

# **The Impact of Digital Innovation on the Social Structure of Professional Public Accounting Practice in Australia**

**Mayada Hansnata**

Master of Business and IT (University of Melbourne)

Bachelor of Economics–Accounting (University of Indonesia)

Chartered Accountant (IAI)

XBRL Foundation Certified (XBRL International)

Certified Information Systems Auditor (ISACA)

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College of Business and Economics

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## Declaration of Originality

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed: \_\_\_\_\_ On: \_\_\_\_/\_\_\_\_/\_\_\_\_

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## Abstract

*This thesis investigates the impact of digital innovation, associated with Standard Business Reporting (SBR) and cloud accounting, on the social structure of professional public accounting practice in Australia. Social structure in public accounting practice refers to the social arrangement of internally diverse groups of professionals and is hierarchical due to disparity in intra-professional status. At issue here is the commodification of traditional accounting work in serving small-medium enterprises (SMEs), the primary work of small-medium practitioners (SMPs). The innovation poses both jurisdictional threats and opportunities for SMPs but has ramifications for public accounting practice as a whole, due to the nature of the innovation impacting professional work. The impact on professional work, creates a ripple effect, altering the boundaries between different sub-groups within the social structure of professional public accounting practice, namely location of work, firm size, firm structure, client base and in the end professional values. The impact of the digital innovation on the social structure of public accounting practice is examined through the lens of the emergence of an organisation field centring on the commodification of traditional accounting work in servicing SMEs (i.e., an issue-based approach). From the perspective of organisational and institutional theory, the innovation represents a form of exogenous shock to the institutional environment of professional public accounting practice in Australia, which disrupts the existing institutional arrangement and leads to intra-professional competition (i.e., institutional war). A mixed methods research approach is carried out in examining the issues involved. The study finds that the boundaries associated with professional work, location of work, firm structure, client base and professional values have become less distinct. This is attributable to SMPs increasingly becoming multidisciplinary practices and having a tendency towards a commercial logic; and larger sub-groups such as the Big 4 and Next Big 8 expanding their share of the market for servicing small businesses, including reclaiming bookkeeping as part of their portfolio of services. Overall, the results indicate that the professional identities of public accountants in Australia are less fragmented as professional values converge towards commercialism. Firm size and the combinations of capitals that each sub-group possesses are, on the other hand, becoming more relevant in differentiating between them.*

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## List of Abbreviations

ABS	Australian Bureau of Statistics
AFR	Australian Financial Review
AICPA	American Institute of Certified Public Accountants
APA	Accounting Profession Association
APES	Accounting Professional & Ethical Standards
APESB	Accounting Professional Ethical Standards Board
APRA	Australian Prudential Regulatory Authority
ARC	Australian Research Council
ASIC	Australian Securities and Investments Commission
ATO	Australian Tax Office
ATPF	Australian Tax Practitioner Forum
ATSA	Accountants' Technology Showcase Australia
AUASB	Auditing and Assurance Standards Board
BAF	Business Advisory Forum
BAS	Business Activity Statement
BRCWG	Business Regulation and Competition Working Group
BRW	Business Review Weekly
CAANZ	Chartered Accountants Australia and New Zealand
CFO	Chief Financial Officer
CI	Convergent Interviewing
CICA	Canadian Institute of Chartered Accountants
COAG	Council of Australian Government
DF	Discussion Forums
DIICCSRTE	Department of Industry, Innovation, Climate Change, Science Research and Tertiary Education
ECI	Electronic Commerce Interface
ELS	Electronic Lodgement System
ERP	Enterprise Resource Planning
FSIP	Financial Services Industry Partnership
FOFA	Future of Financial Advice
GBAF	Global Business Advisory Firms
ICAA	Institute of Chartered Accountants in Australia

ICAA (Canada)	Institute of Chartered Accountants of Alberta
ICAEW	Institute of Chartered Accountants in England and Wales
ICB	Institute of Certified Bookkeepers
ICT	Information and communication technology
IFRS	International Financial Reporting Standards
IGO	International government organisations
IIA	Institute of Internal Auditors
IPA	Institute of Public Accountants
IT	Information technology
NGO	Non-governmental organisations
NIA	National Institute of Accountants
NZICA	New Zealand Institute of Chartered Accountant
OCR	Object Capture Recognition
PSF	Professional service firms
RQ	Research questions
SaaS	Software as a service
SBAG	Small Business Advisory Group
SBR	Standard Business Reporting
SEC	Securities Exchange Commission
SME	Small–medium enterprises
SMP	Small–medium practices
SMSF	Self-managed super funds
SRO	State Revenue Offices
WSJ	Wall Street Journal

# Chapter 1 Introduction

## 1.1 Chapter Content

This chapter presents the background information and motivation for the research (Section 1.2), research questions and the theoretical perspective (Section 1.3), research methodology (Section 1.4), importance of the study and research contributions (Section 1.5), and the structure of the remainder of the thesis (Section 1.6).

## 1.2 Background and Motivation

This study examines the impact of digital innovation on the social structure of professional public accounting practice in Australia. Public accounting practice is composed of professional accountants in firms who provide professional financial and accounting services such as audit, tax, management consulting and business advisory (APESB, 2013; IESBA, 2013). At issue here is the premise that digital innovation leads to the commodification of traditional accounting work in serving small–medium enterprises (SMEs). In practice, traditional accounting work is referred to as compliance work and typically involves bookkeeping and the preparation and reporting of financial statements and tax filings (Greenwood, Suddaby, & Hinings, 2002; Ramirez, 2009).<sup>1</sup>

Digital innovation refers to a ‘product, process, or business model that is perceived as new, requires some significant changes on the part of adopters, and is embodied in or enabled by [information technology] IT’ (Fichman, Santos, & Zheng, 2014, p. 330). The digital innovation discussed in this thesis stems from Standard Business Reporting (SBR) and cloud accounting. SBR is an Australian-government-sanctioned digital standard for business and financial reporting that is destined to become the single national standard for the business-to-government reporting channel. Cloud accounting refers to cloud-based accounting and business software for SMEs. Its development in Australia was sparked by Xero Ltd,<sup>2</sup> a recent start-up vendor from New Zealand that offers a wholly on-the-cloud system and targets the largest business segment in Australia—that is, small business (ABS, 2014a; Markus, 2013; Xero, n.d.-c). Cloud accounting integrates SBR, thus facilitating its implementation. Accordingly, the digital innovation involves an ecosystem of cloud-based accounting and business solutions

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<sup>1</sup> Professional work beyond traditional accounting work typically involves multidisciplinary consulting or business advisory tasks such as merger and acquisition advice, business strategy advice and executive remuneration restructuring.

<sup>2</sup> Xero first released its Australian version in September 2008 and listed in Australia in November 2012. This is further discussed in Chapter 2.

targeted at SMEs (Head, 2013). Such an ecosystem has not previously been available, and its adoption by SMEs revolutionises their business and accounting processes, which significantly affects their interactions with business intermediaries such as bookkeepers, tax agents and accountants (Greenwood, 2013; Satell, 2014). It has significant implications for accountants who serve SMEs because the nature of the digital innovation—emanating from the *core technology features* and the *key design feature* of the digital innovation (Griffith, 1999)—leads to the commodification of traditional accounting work.

The core technology features are twofold. First, it embodies the *standardisation and automation* of business and accounting processes, which consequently democratise the *production* of professional knowledge in conducting traditional accounting work. Second, *cloud computing*, which represents *real-time access*, democratises the *distribution* of professional knowledge in serving SMEs, as it breaks down geographical (from anywhere), temporal (at any time) and accessibility (using any device) barriers.

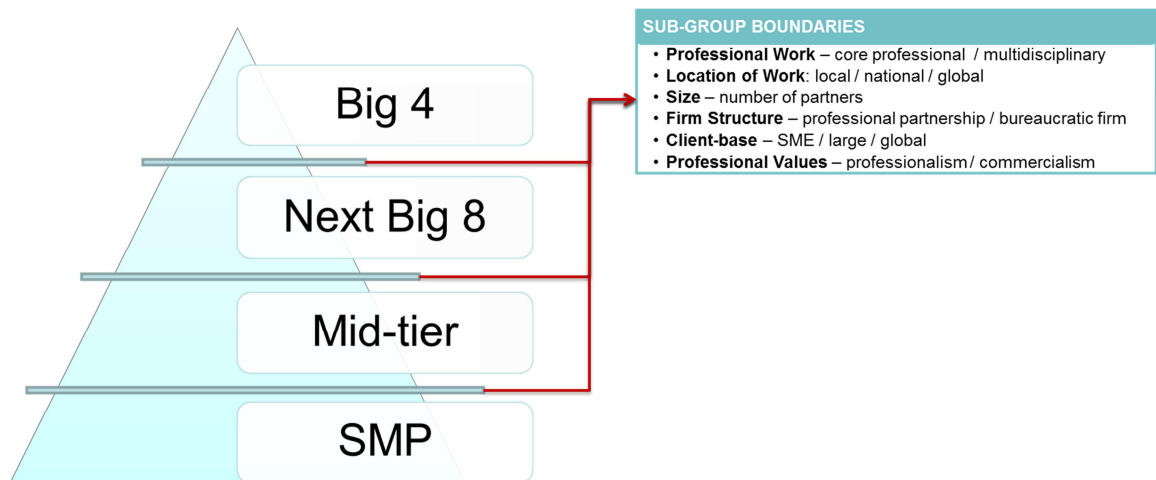
The *key design feature* is *single view* and is often referred to as a single-ledger design. It integrates the technology underlying the digital innovation. As a result, the single-view design enables business intermediaries, such as accountants, to view their SME clients' data seamlessly in a manner similar to that of internal management accountants, who use an Enterprise Resource Planning (ERP) system. This integration means that the single-view design *streamlines* the democratisation of the production and distribution of professional accounting knowledge underpinning traditional accounting work in serving SMEs.

Professional knowledge—in the provision of accounting services facilitated by technology—typically represents a communication process that includes all phases from the production of knowledge to its distribution (Kauppinen, 2014, p. 396). The democratisation of professional knowledge is referred to as commodification (Abbott, 1988; Suddaby & Greenwood, 2001). Therefore, the issue is again the commodification of traditional accounting work, specifically in serving SMEs.

Commodification (digital innovation) has implications for the existing social structure of professional public accounting practice in Australia. For the purpose of this thesis, the *social structure* of a profession refers to the social arrangement of internally diverse groups of professionals, which is hierarchical due to disparities in intraprofessional status (Abbott, 1988, pp. 78-85, 117-142). Thus, notwithstanding the collective nature suggested by the definition of public accounting practice presented earlier, the domain consists of a community of sub-groups. The extant accounting literature typically identifies three groups: the Big 4, Mid-Tier Firms and Small-Medium Practices (SMPs) (Abbott, 1988; Greenwood et al., 2002; Lander,

Koene, & Linssen, 2013; Ramirez, 2009). However, this thesis uses an alternative, more granular, classification scheme that was provided in the Business Review Weekly's (*BRW*) report on the 'Top 100 Accounting Firms in Australia' (Beaton, 2013; Khadem, 2013a). The report divides mid-tier firms into two categories—Next Big 8 and Mid-Tier Firms—giving rise to a four-tier social structure (see Figure 1.1). The Next Big 8 represents the next top 8 firms after the Big 4 based on certain characteristics identified in the *BRW* report. Chapter 4 presents a detailed discussion of the social structure, including the basis for the classification of sub-groups.

**Figure 1.1: Social Structure of Professional Public Accounting Practice in Australia**



The disparity in professional status between different sub-groups, which gives rise to the social structure, derives from intraprofessional differences with respect to professional work, the work setting and the client base (Abbott, 1988), and thus professional values (Greenwood et al., 2002; Khalifa, 2013; Lander et al., 2013; Malhotra & Morris, 2009; Malhotra, Morris, & Hinings, 2006; Ramirez, 2009). The work setting dimension breaks down to the following three issues: the location of work, firm size and firm structure (Abbott, 1988). Thus, as shown in the table in Figure 1.1, this gives rise to six related issues that the literature traditionally identifies as the boundaries that delineate sub-groups in public practice: *professional work* (core professional/multidisciplinary), *location of work* (local/national/global), *firm size* (number of partners), *firm structure* (professional partnership/bureaucratic firm), *client base* (SMEs/large/global) and *professional values* (professionalism/commercialism) (Abbott, 1988; Greenwood et al., 2002; Khalifa, 2013; Lander et al., 2013; Malhotra & Morris, 2009; Malhotra et al., 2006; Ramirez, 2009).

The social structure of professional public accounting practice at a given point in time is temporary, as institutional structures and logics are transient even in highly mature fields (Greenwood & Suddaby, 2006). Historically, the accounting profession as a whole is seen as

being 'always on the move' and keeping its 'knowledge expanding' (Greenwood et al., 2002, p. 68). Such transience demonstrates that the accounting profession—including, therefore, public practice—is socially constructed, contested and contingently established over time, and that its boundaries are porous and shifting (Samuel, Covaleski, & Dirsmith, 2009).

Evidence of the transient nature of the accounting profession, per se, is reflected in prior accounting professionalisation studies dealing with: (i) struggles in the construction of *social closure* as the profession attempted to differentiate (define) itself from mere occupation and less credible accounting practitioners, as well as dealing with contestation from other professionals—that is, *interprofessional competition*—as they strive to defend and expand its jurisdictions (Edwards, Anderson, & Chandler, 2007; Walker, 2004); (ii) conflicts over jurisdictions arising from *exogenous shock*, which affect the accounting profession's ability to defend and expand its jurisdictions such as government regulation and supranational pressures, resulting in the defence or expansion of jurisdictions shaped by interactions between actors within and outside the accounting profession (Caramanis, 1999, 2005; Sikka & Willmott, 1995; Walker, 2004); (iii) polemics in the redefinition of the accounting profession's jurisdiction due to *endogenous shock*—that is, field transformation driven by Big firms (Cooper & Robson, 2006; Suddaby, Cooper, & Greenwood, 2007), as these firms ventured to find another source of sustainable competitive advantage (Covaleski, Dirsmith, & Rittenberg, 2003; Greenwood et al., 2002); (iv) rising fragmentation in the *professional identity* of accountants in public practice (Khalifa, 2013; Sikka, 2009; Suddaby, Gendron, & Lam, 2009), and attempts to redefine it into a more homogeneous identity, as the field transformation driven by Big firms does not generalise to smaller firms (Lander et al., 2013; Ramirez, 2009); and (v) the implications of changes in the nature of *professional knowledge* for professional identity, as the change in professional knowledge affects the types and conduct of professional work, which leads to the redefinition of the professional jurisdiction of public accounting practice and the arrangement of its professional organisation (Cooper & Taylor, 2000; Greenwood, Li, Prakash, & Deephouse, 2005; Malhotra & Morris, 2009; Malhotra et al., 2006; Manson, McCartney, & Sherer, 2001; Suddaby & Greenwood, 2001).

Informed by these professionalisation studies, this thesis focuses on potential disturbance to the jurisdiction of professional public accounting practice emanating from one of its facets (professional work)—that is, the servicing of SMEs and therefore a disturbance to the SMP domain. Importantly, the disturbance also has the capacity to affect the social structure of professional public accounting practice, as a whole, because the nature of the digital innovation has implications for the boundaries that currently define the sub-groups. That is, the digital innovation is, *inter-alia*, a source of intraprofessional competition.

First, the core technology features of the digital innovation, which represent enhanced standardisation and automation, as well as online real-time accessibility, threaten the jurisdiction of SMPs from entities outside public practice. It enables *non-professionals* and *non-accounting professionals* to perform traditional accounting work for, and to have access to, SMEs, thereby competing with a newfound aggression for this client base to an extent that was not previously feasible. However, at the same time, the core technology features also create opportunities for SMPs. Standardisation and automation significantly reduce data entry and repetitive low-status work and increase data accuracy, which together improve the quality of professional work. Further, online real-time access improves timeliness and cost efficiency in dealing with clients and adhering to compliance requirements, as well as providing access to a broader client base than previously possible (e.g., more geographically dispersed clients).

Second, the core technology and the single-view design heighten the importance of the oversight or supervisory role of the SMPs and their professional judgement in serving SMEs. Together, the core technology and the key design of the digital innovation create efficient and seamless integration between SMEs and public accountants, which enhances collaboration between them. As a result, the single-view design fosters an increased need by SMEs to ensure that systems are in place to generate reliable data and gain an understanding of the data generated. This need provides important opportunities for SMPs to deepen their engagement with clients and expand their jurisdiction by building on traditional accounting work to leverage their expertise. For instance, to an extent that was not previously feasible, SMPs may work towards the multidisciplinary, one-stop-shop advisor business model that is typical of larger practices (Kellerman & Walker, 2013). This potential expansion in professional work in serving SMEs represents high-status professional work, which is in contrast with the existing literature. The position of SMEs, especially small businesses, has traditionally been associated with low-status professional work (Abbott, 1988; Greenwood et al., 2002; Lander et al., 2013; Ramirez, 2009).

The change from low- to high-status professional work in serving SMEs, especially small businesses, which is attributed to increased efficiency from standardisation and automation, increased accessibility from online real-time access, and increased seamless collaboration, has the capacity to attract more aggressive competition from larger practices such as the Big 4 than has traditionally been the case. In addition to the shift in status, there are significant financial incentives for larger firms to encroach into the small business space in Australia. Small businesses comprise 96 per cent of the total number of Australian businesses and represent the largest pool of money for the economy, as they constitute the largest number of growing and high-value businesses (ABS, 2014a; CPA Australia, 2013). This indicates a large market for

traditional accounting work (compliance services) and an untapped market for additional services. Thus, Big firms are not only able to gain market share in compliance services from this space, but also to leverage it to gain market share in the provision of multidisciplinary services for SMEs. Further, larger firms such as the Big 4 benefit from existing resources and reputation in the multidisciplinary area; thus, they have a competitive advantage.

In addition to its disruptive nature, there has also been a 'push' to adopt the digital innovation as a result of Xero challenging the market held by incumbent accounting software vendors for SMEs in Australia (Vallence, 2013). Coupled with the benefits of cloud accounting, the challenge compelled incumbent accounting software vendors to compete with Xero. Consequently, these incumbent vendors, who previously championed their desktop software, released their own cloud accounting products to avoid losing market share. The 'war' for lucrative market share between software vendors created pressure for SMEs to adopt this digital innovation. However, the 'war' was primarily targeted at accountants in public practice who served SMEs, as Xero provides a free practice licence and attractive partnership program, thus providing financial incentives to accountants to adopt Xero cloud accounting. That is, Xero encourages accountants to switch their clients to Xero products. Further, the 'push' due to the 'war' between vendors is compounded by the government, as cloud accounting facilitates the adoption of its SBR Program as part of its broader agenda to manage business compliance and improve the survival rate of small businesses.<sup>3</sup>

Therefore, the digital innovation has the capacity to spark institutional war—intraprofessional competition (Hoffman, 1999)—in professional public accounting practice. The nature of the digital innovation, as well as the 'push' to adopt, including the government's role in fostering adoption discussed earlier, thereby results in a new way of servicing SMEs that creates disturbance beyond the control of the profession. Thus, the digital innovation of interest, which represents an exogenous shock to the institutional environment (structures and practices) of professional public accounting practice, has the capacity to lead to field transformation and institutional change. This ultimately has implications for the social structure (social arrangements) of professional public accounting practice.

As the foregoing discussion indicates, the digital innovation has considerable impetus for change because it affects the six related issues that determine the boundaries of the existing social structure. The related issues may be affected because the digital innovation disrupts the

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<sup>3</sup> SBR was incorporated into the Council of Australian Governments' (COAG) Business Regulation and Competition Working Group (BRCWG) reform agenda in March 2008. The BRCWG was co-chaired by the Minister for Finance and Deregulation and the Minister for Small Business, Independent Contractors and the Service Economy. In 2013, the government released the National Cloud Computing Strategy, whose main objective was to promote the use of cloud-based services in the government and for small businesses and not-for-profit organisations.



*nature of professional knowledge, client relationship and jurisdictional control*, particularly for SMPs. The disruptive circumstances in turn have the capacity to affect the nature of *professional work*, which would lead to a wave of change in other issues, namely the *location of work, firm size, firm structure, client base*, and ultimately *professional values* (Abbott, 1988; Malhotra & Morris, 2009).

### **1.3 Overarching Research Question and Theoretical Perspective**

Following on from the foregoing discussion, the overarching research question addressed in this study is as follows:

***Is digital innovation impacting the social structure of professional public accounting practice in Australia?***

This question is addressed through the lens of an emergent field centring on the *issue* (Hoffman, 1999) of the commodification of traditional accounting work and therefore the provision of professional services to SMEs.

The theoretical framework underpinning the foregoing issue draws on aspects of organisational theory, institutional theory and the sociology of the professions. Chapter 4 details the relationship between the three disciplines and the key concepts involved.

### **1.4 Research Methods**

A mixed methods approach is employed to obtain an in-depth understanding of any changes occurring in professional public accounting practice in Australia from multiple perspectives.

A mixed methods approach integrates quantitative measures and qualitative experiences in order to provide a more complete understanding of the issue researched (Creswell, 2014). Specifically, an embedded mixed methods approach is used. That is, where one kind of method is given less emphasis and embedded in the other kind of method (Creswell, 2014; Harwell, 2011). For the present study, greater weight is placed on the qualitative method and the quantitative method is nested within it.

The investigation in this study commences with an exploratory qualitative data collection and analysis, the preliminary article review. It is critical for clarifying the research topic of interest. The preliminary article review involves analysing popular and academic literature that helps the researchers to gain better understanding of the nature of the digital innovation and the relevant concepts as well as to provide a basis for justifying the issue and timeframe of the

examination (Ahrens & Chapman, 2006; Blackstone, 2012; Oxford Journals, 2002; Singleton & Straits, 2005).

The timeframe involves the seven-year financial period from 1 July 2007 to 30 June 2014. The start and end dates, respectively, are marked by the launch of the SBR Program in August 2007 and the launch of a digital-based division to serve SMEs by one of the Big 4 accounting firms in June 2014.

Overall, the results from the preliminary article review provide the basis for: (i) constructing the conceptual framework based on theories that underpin this study and (ii) designing the core mixed methods data collections and analyses. However, as this thesis deals with a contemporary issue, the preliminary article review is iteratively informed and will be informed by processes in the core mixed methods data collections and analyses. These involve an article review, which includes the generation of network maps, as well as convergent interviewing (CI), discussion forums, direct observations and an extensive document review (Yin, 2014). Data are collected and stored using Evernote and uploaded into NVivo for analysis. NodeXL is used to generate network maps for network analysis. Chapter 5 details the research methods used.

## **1.5 Importance and Research Contributions**

The importance of this study lies in documenting the changing social structure in professional public accounting practice in Australia. In doing so, it will promote our understanding of the institutional pressures and dynamic interactions between different sets of actors within the field that give rise to the professionalisation of SMPs and professional public accounting practice in general (Lander et al., 2013; Malhotra et al., 2006; Ramirez, 2009; Sikka, 2009; Suddaby et al., 2009).

Professionalisation refers to ‘the collective struggle of members of an occupation to define the conditions and methods of their work ... and to establish a cognitive base and legitimation for their occupational autonomy’ (Powell & DiMaggio, 1991, p. 70). Professionalisation is a constant effort on the part of a profession to define, claim and maintain jurisdiction to protect its abstract knowledge base, which results in the production and reproduction of its professional identity to maintain alignment with its professionalism (Abbott, 1988). In professional public accounting practice, professionalism traditionally centres on an ongoing commitment to protect and serve the public interest, and thus maintain its hallmark of independence (Covaleski et al., 2003; Greenwood et al., 2002; Khalifa, 2013; Sikka, 2009; Suddaby et al., 2009).

However, the focus of prior literature on public interest and the quest for legitimacy distracts from the ability to enhance our understanding of the professionalisation process (Cooper & Robson, 2006). Professions are actually market-driven entities that are motivated to expand by controlling their knowledge base and skills (Larson, 1977). The ability to capture the latter perspective is best served by focusing on accounting firms (the organisational level) rather than the profession as a whole, thus, the organisational perspective taken by this study. Investigating professionalisation and professionalism motivated by profits and capital accumulation rather than gaining legitimacy (Cooper & Robson, 2006), will advance our understanding of the social construction and reconstruction of the boundaries between professionals and non-professionals, as well as at the intraprofessional level. In doing so, this approach provides a richer understanding of the professional identity of accountants.

Overall, this study extends the existing literature on the professionalisation and professionalism of the accounting profession in public practice. The contributions of this study to theory and practice are discussed in the following sub-sections.

### **1.5.1 Theoretical Contributions**

This study contributes to three bodies of literature. The primary contribution is to the accounting literature that examines the commodification of the financial audit. It enriches the literature in three ways, which in turn contribute to the literature on the professionalisation of the accounting profession.

First, this study advances our understanding of the implications of the commodification of professional work for the professionalisation of public accounting practice. Prior studies dealing with the commodification of the financial audit are confined to examining the professionalisation process in the domain of the Big firms because they focus on the facet of the professional field dominated by Big firms (Covaleski et al., 2003; Greenwood et al., 2002). That is, the financial audit and the servicing of large, public-listed or global businesses that are typically the client base of the financial audit (Greenwood et al., 2005). However, this study examines the commodification of traditional accounting (compliance) work in serving SMEs. This facet of professional field is the domain of SMPs, thus, this study focuses on the professionalisation process from the perspective of SMPs. In turn, the commodification spills over to the professionalisation of public accounting practice at large because the digital innovation presents new opportunities in serving SMEs that were not previously possible, which therefore attract larger sub-groups such as the Big 4 to encroach.

Second, this study provides a nuanced understanding of the competitive forces arising from the commodification of professional work and its implications for the professionalisation of

public accounting practice. Prior studies on the commodification of the financial audit focus on inter-organisational competition because the disruption occurred in the domain of Big firms (Covaleski et al., 2003; Greenwood et al., 2002). The commodification drove Big firms to compete with each other for a new sustainable competitive advantage in diversified services, particularly in servicing a large and global client base (Greenwood et al., 2005; Suddaby & Greenwood, 2001). The commodification did not lead to competition with non-professionals and other professionals because regulation places restrictions on who may perform the financial audit (Manson, McCartney, Sherer, & Wallace, 1998). In addition, the commodification did not lead to intraprofessional competition with Non-Big firms because they did not have the competitive base<sup>4</sup>—highly educated professionals, elite network, financial abundance and premium reputation—to encroach into the Big firms' domain (Greenwood et al., 2005; Greenwood et al., 2002). Conversely, this study is concerned with the commodification of traditional accounting work and focuses on intraprofessional competition. As stated earlier, the commodification of traditional accounting work in servicing SMEs mostly affects the domain of SMPs, but it attracts larger sub-groups such as the Big 4. In addition, the commodification of traditional accounting work creates imminent threats from non-professionals and other professionals, which may contribute to more aggressive intraprofessional competition. Therefore, the disruption has the capacity to lead to field transformation and institutional change, which ultimately affects the social structure in professional public accounting practice because field transformation and institutional change affect related issues that define the boundaries between sub-groups within the social structure.

Third, this study enriches our understanding of field transformation and institutional change in the accounting professional field due to the commodification of professional work. Prior studies have focused on the role of Big firms—that is, endogenous shock—in driving the change (Covaleski et al., 2003; Greenwood et al., 2002). However, this study deals with exogenous shock—that is, the role of those external to the accounting profession who do not seek to compete for jurisdictions—in which the central actors of professionalisation (the accounting professional associations and the Big 4) do not have the power to prevent them from disrupting the nature of professional accounting knowledge.

Fourth, this study shows that the difference in the force of change in the accounting profession is attributable to the difference in the source and nature of the technology underpinning the commodification. The audit automation behind the commodification of the financial audit was initiated by Big firms and involved proprietary systems built in-house (Manson et al., 2001;

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<sup>4</sup> That is, due to differences in cultural capital, social capital, economic capital and symbolic capital.

Manson et al., 1998). Conversely, the digital innovation behind the commodification of traditional accounting work in serving SMEs is commercial, off-the-shelf software imposed on the accounting profession, in which mass adoption creates network effects. It is primarily driven by software vendors and involves other external actors, including the government.

In addition to the foregoing four main contributions, this study also contributes to accounting professionalisation literature in general. Prior studies focus on exogenous shocks arising from regulatory changes (Caramanis, 1999, 2002, 2005; Walker, 2004). This study, however, goes beyond regulatory change to include private sector commercial forces (Sikka & Willmott, 1995).

Finally, this study contributes to the literature on professional service firms by examining the changes in the boundaries of the social structure of public accounting practice from the perspective of small practitioners to provide further understanding of intraprofessional differences within the accounting profession (Malhotra et al., 2006). Existing literature focuses on examining accounting professional service firms from the perspective of Big firms and compares it to other large firms in other professions, rather than examining differences in professionals service firms within different sub-groups in the accounting profession (Lander et al., 2013; Malhotra et al., 2006). In addition, examining accounting professional service firms from the perspective of small practitioners is under-researched (Lander et al., 2013; Malhotra et al., 2006).

### **1.5.2 Contributions to Practice**

The contributions to practice are twofold. First, the results of this thesis hold important implications for the structure of accounting education and training at the tertiary level, as well as for continuing professional development.

Second, to the extent that the survival of SMPs is threatened, this study has important implications for the role of accounting professional associations in protecting their members. Intraprofessional competition within the profession may need to be overseen, as well as the role of external actors in affecting professional conduct. This problem could be compounded over time because the digital innovation is likely to keep advancing.

## **1.6 Organisation of the Thesis**

The remainder of this thesis consists of the following six chapters: Background to and Motivations for the Research Topic (Chapter 2), Literature Review (Chapter 3), Conceptual Framework (Chapter 4), Research Methodology and Data Collection Methods (Chapter 5), Results and Analysis (Chapter 6) and Conclusion (Chapter 7).

## **Chapter 2 Background to and Motivation for the Research Topic**

### **2.1 Chapter Content**

The motivation for this study lies to an extent in the academic literature, but primarily in the popular press dealing with digital disruption and government publications associated with the SBR Program. This chapter reviews that literature, as it relates to the accounting profession, and in doing so addresses the following issues:

- The SBR Program and matters relating to its take-up.
- Cloud accounting and its role in the take-up of SBR.
- The implications of digital innovation for the public accounting practice.
- The nature of the digital innovation

This chapter presents the preliminary article review conducted for this thesis to show why it is important to investigate the impact of the digital innovation on the social structure of public accounting practice in Australia, which represents the overarching research question in this thesis. This process is iterative because the contemporary nature of the digital innovation means that it evolves over time. For the purpose of this thesis, the discussion on the four issues identified is scoped up to 30 June 2015.

Following the introduction to the chapter (Section 2.2), the remainder of this chapter is structured to address the foregoing four issues in this order: SBR Program (Section 2.3), Cloud Accounting (Section 2.4), The Implications of the Digital Disruption for Public Accounting Practice (2.5) and The Nature of the Digital Innovation (2.6).

### **2.2 Introduction**

They [accounting firms] will have to broaden their employee base, broaden their service base because the core business, the compliance business, is the one that's going to cop a hiding with technology because it's a repetitive processing task. All around the world, digital disruption is affecting anything that looks like processing, non-customer facing, repetitive tasks. The internet can do a much better job.

Rob Nixon, CEO and Founder of Proactive Accountants Network (as cited in Gettler, 2013, p. 13)

Digital disruption refers to changes enabled by a digital innovation. Digital innovation is defined as 'a product, process, or business model that is perceived as new, requires some significant changes on the part of adopters, and is embodied in or enabled by IT [information technology]' (Fichman et al., 2014, p. 330). Digital disruption occurs because digital innovation disturbs the established social environment at a significant rate and magnitude (Deloitte,

2012). Digital innovation may be seen as an extension to existing technology. However, it is powerful, creating pervasive and multiple indirect effects, such as reducing barriers to entry, blurring categories of boundaries and overturning existing markets as they open the door for a new generation of entrepreneurs and innovators (Deloitte, 2012). In the context of this thesis, the digital innovation represents an innovation that digitises business processes arising from advancements in broadband, smartphones, cloud computing, complex data analysis tools and social media (Deloitte, 2012). Digital disruption in the Australian accounting services industry is expected to occur in a 'big bang' due to the fast-paced increase in the adoption of the digital innovation between 2012 to 2015 (Deloitte, 2012). In respect to the accounting industry, this thesis specifically identifies the digital innovation as stemming from SBR and cloud accounting.

SBR is an Australian government-sanctioned digital standard for financial and business reporting that aims to be the single national standard for business-to-government reporting to multiple government agencies (Madden, 2009). The SBR Program was initiated in August 2007, and the SBR channel was launched in July 2010 (Madden, 2011; Productivity Commission, 2012). SBR is expected to reduce compliance costs for businesses, which is especially significant for smaller businesses that generally do not have internal capacity, such as an accounting department, to deal with compliance matters (Regulation Taskforce, 2006). SBR-enabled software leads to increased reporting accuracy because standardisation and automation enable the pre-filling of data from the business's accounting system or the government's system. SBR should in turn increase efficiency, as pre-filling is expected to reduce reporting time.

Cloud accounting refers to cloud-based accounting and business software for SMEs. Start-up vendor Xero Ltd sparked the development of cloud accounting and has been highly successful in offering a wholly on-the-cloud accounting system directed primarily at small businesses. Xero Ltd first released its Australian cloud accounting software in September 2008, established its Australian headquarters in October 2010 and became listed on the Australian Securities Exchange (ASX) in November 2012<sup>5</sup> (Xero, n.d.-e). Cloud accounting enables SMEs to adjust their system at any time based on their needs, and to seamlessly integrate with those who service them—typically, but not limited to, external (public) accountants. Cloud accounting also enables the integration of technology that aims to reduce manual data entries and streamline processes into its core system. Accordingly, cloud accounting facilitates the integration of SBR. This integration highly automates much of the repetitive work represented by traditional accounting work, which in practice is referred to as compliance work.

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<sup>5</sup> Xero Ltd is a New Zealand-based company. It has been listed on the New Zealand Exchange since June 2007, only one year after being incorporated.

Traditional accounting work is typically the primary professional work of SMPs whose client base is predominantly composed of small businesses (Greenwood et al., 2002; Ramirez, 2009). It involves bookkeeping as well as the preparation and reporting of financial statements and tax filings (Greenwood et al., 2002; Ramirez, 2009). The issue here is that the digital innovation of interest leads to the commodification of traditional accounting work, specifically in serving SMEs, thereby creating newfound competition over this space.

Prior to discussing the digital innovation in more depth, this chapter first provides a detailed explanation of SBR and cloud accounting, which form the digital innovation of interest.

### **2.3 SBR Program**

The SBR Program is an Australian government initiative that aims to reduce administrative burdens on businesses. It is also expected to be part of global efforts to reduce the regulatory burden in the exchange of financial data (OECD, 2009, 2010). The SBR Program was first launched in Australia in August 2007 following recommendations from the *Report of the Taskforce on Reducing Regulatory Burdens on Business* (2006). It was incorporated into the Council of Australian Government's (COAG) Business Regulation and Competition Working Group (BRCWG) reform agenda in March 2008. The BRCWG was co-chaired by the Minister for Finance and Deregulation and the Minister for Small Business, Independent Contractors and the Service Economy. The current host agency of the SBR Program is the Australian Tax Office (ATO), which is responsible for maintaining and managing SBR. The host agency role was previously held by the (Commonwealth) Treasury, which was also the lead agency. The Treasury is still the lead agency, and its role is to coordinate SBR development and maintenance.

SBR is an XBRL-based<sup>6</sup> standard for the exchange of financial and business data. XBRL stands for eXtensible Business Reporting Language. It is an open global electronic standard that works like a business and financial data barcode for the exchange of business and financial data between different computer systems and languages. Its use has been mandated in several countries for financial reporting to market regulators—for example, all public companies that file with the US Securities and Exchange Commission (SEC) must use XBRL-based reporting for fiscal periods ending on or after 15 June 2011 (Tittel, 2011). Prior to the SBR Program commencing, XBRL-based reporting was introduced in Australia in 2001, driven by the Australian Prudential Regulatory Authority (APRA), which was the first banking regulator in the world to implement XBRL-based infrastructure to communicate with regulated entities (Efendi,

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<sup>6</sup> See [www.xbrl.org](http://www.xbrl.org) for more information.



Smith, & Wong, 2011). SBR involves multi-agencies and thus has a broader scope than XBRL-based reporting mechanisms in other countries.

SBR is primarily designed as a business-to-government reporting mechanism via web services using SBR-enabled software. It provides a means for businesses to submit online using forms that are pre-filled with data taken directly from the accounting software (business data) or from the government's system (government data). The pre-filling follows the SBR taxonomy,<sup>7</sup> but editing and further data entry is permitted before submission to complete the form or report. This online reporting mechanism is called SBR core services<sup>8</sup> and is typically referred to as the SBR channel. An AUSkey<sup>9</sup> is used as the single sign-on authentication to submit via the SBR channel (Madden, 2011). The SBR taxonomy, SBR core services and AUSkey are the main components of SBR that facilitate the exchange of data between businesses' SBR-enabled systems and the government's SBR-enabled system (Madden, 2011).

The SBR taxonomy is particularly critical because it harmonises different definitions of terms across multiple government agencies. For example, the term 'employee' in Australia has more than 50 legal definitions because of the differences in information being sought by each government agency (ABR, n.d.). The SBR taxonomy identifies the information that is to be applied for business reporting to each of these agencies. Thus, SBR functionality coupled with SBR core services and AUSkey is expected to practically eliminate data entry errors and the misclassification of data in reporting to the government. In turn, SBR increases time efficiency and thus reduces compliance costs—that is, costs for businesses in reporting to the government. SBR is expected to save Australian businesses an estimated \$800 million per year once it is fully implemented (Swan & Tanner, 2008). Government agencies are also expected to become more efficient. In 2012, the SBR taxonomy was endorsed as a standard for cross-agency interaction under the National Standards Framework for Government (ABR, n.d.).

SBR is not only designed to increase the efficiency of business-to-government reporting, but also businesses' internal interoperability, including business-to-business exchange of data (Madden, 2011). There are three phases (approaches) of SBR implementation. The first phase focuses on business-to-government compliance reporting and involves high-level SBR implementation where existing reports for government reporting in the accounting system are

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<sup>7</sup> The SBR taxonomy represents an XBRL-based data dictionary that details the collection of items (data elements) that may be required to be reported by businesses to government agencies in Australia. See <http://www.sbr.gov.au/about-sbr/what-is-sbr/sbr-taxonomy> for more information.

<sup>8</sup> SBR core services act like a post office, moving electronic messages from businesses' systems to appropriate agencies, including returning receipts with any relevant message. See <http://www.sbr.gov.au/software-developers/developer-tools/glossary> more information.

<sup>9</sup> AUSkey is a secure authentication system for the online business-to-government reporting mechanism. See <https://abr.gov.au/AUSkey/AUSkey-explained/> for more information.

tagged to the SBR taxonomy to produce valid instance reports<sup>10</sup> (SBR, n.d.-b). In the second phase, the XBRL-based SBR taxonomy is embedded in the accounting system to allow users to map the trial balance or other summary-level information to generate reports (SBR, n.d.-b). Here, businesses are expected to gain further benefits from SBR for internal reporting, including the ability to extend the SBR taxonomy for internal needs. This is possible because XBRL is an open-source standard—that is, the source code is available to anyone who wants to use or change it, thus enabling software vendors and businesses to extend the existing SBR taxonomy to suit their needs beyond reporting to the government. The third phase involves embedding the XBRL Global Ledger (XBRL GL) at the transaction level within the accounting system (SBR, n.d.-b). The XBRL GL enables transactional details to be retained and controlled when data are aggregated or consolidated into summary-level information. The XBRL GL is system-independent; therefore, it facilitates the transfer of transactional data from system to system—for example, from government agency to central government agency, from subsidiary to headquarters and from suppliers to customers (XBRL International, n.d.-c). The scope of this study is restricted to the first phase of SBR implementation in Australia because this is the government's current focus.

In the first phase of the SBR implementation, the SBR channel was launched on 1 July 2010 for financial, prudential, taxation and payroll information reporting (Madden, 2009, 2011; SBR, 2009), which involves reporting to APRA, the Australian Securities and Investments Commission (ASIC), the ATO and State Revenue Offices (SROs). The use of XBRL-based reporting to APRA has been mandated since 1 July 2002—that is, prior to the commencement of the SBR Program. However, APRA XBRL-based reporting has now been harmonised with SBR, and this went live on 1 July 2011 (APRA, n.d.). Unlike in the case of APRA, SBR-based reporting to ASIC, the ATO and SROs was not mandated (as of 30 June 2015) except for superannuation reporting (SuperStream) to the ATO, which is an expansion from the initial scope of the implementation (Leeper, 2013). In September 2011, the Treasury announced SuperStream, a government initiative for a stronger superannuation measure using SBR as the platform to ensure an industry-wide standard for the exchange of data within the industry and in reporting to the government. The use of SBR for superannuation reporting was mandated as the industry pushed for a single industry-wide standard (The Treasury, n.d.-b). This mandate commenced for APRA-regulated funds and self-managed super funds (SMSFs) from 1 July 2013, followed by medium to large employers from 1 July 2014 and small employers from 1 July 2015 (The Treasury, n.d.-b).

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<sup>10</sup> Instance reports are electronic versions of a set of facts with context that are brought together according to the taxonomy to meet a reporting obligation to an agency. See <http://www.sbr.gov.au/about-sbr/publications-and-resources/learning-modules/xbrl-fundamentals> for more information.

The adoption of SBR for reporting to ASIC, the ATO and SROs remains voluntary, and the development of the platform was ongoing as of 30 June 2015. Initially, the government targeted the use of SBR for financial reporting, and its key interests were financial statement reporting to ASIC and tax-related reporting to the ATO. Reporting to ASIC was intended to first regulate financial reporting by listed public entities following similar XBRL-based financial reporting mandates in other countries, including the US and Japan (XBRL International, n.d.-b). Reporting to the ATO was first focused on the Business Activity Statement (BAS) and corporate income tax returns (Madden, 2009).

However, ASIC's complex reporting nature, lack of mandate and stability of the SBR platform hampered this implementation (Productivity Commission, 2012). In addition, the number of businesses required to report to ASIC represented a small proportion of the total number of businesses in Australia (The Treasury, 2012). In contrast, all businesses report to the ATO, including, most importantly, small businesses, which comprise the largest proportion of businesses in Australia and which are the most disadvantaged by this compliance burden (Regulation Taskforce, 2006). The need to focus on the tax system and small businesses was identified in a 2009 review of Australia's future tax system (The Attorney-General Department, 2010, Recommendation No. 127 and 128). The review indicated the need to use common information standards, by leveraging standard and governance put in place by SBR, to support interoperability between tax and transfer agencies and between agencies and third parties. The review also revealed the need for the government to assist small businesses to be 'business ready' when they start their business. The assistance included education and financial assistance, as well as assistance to prepare for SBR.

Thus, in December 2011, the focus of SBR implementation was shifted to enable full (all forms) submission to the ATO. This government SBR agenda was marked by the transfer of the SBR Program division from the Treasury to the ATO. Further, the government announced that, by 1 July 2015, all forms for submissions to the ATO would be available under the SBR Program, and a plan would be put in place to decommission the ATO legacy submission system—the Electronic Lodgement System (ELS)—by 30 June 2018 (ATO, 2012; Productivity Commission, 2012). This strategy aligns well with the government's SBR agenda of reducing the regulatory compliance burden on businesses (Productivity Commission, 2012). Currently, the benefits of using SBR for reporting to ASIC have increasingly been recognised as important for the preparer and consumers of financial statements (Robb, Rohde, & Green, 2014). Despite this, the need for a government mandate for reporting to ASIC is debatable, and the government priority remains focused on reporting to the ATO as part of tax administration transformation (Leeper, 2014; Robb et al., 2014).

The current government agencies involved include the Treasury, APRA, ASIC, the ATO and SROs. Although the Department of Industry, Innovation, Climate Change, Science Research and Tertiary Education (DIICCSRTE) had transferred SBR software assets to the ATO in 2012, it is still involved in issues related to AUSKey (Parliament of Australia, 2014; Productivity Commission, 2012). The Australian Bureau of Statistics (ABS) was an original participant, but it withdrew early because the *Census and Statistics Act 1905* does not allow the ABS to contract out the collection of information on its behalf to another organisation (ABS, 2012). However, the ABS showed its continued support for the SBR implementation by, for example, providing definitional updates for the SBR taxonomy (ABR, 2012; ABS, 2012). The government later dealt with the issue preventing the ABS from participating, and thus the ABS re-joined as a participating agency at the end of 2014 (ABS, 2014c).

SBR adoption is believed to rely heavily on support from software vendors, especially incumbent accounting software vendors (Madden, 2009, 2011; Productivity Commission, 2012). However, the accounting software used at the time the SBR channel went online in July 2010 was dominated by desktop-based software that supported a range of different submissions to the ATO available under existing platforms, such as the ELS, the Electronic Commerce Interface (ECI) and 'snail mail'.<sup>11</sup> Accordingly, as of 2011, despite satisfactory progress in the development of the SBR taxonomy and AUSKey, only few users had started using SBR core services (Productivity Commission, 2012). This low adoption rate was potentially due to the lack of demand by business users and business intermediaries for the SBR-based submission channel, which in turn led to sluggish SBR development by software vendors (Productivity Commission, 2012). Factors contributing to low adoption rates have been discussed in prior studies, including the extent of SBR implications for professional public accounting practice. These prior studies anticipate possible road blocks to SBR adoption both before and after the launch of the SBR channel in July 2010, including prior to the SBR Program officially commencing in 2007—that is, at the time when SBR was referred to as an XBRL-based financial and business reporting standard.

Troshani and Rao (2007) find three important drivers for, or inhibitors to, the adoption of SBR. These findings came after interviewing a range of stakeholders well before the launch of the SBR Program, namely large accounting firms, software vendors, a regulatory agency, a local XBRL consortium and academics. Troshani and Rao (2007) find that the first important factor for adoption is the dissemination of a clear message. Although reporting to APRA was already mandated, at the time, the lack of clarity on the use of an XBRL-based channel as a standard

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<sup>11</sup> The ELS and ECI involve uploading dump files from the accounting software using an online portal, while snail mail involves sending the dump file using the postal service.

for business-to-government financial reporting and the lack of a mandate appeared to inhibit adoption. The second factor is a campaign to raise awareness and educate all stakeholders on the benefits of XBRL, as user resistance seems to arise from a lack of understanding regarding SBR. Finally, the importance of XBRL readiness is the third factor that could inhibit adoption, as a lack of readiness hampers the development of SBR software and thus its availability. The Productivity Commission Report (2012) later raised the last two points as possible factors contributing to low adoption. Troshani and Rao (2007) conclude that the role of the host government organisation is vital in influencing adoption.

The significance of these drivers in boosting adoption is further supported by Doolin and Troshani (2007), whose study is based on semi-structured interviews with 10 members of XBRL Australia, including its operations manager. Their study finds that the presence of an innovation champion creates an enabling effect, but adoption decisions are affected by different vested interests among stakeholders. Finally, the lack of pressure to adopt is an inhibiting factor to adoption, as organisations may choose to stay with the current system regardless of the new system's benefits.

Troshani and Doolin (2007) then examine the issues surrounding the XBRL innovation diffusion in Australia. They find that most stakeholders lack influence to effect change, and only three types of stakeholders are considered dominant: large accounting firms, accounting professional bodies and government regulatory agencies. However, overall, stakeholders lack saliency, which results from a low sense of urgency, little aspiration to take effective and efficient instrumental actions, and the perceived instability of the XBRL platform. Troshani and Doolin (2007) show that not all stakeholders hold normative orientations, which indicates the existence of vested interests.

In summary, studies undertaken before the SBR Program was officially launched find that, to encourage XBRL adoption in Australia, the existence of strong champions or dominant stakeholders with the centrality to effect change is crucial to ensuring the clear dissemination of messages regarding the benefits of the SBR Program (Doolin & Troshani, 2007; Troshani & Doolin, 2007; Troshani & Rao, 2007).

A study by Troshani and Lymer (2010), published after the SBR channel was officially launched, confirms that focal actors hold critical roles in the standardisation of XBRL/SBR in networks of heterogeneous actors in Australia. Their study finds that it is important for focal actors to undertake effective problematisation in addition to posing clear and indispensable value propositions and providing solid political and financial support to engender interest in the network. Azam and Taylor (2011) also recognise the diffusion problem in a study that

examines the development and implementation of SBR in Australia. Their study assesses the potential extensive adoption of SBR using a normative approach by critically reviewing issues faced by stakeholders such as corporate financial and business report preparers, users and regulators (Azam & Taylor, 2011). The authors assert that businesses tend to be reluctant to voluntarily adopt SBR because critical mass is important in order for the benefits to be realised. Similar to Doolin and Troshani (2007), Azam and Taylor (2011) report a lack of pressure to adopt, with SBR remaining voluntary, but they add that critical mass cannot be achieved because businesses tend to have a 'wait and see' attitude towards adoption. Azam and Taylor (2011) support the results of Troshani and Rao (2007) and Doolin and Troshani (2007) to the effect that such an attitude is potentially due to uncertainty regarding the role of XBRL/SBR in financial reporting, and thus also due to doubts about its net benefits.

A subsequent study by Zakowska, Tan-Nam and Evans (2012) examines SBR's ability to deliver promised savings by investigating the level of awareness, attitudes and experience with SBR among SBR stakeholders such as participating government agencies, software developers and reporting practitioners such as tax agents. Evidence from their study shows unfavourable results for claims made regarding the benefits of SBR. Various stakeholders believed that the risks or unfulfilled expectations of SBR outweigh its benefits. Overall, the study by Zakowska et al. (2012) confirms the findings of the Productivity Commission Report (2012) regarding the potential factors contributing to the low level of SBR adoption, namely insufficient demand for SBR, which affects the development of SBR-enabled software and thus its availability.

Therefore, based on prior studies and reports on the progress of SBR adoption, sluggish development and adoption results from a lack of urgency by users to use the SBR channel for financial and business reporting to ASIC, the ATO and SROs. This lack of urgency derives from a number of factors, but primarily the lack of mandate and failure to see the benefits of SBR. However, in the absence of a mandate, this lack of urgency might be driven by users' self-interest. Users include not just businesses, but also business intermediaries, which have been recognised by the government as one of the most important stakeholders in the implementation of SBR. Business intermediaries consist of (public) accountants, tax agents, bookkeepers, financial advisors and payroll specialists, as well as business and industry associations (Madden, 2009).

Business intermediaries are the most important stakeholder group during early SBR implementation because, as discussed earlier, SMEs, and particularly small businesses, generally do not have internal accounting departments; rather, they rely on business

intermediaries for the provision of traditional accounting work. As of 2008, more than 26,000<sup>12</sup> registered tax agents (i.e., all accounting practitioners in Australia that are qualified to provide tax-related services), lodged business-related tax income returns for 97 per cent of more than two million businesses in Australia (Madden, 2009). In 2013–2014, there were more than 35,000 firms in the accounting services industry, and more than 300,000 tax practitioner individuals were registered with the Tax Practitioner Board (Chia, 2013; Lee, 2013). In the five years to 2013, there were more than two million businesses in Australia, with SMEs comprising 97 per cent (ABS, 2014a). Thus, SBR has substantial implications for those who serve SMEs, particularly for accountants in public practice. However, SBR efficiency benefits that accrue to SMEs due to standardisation and automation may be perceived as a threat to accountants' professional work.

Given these observations, this study examines the digital innovation stemming from SBR and cloud accounting because: (i) cloud accounting may be able to overcome the roadblocks that inhibit SBR adoption, as identified in prior studies; and (ii) overall SBR and cloud accounting have substantial and important implications for professional public accounting practice. Cloud accounting aligns with the government's SBR agenda in the first phase of SBR implementation. It also supports the first phase of SBR implementation; that is, facilitating the adoption of SBR for reporting to the government— especially to the ATO, which has become the current target of the SBR Program. Second, it is also likely to support the next planned scope of the first phase—that is, financial and business reporting to other government agencies and jurisdictions involving data that normally exist within businesses' financial/accounting/record-keeping systems (Madden, 2011). In addition to supporting the first phase of SBR implementation, cloud accounting has the capacity to support subsequent phases of SBR implementation if the XBRL-based standard is embedded into businesses' accounting systems. Accordingly, cloud accounting will have significant implications for public accountants whose primary client base is SMEs, not only for compliance purposes, but possibly beyond. The following section discusses how cloud accounting possesses this capacity.

## **2.4 Cloud Accounting**

As stated previously, cloud accounting refers to a new and disruptive model of cloud-based accounting software created by entrepreneurs and innovators, particularly those behind Xero Ltd, a recent start-up software vendor (Macpherson, 2013c; Satell, 2014). Cloud accounting

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<sup>12</sup> This figure is obtained from Madden (2009), who obtained it from multiple sources, including ATO Knowledge Profiles, ATO Tax Agent Technology Survey 2008 and IBIS Accounting Services in Australia.

emanates from cloud computing technology.<sup>13</sup> Prior to Xero entering the market, cloud-based accounting software existed but did not disrupt the mainstream market, which was dominated by incumbent software vendors who championed their desktop-based software. Xero claims that its software is disruptive for two main reasons: (i) the *design* of its cloud-based accounting software, which Xero refers to as *pure cloud accounting* with a *single-ledger* design; and (ii) its *aggressive business model*, which includes having an *open system*, *free practice licence* and an *attractive partnership program* (Xero, n.d.-a, n.d.-c).

Xero was established in New Zealand in 2006, and the Australian version of its cloud accounting software was first launched in September 2008 (Carey, 2014; Xero, n.d.-e). Xero claims that the software is designed from the perspective of SMEs' needs, and particularly small businesses—that is, not only for accounting purposes, but also for affordable, comprehensive business needs. Xero claims that this is in contrast to other desktop-based and on-the-cloud software products, which are designed from the perspective of accountants—that is, only for accounting purposes (Xero, n.d.-a, n.d.-c). For these reasons, Xero offers *pure cloud accounting* with a *single-ledger* design.

Xero's *pure cloud accounting* design means that it is delivered as 'software as a service' (SaaS). It is wholly (purely) on-the-cloud, where it can be accessed via a standard browser without an additional interface.<sup>14</sup> Therefore, any user can access the system at any time, anywhere and from any device. This design also provides the flexibility for Xero to enhance its system at any time without disrupting users, and advancements are delivered immediately, without users needing to perform upgrades (Xero, n.d.-d). Other desktop-based and on-the-cloud accounting software with an interface require users to perform an upgrade, which is not automatic. In addition, users are typically charged for upgrades. Xero does not require an extra fee for an upgrade because as a SaaS, its business model is to charge clients for access. That is, based on a monthly subscription plan that clients select or modules clients actually utilise.

In addition to pure cloud accounting, its critical design is the *single-ledger* design, which Xero brands as 'the new disruptive model'. As shown in Figure 2.1, the model is critical, as it has been subsequently adopted by competitors in their new cloud accounting offerings or in revamping their existing cloud-based accounting software (Carey, 2014; O'Neill, 2013; Vallence, 2013).

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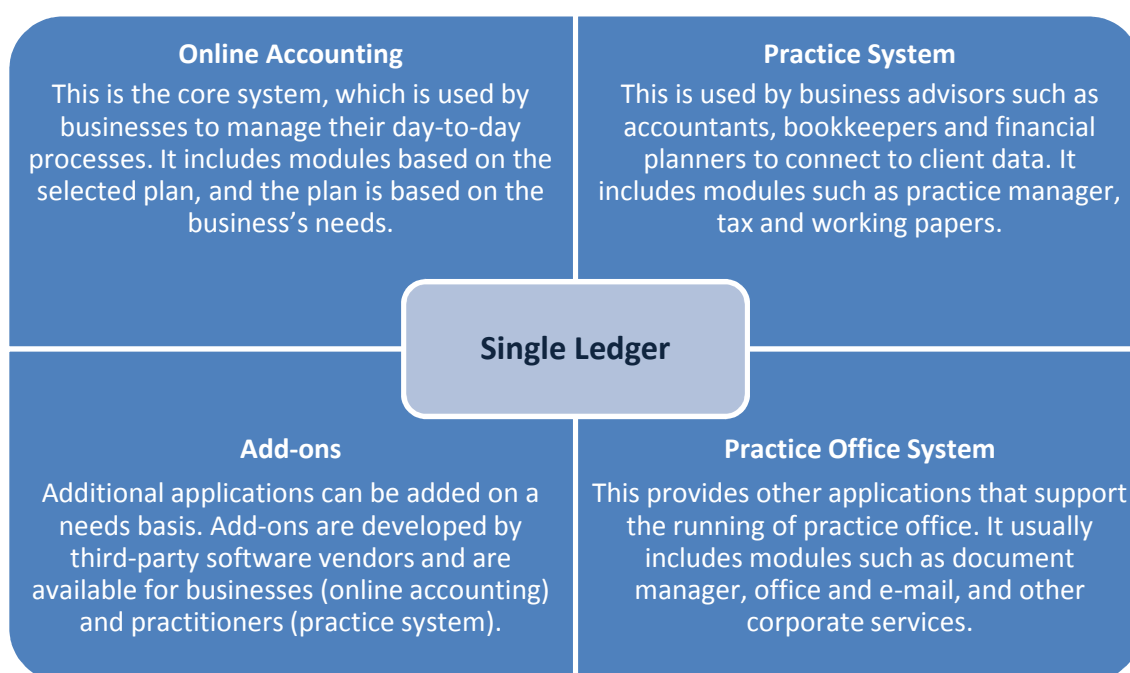
<sup>13</sup> Cloud computing is generally defined as a model of computing in which Internet-based information and computer power is accessible to users from a web browser via the Internet (Shawish & Salama, 2014).

<sup>14</sup> An interface, according to oxford dictionaries, refers to 'a device or program for connecting two items of hardware or software so that they can be operated jointly or communicate with each other'. (<http://www.oxforddictionaries.com/definition/english/interface>). Therefore, before connecting to a SaaS, an interface needs to be installed by end-users into their computers.



As shown in Figure 2.1, cloud accounting consists of online accounting, a practice system, a practice office system and add-ons. Online accounting is the *core system* used by SMEs. The practice system used by accounting practitioners accesses this core system based on defined access rules. Add-ons are applications that are added on a needs basis, and that consist of extensive accounting and business solutions. Accordingly, through add-ons, the core accounting system is extended into an ecosystem of cloud-based accounting and business solutions. This also occurs from the accounting practitioners' perspective, thereby providing increased effectiveness and efficiency in managing their clients and practice seamlessly through the practice office system and add-ons.

**Figure 2.1: Cloud Accounting Design**



The model gives control to small businesses to choose whether they need integrated accounting software with basic or more comprehensive modules and the flexibility to change. It also gives small businesses the capacity and scalability to customise their system to suit their current business operations. It includes the ability for public accountants who serve small businesses to support this new way of working in a more streamlined manner. The model enables effective, seamless collaboration between SMEs and their external (public) accountants in a manner similar to internal management accountants using an ERP system. The model also enables practitioners to run their whole practice based on a single cloud accounting product, such as Xero, as it provides facilities for office administration and client management. In contrast, mainstream, largely desktop-based accounting systems treat SME clients and their public accountants as disintegrated entities. Collaboration is limited, as it is

largely based on file exchange between standalone systems, which often suffers from file versioning problems when both ends perform different updates in their own systems.

Xero's cloud accounting software uses an *open system*<sup>15</sup> to drive the development of other digital innovations that can be integrated into the core system to extend its capability. This feature is part of Xero's business model. It aims to further enhance standardisation and automation (efficiency), and to promote the availability of extensive, compatible add-on software. These features promote the use of Xero as the main accounting system not only for businesses, but also for accounting practitioners and/or business advisors. For example, the integration of Object Capture Recognition (OCR) technology to capture data from receipts represents a way to increase the automation of data entry through add-ons. Most importantly, as discussed earlier, cloud accounting facilitates the integration of government-sanctioned standardisation in compliance reporting (i.e., SBR). For example, the core accounting system may provide basic functionalities for SBR-based reporting, but an add-on can provide more advanced functionalities for more comprehensive reporting by more complex SMEs. Therefore, through add-ons, SMEs and accountants can customise their systems seamlessly based on their needs in order to conduct effective and efficient operations.

The open system thus supports Xero's focus to provide a comprehensive single-view core system specifically for small businesses, which typically have limited resources, are easily affected by the changing environment and do not have internal accounting departments (Xero, n.d.-c). Xero's aim to be the core system is further promoted through its *free practice licence* and an *attractive partnership program*. These include monetary incentives that persuade public accountants, and therefore their clients, to use Xero (Macpherson, 2014b).

The free practice licence enables public accountants to use Xero as their practice software without cost. Previously, with desktop-based systems, public accountants paid a fee to use the practice software version. The attractive partnership program enables public accountants to earn revenue from having more clients engage with Xero, and to receive non-monetary benefits (Xero, n.d.-b). For example, public accountants with 25–99 clients on Xero are classed as Silver partners who earn a 20 per cent margin from their clients' Xero subscriptions,<sup>16</sup> and they are entitled to a free practice office system. Public accountants can deliver these benefits to SMEs (clients) as both non-monetary and monetary benefits.

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<sup>15</sup> The open application programming interface (API) enables third-party vendors to develop add-on software that is compatible with Xero.

<sup>16</sup> For more information about the Xero partnership program, see <https://www.xero.com/partners/partner-program/rewards/>. However, the Xero partnership program has been revamped due to conflicts between accountants, bookkeepers and clients. The revamp was announced in August 2014 and became effective on 1 April 2015. See Appendix 2.2, pages 44-48, for further information.

Accordingly, Xero's open system, the free practice licence and attractive partnership program promote the use of Xero as the core system of an accounting firm, especially for SMPs. This in turn creates a push for SMEs—specifically small businesses—to adopt Xero (Adhikari, 2013). The benefits of using Xero are also available to other practitioners, such as bookkeepers (non-professionals) and financial planners (other professionals). It is therefore not surprising that Xero has become increasingly successful.

In 2011, Xero started to grow rapidly, and its customer-base growth was the fastest in Australia in 2012 (Drury, Jenkins, & Ridd, 2012; Norman, 2011). Xero targets small businesses not yet using any accounting software, and it is encroaching into the market share of incumbent accounting software vendors (Markus, 2013; Vallence, 2013). These events likely drove incumbent software vendors, who previously enjoyed significant revenue and market share from their desktop-based accounting software, to launch their own cloud accounting software (Boreham, 2012; Polites, 2013; Williams, 2012). The incumbent vendors developed new cloud accounting or revamped their existing cloud-based software (O'Neill, 2013). The resulting 'war' between accounting software vendors may result in pressure to adopt cloud accounting. The 'war' became evident in the period during which incumbent vendors launched their cloud accounting software—that is, between 2012 and 2014 (O'Neill, 2013; Williams, 2012). During this time, incumbent vendors revolutionised their business models to compete with Xero by lowering software prices, reducing or removing practice licence fees and redesigning their partnership programs (Adhikari, 2013; Markus, 2013).

In addition to the 'war' between software vendors, the government has promoted cloud accounting development because the software aligns with its SBR Program and its program to manage business compliance and improve the survival rate of small businesses. For example, in 2013, the government released its National Cloud Computing Strategy, which aimed to promote the use of cloud-based services within the government and among small businesses and not-for-profit entities (Department of Broadband, 2013). This government program compounded the 'war' between accounting software vendors and created a 'push' towards the use of cloud accounting for SMEs, particularly in the small business space.

This 'push', coupled with the design of cloud accounting as discussed in the previous section, is behind this study's assertion that the digital innovation stemming from SBR and cloud accounting has profound implications for professional public accounting practice. As stated earlier, cloud accounting has the capacity to overcome roadblocks that inhibit the adoption of SBR identified in previous studies. The innovative design facilitates SBR integration, and the 'push' towards cloud accounting dissolves roadblocks to SBR adoption (Durkin, 2014; Leeper, 2013).

As discussed earlier, low SBR adoption has been attributed to an absence of a force to adopt—that is, no government mandate—and adoption relies significantly on business intermediary acceptance, particularly that of the professional accounting community (Azam & Taylor, 2011; Productivity Commission, 2012). However, the extent to which the professional accounting community—specifically sub-groups with small businesses as their primary client base—perceives threats arising from SBR due to the commodification of traditional accounting work overpowers the benefits of SBR. Small businesses typically rely on business intermediaries for compliance services. As a result, a lack of clear net benefits led to a lack of sufficient demand from both practitioners and businesses for SBR-enabled software (Productivity Commission, 2012; Zakowska et al., 2012). Thus, software developers possibly did not see the business case for developing SBR-based software. Accordingly, early in the SBR Program’s life, there was insufficient SBR-enabled software available, which further hampered SBR adoption (Productivity Commission, 2012). However, in the case of cloud accounting, software vendors initiated the change, so there was a supply-push mechanism rather than a demand-pull mechanism (as was expected for SBR).

A supply-push mechanism has two important implications for professional public accounting practice. First, cloud accounting appears to incentivise business intermediaries to push small businesses to adopt, unlike the case of SBR. This is evidenced by Xero’s innovative business model, which sparked the ‘war’ between software vendors. Second, unlike the case of SBR, the accounting professional community has no control over the move towards cloud accounting. This includes no control over the ability of cloud accounting to further the commodification of traditional accounting work in serving SMEs. As previously stated, cloud accounting enables not only the integration of SBR, but also the integration of other technologies that increase standardisation and automation. This integration creates an ecosystem of cloud-based accounting and business solutions that enables single-view, streamlined and highly automated end-to-end processes from the entry of business data to reporting to the government; hereafter, this is referred to as the digital innovation.

The link between SBR and cloud accounting is further supported by government reports that detail the progress of SBR (ABR, 2015; ATO, 2014, 2015). As of 30 June 2015, the reports show that SBR adoption increased rapidly in almost the same years as the ‘war’ between software vendors over cloud accounting—that is, between 2012 and 2014 (see Appendix 2.1, pages 42-43, which details SBR progress as of 30 June 2015). As previously stated, Xero’s customer base increased significantly during that period, and incumbent software vendors released and revamped their cloud-based accounting systems.

Overall, both SBR and cloud accounting—that is, the digital innovation—present challenges for accountants in public practice because increased automation and standardisation threaten their professional work. However, the whole ecosystem also provides opportunities for accountants in public practice to be more involved with their SME clients beyond compliance work (Kellerman & Walker, 2013). The following section discusses these implications in more detail.

## **2.5 The Implications of the Digital Disruption for Public Accounting Practice**

This section discusses issues that motivate this study. The issues are drawn primarily from popular literature given the contemporary nature of the topic and therefore the lack of available academic literature.

The anecdotal evidence presented in this section shows the tensions that public accountants face with non-professionals such as bookkeepers, as well as with other professionals such as financial planners. The evidence also shows potential tensions between different sub-groups within professional public accounting practice—for example, between SMPs and the Big 4. These tensions arise from different vested interests between the different groups because, as explained earlier, the digital innovation of interest has imminent implications for the traditional accounting professional services' business model, making it timely to explore the transformative effect of the digital innovation on the accounting profession (Deloitte, 2012; Gettler, 2014; Grabski, Leech, & Schmidt, 2011). The evidence of increased tensions highlights the importance of researching the overarching question posed in this thesis—specifically the impact of digital innovation on the social structure of professional public accounting practice. This research will extend our understanding of how the changing social environment shapes changes in accounting practice.

Tensions faced by professionals in public accounting practice are evident from the results of a survey commissioned by CCH (2013a).<sup>17</sup> The results of the survey indicate that integrated cloud-based accounting and business systems—that is, the digital innovation of interest—threaten the survival of accountants whose primary client base is SMEs. Increased automation and standardisation enable a range of alternatives for SMEs, such as performing some of the work themselves or switching to other accountants that provide better value for money (i.e., SMEs expect accountants to provide broader or more value-adding services in response to efficiency gains in dealing with compliance matters). Indeed, around 65 per cent of SMEs have

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<sup>17</sup> Two online surveys were conducted in parallel. The first probed 1,018 business owners, or decision-makers, of organisations with 200 or fewer employees. The second gathered responses from 212 accountants, or principals, of accounting firms that service SMEs. The fieldwork commenced on 8 March 2013 and was completed on 21 March 2013. After the interviews, the data were weighted to the latest business count estimates sourced from the ABS. The research was conducted by Lonergan Research.

considered replacing some accountants' tasks with a cloud-based system (CCH, 2013a). Further, more than half of SME owners have considered replacing accountants who do not embrace the cloud (CCH, 2013a). The results of the survey suggest potential loss of professional work to non-professionals and imminent intraprofessional competition. Further the results suggest that SMEs are becoming more demanding, which this likely weakens the ability of public accountants in maintaining part of their jurisdiction from non-professionals and worsens potential intraprofessional competition.

This is particularly critical for SMPs whose primary client base is small businesses, as the digital innovation is increasingly changing the SME landscape. SMEs, particularly small businesses that have not previously used any accounting software, are increasingly adopting cloud accounting (Markus, 2013). In addition to cloud accounting becoming the standard system for SMEs, the increasing availability of SBR software that is compatible with cloud accounting adds pressure for public accountants to go beyond compliance work (Macpherson, 2013b, 2014d). Colin Dunn discusses this in his book called *Accountants—The Natural Trusted Advisors*, which was published in 2012 (Gettler, 2014).

Dunn argues that the digital innovation increases the need for accountants to transform and reposition themselves as a key part of their clients' teams by effectively becoming their clients' chief financial officer (CFO). Dunn suggests that accountants need to engage in one of two strategies: (1) become a specialised or boutique firm that offers a niche service to a small and select client base; or (2) become a growth firm that focuses on high-value delivery such as identifying and selling new projects, and advising on leadership and strategy implementation (Gettler, 2014). Dunn's view is supported by Khadem (2013a), who predicts that smaller accounting firms will diversify and become boutiques that focus on specialist areas such as the commercialisation of intellectual property, or they will become external or offshoring back office professionals. These strategies towards diversification, as well as client orientation, suggest similarities to the Big 4's actions in transforming into multidisciplinary practices (Greenwood et al., 2002; Suddaby & Greenwood, 2001). Meanwhile, the Big 4 are expected to continue repositioning themselves as multidisciplinary practices and to increase their focus on digital expertise and Asia (Khadem, 2013a). This trend presents significant challenges for smaller firms aiming to become multidisciplinary in response to the disruption by the digital innovation.

In addition, the disruption places pressure on SMPs to show that they possess the appropriate expertise and values to perform work at an appropriate level in line with changing expectations by SMEs—specifically small businesses. At the same time, SMPs need to differentiate their work from other sub-groups higher up in the social structure of public

accounting firms in order to maintain their jurisdictional claims, particularly over the SME space. This need for SMPs to gain a position of legitimacy in relation to their client base also includes differentiating themselves from cheaper, offshore accountants (Gettler, 2013). Coupled with the Big 4's competitive advantage in multidisciplinary services and abundant resources, this has significant implications for SMPs in exploiting new opportunities arising from the digital innovation; that is, as discussed earlier, the digital innovation can create intraprofessional competition over the SME space.

Since commodification is the issue here, the digital innovation also results in threats from non-professionals and other professionals (Abbott, 1988) because commodification represents a loss of control over professional abstract knowledge, and therefore claims, over that jurisdiction (Abbott, 1988; Fournier, 2000). However, in responding to this issue, David Smith, the Director of *Smithink*, a consulting firm that offers advice to accounting firms, suggests that accountants should reclaim the bookkeeping work that they left more than three decades ago (as cited in Gettler, 2013). Smith says that the ability to attend to clients at any time and anywhere means that accountants can provide services on a more frequent basis, such as daily instead of monthly, quarterly or yearly. Smith (2013) maintains that this also means the end of rear-view accounting; that is, accountants no longer receiving data from clients at the end of the period, as they now have access to clients' up-to-date data. This means instead of providing services based only on past data, accountants can provide real-time services based on how the client is doing currently, which helps clients to look forward. Smith's view is also supported by Sam Allert, the Managing Director of the Professional Division of Reckon, an accounting software provider. Allert believes that accountants can reclaim the role of trusted business advisors (as cited in Walker, 2013). This view is shared by Stuart Black, a partner at Chapman Eastway (as cited in Mace, 2012), who states that the cloud enables accountants to reclaim bookkeeping—for example, by becoming the CFO for their clients—because they can oversee their clients' businesses more regularly.

However, this view is challenged by bookkeepers. Matthew Addison, the executive director of the Institute of Certified Bookkeepers (ICB)<sup>18</sup> believes that real-time, anytime, anywhere access and increased standardisation and automation will not lead to the death of bookkeeping (Addison, 2013b, 2013c). He suggests that, far from threatening the existence of bookkeepers, digital innovation positions bookkeepers strongly in the market. Increased accuracy due to standardisation and automation is vital for bookkeepers' credibility. In addition, increased efficiency improves bookkeepers' focus and their service offerings, including the provision of

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<sup>18</sup> The Institute of Certified Bookkeepers (ICB) claims to be the largest bookkeeping institute in the world. The ICB is not-for-profit and is a registered BAS Agent and Tax Agent in Australia. It aims to promote and maintain standards of bookkeeping as a profession through its established professional qualification system.

advisory services such as the interpretation of financial records. This view indicates that the digital innovation not only exposes accountants' jurisdiction to bookkeepers because standardisation and automation enable less qualified individuals to undertake some of their core work, but it also disturbs the prior subordination settlement between accountants and bookkeepers (Edwards et al., 2007).

Addison's view is shared by the then CEO of the Association of Accounting Technicians (AAT<sup>19</sup>), Rob Comelli, in an interview with Sholto Macpherson (2012b). Comelli argues that the efficiency and increased automation brought about by cloud accounting do not eliminate the market for bookkeepers, but instead enable bookkeepers to fill a different role—as trusted advisors of SMEs—because they deal with businesses on a day-to-day basis. Comelli suggests that bookkeepers should extend their role into areas such as stock control, data management from point-of-sale and the identification of software needed for SMEs.

New directions for bookkeepers, as identified by Addison (2013c), are also identified by Anita Gisch, the Managing Director of the Northpoint Training Institute (as cited in Macpherson, 2012b). The Northpoint Training Institute offers business coaching that includes project management, process consulting and cloud advisory services, as well as partnerships for bookkeeping firms and accounting firms. However, in responding to the threats and opportunities provided by the cloud-based ecosystem for business and accounting processes, Gisch subtly encourages bookkeepers to encroach into a domain that has been regarded as the accountants' space. Gisch indicates that, to survive: 'If they [bookkeepers] don't move to establishing their broader value beyond data entry they're going to get priced out' (Macpherson, 2012b, para. 5). Gisch suggests that, since the cloud-based ecosystem of accounting and business solutions enables multiple services to be bundled together, bookkeepers should let their clients know that 'I'm not just a bookkeeper. Look at all the value I'm giving to these businesses' (Macpherson, 2012b, para. 18).

This new direction for bookkeepers suggests a movement towards more professional bookkeepers—that is, the expansion of bookkeepers' service offerings beyond data entry to business advisory by exploiting opportunities that arise from higher automation on the cloud (i.e., the commodification of traditional accounting work).

However, Comelli (as cited in Macpherson, 2012a) holds a slightly different view from that of Addison and Gisch. Comelli suggests that bookkeepers need to be careful in extending their services. He maintains that what bookkeepers can offer is limited by the law and professional

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<sup>19</sup> The Association of Accounting Technicians (AAT) is a professional body for bookkeepers, financial administrators and assistant accountants.



indemnity cover. If they go beyond these constraints, bookkeepers can face significant problems in the future. Comelli also suggests that bookkeepers should stay within the boundary of day-to-day operations, such as recording and filing of information. He suggests that offering advice on the types of software that are suitable for specific businesses is appropriate for bookkeepers, but he warns that providing advice on strategic growth is the accountants' space. Further, according to Comelli, in order for bookkeepers to provide services usually performed by accountants, they need to undertake further education that includes a diploma, a more advanced diploma and then a degree. Even after a degree, if bookkeepers want to offer tax-related services, the law requires them to be registered as tax agents. Comelli also indicates that there is a fundamental difference between the work of accountants and bookkeepers. Accountants deal with the more technical aspects of running a business, while bookkeepers deal with basic day-to-day business operations. Here, Comelli dismisses the potential for accountants attempting to reposition themselves by becoming day-to-day trusted business advisors—that is, including day-to-day bookkeeping and business advisory as part of the bundle of services that they offer to clients.

Addison (2013a) further argues that, in the new digital paradigm, bookkeeping will expand its services towards advising businesses operations as a whole rather than mere data entry, recording and balancing. According to Addison, bookkeeping is no longer associated only with the physical activity of maintaining an accounting ledger; rather, today's bookkeepers spend time advising, setting up and managing integrated business systems. Addison suggests that today's bookkeepers act as business system managers. They are at the forefront of the technology that SMEs implement, and they take the lead on changes to software relating to accounting, bookkeeping, compliance and record-keeping. In contrast, accountants virtually have an annual interaction with smaller businesses. According to Addison (2013a), the upheaval in the accounting industry due to digital innovation positions bookkeepers more as integral advisors for business than has previously been the case. Thus, the role of bookkeepers is becoming increasingly associated with the success of their business clients and their compliance levels. Addison (2013a) believes that the digital innovation makes the work of bookkeepers more effective and efficient; it enables them to work with business partners as an integral part of the businesses they serve, and it provides clients with visibility of cash flows and forecasts.

It is acknowledged that each of these proponents has their own vested interests, but if Addison's position is accepted, the new paradigm in bookkeeping practice can be seen as overlapping with the jurisdictions of SMPs, which continues to undergo a paradigm shift. Kellerman and Walker (2013, para. 5) maintain that 'the accounting profession collectively will

face increasing competition from other professionals who want to seize attention of its best small business clients'. Further, Robert Powell, a private business expert at Grant Thornton (as cited in Kellerman & Walker, 2013), recounts that bookkeepers have started to encroach on accountants' territory. This is interesting because Grant Thornton is one of the larger sub-groups (Next Big 8) and it is concerned about bookkeepers potentially expanding their jurisdiction.

However, the need for SMPs to move beyond traditional accounting work (i.e., compliance work) is also challenging for them. Their move to expand into financial and business advisory services may be constrained by competition with other professionals, such as financial planners who are undergoing substantial transition and reputational issues (Khadem, 2013b). Financial planners include of professionals from both accounting and non-accounting backgrounds, ranging from accountants to stockbrokers and bankers to real-estate agents (Khadem, 2012a). In addition, competition in financial planning is likely to intensify due to the nature of the digital innovation that enables financial planners to better interact with their clients, as well as Xero's interest in pushing financial planners to adopt its software (Khadem, 2013b). Xero maintains that financial planners can increasingly align themselves with accountants, and it expects the number of financial planners who become Xero clients to exceed the number of accountants (Khadem, 2013b).

Some accountants consider Xero's push to attract financial planners a challenge arising from digital disruption because it widens the overlap in jurisdictions. Rob Nixon, as cited in Kellerman and Walker (2013), warns that financial planners and lawyers are also competing for a role as business advisors—for example, how to collect debt or how to manage the business. This suggests that public accountants expanding into this territory will face competition with other professionals. This is particularly true for SMPs who do not have the level of expertise and reputation of such as the Big 4.

Conversely, according to David Naylor, co-founder of Chan & Naylor, accountants do not view these developments as a threat because they have the confidence to use cloud accounting to upsell and offer more advice than traditional tax-related advice—for example, by fulfilling increasing demand by SMSFs or providing general financial planning advice (Khadem, 2013a). This confidence is supported by the chief executive of Certified Public Accountants Australia (CPAA), Alex Malley; the chief executive of the Institute of Public Accountants (IPA), Andrew Conway; and Deloitte's superannuation lead partner, Russell Mason (Khadem, 2012a, 2012b). Their view is that businesses will 'shop around', and in seeking value for money, they will tend to choose accountants as the more qualified and trustworthy advisors.

Further, according to Yasser El-Ansary, the General Manager of leadership and quality at the Institute of Chartered Accountants in Australia (ICAA),<sup>20</sup> accountants should aim to become a 'one-stop-shop' (Khadem, 2012b) because regulatory change in relation to the Future of Financial Advice (FOFA), which requires professionals to hold an Australian Financial Services licence to be eligible to provide financial services advice, favours accountants (CAANZ, n.d.-a; The Treasury, n.d.-a). Since 1 July 2013, accountants—specifically those who hold a public practice certificate from one of the three professional bodies (ICAA, CPAA and IPA)—have been given a limited three-year exemption from the training requirements (Khadem, 2012b). During this period, accountants receive an advantage by becoming fully licenced.

However, the exemption will be removed from 1 July 2016, and if accountants do not then have a full licence, they must follow more stringent requirements. Accountants without a licence, or with a limited licence, will not be able to offer certain advice on financial services. This suggests that competition between public accountants and financial planners for the provision of financial advice will become more intense from 1 July 2016. Simultaneously, cloud accounting is potentially becoming the norm and is changing the relationship between SME clients and their business advisors. It is expected that a significant number of SME businesses and their advisors will have moved to cloud-based services in 2016 (Department of Broadband, 2013).

In addition, according to a survey by CCH (2013b), 82 per cent of SME owners believe that accountants are trusted advisors not only for financial accounts, but also for advice on continued success and business growth. However, for business advice, only 69 per cent trust accountants over financial planners. This may be due to SMEs' survival issues reflecting an overlapping jurisdiction. The survey (CCH, 2013b) also reveals that the type of services most needed by SMEs to help their businesses are more related to financial and business advice than just compliance matters. For example, 'Failure to manage costs or anticipate rising costs' is ranked first by 61 per cent of respondents, making it the most important factor behind businesses failing (CCH, 2013b, p. 3). In contrast, 'Not enough time spent on managing the books' was only ranked by 27 per cent of respondents, placing it seventh in terms of importance (CCH, 2013b, p. 3). This indicates more pressure for accountants to have financial and business advisory skills.

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<sup>20</sup> The Institute of Chartered Accountants in Australia (ICAA) merged with the New Zealand Institute of Chartered Accountants (NZICA) in 2014 and changed its name to Chartered Accountants Australia and New Zealand (CAANZ). The new structure was formally implemented on 31 December 2014. However, this thesis uses ICAA instead of CAANZ because the data used in this thesis is as of 30 June 2014, when CAANZ had not yet received formal recognition.

Further, although SME owners ranked accountants well above financial planners as their trusted business advisor, this number is much lower among younger generations. The survey finds that 49 per cent of SME representatives aged 50 years and above consider accountants the most trustworthy, but only 38 per cent and 31 per cent of those aged 35–49 and 18–34, respectively, rank accountants as the most trustworthy. Given that SME owners who are among the younger generation (Gen Y) are more agile with technology and more aggressive towards expanding (MYOB, 2013), accountants are likely to face greater competition from financial planners and other advisory professionals. This indicates that accountants, especially SMPs, will face more intense competition not only from other professionals, but also from larger sub-groups such as the Big 4, which have a competitive advantage in financial and business advisory services (Greenwood et al., 2005; Ramirez, 2009).

Thus, the digital innovation may create significant challenges specifically for SMPs, but it may also affect professional public accounting practice as a whole. The commodification of traditional accounting work due to digital innovation creates both threats and new opportunities that lead to jurisdictional conflicts with non-professionals, other professionals and specifically intraprofessionals (Attewell & Rule, 1984; Cooper & Taylor, 2000). Competition from these groups is imminent because the digital innovation can disrupt the nature of professional knowledge, client relationships and jurisdictional control, particularly for SMPs. These disruptive circumstances may in turn affect the nature of professional work (Abbott, 1988; Greenwood et al., 2002; Malhotra & Morris, 2009; Malhotra et al., 2006). This is explained in detail in the next section.

## **2.6 Digital Innovation**

As discussed earlier, the digital innovation as defined in this thesis is an ecosystem of cloud-based accounting and business solutions targeted at SMEs. It stems from the conjunction of SBR and cloud accounting. As this thesis focuses on the implications arising from the digital innovation for the social structure of professional public accounting practice, the discussion focuses on the perspective of (public) accountants. The digital innovation represents disruption to professional public accounting practice in serving SMEs—a facet of professional public accounting practice that is the primary domain of SMPs. However, it holds implications for the overall domain of public accounting practice because of the nature of the digital innovation. This nature emanates from the core technology features and the key design feature of the digital innovation (Griffith, 1999), leading to the commodification of traditional accounting work.

Traditional accounting work is referred to in practice as compliance work, and it typically involves bookkeeping and the preparation and reporting of financial statements and tax (Greenwood et al., 2002; Ramirez, 2009).<sup>21</sup> From the perspective of the sociology of the professions, commodification represents the democratisation of professional knowledge and typically represents a threat to the accounting profession in maintaining its jurisdiction (Abbott, 1988; Suddaby & Greenwood, 2001). Professional knowledge—in the provision of accounting services facilitated by technology—typically represents a communication process that includes all phases from the production of knowledge to its distribution (Kauppinen, 2014, p. 396).

The commodification of the production of professional knowledge refers to the conversion of localised and highly experiential abstract knowledge into a product through codification, abstraction and translation (Suddaby & Greenwood, 2001). Commodification is usually facilitated by technology as the medium in: (1) converting individual knowledge and experience into a storable product that can be moved and reused; (2) synthesising the codified knowledge and experience into templates or routinised processes that can be easily understood and implemented by those who lack experience and qualification; and (3) reapplying codified knowledge and processes to different contexts (Suddaby & Greenwood, 2001). The commodification of the distribution of professional knowledge is where the channel for moving and reusing codified knowledge and reapplying it to different contexts becomes accessible by anyone, regardless of their experience or qualification level (Kauppinen, 2014).

The digital innovation discussed in this study leads to the democratisation of the production of professional knowledge for traditional accounting work and to the democratisation of the distribution of professional knowledge in serving SMEs. The nature of the digital innovation emanating from its *core technology features* and *key design features* is behind these phenomena.

The *core technology features* are twofold. First, they embody the *standardisation* and *automation* of business and accounting processes, which consequently democratise the *production* of professional knowledge in conducting traditional accounting work. Second, *cloud computing*, which represents *real-time access*, democratise the *distribution* of professional knowledge in serving SMEs, as it breaks down geographical (from anywhere), temporal (at any time) and access (using any device) barriers.

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<sup>21</sup> Professional work beyond traditional accounting work typically involves multidisciplinary consulting or business advisory tasks such as merger and acquisition advice, business strategy advice and executive remuneration restructuring.

The *key design feature* lies in the *single view*, which integrates the technology underlying the digital innovation. As a result, the single-view design enables business intermediaries such as accountants to view their SME clients' data seamlessly from data entry to reporting to the government. That is, the single-view design *streamlines* the democratisation of the production and distribution of professional accounting knowledge underpinning traditional accounting work in serving SMEs.

As such an ecosystem streamlines the democratisation of the production of professional knowledge in the provision of traditional accounting work together with the democratisation of the distribution of professional knowledge in servicing SMEs, it then leads to the democratisation of the scale of services beyond traditional accounting work offered by SMPs in serving SMEs. This was not previously feasible, and it places further pressure on the commodification of traditional accounting work as a means to leverage service provision into more value-adding and profitable tasks. That is, public accountants—specifically those serving SMEs—are pressured to have the expertise and capacity to offer services beyond traditional accounting work, typically involving advisory services. This is especially challenging for SMPs (Ramirez, 2009).

Thus, commodification is considered a threat to the accounting profession. However, as stated earlier, such an ecosystem may lead to new opportunities that were not previously feasible. Figure 2.2 summarises the potential threats and new opportunities for professional public accounting arising from the nature of the digital innovation. The discussion of the threats and new opportunities begins with an outline of the implications that arise from the digital innovation's core technology features, followed by those from the key design feature.

Increased *standardisation* and *automation* (left-hand column in Figure 2.2), which represent one part of the core technology features, create both threats and opportunities for public accounting practice because they represent commodification that increases accuracy and thereby quality and ability to adhere to compliance requirements. This commodification also increases efficiency and removes much of the repetitive, low-status work, thereby reducing the cost of performing traditional accounting work.

However, these opportunities are accompanied by a number of threats for professional public accounting practice. First, there is a significant potential reduction in revenue due to pressure from clients to lower fees as a result of efficiencies (Niesche, 2013). The democratisation of the production of professional knowledge also means that clients can do some of the work themselves to reduce the cost of professional fees. In addition, professional public accounting practice faces potential increased competition from non-professionals and other professionals.

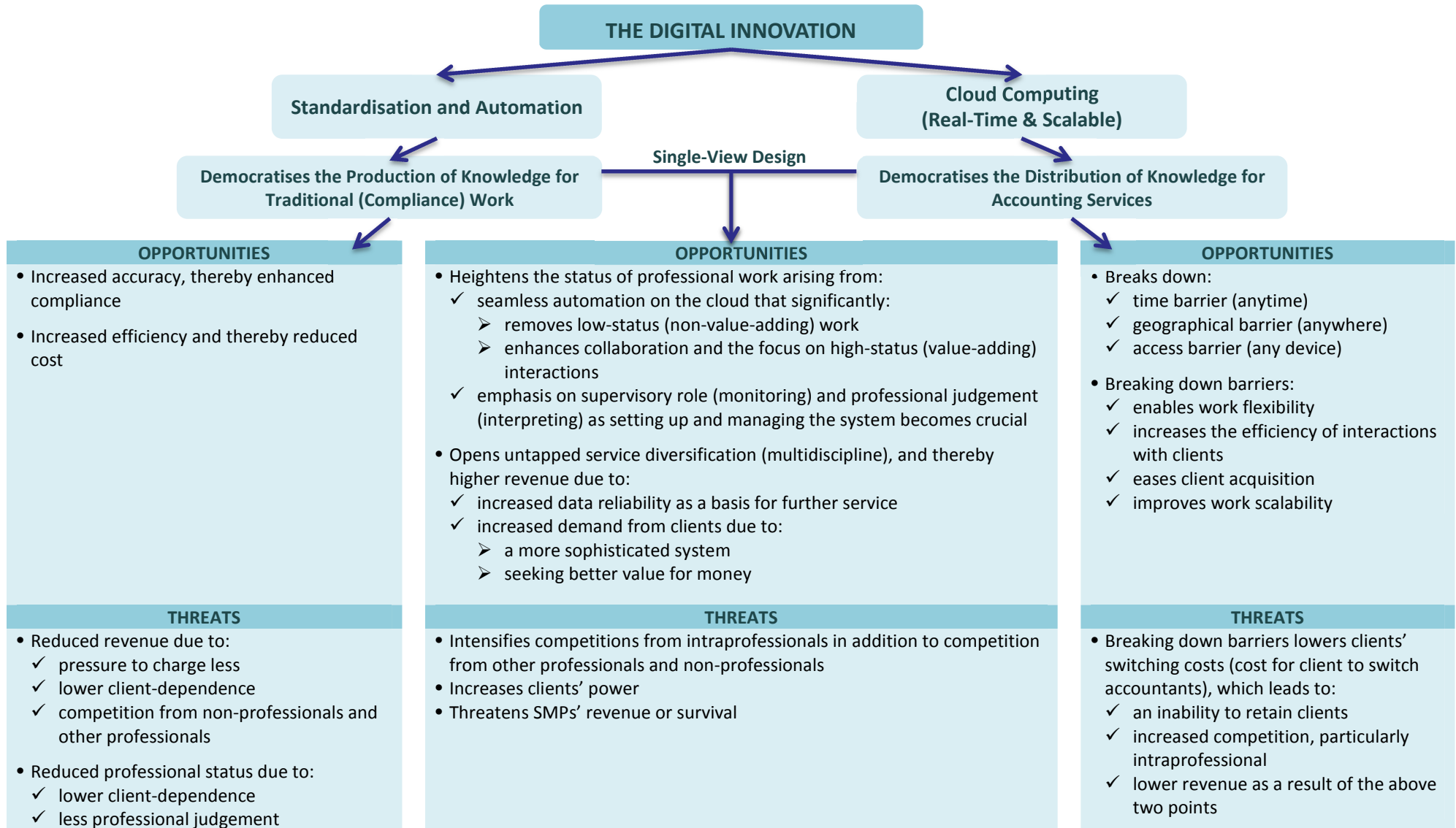
These other occupational groups can bundle some of the commodified work into their services (e.g., office administration or business coaching). According to Abbott (1988), commodification leads to the loss of jurisdictional control, which then threatens the professional status of accountants in public practice.

The other part of the core technology features is *cloud computing* (right-hand column in Figure 2.2). This democratises the distribution of professional knowledge in servicing SMEs because real-time access to resources or data through the Internet—often accessed directly through a web browser—breaks down barriers relating to time, geographical position and accessibility. Cloud computing is generally defined as a computing model in which Internet-based information and computer power—typically real-time scalable resources such as files, data, programs, hardware and third-party services—can be accessible to users from a web browser via the Internet (Shawish & Salama, 2014).

Cloud computing appeals to small business owners because it enables them to start transaction recording on a small scale and dynamically increase their resources simultaneously with increased business demand. Clients of the service pay a subscription fee based on the computer resources and services they use. A wide range of services is available due to rapid growth driven by software vendors in the industry; thus, cloud computing is increasingly described as a category of sophisticated and cost-efficient, on-demand computing services (Shawish & Salama, 2014). The model offers computing, storage and software ‘as a service’ that customers can access at any time, from anywhere, using any device (Shawish & Salama, 2014).

Not only does cloud computing enable businesses to adjust the scale of their operations, but it also enables accountants to freely adjust the scale of their work or practice offerings. Opportunities provided by the cloud (i.e., benefits from the commodification of the distribution of professional knowledge) are threefold. First, the ability to work at any time, from anywhere, using any device enables work flexibility. This is attractive for SMPs with limited resources (e.g., no staff). Second, it increases the efficiency of interactions between accountants and their clients (SMEs). For example, while the manual exchange of files may suffer from inconsistency as a result of working on different versions of the files, this is eliminated by the accountants’ ability to access clients’ real-time data. Third, the breaking down of barriers presents an opportunity to ease client acquisition. These benefits allow accountants to expand their services to clients who were not previously accessible due to geographical barriers.

Figure 2.2: Digital Innovation





However, the commodification of the distribution of professional knowledge also lowers clients' switching costs, which represents a threat. SME business owners or managers can decide to engage with service providers from anywhere in Australia if they are not satisfied with their existing accountant. Thus, lower switching costs for SMEs makes it difficult for public accountants to retain clients. It can also spark intraprofessional competition, which may ultimately bring about the redistribution of public accountants' revenue.

Opportunities and threats arising from the core technology features are amplified by the key design feature of the digital innovation. As discussed earlier, the *single-view* design emanates from cloud accounting's single-ledger design and enables a single view of the integrated cloud-based ecosystem. This single view facilitates the seamless integration of business operations and accounting practice, thereby creating collaboration between the two. Generally, SMEs, particularly small businesses, do not have internal accounting departments. Accordingly, seamless integration with accountants in public practice creates an ERP feel at a fraction of the cost. This creates significant opportunities for accountants in public practice to become more involved with their SME clients (Kellerman & Walker, 2013). However, the ability to become more involved also creates threats, as the single-view design exacerbates threats from the commodification of the distribution of professional knowledge.

Therefore, the overall nature of the digital innovation leads to increased opportunities and threats for professional public accounting practice, which is discussed in the remainder of this section.

The middle column in Figure 2.2 shows two potential opportunities that may arise. The first is from the heightened status of professional work due to on-the-cloud seamless automation, and possibly standardisation, which reorients the emphasis on the supervisory role and professional judgement of accountants. This feature reduces, if not removes, low-status (low-value-adding) work and enhances collaboration, thereby enabling accountants to focus on high-status (high-value-adding) interactions. Although automation and standardisation represent commodification, rather than downgrading the status of professional accounting work, as identified in the existing accounting literature (Cooper & Taylor, 2000; Edwards et al., 2007; Kirkham & Loft, 1993), it has the opposite effect (Attewell & Rule, 1984). For cloud accounting to generate the appropriate processes, from data entry to reporting, and thus generate reliable data, the setting and ongoing monitoring of this seamless automation must be performed properly, and higher-level accounting knowledge is an advantage (Walker, 2013). Therefore, although automation and standardisation democratise knowledge, the overall nature of the digital innovation heightens the importance of the supervisory role and professional judgement of the commodified traditional accounting work.

The emphasis on supervisory work indicates performance at a higher level of jurisdiction (Attewell & Rule, 1984). For example, the accounting literature shows that the commodification of bookkeeping arising from advancements in technology has resulted in the accounting profession leaving some of its traditional work to be undertaken by accounting technicians (Cooper & Taylor, 2000; Kirkham & Loft, 1993). Accountants instead take more of a supervisory role that requires a higher level of knowledge and less low-value-adding administrative work in interacting with clients (Cooper & Taylor, 2000; Edwards et al., 2007). The installation of bookkeeping systems remains the jurisdiction of public accountants, as this is where they retain supervision and control over bookkeeping operations and applications (Edwards et al., 2007).

Bookkeeping (data entry and recording) is a good example of disruption because the nature of the digital innovation, contrary to the literature, emphasises the supervisory role. This indicates a shift back to higher-level jurisdiction as a result of the accountants' competitive advantage (Mace, 2012). However, it is not only the emphasis on supervisory roles that shifts traditional accounting work in serving SMEs to a higher-level jurisdiction, but also the potential increased demand from SMEs for the provision of professional judgement in interpreting the data generated.

This then points to the second opportunity, that is, that arising from the potential of service diversification. Increased data reliability provides a sound basis for public accountants to provide further services. Conversely, more complex systems and the need to seek better value of money likely escalate clients' (businesses') demand for services beyond traditional accounting work and even beyond accounting (Kellerman & Walker, 2013). This may increase potential revenue for public accountants. However, it also brings newfound threats, particularly for SMPs.

Larger sub-groups in professional public accounting practice, such as the Big 4 and Next Big 8, already have a competitive advantage in the provision of multidisciplinary services. In particular, the Big 4 have been identified in the literature as preferring to be associated with larger clients (Abbott, 1988; Greenwood et al., 2005). However, they may now become interested in strengthening their position in the SME space. Larger sub-groups are likely to become interested in the SME space not only because they have a competitive advantage in multidisciplinary services, but also because of the opportunities that arise from heightened professional work in serving SMEs. In contrast, the literature indicates that smaller clients are associated with low-status work—that is, types of work at a lower level of jurisdiction, such as that performed by SMPs (Abbott, 1988; Edwards et al., 2007; Greenwood et al., 2002; Ramirez, 2009).

These phenomena indicate that SMPs—whose primary client base is SMEs—may face intraprofessional competition from larger sub-groups, which signify the first threats listed in the middle section of Figure 2.2. Concurrently, SMPs may also face increased competition from non-professionals and other professionals (interprofessionals) as SMEs become more accessible and represent an untapped market for new opportunities (Mace, 2012; Walker, 2013). However, intraprofessional competition potentially has the largest effect on SMPs, leading to the second threat: an increase in SMEs' (clients') power. SMEs are becoming powerful due to not only lower switching costs enable them to access public accountants anywhere, but also because intense intraprofessional competition from larger sub-groups increases their ability to select the accountants they want to work with (i.e., demanding better value of money from accounting professionals). SMEs, especially small businesses, represent the primary client-base of SMPs.

This ability for SMEs to select accountants is further exacerbated by the fact that the commodification of the distribution of professional knowledge, which primarily emanates from the cloud-based single-view design, cannot separate the clients' data and the data that have been improved by public accountants. As discussed earlier, single view means that SMEs (clients) and their public accountants work on the same file. Therefore, in the case of a dispute regarding work done in which SMEs (clients) refuse to pay, the accountants' ability to withhold their professional work from clients (i.e., exercise lien) is significantly diminished (Macpherson, 2014e, 2014f). Lien is the right to hold a client's property for work performed as security for non-payment or debt (CPA Australia, 2014; ICAA, n.d.-a; TPB, 2011).<sup>22</sup> Therefore, this reduces accountants' ability to protect their professional work not only from non-professionals or other professionals but also from other accountants as SMEs have the power to leave them or switch to another accountant and take the work with them. Similar to the case of lower switching costs for SMEs discussed earlier, this ultimately translates to lower revenue. In particular, it may have a significant effect on SMPs, as smaller firms have limited resources and it is difficult for them to compete with larger firms. Again, intraprofessional competition plays significant part in an increase in SMEs' power. Therefore, the digital innovation may threaten the survival of SMPs.

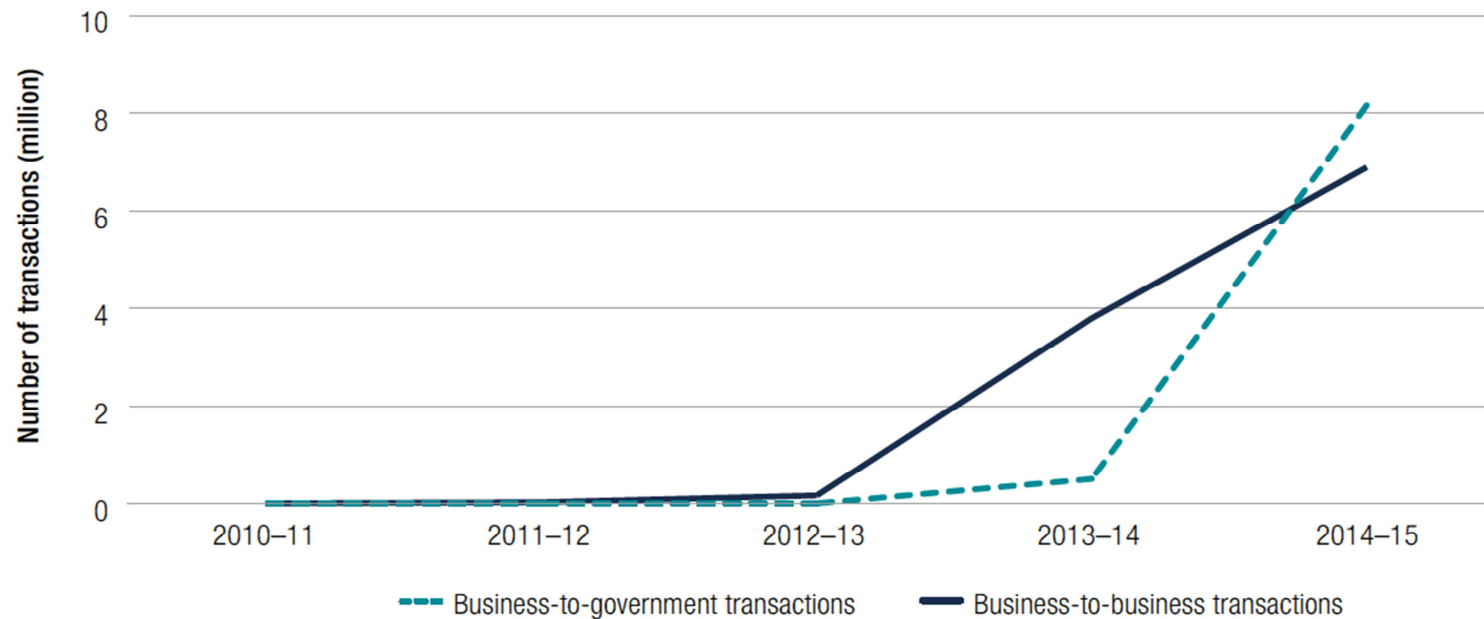
Overall, based on the explanation in this section, the digital innovation has the capacity to not only transform the SMP domain, but also professional public accounting practice at large.

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<sup>22</sup> According to ethical standards, accountants can only withhold work that is in dispute. Accountants must not withhold clients' data (e.g., invoice and sales journal entries made by clients), work not in dispute (e.g., prior work) and work done by others (e.g., bookkeepers). Digital innovation makes it difficult for accountants to exercise their rights without breaching ethical standards because data that have been improved by accountants' professional knowledge cannot be separated from the data that are not in dispute. In the case of desktop-based systems, accountants work on a different file; thus, they can withhold their work in the case of a dispute without holding back other data.

## APPENDIX 2.1: SBR Progress as of 30 June 2015

Figure A2.1.1: Growth in the Use of SBR as of 30 June 2015

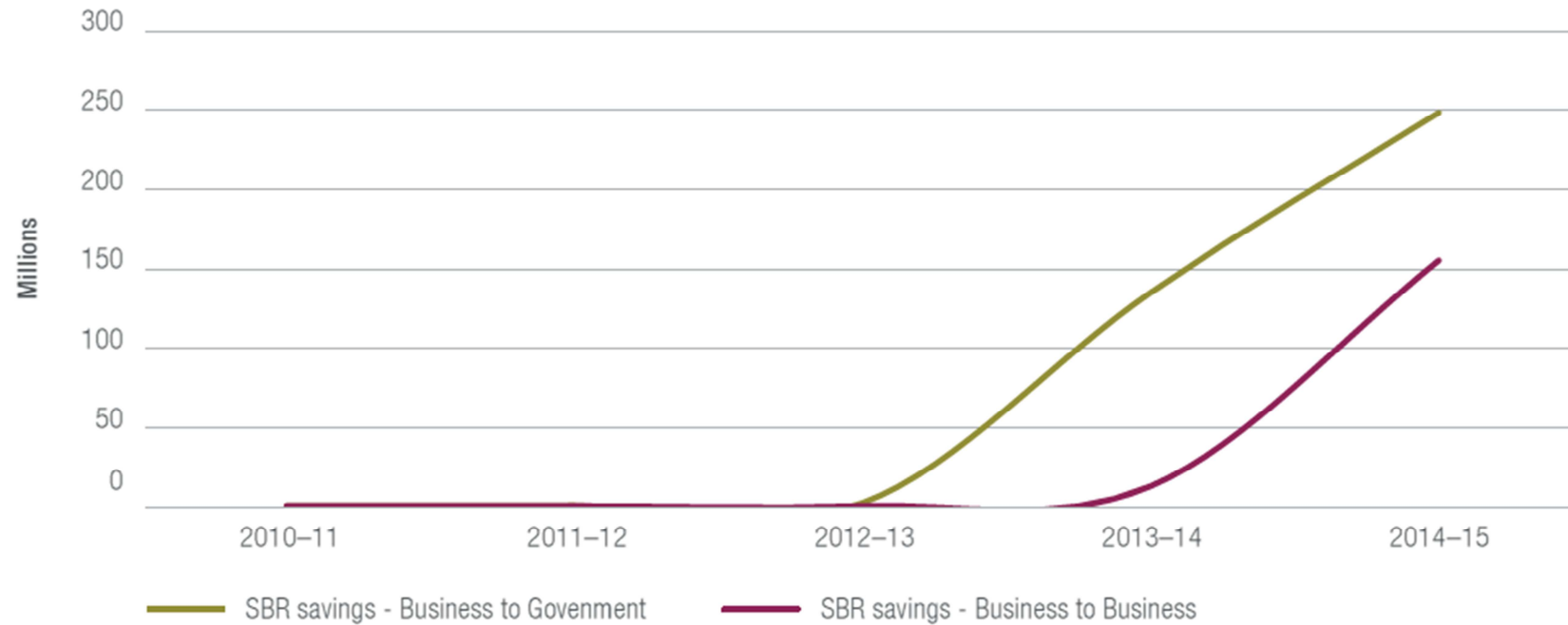


Source: Commissioner of Taxation Annual Report 2014–2015 (2015, p. 65)

### NOTE:

The business-to-business transactions reflect activities between businesses in the superannuation industry following the SuperStream initiative. The sharp increase in business-to-government transactions in 2013-2014 is likely the result of the increased availability of SBR software and better integration between SBR and accounting software, which at that time was moving towards cloud accounting. In addition, the sharp increase from around 170,000 transactions in 2012–2013 to 3.8 million in 2013–2014 was largely caused by the commencement of the SuperStream mandate for APRA-regulated funds and SMSFs on 1 July 2013. About 89 per cent, or 3.4 million of the total transactions in 2013–2014, represented super lodgements. However, non-super transactions significantly increased. In 2012–2013, about 88 per cent, or 150,000 transactions, represented non-super lodgements, and in 2013–2014, non-super transactions increased almost three-fold. Total adoption growth has been increasing steadily since the 2013–2014 financial year.

Figure A2.1.2: SBR Savings to the Community as of 30 June 2015



Source: Report of the Australian Business Registrar 2014-2015 (2015, p. 12)

**NOTE:**

The business-to-business transactions reflect activities between businesses in the superannuation industry following the SuperStream initiative. The SBR savings have been steady since 1 July 2012, despite the SuperStream mandate commencing on 1 July 2013. In 2012-2013, transactions primarily comprised non-super lodgements (88 per cent), indicating that substantial savings are gained from non-super transactions.

## APPENDIX 2.2: Changes in the Xero Partnership Program

*The small business owner and the advisor [e.g. accountants] can decide how to structure the subscription depending on the needs of the client. The advisor can set up a subscription in Xero and incorporate (often called ‘bundling’) the Xero subscription fees into their service fees that are charged to the small business as their client. In this way the advisor becomes the ‘Subscriber’. Alternatively, the SME owner can hold their own subscription and pay Xero directly for the subscription fee. In this way the small business owner becomes the ‘Subscriber’, and can invite their advisor into the subscription as an ‘Invited User’ (a user with certain access rights set by the Subscriber).*

*All users of Xero accept the same Terms of Use. The Terms of Use state that the ‘Subscriber’ for a Xero subscription controls access to that subscription. The Subscriber also determines the level of access that other ‘Invited Users’ have to the Xero subscription.*

*When it comes to using Xero, small business owners should consider who they wish to act as ‘Subscriber’ in relation to the Xero subscription. A small business owner can register for Xero themselves and assume the ‘Subscriber’ role, and limit the accountant’s involvement to that of ‘Invited User’.*

**Excerpt taken from:** <https://www.xero.com/blog/2014/04/managing-xero-subscription/>

The previous partnership program (see Figure 2.2.1) was based on a client’s subscription whose an accounting practitioner is the registered partner for the subscription. This is because the reward was based on the number of clients’ subscriptions. For example, public accountants who are registered partners for 25 to 99 clients are classed as Silver partners. They earn a 20 per cent margin from their clients’ Xero subscriptions and are entitled to a free practice office system. These benefits can be delivered to SMEs (clients) by public accountants as both non-monetary and monetary benefits.

In one way, the previous Xero partnership program made accountants (and other practitioners such as bookkeepers) the salespeople of Xero because the program drove accountants to put more clients on Xero. Further, as the registered partner for the subscription (i.e., the subscriber), accountants were responsible for paying the subscription fee to Xero. In this case, accountants would ensure that the monthly subscription fee was paid to Xero so they could receive the benefits, and then they chased the clients for the fee. This benefited Xero as accountants helped collect Xero’s receivables. If the SME subscribed directly to Xero, Xero must chase up the fees directly from the SME.

This partnership program was designed in such a way to assist Xero in retaining and growing its customer base because the accountants (and other practitioners such as bookkeepers)—driven by the rewards—would ensure that their clients used and kept using Xero. Therefore,

the partnership program was structured to support accountants to continuously increase their number of clients on Xero in order to achieve a higher status (e.g., from silver to gold). SMEs received the non-monetary and/or monetary benefits if it subscribed through their accountants. If the subscriber was the SME itself, it would pay the subscription fee directly to Xero and it would not receive any benefits as in the case if it subscribed through its accountant.

**Figure A2.2.1: Xero Partnership Program as of 31 March 2015**

Status Level	STARTER	BRONZE	SILVER	GOLD	PLATINUM	GROUP PLATINUM
Organisations (excluding ledgers)	1-4	5-24	25-99	100-499	500+	1000+ across group
Margin on Xero Business subscriptions	-	15%	20%	25%	30%	30%
Free 'My Xero' for Partners - including range of exclusive resources	✓	✓	✓	✓	✓	✓
Free Practice Organisation - to run your practice's books on	✓	✓	✓	✓	✓	✓
Dedicated Account Manager	✓	✓	✓	✓	✓	✓
Enablement Specialist for conversions and technical accounting queries	✓	✓	✓	✓	✓	✓
Free 24/7 email support	✓	✓	✓	✓	✓	✓
Free Introduction & Essentials training	✓	✓	✓	✓	✓	✓
Free Marketing Resource Guide	✓	✓	✓	✓	✓	✓
Free directory listing on xero.com	-	✓	✓	✓	✓	✓
Free Partner banner advertising on xero.com	-	✓	✓	✓	✓	✓
Free Xero stickers & instructional video	-	✓	✓	✓	✓	✓
Free co-branded collateral	-	✓	✓	✓	✓	✓
Free Practice Manager	-	-	✓	✓	✓	✓
Free Workpapers	-	-	✓	✓	✓	✓
Free Tax (on release)	-	-	✓	✓	✓	✓
Free brochure display stand	-	-	✓	✓	✓	✓
Contribution towards client events to promote Xero with 10+ attendees	-	-	\$150 inc GST for 10+ \$300 inc GST for 25+	\$150 inc GST for 10+ \$300 inc GST for 25+	\$150 inc GST for 10+ \$300 inc GST for 25+	\$150 inc GST for 10+ \$300 inc GST for 25+
Access to preferential offers from Xero solution partners and service providers	-	-	✓	✓	✓	✓
Invitation to Partner lunches & participation in advisory groups	-	-	-	✓	✓	✓
Eligibility for Xero advertising fund*	-	-	-	✓	✓	✓

\* Terms and conditions apply

Source: [https://www.xero.com/media/2353703/xero\\_partner\\_programme\\_au.pdf](https://www.xero.com/media/2353703/xero_partner_programme_au.pdf)

However, this prior partnership program created two main problems. First, it created competition, especially between accountants and bookkeepers. An accountant or a bookkeeper accumulated a number of subscriptions by placing clients or SMEs on Xero. Therefore, an accountant and a bookkeeper might be working on the same client, with the accountant being the registered partner for the subscription. Conversely, an accountant and a bookkeeper might be working on the same client, with the bookkeeper being the registered partner for the subscription. The latter often resulted in conflicts as accountants are typically more powerful. An accountant could steal bookkeepers' clients, which is referred to as licence poaching, by asking clients to list them as the registered partner instead of the bookkeeper. This meant that the bookkeeper was no longer the registered partner for that client and the partnership status could drop from silver to bronze level. On the other hand accountants could increase their status from bronze to silver level.

Second, the partnership program enticed SME owners to subscribe through their accountant (or another practitioner, such as a bookkeeper). Thus, the accountant became the subscriber and the SME was the invited user. As discussed earlier, the SME owner received benefits if it subscribed through its accountant. However, if the accountant was the subscriber, he/she had full access and control. This created problems because the accountant could hold the SME's full data, and the SME could not easily switch to another accountant if there was a dispute.

In Australia, accountants have a lien over the work they have done for their client when the client has not paid. However, in the case of cloud accounting, the single ledger means that all data are in one location, and accountants only have rights over the data they have worked on. Under the prior partnership program, it was typical for SMEs (the clients) to subscribe through their accountants. However, SMEs were disadvantaged if their accountants held their data because they did not have full control over their data.

The new partnership program (see Figure 2.2.2) is designed to prevent licence poaching, and it does not force SMEs to subscribe through their accountants (and other practitioners such as bookkeepers). Therefore, it is no longer based on the number of subscriptions, but on a points system whereby accountants (and other practitioners, such as bookkeepers) must meet certain criteria that reflect their commitment to Xero to collect points. For example, accountants receive one point if they become an invited user for a client, one point for every Xero-certified staff member and one point for every staff member who attends Xero-approved events.



This new partnership program still encourages accountants to market Xero to their clients. However, it gives SMEs significant freedom because they do not have to subscribe through their accountants. In addition, SMEs can receive non-monetary and monetary benefits from their accountants (or other practitioners, such as bookkeepers) because accountants receive rewards through different avenues (no longer derived from client subscription). In contrast, the new partnership program may disadvantage accountants. In cases where SMEs hold their own subscription, accountants clients leave may leave them without paying for the work as accountants can no longer exercise lien over their work. Prior to engaging with clients, accountants typically set out terms of agreement and a fee agreement. However, in cases where SMEs have full control and accountants are only invited users, SMEs have the full ability to do anything. SMEs could also hold their own subscription with other software vendors even before Xero changed its partnership program. Thus, in the new digital era, accountants generally have no control over the work they provide to their clients.

**Figure A2.2.2: Xero Partnership Program Since 1 April 2015**

	STARTER	BRONZE	SILVER	GOLD	PLATINUM
Points	1-9	10-29	30-119	120-499	500+
Margin on Xero Business subscriptions	-	15%	20%	25%	30%
Free program membership	✓	✓	✓	✓	✓
Free Xero Partner Edition – including range of exclusive resources*	✓	✓	✓	✓	✓
Free Xero subscription for your own business	✓	✓	✓	✓	✓
Exclusive Cashbook and Ledger plans	✓	✓	✓	✓	✓
Account Manager	✓	✓	✓	✓	✓
Enablement Specialist for conversions and technical accounting queries	✓	✓	✓	✓	✓
Free email support	✓	✓	✓	✓	✓
Xero U & Xero TV - free education and training	✓	✓	✓	✓	✓
Free online Xero Certification	✓	✓	✓	✓	✓
Access to Xero Toolkit for marketing resources	✓	✓	✓	✓	✓
Directory listing on xero.com/advisors	-	✓	✓	✓	✓
Partner banner advertising and lead capture on xero.com	-	✓	✓	✓	✓
Free co-branded collateral	-	✓	✓	✓	✓
Free Practice Studio (Xero Practice Manager, Tax & Workpapers)	-	-	✓	✓	✓
Free Xero banner	-	-	✓	✓	✓
Contribution towards client events to promote Xero with 10+ attendees	-	\$150 inc GST for 10+ \$300 inc GST for 25+	\$150 inc GST for 10+ \$300 inc GST for 25+	\$150 inc GST for 10+ \$300 inc GST for 25+	\$150 inc GST for 10+ \$300 inc GST for 25+
Eligibility for Xero Advertising Fund**	-	-	Up to \$2,000 each year	Up to \$5,000 each year	Up to \$5,000 each year

\* Access to Starter benefits are subject to adding Xero organisations within 6 months

\*\* Terms & Conditions apply

Source: <https://www.xero.com/downloads/pdf/partner-rewards/xero-partner-benefits-for-your-practice-au.pdf>

## Chapter 3 Literature Review

### 3.1 Chapter Content

This chapter reviews prior accounting-related studies that deal with the professionalisation of the accounting field. The chapter consists of an introduction (Section 3.2) and three literature review sections (Sections 3.3–3.5). The literature review is framed around identifying the gaps in prior literature that this study seeks to address. The literature review begins by describing the two key studies that this research seeks to build on.

### 3.2 Introduction

The discussion of the prior research is structured around three bodies of literature:

- i. *Commodification of the financial audit* (Section 3.3). This consists of the two key studies that this research seeks to extend—Covaleski, Dirsmith and Rittenberg (2003) and Greenwood, Suddaby and Hinings (2002)—as well as studies that highlight the gaps in those key studies.
- ii. *Accounting professionalisation studies* (Section 3.4). This provides a summary of studies that discuss the process of defining, defending and expanding the jurisdiction of the accounting profession (public practice) and the commodification of accounting knowledge. They are related, but not fundamental, to this thesis.
- iii. *Professional service firms literature* (Section 3.5). This section lists supplementary studies that discuss phenomena (i.e., changes) in professional public accounting practice from the perspective of the professional service firms literature.

A detailed description of the individual studies is provided in table format for each of the three bodies of literature<sup>23</sup>. In the first two bodies of literature (Sections 3.3 and 3.4), each table is preceded by an introductory overview of the findings of the research.

### 3.3 Commodification of the Financial Audit

This thesis extends the literature on field transformation, and thus institutional change, in professional public accounting practice due to the commodification of professional work, beginning with the commodification of the financial audit as examined by Greenwood,

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<sup>23</sup> The results summarised in the tables were often taken directly from the source (articles/book chapters).

Suddaby and Hinings (2002) and Covalleski, Dirsmith and Rittenberg (2003). Greenwood et al. (2002) examine the role of professional associations in the transformation of institutionalised fields based on a major change in the jurisdictions of public accounting firms—that is, the Big 5's move towards multidisciplinary practices in Canada. Professional accounting associations played a significant role in legitimating this change for the profession as a whole, which involved theorising for change, endorsing local innovations and shaping the diffusion of change (Greenwood et al., 2002). Covalleski et al. (2003) examine jurisdictional disputes over professional work between external and internal auditors in the US. The Big 5's pursuit as external auditors to obtain legitimation for the jurisdictional transformation—that is, jurisdictional expansion into the outsourcing of internal audit services—involved a heated exchange of relations among professional associations of external and internal auditors and a market regulator (Covalleski et al., 2003). According to both studies, the commodification of the financial audit played a significant role in driving the Big 5 towards multidisciplinary practices. A review of these key studies is undertaken and it includes the broader literature that consists of studies conducted preceding the key studies.

The commodification of the financial audit, which involves the use of audit automation, was primarily initiated by Big firms in response to stricter regulation and increased demand from clients to have consistent-quality audit services (Covalleski et al., 2003; Manson et al., 1998). It was also spurred by the need to increase efficiency due to rising competition in fees for the traditional financial audit (Covalleski et al., 2003; Manson et al., 1998). Commodification involved proprietary (sophisticated) systems developed in-house. Therefore, unlike other firms, Big firms could afford to make a significant investment in IT—that is, they have more advanced audit automation and use it more extensively (Manson et al., 1998). In turn, this commodification, along with increased globalisation, sparked Big firms to engage in a merger and acquisition strategy to strengthen and broaden their market reach (Aharoni, 1999). The reduction in the number of Big firms—that is, from Big 8 to Big 6 and then to Big 5<sup>24</sup>—led to further pressure from clients to reduce the financial audit fee because the characteristics of that service between Big firms became less distinct (Aharoni, 1999; Brown, Cooper, Greenwood, & Hinings, 1996; Rose & Hinings, 1999). At the same time, the strategy shrank the elasticity for expanding the client base of financial audit services and resulted in increased

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<sup>24</sup> The merger from Big 5 to Big 4 occurred in 2002 following the collapse of Arthur Andersen in the same year. Previous studies that examine the commodification of the financial audit and the move to multidisciplinary practice were conducted prior to the collapse

competition (Aharoni, 1999; Brown et al., 1996). In addition, there was increased litigation over the provision of the financial audit, which rendered it as an unsustainable source of competitive advantage (Aharoni, 1999; Covalleski et al., 2003). Overall, declining profits in financial audit services, combined with a simultaneous increase in demand for consulting services, led Big firms to shift their focus to multidisciplinary services as a new area of sustainable competitive advantage (Brown et al., 1996; Greenwood et al., 2002; Rose & Hinings, 1999).

The shift towards multidisciplinary services resulted in field transformation and institutional change because it involved a shift in the jurisdiction of professional public accounting practice. First, the shift involved the redefinition of what constituted the role of professional (public) accountants (Covalleski et al., 2003; Greenwood et al., 2002). It revolutionised the nature of professional work by including an extensive array of services, such as financial advisory services, management consulting and legal services, and outsourced internal audit services, in contrast to the role of financial (external) auditors (Covalleski et al., 2003; Greenwood et al., 2002). Second, the transformation was also associated with a radical change to the firm structure that departed from the traditional partnership towards the bureaucratic form with more centralised managerial arrangements (Greenwood et al., 2002). The change in firm structure included an endorsement for a new organisational form—that is, multidisciplinary practice—which could include not only accountants, but also non-accountants such as lawyers and consultants (Greenwood et al., 2002). This move towards multidisciplinary practices represents a shift in professional identity, which moved away from the core (traditional) institution formed around the role of external financial auditors (independence and the guardian of public interest) becoming more commercially oriented entities (Covalleski et al., 2003; Greenwood et al., 2002). The shift in professional identity indicates changing professional values (Greenwood et al., 2002).

Multidisciplinary practices received authoritative acknowledgement from professional accounting associations, which declared that the new model was appropriate for the profession and thus encouraged its adoption (Greenwood et al., 2002). A further extension into outsourced internal audit by public accountants involved the redefinition of public accountants' knowledge expertise, including the modification of codes of ethics to legitimate the jurisdictional expansion (Covalleski et al., 2003).

However, the change to multidisciplinary practices did not affect smaller practitioners, as they primarily engaged in traditional accounting work and dealt with a smaller client base (Greenwood et al., 2002). A further expansion in multidisciplinary services to include the internal auditors' role also occurred primarily in the domain of Big firms because the change to multidisciplinary practices, which was initiated by the commodification of the financial audit, was driven by commercial motives and competition between Big firms (Covaleski et al., 2003). The diffusion of change, which was facilitated by normative justification—that is, proactively circulated by the professional associations as benefiting the general interests—was a way to create a homogenous identity, when it actually only served the interests of the Big firms (Covaleski et al., 2003; Greenwood et al., 2002).

We can conclude from this review of the key studies that field transformation and institutional change associated with the commodification of the financial audit—that is, the shift to multidisciplinary practices—was: (i) confined to the domain of the Big firms; (ii) viewed from the perspective of inter-organisational competition as Big firms sought a new, sustainable competitive advantage; and (iii) occurred due to an endogenous shock (i.e., it was driven by the Big firms).

Table 3.1 summarises Greenwood et al. (2002) and Covaleski et al. (2003), as well as the remaining four studies of the broader literature.

The remainder of this section, following Table 3.1, highlights the gaps in the studies of Greenwood et al. (2002) and Covaleski et al. (2003). The gaps are addressed under the following three headings: the professionalisation of the Non-Big-4 domain (Section 3.3.1), the importance of intraprofessional competition (Section 3.3.2), and the exogenous shock and field transformation of public accounting practice (Section 3.3.3).

**Table 3.1: Commodification of the Financial Audit and the Shift to Multidisciplinary Practices**

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
<b>Key Studies</b>						
Greenwood, Suddaby & Hinings (2002)	The role of regulatory agencies, such as professional associations, in theorising change, endorsing local innovations and shaping their diffusion. How did the profession theorise and legitimate the change to itself?	Institutional theory	<ul style="list-style-type: none"> <li>▪ Canada</li> <li>▪ 1977–1997</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Internal representations (e.g., CICA and ICAA (Canada) annual reports, 1977–1997 inclusive; Rainbow Report, 1986) and external representations (e.g., radio and newspaper advertisements).</li> <li>▪ Interviews with 25 people (at least one senior officer of CICA and ICAA, member of the Alberta Securities Commission, and members from each sub-community—i.e., Big 4, Mid-tier firms, SMPs).</li> </ul>	Qualitative: Case study	The study presents stages of the institutional change model in order to understand how institutional change occurs. It highlights that the theorisation stage is the much-neglected stage in the change process. The study shows the importance and the multifaceted role of professional associations, especially at the collective level; that is, defining and redefining the institutional logic that legitimates the nature of Chartered Accountants, what they do and what they are meant to be. It presents a case wherein the Big 5 actively sought accounting professionalisation endorsement for the redefinition of the role of a professional accountant and expanded it to include the capability to provide business advisory services, as well as for a new organisational form—the multidisciplinary practice—which could include not only accountants, but also lawyers and consultants.
Covaleski, Dirsmith & Rittenberg (2003)	What is the nature of the jurisdictional dispute/dramaturgy of exchange relations among international public accounting firms, the AICPA, the IIA and the SEC	Sociology of the professions, institutional theory and outsourcing literature	<ul style="list-style-type: none"> <li>▪ US</li> <li>▪ 1970s to 2002</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Public records (e.g., AICPA audit guide and ethic code rulings; Big 5 speeches), private records (e.g., IIA board meeting minutes/correspondence), business press (e.g., CNBC and CNN broadcasts; articles in WSJ, Fortune, Public</li> </ul>	Qualitative: Historical study	Rather than being a process of institutionalisation or de-institutionalisation, this study finds a process of re-institutionalisation, wherein the Big 5 public accounting firms actively sought to reconstitute their professional field of jurisdictional domain so they could perform the internal audit services for their external audit clients. This process of re-institutionalisation was rife with conflict and profoundly political, suggesting an intersecting web of institutionalisation vectors. The

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
	concerning the outsourcing of the internal audit function to external auditors?			Accounting Report, Accounting Today, New York Times and Internal Auditor). <ul style="list-style-type: none"> <li>Supplementary discussions with limited number of prominent actors.</li> </ul>		transformation of a jurisdiction should be accompanied not only by conflict, but also by the modification of both codes of ethics, per above, and the profession's abstract system of knowledge.
<b>Studies Preceding the Key Studies</b>						
Brown, Cooper, Greenwood & Hinings (1996)	Do transborder changes resulting from the rapidly changing international business environment that is now in effect bear a direct relation to 'strategic alliances'?	Strategic alliance	<ul style="list-style-type: none"> <li>A Big 6 firm (global) with a West European focus</li> <li>As of research date</li> </ul>	<ul style="list-style-type: none"> <li>Interviews with representatives from the participating Big 6.</li> <li>Archival: Private records (firm's internal documents) and literature on strategic alliances, joint ventures and networks, as well as the internationalisation of Big 6 accounting firms derived from academic articles, popular articles and other official documentation.</li> </ul>	Qualitative: Case study	The results are relevant to Hedlund's (1994) N-Firm organisation. The firm moved from a loose federation of quasi-independent firms to attempting a one-firm infrastructure. The idea is to bring the best possible talent to bear across national borders and to generate business irrespective of borders. However, organisational change—that is, changing organisational arrangements and the nature of professional service firms—may be seen as a layering of a new form of organisation upon a previous form. The result is competitive commitments within the firm that will affect the final form of the change as individuals retain loyalty to the national firm rather than the newly formed international entity, which is the case identified in this study.
Manson, McCartney, Sherer & Wallace (1998)	The nature and extent of the use of audit automation by audit firms in the UK and the US, and whether there are significant differences between	Developed own framework for analysis based on two aspects: globalisation and cultural	<ul style="list-style-type: none"> <li>UK and US Big 6 and Mid-tier firms</li> <li>1994–1995</li> </ul>	<ul style="list-style-type: none"> <li>Postal survey to the largest 40 audit firms in the UK and the largest 50 audit firms in the US, defining size by fee income. However, only 40 firms were used for the analysis because only these firms utilised audit</li> </ul>	Quantitative: Survey	The principal conclusions from the research are: <ol style="list-style-type: none"> <li>There are differences in the practice of audit automation in the UK and the US (e.g., US firms are more advanced than their UK counterparts); however, in general, Big firms have a more advanced system and use it more extensively than Mid-tier firms.</li> <li>These differences persist even among Big 6 firms (between countries). These two conclusions suggest</li> </ol>



Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
	the practices in the two countries.	factors		automation in more than 40 per cent of audit engagements.		that cultural differences (innovation and differentiation pressures) are not dominated by the forces of globalisation (homogeneity pressures). 3. The most important benefit of audit automation in both countries is perceived to be improvements in audit quality. The most important costs across all types of audit firms are training and staff learning time.
Aharoni (1999)	1. Why have accounting firms become multinational? 2. What were their key success factors? 3. How are the firms organised to achieve their tasks?	Contingency theory of multinational production (behaviour and organisation)	▪ Big firms (global)	▪ Archival: Literature on market globalisation and internationalisation of accounting firms derived from academic articles, popular articles and other official documentation.	Qualitative: Historical study (book chapter)	New organisational structures and relationships are being designed and implemented because professional service firms find that they (through their offices around the world) must offer services to their global clients to survive. Therefore, the new structure enables adaptability and flexibility, which are vital characteristics of their strategies (i.e., people-centred). Accounting firms have moved abroad through the creation of networks of autonomous national firms. However, with the growth of diversification, global accounting firms face ethical issues regarding the use of auditing to secure lucrative consulting.

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Rose & Hinings (1999)	How organisational structure and the culture of Global Business Advisory Firms (GBAFs—i.e., Big 5 accounting firms) are changing as a result of their pursuit of large, international clients.	GBAF structural response analysis: differentiation and integration	<ul style="list-style-type: none"> <li>▪ GBAFs (global)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Extensive interviews from a prior study on evolving coordination and integration processes underlying services by GBAFs in Canada, Singapore and Malaysia to their large global clients (unpublished dissertation) conducted by Rose (1998).</li> <li>▪ Archival: Literature on GBAFs' global pressures and clients' characteristics derived from academic articles, popular articles and other official documentation.</li> </ul>	Qualitative: Case study (book chapter)	<p>GBAFs' departure from the traditional form is pressured by global clients' demand for diversified, consistent and quality service. The Big 5 firms differentiate along functional, geographical, industry, service and demographic lines by evolving new roles and activities that allow them to attain the right level of integration across their semi-autonomous units to serve complex clients.</p> <p>The analysis provides empirical support that the definitive characteristics of a differentiated network structure are determined by the broader network of relations within which a differentiated network exists.</p>

### 3.3.1 Professionalisation of the Non-Big-4 Domain

As discussed above, Greenwood et al. (2002) and Covalleski et al. (2003) are confined to examining professionalisation in the domain of the Big firms. This is because the field transformation was triggered by a disruption to the facet of the professional field dominated by Big firms (Covalleski et al., 2003; Greenwood et al., 2002)—that is, the financial audit services and the servicing of large multinational or public-listed businesses that represent the client base of the financial audit. Nonetheless, the professionalisation was endorsed by professional accounting associations and was thus expected to extend to the public accounting practice at large.

This raises the question of whether the change in the professional identity of the Big firms spills over to the remaining sub-groups. Ramirez (2009) addresses this question at the SMP level in the context of the UK, and Lander et al. (2013) addresses it at the Mid-tier firm level in the context of the Netherlands.

Ramirez (2009) examines the issue from the perspective of the management of professional accountants' identities in the UK by the Institute of Chartered Accountants in England and Wales (ICAEW). Ramirez (2009) investigates how the ICAEW governs various sub-groups within it, particularly small practitioners, to represent a homogeneous image of membership. The ICAEW consists of both big and small firms. The representation task became increasingly difficult because there was greater fragmentation in the Chartered Accountants' identity due to Big firms becoming larger, which led to increased disparity in professional work among ICAEW members that arose from differences in firm size (big/small), location of work (global/local) and moral judgment (well-known /anonymous member). As transnational actors, Big firms were becoming powerful and independent as they increasingly gained prominence both in servicing large companies and in dealing with national and international standard-setting organisations. This increasing power was exacerbated by stricter auditing regulation, which was implicitly designed for larger firms as considerable resources were required to meet regulatory compliance. Thus, Big firms have a competitive advantage in financial audit services and the capacity to offer new services to existing (audit) clients and service new types of clients. Conversely, small practitioners were leaving the financial audit due to stricter auditing regulation. Thus, in an attempt to create a more homogenous identity for the accounting profession and to govern small practitioners, the ICAEW problematised the definition of small practitioners.

The ICAEW argued that the representation of SMPs as good practitioners could no longer be constructed around the traditional image derived from the accountants' role as financial

auditors (i.e., independence). Therefore, the role of small practitioners was formally converted into that of small business advisors who could provide a range of integrated business services from traditional compliance to recruitment and marketing. This was suggested to be more relevant to servicing their client base because small businesses needed business advice rather than auditing services. Thus, they could run their practice more efficiently with less regulatory burden to provide “value for money” services to their clients’ (Ramirez, 2009, p. 402). This indicates that the identity of small practitioners was redefined to be more commercially oriented, which is more aligned with the Big firms’ level.

Ramirez (2009) finds that although the ICAEW redefined the traditional role of SMPs, small practitioners generally did not have the capacity to move beyond traditional accounting work because they primarily dealt with non-demanding small businesses. In addition, according to Ramirez (2009), such redefinition is actually the ‘Holy of Holies in the fabrication of professionalism’ (p. 402). This means that the redefinition was not about what the small practitioners needed, but about the ICAEW’s interest in defining what was to be governed. The transformation of small practitioners into small business advisors was driven by the ICAEW and, concurrently, the ICAEW’s management of professional identity was increasingly influenced by Big firms as the dominant players.

Lander et al. (2013) investigate whether the Big 4’s shift to multidisciplinary practices trickles down to Mid-tier firms. The existing literature identifies that the Big 4’s practices were becoming client-oriented and primarily driven by commercial interests. This disrupted the balance between the need to maximise profits (commercial logic) and the need to maintain their independence and role as the guardian of public interest (traditional logic). Therefore, Lander et al. (2013) focus on how Mid-tier firms adapt their whole portfolio of structure and processes in view of the growing importance of the commercial logic. Lander et al. (2013) thus investigate whether the changing role of the accountant and changes in organisational structure and practices are fundamental issues that challenge the characteristics of their professional identity.

Lander et al. (2013) find that large Mid-tier firms understood the need to provide more advisory services and create specialisation in order to maintain profitability. However, in doing so, they selectively adopted practices related to the commercial logic (Lander et al., 2013). Mid-tier firms were more concerned about the need to maintain their independence and role as the guardian of public interest. Mid-tier firms also resisted the changing role of accountants, especially those that departed from core accounting work. Therefore, Mid-tier firms limited

their diversification to competencies within the accounting profession and were guarded with the entry of non-accountants (Lander et al., 2013).

Overall, unlike Big firms, which have been identified in the literature as possessing competing traditional and commercial logics, Non-Big-4 firms, especially small practitioners, tend to adhere to the core institution because they do not have the same level of commercial drive, as they engage in different professional work, the work setting and the client base (Lander et al., 2013; Ramirez, 2009). As discussed earlier, the core institution is the traditional professional's identity formed around the role of financial auditors, where professional work focuses on core accounting work, the firm structure is organised based on partnership form and is exclusive to accountants, and professional values (logic/professionalism) are based on the notion of independence and the guardian of public interest (Lander et al., 2013; Ramirez, 2009).

The results show that not all sub-groups within professional public accounting practice should be generalised as acting like the Big 4 (Lander et al., 2013). First, the way in which smaller practitioners respond to a disturbance may be subject to different dynamics because they do not possess professional power akin to that of the Big 4. Second, the difference in professional work and the distribution of resources seems to affect accounting practitioners' commonly held logic and thereby their strategy to defend themselves and to expand. This provides a basis to further investigate accounting professionalisation from the perspective of smaller practitioners, which can be achieved through micro-level research (Lander et al., 2013). The perspective of SMPs is especially important because their professional identity represents the norm due to their localities and dependence upon local professional accounting associations compared to transnational Big firms (Ramirez, 2009). Table 3.2 summarises the studies discussed in this section, Ramirez (2009) and Lander et al. (2013).

**Table 3.2: Professional Identity of Non-Big Firms**

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Ramirez (2009)	How do professional organisations govern the various categories that have emerged in the professional body throughout its history?	Sociology of the professions	<ul style="list-style-type: none"> <li>▪ UK</li> <li>▪ 1960–2000</li> <li>▪ Small practitioners/ firms</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival data: Administrative records of the ICAEW (1960–2000), which are supplemented by professional press (1970–2000) from, essentially, the Accountancy and Accountancy Age publications.</li> <li>▪ Interviews with seven ICAEW personnel from 1999 to 2000: office holders and leaders of practitioners’ associations.</li> </ul>	Qualitative: Historical study	<p>The professional identity of accountants (in public practice) is heterogeneous due to intraprofessional differences. However, the nature of small practitioners is being problematised by the ICAEW as a way to integrate distant modalities of accounting expertise into a single professional space. This to prevent the distance between Big firms and small practitioners from becoming too conspicuous, thus preserving the ideal of the community of peers upon which professional bodies have been built.</p> <p>However, the representation of the professional identity tends to be overridden by the dominant segment: Big firms. The profession enjoys symbolic benefits from the professional status of Big firms, but the influence of Big firms inhibits professional associations’ ability to cater to the aspirations and needs of all of their members, especially small practitioners.</p>
Lander, Koene & Linssen (2013)	How did Mid-tier accounting firms deal with changes in their institutional environment that resulted in a shift in emphasis from the trustee logic to the commercial logic?	Institutional theory	<ul style="list-style-type: none"> <li>▪ The Netherlands</li> <li>▪ 2009–2011</li> <li>▪ Mid-tier firms</li> </ul>	<ul style="list-style-type: none"> <li>▪ Open-ended interviews with 34 senior-level informants in 11 Mid-tier accounting firms of the next Big 22 firms after the Big 4 firms.</li> <li>▪ Archival data: Firms’ annual reports (2008–2010), firms’ websites for press releases (2008–2010) and industry journals (e.g., MAB—in Dutch).</li> </ul>	Qualitative: Multiple case studies using event sequencing of historical and contemporary processes within and between cases	<p>The majority of Mid-tier firms: (i) refuse the entry of non-accountants and are selective in adopting practices related to the commercial logic; (ii) resist the changing roles of accountants, especially those that depart from core accountancy, so they limit their diversification to competencies within the accountancy profession; and (iii) draw upon both economic and professional rationales and more towards traditional logic—that is, commitment to trustee logic—which is stronger in firms that are more locally grounded.</p> <p>The result is contrary to the existing literature, which centres on large accounting firms with multidisciplinary practices.</p>

### 3.3.2 Importance of Intraprofessional Competition

Greenwood et al. (2002) and Covaleski et al. (2003) focus on inter-organisational competition because the disruption occurred primarily in the domain of Big firms. The resulting shift to multidisciplinary practices did not lead to institutional war in public practice (i.e., intraprofessional competition), as smaller practitioners primarily provide traditional accounting work and they serve a different client base than Big firms; that is, there were no jurisdictional disputes between them (Greenwood et al., 2002, p. 69). As discussed earlier, the shift to multidisciplinary practices represents the Big firms' need to gain a new sustainable competitive advantage in servicing their primary client base—the clients of financial audit services (Greenwood et al., 2002). The Big firms' aim to establish a competitive advantage in multidisciplinary practices did lead to intraprofessional competition, however, with other segments of the accounting profession (non-public practice; i.e., internal audit) not with other public practice sub-groups (Covaleski et al., 2003). The expansion to the internal audit jurisdiction was driven by Big firms and their need for new market opportunities within their already competitive domain (i.e., centring on the servicing of the financial audit client base). The expansion enabled them to perform internal audit services for their external audit clients (Covaleski et al., 2003). Again, it did not create intraprofessional competition between different layers of public accounting practice.

Few prior studies have examined intraprofessional competition in public practice. The differences in professional work and the client base, as well as the professional power between larger and smaller sub-groups, may render the occurrence of such competition unlikely. In respect to changes in jurisdictions, an increasing number of studies on accounting professionalisation were undertaken from the perspective of Big firms' dominance in driving the change, as in the case of Greenwood et al. (2002) and Covaleski et al. (2003). However, five prior studies by Caramanis (1997, 1998, 1999, 2002, 2005) examine intraprofessional competition in public accounting practice, although they also highlight Big firms' rising dominance and their involvement in driving the change. Caramanis (1997, 1998, 1999, 2002, 2005) examines accounting professionalisation based on a case of competition between Big firms (Big 6) and smaller local firms (indigenous auditors) in Greece over the jurisdiction of statutory audit. Given the focus of each study, only Caramanis (1999, 2005) are immediately relevant to this study, as these studies investigate intraprofessional competition from the perspective of smaller local firms. Caramanis (1997, 1998) examines the issue leading to intraprofessional competition from the perspective of individual auditors and corporate financial executives (auditee) and Caramanis (2002) examines intraprofessional competition

from the perspective of Big firms—that is, their strategy used to win the competition (Caramanis, 2002).

Caramanis (1999, 2005) examines the effect of state-activated disturbance on the auditing profession (public practice). State-activated disturbance—pressured by international actors and mobilised by Big firms—was the liberalisation of the Greek auditing profession by the government. The liberalisation abolished the monopoly of the statutory audit held by smaller local sub-groups and led to intraprofessional conflicts between smaller local firms and local branches of Big firms in Greece. Caramanis (1999) examines the government (state)-profession axis to explain the micropolitics of how professional groups organise to define, defend or extend their domain. Caramanis (1999) shows that such liberalisation arises from the government's neoliberal politico-economic programme and Big firms' ambition to gain access to the market of statutory audits on the premise of benefiting the public interest. Caramanis (1999) then discusses the defensive strategy of smaller local firms to reverse the liberalisation by garnering public support through publishing their criticism of the government in the media and protesting to the European Commission. Notwithstanding the prominent role of government agencies and professional groups, the outcome of a dynamic interplay of economic, social and political forces at the national and international levels influenced the structure of the auditing profession in Greece (Caramanis, 1999).

While Caramanis (1999) provides insights into the implications of intraprofessional competition and the interplay between various actors for the social structure of professional public accounting practice, Caramanis (2005) describes the use of multiple strategies by smaller local sub-groups to fight Big firms. Caramanis (2005) finds that a charismatic personality, especially of the leader of the union of smaller local firms, was the key role in dealing with the conflict (i.e., influencing the government and thus disrupting the liberalisation). The use of legal action was also fruitful in defending the contested jurisdiction. However, smaller local firms were losing to Big firms—that is, they failed to reinstate a monopoly—due to the disparity in social stratifications (i.e., Big firms had more power to effect change) (Caramanis, 2005). The study outlines the tensions between Big firms and smaller local firms due to contradicting logic regarding neo-liberal and free market issues (Caramanis, 2005).

Overall, these studies show that Big firms and smaller local firms might not have had unified interests and homogenous priorities, as each had different objectives (Caramanis, 1999, 2005). In addition, although the Big firms were deemed to have more influence, these studies raise the case for smaller local firms to fight for their jurisdiction as Big firms encroach into their



domain (Caramanis, 1999, 2005). However, Big firms' strong influence and tendency towards a liberal and competitive atmosphere created a need for the transformation of the auditing profession along similar lines. Table 3.3 summarises the studies that are immediately relevant to this thesis, Caramanis (1999) and (2005).

**Table 3.3: Intraprofessional Competition in Public Practice**

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Caramanis (1999)	To analyse the state-profession axis and explain the micropolitics of how professional groups organise to define, defend or extend their domain of practice.	Critical-sociological literature on professionalism drawing on Abbott (1988) and Burrage et al. (1990), supplemented by Sikka and Willmott (1995)	<ul style="list-style-type: none"> <li>▪ Greece</li> <li>▪ 1990–1992</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Primary and secondary data.</li> <li>▪ Interviews were conducted with a number of individuals who played a key role in the development of the Greek auditing profession in order to clarify certain areas of the history of the Greek auditing profession.</li> </ul>	Qualitative: Historical study	<p>The nature of intraprofessional struggle should be understood in its wider socio-political context in which the state can play a key role. However, the passing of legislation that provided for the ‘liberalisation’ of the Greek auditing profession in 1992 was concurrent with a dramatic change in the general economic and political climate of Greece—a marked shift in the policy of the state towards deregulation and privatisation emanating from a newly prevalent ideology of liberalism. The liberalisation was initiated by the local branch of the Big 6 and supported by the Confederation of Greek Industries and other local and international actors based on the notion of public interest. However, although the lobbying of the Big 6 played a significant role, the change in the Greek auditing profession was essentially precipitated by the advancement of neoliberal economic and political discourses.</p> <p>Overall, the structure of the auditing profession in Greece is the outcome of a dynamic interplay of economic, social and political forces at both the national and international levels. State agencies and professional groups play a prominent role within these various interests.</p> <p>The transition of the Greek economy from closed and state-regulated to liberal and competitive created a need for the transformation of the auditing profession along similar lines.</p>

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Caramanis (2005)	Max Weber's theoretical work on history and social development can be applied to help understand the complex processes of contemporary change in the accounting profession.	Weberian school of thought—market closure, supplemented by Chua and Poullaos (1988) class–status–party model and other Weberian concepts, namely rationalisation and charisma	<ul style="list-style-type: none"> <li>▪ Greece</li> <li>▪ 1992</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: A variety of published and unpublished material.</li> <li>▪ Supplementary interviews with people who played a significant role in, or who were familiar with, the development of the Greek auditing profession in the 1990s: 6 auditors from various professional affiliations, 2 officials from the Greek professional institute, 2 senior officials at the Ministry of National Economy, 1 politician and 1 financial journalist.</li> <li>▪ Informal personal interviews were conducted with 12 rank and file members of the auditing profession from various professional affiliations.</li> </ul>	Qualitative: Historical study	<p>This study examines an attempt by the indigenous auditors to regain the monopoly of practice they lost following the 'liberalisation' of the Greek auditing profession in 1992.</p> <p>The analysis of this case study posits that rationalisation and charisma play a major role in helping to effect historical change through their influence on class–status–party—the tripartite stratificatory structure of modern society. In these encounters, multifarious social, economic and political actors with overlapping or differing interests interact with one another.</p> <p>The analysis shows that a more all-inclusive Weberian approach is a useful methodological tool for understanding and explaining the complex processes of (contemporary) historical change in the accounting profession. Theoretical guides provide a basis to understand the struggles between competing interest groups in history that often appear as merely protracted and poorly resolved battles with a fuzzy plot line.</p>

### 3.3.3 Exogenous Shock and Field Transformation in Public Accounting Practice

Greenwood et al. (2002) and Covalleski et al. (2003) examine field transformation from the perspective of an endogenous shock—that is, focusing on the role of Big firms, which was enthused by commercial desires and competitive drives in instigating the change (Covalleski et al., 2003; Greenwood et al., 2002). The commodification of the financial audit and the shift to multidisciplinary practices was pushed by the Big firms, although it was motivated by external pressures (Covalleski et al., 2003; Greenwood et al., 2002).

The Big 4 are becoming the centre of professionalisation, not only for public practice, but also for accounting professionals at large (Cooper & Robson, 2006). The Big 4's dominant position enables them to shape the field (Suddaby et al., 2007). The Big 4 are identified as key actors in professionalisation and professional regulation because there are: (i) links between accounting firms and the production of professional identity and regulation; and (ii) the position of the Big 4 as network actors both nationally and internationally enables them to have influence and gain legitimacy in the interpretation of regulations in practice (Cooper & Robson, 2006).

Although there is an emphasis on the Big 4, the accounting firms in general help to produce and reproduce the identity of not just accountants, but also the economic and social life to be taken, managed and changed (Cooper & Robson, 2006). In addition, in examining professionalisation and the professional regulatory process, not only bringing accounting firms into the centre of analysis is critical, but also including the myriad of other parties that form links in the circulation of accounting and auditing disciplines and practices (Cooper & Robson, 2006). For example, the centrality of Big 4 in the professionalisation and professional regulation process is becoming significant but this process is also influenced by the commercial forces of non-governmental organisations (NGOs) (Cooper & Robson, 2006; Suddaby et al., 2007). The historical regulatory bargain between professional associations and nation states is being superseded by the Big 4 as well as NGOs (Suddaby et al., 2007). This has resulted in an emphasis on commercial logic instead of the traditional logic of protecting the public interest, in which NGOs (e.g., the World Trade Organization, with its commitment to liberalising trade internationally) play a role in generating new logics of post-professionalism (Suddaby et al., 2007). By examining the role of the Big 4 and NGOs, this goes beyond a common position in the accounting literature of examining the process of professionalisation within and around professional associations and related organisations, such as standard-setting bodies and regulatory agencies (Suddaby et al., 2007).

Overall, the focus on accounting firms, as opposed to the profession as a whole, enables the investigation of professionalisation motivated by profits and capital accumulation, and is

therefore not preoccupied with the issue of gaining legitimacy (Cooper & Robson, 2006). With rapid globalisation, professionalisation and the professional regulatory process also involve a broad network of heterogeneous actors outside the profession (exogenous actors) that may promote the logic of commercialism (Suddaby et al., 2007). The role of exogenous actors in professionalisation and the professional regulatory process has been raised in a previous study by Sikka and Willmott (1995), which is used as the basis of a study by Cooper and Robson (2006) and Suddaby et al. (2007).

Sikka and Willmott (1995) examine accountants as part of Abbott's (1988) *System of Professions*, but they challenge the limitations of the theory. First, Sikka and Willmott (1995) argue that challenges for accountants in defining, defending and expanding their jurisdiction do not always come from competition with rival professions. Second, external (exogenous) forces other than the state or government—that is, from those who do not seek to occupy for jurisdiction—can influence public opinion and delegitimise the position of accountants. Third, the accounting profession is not homogenous; rather, it consists of multiple jurisdictions, including the private sector (industry/commerce), public sector (local/central) and public practice (Big/small), and each group has different priorities and pressures that can be contradictory. Thus, Sikka and Willmott (1995) begin by describing the heterogeneity and extensiveness of the accounting profession's jurisdiction, but they focus their investigation on the development and defence of accountants' claims to independence in public practice due to the accounting profession's continuing reliance upon audit and the growth of capitalism. From the audit perspective, independence is critical for securing and expanding the accounting jurisdiction.

Sikka and Willmott (1995) maintain that the existence of supranational pressures (international actors) and pressures from actors who do not seek to occupy—such as journalists, academics and politicians—can spark disputes between those who seek to occupy, such as within and between professions. Sikka and Willmott (1995) find that those who did not seek to occupy may have weakened the image of 'independence', where this image was traditionally important in defining, defending and extending the jurisdiction of the accounting profession. This in turn created threats to self-regulation for accounting professions. For example, Big firms' increasing tendency towards diversification jeopardised their reputation as auditors, as diversification emphasised commercialism and threatened the independence image. Accountants became vulnerable to accusations of neglecting their responsibilities as the guardians of public interest, and there was growing disquiet among the press (journalists) about the independence and integrity of accountants. Big firms' rising dominance in the professionalisation of the accounting profession overpowered the efforts of the accounting

profession to restore their image. In this case, to neutralise the threats, the accounting profession engaged in a variety of tactics that included revising their ethical guidelines and disciplinary arrangements, and mobilising other actors, including the state, media (journalists), academics and politicians.

Overall, Sikka and Willmott's (1995) study reveals that the accounting profession's ability to defend and extend its jurisdiction is affected by exogenous forces: (i) supranational pressures that condition both the local practice and national standing of professional groups; and (ii) interactions between the profession/industry and others who do not seek to occupy the accounting territory, which shape the defence and expansion of professional accounting jurisdictions (Sikka & Willmott, 1995, p. 574).

In summary, these studies show that although the role of the Big 4 is becoming important, exogenous actors may have a significant role in the construction of professional identity of the accounting profession through their involvement in the professionalisation and professional regulation process for public accounting practice. Table 3.4 summarises the studies discussed in this section, Cooper and Robson (2006), Suddaby et al. (2007) and Sikka and Willmott (1995).

**Table 3.4: Big Firms and Exogenous Actors as the Centre of Professionalisation**

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Cooper & Robson (2006)	The institution sites of professionalisation projects and regulatory processes. Increased examination of accounting firms and how they can enhance an understanding of professionalisation and professional regulation.	No specific theory, but with an interest in the power of accounting, accountants and the accounting profession	<ul style="list-style-type: none"> <li>▪ Anglo-American orientation (UK and US) with a focus on the Big 4</li> <li>▪ 1970s to the date of the research</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accounting literature on the process of professionalisation and accounting and audit regulation since the 1970s.</li> <li>▪ Archival: Popular literature (e.g., business press) and official documentation.</li> </ul>	Qualitative: Non-empirical historical (comparative) study	<p>Multinational professional firms such as the Big 4 increasingly become key actors in professionalisation and regulatory processes. This departs from typical accounting literature, which sees social closure as struggles between the state and professional associations and professional regulation as involving struggles between professional bodies, standard-setters and the state.</p> <p>Future research needs to examine the sites of regulation in terms of production, transmission and enactment, and bring not only firms into the centre of analysis, but also myriad NGOs and IGOs that form links in the circulation of accounting and auditing practices.</p>
Suddaby, Cooper & Greenwood (2007)	The role of large accounting firms in the emergence of the transnational regulatory field in professional services to provide a coherent historical account of the ongoing structuration of an emerging organisational field to enrich the theoretical understanding by which structuration occurs.	Neo-institutional theory	<ul style="list-style-type: none"> <li>▪ US with a focus on Big 8 (five) accounting firms</li> <li>▪ 1980–2000</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: (quantitative and qualitative) and accounting literature on historical account of the growth of large accounting firms.</li> <li>▪ Key public debates surrounding the expansion of the accounting profession, both on a geographical scale and in the scope of services, primarily US SEC Public Hearings on Auditor Independence (93 witnesses) and American Bar Association’s Commission on</li> </ul>	Qualitative: Historical study	<p>There is a shift in the institutional power structure from coercive structures of domination to inclusive power structures of membership and identity. Primary contribution: the process of structuration of organisational fields and the finding that, in contrast to traditional assumptions of institutional theory, there is evidence that organisations are aggressive actors—in this case Big firms—that shape the boundaries (structural, logics, ideational and power) of organisational fields.</p>

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
				<p>Multidisciplinary Practice Hearings (173 witnesses).</p> <ul style="list-style-type: none"> <li>Supplementary semi-structured interviews with key informants in the accounting profession, including state regulators and managing partners of Big 5 accounting firms.</li> </ul>		
Sikka & Willmott (1995)	How does the accounting profession define, defend and extend its jurisdiction based on their independence image?	Critical sociology of the professions	<ul style="list-style-type: none"> <li>UK</li> <li>1970s to early 1990s</li> </ul>	<ul style="list-style-type: none"> <li>Archival: Academic literature, popular literature (e.g., business press and broadcasts) and official documentation that illustrate how the UK accounting profession has responded to recent challenges to its aura of independence—challenges that threaten to damage its credibility and imperil its control of lucrative jurisdictions.</li> </ul>	Qualitative: Multiple case study (three)	<p>The major challenges to the accounting profession's capacity to define, defend and extend jurisdictions are from groups that do not seek to occupy, but that continuously challenge the credibility, status and growth of the accounting profession, as well as the capacity of self-regulation.</p> <p>Overall: (i) supranational pressures condition both the local practice and national standing of professional groups; and (ii) the interactions between the profession/industry and others who do not seek to occupy the accounting territory shape the defence and expansion of professional accounting jurisdictions.</p>



### **3.4 Accounting Professionalisation Studies**

This section summarises the professionalisation studies that are related, but not fundamental, to this thesis. This section is divided into three sub-sections according to the subject matter of the studies involved.

#### **3.4.1 Defining, Defending and Expanding the Jurisdiction of Accounting**

This section discusses the studies of Walker (2004) and Edwards, Andersen and Chandler (2007), which provide evidence of the variety of challenges faced by the accounting profession in claiming its jurisdiction in public practice—that is, gaining a legitimate position and the control of work to maintain a claim over professional status and ultimately financial rewards (Abbott, 1988). A jurisdictional claim hinges on the application of abstract knowledge and is used by the accounting profession to define, defend and expand its jurisdiction—that is, to demarcate the boundaries of its jurisdiction from other professions and from non-professionals (Abbott, 1988).

These studies show that a jurisdictional claim may lead to the accounting profession engaging in a social closure strategy to deter competition from those they consider outsiders. However, both studies (Edwards et al., 2007; Walker, 2004) focus on the examination of jurisdictional claims from an interactionist perspective (Abbott, 1988) rather than Weberian social closure (Weber, 1978), highlighting that the accounting professionalisation process is complex and involves dynamics with a range of different actors. However, the focus of these studies is typical of the accounting literature, warding off less credible/reputable accounting professionals and competing with other professionals where accounting professional associations are the central axis of professionalisation.

Walker (2004) outlines the process of jurisdictional expansion due to external sources of change that led to the construction of accounting professional organisations (i.e., social closure). Walker (2004) shows that the *Bankruptcy Act 1869*, a state-activated disturbance, created tensions on the boundary of, and changed the practice within, the accounting profession because such a disturbance invited accountants into the jurisdiction of bankruptcy. This expansion created conflicts with other professionals within that jurisdiction. Here, Walker (2004) presents a case of dynamic relationships between accountants and other professionals in which lawyers instigated the formation of an accounting professional association because they needed a medium to resolve jurisdictional conflicts and prevent less reputable accountants from entering bankruptcy jurisdiction. Therefore, the social closure was a way to demarcate public accounting jurisdictional boundaries from other professionals (lawyers) and

intraprofessional groups referred to as less reputable accounting practitioners. This approach was taken because at the time professional accountants 'had no capacity to enforce an internal demarcation of the occupation by defining the specific tasks to be performed by' (Walker, 2004, p. 153) the superior professional and the inferior non-professional.

Walker (2004) shows that the closure strategy to define and defend the jurisdiction from outsiders does not always come from the accounting profession. Such a strategy could be initiated by an outsider (i.e., another profession), which could be effective not only in resolving interprofessional jurisdictional disputes, but also in reducing intraprofessional conflicts with less reputable accounting practitioners.

However, social closure alone may not be effective. Edwards et al. (2007) examine, from a historical perspective, the emergence and progress of public accountants in England as recognisable expert suppliers of specialist services over which they possessed an effective jurisdiction.<sup>25</sup> This was achieved in 1870, prior to the organisational fusion of five accounting associations in 1880. Although Edwards et al. (2007) find that the chartered accountants' association was used as an effective guard in competition with less credible accountants, the label 'public accountant' failed to provide occupational differentiation effectively for the continuing success of their professional project—that is, 'fighting further jurisdictional battles within the system of professions' (Edwards et al., 2007, p. 93) such as with the law profession. This condition led to the reconstruction of a public accounting profession based on the title 'chartered accountants'. Edwards et al. (2007) discuss the strategies used by public accountants to demarcate their professional jurisdiction from outsiders and to continuously expand their jurisdictional claim through the 'chartered accountants' title.

Edwards et al. (2007) primarily focus on interprofessional conflicts because they assume that accountants have always been extending into new jurisdictions and suggest that there is a remote likelihood of conflicts with non-professionals such as accounting technicians and bookkeepers. Edwards et al. (2007) believe that jurisdiction arrangements between public accountants and accounting technicians or bookkeepers have been settled (Abbott, 1988), with bookkeeping work becoming the domain of bookkeepers and the installation of the double-entry bookkeeping system remaining the domain of public accountants because the latter is the higher-level jurisdiction (i.e., involving supervision and control over the operation and application of bookkeeping). On the other hand, Walker (2004) finds that investigating

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<sup>25</sup> Edwards et al. (2007): The term jurisdiction is used to describe the profession's effective control over a task area (Abbott, 1988, p. 112). Jurisdiction is mapped based on a classified list of tasks undertaken by a profession at any point in time (Abbott, 1988, p. 41).

interprofessional conflict does not only provide the best means for understanding professional development but also provide insight on intraprofessional conflict (Walker, 2004, p. 153).

Overall, these studies (Edwards et al., 2007; Walker, 2004) show that jurisdictional claim is achieved not only by establishing professional association in order to enhance the status of public accountants on the basis of superior (abstract) knowledge, but 'that a defensible jurisdiction must be based on a coherent set of tasks anchored to a profession's abstract knowledge base' (Edwards et al., 2007, p. 62). Therefore associating and disassociating with different types of professional work—that gives accountants, respectively, high and low occupational status honour—are critical also to successfully achieve jurisdictional claim. Professional work associated with high status is that requiring higher professional judgement (i.e., the application of abstract knowledge) (Abbott, 1988). Table 3.5 summarises the studies discussed in this section, Edwards et al (2007) and Walker (2004).

**Table 3.5: Defining, Defending and Expanding the Jurisdiction of Accounting**

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Edwards, Anderson & Chandler (2007)	Extend an understanding of accounting's past by studying the emergence of public accountants as recognisable suppliers of a coherent range of specialist services over which they claimed jurisdiction.	Abbott (1988): The System of Professions	<ul style="list-style-type: none"> <li>▪ England</li> <li>▪ 1800–1880</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Academic literature on the emergence and progress of 'public accountants' in England, as well as popular literature (e.g., business press) and official documentation.</li> </ul>	Qualitative: Historical study	Public accountants were operating as autonomous professionals who fought for and captured their jurisdiction within the workplace. The initial organisational formation provided the means for distinguishing the bona fide accountants from the 'rag, tag and bobtail', but in an insufficiently effective manner—it lacked a national presence and a name. After organisations' fusion and the reconstruction of public accountancy based on the title chartered accountants (which led to the creation of the ICAEW); when they could not claim exclusive ownership of the knowledge base (e.g., bankruptcy), they persuaded the public of their claim for jurisdiction by undertaking tasks, to their clients' satisfaction, under that title. The results show the qualified public accountant successfully obtaining a degree of protection from the state through the grant of a Royal Charter.
Walker (2004)	The motives behind the formation of organisations of accountants.	Abbott (1988): The System of Professions	<ul style="list-style-type: none"> <li>▪ England</li> <li>▪ 1860s and 1870s</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Academic literature on the first four accountancy organisations in England, popular literature (e.g., business press) and official documentation.</li> </ul>	Qualitative: Historical (case) study	The genesis of professional organisation varied in the context of a common legislative catalyst that disturbed extant inter- and intraprofessional arrangements. A closure strategy does not always come from the accounting profession itself to protect from less reputable individuals; it can be initiated by other professions to resolve jurisdictional boundary disputes. Thereby, the formation of a professional body or closure strategy can be used to resolve inter- and intraprofessional conflicts faced by the accounting profession as the result of a disturbance.

### 3.4.2 Commodification of Professional Knowledge

This section discusses three studies that examine the commodification of professional accounting knowledge, namely those of Cooper and Taylor (2000), Manson, McCartney and Sherer (2001) and Suddaby and Greenwood (2001).

Bookkeeping is an early episode of the commodification of accounting work. Cooper and Taylor (2000) focus on analysing the changing work practices (e.g., bookkeeping) of non-professionally qualified workers in accounting clerical roles in the UK between 1974 and 1996, using Braverman's *Capital and Monopoly Capital* (1974) as the framework. Cooper and Taylor (2000) find that as the demand for computer experience increased sharply, the demand for double-entry experience declined sharply, which suggests that there is an association. Further, the demand for trial balance experience has decreased steadily over the 22 years. Cooper and Taylor (2000) also find that the demand for bookkeepers with the ability to perform tasks with a level of discretion and autonomy also declined. This suggests increasing removal of the thought process, which indicates the deskilling and dehumanisation of bookkeeping and further differentiates professionally qualified accountants and non-professionally qualified accounting workers. However, Cooper and Taylor (2000) also argue that such changes in work practices in non-professionally qualified accounting workers are likely to have implications for the accounting profession. It threatens the position of junior accountants within a company, as the deskilling and dehumanisation lead to declining salary levels, which attract companies to outsource lower-level accounting work to bookkeepers.

Cooper and Taylor (2000) show how the commodification of bookkeeping leads to the work increasingly being seen as non-professional work. Bookkeeping has been deskilled and is being shifted from accountants to accounting technicians (i.e., accounting clerks and bookkeepers), especially with the advancement of technology. Here, Cooper and Taylor (2000) highlight a case of jurisdictional shift where professional accountants aimed to differentiate themselves from non-professionals. However, Cooper and Taylor (2000, p. 575) add that, particularly with the advancement in technology, 'the dehumanising long run impact of Tayloristic deskilling is impacting on the majority of the accounting workforce. It may, in the near future, begin impacting on "professional" accountants'. They argue that, according to Tayloristic Scientific Management principles, the majority of work experience in the accounting industry is deskilling—that is, the work has been subdivided into routine and fragmented tasks and is subject to significant managerial control.

Cooper and Taylor's (2000) assertion that the increasing dehumanisation, or the use of technology, results in a deskilling effect that may begin to affect 'professional' accountants in

the future is also discussed by Manson et al. (2001), who examine automation in the financial audit (i.e., the commodification of the financial audit) in the UK and US from 1994 to 1995. Manson et al. (2001) investigate the nature of audit automation as control over the work process and audit staff, including the issue of deskilling and resistance, as well as competition. The study builds on a survey of Big and Mid-tier firms conducted for the previous study by Manson, McCartney and Sherer published in 1997 titled *Audit automation: The use of information technology in planning, controlling and recording of audit work*. Manson et al. (2001) further focus their study on Big firms by interviewing audit staff at all levels in two of the Big 5 firms. The results reveal that audit automation is not only a technology for improving the quality and/or productivity of the audit process, but it also represents the firm's market competitiveness that promotes the firm both externally (clients) and internally (staff). In addition, Manson et al. (2001), who also refer to Braverman (1974), find that in contrast to Cooper and Taylor (2000), the commodification of the financial audit due to advancements in technology does not lead to deskilling or loss of jurisdiction to non-professionals. Indeed, the financial audit is protected by the regulation that restricts those who can do the work. The automation enables greater managerial surveillance and control, which at the same time facilitates a less hierarchical and less formal organisational structure. In turn, the automation increases efficiency and assists audit staff, especially juniors, to focus on more complex work.

Manson et al.'s (2001) findings that competition occurs primarily between the Big firms and audit automation and is critical for firms' competitiveness are also identified by Suddaby and Greenwood (2001), who find that commodification is used as leverage for moving into multidisciplinary practices.

Suddaby and Greenwood (2001) refer to such a move towards multidisciplinary practices as a colonisation strategy. Suddaby and Greenwood (2001) define colonisation as a strategy of regenerating abstract knowledge to maintain a claim over professional status (jurisdictional claim) by expanding into a new knowledge territory (jurisdictional expansion). Colonisation involves extending expertise into the weakening jurisdiction as leverage into the new jurisdiction, as well as using its connection with those outside the profession to gain legitimate position and control over work. Accordingly, since commodification typically enables the efficient relocation of resources, Suddaby and Greenwood (2001) argue that colonisation is the natural consequence of commodification.

Suddaby and Greenwood (2001) examine the process by which management knowledge is produced by investigating two linked dynamics—commodification and colonisation—as the main components of the process. After Big firms' migration into management consulting and

business advisory due to the commodification of the financial audit, they have been rapidly growing and engaging in the colonisation of knowledge as an explicit strategy to transform into multidisciplinary firms. Due to increasing competition and the need to differentiate themselves from more specialised, pure consulting firms such as McKinsey or Boston Consulting Group, the Big firms' colonisation project includes internalising the production of management knowledge into the confines of a single organisation. Internalising management knowledge production leads to Big firms establishing knowledge centres or building links with universities to legitimate their self-generated knowledge. This colonisation strategy is used by Big firms as their dominating strategy over management knowledge production and in the wake of increasing competition over new knowledge products.

Overall, the commodification of traditional accounting work converts localised and highly experiential abstract knowledge into a product by transforming it into something that can be stored, moved or reused, and codified knowledge is synthesised into a more portable and universal form that enables it to be used in many different contexts (Suddaby & Greenwood, 2001). Technology is commonly used as the medium for commodification, and significant advancements in technology arguably intensify the dehumanisation of abstract knowledge, which has deskilling implications for a profession (Cooper & Taylor, 2000). Thus, once knowledge is converted into routinised and rule-based forms, accounting practice becomes transparent and imitable (Suddaby & Greenwood, 2001). This means that the accounting profession's power over such work disappears, creating a loss of status and the ability to exploit financial rewards within its claimed jurisdiction. Therefore, commodification threatens the accounting profession because it is essential for a profession to control its system of abstract knowledge to claim professional status (Abbott, 1988). However, commodification may not lead to deskilling when the jurisdiction is protected by regulation or when commodified knowledge can be used as leverage to redefine the systems of abstract knowledge if the profession has the professional power to do so (Manson et al., 2001; Suddaby & Greenwood, 2001).

Therefore, these studies highlight the importance of effective control over abstract knowledge in claiming jurisdiction in which commodification may threaten accountants' ability to maintain that control. The system of abstract knowledge represents a combination of the occupational (professional) knowledge base and cultural values. The knowledge base is a means to claim control over work because it is abstract and thus requires professional judgment by those who have the expertise to do so. The cultural values (e.g., codes of ethics) justify the professional work and thus provide legitimation (Abbott, 1988; Macdonald, 1995). Table 3.6 summarises the studies discussed in this section.

**Table 3.6: Commodification of Professional Knowledge**

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Cooper & Taylor (2000)	Deskilling of accounting skills due to changing work practices.	Labour process; Braverman Tayloristic 'Scientific Management' principles	<ul style="list-style-type: none"> <li>▪ UK</li> <li>▪ 1974–1996</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Academic literature on how the deskilling of accounting work has been organised in practice, job advertisements in newspaper (qualitative) and official statistics (quantitative).</li> </ul>	Qualitative: Historical Studies	The study examines non-professionally qualified workers in accounting clerical roles (bookkeepers, accounting clerks) and finds that the dehumanising long-run effect of Tayloristic deskilling is affecting the majority of the accounting workforce, and it may soon affect professional accountants. Provides evidence of 'deskilling' by reference to changing job specifications.
Manson, McCartney & Sherer (2001)	The effect of audit automation on work practices in audit firms where the themes analysed are control over the work process and audit staff, deskilling and resistance, and competition.	Giddens' Structuration Theory and Coombs et al.'s (1992) effect of IT in organisations	<ul style="list-style-type: none"> <li>▪ UK (interview)</li> <li>▪ Supplemented by UK and US (survey)</li> <li>▪ 1994–1995</li> </ul>	<ul style="list-style-type: none"> <li>▪ Semi-structured interview based on previous study survey results (Manson et al., 1997), with 33 personnel of two of the Big 5 firms (A/B): audit partners (3/2), audit managers (3/5), audit seniors/assistants (5/4) and IT specialists (5/5).</li> </ul>	Qualitative: Linking functionalism, ethno-methodology and action research enabled by Giddens' structuration theory	Instead of creating a deskilling effect, audit automation increases efficiency, which places more emphasis on judgmental and high-risk areas of audit, leading to improvements in the quality of audit. Further, improved efficiency and audit quality lead to an increased competitive position, where audit automation becomes a factor that contributes to the competitive strategy to win both clients and recruits. This shows that they gain symbolic power because their position is considered at the forefront of technological advance.
Suddaby & Greenwood (2001)	The process by which management knowledge is produced.	Institutional theory—organisational field	<ul style="list-style-type: none"> <li>▪ Global</li> <li>▪ As of research date</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Academic literature on the structure of the field of management knowledge production, popular literature (e.g., business press) and official documentation.</li> </ul>	Qualitative: Field-level analysis	Two linked dynamics are important components of the process of management knowledge production: commodification and colonisation. A framework of the cycle of knowledge production and consumption depicts that the production of managerial knowledge occurs through the complex interaction of a network or field of organisations. By pursuing individual interests, actors in the field produce an informal structure, innovate new managerial knowledge and regulate production and consumption.



### **3.4.3 Intraprofessional Differences in the Professionalism of Public Accounting Practice**

This section highlights fragmentation in the professionalism of the accounting profession, especially public accounting practice. The discussion starts with a study by Khalifa (2013) that examines specialism in the accounting profession in the UK between 1996 and 2004 from a gender perspective, followed by discussions of studies by Suddaby, Gendron and Lam (2009) and Sikka (2009)

Khalifa (2013) examines whether specialisms have emerged and, in turn, been shaped and recreated by gender as well as other processes. Khalifa (2013) finds that professionalism is gendered and ordered based on the intraprofession hierarchy, as certain segments of the accounting profession are dominated by females, but others are dominated by males. Khalifa (2013) uses an example of two divisions in accounting firms—personal tax and management consulting. Personal tax is dominated by females and is considered more feminine. It is perceived as more technical, associated with less use of tacit professional knowledge, and involves less interaction with clients (generally individuals and small companies) and thus, there is less need to devote irregular and long work hours. Conversely, management consulting is dominated by males and is regarded as more masculine. It is perceived as requiring higher-level professional work because it involves more interaction with clients (generally large corporations), tasks that are not easily transferable to others and junior staff, and it requires a pitch for commercialism (e.g., after-hours interaction with clients); thus, it involves longer working hours.

Khalifa (2013) supports Suddaby et al.'s (2009) findings on fragmentation in accountants' self-articulated professionalism due to context, content and location of both the accountants within the organisation and the organisation within the field (e.g., accounting firms). Suddaby et al. (2009) find that professional work has contributed to a variation in attitudes towards professional ideology and institutions. Suddaby et al. (2009) find that accountants in public practice (accounting firms)—that is, the traditional work context—show the strongest deviation from core (traditional) professional values (i.e., traditional logic of professionalism). In addition, for the distinctive value of commitment to the independence enforcement, the deviation is most pronounced in the Big 4, which represents the elite core of the profession.

Suddaby et al. (2009) find that, as the conditions of work change, so do the patterns of value commitments. They find that when the environment surrounding accountants or the work context changes, there is growing managerial (commercial) logic. The Big 4 is identified as a sub-group that has competing logics because it exhibits the lowest commitment to organisations and clients, but also independence enforcement. As discussed earlier, the notion

of independence represents professionalism (i.e., traditional logic), while organisation and client orientation represent commercial logic. Mid-tiers are a sub-group that exhibit the highest independence enforcement, similar to findings in a study by Lander et al. (2013). However, Suddaby et al. (2009) find that sole practitioners exhibit the highest commitment to organisations and clients. This means that although sole practitioners exemplify the traditional organisational form of professions compared to the Big 4, which have become multidisciplinary, they seem to show a tendency away from the traditional logic of professionalism. SMPs that are non-sole practitioners show more alignment with the traditional logic of professionalism, similar to Mid-tiers.

Overall, Suddaby et al. (2009) find that there are no significant in-between sub-group differences relating to commitment to the profession and the utilitarian view of CA designation—that is, accountants in public practice are more committed than those in non-public practice. However, accountants in public practice view their CA designation in commercial terms and are less committed to independence enforcement than accountants in non-public practice.

Sikka (2009) responds to Suddaby et al. (2009) regarding what constitutes the professionalism of the accounting profession by arguing that ‘changes in professional attitudes and values cannot be easily understood without a consideration of the broader social and political context’ (Sikka, 2009, p. 428). Sikka (2009) finds that although Suddaby et al. (2009) urge further study on the organisational work context of accountants, as this is the key site for the production, consumption, regulation, identity and subjectivity of accountants, there is a need to look beyond this site. Sikka (2009) argues that Suddaby et al. (2009) do not locate accounting firms in any recognisable social formation, such as capitalism, and they do not consider the structural dynamics of change. Sikka (2009) believes that, in the pursuit of capital accumulation, accounting firms are concerned about strategy, finance and competition, and thus they are obliged to develop ethical lapses. Sikka (2009) suggests that ethical lapses do not only occur in large accounting firms or Big firms.

Sikka (2009) therefore highlights the importance of Suddaby et al.’s (2009) findings on the potential competing logics of SMPs, and thus ethical lapses, using two cases where SMPs engaged in predatory practices. This indicates that commercial logic as a predatory practice is client-oriented and deviates from the need to protect the public interest. Overall, Sikka (2009) recognises that SMPs are closely identified with the traditional professional identity, where they engage in traditional professional work, and they are less contaminated with multidisciplinary practices. However, accounting firms (accountants), such as SMPs, that are

associated with the traditional work environment are not immune to commercial logic, especially with increasing capitalism. Table 3.7 summarises the studies discussed in this section.

**Table 3.7: Intraprofessional Differences in the Professionalism of Public Accounting Practice**

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Khalifa (2013)	Whether accounting specialisms have emerged through and, in turn, have been shaped and recreated by gender as well as other processes.	Sociology of the professions and feminist studies of the professions	<ul style="list-style-type: none"> <li>▪ UK</li> <li>▪ 1996–2004</li> </ul>	<ul style="list-style-type: none"> <li>▪ 75 interviews with 67 individuals: 72 in 2000–2004 and 3 in 2010–2011.</li> <li>▪ Archival: 1996–2011 professional press and publications, recruitment brochures of UK accounting firms, and firms’ websites.</li> <li>▪ Survey: 2,465 responses out of 8,220 sent.</li> </ul>	Qualitative and quantitative: Exploratory study	A key contribution of this study lies in the suggestion that accountants’ self-articulated notions of professionalism in the different specialisms are gendered—that is, gender offers an encompassing conceptual frame for ordering discursive attributes of the different specialisms. The more pronounced the ‘public’ character of a specialism—in a deeply ideological fashion (e.g., working long and unpredictable hours and socialising with clients)—the more masculine it was perceived to be. Without regard to the technical, political and cultural softenings between traditional conceptions of public versus private, the ‘professional’ was considered the masculine bread-winner who could dedicate time to work without interruptions from home. Those notions of professionalism played an important role not only in further understanding the relative professional status of the various accountancy specialists, but it also highlighted the intraprofessional demarcation strategies of a profession that struggles to maintain its professional status.
Suddaby, Gendron & Lam (2009)	The espoused attitudes of professionals to their employing organisation, their profession and, most critically, their clients, to assess varied explanations for recently observed shifts away from professional logics: 1. ‘How do value commitments	Institutional theory	<ul style="list-style-type: none"> <li>▪ Canada</li> <li>▪ Last quarter of 2002 to mid January 2003 (after the collapse of Arthur Andersen)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Online survey: 1,200 usable responses out of 7,169 sent to members of Canadian CAs in public practice, government and private industry. The responses were analysed by gender, organisational type and hierarchical positions occupied by the respondents.</li> </ul>	Quantitative: Survey	Extends a prior study (Gendron & Suddaby, 2004) by mapping the relative degree of commitment to core and ideal professional values across the broad spectrum of practice areas and work contexts of professional accountants in Canada. It is a preliminary attempt to map the variation in professional attitudes and values as the conditions of professional work change. The results show that the majority of accounting professionals remain committed to their profession despite profound changes in the context, content and location of their work. However, the strongest espoused deviation from core professional values and logics has occurred in traditional work contexts (i.e., public accounting firms), and

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
	<p>change when professionals work as salaried employees?</p> <p>2. Do the relative commitments change when they work in conditions where professionals no longer control professionals?</p> <p>3. How do value commitments change when professionals engage in the delivery of non-professional services?</p>					<p>for the distinctive value of commitment to independence enforcement, the deviation is most pronounced in the elite core of the profession—the Big 4. Accountants in higher ranks also tend to identify more with commercialistic values.</p>
Sikka (2009)	<p>Commentary on Roy Suddaby, Yves Gendron and Helen Lam (2009) ‘the organizational context of professionalism in accounting’ to extend the debate by posing questions about the theory and evidence of the paper. In particular, to argue that changes in professional attitudes and values cannot</p>	Not applicable	<ul style="list-style-type: none"> <li>▪ US and UK</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Academic literature on professional attitudes and values, popular literature (e.g., business press) and official documentation.</li> </ul>	<p>Qualitative: Commentary (case analysis)</p>	<p>Addresses the somewhat mixed findings of Suddaby et al. (2009). Highlights rich avenues for future research by discussing the study’s limitations:</p> <ol style="list-style-type: none"> <li>1. The context, Canada, may not be applicable in other countries (e.g., the UK), where the majority of accountants do not work in ‘the traditional work context’ (i.e., public accounting firms).</li> <li>2. It recognises conflicts between institutional and professional logic. Consequently, accountants have to construct and legitimise multiple identities, not just accept the idealised professional traits of autonomy, independence, objectivity etc.</li> <li>3. It makes no attempt to establish any connections, no matter how tentative, between the expressed values and overt behaviour. The changes in attitudes always</li> </ol>

Author (Year)	Research Problems/ Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
	easily be understood without consideration of the broader social and political contexts.					<p>incubate in broader social contexts. Instead, the objective of the Suddaby et al. (2009) paper is 'not to map behaviour, but rather to capture changes in attitudes and logics' (p. 425). An examination of behaviours might show that some shifts in attitudes have already taken place, and thus there is a need to think about possibilities of fresher theories and regulation.</p> <p>4. It does not locate accounting firms in any recognisable social formation, such as capitalism, and it considers the structural dynamics of change. In the pursuit of capital accumulation, accounting firms are concerned about strategy, finance and competition, and they have been obliged to develop 'ethical lapses' such as participating in price fixing and the falsification of clients' financial statement and audit reports. Discusses two cases where accountants and firms associated with the traditional work environment are not immune to the logic of higher profits.</p>

### **3.5 Supplementary Studies**

This section presents a list of studies that support this thesis, namely those of Greenwood, Li and Deephouse (2005), Malhotra, Morris and Hinings (2006) and Malhotra and Morris (2009). These studies discuss phenomena in professional public accounting practice from the perspective of professional service firm literature. The literature examines professional service firms in public accounting practice and compares them with those in other professions, such as law and engineering. Table 3.8 summarises the studies.

**Table 3.8: Professional Service Firm in Public Accounting Practice**

Author (Year)	Research Problems/Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
Greenwood, Li & Deephouse (2005)	Seeks to construct a theory of professional service firms (PSFs) from two significant gaps: explicit attention to performance and lack of attention to strategy. H1: For PSFs, reputation positively affects performance. H2: For PSFs, there will be a positive relationship between balanced diversification and performance.	Professional service firm theory	<ul style="list-style-type: none"> <li>▪ US</li> <li>▪ 1991–2000</li> </ul>	<ul style="list-style-type: none"> <li>▪ Top US 100 accounting firms from 1991–2000; at least 2 years in top 100 = 160 firms</li> </ul>	Quantitative: Econometric approach using panel data estimation	Finds the importance of reputation permeates core strategic decisions, bounding the appropriate form of diversification, where diversification affects the success of firms' performance. Reputation is elevated from client dependence where client dependence is created by maintaining the mystique (information asymmetry) of professional services that they provide to their clients. The result of the study may not apply to smaller firms because they: (i) may not have the capacity to diversify and (ii) deal with small clients involving less complex knowledge thus less information asymmetry.
Malhotra, Morris & Hinings (2006)	The sources of variation in organisational forms among accounting and law firms. How does the changing balance between the influence of market and institutional factors result in structural variation?	Contingency and institutional theory	<ul style="list-style-type: none"> <li>▪ Global with a focus on PSFs in the accounting and law professions</li> <li>▪ As of the research date</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Academic literature on organisation of PSFs and its evolution variations, popular literature (e.g., business press) and official documentation</li> </ul>	Qualitative: Historical (case) study (book chapter)	There are variations of the traditional P2 archetype rather than one universal archetype emerging in response to external pressures for change. Differences in the market and institutional contexts of the accounting and law professions suggested that the nature of the pressures they faced were (and remain) different and that the interactive dynamic between the market and institutional factors has evolved differently resulting in different organisational forms. In the case of accounting, the dynamic shaped by the reflexivity between market factors and the entrepreneurial role of large firms (Big 5), was critical in challenging existing institutionalised practices and propelling the change toward the multidisciplinary practice and global differentiated network forms. The entrepreneurial role of agents was not pronounced in the case of law firms. Therefore, there is more plasticity in accounting compared to law. However, current PSF research focus has been on interprofessional differences and dominated by attention to the biggest firms within a professional field. Expanding the scope to intraprofessional differences and thus include the



Author (Year)	Research Problems/Questions	Theoretical Framework/ Model	Context	Data Source	Method	Results/Contributions
						smaller firms may be useful to develop theoretical arguments that encompass the entire industry.
Malhotra & Morris (2009)	Differences between professions in a number of dimensions affect the nature of professionals' work and, in turn, the organisation and management of firms across different professional sectors.	The sociology of the professions	<ul style="list-style-type: none"> <li>▪ Global with Anglo-American orientation and a focus on accounting, law and engineering consulting PSFs</li> <li>▪ As of 2008 (inclusive)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Archival: Qualitative and quantitative data from popular literature (e.g., business press such as <i>Accounting Today</i>), firms' websites and official documentation</li> </ul>	Qualitative: Historical study	Differences in three dimensions—that is, the nature of knowledge, jurisdictional control and client relationships—between legal, auditing and engineering consulting firms affect the way firms are organised (i.e., organisational form, teamwork and pricing systems). The role of the conduct of professional work is the key situational mechanism that provides an understanding of how macro-level factors at the level of the profession have significant effects at the organisational level (micro-level factors, i.e., organisational characteristics): why the structure of the professional firm is dominated by professional or bureaucratic principles; why the team structure within the firm is hierarchical or lateral and the team process is sequential or reciprocal; why the global organisational network is loose or integrated; why the spatial distribution of assets is widely dispersed or concentrated; and why the mode of pricing may be fixed or a variable fee based across the professions. Unpacking the connection between the abstract characteristics of the profession- and firm-level characteristics illuminates firm-level heterogeneity across different professions. This shows that instead of large professional organisations influencing the jurisdictional boundaries of professions, the influence may flow in the opposite direction, from profession to organisation.

### 3.6 Summary

The literature review centres on the examination of field transformation and institutional change in professional public accounting practice due to the commodification of the financial audit (Covaleski et al., 2003; Greenwood et al., 2002). Overall, the review shows that field transformation and institutional change in professional public accounting practice may be affected by various factors, namely (i) inter-organisational, inter-professional and/or intraprofessional competition and (ii) endogenous or exogenous shock.

Prior studies examine field transformation and institutional change from the perspective of the Big firms (Covaleski et al., 2003; Greenwood et al., 2002). The commodification of the financial audit was sparked by inter-organisation competition between the Big firms over the financial audit service. The resulting shift to multidisciplinary practice was driven by the Big firms (endogenous shock) as they sought a new, sustainable competitive advantage because the financial audit service was becoming less profitable (Covaleski et al., 2003; Greenwood et al., 2002). The move towards a more commercially oriented practice shifted their professional identity away from the core institution (independence and the guardian of public interest) perspective. This begged the question of whether the change spilled over to the non-Big firms.

Subsequent studies find that non-Big firms tended to adhere to the core institution because they did not have the same level of commercial drive and resources (power) as the Big firms to become multidisciplinary practice—because they engaged in different professional work, work setting and client base (Lander et al., 2013; Ramirez, 2009). Thus intraprofessional competition between sub-groups as a result of the shift to multidisciplinary practice was essentially non-existent (Greenwood et al., 2002). On the issue of intraprofessional competition, the results of studies undertaken by Caramanis (1999, 2005) in Greece tell us that smaller local firms struggle to defend their territory when Big firms encroach on their jurisdiction. Further, intraprofessional competition is more likely to occur when non-Big firm space is disrupted and not least of all when the source of disruption is exogenous. That is, it is driven by those external to the profession and beyond the control of the profession. The digital innovation, that is the focus of this study, invokes intraprofessional competition and is exogenous in nature. It significantly affects the domain of SMPs and is likely to affect professional public accounting practice at large, because it affects the six related issues that determines the boundaries of the existing social structure. The digital innovation disrupts the nature of professional knowledge, client relationship and jurisdictional control, particularly for SMPs. The disruptive circumstances, in turn, have the capacity to affect the nature of professional work, which would lead to a wave of change in other issues, namely the location of work, firm size, firm structure, client base and ultimately professional values (Abbott, 1988; Malhotra & Morris, 2009). Altogether, it

has the capacity to lead non Big-firms to become more commercially oriented (Cooper & Robson, 2006; Sikka & Willmott, 1995; Suddaby et al., 2007). How actors will behave in the foregoing scenario will be driven by regulative, normative or cultural-cognitive pillars (Hoffman, 1999; Scott, 1995, 2014). The possible changes in the boundaries of the existing social structure and how actors behave in responding to those changes have the capacity to lead to field transformation and institutional change.

Therefore, the digital innovation provides an avenue to extend prior literature by examining field transformation and institutional change from the perspective of non-Big firms, especially SMPs (i.e., focusing on the role of intraprofessional competition as well as exogenous shock).

## **Chapter 4 Conceptual Framework**

### **4.1 Chapter Content**

This chapter presents the conceptual framework for this thesis. That is, the researcher's map of the territory being investigated, which provides the direction for the study (Miles, Huberman, & Saldana, 2014). It specifies who and/or what will be studied and the researcher's position on the research topic. A conceptual framework can be commonsensical or theory-driven and consists of key factors, concepts or constructs and the interrelationship among them (Miles et al., 2014). It is 'developed at the beginning of the study' (Miles et al., 2014, p. 20) and evolves as the study progresses, thus it can be constructed based on not only existing theory and research but also experiential knowledge, pilot and exploratory research and thought experiments (Maxwell, 2005). The conceptual framework of this study is developed based on the insights gained from the preliminary article review (see Chapter 2) and the theoretical framework employed, which is discussed in this chapter.

The preliminary article review is helpful for gaining a reasonable understanding of the impact of digital innovation on professional public accounting practice in Australia. The theoretical framework provides the lens through which the impact of the digital innovation on the social structure of professional public accounting practice is examined. The theoretical framework consists of organisational theory (an issue-based organisational field), institutional theory (institutional pillars) and the sociology of the professions (social structure). Together, these conceptual underpinnings are linked and used to explain the digital disturbance in the highly institutionalised and professional field of public accounting practice in relation to an issue that is hotly contested by vested interests—that is, the commodification of traditional accounting work due to the digital innovation.

The remainder of the chapter is structured as follows: theory of social structure (Section 4.2), the social structure of professional public accounting practice in Australia and its potential change (Section 4.3), and theoretical framework (Section 4.4).

### **4.2 Theory of Social Structure**

This study examines the impact of the digital innovation on the social structure of professional public accounting practice in Australia. At issue here is the premise that the digital innovation leads to the commodification of traditional accounting work in serving SMEs. Traditional accounting work is referred to in practice as compliance work, and it typically involves

bookkeeping and the preparation and reporting of financial statements and tax fillings (Greenwood et al., 2002; Ramirez, 2009).<sup>26</sup>

As discussed in Chapter 2, the digital innovation of interest stems from cloud accounting and SBR. It involves an ecosystem of cloud-based accounting and business solutions targeted at SMEs (Head, 2013). Such an ecosystem has not been available previously, and its adoption by SMEs has revolutionised their business and accounting processes and significantly affected their interactions with business intermediaries such as bookkeepers, tax agents and public accountants (Greenwood, 2013; Satell, 2014). It significantly affects public accountants in serving SMEs because, as discussed in Chapter 2, the nature of the digital innovation emanating from the core technology features and the key design feature of the digital innovation (Griffith, 1999) leads to the commodification of traditional accounting work.

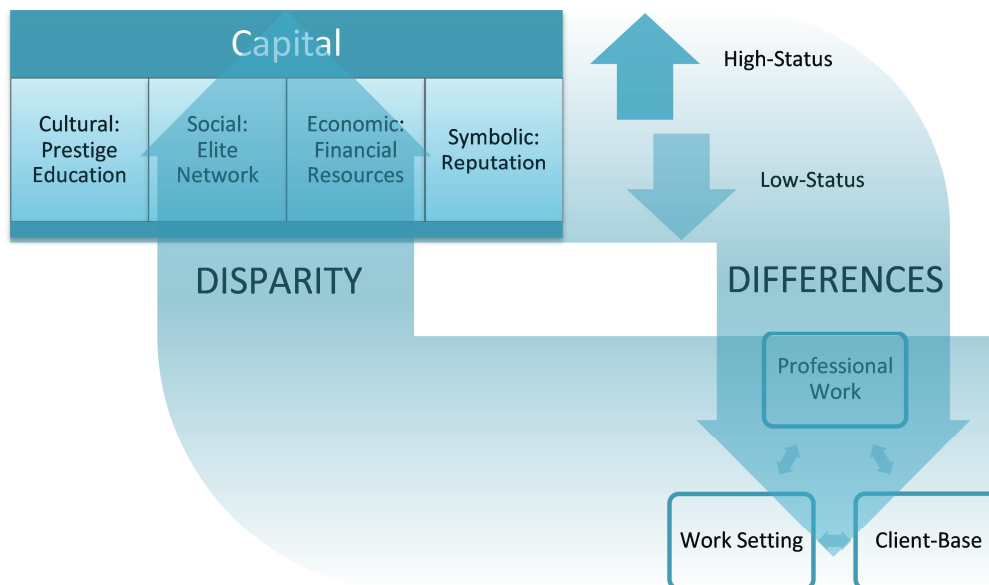
Such commodification (the digital innovation) has implications for the existing social structure of professional public accounting practice in Australia. Public accounting practice comprises professional accountants in firms who provide professional accounting services. These services include, but are not limited to, audit, tax, management consulting and business advisory, as well as financial services (APESB, 2013; IESBA, 2013). Notwithstanding the collective nature suggested by the definition of public accounting practice, the domain consists of a community of sub-groups (Abbott, 1988; Greenwood et al., 2002; Lander et al., 2013; Ramirez, 2009).

These sub-groups assume different social positions in public accounting practice, which entails a social ladder, due to the disparity in intraprofessional status. This stems from a disparity in the combination of resources (capital) that each sub-group possess, namely: the prestige education of its professionals (cultural capital); an elite network for recruiting professionals and clients (social capital); financial resources (economic capital); and reputation (symbolic capital) (Abbott, 1988; Bourdieu, 1984, 1986). This then leads to differences in the professional work, the work setting and the client base (Abbott, 1988) for each sub-group, which feed back to the maintenance of intraprofessional status. This process is depicted in Figure 4.1.

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<sup>26</sup> Professional work beyond traditional accounting work typically involves multidisciplinary consulting or business advisory tasks such as merger and acquisition advice, business strategy advice and executive remuneration restructuring.

**Figure 4.1: Establishment and Maintenance Process of Intraprofessional Status**



For example, the Big 4 initially earned their high status through prestige from their professional members' education training and elite university background. This in turn enables them to recruit a high-status client base (e.g., large multi-national or publicly listed companies) and provide high-value professional work. This creates client dependence because the conduct of professional work requires higher professional judgment—that is, services encoded with complex knowledge—resulting in information asymmetry (Abbott, 1988; Greenwood et al., 2005). This high-status client dependence translates into a better reputation and a greater income. Therefore, the Big 4 have the capacity to continue recruiting skilful personnel and high-status clients (Greenwood et al., 2005). Consequently, to maintain their high status, the Big 4 traditionally distance themselves from low-status client bases (e.g., local small businesses), thus subordinating these client bases to those who are lower in the hierarchy, such as SMPs (Abbott, 1988; Hanlon, 1997a, 1997b). The low-status of the client base is also derived from the fact that it involves repetitive, often non-value-adding, work that requires more intense interaction with clients and involves less complex knowledge, and thus a lower professional judgment (e.g., bookkeeping) (Abbott, 1988).

Difference in intraprofessional status translates to difference in professional power. Professional power refers to the ability to retain jurisdiction even though system forces (e.g., competition) suggest that a profession—in this case each sub-group in public accounting practice—should have lost its jurisdiction (Abbott, 1988). The higher the professional power the higher the ability of a sub-group to retain its jurisdiction as it has greater capacity to influence the production and reproduction of norms as well as the social prescription for the

profession. Professional power depends on the ability to access resources as resources are important for influencing activities in the professional field (Abbott, 1988; Bourdieu, 1993; DiMaggio & Powell, 1983; Scott, 2014). Therefore, the higher the intraprofessional status, the higher the professional power because high status affects the ability to access resources—that is, to secure skilful personnel of prestige education and elite network as well as a valuable high-status client base, which these translate into stronger financial resources and reputation (Abbott, 1988; Bourdieu, 1984).

Therefore, for the purpose of this thesis, the social structure of public accounting practice is referred to as the social arrangement of internally diverse groups of professionals, and it is hierarchical due to the disparity in intraprofessional status and thus professional power (Abbott, 1988, pp. 78-85, 117-142).

The foregoing discussion thus indicate that difference in intraprofessional status is aligned with difference in professional work, the work setting and the client base (Abbott, 1988). These differences are in turn associated with difference in professional values (Greenwood et al., 2002; Khalifa, 2013; Lander et al., 2013; Malhotra & Morris, 2009; Malhotra et al., 2006; Ramirez, 2009). Work setting is typically broken down into three issues: location of work, firm size and firm structure (Abbott, 1988; Malhotra & Morris, 2009; Malhotra et al., 2006). Therefore, the boundaries that delineate sub-groups within the social structure of professional public accounting practice are traditionally based on the following six related issues: professional work (core professional/multidisciplinary), location of work (local/national/global), firm size (number of partners), firm structure (professional partnership/bureaucratic firm), client base (SMEs/large/global) and professional values (professionalism/commercialism) (Abbott, 1988; Greenwood et al., 2002; Khalifa, 2013; Lander et al., 2013; Malhotra & Morris, 2009; Malhotra et al., 2006; Ramirez, 2009).

These related boundaries are subject to change because the practices of different sub-groups within the social structure may alter due to changes in external (exogenous) or internal (endogenous) forces (Hanlon, 1997a, 1999). Therefore, change has implications for the social structure because it alters the existing social arrangement. This, and the link to the digital innovation, are explained further in the next section.

### 4.3 Social Structure of Professional Public Accounting Practice in Australia and Its Potential Change

Following on from the preceding discussion, the specific social structure in professional public accounting practice in Australia is defined in this thesis as consisting of four sub-groups—Big 4, Next Big 8, Mid-tier and SMP—that arise from splitting the mid-tier firms into Next Big 8 and Mid-tier (Beaton, 2013; Khadem, 2013a). However, traditionally, professional public accounting practice is defined as consisting of three sub-groups, Big 4, Mid-tier and SMP. Accounting-related literature discussed in Chapter 3 shows that differences in intraprofessional status—thus professional power—lead to differences between these sub-groups based on six issues, namely professional work (core professional/multidisciplinary), location of work (local/national/global), firm size (number of partners), firm structure (professional partnership/bureaucratic firm), client base (SMEs/large/global) and professional values (professionalism/commercialism) (Abbott, 1988; Greenwood et al., 2002; Khalifa, 2013; Lander et al., 2013; Malhotra & Morris, 2009; Malhotra et al., 2006; Ramirez, 2009). These differences are explained as follow starting with the differences in professional work.

As have been discussed earlier, *professional work* is an important aspect in the maintenance of intraprofessional status. Big 4 have expanded to offering multidisciplinary services, which was driven by the commodification of the traditional accounting work and the need to find new sustainable (and profitable) competitive advantage. However, Mid-tier generally are cautious in providing non-accounting related services (Covaleski et al., 2003; Greenwood et al., 2002; Lander et al., 2013). Unlike the Big 4 that have been regarded as moving away from the traditional institution, SMPs remain focused on the core professional work although the focus of their work no longer on providing financial audit services (Ramirez, 2009). SMPs predominantly provide traditional accounting work and do not have yet the capacity to provide multidisciplinary service such as Big 4 (Greenwood et al., 2002; Ramirez, 2009). This difference in professional work stems from difference in *client-base*.

The Big 4 dominate the *client-base* of the financial audit, which primarily consists of large and/or global (multi-nationals) businesses (Greenwood et al., 2005). Although Mid-tier to some extent also serve the financial audit client-base, their focus is on strengthening local and national presence (Lander et al., 2013). Therefore, Mid-tier tend to serve national and local businesses comprising of large businesses and SMEs (Lander et al., 2013). SMPs, on the other hand, are primarily but not limited to serving small businesses (local and regional) that typically requiring traditional accounting work such as bookkeeping and tax filing (Greenwood



et al., 2002; Ramirez, 2009). These differences in professional work and client-base naturally lead to differences in *location of work*.

The *location of work*, therefore, indicates the focus of market (professional work and client-base) that these sub-groups aim to capture. Since Big 4's focus is on large and/or global client-base, they have multiple offices both locally and internationally. Mid-tier's focus on local and national presence typically involves multiple local offices across the country. However, larger Mid-tier commonly also have international offices or are part of a global network (Lander et al., 2013). SMPs, on the other hand, typically only have single office location and focus on serving client-base surrounding their local area (Abbott, 1988, pp. 152-153; Hanlon, 1996).

Differences in professional work, client-base and location of work lead to differences in *firm size* and *firm structure*. In order to be able to expand the location of work, Big 4 (previously Big 8, 6 and 5) merged with accounting firms in other countries to form a network of multi-national alliance and later merged between Big firms to strengthen their global position (Aharoni, 1999; Rose & Hinings, 1999). Therefore, Big 4's *firm size* is significantly larger than other sub-groups. In view of that, typically after the Big 4, the classification of Mid-tier and SMPs is based on *firm size* (number of partners).

The Big 4's mergers and acquisitions also involve changes in the *firm structure* that enable them to expand their professional work—that is, towards multidisciplinary practice firm structure (Brown et al., 1996; Greenwood et al., 2002). The new structure reflects a bureaucratic firm structure, which departs from traditional partnership structure, as it involves managerial arrangement where the firm is headed by a Director or Chief Executive Officer (CEO) and involves also non-accounting professionals such lawyers and IT consultants (Greenwood et al., 2002; Malhotra & Morris, 2009; Malhotra et al., 2006). Although larger Mid-tier commonly are part of a global network as well, they are not as big as the Big 4's network. Thus, since larger Mid-tier have been wary towards multidisciplinary practices in the same extent as the Big 4, they are inclined to maintain their partnership form and selective in adopting a new practice. This indicates that larger Mid-tier show more tendency towards hybrid structure (Lander et al., 2013). Mid-tier in general and especially SMPs are typically local firms that do not have international affiliations and thus their firm structures are in the form of traditional partnership (Hanlon, 1996; Lander et al., 2013; Ramirez, 2009).

Overall, these differences create disparity in *professional values* as changes in Big 4's professional work were driven by commercial interests which led to changes in other related issues. Big 4, thus, have been identified as having conflicting logic, traditional and commercial while Mid-tier have higher tendency towards traditional logic (Lander et al., 2013; Suddaby et

al., 2009). Even though traditional logic is formed around the role of financial auditors—centring on an ongoing commitment to protect and serve the public interest, and thus maintain its hallmark of independence—SMPs typically are identified as having tendency towards traditional logic (Ramirez, 2009). However, due to SMPs' scope of practice, SMPs may have increased tendency towards client-oriented services that moves away from traditional logic (Sikka, 2009; Suddaby et al., 2009).

What can be concluded from the foregoing discussion is that larger mid-tier firms may sit in a different position than the rest of mid-tier firms, which is the basis of this thesis in adopting the four-tier structure. That is, in order to differentiate the two, mid-tier firms are split into Next Big 8 and Mid-tier. Not only has the literature indicated potential disparity in intraprofessional status among mid-tier firms, but in Australia, the Next Big 8 have been identified as having the capacity to increasingly grow in size compared to the rest of the Mid-tier firms, and to progressively compete with the Big 4 (Beaton, 2013; Khadem, 2013a). This includes growing the number of partners (King, 2015). To achieve this, the Next Big 8 have been seeking to grow through mergers and acquisitions and to extend their existing international network through transnational expansion (Beaton, 2013; Khadem, 2012c; King, 2015). In addition, the Next Big 8—that have been adopting multidisciplinary practices—increasingly searching for larger clients by differentiating themselves from the Big 4 through, for example, competitive fees and a higher level of client interaction (Beaton, 2013; Khadem, 2013a).

As discussed earlier, disparity based on the six-boundary related issues arises from disparity in intraprofessional status. The discussion thus far indicates that Big 4, Next Big 8, Mid-tier and SMPs in Australia have different intraprofessional status. For the purpose of this thesis, the sub-groups are practically defined based on firm size (number of partners) and to some extent revenue. These criteria can be used to represent disparity in intraprofessional status that has the capacity to affect differences in the six related issues. However, for Next Big 8, special classification criteria based on BRW (Beaton, 2013; Khadem, 2013a) is used. The process of defining the sub-groups is explained in detail in Appendix 4.1 (pp. 124-125) and Appendix 4.2 (pp. 126-131).

In Australia, Big 4 have significantly higher revenue compared to the rest of sub-groups and there is a distinct gap between Next Big 8 and Mid-tier. Big 4 in general earn more than A\$1 billion while Next Big 8 typically earn more than A\$100 million per year, but less than A\$500 million, and Mid-tier firms typically earn less than A\$100 million, with the majority earning less than A\$20 million (BRW, 2008, 2009, 2010, 2011, 2012, 2013). Further, from the perspective of firm size

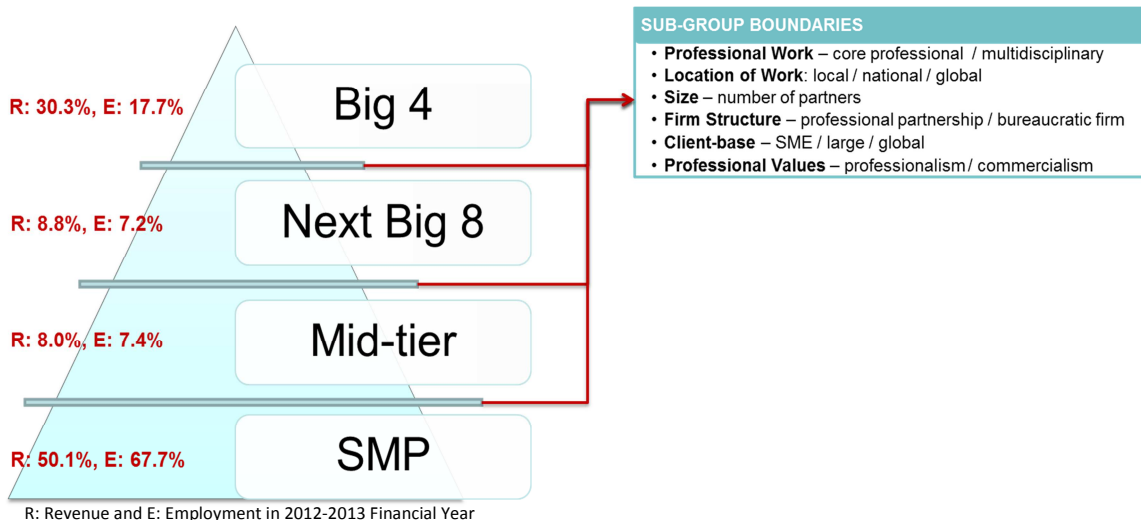
(number of partners), Big 4 are the top four firms and Next Big 8 are the next 8 firms. The Big 4 have more than 400 partners while Next Big 8 typically have more than 80 partners and Mid-tier have fewer than 20 partners (BRW, 2008, 2009, 2010, 2011, 2012, 2013). SMP in general consist of sole practitioners (ABS, 2014b). In Australia, the ICAA defines the sub-groups into the traditional three-tier structure based on the number of partners, where SMPs are defined as sole practitioners and firms with up to 5 partners while Mid-tier are defined as firms with more than 5 partners that are not the Big 4. The ICAA classification puts a big range of accounting firms into one mid-tier sub-group. Therefore, the four-tier approach adopted in this thesis is expected to provide a more granular structure for examining different vested interests around the issue of the commodification of traditional accounting work due to the digital innovation.

The four-tier structure provides a more granular structure because it enables better investigation of whether changes in the servicing of SMEs, which is the primary client-base of SMP, affect only SMP or also Mid-tier (smaller mid-tier), Next Big 8 (larger mid-tier) and Big 4. A more granular structure is critical because how each sub-group respond to forces of change is dependent upon their professional power, which is determined by their intraprofessional status (Abbott, 1988). Thus, it provides more accurate basis in examining the potential change in the social structure of professional public accounting practice.

Potential change due to digital innovation, as discussed in Chapter 2, is imminent. This has the capacity to affect the social structure of professional public accounting practice in Australia because, as discussed earlier, although smaller sub-groups are likely mostly affected, it has the capacity to attract larger sub-groups because not only the nature of the digital innovation changes the nature of professional work in servicing SMEs, but the size of the market (i.e., revenue generated from servicing SMEs, especially the small business) is substantial.

Figure 4.2 shows the classification scheme adopted in this thesis, along with the size of the market—that is, revenue from servicing clients (R) and the employment market (E)—based on 2012–2013 financial year data. The total industry revenue for accounting services in the 2012–2013 financial year was estimated to be A\$15.9 billion, and employment was 130,349 people (Chia, 2013).

**Figure 4.2: Social Structure of Professional Public Accounting Practice in Australia**



**NOTE:**

Due to limited access to actual data, these data only present an illustration of the size of the industry per sub-group. Revenue and employment data were obtained from two sources: *BRW* report entitled 'Top 100 Accounting Firms 2013', published in October 2013; and Sebastian Chia's IBISWorld Industry Report entitled 'Accounting Services in Australia', published in December 2013. The Revenue and employment data of the Big 4 and the Next Big 8 were taken from *BRW*; they are actual self-reported data from the accounting firms. The revenue and employment data of the mid-tier were obtained from *BRW*. Data for SMP sub-groups were calculated based on data from *BRW* and IBISWorld—that is, estimated total market revenue and employment of the industry reported in the IBISWorld report minus total market revenue and employment of Mid-tier, Next Big 8 and Big 4 reported in *BRW*, respectively. Due to the limitation, the SMP data may also consist of smaller Mid-tier firms. The data in *BRW* consist of actual self-reported data and a few estimations (fewer than five), and from estimations in IBISWorld. Another limitation is that *BRW* employment data may not contain non-professional staff, while IBISWorld data contain non-professional staff.

As shown in Figure 4.2, the Big 4 generate about 30.3 per cent of the revenue of the whole accounting services industry, while SMPs generate about 53.1 per cent. The remaining 16.8 per cent is generated by the mid-layer sub-groups. The Next Big 8 generate slightly more (8.8 per cent) than the Mid-tier (8.0 per cent), despite the fact that the Mid-tier consists of more than 50 firms. This mid-layer sub-groups represent the smallest market size compared to the Big 4 and SMPs. The magnitude of the revenue in the SMP domain shows a substantial market. Nevertheless, it is generally not attractive for larger sub-groups, as it is typically associated with a low-status client base and low-value work. It is constituted predominantly of small businesses, and its professional service provision consists of traditional accounting work. The literature identifies that it is important to associate with a high-status client base and high-value work to maintain or increase intraprofessional status (Abbott, 1988; Edwards et al., 2007). However, change is imminent. As discussed in Chapter 2, the nature of digital innovation has the capacity to alter that scenario because it disrupts aspects that affect professional work, namely the nature of *professional knowledge*, the *client relationship* and *jurisdictional control* especially of the SMP domain (i.e., access to servicing SMEs) (Abbott, 1988; Malhotra & Morris, 2009).

First, the core technology features of the digital innovation, which represent enhanced standardisation and automation, as well as online real-time accessibility, threaten the jurisdiction of SMPs from entities outside public practice. They enable non-professionals and non-accounting professionals to perform traditional accounting work for, and to have access to, SMEs, thereby competing with a newfound aggression for this client base to an extent not previously feasible. However, at the same time, the core technology features also create opportunities for SMPs. Standardisation and automation significantly reduce data entry and repetitive low-status work and increase data accuracy, thereby improving the quality of professional work. Further, online real-time access improves timeliness and cost efficiency in dealing with clients, adhering to compliance requirements and accessing a broader client base than was previously possible (i.e., more geographically dispersed clients).

Second, the core technology, together with the single-view design, heightens the importance of the oversight or supervisory role of SMPs and their professional judgment in serving SMEs. Together, the core technology and the key design of the digital innovation create efficient, seamless integration between SMEs and public accountants, which enhances collaboration between them. As a result, the single-view design fosters SMEs' increased need to ensure that systems are in place to generate reliable data and gain an understanding of the data generated. This creates important opportunities for SMPs to deepen their engagement with clients and expand their jurisdiction by building on traditional accounting work to leverage their expertise. For instance, SMPs may work towards the multidisciplinary, one-stop-shop advisor business models typical of larger practices to an extent that was not previously feasible (Kellerman & Walker, 2013). This potential expansion in professional work in serving SMEs represents high-status professional work. This is in contrast to the position where SMEs, especially small businesses, have been traditionally associated with low-status professional work (Abbott, 1988; Greenwood et al., 2002; Lander et al., 2013; Ramirez, 2009).

The change from low- to high-status professional work, particularly in serving small businesses, is attributed to increased efficiency from standardisation and automation and increased accessibility from online real-time access. Further, increased seamless collaboration can attract more aggressive competition from larger practices, such as the Big 4, than has traditionally been the case. In addition to the shift in status, which fits with the Big 4s' type of work, there are significant financial incentives for larger firms to encroach into the small business client base in Australia. According to *'Australian Bureau of Statistics (ABS) report '8165.0—Counts of Australian Businesses, including Entries and Exits, June 2009 to June 2013'*, each year small businesses comprise 96 per cent of more than two million businesses and on average 80,000 small businesses grew in size (based on the number of employees) (ABS, 2014a). This indicates

that small business represent the largest pool of money for the economy—that is, they are the engine room of growth and jobs in Australia, as they constitute the largest number of growing and high-value businesses (ABS, 2014a; CPA Australia, 2013; Hockey, 2015). This signifies a large market for traditional accounting work (compliance services) and other accounting and business services. The magnitude of servicing small businesses is reflected in the size of the SMP domain. An earlier discussion concerning the revenue of each sub-group (see Figure 4.2) indicates that the SMP domain is the largest—that is, more than 50 per cent of the revenue in the accounting services industry is generated by SMPs. Additional data, ‘*Australian Bureau of Statistics (ABS) report ‘8165.0—Counts of Australian Businesses, including Entries and Exits, June 2009 to June 2013 – Accounting Services Industry (6932)’*’ was obtained (Table 4.1) (ABS, 2014b). This report comprises not only accounting firms but also bookkeeping firms and tax agents. However, these data support the earlier data (see Figure 4.2, page 98), assuming that SMPs are firms with fewer than five employees and earning at least A\$50,000 per annum. The data show that there are around 53.3 per cent of them. That is, 33.7 per cent that earn between A\$50,000 and A\$200,000, and 19.6 per cent that earn A\$200,000 or more (ABS, 2014a; Chia, 2013; Khadem, 2013a).

**Table 4.1: Accounting Services Industry**

*Based on Australian Bureau of Statistics (ABS) report ‘8165.0—Counts of Australian Businesses, including Entries and Exits, June 2009 to June 2013 – Accounting Services Industry (6932)’:*

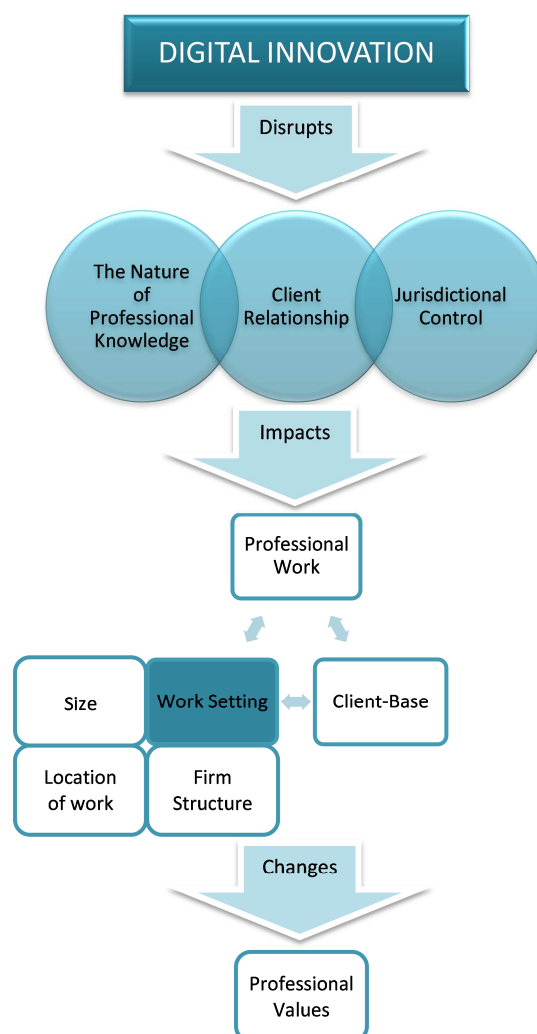
- ❖ *firms with zero to fewer than five employees produce the majority of revenue in this industry*
- ❖ *there is a similar trend in the BRW and IBISWorld reports regarding revenue estimation for the SMP sub-group:*
  - *almost 53.3 per cent of the industry represents firms with zero to fewer than five employees that have annual turnover of \$50,000 or more. Of the 53.3 per cent, around 33.7 per cent earn \$50,000–less than \$200,000, and around 19.6 per cent earn \$200,000 or more*
  - *almost 12.3 per cent are firms with five or more employees (this may include SMPs with five or more employees). Of the 12.3 per cent, around 0.1 per cent earn \$0–less than \$50,000, 0.3 per cent earn \$50,000–less than \$200,000, and around 11.9 per cent earn \$200,000 or more.*
  - *the remaining 34.4 per cent are firms with zero to fewer than five employees that have an annual turnover of less than \$50,000.*
- ❖ *Industry 6932 includes not only accounting firms but also bookkeeping firms and tax agents.*

Thus, the Big 4 not only have an incentive to gain market share in compliance services from this space, but they can also leverage it to gain market share in the provision of multidisciplinary services for SMEs. Further, larger firms such as the Big 4 benefit from existing resources and their reputation in the multidisciplinary area, so they have a competitive advantage. In addition, based on the BRW reports of ‘Top 100 Accounting Firms’ in Australia from 2008 to 2013 (BRW, 2008, 2009, 2010, 2011, 2012, 2013), which compare current-year performance with prior-year performance (the overall trend over six financial years), there has been declining revenue in the accounting services industry in Australia, especially for larger sub-groups such as the Big 4 and the Next Big 8. This may drive larger sub-groups to expand

their domain (Beaton, 2013). With the advent of the digital innovation, the expansion is likely to occur through a typical merger and acquisition as a way to acquire the advisory market (i.e., extending professional work). The digital innovation will likely lead to expansion in terms of the client base, thereby enabling larger sub-groups to encroach on, and strengthen their presence in, the small and local market.

Therefore, the argument that the digital innovation impacts the social structure of professional public accounting practice is based on the premise that the digital innovation has the capacity to affect the six related issues that form the boundaries between the sub-groups; that is, the digital innovation disrupts the nature of professional knowledge, the client relationship and jurisdictional control, particularly for SMPs (Malhotra & Morris, 2009). The disruptive circumstances in turn affect the nature of professional work, which is a critical issue that can create a ripple of change in other related issues, namely location of work, firm size, firm structure, client base and ultimately professional values (Abbott, 1988; Malhotra & Morris, 2009). Figure 4.3 summarises the foregoing discussion.

**Figure 4.3: Effect of Digital Innovation on the Social Structure of Professional Public Accounting Practice**



As discussed in Chapter 2, the disturbance is not only due to the nature of the digital innovation, but also the push to adopt the digital innovation. The push to adopt is due to Xero challenging the market held by incumbent accounting software vendors for SMEs in Australia (Vallence, 2013), compelling them to compete with Xero. The resulting ‘war’ for lucrative market share between software vendors has created pressure not only for SMEs to adopt this digital innovation, but also primarily for public accountants. Xero, as part of its disruptive strategy, provides a free practice licence and attractive partnership program, thus providing financial incentives to public accountants to use it and switch their SME clients to Xero products. This push was compounded by the government because the digital innovation benefited its SBR Program and other digital programs for small business compliance and red tape reduction.<sup>27</sup> This push, together with the nature of the digital innovation, triggers a new way of servicing SMEs that creates a disturbance beyond the control of the profession. Therefore, it represents an exogenous shock. That is, even central actors of professionalisation, such as accounting professional associations and the Big 4, are likely to be powerless to prevent such a disturbance, notwithstanding the fact that it affects the nature of professional knowledge, the client relationship and jurisdictional control.

Overall, the digital innovation of interest can thus affect the domain of SMPs but it likely spills over to the accounting profession at large (gap 1, Chapter 3); has the capacity to spark institutional war (i.e., intraprofessional competition) (Hoffman, 1999)— because each sub-group has different vested interests and professional power to deal with the disturbance (gap 2, Chapter 3); and can lead to field transformation and institutional change (gap 3, Chapter 3). This ultimately has implications for the social structure (social arrangements) of professional public accounting practice because the disruptive circumstances affect the nature of professional work, as well as other related issues that define the boundaries between sub-groups, culminating in the change in professional values (Abbott, 1988; Malhotra & Morris, 2009). Field transformation and institutional change in professional public accounting practice are expected to reduce the disparity between sub-groups within the social structure.

The preceding discussion leads to the following overarching question that this thesis investigates:

***Is digital innovation impacting the social structure of professional public accounting practice in Australia?***

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<sup>27</sup> SBR was incorporated into the Council of Australian Governments’ (COAG) Business Regulation and Competition Working Group (BRCWG) reform agenda in March 2008. The BRCWG was co-chaired by the Minister for Finance and Deregulation and the Minister for Small Business, Independent Contractors and the Service Economy. In 2013, the government released its National Cloud Computing Strategy, which aimed to promote the use of cloud-based services in the government and for small business and not-for-profit organisations.



Importantly, this overarching research question will be addressed in the context of identifying the presence, or otherwise, of an emerging field around the provision of accounting services to SMEs. This in turn leads to a more detailed set of research questions, which are identified in the following section centring on the theory that underpins this study.

#### **4.4 Theoretical Framework**

The theoretical framework draws on aspects of organisational theory, institutional theory and the sociology of the professions, which are introduced respectively in the ensuing discussions. Together, these theoretical underpinnings are used to examine the disturbance in a highly institutionalised and professional field around the issue of the commodification of traditional accounting work in serving SMEs.

The investigation into the impact of the digital innovation on the social structure of professional public accounting practice is undertaken through the lens of the concept of an organisational field (i.e., the latter is the primary unit of analysis in this thesis). The organisational field concept is central to institutional theory. It was crafted by DiMaggio and Powell (1983), who primarily focus on the social relation and network components of a field (Scott, 2014).

The existence of an organisational field depends on the extent to which it is institutionally defined. The process of defining an institutional structure is called the structuration process (DiMaggio & Powell, 1983). This process may be viewed from two competing theoretical perspectives: organisational homogeneity and heterogeneity (Machado-da-Silva, Filho, & Rossoni, 2010; Wooten & Hoffman, 2008). The homogeneous perspective views structuration as the process of isomorphic change, and thereby tends to view an organisational field as static (DiMaggio & Powell, 1983). Conversely, the heterogeneous perspective views structuration as a process of contestation and debate because it incorporates the notions of change and self-interest, and thereby views an organisational field as dynamic (Hoffman, 1999).

Accordingly, from the homogeneous perspective, an organisational field is seen as a collection of organisations that directly interact and influence each other in a meaningful way, and that become similar to one another (isomorphic) as they are driven by institutional forces (DiMaggio & Powell, 1983). Conversely, from the heterogeneous perspective, an organisational field represents a relational space where distinct organisations with competing interests interact with one another to develop a collective understanding regarding matters that are crucial for ongoing activities (Hoffman, 1999; Wooten & Hoffman, 2008). Nevertheless, existing studies from both perspectives highlight that an organisational field 'cannot be

determined a priori but must be defined on the basis of empirical investigation' (Powell & DiMaggio, 1991, p. 65).

To empirically determine the organisational field, this thesis examines the structuration process using the concept of an organisational field formed around an *issue*, that is the commodification of traditional accounting work in serving SMEs (Hoffman, 1999). This approach, which represents a heterogeneous approach, is appropriate because it accommodates the examination of the dynamic exchange of relations at the field-level activity that this thesis aims to capture. Hoffman (1999) asserts that an organisational field is not always formed around a common belief, technology or industry, and it is capable of moving towards a direction other than isomorphism, as actors can respond strategically to institutional pressures. Instead, an organisational field may be formed around a central issue that brings together various actors with disparate purposes. Here, the actors involved are defined based on their increasing interactions and the information load that they share in the debate over the issue (Hoffman, 1999). Interactions between these various actors may be similar to institutional war (White, 1992) rather than isomorphic dialogue.

This thesis also follows Hoffman's (1999) approach of using the notion of triggering or disruptive events (Hoffman, 1999). Organisational field formation is not a static process, and new debate emerges in the wake of triggering or disruptive events that can ultimately alter existing social arrangements. This is because these events trigger change or disrupt the interaction patterns between actors and thus affect actors who are included in, or excluded from, the new debate. The identification of such events helps to determine how an issue becomes an important factor in order to then view an increased debate (discussion)—that is, increased interactions and information load between various actors with diverse interests (Hoffman, 1999). Therefore, the use of triggering or disruptive events helps to better investigate the structuration process because it helps to identify various points where the alteration of existing social arrangements occurs throughout the process.

In addition, this thesis follows Hoffman's (1999) approach in using Scott's (1995, 2014) notion of three pillars of institutions, namely regulative, normative and cultural-cognitive. A field is the outcome of negotiation between actors that arises from interpretations of the elements of a central issue that has implications for the institutional structure, and how actors behave are driven by regulative, normative or cultural-cognitive pillars (Hoffman, 1999).

In the context of this thesis, the regulative pillar represents bureaucratic logic because it is about driving actors to follow certain structures, procedures, rules or interaction patterns to meet certain objectives efficiently, which, according to Weber's theory, represents a rational

instrument for bureaucracy (Jaffee, 2001). The normative pillar includes both values and norms, as it introduces a prescriptive, evaluative and obligatory dimension into social life. Therefore, this pillar is concerned with ethics and thus represents normative logic, which is aligned with professionalism. Finally, the cultural-cognitive pillar signifies 'the shared conceptions that constitute the nature of social reality and create the frames through which meaning is made' (Scott, 2014, p. 67). Meanings arise in interactions and are maintained and transformed to be used to make sense of ongoing situations. The emphasis of this pillar is on new ideas, which involves agency and self-interest to maximise self-benefits in order to obtain legitimacy and survive, and it does not emphasise identity ethics (Campbell, 2004; Scott, 2014). Accordingly, the cultural-cognitive pillar reflects the logic of the market or commercial logic.

Hoffman (1999) argues that these three pillars co-exist and are interconnected, and one may be dominant at any given time (Hirsch, 1997) as an organisational field evolves in the wake of disruptive events. The alteration of existing social arrangements may lead to changes in the dominant pillar. Therefore, while Hoffman's (1999) concept of triggering events is used to identify changes in social arrangements in the emergent field at various points throughout the structuration (transformation) process, Scott's (2014) three pillars of institutions are used to identify institutional changes that occur due to changes in social arrangements throughout that process. Overall, the use of Hoffman's (1999) triggering events and Scott's (2014) pillars of institutions enables the examination of field transformation and institutional transitions.

Scott's (2014) three pillars enable the framework for this thesis to link to the sociology of the profession (Abbott, 1988). This is possible because, by investigating the structuration of an emergent professional field, Scott's (2014) three pillars enable the identification of changes (institutional transition) in 'the patterning of social activities and relations through time and across space' (social structure) (Scott, 2014, p. 93) within the profession. Institutional transition indicates changes in institutional logic and therefore enables the investigation of potential change in professional public accounting practice by linking it to the sociology of the profession based on institutional logic. The link is feasible because institutional logic reflects professional values.

This link is appropriate because examining field transformation and institutional change based on the issue of the commodification of traditional accounting work involves examining debates or the exchange of relations centring on changing professional work. As discussed earlier, according to the sociology of the profession (Abbott, 1988), a change in professional work in a given domain is critical because it can create a ripple of change in other related issues, namely location of work, firm size, firm structure, client base and ultimately professional values

(Abbott, 1988; Malhotra & Morris, 2009). Therefore, examining the structuration process surrounding the issue of the commodification of traditional accounting work in serving SMEs, is expected to provide not only evidence of field transformation and institutional change in professional public accounting practice, but also the existing wider social structure.

The foregoing discussion indicates that the commodification of traditional accounting work plays a central role in relation to examining the structuration process. This leads to a more detailed research question that emerges from the overarching research question, which is framed based on Hoffman's (1999) approach:

**RQ1: Is there an emergent field surrounding the issue of the commodification of traditional accounting work in servicing SMEs?**

As stated earlier, a field must be defined on the basis of empirical investigation (Powell & DiMaggio, 1991, p. 65). Accordingly, rather than just observing the pattern of coalitions between actors, evidence of an emergent issue-based field is, in turn, analytically detected through the following developments surrounding the issue: an increase in the extent to which certain actors interact; an increase in the information load the actors share; and a mutual awareness that the actors are involved in a common debate (Hoffman, 1999, p. 352). Therefore, RQ1 is addressed through the following sub-questions:

**RQ1a: Is there an increase in the extent to which certain actors interact?**

**RQ1b: Is there an increase in the information load the actors share?**

**RQ1c: Is there a development of a mutual awareness that the actors are involved in a common debate?**

In the event that the evidence supports the foregoing research question (RQ1), then a further research question will be addressed (i.e., RQ2), which examines the nature of the exchange relations between actors, including the institutional logic of each actor reflected in the exchanges.

The flip side of the issue surrounding the commodification of traditional accounting work in servicing SMEs is represented by competition over the SMP space, as the primary professional work and client base of SMPs are targeted by the digital innovation. As the digital innovation represents an exogenous shock to the institutional environment of professional public accounting practice, the second research question is posed to identify the critical force behind the field transformation and institutional transitions. Exogenous shock is driven by those who, although not competing for jurisdictions, are behind the shock that disrupts or weakens the

incumbents' ability to define, defend and extend their jurisdiction. Accordingly, in order to examine field transformation and institutional transitions, understanding the nature of the exchange relations between public accountants and the exogenous actors as well as the institutional logic of each actor, are critical. This leads to the following research question:

**RQ2: What is the nature of the exchange relations between actors, including the institutional logic of each actor reflected in the exchanges?**

The findings from RQ1 and RQ2 will provide insights into the overarching research question stated earlier.

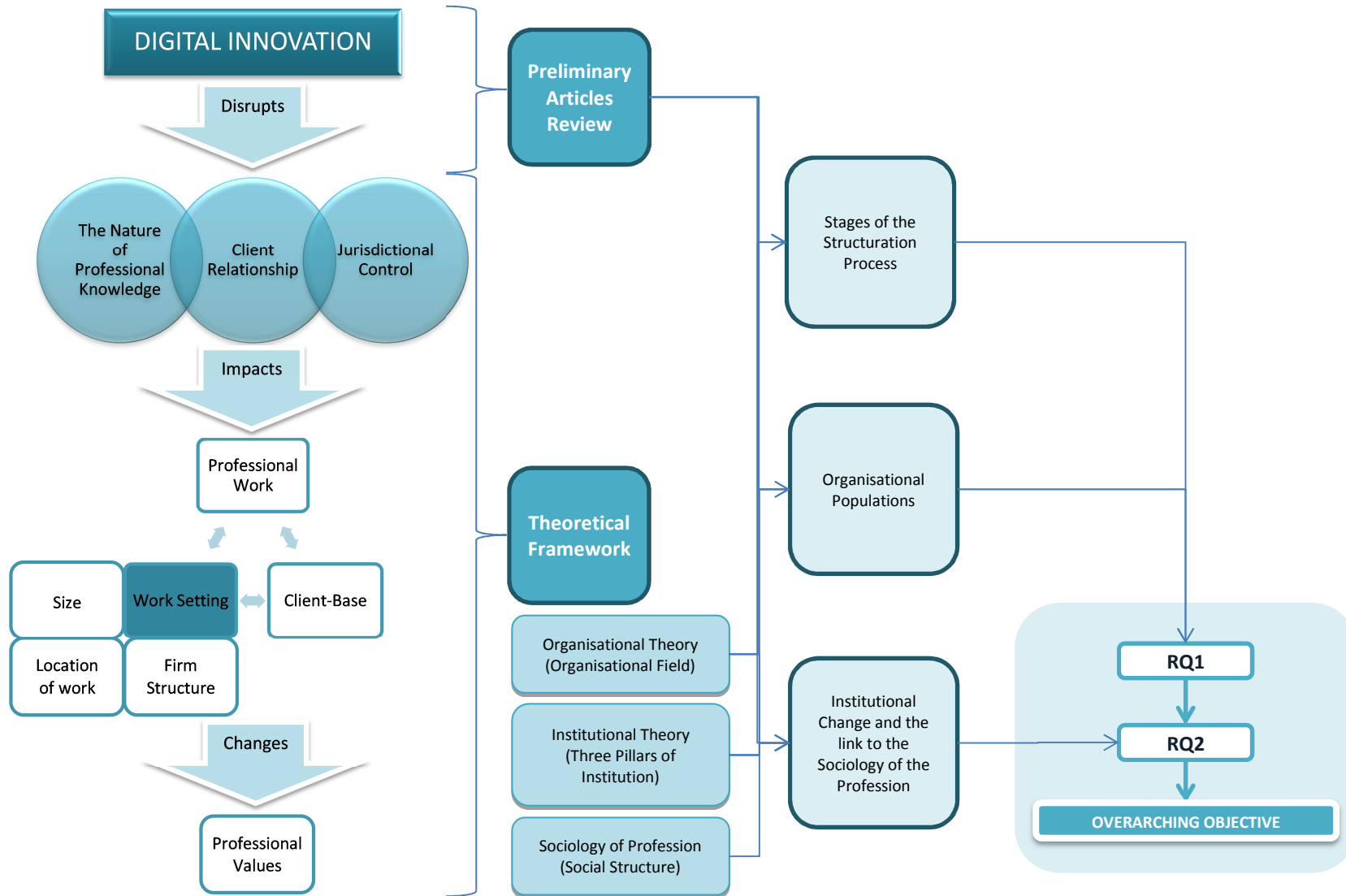
#### **4.5 Operationalisation of RQs 1 and 2**

This section discusses the operationalisation of RQ1 and RQ2. Three elements of operationalisation are translated from the theory and data. This process is iterative because it uses not only the concepts and theoretical framework discussed earlier, but also data from the field that were gathered during the preliminary article review (see Chapter 2). Identifying operational definitions is crucial because it provides the basis for collecting and analysing the data to answer RQ1 and RQ2, and thus the overarching research question (Singleton & Straits, 2005).

The operationalisation undertaken has three dimensions. First, identifying stages of the structuration process to empirically examine an emergent field or field transformation (Section 4.5.1). Second, defining actors as organisational populations in order to identify different groups of actors involved (Section 4.5.2). Third, constructing foundations to investigate institutional transition and linking it to social structural change in order to identify potential institutional change and the implications for the social structure (Section 4.5.3).

Prior to developing these three dimensions, an overview of the conceptual framework is provided in Figure 4.4 in the following page.

Figure 4.4: Conceptual Framework



#### 4.5.1 Stages of the Structuration Process

As discussed earlier, the digital innovation represents an exogenous shock that disturbs the existing institutional environment of professional public accounting practice. This thesis identifies the exogenous shock as representing a chain of disruptive events spanning a seven-year period from 1 July 2007 to 30 June 2014. The chain of disruptive events is used to divide the seven-year period into three stages of the structuration process (see Figure 4.5). These events may trigger increasing debate over the issue of the commodification of traditional accounting work, especially in serving SMEs. Accordingly, identifying the three stages provides a basis for analysing the organisational field structuration process, which, as stated earlier, is central to identifying field transformation and institutional change.

**Figure 4.5: Three Stages of a Chain of Disruptive Events**



Stage 1 covers the period 1 July 2007 to 30 June 2010. It represents the years of SBR development before SBR went live. It was triggered by the commencement of the SBR Program in August 2007, after the federal government first announced its commitment to proceed with the SBR Program in December 2006 (SBR, 2009). The stage started at the beginning of a new financial year in Australia in which the government planned to launch the SBR Program.

Stage 2 is from 1 July 2010 to 30 June 2012. It represents the years when SBR went live and when the disruption by Xero started to occur. Therefore, Stage 2 was triggered by SBR going live on 1 July 2010, as well as by Xero's cloud accounting, which established its first headquarters in Australia in October 2010. As discussed in Chapter 2, in Stage 2 Xero began to grow rapidly and the government publicly announced its commitment to shift the ATO system to a fully-SBR enabled channel by 1 July 2015 and to gradually decommission the existing (legacy) system. Thus, during Stage 2, Xero's disruption expedited the development of third-party cloud-based software for SMEs that integrate with its cloud accounting, including SBR software. This is because Xero's disruption, as discussed in Chapter 2, was fuelled by its design

and business model, which encouraged not only adoption by end users,<sup>28</sup> but also integration with various third-party cloud-based software—that is, to create a cloud-based collaborative ecosystem for end users with Xero as the core system. As a result, Xero started to be seen as threatening the existing market share of incumbent software vendors for SMEs, particularly in the small business space (Macpherson, 2012c; Timson, 2011).

Stage 3 is from 1 July 2012 to 30 June 2014. It involves the intensified commodification of traditional accounting work in serving SMEs, as SBR was increasingly being adopted and the war between software vendors for SMEs in the provision of cloud accounting progressively pushed the adoption of cloud accounting (Markus, 2013; Vallence, 2013). Thus, the triggering events of Stage 3 involved the surge in SBR lodgements in July 2012, followed by the start of the ‘war’ between accounting and business software vendors for SMEs when an incumbent software vendor with the largest market share released its first cloud accounting product in October 2012. During Stage 3, as discussed in Chapter 2, incumbent software vendors for SMEs released their cloud accounting products or revamped their existing online accounting software following the cloud accounting model to compete for market share. In addition, SBR development became more intertwined with cloud accounting because there was an increasing tendency towards the development of cloud-based SBR software as add-on software, and the increasing development of SBR into the core of cloud accounting products (Macpherson, 2013a).

Stage 3 concludes with a heightened level of competition in the provision of cloud accounting and a push towards the adoption of cloud accounting for SMEs and public accountants because the last incumbent software vendor for SMEs released its cloud accounting product in February 2014 and that one of the Big 4 released a new division in June 2014—designed based on the digital innovation—targeting small business client-base. The development of the digital innovation created a seamless ecosystem of highly automated accounting and business systems for SMEs, including real-time integration with their business intermediaries (e.g., public accountants). This further commodified traditional accounting work, particularly in serving SMEs. However, it created both threats and opportunities that can revolutionise professional public accounting practice in serving SMEs.

The three-stage approach to viewing a disruptive event differs from that of Hoffman (1999), who identifies four stages of the evolution of an organisational field and institutional transition based on separate (unrelated) disruptive events. This thesis identifies a disruptive event based

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<sup>28</sup> End users are users of the finished product. In the case of software, they are users of fully developed and marketed software. End users for cloud accounting are mainly SMEs and their business intermediaries, such as bookkeepers, public accountants and tax agents.



on a chain of events that occurs in three stages throughout the seven-year period, as this will provide a better understanding of the structuration process (i.e., how institutions become defined and how the organisational field emerges). This approach will provide a further understanding of how events drive institutional change, the characteristics of the disruptive event that enable them to alter institutional order, and whether chains of events are responsible for social change (Hoffman, 1999, p. 366).

Therefore, the three stages provide a basis for addressing RQ1 to identify an emergent field or field transformation by examining increasing debate based on a disruptive chain of events around the issue of the commodification of traditional accounting work in serving SMEs. The three stages then provide a basis for examining RQ2, as the results of RQ1 are expected to provide the main basis for identifying the actors involved, as well as preliminary evidence on the nature of the exchange of relations between actors involved in the debate to identify potential institutional transitions that occur in a field transformation (RQ2). The results from RQ1 and RQ2 are expected to provide evidence of how the digital innovation drives institutional change and field transformation and the impact on the social structure of professional public accounting practice. Section 4.5.2 presents operationalisation to answer RQ1 and RQ2 and Section 4.5.3 to answer RQ2.

#### **4.5.2 Organisational Populations**

The concept 'actor', referred to in RQ1 and RQ2, is operationalised by drawing on the concept of an organisational population—one of three such concepts that make up a multi-level organisational field (i.e., organisation set, organisational population and organisation field) (Scott & Davis, 2007; Scott, Ruef, Mendel, & Caronna, 2000).

The organisation set is identified as a smallest cluster of field-level activity. It is defined as 'encompassing a given organisation of interest—the focal organisation—together with its relations to other organisations that are critical to its functioning and survival' (Scott et al., 2000, p. 10). Organisation population is broader than the set, but it is more firmly linked than the organisation field because it consists of an aggregate of organisations that are alike in some respects (Scott & Davis, 2007). That is, it consists of a set of organisations with similarities, typically of organisational form, within a (bounded) social system (Scott et al., 2000). An organisational field is the overall domain where these two concepts are nested. It incorporates 'both organisation sets—individual organisations and their exchange partners and competitors—and organisational populations—aggregates of organisations exhibiting similar form and providing similar or related services' (Scott et al., 2000, p. 13). An organisational field

includes vertical relations such as head offices, and local establishments or professional and government actors aiming to establish rules and norms governing practice (Scott et al., 2000).

The concept of organisational population best fits this thesis because it provides a basis for identifying different types of actors within the field who are involved in the discussion—types of actors that expand (increased participation) or contract (decreased participation) and their differing levels of engagement—around the issue of the commodification of traditional accounting work (RQ1) as well as for investigating the nature of the exchange relations between them (RQ2) (Hoffman, 1999). It provides a basis for data collection, organisation and analysis to examine how interactions between different types of actors lead to the emergence of an organisational field or field transformation.

As identified earlier, organisational populations are nested within an organisational field—that is, an organisational field comprises a number of organisational populations (Scott et al., 2000). More than one organisational population may exist within a field (Hoffman & Bertels, 2007; Scott et al., 2000). Organisations are identified as belonging to the same organisational population based on their ‘aliveness’ (Hoffman & Bertels, 2007; Scott, 2014). The ways in which organisations within an organisational population are alike may differ from one population to another. However, multiple populations may overlap and interpenetrate (Hoffman & Bertels, 2007).

Typically, an organisational population consists of organisations that produce similar products/services and compete for the same resources (Scott, 2014). In this thesis, an organisational population is defined based on ‘aliveness’, which indicates that organisations share similar interests regarding the field-level issue that will lead them to demonstrate similar behaviour (Scott & Davis, 2007). The ‘aliveness’ is determined based on the *type of organisation*, which will be classified according to common organisational activity rather than merely based on common organisational form (see Table 4.2). For example, government institutions potentially will be classified into two different organisational populations, SBR Program and non-SBR Program; professional associations may be classified into two as well, accounting and non-accounting; and technology companies will potentially be classified into a number of different organisational populations based on categories of the products/services. This classification enables the identification of the behaviour of different types of actors in the debate around the issue of the commodification of traditional accounting work, especially in serving SMEs, in order to answer RQ1 and RQ2 (Scott, 2014; Scott & Davis, 2007). In determining the type of organisation of each organisation, its official website will be perused to gain understanding of its organisational form and activity as well as its products/services.

**Table 4.2: Organisational Population**

Alikeness Attribute	Definition	Example
<b>Type of organisation</b>	The type of organisation based on the organisational activity rather than merely the organisational form. This is a factor to identify an actor's interests in relation to the issue. It is also useful for identifying types of actors who are affected or who attempt to influence the change.	Government institutions: SBR Program and non-SBR Program. Professional associations: Accounting and non-accounting. Technology companies: Categories of products/services (e.g., software/IT infrastructure).

Overall, this operationalisation to identify different types of actors provides the basis for what is subsequently referred to as the *actor count*—identifying those who become attracted to join the debate or to leave the debate—thus the presence or otherwise of an emergent field and actors involved (RQ1), and for investigating the linkages or the nature of exchange relations between actors in professional public accounting practice around the issue (RQ2). Examining the nature of exchange relations will enable this thesis to detect the potential shift in the boundaries of professional public accounting practice (i.e., field transformation and institutional change), which this is discussed further in Section 4.5.3.

#### **4.5.3 Institutional Transition and the Link to Social Structural Change**

In the context of this thesis, the organisational field is the emergent field surrounding the issue of the commodification of traditional accounting work in servicing SMEs. It will likely undergo institutional transitions as the digital innovation disturbs the institutional environment of public accounting practice (Hoffman, 1999; Scott, 2014). An organisational field bounds the environment within which institutional processes operate (Scott, 2014). In the context of this thesis, the institutional environment is the environment in which professional public accounting practice operates. It represents the source of legitimisation, rewards or incentives for, as well as constraints or sanctions on, professional activities and thus professional power. A jolt in the institutional environment disturbs the existing institutional arrangement, which often facilitates departure from the core or traditional institutions, and typically leads to field transformation and institutional change (Scott, 2014).

To analyse institutional change—that is, the potential institutional transitions occurring in a field transformation (RQ2)—this thesis links Hoffman's (1999) issue-based concept of an organisational field to Scott's (1995; 2014) three pillars of institutions as the basis to collect, organise and analyse data. The three pillars of institutions—regulative, normative and cultural-cognitive—which structure how important issues are perceived and appropriate actions are developed (Fligstein & Brantley, 1992), enable the identification of the changing dominant institutional logic. The result is then linked to the sociology of professions based on

professional values. As discussed earlier, to enable the link to professional values, the regulative, normative and cultural-cognitive pillars are viewed as, being consistent with the bureaucratic, normative and commercial logic, respectively. The three pillars of institutions represent a complex concept but for the purpose of this thesis, they are defined in such manner. This provides a means to examine whether the digital innovation leads to field transformation and institutional change, and impacts the social structure of professional public accounting practice in Australia.

As the three pillars form the basis for identifying the institutional logic, the operationalisation element for analysing institutional transition and social structural change consists of a set of three tables that discuss each pillar (see Tables 4.3–4.5). Each pillar is linked to the sociology of professions concepts based on aspects that will affect the conduct of professional work, namely the nature of knowledge, the client relationship and jurisdictional control, which may affect the location of work, firm size, firm structure, client base and ultimately professional values (Abbott, 1988; Malhotra & Morris, 2009; Malhotra et al., 2006; Suddaby et al., 2009). These aspects reflect the related issues that defined the boundaries of the social structure. The Tables include quotations from articles reviewed in the early stages of gathering data to provide clear sense of each concept.

#### **4.5.3.1 Regulative Pillar**

The regulative pillar represents the regulative aspects of institutions, which act as institutional constraints and regularise behaviour. Regulatory processes include rule-setting, monitoring and sanctioning activities that can establish rules, inspect others' conformity to them and manipulate sanctions such as rewards and punishments as necessary to influence future behaviour. Scott (2014) explains that regulatory systems represent a continuum whose values vary along three dimensions. The first is obligation, which forces actors to obey, as their behaviour is subject to scrutiny by external parties. The second is precision, where rules unambiguously specify the required conduct. The third is delegation, which allows a third party to apply rules and resolve disputes.

However, Scott (2014) maintains that although the regulatory pillar is about repression and constraint, it may also enable and empower social actors and actions by conferring licenses, special powers and benefits to some types of actors. Scott (2014) suggests that in general, regulatory processes in the private market-based sector is about pursuing positive incentives (e.g., increasing profit), whereas in public sector, it is about applying negative sanctions (e.g., tax fines) (Scott, 2014, p. 61). Scott's (2014) definition of the regulative pillar is derived from both sociological (DiMaggio & Powell, 1983) and economic (North, 1990) perspectives. Scott

(2014) highlights that the sociological perspective focuses on coercive mechanism to improve legitimacy, whereas, the economic perspective focuses on constraints that increase efficiency and effectiveness. In the case of mandatory regulation, actors conform as a direct response to ensure their legitimacy because failure to comply may lead to loss of licences, reputation and other benefits such as loss of earnings. However, in the case of voluntary regulation, actors conform potentially as a direct response to stimulus or when they see clear advantages for them. Therefore, the reasoning under this regulative pillar is ‘What choice is in my own best interests (in this situation)?’ (Scott, 2014, p. 64), which reflects the logic of instrumentality—that is, reasoning that involves agency and self-interest.

In the context of this thesis, the regulative pillar is about driving actors to follow certain structures, procedures, rules or interaction patterns to meet certain objectives *efficiently* and *effectively*. It is about the controlling of behaviour to maximise benefits relative to cost and involves the dehumanisation of social relations into control relations where norms and beliefs are replaced with the ascendancy of technical means, which according to Weber’s theory represents the mechanism of bureaucracy (Friedland & Alford, 1991, p. 248; Scott, 2014, pp. 88, 121). As discussed in Chapter 2, SBR is sanctioned by the government and is used to constrain behaviour or control activities—that is, to standardise business and financial reporting in Australia to not only enhance the efficiency of the reporting process but also the effectiveness (OECD, 2009, 2010; Productivity Commission, 2012). Although SBR is never formally mandated<sup>29</sup>, SBR represents the government’s effort to regulate human activity, as SBR rationalises and dehumanises the reporting process through digital innovation (Bharosa et al., 2013; Friedland & Alford, 1991, p. 248). This mechanism, from the perspective of the sociology of the profession, is defined as the commodification of professional labour through the rationalisation and codification of professional knowledge that erodes professional power—that is, proletarianisation or deprofessionalisation—to increase efficiency, standardisation, predictability and control (Fournier, 2000; Sikka, 2009; Suddaby et al., 2009). This mechanism may be utilised by those with the rationale of capitalism and it has the capacity to undercut professional autonomy and thus independence (Abbott, 1988, pp. 143-176; Jaffee, 2001). Therefore, in the context of this thesis—viewed from the sociology of the profession—regulative pillar is aligned with the *bureaucratic logic*.

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<sup>29</sup> Based on meeting with relevant stakeholders in 2012-2013, SBR Program at that time was under the Department of Finance and Deregulation. A mandate was regarded as politically inappropriate as it may be perceived as more regulations and thus undermining the purpose of SBR to reduce red-tape. In 2013, SBR was mandated for superannuation reporting as requested by the industry. SBR, however, becomes the only reporting channel for ATO-related reporting once the SBR channel is completed and the legacy system is phased out. SBR is not mandated for other business-to-government reporting, such as to the ASIC and SROs. See Chapter 2 for the detail.

Table 4.3 provides the basis for this thesis to identify the potential existence of a more dominant regulative pillar in professional public accounting practice than normative logic by investigating whether public accountants in Australia is adopting the SBR or not and to understand their reasoning behind it. Public accountants may have higher tendency towards bureaucratic than normative logic due to pressures from or interactions with other actors. The analysis will be carried out based on three dimensions, the *commodification of professional knowledge into a regulatory mechanism*, *implementation of a new regulatory mechanism to create standardisation*, and *adherence to the regulation*; in order to understand the reasoning of professional public accounting practice and other actors that they interact with.

Public accountants may adopt if they see the opportunity to maximise benefits relative to costs (bureaucracy logic). In this case they comply with regulations and become more technical. On the other hand, regardless of the benefits, they may reject in order to protect their professional knowledge from being commodified and thus maintain their legitimacy (normative logic). In summary, understanding their reasoning will enable the identification of whether public accountants adopt out of expedience or they reject due to moral obligation and thus to investigate the potential field transformation and institutional transition.

The capacity of regulatory activities to disseminate coercive pressure may depend on normative and cultural-cognitive pillars (Dobbin & Sutton, 1998; Scott, 2014). In the context of this thesis, public accountants may adopt SBR because there is pressure from the accounting professional associations or because they are culturally driven towards the new way of practice. As discussed earlier, the three pillars may co-exist and be interconnected, where one may be dominant at any given time as the professional field evolves. Therefore, it is important to understand the next two pillars.

**Table 4.3: Regulative Pillar**

Dimensions	Logics/Values	Actor	Examples in Context	Implications
<b>Commodification of professional knowledge into a regulatory mechanism</b>	Efficiency	Accounting Profession Association	'The selling point of SBR is that it will take the pressure off small and medium practices by freeing up time traditionally spent on compliance work for clients in the areas of financial reporting, statistical reporting and tax office reporting. SBR will simplify business-to-government reporting by making forms easier to understand, using accounting software to automatically pre-fill government forms and introducing a single secure way to interact with participating agencies such as ASIC, APRA, the ATO and the Australian Bureau of Statistics' (S1_T1_9_Charter_2008_11).	Commodification leads to greater technical knowledge, lower jurisdictional control, possibly also higher clients' involvement in influencing the process and value of professional work.  These lead to lower control of work and financial rewards (i.e., blurring boundaries with outsiders). This typically drives accountants to expand to other jurisdiction regenerate abstract knowledge.  Thus, regulatory commodification has the capacity to change professional work and professional values of accountants following bureaucratic logic.
		Consultant for Accounting Firm*	'With new technological systems converging so they [government agencies] talk to each other, it means that a repetitive task such as compliance can be systemised, automated and then commoditised' (S3_T4_4_BRW_2012_11).	
	Effectiveness	Regulator	'Businesses or their accountants will be able to complete the forms where needed, check for accuracy and validity and correct any errors before final submission' (S1_T1_17_Charter_2010_05).	
<b>Implementation of a new regulatory mechanism to create standardisation</b>	Efficiency	Regulator	'It's simply more efficient – the opportunities for transportational errors (manually moving paper-based data to electronic forms) are removed. Along with pre-filling, it is a great boom for our efficiency, direction and management of the tax administration system' (S1_T1_14_Charter_2009_11).	
		XBRL Australia*	'As well as benefits from the reduction in reporting costs and efforts, the standardisation of business and financial information will have wide ranging consequences and benefits to the way we do our work as Chartered Accountants' (S1_T1_8_Charter_2008_03).	
		Accountant (SMP)	'The fact that standard business reporting will save 30 minutes here and an hour there doesn't sound like a lot, but multiply it across a client group and it quickly becomes substantial' (S1_T1_5_BRW_2010_03).	
	Effectiveness	Academic / Researcher	'SBR should take much of the uncertainty out of what's being reported' (S1_T1_10_Charter_2008_11).	
		Regulator	'While the SBR taxonomy provides the single set of reporting definitions, SBR has also used XBRL as the single technical language for electronic communication/ reporting to the participating agencies. This means that as many as 240 software developers' packages will be able to send electronic reports/forms to the agencies in one technical language' (S1_T1_17_Charter_2010_05).	
<b>Adherence to the regulation</b>	Conformity or Compliance	Accountant (Big 4)	'SBR definitely has value: It provides a structure for organising client data' (S3_T1_1_Charter_2013_03).	
		Accountant (Next Big 8)	'The SBR program is now working with software providers, business and reporting professionals to further refine the SBR functionality. They are also expanding the range of forms available under SBR' (S3_T1_1_Charter_2013_03).	

\*Accountant (i.e., with an accounting degree, CA and/or CPA qualification)

#### 4.5.3.2 Normative Pillar

The normative pillar includes both values and norms, as it introduces a prescriptive, evaluative and obligatory dimension into social life. Values refer to the preferred construction of standards, where existing structures or behaviours can be compared and assessed. Norms denote how things should be done, and they define the legitimate means available for pursuing valuable outcomes. Therefore, this pillar is concerned with ethics. This pillar also exhibits constraining and regularising behaviour, as with the regulatory pillar, but is of lower value (Scott, 2014). Some theorists believe that institutions rest primarily on a normative pillar rather than a regulative pillar.

Thus, normative systems 'define goals or objectives but also designate appropriate ways to pursue them' (Scott, 2014, p. 64). As some values and norms may be applied to all members of the collectivity, but some only to selected actors or social positions, the conception of appropriate goals and activities for specified social positions gives rise to roles that can be formally constructed or emerge informally over time through interactions based on expectations that guide behaviour (Scott, 2014). Similar to the regulative pillar, although normative systems are viewed as imposing constraints on social behaviour, at the same time they also empower and enable social actions.

The logic of the normative pillar is appropriateness. Based on that logic, in responding to a normative institution, one might ask 'Given this situation, and my role within it, what is the appropriate behaviour that is expected of me to carry out?' (Scott, 2014, p. 65). Accordingly, within this pillar, the rationale for adopting practices is based on appropriateness or legitimacy, regardless of whether these practices increase efficiency or otherwise reduce costs relative to benefits.

This pillar is fundamental for professionals such as accountants (Scott, 2014, p. 122). This logic of appropriateness is relevant to the Accounting Professional Ethical Standards Board (APESB), which regulates all members of the three main accounting profession associations in Australia: CPA Australia, ICAA (now CAANZ, or Chartered Accountants Australia and New Zealand) and the Institute of Public Accountants (IPA). The APESB indicates that, for members in public practice, they 'shall not knowingly engage in any business, occupation, or activity that impairs or might impair integrity, objectivity or the good reputation of the profession and as a result would be incompatible with the fundamental principles' (APESB, 2013, § 200.2). Fundamental principles comprises not only *integrity* and *objectivity* but also *professional competence and due care*, *confidentiality* and *professional behaviour* (APESB, 2013, § 100.5).



Therefore, from the perspective of the sociology of the profession, the normative pillar is aligned with the traditional professionalism of the profession, that is, *normative logic*. Table 4.4 provides a basis to identify the existence of the normative pillar. The analysis will be based on these principles, which will be viewed from two dimensions; *maintaining adherence to professional conducts* and *protecting the public interest* (see Table 4.4). The latter is regarded in the literature as the traditional professionalism of the accounting profession, that is, which centres on an ongoing commitment to protect and serve the public interest, and thus maintain its hallmark of independence (Covaleski et al., 2003; Greenwood et al., 2002; Khalifa, 2013; Sikka, 2009; Suddaby et al., 2009).

Integrity refers to being straightforward and honest as well as maintaining fairness and truthfulness in all professional activities. Objectivity refers to not allowing 'bias, conflict of interest or undue influence of others to override professional or business judgments' (APESB, 2013, p. 17), that is, maintaining independence such as pressures from market trend, clients and even the government. Professional competence and due care refers to the maintenance of professional knowledge and skills required to ensure that a client receives competent professional services in accordance to current practice (legislation and technical and professional standards). Confidentiality refers to refraining from disclosing client's confidential information and taking advantage of it, including maintaining the confidentiality within the firm. Professional behaviour refers to obligations to comply with relevant laws and regulations and avoid any conduct that discredit the profession, which includes refraining from making unfair comparisons with other colleagues' work (loyalty/collegiality).

Overall, in responding to the digital innovation, to the extent that the adoption is voluntary, actors may resist adoption; that is, they may adhere to the traditional professionalism in responding to the exogenous shock. For example, accountants may potentially resist due to SBR being seen as increasing costs for clients instead of reducing burden, thus questioning the benefits from a public interest perspective. In addition, accountants may resist because they realise they do not yet have the competence to use the digital innovation and are sceptical about the data security and availability in the cloud. This poses a question regarding the logic of public accountants once the digital innovation disrupts the existing professional public accounting practice in serving SMEs as in order to survive the increasing competition over SME space, accountants are potentially driven to adopt the digital innovation. Thus, it is important to understand the cultural-cognitive pillar, which is explained in the next section. The cultural-cognitive pillar will become dominant if actors have no choice except to follow the prevailing cultural beliefs, that is, the new way of doing things (Scott, 2014, pp. 66-70).

**Table 4.4: Normative Pillar**

Dimensions	Logics/Values	Actor	Examples in Context	Implications
<b>Maintaining adherence to professional conducts</b>	Integrity	Accountant (Big 4)	"There is a lot of scepticism from the community about how and where the [standard business reporting] initiative is going" (S1_T1_1_BRW_2008_05).	Commodification leads to resistance due to: <ul style="list-style-type: none"> <li>the need to maintain abstract knowledge and thus professional status (i.e., protecting the jurisdiction from non-professionals and other professionals, and thus controlling the financial rewards);</li> <li>the need to distance clients from professional work.</li> </ul> These do not lead to the blurring of boundaries with outsiders and possibly between sub-groups of public accountants, as there is a need to maintain existing professional work and emphasise professional principles.
	Professional competence and due care	Accountant (SMP)	"A lot of [accounting] firms find this hard, because they have a lot of legacy to contend with, both systems and clients, so it doesn't necessarily work for them. It worked for me because I had a blank sheet of paper, but I think there will always be clients who won't pursue something different, and some people like their old desktop systems, and that is fine" (S3_T4_15_Charter_2013_05).	
	Confidentiality	Government Agency*	"The proposed standard is not directed only at financial reporting controls but may be applied to controls over any subject matter, such as controls over the privacy of customer data, completeness and accuracy of emissions or abatement measurement, compliance with regulatory requirements or security of cloud computing services" (S3_T4_23_Charter_2014_05).	
	Collegiality/loyalty	Accounting Profession Association	"Many large reporting entities upgrade their software once or twice a year and for these businesses changing over to SBR compatible software will be implemented as part of their normal upgrades. For small practitioners and entities that may only report to one or two of the relevant government agencies, the cost savings aren't quite as obvious" (S1_T1_10_Charter_2008_11).	
<b>Protecting the public interest</b>	Independence or objectivity over market trend	Accounting Profession Association	"Step back and think about it. Should it be about business compliance costs or should it be about investors? It would be good if it were both but, at the moment, the real focus is on compliance costs and I don't think businesses would argue with that" (S2_T1_5_Charter_2011_11).	
	Independence or objectivity over client needs or demands	Accounting Profession Association	"This is about reducing the burden on business. There are so many different avenues where they [business] need to report to government and that can be streamlined in any way so that they focus on their real business and not just reporting. That's why they [the government] have said all along that they don't need to mandate this. They [the government] reckon the benefits in reducing compliance costs will be so great that companies will just jump into it" (S2_T1_5_Charter_2011_11).	
	Independence or objectivity over the state/ government pressures	Accounting Profession Association	"I can see huge benefits in the tax space but at the moment, there are not too many benefits in the accounting space. They [government] need to work out those benefits" (S2_T1_5_Charter_2011_11).	
		Accounting Profession Association	"As much as SBR is about two-way communication between business and government systems, so is the sharing of information between the Institute, our members and Treasury on this issue. The Institute is helping educate members on SBR and, in turn, identifies member concerns to Treasury. To date, the Institute has helped put Treasury in contact with members, who are now influencing the development of the system via direct user feedback" (S1_T1_9_Charter_2008_11).	

\*Accountant (i.e., with an accounting degree, CA and/or CPA qualification)

#### 4.5.3.3 Cultural-Cognitive Pillar

The cultural-cognitive pillar signifies 'the shared conceptions that constitute the nature of social reality and create the frames through which meaning is made' (Scott, 2014, p. 67). Meanings arise in interactions and are maintained and transformed to in the process of actors making sense of ongoing situations. While cognitive frames determine the information processing activities, such as how information is given attention, encoded, retained, retrieved, organised and ultimately interpreted, which affects evaluation, judgments and predictions, cultural frames shape the interpretive processes. Thereby, Scott (2014) maintains that since internal cognitive processes are affected by external cultural frameworks, cultural categories should be treated as cognitive containers wherein social interests are defined and classified, as well as argued, negotiated and fought out.

Such cultural systems affect the shared or common belief of organisation cultures regarding the organising logics (instrumentality or normative) that structure organisational fields. This is because the underlying logic within this pillar is orthodoxy. Based on that logic, in responding to a cultural-cognitive institution, one might see it as 'the way we do these things'—that is, where social actions are based on the conformity or perceived correctness and soundness of actors (Scott, 2014, p. 68). Under this pillar, actors' cognitive ability is not limited or constrained as it is under the regulative pillar. Accordingly, actors may make decisions based on the appropriateness of instrumentality logic, depending on the current environment or drivers (the orthodox or shared belief system of actors) that influence decisions.

However, unlike the normative pillar, where actors make appropriate decisions based on norms and values, within this pillar, actors may not have a clear sense of what their self-interests or goals are, particularly during periods of great uncertainty and information scarcity. Actors may act in unreflective ways according to these taken-for-granted cognitive structures (Campbell, 2004). Conversely, institutionalisation based on such orthodoxy logic usually places an emphasis on increasing the objectification of shared beliefs (Scott, 2014). Objectification involves the development of a new social consensus, where increasing adoption may become the basis of the normative mechanism (Tolbert & Zucker, 1996, pp. 182-183), and that objectification usually occurs in response to changes due to advancements in new ideas, solutions and best practices.

The effort to formulate a new social consensus or diffuse new institutions on how practices should be done is driven by the need to obtain legitimacy and to survive, which is similar to the normative pillar. However, within the cultural-cognitive pillar, the emphasis is on new ideas, and it involves agency and self-interest as actors maximise benefits for themselves (Campbell,

2004; Scott, 2014). By emphasising the importance of ideas, a new social consensus may represent a response to principled belief, as well as a response to public sentiment or market forces, a world-view or self-interests (Scott, 2014, pp. 149-150). Unlike the normative pillar, the cultural-cognitive pillar does not emphasise identity or ethics (Scott, 2014). However, new institutions formed under the cultural-cognitive pillar may become the accepted norms over time.

Evidence of the existence of the cultural-cognitive pillar is shown, for example, when professionals use new ideas as their primary weapons in which 'they exercise control by defining reality—by devising ontological frameworks, proposing distinctions, creating typifications, and fabricating principles or guidelines for action' (Scott, 2014, p. 122). Such behaviour is demonstrated in the Big firms' logic of the market with respect to the commodification of audit and the adoption of multidisciplinary practices (Greenwood & Suddaby, 2006; Greenwood et al., 2002; Ramirez, 2009). Accordingly, this pillar reflects the logic of the market (capitalism) when the current environment or drivers lead actors to adopt new innovative practices based on self-interest and to maximise benefits, which move away from their identity or ethical values, as a way to gain legitimacy or to survive. This indicates that, in the context of this thesis, cultural-cognitive pillar aligns with the notion of *commercial logic*.

Table 4.5 provides the basis to identify the existence of the cultural-cognitive pillar, which will be analysed based on three dimensions; the *adoption of practices outside traditional model*, the *provision of professional services based on the appeal to, or the demand from, clients* and the *adoption of practices or the provision of professional services that lead to profit maximisation*. The impact of the digital innovation on professional public accounting practice creates a period of great uncertainty and information scarcity. During this period, actors typically formulate a social consensus on new ways of doing things and 'actors who align themselves with the prevailing cultural beliefs are likely to feel competent and connected' (Scott, 2014, p. 70). Digital innovation will likely affect SMPs the most, may involve the drive towards entrepreneurial practice, as the digital innovation represents not only a threat to their survival, but it also creates new opportunities. Therefore, it is important to investigate whether the digital innovation will likely lead to the adoption of more *innovative* and *entrepreneurial* practices in responding to increasing competition in the SME space that likely also drive public accountants to become more *client-driven*, *profit-oriented* and *competitive*. This will enable the identification of potential field transformation and institutional change in professional public accounting practice.

**Table 4.5: Cultural-Cognitive Pillar**

Dimensions	Logics/Values	Actor	Examples in Context	Implications
<b>Adoption of practices outside traditional model</b>	Entrepreneurial	Accountant (SMP)	'I actually had one client who was helping me, and he was a very entrepreneurial guy and was very positive about me making the change ... [move beyond pure compliance into a more meaningful role, almost as a] virtual chief financial officer ... So we charge a fixed fee. We agree the price, and the work that is going to be conducted, and the result is that there's no nasty surprise or a sneaky invoice in the mail, which really annoys the clients' (S3_T4_15_Charter_2013_05).	Commodification leads to greater technical knowledge, lower jurisdictional control and possibly higher client involvement in influencing the process and the value of professional work.  Lower jurisdictional control indicates lower social closure and higher geographical permeability into the commodified space that can drive competition with outsiders and intraprofessionals. This ultimately leads to lower financial rewards.
	Innovative	Accountant (SMP)	'Our clients can't pay to have a CFO sitting there all the time, but I'm available to them through whatever means they prefer—be it Skype, email, face-to-face or Twitter ... We can access our data anywhere and anytime, so because of the availability of the data I have far better information to make decisions for my clients, and I think this gives me an edge' (S3_T4_15_Charter_2013_05).	
		Accountant (Mid-tier)	'That's gradually led to our industry making more of an effort to try and attract talent. The conundrum has always been, "How can we make accounting sexy?" I think the technology does help do that' (S3_T4_7_BRW_2013_03).	
		Accountant (Big 4)	'Firms that thrive will be those that build a culture of constant renewal, enabling them to stay ahead of market disruptions and client needs' (S3_T4_9_BRW_2013_10).	
		Consultant for Accounting Firm*	'This presents a whole new set of opportunities for accountants. Accountants who acquire new skills in evaluating technologies will be able to help clients plan how and when to adopt new processes, and how to connect the chunks together' (S3_T4_20_Charter_2014_03).	
<b>Provision of professional services based on the appeal to, or the demand from, clients</b>	Client-driven	Accountant (Mid-tier)	'I'm advising clients in relation to IT system rollouts. There's a whole new wave of business coaching where you're the be-all and end-all to the client. You're no longer just an accountant. You're the HR person, the IT person, the finance person and the project manager' (S3_T4_7_BRW_2013_03).	This drives jurisdiction expansion beyond core professional work. It also creates a tendency towards a firm structure that emphasises bureaucratic principles (i.e., led by a CEO) and the use of a fixed-price model. Changes in firm structure may increase the appetite for merger and acquisition that leads to an expansion in terms of size.
		Consultant for Accounting Firm*	'As an accounting professional, your success lies in thinking through your strategies for how you can leverage these new trends in technology, and how you can position yourself and your firm to become change leaders for your clients. Clients are seeking this type of advice' (S3_T4_20_Charter_2014_03).	
<b>Adoption of practices or the provision of professional services that lead to profit maximisation</b>	Profit-Oriented	Consultant for Accounting Firm*	'Every accounting firm is experimenting and rethinking the relationship with clients, particularly on the book-keeping side. With bank feeds (directly into accounting systems) this is all much more automated. Accountants are saying maybe there is a whole different way of doing this so that we can have faster compliance ... [There is evidence of accounting practices badgering smaller clients to adopt a cloud-based solution] There are firms saying to clients that they have to use Xero and nothing else' (S3_T2_1_BRW_2013_04).	Overall, location of work, client base and professional values may be affected.
		Accountant (SMP)	'...using mobile technology strengthens relationships with clients and creates new financial management opportunities' (S3_T4_21_Charter_2014_05).	
	Competitive	Consultant for Professional Service Firm	'Private clients was previously the domain of second- and third-tier firms, but we are increasingly seeing the big four dip into these areas very successfully and stretching their brands to SMEs very successfully' (S3_T4_7_BRW_2013_03).	

\*Accountant (i.e., with an accounting degree, CA and/or CPA qualification)

## Appendix 4.1: Basis of Classification of Sub-groups in Public Accounting Practice in Australia

BIG 4	
<b>Basis of Classification</b>	<p>Top four firms based on the ICAA classification (i.e., based on the number of partners). These firms are also recognised by <i>BRW</i> 'Top 100 Accounting Firms' 2008–2013 (six reports) in Australia (<i>BRW</i>, 2008, 2009, 2010, 2011, 2012, 2013) as the top four firms in Australia based on revenue and number of partners. In alphabetical order, these firms are: Deloitte, EY, KPMG Australia and PwC.</p>
NEXT BIG 8	
<b>Basis of Classification</b>	<p>In alphabetical order, the next top eight firms are: BDO, Crowe Horwath (formerly WHK), Grant Thornton Australia, HLB Mann Judd, Moore Stephens, Pitcher Partners, PKF and RSM Bird Cameron.</p> <p>Those eight firms were identified as the 'Next 8' in the <i>BRW</i> article 'Top 100 Accounting Firms: The competition for market share' by George Beaton (2013)—that is, eight large trans-national mid-tier firms with an aggressive business strategy that seeks to compete with the Big 4 and to strengthen their local position in Australia.</p> <p>This thesis adopts <i>BRW</i> classification as those eight firms are the next 8 firms after the Big 4 based on the following (see Appendix 4.2, pages 126-131, for the detail):</p> <ol style="list-style-type: none"> <li>1. Ranked 5<sup>th</sup> to 12<sup>th</sup> in Australia based on the number of partners reported in the <i>BRW</i> reports, which this fits with the ICAA classification (i.e., based on the number of partners).</li> <li>2. Ranked 5<sup>th</sup> to 12<sup>th</sup> in Australia based on revenue as global multidisciplinary firms. Next Big 8 are competing with the Big 4 because they have similar business model (i.e., multidisciplinary). That is, they offer financial audit and other multidisciplinary services and are part of an integrated international network. The <i>BRW</i> report ranks firms based on revenue and it includes accounting firms that offer specialist advisory services only (do not offer financial audit services), and that represent an aggregated network of diverse independent firms.</li> </ol> <p>However, there was an exception for PKF. During the seven-year period being reviewed, PKF has been in the next top eight after the Big 4 except in the last two years, 2012–2013 and 2013-2014 financial years (Stage 3). PKF has suffered a significant decline in total revenue and the number of partners due to the departure of its East Coast Practice on 1 July 2012 to another Next Big 8, BDO. Thus, PKF's value decreased from \$128.3 million as of 30 June 2012 to \$40 million as of 30 June 2013, and 102 partners declined to 17 partners. Technically, based on the number of partners and revenue as a global multidisciplinary firm, Nexia Australia was the 11<sup>th</sup> largest. However, according to <i>BRW</i>, PKF would pick up its loss and would resume its position as the next top eight firms after the Big 4 as it has been a strong player for many years (Beaton, 2013; Khadem, 2013a). As of 30 June 2014, although the performance of PKF has not exceeded Nexia Australia, it significantly increased its revenue and number of partners due to mergers, that is, to about \$85 million in revenue and over 65 partners.</p> <p><i>BRW</i> analysis about PKF's ability to resume its position was correct. As of 30 June 2015, the performance of PKF exceeded Nexia Australia. Its revenue increased about 14 percent to \$97 million due to a series of mergers. On the other hand, the performance of Nexia Australia dropped 4.5%, from about \$90 million as of 2014 to about \$86 million due to loss of its Melbourne office to Moore Stephens, one of the Next Big 8. Nexia Australia's performance has been fluctuating throughout the seven-year period, even dropping out of the top 20 in 2009 and 2011. Therefore, despite the exception described earlier, this thesis follows <i>BRW</i> classification for the whole period under review. That is, recognising PKF as one of the Next Big 8 in Australia in Stage 1–3.</p>

The *BRW* reports cover six out of seven financial years being reviewed, which covers the period 1 July 2007 to 30 June 2013 (*BRW*, 2008, 2009, 2010, 2011, 2012, 2013). Information subsequent to 30 June 2013 was obtained from the Australian Financial Review (King, 2015) and PKF's website (PKF, 2014a, 2014b).

**MID-TIER**

Basis of Classification	Based on ICAA classification: Firms with more than five partners but that are not classified as the Big 4 or Next Big 8.
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**SMP**

Basis of Classification	Based on ICAA classification: Sole practitioners and firms with up to five partners.
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## Appendix 4.2: BRW Next Big 8 Accounting Firms in Australia

Firms	2007-2008			
	BRW rank (out of 100)		BRW Data	
	No. of Partners	Revenue	No. of Partners	Revenue
1. WHK Group	5	5	263	\$330.5 million
2. BDO	6	6	143	\$196.0 million
3. PKF	7	7	120	\$148.7 million
4. Grant Thornton Australia	8	8	106	\$145.3 million
5. Moore Stephens	9	11	97	\$101.3 million
6. HLB Mann Judd	10	12	81	\$78.3 million
7. Pitcher Partners	11	9	78	\$133.5 million
8. RSM Bird Cameron	12	10	70	\$102.5 million

**Note:**

Based on both number of partners and revenue, the Next Big 8 are the next top eight firms after the Big 4. That is, ranked 5<sup>th</sup> to 12<sup>th</sup>.



Firms	2008-2009			
	BRW rank (out of 100)		BRW Data	
	No. of Partners	Revenue	No. of Partners	Revenue
1. <b>WHK Group</b>	5	5	268	353.1 million
2. <b>BDO</b>	6	6	146	201.8 million
3. <b>Grant Thornton Australia</b>	7	8	108	158.0 million
4. <b>PKF</b>	8	9	106	143.7 million
5. <b>Moore Stephens</b>	9	11	88	105.5 million
6. <b>Pitcher Partners</b>	10	7	85	167.6 million
7. <b>HLB Mann Judd</b>	11	14	80	86.4 million
8. <b>RSM Bird Cameron</b>	12	10	72	110.5 million

**Note:**

Based on number of partners and revenue, the Next Big 8 are the next top eight firms after the Big 4. That is, ranked 5<sup>th</sup> to 12<sup>th</sup>. An exception, HLB Mann Judd ranked 14<sup>th</sup> based on revenue after McGrathNicol (12<sup>th</sup>) and Ferrier Hodgson (13<sup>th</sup>). The latter two are specialist advisory firms that do not offer financial audit and thus have different business model.

Firms	2009-2010			
	BRW rank (out of 100)		BRW Data	
	No. of Partners	Revenue	No. of Partners	Revenue
1. <b>WHK Group</b>	5	5	262	\$348.5 million
2. <b>BDO</b>	6	6	141	\$195.9 million
3. <b>Moore Stephens</b>	7	11	98	\$113.6 million
4. <b>Grant Thornton Australia</b>	8	7	90	\$152.0 million
5. <b>PKF</b>	9	8	89	\$148.7 million
6. <b>HLB Mann Judd</b>	10	14	84	\$93.9 million
7. <b>Pitcher Partners</b>	11	9	80	\$140.3 million
8. <b>RSM Bird Cameron</b>	12	10	74	\$117.5 million

**NOTE:**

Based on number of partners and revenue, the Next Big 8 are the next top eight firms after the Big 4. That is, ranked 5<sup>th</sup> to 12<sup>th</sup>. An exception, HLB Mann Judd ranked 14<sup>th</sup> based on revenue after McGrathNicol (12<sup>th</sup>) and Korda Mentha (13<sup>th</sup>). The latter two are specialist advisory firms that do not offer financial audit and thus have different business model.

Firms	2010-2011			
	BRW rank (out of 100)		BRW Data	
	No. of Partners	Revenue	No. of Partners	Revenue
1. <b>WHK Group</b>	5	5	246	\$348.5 million
2. <b>BDO</b>	6	6	157	\$195.9 million
7. <b>Moore Stephens</b>	7	12	95	\$113.6 million
3. <b>Grant Thornton Australia</b>	8	7	91	\$152.0 million
4. <b>PKF</b>	9	10	89	\$148.7 million
8. <b>HLB Mann Judd</b>	10	16	83	\$93.9 million
5. <b>Pitcher Partners</b>	11	8	82	\$140.3 million
6. <b>RSM Bird Cameron</b>	12	11	80	\$117.5 million

**NOTE:**

Based on number of partners and revenue, the Next Big 8 are the next top eight firms after the Big 4. That is, ranked 5<sup>th</sup> to 12<sup>th</sup>. An exception, HLB Mann Judd ranked 16<sup>th</sup> based on revenue after Proactive Accountants Network (9<sup>th</sup>), Korda Mentha (13<sup>th</sup>), Ferrier Hodgson (14<sup>th</sup>) and McGrathNicol (15<sup>th</sup>). Proactive Accountants Network was a network of diverse independent firms, which focused on coaching accounting firms to create a network of progressive firms. In October 2014, Proactive Accountants Network reinvented itself as a software company, Panalitix, which supports and coaches accounting firms to digitally enhance their practice and grow their operations (Panalitix, n.d.). In this thesis, Proactive Accountants Network is not regarded as an accounting firm, rather, a consultancy and business coaching firm for accounting firms. The latter two, as explained before, are specialist advisory firms.

Firms	2011-2012			
	BRW rank (out of 100)		BRW Data	
	No. of Partners	Revenue	No. of Partners	Revenue
1. WHK Group	5	5	237	\$353.9 million
2. BDO	6	6	156	\$232.6 million
3. Grant Thornton Australia	7	7	154	\$232.3 million
4. Moore Stephens	8	9	111	\$136.0 million
5. PKF	9	11	96	\$128.3 million
4. Pitcher Partners	10	8	85	\$153.6 million
6. RSM Bird Cameron	11	10	85	\$135.6 million
8. HLB Mann Judd	12	16	77	\$90.5 million

**NOTE:**

Based on number of partners and revenue, the Next Big 8 are the next top eight firms after the Big 4. That is, ranked 5<sup>th</sup> to 12<sup>th</sup>. An exception, HLB Mann Judd ranked 16<sup>th</sup> based on revenue after Korda Mentha (12<sup>th</sup>), PPB Advisory (14<sup>th</sup>) and McGrathNicol (15<sup>th</sup>). The latter three firms are specialist advisory firms that do not offer financial audit and thus have different business model.

Firms	2012-2013			
	BRW rank (out of 100)		BRW Data	
	No. of Partners	Revenue	No. of Partners	Revenue
1. <b>Crowe Horwath (Formerly WHK Group)</b>	5	5	232	\$344.5 million
2. <b>BDO</b>	6	6	159	\$243.4 million
3. <b>Grant Thornton Australia</b>	7	7	140	\$223.0 million
6. <b>Moore Stephens</b>	8	11	84	\$112.0 million
5. <b>RSM Bird Cameron</b>	9	9	83	\$141.1 million
4. <b>Pitcher Partners</b>	10	8	82	\$161.7 million
8. <b>HLB Mann Judd</b>	12	17	79	\$87.1 million
7. <b>PKF</b>	36	25	17	\$40.0 million

**Note:**

Seven firms of the Next Big 8 are in the next top eight after the Big 4. That is, ranked 5<sup>th</sup> to 12<sup>th</sup> based on the number of partners and revenue. An exception, HLB Mann Judd is ranked 17<sup>th</sup> based on revenue after PPB Advisory (12<sup>th</sup>), McGrathNicol (13<sup>th</sup>), Ferrier Hodgson (14<sup>th</sup>), Countplus (15<sup>th</sup>) and Nexia Australia (16<sup>th</sup>). Countplus is an aggregated network of diverse independent firms. The rest, except Nexia Australia, are specialist advisory firms. Nexia Australia is a global multidisciplinary firm. As explained earlier, Nexia Australia became 11<sup>th</sup> largest accounting firm as of 30 June 2013, both based on the number of partners and revenue. One of the Next Big 8, PKF, experienced significant decline due to the departure of a substantial part of its practice, thus considered a significant exception. PKF was not in the next top eight based on both number of partners and revenue. However, it remains as the Next Big 8 due to its strong performance throughout the years. As explained earlier, PKF was able to significantly increase its number of partners and revenue as of 30 June 2014. In 2014-2015 financial year, PKF was able to resume its position as the next top eight after the Big 4 based on number of partners and revenue while Nexia Australia experienced a considerable decline.

## **Chapter 5 Research Methodology and Data Collection Methods**

### **5.1 Chapter Content**

This chapter discusses the research process undertaken for this thesis, which covers the research methodology, research data and methods of data collection. It starts with the introduction section, which explains the research methodology used (Section 5.2), followed by a discussion of the research data and methods of data collection (Section 5.3). It concludes with a discussion of a list of data collected, which will be used to address RQ1—3 in Chapter 6 (Section 5.4).

Frequent reference will be made to RQ1 (a, b, c) and RQ2. They are listed here for ease of reference.

**RQ1: Is there an emergent field surrounding the issue of the commodification of traditional accounting work in servicing SMEs?**

**RQ1a: Is there an increase in the extent to which certain actors interact?**

**RQ1b: Is there an increase in the information load the actors share?**

**RQ1c: Is there a development of a mutual awareness that the actors are involved in a common debate?**

**RQ2: What is the nature of the exchange relations between actors, including the institutional logic of each actor reflected in the exchanges?**

### **5.2 Introduction**

The research approach undertaken for this thesis is multifaceted, in order to obtain an in-depth understanding of the phenomena occurring in professional public accounting practice in Australia. In addition, the digital innovation of interest has been under-researched and according to the popular literature is driving change in Australia (Deloitte, 2012; PricewaterhouseCoopers, 2014; Troshani & Rao, 2007). Thus this thesis employs a mixed methods approach (i.e., integrates quantitative measures and qualitative experiences), which enables the examination of a field from multiple perspectives (Creswell, 2014).

Specifically, this study uses an embedded mixed methods approach. That is, where one kind of method is given less emphasis and embedded in another kind of method (Creswell, 2014; Harwell, 2011). In this study, greater weight is placed on the qualitative method and the quantitative method is nested within it. Under this approach, qualitative and quantitative data are mixed in the analysis phase, a process that can be done by employing various strategies

(Caracelli & Greene, 1993). This analysis process may or may not be guided by a theoretical perspective (Creswell, 2014; Harwell, 2011). However, in this thesis it is. That is, the analysis is conducted based on the conceptual framework developed earlier (Chapter 4) by linking the results of the preliminary article review with the theories underpinning this study.

As discussed earlier, this study commenced with a preliminary article review (Chapter 2) of the popular and academic literatures to gain better understanding of the research topic of interest. A preliminary article review is critical for identifying and defining the essential concepts as well as the research timeframe, which helps focus the research topic. This then was followed by the development of the conceptual framework (Chapter 4) to precisely measure the concepts by linking them with theories, namely organisational theory (organisational field), institutional theory (institutional pillars) and the sociology of the professions (Ahrens & Chapman, 2006; Miles et al., 2014). Finally, it proceeded with the core data collection, which is discussed in detail in this chapter, following the embedded mixed methods approach. This overall process is shown in Figure 5.1. This process is iterative, with problems (concepts), theory and data influencing each other to generate a plausible fit between them (Ahrens & Chapman, 2006; Baxter & Chua, 1998; Silverman, 2010).

The core data collection and analyses involve multiple methods, which enabled the author to observe and interact with people in their natural settings and/or to understand their behaviour from their view points (Singleton & Straits, 2005). The data collected are extensive, comprising archival data, interview data, as well as diaries or field notes, charts, and records of interactions and observations (Ahrens & Chapman, 2006; Blackstone, 2012; Merchant & Van der Stede, 2006). The quantitative data are obtained by transforming qualitative data collected from archival data into discrete data so they can be further analysed using statistical and mathematical tools (Caracelli & Greene, 1993; Miles et al., 2014; Singleton & Straits, 2005). In view of the above, as shown in Figure 5.1, after the preliminary article review, the research data were collected and analysed through five different methods, *article review*, *convergent interviewing*, *discussion forums*, *direct observation* and *a document review*. The main aim of the article review is to answer RQ1 using a set of network maps. This article review comprises both qualitative and quantitative content analysis of sets of articles (i.e., specific archival data). Although the article review is the primary data set for RQ1, the results of the analysis also provide preliminary evidence and a basis for answering RQ2. The primary data sets for answering RQ2 are obtained from the *convergent interviewing (CI)* and *discussion forums (webcasts)*, which are further supported by *direct observations* as well as a *document review* involving qualitative content analysis of extensive archival data. The document review is not built into the article review because its inclusion would distort the capacity to accurately

observe change over the seven-year period reflected in the network maps (i.e., the documents do not provide the continuity of publication on the issue, required throughout 1 July 2007 to 30 June 2014). As stated earlier, these data collections are sequential and iterative and the qualitative and quantitative data are mixed at the analysis phase because one method leads to another and the data builds on each other (Caracelli & Greene, 1993).

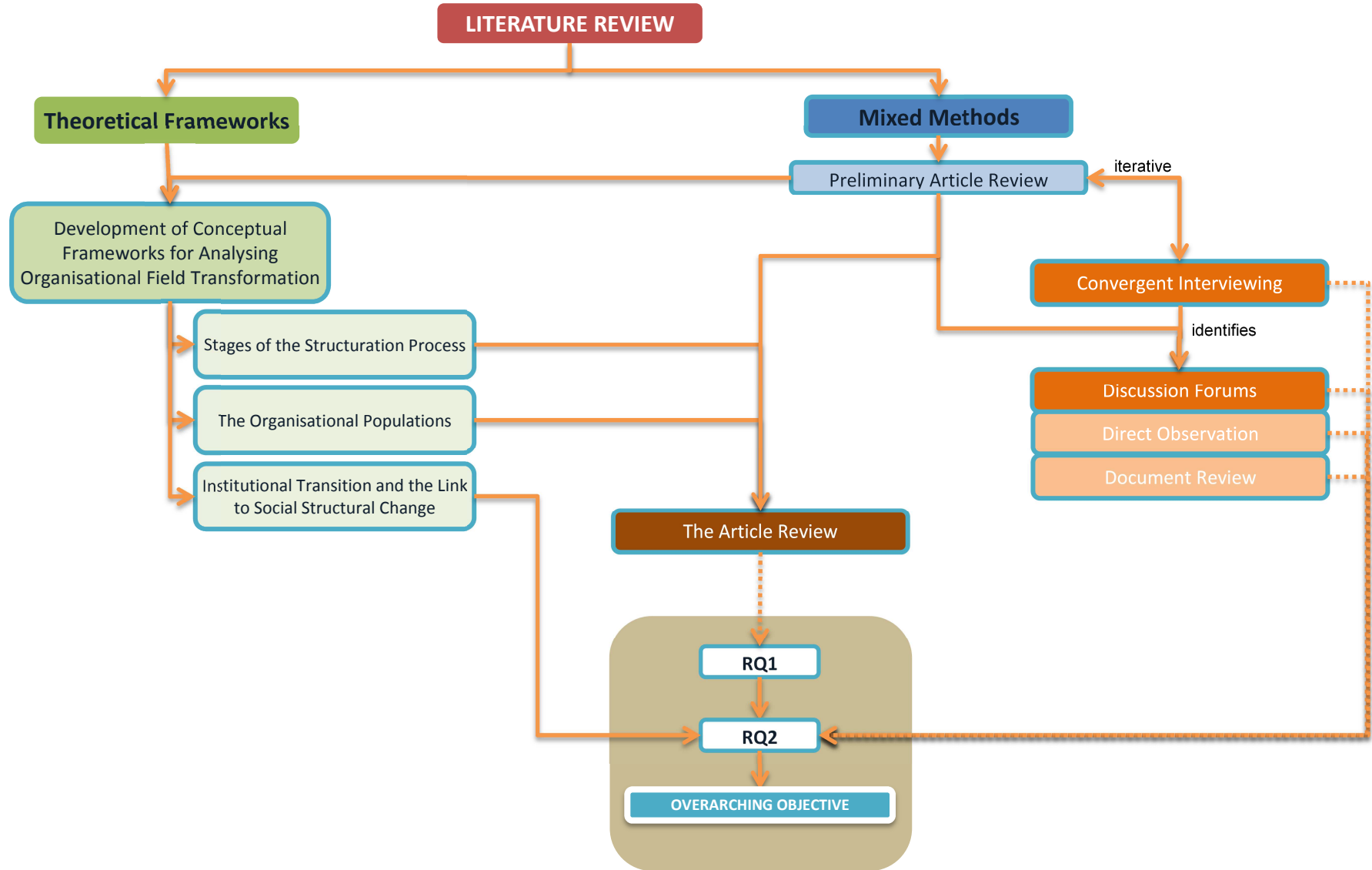
The use of multiple data collection methods, data sources and data types enable robust triangulation, which is critical in a mixed methods study as it helps to ensure validity and reliability (Creswell, 2014; McKinnon, 1988; Miles et al., 2014). That is, it helps to reduce the risk that the research findings or outcomes are not representative of the phenomena being studied, or that they are contaminated by researcher bias (Miles et al., 2014). The triangulation of qualitative and quantitative data helps minimise the weaknesses of each method (Creswell, 2014).

In this study, the focal point of data collection is the servicing of the SME segment of professional public accounting practice in Australia because it is significantly affected by the digital innovation. Identifying a focal point that brings out different voices in the practice of accounting is important as it enables researchers to capture the tensions among various actors (Ahrens & Dent, 1998; Blackstone, 2012).

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Figure 5.1: Summary of the Research Approach



## 5.3 Research Data and Methods of Data Collection

### 5.3.1 Article Review

The article Review consists of only one type of data source—that is, archival data from specific mass media (Jones, 2010). These data will be obtained through the document review of specific archived articles (i.e., *BRW* and *Charter*). It will involve qualitative and quantitative content analysis. Articles are used as a proxy for a debate because they typically discuss a ‘hot’ issue at a point in time and quote people from different backgrounds. Therefore, articles represent interactions between different groups of actors with competing interests regarding the issue (Hoffman, 1999). Examining articles published over a period of time provides an objective means to identify how interactions and different groups of actors are changing. These articles, as with other archival data, enable the identification of trends over a long time span to provide a firmer basis for drawing conclusions (Yin, 2014).

The article review will be based on articles published in the media that discuss the development of the digital innovation of interest in relation to the issue of the commodification of traditional accounting work, especially in serving SMEs. These articles were published between 1 July 2007 and 30 June 2014 in *BRW* and *Charter*. The review period of 1 July 2007 to 30 June 2014 is based on the three stages identified earlier.

*BRW* is selected on the basis of its circulation and accessibility. *BRW*, published by a prominent Australian media, Fairfax Media, has been one of the leading business publications in Australia for the past 32 years, and it has the highest per-capita circulation (Fisher, 2013). *BRW* articles can be accessed via its website or via Factiva, a business research subscription online database.

*Charter* is selected because it is published by the ICAA, which was the first accounting profession association in Australia established by Royal Charter in 1928. The ICAA is historically more conservative and has a more rigorous designation than other major accountancy bodies such as the CPAA and the IPA (Dean & Clarke, 2011; West, 2013). Therefore, the ICAA is considered the barometer of issues or trends in the accounting profession. *Charter* also publishes a special supplement every May, called *Business Software & Technology Guide*, which was first released in 2011 due to demand from its members for such issues (ICAA, n.d.-b). This supplement is relevant to this thesis because it includes articles on the issue discussed.

This thesis only uses the digital versions of hard copy *Charter* articles because these articles are properly dated and can be accessed via an online subscription database, ProQuest. Through this database, *Charter* articles from February 1990 onwards can be accessed. ProQuest only generates digital versions of hard copy *Charter* articles and does not include the *Business*

*Software & Technology Guide* supplement. Copies of the supplement will be obtained from the ICAA in the original hard copy format. These supplements will be scanned and converted into searchable portable document files (pdfs).

The article review will first conduct testing of the keywords or search terms that will be used to generate the articles (see Section 5.4.1.1). These search terms are obtained from the results of the preliminary article review (see Chapter 2). The testing will be conducted after the period being reviewed has ended—that is, after 30 June 2014. The most relevant search terms identified will then be used to generate articles from *BRW* and *Charter*. A thorough manual review will be conducted to identify the relevant articles.

Once relevant articles have been identified, content analysis will be conducted to investigate whether there is an emergent field (RQ1) by identifying different themes and types of actors involved in the debate. The themes and types of actors will be used to examine whether there are increased interactions and information load around this issue that ultimately lead to a common debate. Content analysis ‘is the intellectual process of categorizing qualitative textual data into clusters of similar entities, or conceptual categories, to identify consistent patterns and relationships between variables or themes’ (Julien, 2008, p. 121). This process is iterative and follows the conceptual models to answer the research questions.

Themes will be identified through thematic coding; that is, it begins with a potential list of codes derived from anticipated issues (Ayres, 2008). Accordingly, based on the main theme of each article, themes will be identified against a list of potential themes informed by the result of the preliminary article review. This iterative coding process will result in a final list of themes. The identification of themes will provide an understanding of how increased interactions progressed throughout different stages over the seven-year period (Ahrens & Dent, 1998).

Types of actors will be identified based on the actors involved in each article against a list of potential types of actors that is defined based on preliminary article review and the organisational population concept explained in Chapter 4—that is, the types of organisations and their tendency in institutional logic. As discussed earlier, this thesis takes the perspective of organisational populations in analysing the organisational field. Thus, the different types of actors who are involved are regarded as different organisational populations that make up the organisational field.

Actors who are involved will be identified based on those who authored and those who were directly quoted in the article, and then classified according to the list of potential different

types of actors. This coding process is iterative in nature, so new types of actors will be identified as the researcher becomes familiar with the data and this will result in a final list of the types of actors. The identification of actors based on author and direct quotes provides an objective measure because it represents taking explicit data from the document, even though data from the document might not always be accurate (Yin, 2014). In journalism, direct quotations are important in providing actuality and precision and for highlighting bald facts (Cole, 2008). Further, direct quotations are useful in recreating a real sense of the subject's experience and insights, particularly on critical issues (Tate & Taylor, 2014, p. 34). However, there is a risk of failing to identify actors who were involved in the debate but not included because they did not author, or were not directly quoted in, any article published in the selected media.

After the themes and types of actors are identified, a count of the articles published around this issue (article count) and a count of actors involved (actor count) will be performed. The article count will be conducted by coding each article with the identified theme, where each article can only be coded with one theme. The actor count will be conducted by coding each article with the types of actors that authored the article and who were directly quoted in the issue. An article may consist of more than one type of actor and that more than one of the same type of actors could be identified.

Ultimately, following the approach of Hoffman and Bertels (2007), a set of network maps will be generated based on the article–actor count, which represents the relationship between each article and each type of actor. It represents the relationship between the types of actors (organisation populations) and the information load they share (themes). Accordingly, the network maps will provide a graphical display of linkages or the nature of the exchange relations between these actors.

Overall, the results from examining the nature of the exchange relations between these actors will serve as evidence to identify potential shifts in jurisdictional claims (field transformation), as well as the logic of each actor (institutional transition)—that is, answering RQ1, the identification of an emergent field. This provides a basis to analyse the dominant actors driving the change and also for RQ2 to analyse field transformation and institutional transition based on issues that define the boundaries of sub-groups within the social structure of professional public accounting practice.

The article review, although it is primarily used to provide evidence for RQ1, will provide evidence for all research questions because the result of RQ1 will serve as the basis for RQ2.

Accordingly, the design of the article review followed each sub-question (RQ1 and RQ1a–RQ1c) listed earlier in this chapter. Table 5.1 summarises the article review method that will be used.

The next section discusses the collection of data sets from CI and discussion forums to provide robust evidence for RQ2.

**Table 5.1: Summary of the Article Review Method**

Methods	Expected Results	Purpose
<b>Data Collection</b>		
Obtaining keywords identified in the preliminary article review	A list of potential search terms.	Provides a range of search terms to be tested to identify the most relevant search terms.
Testing search terms	A list of the most relevant search terms.	Provides basis to generate articles that potentially are relevant.
Identifying relevant articles	A list of relevant articles.	Provides a basis for the article review to begin the content analysis.
<b>RQ1a: 'Is there an increase in the extent to which certain actors interact?'</b>		
Content analysis	A list of main themes.	Provides basis for article count. Article count involves the coding of each article with one theme. The theme indicates the main or relevant discussion of each article.
	A list of types of actors.	Provides the basis for the actor count, which involves the coding of actors in each article per types of actors. Each article may have different types of actors and number of actors identified.
Article count	Count of articles per theme per stage.	Provides basis for the actor count.
Actor count	Count of number of actors for each type of actors per theme per stage.	Provides evidence for RQ1a. T-test of the result is conducted. Provides basis to generate the article–actor count per theme per stage.
<b>RQ1b: 'Is there an increase in the information load they share?'</b>		
Article–actor count	Count of relationship between articles and each type of actor per theme per stage. The aggregate relationship per theme per stage indicates information load that is shared.	Provides evidence for RQ1b. T-test of the result is conducted. Provides basis to generate a set of network maps.
<b>RQ1c: 'Is there a development of a mutual awareness that they are involved in a common debate?'</b>		
Network maps generation	Network maps, one map for each stage.	Provides evidence for RQ1c. Provides further evidence for RQ1a and RQ1b. Preliminary evidence for RQ2.

### 5.3.2 Convergent Interviewing

CI will be conducted as part of a larger project—an Australian Research Council (ARC) Grant (LP 110200474) entitled ‘Development, Implementation and Private and Public Sector Adoption of Standard Business Reporting in Australia’ with the Treasury and the ICAA. CI is primarily used to address issues in an under-researched area by converging the experiences, knowledge, attitudes and beliefs of heterogenous actors in a set of interviews (Driedger, 2008; Rao & Perry, 2003).

The technique of CI was developed by Bob Dick at the University of Queensland, Australia. It was first developed for researchers in marketing and business disciplines with foci on organisational change and development (Dick, 1998; Driedger, 2008; Troshani & Rao, 2007). The CI process includes comparing and contrasting issues that emerge, and it provides a way to flexibly structure research projects while using unstructured content to enable greater reflexivity throughout the different phases of the research. CI facilitates in-depth interviewing by promoting a cyclical research process that entails continuous analysis as part of the overall strategy. Accordingly, CI generally does not involve a set of questions being developed prior to data collection, except for opening or preliminary questions. Preliminary questions may be derived from information obtained from experts in the subject matter and/or from the literature. Questions will be developed iteratively as the interviews proceed and continuously adjusted throughout the project in order to achieve convergence.

In doing so, CI uses the snowballing technique to identify actors to be interviewed. The snowballing technique is central to CI because it helps to maximise the identification of the heterogeneous nature of the actors involved. The snowballing technique is:

a way to pursue the goals of purposive sampling in many situations where there are no lists or other obvious sources for locating members of the population of interest, but it does require that the participants are likely to know others who share the characteristics that make them eligible for inclusion in the study. This method is particularly useful for locating hidden populations, where there is no way to know the total size of the overall population (Morgan, 2008b, p. 816).

Therefore, CI is ideal for this thesis, which deals with the contemporary digital innovation and an under-researched area (Troshani & Rao, 2007). CI is expected to provide a better understanding of the field of professional public accounting practice and the effect of the digital innovation, which represent RQ2. First, it aims to further reveal the different types of actors who are involved in the potential field transformation, as an exogenous shock (i.e., digital innovation) creates a disturbance in the existing institutional environment of professional public accounting practice. Second, it aims to identify the exchange relations

between these actors, as an exogenous shock will likely lead to intense inter- and intraprofessional competition in professional public accounting practice and therefore field transformation. Ultimately, the results of CI will be used to identify the impact of digital innovation on the social structure of professional public accounting practice, which is the overarching objective of this thesis

The RQ2 and overarching objective of this thesis are based on the notion that the digital innovation will likely lead to field transformation. Accordingly, it is important to first check whether an emergent field or field transformation occurs (RQ1). However, CI will be conducted prior to the article review because an article review can only be conducted after the period being reviewed has ended (i.e., 30 June 2014). CI will be conducted almost in parallel with the preliminary article review due to the under-researched issue being investigated in this thesis and the cyclical nature of CI (Troshani & Rao, 2007). As stated earlier, CI will start with a preliminary set of questions, and questions will then be developed iteratively as the interview progresses. The preliminary article review will also contribute to the development of the preliminary set of questions and may iteratively inform CI. Accordingly, the iterative questions will be based not only on the results of the interviews, but also on the insights obtained from the preliminary article review. Conversely, the progress of the preliminary article review may also be affected by the ongoing CI.

Therefore, this thesis will start the interviews with the SBR team in government agencies based on preliminary questions. SBR was identified as the initial disruption, and the SBR team is expected to provide a preliminary understanding of the area. The foregoing method is consistent with the approaches of Hoffman (1999) and Hoffman and Bertels (2007). In addressing the issue of hidden actors in an under-researched area, it is crucial to identify the organisational field based on an issue that creates disruption in order to identify the actors involved in the field. The SBR team is also expected to provide richer information on other actors who are involved in the implementation of SBR, which may elicit the influence of cloud accounting together with SBR on professional public accounting practice. CI will then proceed by asking interviewees to refer to other experts or actors who may be relevant to the research. It is expected that the interviewees may also refer to other avenues of data collection that involve relevant experts or actors such as discussion forums. At the same time, the iterative relationship between the preliminary article review and CI may lead to the identification of discussion forums. Therefore, data collection from the discussion forums will be conducted almost in parallel with CI and the preliminary article review.

It is expected that the results of CI will identify not only different types of actors involved in the debate (i.e., interviewees), but also the priority issues being discussed (Troshani & Rao, 2007). Priority issues are important issues or concerns regarding the issue being investigated that are raised by interviewees when prompted or not prompted by questions. These will be identified from each interview and refined as the interviews progress. Ultimately, CI will be concluded once differences over these important issues can be explained for each type of actor. These priority issues may reflect the logic of each type of actor, as they have different self-interests regarding the issue of the commodification of traditional accounting work due to the digital innovation. Accordingly, the results from CI will be organised and analysed based on the frameworks discussed in Chapter 4 in order to respond to RQ2. Figure 5.5 summarises the CI method.

**Table 5.2: Summary of Convergent Interviewing Methods**

Methods	Expected Results	Purpose
<b>Development of preliminary questions</b>	A list of preliminary questions.	To interview different personnel of the SBR Program to gain a preliminary understanding of the area and referral to the next people or experts to be interviewed.
<b>Interviewing: Iterative questions development and identification of priority issues</b>	Interviews with different type of actors.	The identification of heterogeneous actors involved in the debate. Further evidence for RQ2.
	Achieve agreement or obtain explanation on disagreement over a list of priority issues identified.	Gain insights on the implications of SBR and cloud accounting on professional public accounting practice. The views of different types of actors on the issue, which will provide strong evidence for RQ2.
	Information about relevant discussion forums to attend. Information about other avenues of data collection.	The identification of potential sources of data. Further evidence for RQ2.

### 5.3.3 Discussion Forums

Discussion forums represent group discussions conducted and attended by potentially relevant actors. A discussion forum is similar to a focus group discussion or panel discussion, but it is not conducted by the author; rather, it is conducted by a third party such as an accounting profession association, accounting firm or software vendor. The author observes and takes notes of the discussions but does not participate in the discussion forum. The following definition of a focus group explains the conduct of discussion forums in this thesis: ‘The defining element of focus groups is the use of the participants’ discussion as a form of data collection. In particular, there is no requirement to reach consensus or produce a decision;



instead, it is the participants' conversation about the research topic that is of interest' (Morgan, 2008a, p. 353).

A discussion forum may be identified based on recommendations from interviewees (CI) or from conducting the preliminary article review. The author will attend discussion forums in-person or online, and webcasts of these discussion forums, if available, will be collected from the organisers for further analysis, in addition to field notes taken by the author. These forums will provide further evidence of actors who are involved, the nature of the exchange relations between them, including their institutional logics (RQ2), which can help to identify the potential shift in the boundaries of professional work (i.e., field transformation and institutional transition) that occurs.

Again, the use of discussion forums is appropriate for the methodology undertaken because it is a data collection method obtained from the natural environment to better understand the phenomena. It is one way to study emergent social realities in the field without disturbing the natural setting, which can threaten the reliability of the data (McKinnon, 1988).

#### **5.3.4 Direct Observation**

In addition to the article review, CI and discussion forums, further supporting data will be collected through direct observation for triangulations purposes. Triangulation based on the results from these multiple data sets strengthen the evidence for the two RQs (Denzin, 2001 in Miles et al., 2014; Patton, 2002 in Yin, 2014).

Direct observations will be collected by attending discussion forums or conferences recommended by interviewees (CI) or identified from the preliminary article review. Direct observations involve observing the situation, informal discussion with other participants and reviewing materials collected from these forums or conferences, such as presentation materials and handouts.

#### **5.3.5 Document Review**

A document review is also conducted to provide further supporting data for triangulation. It involves qualitative content analysis of various documents other than those reviewed in the article review. This data set consist of various types of relevant archival data to support the analysis for the seven-year period involved, that is, that fall within the same period as the article review (1 July 2007 to 30 June 2014). Articles will be obtained from business media other than *BRW*, and from professional association media other than *Charter*. Relevant government records and statistical data from reputable sources will also be used. In addition,

information from websites and blogs of each actor identified will be used in order to further understand the strategy and the products and services.

Other business media used will include *The Australian*, with both its print and online articles sourced through Factiva. *The Australian* is published by News Corporation and, similar to Fairfax Media, is a prominent media on global and business issues in Australia. Free and online-only business media, *Business Spectator* (including *Technology Spectator*) will also be used. Although *Business Spectator* was first published in October 2007—that is, after the start of the seven-year period of this thesis—it is considered relevant because it largely covers the period under review (Steffens, 2007). *Business Spectator* was founded by Australian Independent Business Media Pty Ltd (AIBM), which aims to provide an independent voice for Australian investors and businesses (Kohler, 2012). However, AIBM has been wholly owned by News Corporation since July 2012 (Business Spectator, n.d.). The *Australian Financial Review* (AFR) will also be perused although it is also published by Fairfax Media that publishes *BRW*. AFR articles will be perused through its online website and Factiva. The AFR is one of the top financial and business publications in Australia, with more than 50 years of nationwide circulation (AFR, n.d.).

In addition, an independent, free online source, BoxFreeIT, will be used to monitor the transition of desktop- to cloud-based technology and the development of the latter for small businesses and accounting firms. Articles will be downloaded from <http://www.boxfreeit.com.au>. BoxFreeIT is an Australian-based site that operates in accordance with the MEAA, the code of ethics of the Australian Journalists Association. It was launched in July 2011, and although it was launched mid-way through the seven-year period under review in this thesis, its focus is relevant for this thesis. In addition, articles published in this site typically attract relevant stakeholders such as accountants, bookkeepers, software vendors and associations to comment and they are formally identified. Thus, perusing articles in this site provide rich sources of information from the field.

Professional association media other than *Charter* by the ICAA include *Public Accountant* by the Institute of Public Accountants (IPA) and *In the Black* by the Certified Practicing Accountants in Australia (CPAA). Other than the ICAA, the top three accounting professional associations are the IPA, which focuses on facilitating the SMPs, and the CPAA, which focuses on facilitating professional public accounting practice. *Public Accountant* is only available from August 2011 after IPA, which formerly known as the National Institute of Accountants (NIA), became effective on 11 March 2011 (IPA, 2011, p. 24). *National Accountant*, NIA's media, will be perused through Informit, an online subscription database. *Public Accountant* articles will

be obtained from [www.pubacct.org.au](http://www.pubacct.org.au), the official dedicated website, because it consists of articles from both its hard copy and online journals. *In the Black's* digital versions of its hard copy articles are available on ProQuest, but they are not all available on the website; thus, this and its official dedicated website, [www.itbdigital.com](http://www.itbdigital.com), will be perused.

Government records used in this thesis are those that are relevant to SBR and cloud accounting. These data will be obtained from government websites such as the Treasury ([www.treasury.gov.au](http://www.treasury.gov.au)), the ATO ([www.ato.gov.au](http://www.ato.gov.au)) and SBR ([www.sbr.gov.au](http://www.sbr.gov.au)). Based on the preliminary article review, the Treasury and ATO Media Centre, Australian Tax Practitioner Forum (ATPF) minutes and SBR News provide rich and critical information. In addition, the author will monitor any relevant government records and ask interviewees to refer to any critical records.

The ABS data that will be used are specific to businesses and the accounting industry in Australia. ABS report No. 8165—*Counts of Australian Businesses, including Entries and Exits*—will be used. This report is publicly available and can be obtained directly from the ABS website. The ABS statistical data consist of data on businesses in Australia per sector, including the accounting services industry. This ABS report will be used in conjunction with statistical data obtained from IBISWorld industry report No. M6932—*Accounting Services in Australia*, as well as statistical data obtained from the *BRW* report of the *Top 100 Accounting Firms*. The IBISWorld report is obtained through the university library subscription service, and the *BRW* report is freely available on the *BRW* website.

## **5.4 Results of Data Collection Methods**

This section discusses some results of the data collection methods identified in the previous section. First, the results of the article review, are presented, followed by the results of the CI and discussion forums. Finally, this section concludes with a presentation of the results of the direct observations and additional related documents.

### **5.4.1 Article Review**

#### **5.4.1.1 Testing Search Terms**

The article review began by collecting relevant articles from *BRW* and *Charter*. As identified earlier (see Table 5.1), prior to collecting the relevant articles, a list of potential keywords or search terms was tested to identify the most relevant search terms in order to reduce the risk of relevant articles being missed. The tests were conducted in July 2014 for two reasons. First, the seven-year period being reviewed to the 30 June 2014, had ended. Second, a list of potential search terms was obtained after around two years of reviewing articles from various

sources that were published within the seven-year period around SBR and cloud accounting (i.e., the preliminary article review). SBR and cloud accounting represent digital innovations that commodify traditional accounting work.

The search terms identified were based on keywords used to refer to SBR and cloud accounting. SBR might also be referred to as *online tax*, and cloud accounting might be referred to as *online accounting*. Both SBR and cloud accounting might be referred to as *SaaS*. Therefore, potential search terms for SBR were *standard business reporting* and *online tax* and for cloud accounting were *cloud accounting* and *online accounting*. The search term *software-as-a-service* was also included. These search terms were then run based on Boolean operators that could best capture the relevant articles.

The Boolean operator for the search term *standard business reporting* was "*standard business reporting*" because it would be able to capture information exactly about SBR—that is, generate articles that consist of the term *standard business reporting* in that exact order. The Boolean operator for the search term *online tax* was *online tax*, which could also be run as "*online*" AND "*tax*". It was used to generate greater results than search term "*online tax*" because the search term "*online tax*" generated results limited to the term *online tax* in that exact order while search term *online tax* generated articles with the words *online* and *tax* in any order, and these words did not have to be side-by-side. Similar to *online tax*, the Boolean operator for the search term *cloud accounting* was *cloud accounting*, which could also be run as "*cloud*" AND "*accounting*". This search term generated articles that consisted of both *cloud* and *accounting* in any order, where both words did not have to be side-by-side. This approach was also used for the search term *online accounting* ("*online*" AND "*accounting*"). Search terms *cloud accounting* and *online accounting* were used to capture greater results than the search terms *cloud accounting* and *online accounting* respectively. Finally, the Boolean operator for *software-as-a-service* was "*software as a service*", which generated articles exactly on *software-as-a-service*.

The testing conducted for the search term *online tax* resulted in an error search on the *BRW* website, potentially due to the large number of articles identified. Accordingly, a search was conducted in Factiva. Factiva tends to generate fewer articles than the ones published on the *BRW* website; even so, Factiva generated 308 *BRW* articles. Articles in *Charter*, which were generated through ProQuest, resulted in 181 articles. ProQuest provides the complete range of *Charter* articles and are properly dated than articles published in the ICAA website. Based on manual skimming and in-text searches of both the *BRW* and *Charter* articles, only a small number of the articles were relevant. These articles also had the terms *standard business*

*reporting* and *cloud accounting*. Irrelevant articles discussed the ATO's existing online tax system (i.e., the ELS), which is not based on SBR, and individual online tax returns using *e-tax*. In addition, the search term *online tax* generated articles with the term *online* and *tax* that did not sit side-by-side, resulting in articles that covered many different types of issues that were not relevant to SBR. Accordingly, the search term "*standard business reporting*" picked up relevant articles identified with the search term *online tax*, and other articles with the term *standard business reporting* that were not picked up by the *online tax* search term.

The testing conducted for the search term *online accounting* in *BRW* also resulted in an error search, potentially due to the large number of articles identified. A search in Factiva resulted in 249 *BRW* articles. *Charter* articles generated through ProQuest resulted in 466 articles. A manual skimming and in-text search found three potentially relevant articles from *BRW* and two from *Charter* that would not have been detected using the search term *cloud accounting*. The result was largely not relevant to cloud accounting because articles with search terms *online* and *accounting* that did not sit side-by-side covered a wide range of issues. The search results largely centred on online business operations and included a few discussions on online accounting systems prior to the cloud accounting disruption. Other articles that discussed online accounting in the trend towards cloud-based systems (citing the word *cloud*) would be picked up when searching using *cloud accounting*. Accordingly, the search term *cloud accounting* ("*cloud*" AND "*accounting*") would generate articles relevant to cloud accounting, including those articles not picked up by the search term *online accounting*.

The testing conducted for the search term "*software as a service*" yielded 59 *BRW* articles generated through Factiva and four *Charter* articles generated through ProQuest. Again, based on manual skimming and in-text search, relevant articles would be captured by search terms *standard business reporting* and *cloud accounting*. Potentially only two articles from *BRW* could be relevant and would not be detected by the latter two search terms.

Therefore, the search terms "*standard business reporting*" and *cloud accounting* were the most relevant terms<sup>30</sup>. Based on the search results, these two search terms captured the largest set of relevant articles. This provided evidence that the digital innovation of interest that created a disturbance stemmed from SBR and cloud accounting. Accordingly, a thorough manual review was conducted to identify the relevant articles. This is discussed in the next section.

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<sup>30</sup> Within the period reviewed in this thesis, these search terms are the most relevant. In the future, these search terms may not be the most relevant due to potential changes in the way the community refers to this type of digital innovation.

When testing for search terms, changes in *BRW* and *Charter* were identified. At the end of 2013, *BRW* became a free, online-only publication, providing access to articles published over the past 18 years. Based on the testing, the *BRW* website generally generated more articles than Factiva. Therefore, in this paperless era, where the digital format is increasingly becoming the default option for the exchange of information, *BRW* articles were more accessible (Fisher, 2013). Accordingly, articles published in *BRW* had the potential to capture a larger audience than any other business and financial media.

Conversely, there were fewer *Charter* articles published in 2014 than usual. *Charter* was not published in June 2014 because it was the transition period before the new magazine of the new merged association was released. In October 2013, more than 54,000 members from the ICAA and the New Zealand Institute of Chartered Accountant (NZICA) voted for the amalgamation of these institutes into one institute, CAANZ (CAANZ, n.d.-b). Starting from 1 July 2014, *Charter* was replaced with *Acuity*. This thesis will continue to refer to the ICAA because the discussion in this thesis is based on *Charter* articles, and as of 30 June 2014, the legal structure of CAANZ had not been formally endorsed.<sup>31</sup> In addition, there was no *Business Software & Technology Guide* supplement published in 2013. Therefore, the search terms tested were based on the aforementioned access to *BRW* and *Charter*.

#### 5.4.1.2 Identifying Relevant Articles

*BRW* articles were generated from the *BRW* website based on the search terms “*standard business reporting*” and *cloud accounting*, which were run independently. In total, these search terms yielded 101 (11+90) articles.<sup>32</sup> However, after manually reviewing the content of each article and removing duplicates, only 49 articles<sup>33</sup> were deemed relevant. Irrelevant articles were those that did not discuss the issue and those that only presented the issue in passing, such as a summary of weekly news, a market update or a Q&A section. Therefore, only news and opinion articles written on the issue were identified as relevant articles. The issue of the commodification of traditional accounting work captures discussion on the development of SBR and its implications for all stakeholders (e.g., government, businesses and accountants), as well as the growth and implications of cloud-based technology not just for SMEs, but also for reporting practitioners and business advisors.

*Charter* articles were generated from ProQuest based on the search terms “*standard business reporting*” and *cloud accounting*, which were run independently. The search terms yielded 75

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<sup>31</sup> The legal structure was formally implemented on 31 December 2014 after New Zealand Parliament passed the Accounting Infrastructure Reform Bill on 30 October 2014 and the Royal Charter and By-laws for CAANZ were approved and signed on 26 November 2014 (CAANZ, n.d.-b).

<sup>32</sup> A search in Factiva generated 12+66 articles.

<sup>33</sup> Results from both search terms were combined because relevant articles were generated by both search terms.

(27+48) articles. After manually reviewing the content and removing duplicates, only 34 articles were deemed relevant. Search results generated from searching scanned pdfs of the *Business Software & Technology Guide*, the *Charter Supplement*, yielded 11 (2+9) articles. As discussed in Chapter 5, the *Charter Supplement* must be obtained directly from the ICAA because it is not available in ProQuest. After manually reviewing each article and removing duplicates, only eight articles were deemed relevant. Articles identified as relevant include standard *Charter* articles and institute updates or professional news and technical updates. Professional news and technical updates, albeit brief, were included because they represent news from the ICAA and provide highlights or a focused discussion on critical issues for the profession. Articles identified as irrelevant were those that did not discuss the issue or that only mentioned the search terms but did not discuss the issue in detail. Editors' notes and Letters to the Editor were also excluded.

Therefore, based on the search terms *standard business reporting* and *cloud accounting*, 91 relevant articles were collected in total: 49 from *BRW* and 42 from *Charter* (see Appendix 6.1, pages 256-267). Although *standard business reporting* and *cloud accounting* generated the most relevant set of articles over the timeframe, some relevant articles may not have been captured by these search terms. This is a disadvantage of doing an article review based on keywords or search terms (Hoffman, 1999). However, as discussed earlier, an analysis to identify the most relevant search terms was conducted prior to searching for articles. The analysis found that the search terms "*standard business reporting*" and *cloud accounting* were the two most relevant search terms.

In total, 91 articles were collected from *BRW* and *Charter* over three stages throughout the seven-year period (see Table 5.3). The rest of the results of the article review are presented in Chapter 6—that is, to identify an emergent field in professional public accounting practice (RQ1) by investigating whether there was an increase in the extent to which certain organisations interact (RQ1a), an increase in the information load they shared (RQ1b) and the development of a mutual awareness that they were involved in a common debate (RQ1c).

**Table 5.3: Relevant Articles Identified from the Article Review**

Search Term <sup>1</sup>	Stage 1			Stage 2			Stage 3			TOTAL
	<i>BRW</i>	<i>Charter</i>	Total	<i>BRW</i>	<i>Charter</i>	Total	<i>BRW</i>	<i>Charter</i>	Total	
standard business reporting	5	12	17	2	3	5	0	1	1	23
cloud accounting	2	1	3	7	10	17	33	15	48	68
<b>TOTAL</b>	<b>7</b>	<b>13</b>	<b>20</b>	<b>9</b>	<b>13</b>	<b>22</b>	<b>33</b>	<b>16</b>	<b>49</b>	<b>91</b>

<sup>1</sup> Results from both search terms are not independent as there are articles that consist of both search terms. Articles were classified under the more dominant search term.

In conducting the article review, online or electronic articles were downloaded using Evernote Web Clipper and saved into Evernote to preserve the original format as of the viewing date. Hard copy journal articles were scanned and uploaded to Evernote.

#### 5.4.2 Convergent Interviewing

As explained earlier, CI was conducted tangential to an ARC project. CI is designed to accommodate projects where multiple interviewers are involved. The nature of an under-researched area requires expertise in the subject matter that is often best achieved by combining the knowledge or expertise of multiple interviewers. Multiple interviewers can document or identify priority issues when converging over a series of interviews. This interview process is iterative and involves ongoing refinement where interviewers engage in, as indicated earlier, constant comparing and contrasting as part of the reflexive process to continuously seek emerging interpretations from early interviewers in subsequent interviews.

In total there were four interviewers: one was the author and the other three were professors with different areas of expertise (see Table 5.4). However, CI may be conducted by a single interviewer if the person has the breadth of knowledge or training in the subject matter (Dick, 1990). As the only PhD student, the author was given time to ask questions in relation to her thesis. The author also has a formal education and work experience in accounting and auditing information systems, including *Certified Information System Auditor (CISA)*, *XBRL Foundation Certification* and *Chartered Accountant*. Therefore, the author conducted the research by herself, but she also benefited from discussions with the other interviewers.

**Table 5.4: List of Interviewers**

Interviewers	Area of Expertise
Interviewer 1	Audit and Corporate Governance
Interviewer 2	Public Sector Accountability and Governance (Accounting)
Interviewer 3	Information Systems
Interviewer 4 (the author)	Accounting and Auditing Information Systems

The issues identified for the ARC project and the PhD project were different because the interviewers sought to answer different questions. The ARC project focused on the development and implementation of SBR in the private and public sectors. This thesis focuses on the impacts of the digital innovation, SBR and cloud accounting, on professional public accounting practice. However, CI was largely designed to address both the ARC project and the PhD project.

CI started with the development of preliminary questions. Since the SBR team in government agencies, at that time at the Treasury and the ATO, were identified as the starting point,



preliminary questions were designed based on these potential interviewees. Preliminary questions also represented standard questions to serve both the ARC project and the PhD project. These questions were developed to encourage interviewees to share their story about general SBR/XBRL knowledge and SBR development and implementation (as explained in Chapter 2, SBR is an XBRL-based reporting standard). These questions were also developed to elicit interviewees' background information and their views towards SBR, and to elicit other factors that influence the implementation of SBR, which involves both strengths and weaknesses, or positive and negative aspects. Additional probing questions for the PhD project focused on the extent of the commodification to traditional accounting work, covering aspects such as the role of software vendors, the implementation of SBR and the development of cloud accounting in affecting the work of professional public accounting practice.

Preliminary questions were designed based on informal discussions with a subject-matter expert in this area, the previous director of XBRL Consortium Australia, as well as based on the preliminary article review and the literature review of prior studies on XBRL and SBR (Azam & Taylor, 2011; Doolin & Troshani, 2007; Locke, Lymer, & Lowe, 2010; Productivity Commission, 2012; Troshani & Doolin, 2007; Troshani & Lymer, 2010; Troshani & Rao, 2007; Zakowska et al., 2012). These preliminary questions were also iteratively discussed among the interviewees with different backgrounds. The questions were then developed iteratively as the interviews proceeded and continuously adjusted throughout the project to achieve convergent understanding of issues that the interviewees considered priority concerns (see Appendix 5.1, pages 162-166).

For the PhD project, as the interviews proceeded, the preliminary questions were refined and adapted according to the types of interviewees that were identified, as they needed to be interviewed in more detail. Therefore, preliminary questions were expanded into another four sets for software vendors, general accountants (applies to accountants in various roles, e.g., in public practice, in businesses, in professional/technical associations and in consulting firms), regional (public) accountants and bookkeepers (see Appendix 5.1, pages 162-166). These questions were refined as new issues were raised by interviewees to identify disagreements and agreements over the priority issues. The interviewees were encouraged to enlighten the interviewers about their knowledge and experience on the issue. Therefore, the list of questions often served as a check-point; not all questions were directly asked because the interviewees had already provided expected responses when responding to other questions.

Interviewees were identified based on the snowballing technique. The SBR team provided a preliminary understanding of the area and referred to other people or experts who could be

interviewed. They also provided advice on different types of stakeholders who should be interviewed, as well as relevant reports and articles to be perused and relevant conferences or discussion forums to be attended. Referral and advice on further sources of data were also obtained from subsequent interviewees.

A total of 33 interviews with 38 interviewees were conducted during the period of November 2012 to October 2013. These interviews involved participants from six states and territories in Australia: Victoria (16), New South Wales (seven), Australia Capital Territory (seven), South Australia (one), Queensland (one) and Western Australia (one). Victoria, New South Wales and the Australian Capital Territory topped the list because many headquarters and government agencies are located there.

Of these 33 interviews, 29 were conducted for the ARC Project. As additional information was needed for the PhD project, but not required for the ARC project, four supplementary interviews were conducted for the PhD project. All except seven interviews were attended by at least two interviewers. Those seven interviews were only attended by the author, mainly because they were more relevant to the thesis (accountants and bookkeepers). The author attended all 33 interviews.

Consent forms were obtained from all interviewees, and confidentiality and anonymity procedures were explained prior to each interview. Each interview was audio recorded, and before being transcribed, the audio files were edited to remove opening and closing informal conversation. Based on the edited audio files, the average interview session was 55 minutes and the range was 19 minutes to 1 hour 43 minutes. The average length of the transcribed edited audio files was 21 pages (typed in Calibri font single space) and the range was 7 to 43 pages. Of the 33 interviews, 26 were conducted face-to-face and seven were conducted via video/teleconference. The interviews were transcribed by the author and by a professional transcription service. Each interviewee's name was de-identified in the transcripts, except for their positions. The transcripts were uploaded to NVivo for content analysis based on the frameworks discussed in Chapter 4. Table 5.5 on the following page presents details of each interview: the types of interviewees, the number of interviews conducted for each type, the coded identification of each interviewee (the coded interview number and length of each interview in hh:mm format) and lastly the total number of interviewees for each type.

**Table 5.5: List of Interviewees**

Types of Interviewees	Number of Interviews	Interviewees (Interviews, Length)	Number of Interviewees
<b>Accountant<sup>1</sup></b>	<b>13</b>		<b>12</b>
<i>Big 4</i>	3	P13 (I11, 1:06), P23 (I20, 0:20), P26 (I23, 0:57)	3
<i>Next Big 8</i>	3	P12 <sup>2</sup> (I10,1:01) (I15; 0:41), P25 (I22, 0:58)	2
<i>Mid-tier firm</i>	1	PP3 <sup>3</sup> (S3, 0:32)	1
<i>SMP</i>	6	P11 (I9, 0:38), P18 (I14, 0:58), P20 (I17, 0:54), P21 (I18, 0:57), P30 (I27, 0:52), P31 (I28, 0:54)	6
<b>Bookkeeper</b>	<b>3</b>	PP1 <sup>3</sup> (S1, 0:42), PP2 <sup>3</sup> (S2, 0:56), PP4 <sup>1,3</sup> (S4, 0:39)	<b>3</b>
<b>Consultant</b>	<b>2</b>		<b>2</b>
<i>XBRL specialist</i>	1	P10 <sup>1</sup> (I8,1:14)	1
<i>PSF specialist</i>	1	P29 <sup>1</sup> (I26, 0:19)	1
<b>Non-SME</b>	<b>2</b>	P22 <sup>1</sup> (I19, 0:38), P27 <sup>1</sup> (I24, 0:30)	<b>2</b>
<b>Government Agency</b>	<b>1</b>	P8 <sup>1</sup> (I6, 1:01)	<b>1</b>
<b>Professional/Technical Body</b>	<b>2</b>		<b>2</b>
<i>Bookkeeping</i>	1	P9 <sup>1</sup> (I7, 0:55)	1
<i>Tax</i>	1	P19 <sup>1</sup> (I16, 0:54)	1
<b>SBR Program</b>	<b>6</b>		<b>7</b>
<i>Technical/Development team</i>	2	P1 (I1, 1:20), P2+P3 (I2, 1:43)	3
<i>Legal team</i>	1	P4+P5 (I3, 0:56)	2
<i>Strategic team</i>	3	P6 <sup>2</sup> (I4, 1:20) (I13,1:04), P7 (I5, 1:19)	2
<b>Vendor—Accounting &amp; Business Software for SMEs</b>	<b>4</b>		<b>9</b>
<i>2 incumbent<sup>4</sup></i>	2	P24 <sup>1</sup> (I21, 1:01), P28 <sup>1</sup> (I25, 0:57)	2
<i>1 start-up<sup>5</sup></i>	1	P14+P15+P16+P17 (I12, 1:15)	7
<i>Xero</i>	1	P32+P33+ P34 <sup>1</sup> (I29, 0:56)	
<b>TOTAL</b>	<b>33</b>		<b>38</b>

<sup>1</sup>Accountant (i.e., with an accounting degree, CA and/or CPA qualification)

<sup>2</sup>Interviewed twice

<sup>3</sup>Supplementary interview

<sup>4</sup>Incumbent vendors are dominant vendors in the SME market that have established a client base prior to Xero released its product in February 2007. There are four incumbent vendors: MYOB, Reckon, Intuit and Saasu. These vendors also provide the practice software for accounting practitioners.

<sup>5</sup>Start-up vendors are new vendors that released its first product after Xero was launched (i.e., after February 2007)

During the CI, the author made field notes to highlight the agreements and disagreements (comparing and contrasting) between different interviewees of the same and different types. These field notes were helpful to identify when new priority issues were raised and to better refine the questions for subsequent interviews. Field notes were recorded in Evernote. Other supporting documents available online—such as the LinkedIn pages of the interviewees as well as their formal websites to support the content of the interviews—were filed in Evernote using

Evernote Web Clipper to preserve the original form, the viewing or download date was also recorded.

Although the CI technique suggests that contrasting and comparing should be done by multiple interviewers who may conduct interviews separately, this might not always be feasible. In this case, the author conducted her project individually but the work was tangential to the ARC project and she was allowed to use the ARC data that were relevant to her project. However, as indicated earlier, she benefited from discussions with other interviewers. Discussions between interviewers were primarily undertaken to ensure the distinction between the PhD project and the ARC project, as these projects sought to answer different research questions.

CI was finally concluded once convergence was achieved and disagreements over the priority issues were explained. Since these interviews were conducted almost in parallel with the preliminary article review, discussion forums and the collection of other evidence, the author could use the data to identify that the questions had been exhausted and saturation was achieved.

#### **5.4.3 Discussion Forums**

These forums were identified mainly from CI—that is, recommended by interviewees—but also from the preliminary article review, as the author conducted an iterative assessment of the results of the CI and preliminary article review. The author attended these forums either in person or online in real time. Webcasts were available for attendants after the forum. Table 5.6 lists the webcasts obtained.

In attending the discussion forums, the author was part of the audience, but her presence as a researcher was not known by the participants or discussants in the discussion forum. From an ethical perspective, formal consent was obtained by the organisers to use the data for this thesis prior to obtaining the webcasts. As the discussion forums were held in limited public space, there was a fee to attend each forum.

The data collected were uploaded into NVivo for content analysis based on the frameworks discussed in Chapter 4, which are discussed in detail in Chapter 6. The length of the discussion forums was 1–2 hours, with an average time of 103 minutes. One discussion forum was transcribed by a professional transcription service, and the rest were uploaded as video files.

**Table 5.6: List of Webcasts of Discussion Forum**

Discussion Forums	Event	Place and Date	Participants	Number of Participants
<b>DF1: CEO Debate &amp; Forum</b>	Accountants' Technology Showcase Australia (ATSA) Smithink 2020	Brisbane, 14 October 2013 Mode of attendance: in person	Vendor—Accounting & Business Software for SMEs	<b>5</b>
			<i>Incumbent</i>	3
			<i>Existing</i> <sup>1</sup>	1
			<i>Xero</i>	1
			Vendor—Accounting Practice Platform	<b>3</b>
<b>DF2: Practitioner Open Forum</b>	Accountants' Technology Showcase Australia (ATSA) Smithink 2020	Brisbane, 15 October 2013 Mode of attendance: in person	Accountant	<b>7</b>
			<i>Big 4</i>	1
			<i>Mid-tier Firm</i>	3
			<i>SMP</i>	3
			Vendor—Accounting Practice Platform	<b>1</b>
<b>DF3: How to Thrive in a Post- Compliance World</b>	Future of Accounting Forum—Digital First and the Institute of Public Accountants	Sydney, 2 April 2014 Mode of attendance: in person	Accounting Professional Association	<b>1</b>
			SMP	<b>2</b>
			Vendor—Business & Accounting Software for SMEs (Incumbent)	<b>2</b>
<b>DF4: Virtual CFO</b>	Future of Accounting Forum—Digital First and the Institute of Public Accountants	Melbourne, 30 July 2014 <sup>2</sup> Mode of attendance: online real-time	Accounting Professional Association	<b>1</b>
			Accountant	<b>2</b>
			<i>Big 4</i>	1
			<i>SMP</i>	1
			Vendor—Accounting & Business Software for SMEs (Incumbent)	<b>2</b>

<sup>1</sup> Existing vendors are vendors that are not the incumbent, but that were already operating in Australia prior to Xero was launched (i.e., before February 2007). This existing vendor's main target was not on the SME market although their software can be used by SMEs and that their practice software can be used by accounting practitioners for SMEs. This type of vendor is becoming interested in the SME market.

<sup>2</sup> The last discussion forum was conducted after 30 June 2014, but it was promoted more than a month prior to the date. It was the extension of the previous forum conducted by the same organisers. Accordingly, it was considered within the review period.

#### **5.4.4 Direct Observation**

Data were collected from attending conferences and forums in person. Data comprise of the results of the observation of the situation or the field, informal discussions with the organisers and participants of the conferences/forums and a review of presentation materials, handouts and published participants' list. These conferences and forums were identified based on the result of CI—that is, recommended by interviewees—or based on the preliminary article review. The result of direct observations is used as triangulation for analysis in Chapter 6. Direct observations were made by the author. Direct observations were recorded in Evernote.

Direct observations were conducted based on a different stance within a continuum of complete observer and participant observer (Ahrens & Chapman, 2006; Blackstone, 2012). This means that there were instances where the author introduced herself to the participants and audience of the discussion forums and conferences. However, there were instances where the author did not introduce herself, thereby becoming a complete observer.

Table 5.7 lists the conferences and forums that were attended and presents a summary of the observations.

**Table 5.7: Summary of the Result of Direct Observations**

Title and Organisers	Place and Date	Supporting Documents	Researcher's Position	Summary of Observations
<p><b>DO1:</b>  <b>ICB 2013 National Conference: Today's Bookkeeping Towards Tomorrow—The Institute of Certified Bookkeepers (ICB)</b></p>	<p>Melbourne , 6 March 2013</p>	<p>Conference and presentation handout</p>	<p>The Director of the ICB recognised the presence of the author. The author also introduced herself as a researcher before starting an informal discussion with other participants.</p>	<ul style="list-style-type: none"> <li>✓ Majority of bookkeepers who attended were females.</li> <li>✓ The main issue being discussed was how to maintain level of fee that some of the work became automated or performed by the software. The focus was how to expand the service offering because the cloud world enables them to do that. However, the importance not to upset accountants due to stepping on their toes and the need to maintain impeccable relationship with them were highlighted.</li> <li>✓ Based on informal chat, many have adopted or very eager to adopt SBR and cloud accounting. Time saving due to efficiency and increased accessibility to clients was main issues that attracted bookkeepers. They were reluctant to let clients know about the time saved but anticipated that soon clients would know. Compensate for the loss of income, some would provide additional advisory services or interpretation of financial data, some would try to gain more clients and some would even negotiate with accountants to take over some work that have become highly automated such as BAS lodgement and encourage accountants to do more high-level services. Such preferences potentially depend on the knowledge and experience thus confidence of bookkeepers to provide additional advisory services.</li> <li>✓ Three incumbent software vendors for business and accounting software for SMEs, Xero and the leading SBR software vendors were present (conference exhibitors).</li> </ul>
<p><b>DO2:</b>  <b>Xero Hour—RSM Bird Cameron</b></p>	<p>Canberra, 10 September 2013</p>	<p>Invitation and Offering e-mails</p>	<p>The author did not introduce herself to the presenters and other participants.</p>	<ul style="list-style-type: none"> <li>✓ The workshop was organised by one of the Next Big 8, but conducted by Xero representatives.</li> <li>✓ Xero representatives were two accountants who each also run their own accounting firms.</li> <li>✓ This workshop consists of several repeat sessions to cater people with different time availability. The organiser is an official partner of Xero.</li> <li>✓ This workshop potentially aimed to attract SMEs to attend because post to attending, a 3-month free subscription for converting to Xero with the organiser, was offered to businesses who attended.</li> <li>✓ This free workshop also attracted other practitioners. This is because many of attendants in this session were bookkeepers, tax agents and SMPs (based on them identifying themselves during Q &amp; A session).</li> </ul>

Title and Organisers	Place and Date	Supporting Documents	Researcher's Position	Summary of Observations
<b>DO3: National Partner Conference 2013: Engage—Reckon</b>	Melbourne , 20 September 2013	Conference Handout	The author introduced herself and explained her research aim to other participants before starting an informal discussion. One of the Reckon Director was aware of her presence.	<ul style="list-style-type: none"> <li>✓ This conference is only for Reckon partners. However, this time was made free for all who were interested to attend. Reckon wanted to promote their new cloud accounting, ReckonOne, which was still in development at that time.</li> <li>✓ Majority of attendants were bookkeepers (based on a speaker's request for attendants to raise hands whether they were accountants, tax agents or bookkeepers).</li> <li>✓ The main issue being discussed was around the need to move into the post-compliance world, which was referred to as the future of accounting.</li> <li>✓ The keynote speaker was the President of US-based firm that focuses in helping accountants and small business work together through the use of innovative tools to achieve higher efficiencies and profits.</li> <li>✓ Sessions on the upcoming Reckon One cloud accounting were attended by the majority of attendants rather than sessions on how to create an integrated on-the cloud practices with Reckon and its partners.</li> </ul>
<b>DO4: Accountants' Technology Showcase Australia (ATSA)—Smithink 2020</b>	Brisbane, 14–15 October 2013	Conference and Presentation Handout, Published Attendants' List	No one was aware of the author's presence as a researcher, except for a few participants who knew the author prior to the event.	<ul style="list-style-type: none"> <li>✓ Based on the published attendants' list, the majority of attendants were SMPs followed by Mid-tier practices and Software Vendors and consulting firms. Only one Big 4 attended.</li> <li>✓ The government SBR team attended and gave presentation about SBR and its implementation plan.</li> <li>✓ Three incumbent accounting and business software vendors for SMEs became the sponsor as well as the leading SBR software vendor. The platinum sponsor was not Xero but one of the incumbent vendors with the largest market share. Xero was one of the gold sponsors. SBR (government) also became the sponsor.</li> <li>✓ The theme of the conference was the need for professional public accounting practice to revolutionise their practice, to differentiate themselves from others by leveraging technology in the increasingly digital word. Accordingly the mains issue being discussed were around how to survive, especially focusing on how to increase profitability using the existing technology and how to redefine relationship with clients, service offerings and even firms' structure.</li> <li>✓ The organiser is a consulting firm focusing on accounting firms, which often referred as the business coach for accounting firms.</li> <li>✓ Two discussion forums were held in this conference.</li> </ul>



Title and Organisers	Place and Date	Supporting Documents	Researcher's Position	Summary of Observations
<p><b>DO5:</b>  <b>Future of Accounting Forum: How to thrive in a Post-Compliance World—Digital First and the Institute of Public Accountants</b></p>	<p>Sydney,  2 April  2014</p>	<p>Conference  Handout</p>	<p>The author introduced herself and explained her research aim to other participants before starting an informal discussion.</p>	<ul style="list-style-type: none"> <li>✓ Based on informal chat, attendants consist of SMPs, bookkeepers and tax agents looking into expanding or redesigning their firm as well as software vendors providing services for redesigning practices on the cloud and to provide specific on-the-cloud service for accounting firms. One of the attendants that the researcher spoke to was an accountant working in Big 4 attended on behalf of her own firm, a consulting firm.</li> <li>✓ The main issues discussed were around how to survive in the increasing changing and competitive landscape, what area to expand services to, what factors they need to focus on thereby the need to move towards post-compliance era.</li> <li>✓ Two incumbent accounting and business software vendors for SMEs who in ATSA 2013 Conference held earlier did not present their cloud accounting product became the discussants in this forum. However, one of the incumbent vendors was involved in ATSA 2013 Conference as standard sponsor and as a discussant in one of the forums, discussing their accounting practice software.</li> </ul>

### 5.4.5 Document Review

The document review resulted in diverse sources of data that were typically accessed through the official websites of relevant organisations. A website consists of information presented on website pages and publications and media such as articles or newsletters, reports, public speeches, video case studies and media releases. The government’s website typically includes consultations and reviews, as well as submissions from the public. Non-government websites typically include comment sections and blog entries that represent the writers’ opinion, either from the organisations’ representatives or from the public.

Table 5.8 lists archival data sources used in this thesis other than *BRW* and *Charter*. Again, these sources were not included in the article review as they would distort the capacity to accurately observe change over that seven-year period reflected in the network maps. Details of the data sources used can be found in the References section.

**Table 5.8: Summary of Other Archival Data**

Data Source	Period	Obtained From
<b>Business Media</b>		
<i>The Australian</i>	1 July 2007 to 30 June 2015	<a href="http://www.theaustralian.com.au">www.theaustralian.com.au</a> Factiva
<i>The Australian Financial Review</i>	1 July 2007 to 30 June 2015	<a href="http://www.afr.com">www.afr.com</a> Factiva
<i>Business Spectator</i> (including <i>Technology Spectator</i> )	1 October 2007 to 30 June 2015	<a href="http://www.businessspectator.com.au">www.businessspectator.com.au</a> <a href="http://www.businessspectator.com.au/technology">www.businessspectator.com.au/technology</a>
BoxFreeIT (Digital First) <sup>1</sup>	1 July 2011 to 30 June 2015	<a href="https://www.digitalfirst.com/">https://www.digitalfirst.com/</a>
<b>Accounting Professional Media</b>		
<i>In the Black</i> , CPAA official magazine <sup>2</sup>	1 July 2007 to 30 June 2014	<a href="http://www.intheblack.com">www.intheblack.com</a> ProQuest
<i>Public Accountant</i> , IPA official journal <sup>3</sup>	1 August 2011 to 30 June 2014	<a href="http://www.publicaccountant.org.au">www.publicaccountant.org.au</a>
<b>Government Websites, Publication and Media and Consultations and Reviews</b>		
SBR website (all content)	All relevant	<a href="http://www.sbr.gov.au">www.sbr.gov.au</a>
Relevant Treasury publications and media, as well as consultations and reviews	1 July 2007 to 30 June 2015	<a href="http://treasury.gov.au">http://treasury.gov.au</a> <a href="http://ministers.gov.au">http://ministers.gov.au</a> <a href="http://strongersuper.treasury.gov.au">http://strongersuper.treasury.gov.au</a>
Options Paper: Use of SBR for Financial Reports	30 November 2012	<a href="http://www.treasury.gov.au/ConsultationsandReviews-/Consultations/2012/SBR-Options-Paper">http://www.treasury.gov.au/ConsultationsandReviews- /Consultations/2012/SBR-Options-Paper</a>
Options Paper Submissions	2012–2013	<a href="http://www.treasury.gov.au/ConsultationsandReviews-/Consultations/2012/SBR-Options-Paper/Submissions">http://www.treasury.gov.au/ConsultationsandReviews- /Consultations/2012/SBR-Options-Paper/Submissions</a>
Relevant ATO publications and media <sup>4</sup>	1 July 2007 to 30 June 2015	<a href="http://www.ato.gov.au/media-centre">www.ato.gov.au/media-centre</a>
ATO Tax Practitioner Forum (ATO Tax Practitioner Advisory Forum) <sup>5</sup> Minutes of Meeting	1 July 2007 to 30 June 2014	<a href="http://www.ato.gov.au/General/Consultation/In-detail/Stewardship-committees---minutes/ATO-Tax-Practitioner-Advisory-Group-(ATPAG)">www.ato.gov.au/General/Consultation/In- detail/Stewardship-committees---minutes/ATO-Tax- Practitioner-Advisory-Group-(ATPAG)</a>
Productivity Commission	15 May 2012	<a href="http://www.pc.gov.au/inquiries/completed/coag-">http://www.pc.gov.au/inquiries/completed/coag-</a>

Data Source	Period	Obtained From
Report, Volume 2, Chapter 6, Standard Business Reporting		<a href="#">reporting-busines-vet/report#contents</a>
Productivity Commission Report Submissions	2011–2012	<a href="http://www.pc.gov.au/inquiries/completed/coag-reporting-busines-vet/submissions">http://www.pc.gov.au/inquiries/completed/coag-reporting-busines-vet/submissions</a>
All relevant government websites	1 July 2007 to 30 June 2015	Listed in references.
<b>Industry Reports &amp; Statistics</b>		
BRW 'Top 100 Accounting Firms'	2008, 2009, 2010, 2011, 2012, 2013 <sup>4</sup>	BRW 3-9 September 2008 [hard copy] BRW 2-8 September 2009 [hard copy] <a href="http://www.brw.com.au/p/sections/focus/-top_accounting_firms_13Xp3LIKN85AghhF34IIWL">http://www.brw.com.au/p/sections/focus/-top_accounting_firms_13Xp3LIKN85AghhF34IIWL</a> <a href="http://www.brw.com.au/p/sections/features/-top_accounting_firms_RgKRDLbCxMLDL6eUhuyfl">http://www.brw.com.au/p/sections/features/-top_accounting_firms_RgKRDLbCxMLDL6eUhuyfl</a> <a href="http://www.brw.com.au/lists/top-100-accounting-firms/2012/">http://www.brw.com.au/lists/top-100-accounting-firms/2012/</a> <a href="http://www.brw.com.au/lists/top-100-accounting-firms/2013/">http://www.brw.com.au/lists/top-100-accounting-firms/2013/</a>
ABS report No. 8165, Counts of Australian Businesses, including Entries and Exits, June 2009 to June 2013	1 July 2009 to 30 Jun3 2013	<a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0">http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0</a>
ABS report No. 8165, Counts of Australian Businesses, including Entries and Exits, June 2009 to June 2013—Accounting Services <sup>6</sup>	1 July 2009 to 30 Jun3 2013	Purchased from ABS through its information consultancy services.
IBISWorld industry report No. M6932, <i>Accounting Services in Australia</i> <sup>6</sup>	November 2013	Obtained from the university library subscription database.
<b>All Relevant Websites, Blogs and Publications and Media of All Actors involved</b>		
Xero websites, including blogs and media releases <sup>7</sup>	All relevant	<a href="https://www.xero.com/au">https://www.xero.com/au</a> <a href="https://www.xero.com/blog/topic/australia/">https://www.xero.com/blog/topic/australia/</a> <a href="https://www.xero.com/au/about/media/">https://www.xero.com/au/about/media/</a>
ARC project minutes of meeting and supporting document	2012-2013	Private data
All relevant websites of actors identified, including reports, media releases, blogs etc.	1 July 2007 to 30 June 2015	Cannot be disclosed due to privacy reason.

<sup>1</sup> At the time of writing in 2015, BoxFreeIT changed its name to Digital First in July 2014. All materials from the legacy website can be viewed in the new website.

<sup>2</sup> At the time of writing in 2015, the official website of *In the Black* had changed to [www.intheblack.com](http://www.intheblack.com), and not all old materials had been transferred to the new website. Thus, many articles could no longer be accessed through this new website. However, all relevant data have been downloaded.

<sup>3</sup> The media preceding *Public Accountant*, *National Accountant*, did not generate any relevant articles.

<sup>4</sup> At the time of writing in 2015, the ATO website had been updated; thus, data for previous years could no longer be accessed. However, all relevant data had been downloaded.

<sup>5</sup> ATPF later changed to ATPAG in 2015 and the ATO website's address also changed and its content was updated. At the time of writing the thesis, old data could no longer be accessed. However, all relevant data had been downloaded.

<sup>6</sup> Latest data that can be used in conjunction with other quantitative data as of 30 June 2013 as there were no more *BRW* reports after that.

<sup>7</sup> At the time of writing in 2015, media releases prior to 2012 are no longer available. However, all relevant data had been downloaded.

## APPENDIX 5.1: List of Questions

This section lists four sets of questions for CI. However, since the approach was to let the interviewees tell their stories, often many of the questions did not have to be asked. The questions served as a check-list and not all could be asked due to time limitation.

### Preliminary Questions

1. Background:
  - Position
  - Why taking this position (interested, so asking to be transferred **OR** being transferred?)
  - Education
2. The current state of this SBR program and future direction?
3. Who are driving this implementation of SBR?
4. Who is(are) the key player(s) that can influence business to adopt/not adopt?
5. What would have been key points in this adoption or non-adoption?
6. What area do you think that is important for us to explore or need to be further explored?
7. What are the key learning points to date from this SBR implementation.
8. How do you compare SBR Australia with other XBRL-based initiatives in other countries, e.g. in UK, US, the Netherlands?
9. Is it going to be adopted by business in general without the government mandating it? Any possible mandate in the future? When do you think the tipping point will be?
10. Taxonomy development, is it ongoing or already stable?
  - Who are involved in the taxonomy development?
  - Who provides assurance on this taxonomy?

### Question for Software Vendors

1. Would you please detail your education background and working experience?
2. When did you first hear about Standard Business Reporting (SBR)?
3. What made you become involved with SBR?

### From your perspective as a software developer:

4. What is the current state of SBR implementation or adoption in Australia? What do you expect the future direction of SBR will be and how might this have an impact on your product development and strategies?
5. What do you consider to be the government's role in the implementation of SBR in Australia?
6. Who should be driving this implementation of SBR in Australia?
7. The importance of the role of professional bodies in the implementation of SBR in Australia?
8. Who/what is/are the key player/point(s) that can influence businesses to adopt/not adopt?
9. What are the initiatives that need to be undertaken to increase businesses' awareness of SBR?
10. What is your view about cloud accounting?
11. What is its role for accountants and businesses? Does it help with SBR implementation?

Based on your experience to date:

12. What specific benefits did your company hope to gain by providing SBR software products/cloud accounting?
13. With regard to the process of developing SBR software/cloud accounting, what have been the key enablers in this process?
14. With regard to the process of developing your SBR software/cloud accounting, what have been difficulties or hindrances in the process? Is accounting knowledge required in developing the product and are accountants involved?
15. Do you have other insights into the SBR product development process?

#### **Questions for Accountants (General)**

1. Would you please detail your education background and working experience?

If a public accountant, go to Question 2. Otherwise, go straight to Question 8.

2. Do you work as a sole accountant or in an accounting firm (Small-Medium Practices = 1-5 partners (including sole)/Mid-tier = 5+ partners/Big-4)?
3. What kind of services do you do and/or your Division offer for clients?
4. Would you please explain to us your work as an accountant providing those services?
5. How often do you interact with your clients in a year? What is the size of your clients (small-medium businesses/large businesses) and how many clients do you deal with in a year?
6. Do you have to deal with other professionals working with your clients such as software vendors or tax agents or bookkeepers?
7. What kind of software do you use to do your work for your clients?

8. Have you ever heard of Standard Business Reporting (SBR)? Where and what have you heard about SBR?

If the answer to Question 8 is "Yes", go to Question 9. Otherwise go straight to Question 10.

9. What do you think about the current state of SBR implementation in Australia? (If slow take up, then: What needs to be done to ensure successful implementation of SBR in Australia?)
10. Do you use SBR-enabled software? Examples of SBR-enabled software are: GovReports (Impact Management Group), GovDirect (Deloitte Digital, MYOB official partner) and GovConnect (Reckon).

If the answer to Question 10 is "Yes", go to Question 11. Otherwise go straight to Question 13.

11. Does SBR-enabled software change the way accountants work?
12. Does SBR-enabled software help reporting and ensuring compliance to government requirements?
13. Have you heard about or do you use accounting software with cloud computing technology/cloud accounting?

If the answer to Question 13 is “Yes”, go to Question 14. Otherwise go straight to Question 17.

14. Does cloud accounting change the way accountants work or interact with clients?
15. Does cloud accounting change the focus of services offered to clients? (If not: Why it does not change? If yes: What kind of services now you prefer to offer to businesses?)
16. When you use cloud accounting for some of your clients, do you interact with other professionals working for your clients via cloud?
17. What is the difference of working as an accountant 5 years ago and now as technology has become more advanced? Any particular latest technology that you notice makes your work as an accountant more efficient?
18. Do you expect that accountants’ role to change in the future as technology advances?
19. Based on your experience, do you have preference on the type of accounting software? If yes, why you like one accounting software better than the other?
20. Who (software vendors/bookkeepers/accountants/clients) have more influence over the type of software that businesses (clients) use?

#### **Questions for Regional Public Accountants**

1. Would you please detail your education background and working experience?
2. Would you please tell us how accountants in regional area are working with clients or businesses? What kind of services you offer and what are specific only to regional areas?
3. How often do you interact with your clients in a year?
4. Do you have to deal with other professionals working with your clients such as software vendors and bookkeepers?
5. Have you ever heard of Standard Business Reporting?
6. Do you use SBR-enabled software such as GovReports, GovDirect or GovConnect?

If the answer to Question 6 is “Yes”, go to Question 7. Otherwise go straight to Question 9.

7. Does SBR-enabled software affect the way accountants work?
8. What and who encourage accountants to use SBR-enabled software? Is it because you or your firm see the benefits of it?
9. Have you heard about or do you also use accounting software with cloud computing technology/cloud accounting?
10. Does cloud accounting affect the way accountants work?

If the answer to Question 9 is “Yes”, go to Question 11. Otherwise go straight to Question 15.

11. Does it change your business focus? (If not: Why it does not change? If yes: What kind of services now you prefer to offer to businesses?)
12. What and who encourage accountants to use cloud accounting? Is it because you or your firm see the benefits of it?
13. When you use cloud computing for some of your clients, do you interact with the clients’ bookkeepers via cloud?
14. What is the difference of working with bookkeepers before and now as technology has become more advanced.

15. Is the situation between bookkeepers and accountants different in capital cities and regional areas?
16. What kind of bookkeepers that accountants prefer to work with? What kind of competence do accountants expect from bookkeepers?
17. Are bookkeepers that you deal with all sole practitioners?
18. What are factors that hinder the adoption of SBR-enabled software, specifically in regional areas?
19. Are these factors the same factors that hinder the adoption of cloud technology as well?
20. Who (software vendors/bookkeepers/accountants/clients) have more influence over the type of software that businesses (clients) use?

### **Questions for Bookkeepers**

1. Would you please detail your education background and working experience?
2. How do you first hear about SBR and are you also involved in supporting bookkeepers to adopt SBR-enabled software such as GovReports?
3. What do you think of this SBR-enabled software, how does it affect the way bookkeepers work today?
4. Based on your experience, what is the difference from using SBR-enabled software than the previous system?
5. What do you gain or perhaps not gain from using SBR-enabled software?
6. Does SBR-enabled software change the way bookkeepers interact with accountants OR does it change only the way you interact with government?
7. Do accountants use or support the use of SBR-enabled software?
8. How about the use of SBR-enabled software with cloud technology/cloud accounting such as from XERO? Do you use this?
9. How does the use of cloud accounting change the way you interact with accountants?
10. Do you have to adjust to accountants' technology?
11. Does the use of SBR-enabled software affect bookkeepers' position to accountants? Or in other words do accountants see bookkeepers differently?— How about the use of cloud technology?
12. Do bookkeepers now able to provide services that previously only offered by accountants? —What factors enable this? How do bookkeepers do this without clashing with accountants' work for the same client?
13. How does the client respond to this change?
14. Does it affect your fee structure or your service offering?
15. Does it influence your ability to get more clients?
16. Is this situation between bookkeepers and accountants different in capital cities and regional areas?
17. Do you deal with accountants for their role as the clients' accountants or as the clients' auditors?
18. What are the types of accountants you mostly deal with? Is it sole, up to 5 partners or more than 5 partners? And do you deal with all types of accountants, small to large?
19. What is the purpose of having an *interaction with accountants kit* for bookkeepers?
20. Based on your experience, are bookkeepers more receptive/agile to new technology than accountants?

21. What and who encourage bookkeepers to use SBR-enabled software or is it bookkeepers who identify that this is the kind of software I need to have?
22. Within the bookkeeping industry, who has the key role that influences bookkeepers or even clients to adopt SBR-enabled software?
23. Who have influence over clients on what software to adopt, such as adopting SBR-enabled software?
24. Do bookkeepers also provide training for clients to use this SBR-enabled software?
25. How do bookkeepers train themselves? Do they get training from vendors or bookkeeping associations such as ICB provide that? What is the difference between now and before the presence of ICB in Australia?



## **Chapter 6 Results and Analysis**

### **6.1 Chapter Content**

This chapter discusses the results and data analysis for research questions (RQs) 1 and 2. The results in turn provide evidence of the impact of digital innovation on the social structure of professional public accounting practice. The analysis is based on the theoretical frameworks discussed in Chapter 4, which are derived from organisational and institutional theory and are in turn linked to the sociology of the professions. The theories explain whether the digital innovation is leading to field transformation, including institutional transitions, and subsequently impacting the social structure of professional public accounting practice.

Section 6.2 introduces this chapter, and Sections 6.3–6.4 discuss the results and data analyses in addressing RQ1 and RQ2 respectively. Section 6.5 concludes the chapter by examining the implications of the results for the social structure of professional public accounting practice.

### **6.2 Introduction**

This thesis identifies whether the digital innovation is leading to field transformation in professional public accounting practice. The investigation involves the examination of institutional transitions and their implications for the social structure of professional public accounting practice. The examination is undertaken through the lens of an emergent field surrounding the issue of the commodification of traditional accounting work. The timeframe involved consists of the seven-year period from 1 July 2007 to 30 June 2014. The timeframe captures the evolution of the digital innovation, which represents a disruptive event consisting of a chain of triggering events. The digital innovation has the potential to disturb the existing institutional environment of professional public accounting practice because it involves the commodification of traditional accounting work, especially in serving SMEs, which introduces new opportunities and threats to the field of professional public accounting practice as a whole.

This thesis divides the seven-year period of the disruptive event into three stages. Each stage emerged in the wake of triggering events consisting of a chain of events. The order of the events heightened the commodification of traditional accounting work, especially in serving SMEs. The three stages, including the triggering events, are depicted in Figure 4.5., which is reproduced on following page.

Stage 1 covers the period from 1 July 2007 to 30 June 2010. Here, the triggering event was the commencement of the SBR Program in August 2007 after the government announced its

commitment to the program in December 2006. Stage 2 is from 1 July 2010 to 30 June 2012. The triggering events were the launch of the SBR reporting channel on 1 July 2010, followed by the cloud accounting disruption by a start-up accounting software provider, Xero Ltd. The disruption by Xero expedited the development of cloud-based software for SMEs, including SBR and its integration with cloud accounting. Stage 3 is from 1 July 2012 to 30 June 2014. Here, the triggering events were the surge in SBR lodgements in July 2012, followed by the beginning of a ‘war’ between vendors that sell accounting and business software for SMEs. The ‘war’ began when the largest incumbent vendor in Australia released its first cloud accounting product.

**Figure 4.5: Three Stages of a Chain of Disruptive Events**



Dividing the analysis into three stages provides a better understanding of the structuration process—that is, how a disruptive event drives institutional change, the characteristics of the disruptive event that enable such an event to alter institutional order, and a chain of (triggering) events that are responsible for the social change in each stage (Hoffman, 1999, p. 366).

Therefore, this chapter conducts the analysis for RQ1 and RQ2 following these three stages. In each stage, the analysis for RQ1 and RQ2 is framed by organisational and institutional theories. Finally, the results of RQ1 and RQ2 are linked to the sociology of the professions to answer the overarching research question.

### **6.3 RQ1: Is there an emergent field?**

This section provides the results and data analysis for the first research question:

**RQ1: Is there an emergent field surrounding the issue of the commodification of traditional accounting work in servicing SMEs?**

The primary data set was collected via an article review. The article review was designed to identify the presence or otherwise an emergent field (field transformation) in professional

public accounting practice by investigating the issue-based exchange of relations through quantitative and qualitative network analysis relating to the commodification of traditional accounting work due to the digital innovation of interest. Network analysis is considered the best approach for identifying field transformation, as it provides evidence that focuses on the presence of connections between people/actors and the structural dimensions of relations (Markham & Lindgren, 2014). Network analysis supports the examination of the exchange relations because it enables the investigation of the content or meaning of these relationships, which are being enacted and constantly negotiated in everyday communicative interactions (Markham & Lindgren, 2014). This approach assists in the investigation of the structuration process of the organisational field because focusing on social relations and network components is important in identifying the existence of an emergent field (DiMaggio & Powell, 1983).

Accordingly, the results serve as a proxy in identifying field transformation in professional public accounting practice (DiMaggio & Powell, 1983). As stated earlier, the issue is the commodification of traditional accounting work due to digital innovation, which this thesis argues impacts the social structure of professional public accounting practice. In addressing RQ1, the following sub-questions are used to elicit the presence or otherwise of an issue-based network that displays the changing exchange of relations between different actors (i.e., the emergent field):

***RQ1a: Is there an increase in the extent to which certain actors interact?***

***RQ1b: Is there an increase in the information load the actors share?***

***RQ1c: Is there a development of a mutual awareness that actors are involved in a common debate?***

### **6.3.1 RQ1a: Is there an increase in the extent to which certain actors interact?**

The term 'certain actors' refers to those interested in the issue. The question of whether there has been an increase in the extent to which certain actors interact was first investigated in the article review. As discussed in Chapter 5, 91 relevant articles were identified. The article review began with the identification of the theme of each article. This process is referred to as thematic content analysis (Ayres, 2008; Miles et al., 2014). The identification of the theme is important because it provides the basis for identifying the debate that actors are involved in, and thus the number and types of actors. This is because, in each article, the types of actors involved throughout the seven-year period were likely to differ depending on the theme of the debate.

Prior to identifying the theme of each article, a list of potential themes was created based on the results of the preliminary article review on the issue of the commodification of traditional accounting work due to the digital innovation, particularly in serving SMEs (Ayres, 2008). Then, against this list of potential themes, the theme of each article was identified based on: (i) the main (most dominant) theme of the article; or (ii) the relevant theme—for example, an article on tax and compliance also discussed the implementation of SBR. This thematic content analysis process was iterative and new themes emerged as the author became more familiar with the data. The coding process then involved the consolidation of themes into major themes and resulted in a final list of four main themes: SBR Implementation (T1), Competition in the Provision of Cloud Accounting for SMEs (T2), Transformation in the SME Landscape (T3), and Paradigm Shift in Professional Public accounting Practice, particularly in serving SMEs (T4) (see Table 6.1). The list of articles can be found in Appendix 6.1 (pp. 256-267).

**Table 6.1: Discussion Themes**

THEMES		DESCRIPTION
T1	SBR Implementation	Discussion centres on the effect of the implementation of SBR in Australia, such as the benefits of SBR and how it affects accountants and businesses.
T2	Competition in the Provision of Cloud Accounting for SMEs	Discussion revolves around how vendors for cloud accounting and its related solutions compete to obtain funding, enhance and promote product features, acquire customers and gain partnerships to expand their market.
T3	Transformation in the SME Landscape	Discussion centres on how digital innovation affects SMEs or changes the way they do business and demand business services.
T4	Paradigm Shift in Professional Public Accounting Practice—(particularly in serving SMEs)	Discussion revolves around how accountants in public accounting practice need to change the way they work in serving SMEs as digital innovation increases competition and pressures accountants to go beyond compliance (i.e., to innovate, diversify or create a niche).

In addition to identifying the themes, qualitative content analysis was simultaneously conducted to identify the actors who were involved in the debate. As discussed in Chapter 4, types of actors represent different organisational populations. Each organisational population is classified based on ‘aliqueness’, which indicates that each type of actor represents a group of organisations that share similar interests on the field level issue (Scott & Davis, 2007). The qualitative content analysis identified organisations based on those who authored the articles and those who were directly quoted in the articles. As stated in Chapter 5, the focus on the author and direct quotation, from a journalistic perspective, places an emphasis on those who play a critical role in the issue (Cole, 2008; Tate & Taylor, 2014). Organisations identified were then classified into a list of potential different types of actors based on their ‘aliqueness’, which as discussed in Chapter 4, is based on organisational type. Again, organisation type is

determined based on organisational activity rather than merely organisational form. The information about each organisation was obtained from its official websites.

The process of identifying different types of actors was iterative and is crucial in identifying those who are affected and who try to influence the outcome of the debate. The identification of different types of actors based on the author and direct quotations provides an objective measure of the actors involved because it is explicit data taken from documents, even though they may not always be accurate<sup>34</sup> (Yin, 2014). This also means, however, that there may have been actors involved in the debate who were not included because they were not the author or directly quoted. This issue is addressed later in analysing other sources of data. Overall, this process resulted in a final list of 20 different types of actors.

The 20 different types of actors, in alphabetical order, are: Accounting Professional Association, Bookkeeper, Big 4, Consultant, Government Agency, Journalist, Law Firm, Mid-tier firm, Next Big 8, Other Professional Association, Non-SME Commercial Business Organisation, Research Organisation, Non-Government Regulatory Body, SBR Program, SME, SMP, Vendor—Accounting & Business Software for SMEs, Vendor—Accounting Practice Platform, Vendor—ICT Solutions and XBRL Consortium. However, for the purpose of this thesis, one type of actor—Journalist—was excluded. Journalist consists of business, finance and technology journalists, and all *BRW* articles were written by this type of actor, except one, which was written by an SME. Of the 42 *Charter* articles, 19 were written by this type of actor. Therefore, the Journalist type was excluded because their high level of involvement would distort the data analysis. In addition, they were less likely driven by self-interest to influence the outcome. Table 6.2 presents the 19 different types of actors used in this thesis in alphabetical order.

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<sup>34</sup> Data from documentation is not always accurate because it might be subject to the bias of the preparers. For example, in this case, the journalist's bias in selecting those they want to interview may exclude actors who are actually important.

**Table 6.2: Types of Actors (Organisation Populations)**

TYPES OF ACTORS	ALIKENESS	DESCRIPTION
Accounting Professional Association	Accounting professional associations.	Actor count identified only the Institute of Chartered Accountants Australia (ICAA). Other accounting profession associations, such as Certified Practising Accountants Australia (CPAA) and the Institute of Public Accountants (IPA), were not identified. <i>Charter</i> did not quote or did not publish any articles authored by representatives from CPAA and IPA. <i>BRW</i> did not quote any representative from accounting profession associations or did not publish any articles authored by representatives of any accounting professional associations.
Bookkeeper	Accounting technician or non-professional accounting firms.	It consists of two different bookkeeping firms and a payroll specialist firm.
Big 4	Accounting firms that are classified as the top Big 4.	It comprises, in alphabetical order, Deloitte, EY, KPMG and PricewaterhouseCoopers (PwC). The representatives of all four firms were quoted or authored an article.
Consultant	Consulting firms. They are commercially driven and focus on providing consultancy and advisory on growth, competitiveness and profitability.	Around 40% of actor count represents firms providing consultancy and business coaching for accounting firms, 40% represents firms offering business and management consultancy, and 20% represents firms that provide consultancy and business coaching for professional service firms (PSFs). More than 16 representatives from 16 different consulting firms were identified; the top three in order of the highest quoted were Smithink2020, Beaton Research + Consulting and Proactive Accountants Network.
Government Agency	Government agencies outside the SBR Program.	Actor count identified the Treasury, the ATO, ASIC and Auditing and Assurance Standards Board (AUASB). Even though the SBR Program at the time was a unit under the Treasury and the ATO, representatives from the Treasury and the ATO that are not from the SBR Program are separated into this group.
Law Firm	Law firms.	Only one representative from a law firm was quoted in an article in <i>Charter</i> .
Mid-tier Firm	Accounting firms classified as Mid-tier.	Accounting firms with more than five partners, but that are not one of the top 12 firms. Ten different representatives from 10 different Mid-tier firms were quoted or authored an article.
Next Big 8	Accounting firms classified as the Next Big 8.	The next 8 top accounting firms in Australia after the Big 4 derived from <i>BRW</i> classification. All eight firms were quoted. In alphabetical order: BDO, Crowe Horwath (formerly WHK), Grant Thornton Australia, HLB Mann Judd, Moore Stephens, Pitcher Partners, PKF and RSM Bird Cameron. .
Non-Accounting Professional Association	Non-accounting professional association.	Only one—ISACA—was quoted in an article in <i>Charter</i> . It previously was known as the Information Systems Audit and Control Association but now known by its acronym only to include its broad range of IT governance professionals. Its members also include accounting professionals who are also members of accounting professional associations. ISACA often works together with accounting professional associations.
Non-Government Regulatory Body	Organisations classified as independent non-government regulatory bodies that may affect the accounting profession.	Only one—Accounting Professional and Ethical Standards Board (APESB)—was quoted in <i>Charter</i> .

TYPES OF ACTORS	ALIKENESS	DESCRIPTION
Non-SME Commercial Businesses	Non-SME business organisations typically benefited from the changing SME landscape.	Consists of businesses that are affected by the changing SME landscape due to digital innovation. This group comprises financial institutions and ancillary businesses, except one, a large company.
Research Organisation	Organisations that conduct research, such as research firms and universities. They highlight evidence-based solutions and the use of two sides of possibilities (positive and negative).	Actors identified is about 80% of research firm consultants and about 20% of university researchers—that is, more than 8 representatives from 8 different research firms, and more than 2 representatives from 2 different universities. Even though research firms and universities have different organisational forms, in this thesis they are grouped together because they share similar interests on the field level-issue.
SBR Program	A unit or part of government institutions that deals with the SBR Program.	The SBR Program was initially led by the Treasury, but in 2013 it was transferred to the ATO. Therefore, those who were quoted or who authored an article were from the SBR Program unit in two different government institutions.
SME	Organisations of interest—that is, organisations that are at the centre of all actors' interests.	SMEs that were quoted or that authored an article published in <i>BRW</i> . Actor count did not find any SMEs in articles published by <i>Charter</i> .
SMP	Accounting firms classified as small–medium practitioners.	Accounting firms with 5 or fewer partners, including sole practitioners. More than 10 representatives from 10 different accounting firms were identified.
Vendor—Accounting & Business Software for SMEs	Organisations classified as technology companies providing accounting and business software rather than hardware or infrastructure. They are vendors that sell software to SMEs and some also sell the corresponding software for accounting practitioners.	Almost 21% of actor count represents Xero, and almost 42.5% represents three of the four incumbent accounting software vendors (i.e., around 25% MYOB, 11.5% Reckon and 6% Intuit). The other 36.5% consists of existing software vendor that did not target SME especially small business as their primary target market but were becoming interested to join the cloud accounting bandwagon (9.5%) and vendors of add-on software whom the majority are new start-up companies (27%). Xero and incumbent vendors provide both, software for SMEs and accounting practitioners.
Vendor—ICT Solutions	Organisations classified as technology companies with a focus on providing hardware or infrastructure rather than accounting and business software.	Consists of information and communication technology (ICT) providers that facilitate cloud-based solutions. Big players such as IBM and Google were identified.
Vendor—Accounting Practice Platform	Organisations classified as technology companies with a focus on providing software for reporting and accounting practice.	Comprises of vendors that provide compliance reporting software and accounting practice software, including integrator to create a seamless platform for accounting practice. The compliance reporting software may be used by large corporation that have internal accounting department but it is largely used by accounting practitioners in serving SMEs. It also consists of a software vendor that only provides software for accounting practice. The software provided by these vendors work with various cloud accounting to create a seamless platform for the accounting practice.
XBRL Consortium	An international consortium that oversees an international standard for business and financial reporting, XBRL.	Only one representative from the Australian branch authored an article in <i>Charter</i> .

The identification of themes and types of actors involved for each article provided insights into, respectively, which debate affected actors (what the article was written about), and those who were affected and who tried to influence the outcome of the debate (whom the article was written for) (Hoffman, 1999). These insights were important for identifying whether there was an increase in the extent to which certain actors interact over time because, as discussed earlier, the types of actors who were involved throughout the seven-year period were likely to differ depending on the theme of the debate. To obtain such insights, quantitative content analysis was conducted to obtain an article count and an actor count across the three stages involved (see Table 6.3).

The article count represents the aggregate number of articles identified in each stage per theme. The article count was conducted by coding each article with the identified theme. Each article was coded with one of the four themes only. The actor count represents the aggregate number of actors for each type of actor identified in each stage per theme. The actor count was conducted by coding each article with the types of actors who authored the article and who were directly quoted on the issue. Typically, an article has more than one type of actor involved, each was counted separately. Further, where an article consists of more than one of the same type of actor—that is, two or more different organisations that fall under the same type of actor, they were counted separately (e.g., representatives of Big 4 A and Big 4 B were quoted; actor count for Big 4 is two). However, where more than one individual representative from the same organisation is quoted in an article, they were counted as one (e.g., two representatives of Big 4 A were quoted; actor count for Big 4 A is one). Thus, the actor count does not represent the number of individual representatives who authored or who were quoted. It also does not represent the number of distinct organisations, as there were instances when representatives of the same organisation were quoted in multiple articles.

In classifying those who authored or who were quoted into different types of actors, information was obtained from LinkedIn<sup>35</sup> or the official website of each individual representing an organisation. Similar to the electronic and scanned hard copy articles, the LinkedIn page of each representative was also downloaded into Evernote using its Web Clipper. Evernote was used for data filing because it supports digital filing of data from different data sources, such as online, hard copy, visual and audio, and it is compatible with Nvivo. Articles were uploaded into Nvivo, where qualitative and quantitative content analyses were conducted, as well as coding for the article count and the actor count.

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<sup>35</sup> LinkedIn is a social media website that provides a platform for people to present their professional identity online. See <http://www.linkedin.com/> for further information.



Table 6.3: Results of Article Count and Actor Count

	STAGE 1					STAGE 2					STAGE 3					TOTAL
	T1	T2	T3	T4	Total	T1	T2	T3	T4	Total	T1	T2	T3	T4	Total	
Article Count	17	1	2	0	20	5	3	6	8	22	1	13	11	24	49	91
Actor Count	27	5	4	0	36	6	7	13	33	59	4	27	39	63	133	228
<b>TYPES OF ACTORS</b>																
Accounting Profession Association	9	0	0	0	9	3	0	2	3	8	1	0	1	2	4	21
Big 4	3	0	1	0	4	0	0	1	5	6	1	1	2	13	17	27
Bookkeeper	1	0	0	0	1	0	0	0	0	0	0	0	0	2	2	3
Consultant	0	0	0	0	0	1	1	2	6	10	0	1	8	10	19	29
Government Agency	3	0	0	0	3	1	0	0	0	1	0	0	0	1	1	5
Law Firm	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Mid-tier Firm	0	0	0	0	0	0	0	0	4	4	0	0	0	6	6	10
Next Big 8	1	0	0	0	1	0	0	0	5	5	0	0	1	9	9	16
Non-Accounting Professional Association	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Non-Government Regulatory Body	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Non-SME Commercial Business	0	0	0	0	0	0	0	2	2	4	0	0	3	0	3	7
Research Organisation	3	1	0	0	4	0	1	1	0	2	0	2	3	0	5	11
SBR Program	4	0	0	0	4	0	0	0	0	0	1	0	0	0	1	5
SME	0	1	1	0	2	1	0	0	0	1	0	0	4	1	5	8
SMP	1	0	0	0	1	0	0	1	2	3	0	0	0	6	6	10
Vendor—Accounting & Business Software for SMEs	1	3	0	0	4	0	3	0	5	8	1	22	8	9	40	52
Vendor—Accounting Practice Software	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	3
Vendor—ICT Solutions	0	0	2	0	2	0	2	4	1	7	0	0	8	0	8	17
XBRL Consortium	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>Total Types of Actor</b>	<b>10</b>	<b>3</b>	<b>3</b>	<b>0</b>		<b>4</b>	<b>4</b>	<b>7</b>	<b>9</b>		<b>4</b>	<b>5</b>	<b>10</b>	<b>13</b>		

T1: SBR Implementation

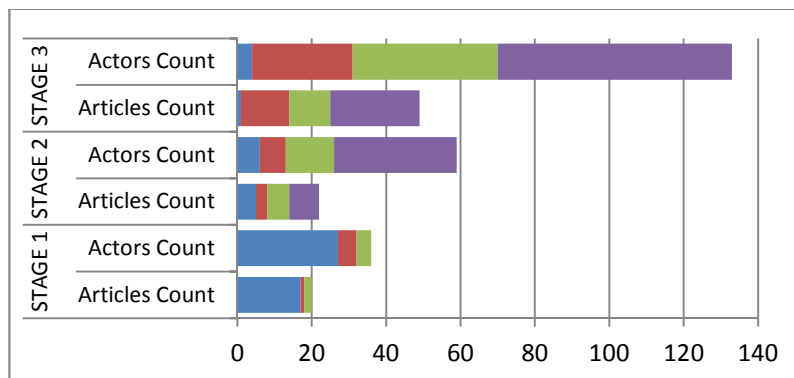
T2: Competition in the Provision of Cloud Accounting for SMEs

T3: Transformation in SMEs' Landscape

T4: Paradigm Shift in Professional Public Accounting Practice

The results of the article count and the actor count in Nvivo were downloaded into Microsoft Excel for further analysis (see Table 6.3). Figure 6.1 graphically summarises the results presented in Table 6.3 to show the increasing trend throughout the three stages over the seven-year period.

**Figure 6.1: Article Count and Actor Count per Theme**



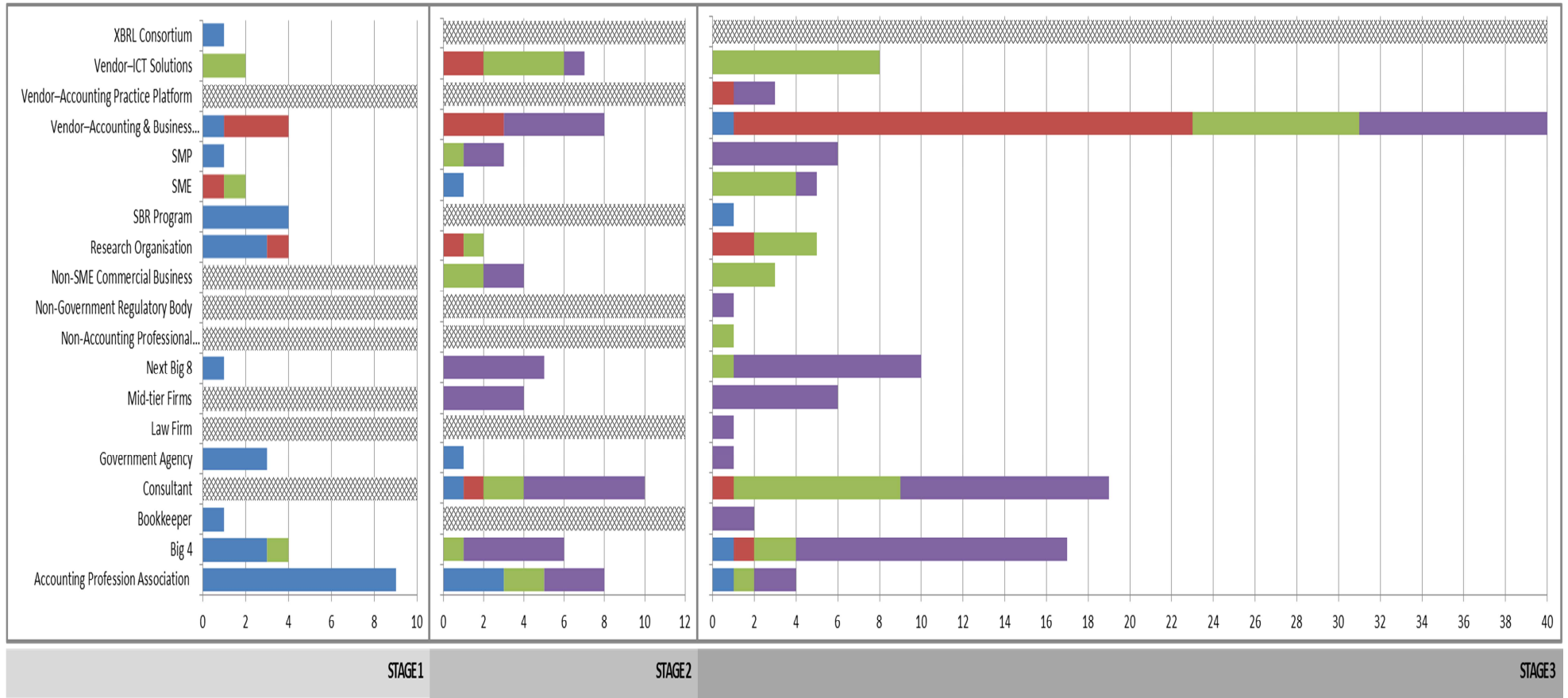
**LEGEND:**

- T1:** SBR Implementation
- T2:** Competition in the Provision of Cloud Accounting for SMEs
- T3:** Transformation in SMEs' Landscape
- T4:** Paradigm Shift in Professional Public Accounting Practice

However, for the purpose of examining whether there was an increase in the extent to which certain actors interact (RQ1a), the analysis was carried out based on the actor count per types of actors per theme. Figure 6.2, which displays the results of the actor count per types of actors per themes in Table 6.3, shows a generally increasing trend, but also a decreasing trend for some types of actors per theme. To ensure that there is a significant increase overall in the extent to which certain actors (different types of actors) interact throughout the three stages over the seven-year period, statistical tests were performed. The statistical tests—paired t-tests—were performed based on the data in Table 6.3. Paired t-tests were appropriate for this thesis because they facilitate the need to compare the same group(s) at two different periods (Keller, 2012).

Paired t-tests were conducted to identify whether there was a significant increase in the number of actors involved in Stage 2 compared to Stage 1, as well as in Stage 3 compared to Stage 2, based on the results of the actor count per types of actors per theme. An increase in the extent to which different types of actors interact must be identified from the themes of discussion that different types of actors were involved in each stage. This is due to the types of actors who were involved throughout the seven-year period were likely to differ depending on the theme of the debate. Therefore, based on the themes, paired t-tests were used to identify whether there was an overall increase in the extent to which different types of actors interact. Table 6.4 shows the results of the t-tests for each theme throughout the three stages.

Figure 6.2: Actor Count per Types of Actors per Theme



T1: SBR Implementation

T2: Competition in the Provision of Cloud Accounting for SMEs

T3: Transformation in SMEs' Landscape

T4: Paradigm Shift in Professional Public Accounting

XXXX: Non-existence

**Table 6.4: Results of Paired T-tests on the Actor Count per Types of Actors per Theme**

	Stage 1 to Stage 2				Stage 2 to Stage 3			
	T1	T2	T3	T4	T1	T2	T3	T4
<b>t Stat</b>	-2.6888	0.8090	2.2819	3.4301	-0.6222	1.0451	2.4531	2.8823
<b>P(T&lt;=t) one-tail</b>	<b>0.0075</b>	0.2145	<b>0.0174</b>	<b>0.0015</b>	0.2708	0.1549	<b>0.0123</b>	<b>0.0050</b>

The results of the paired t-tests show that the number and types of actors involved in the discussion around SBR implementation (T1), which was the dominant theme in Stage 1 (see Figure 6.1), significantly decreased in Stage 2 (p-value=0.0075) and continued to decline in Stage 3. The decline was followed by an increase in the discussion around competition in the provision of cloud accounting for SMEs (T2) and the transformation in the SME landscape (T3), as well as an emergence of a new theme: paradigm shift in professional public accounting practice (T4), particularly in serving SMEs (see Figure 6.1).

However, the increase in the number and types of actors involved in the discussion about cloud accounting competition (T2) from stages one to two and two to three was not significant (p-value=0.2145 and 0.1549). Conversely, the number and types of actors involved in the debate about the changing SME landscape (T3) and the shift in professional public accounting practice (T4) significantly increased across the stages (T3: p-value=0.0174 and 0.0123; T4: p-value=0.0015 and 0.0050). As Figure 6.2 indicates, the insignificant increase in T2 was due to the limited number of types of actors involved in the debate, unlike T3 and T4, which involved numerous types of actors.

Overall, an increase in the number of actors throughout the three stages represents an increase in the number of different types of actors involved in diverse themes, regardless of some identified decreasing trends. This indicates an increase in the extent to which different types of actors interact. To gain a further understanding of this increase, additional analysis was conducted based on Figure 6.2.

Figure 6.2 shows that, in the first stage, the Accounting Profession Association (hereafter APA) was the dominant actor. It was involved heavily in the debate around SBR implementation (T1). The next dominant actors were SBR Program, Big 4 and Vendor—Accounting & Business Software for SMEs (hereafter Software Vendor). These actors were equally involved, but their focus was slightly different. Similar to the APA, the SBR Program was only involved in the discussion around SBR implementation. The Big 4 started to get involved in the discussion around the changing SME landscape, which was what Software Vendor was most interested in.

However, as identified earlier, there was a decreasing trend in the debate about SBR implementation. This was particularly significant from Stage 1 to Stage 2. The significant drop

was due to a large decline not only in the number of actors, but also in the types of actors that became involved. In Stage 1, this issue was the dominant theme, as this stage was triggered by the commencement of the SBR Program. However, in Stage 2, the dominant discussion switched to the shift in professional public accounting practice (T4), specifically in serving SMEs. This newly emerged theme immediately involved the highest number of different types of actors in the debate.

The switch in the dominant themes was potentially triggered by the events that prevailed in the second stage—that is, the increasing disruption by Xero—which possibly shifted the focus from SBR to cloud accounting. SBR, a government initiative, represents regulative pressure and reflects bureaucratic logic—that is, the mechanism aims to increase efficiency through the commodification of professional knowledge that underlies traditional (compliance) accounting work. Such commodification threatens the professional status of accountants in public practice. Accordingly, this may explain APA’s high level of involvement in the first stage around SBR implementation, as it may have attempted to influence the outcome of SBR for the benefit of its members. However, as discussed in Chapter 2, cloud accounting creates a greater effect not only by further commodifying traditional accounting work in serving SMEs (i.e., increasing threats), but also by creating new opportunities. This may have significant implications for accountants in public accounting practice in serving SMEs, as cloud accounting targets this market. In particular, it provides greater access to small businesses, which comprise 96 per cent of the total number of businesses in Australia (ABS, 2014a).

These potential developments likely drove the switch in the dominant theme, and thus the actors who were involved. In each stage, the new debate that emerged in the wake of a triggering event affected the types of actors who were included in, or excluded from, the debate due to changing interaction patterns between the different types of actors, which altered the existing social arrangements (Hoffman, 1999). Accordingly, an increase in the extent to which different types of actors interact could be identified from the changes in the types of actors and the number of actors that became involved in the debate.

In Stage 2, three new types of actors joined the debate, namely Consultant, Mid-tier firm (thereafter Mid-tier) and Non-SME Commercial Business. Conversely, three types of actors identified in the first stage were not involved in the second stage, namely Bookkeepers, SBR Program and XBRL Consortium. Nonetheless, the number of actors involved in this stage increased substantially, which led to changes in the dominant actors. In this stage, the dominant actors were, in descending order, the Consultant, an equal number of APA and Software Vendor, Vendor—ICT Solutions (hereafter ICT Vendor) and the Big 4. The SBR

Program, which was a dominant actor in the first stage that focused solely on discussing SBR implementation akin to the APA, was not involved in the second stage. Conversely, a newly emerged type of actor—Consultant—became the most dominant actor, succeeding the APA, which was the most dominant in the first stage. The change in the dominant actor types accounts for the switch in the dominant theme, and thus the interactions between the different types of actors.

The consultant, around 60 per cent of whom comprise consultants for PSFs (see Table 6.2), were predominantly involved in the debate around the shift in professional public accounting practice (T4), particularly in serving SMEs. Consultants potentially saw that the digital innovation was transforming the SME landscape (T3) and would have implications for professional public accounting practice (T4). There was possibly a push from Software Vendors, a group of actors that was also highly involved in the debate around the changing professional public accounting practice (T4), due to competition in the provision of cloud accounting (T2). While Software Vendors may have been driven by increasing threats to their existing market share, the involvement of Consultants was possibly motivated by commercial interests to provide advice to PSFs, particularly accounting firms.

Xero started to target Australia in this stage, particularly small businesses that had not previously used any accounting software (Drury et al., 2012). This may have driven the changing types of actors and the themes they were involved in. The threat to the incumbent software vendors from Xero was marked by the establishment of its Australian headquarters in October 2010. In this stage, Xero experienced a significant increase in its Australian customer base, making it the fastest growing software vendor in Australia (Drury et al., 2012; Norman, 2011).

Further, an increase in the extent to which different types of actors interacted was also marked by a significant increase in the number of accountants in public practice that became involved, particularly around T4. In Stage 1, the Big 4 were mainly involved in a discussion around SBR implementation, but in Stage 2 they were primarily involved in a discussion around the potential shift in public accounting practice due to technological advancement (T4), and they continued to highlight the potential implications of technological change for the SME space (T3). The Big 4s' support for a digital revolution in public accounting practice, as well as in the SME space, may have threatened the non-Big 4 sub-groups, whose primary client base and work were likely affected. This was indicated by an increase in the number of all non-Big 4 sub-groups that became involved in Stage 2. In Stage 1, the number of the Big 4 involved was more than that of the non-Big 4 sub-groups. However, in Stage 2, the total actor count for non-

Big 4 (11) increased almost sixfold and was thus more than twice the actor count for the Big 4 (5). In Stage 1, the Big 4 had the highest level of involvement because it assisted the government in conducting a pilot test for the SBR Business Case, as it potentially had the self-interest and resources to leverage the benefits gained from SBR compared to smaller practitioners. In Stage 2, the Big 4 also identified the changing nature of the SME space (T3) but other sub-groups except SMPs did not. In general, the theme of the discussion that the non-Big 4 were involved in was about becoming multidisciplinary and focusing on improving their advisory expertise and technological edge to survive the imminent shift (T4). This indicates that this issue was becoming important for non-Big 4 sub-groups.

Large mid-tier accounting firms are typically not separated from the rest of the mid-tier firms. This study separates the large ones into the Next Big 8 group because they are likely to behave differently from the rest of the Mid-tier as they have more professional power—that is, status and resources—and they increasingly compete with the Big 4, but at the same time they aim to strengthen their national (local) position (see Chapter 4, Section 4.3). As shown in Figure 6.2, the actor count for Next Big 8 increased substantially in Stage 2, from 1 to 5. However, although the actor count for Next Big 8 (5) was greater than for Mid-tier (4), the emergence of Mid-tier in the Stage 2 and its involvement only in discussion around changing public accounting practice (T4) indicate that they were potentially becoming threatened by the change. SMPs' involvement also increased (3), but its actor count was lower than Mid-tier. In Stage 1, Both Next Big 8 and SMP were only involved in discussion around SBR implementation (T1), however, in Stage 2 they were no longer involved in this discussion. Again, this shows a shift in their focus.

As identified earlier, the actor count for APA declined slightly, from 9 to 8. Although APA was still involved in the debate around SBR implementation (T1), it was equally involved in the debate around the revolution in professional public accounting practice, particularly in serving SMEs (T4). The APA also recognised the increasingly changing SME space due to the digital innovation (T3), which was the main interest of the ICT Vendor, who had shown a tendency towards this issue since the first stage. This indicates the interest of the ICT Vendor in offering a cloud-based ICT solution, particularly for small businesses, an 'untapped' market that started to 'open' because of Xero's disruption and potentially also the government's push towards the use of digital reporting, specifically SBR.

Overall, the results of the actor count in Stage 2 show not only a significant increase the different types of actors interacting; they also suggest potential intraprofessional competition rather than competition with other occupational groups. This commodification of traditional

accounting work would typically attract competition from non-professionals and other professionals (Cooper & Taylor, 2000; Edwards et al., 2007; Suddaby & Greenwood, 2001). However, in this stage, the different types of actors who became involved were larger accounting practitioners rather than SMPs that would mostly be threatened. SMEs, particularly small businesses, represent the client base of SMPs. Bookkeepers that were involved in Stage 1 were also no longer involved in Stage 2. Accordingly, it is important to identify the extent to which different types of actors interacted in Stage 3.

In Stage 3, there was a substantial increase in the total actor count, from 59 to 133. This was driven, in particular, by a substantial increase in the actor count for Software Vendor (40) and public accounting practice as a whole (38). In addition, four new types of actors emerged: Non-Accounting Professional Association, Non-Government Regulatory Body, Law Firm and Vendor for Accounting Practice Platform. Two types of actors involved in the first stage—SBR Program and Bookkeepers—that were not involved in the second stage became involved again in the third stage. The influx of these types of actors in Stage 3 indicates that the issue was becoming critical for public accounting practice. Overall, there was an increase in the different types of actors involved in this stage. These indicate changes in the dominant actors and thus the dominant themes they became involved in, which suggest changes in interaction patterns and increased interactions between different types of actors in the third stage (see Figure 6.2).

Although Software Vendor had the highest number of actor count (40), they were mainly involved in the discussion around T2. This was in contrast to Stage 2, where they were mainly involved in the discussion around T4. On the other hand, ICT vendor consistently focused on the issue of the changing SME space due to the digital innovation (T3). Software Vendor changed their focus potentially because in Stage 2 they focused on promoting the need to change, and in the Stage 3 on competing for market share through cloud accounting—that is, selling and pushing once the market was made aware of the ‘change’. Since Software Vendors dominated the discussion around T2 and that the types of actors involved in the discussion around T2 was limited, the substantial increase in the total actor count for discussions around T2, from 7 to 27, is not statistically significant (see Table 6.4). This indicates that the increase did not lead to an increase to which different types of actors interacted.

Conversely, other dominant actors after Software Vendors, from the highest number of actor count, namely Consultants (19), the Big 4 (17), the Next Big 8 (9) and equal Mid-tier (6) and SMPs (6), were primarily involved in the debate around the shift in professional public accounting practice (T4). This discussion around T4 continued to be the dominant theme. Since T4 involved the highest number of different types of actors (13 out of 19 types), an increase in



the total actor count in this discussion is statistically significant (see Table 6.4). This indicates significant increase on the extent to which different types of actors interacted.

However, Consultants were almost equally involved in the debate around the changing SME landscape and the shift in professional public accounting practice (T3 and T4). This was likely because the Consultants consisted of those who were interested in providing services to PSFs and/or businesses. The Big 4 and Next Big 8 were also involved in the discussion around T3. Interestingly, Mid-tier and SMPs were only involved in the discussion around T4, and these sub-groups had an equal number of actors involved in the third stage. This again shows that the Next Big 8 were more aggressive—that is, tend to act similar to the Big 4—than the rest of the Mid-tier firms. However, this also shows that SMPs were becoming more attracted to this issue than Mid-tier. There was a chance that Mid-tier firms were being more conservative to this commercially driven change, and that SMPs likely attempted to adapt. Prior accounting literature finds that SMPs may be more committed to clients and organisations than Mid-tier firms, and that SMPs are likely to engage in commercially driven practices (Sikka, 2009; Suddaby et al., 2009). Therefore, similar to T4, T3 was statistically significant (see Table 6.4). This indicates that there was a significant increase on the extent to which certain actors interacted because the issue attracted a large number of different types of actors into the debate.

While discussion around T1 continued to decline and discussion around T2 primarily attracted vendors, the Big 4 were also involved in these discussions. The Big 4, who have the highest professional power to influence, may have been interested in influencing the direction of the changing professional public accounting practice in Australia. This might be because, along with Software Vendor, APA and the SBR Program, which had just re-joined in this third stage, the Big 4 were the only professional public accounting practice sub-group involved in the discussion around SBR implementation in this stage.

Therefore, an increase in the extent to which different types of actors interacted, as identified in Stage 3, provides insights into the expected field transformation in professional public accounting practice that were potentially: (i) driven by the 'war' between software vendors over the SME space, which was further promoted by consultants who may have sought to provide advice to PSFs and SME in this changing environment; and (ii) fuelled by intraprofessional competition as larger firms dominated the debate, which suggests their increasing interest in competing for SMEs—the primary client base of the SMP.

In summary, the evidence presented thus far indicates an increase in the different types of actors that interacted throughout the three stages (RQ1a). However, to determine whether

the result of RQ1a indicates field transformation and thus institutional shift (i.e., the emergence of a new field), further examinations were conducted to identify whether there was an increase in the information load that they shared (RQ1b) and increased awareness that they became involved in a common debate (RQ1c).

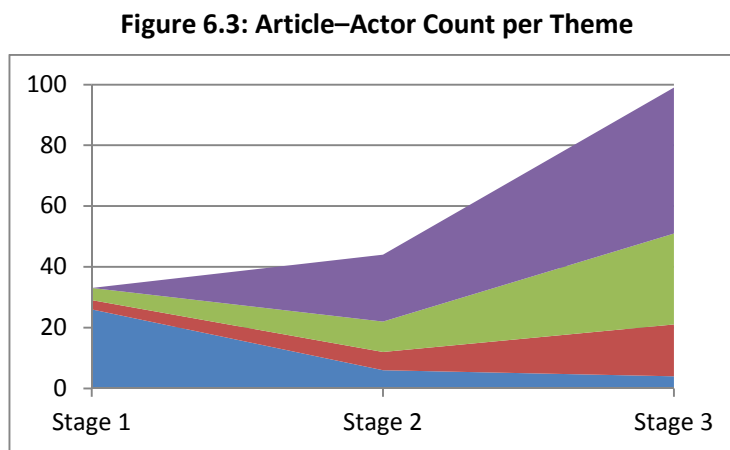
### **6.3.2 RQ1b: Is there an increase in the information load the actors share?**

To identify an increase in the information load that these different types of actors shared, further analysis was carried out. As detailed in the previous section, RQ1a involved the examination of the number actors of each 19 different types of actor involved in each theme (i.e., actor count). The results of RQ1 show that there was an increase to which different types of actors interacted. This further analysis extended the results of RQ1a but could not simply be based on examining the number of discussions (i.e., article count), although an increase was evident (see Figure 6.1). Instead, the examination for RQ1b was based on the connections between each article and each type of actor, referred to as the article–actor count. Examining these connections enabled the identification of an increase in the information load shared because it revealed whether each increase in the discussion attracted an increased number of diverse types of actors involved. An increase in information shared among diverse types of actors highlights the importance of the discussion that is likely to lead to field transformation. Table 6.5 summarises the article–actor count per type of actors, per theme and per source.

Table 6.5: Result of Article–Actor Count

TYPES OF ACTORS	STAGE 1		STAGE 2		STAGE 3		TOTAL
	BRW	Charter	BRW	Charter	BRW	Charter	
<b>T1: SBR Implementation</b>							
Accounting Profession Association		9		3		1	13
Big 4	2					1	3
Bookkeeper	1						1
Consultant				1			1
Government Agency	1	2		1			4
Next Big 8	1						1
Research Organisation	2	1					3
SBR Program	2	2				1	5
SME			1				1
SMP	1						1
Vendor–Accounting & Business Software for SMEs	1					1	2
XBRL Consortium Australia		1					1
<b>TOTAL</b>	<b>11</b>	<b>15</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>36</b>
<b>T2: Competition in the Provision of Cloud Accounting for SMEs (T2)</b>							
Big 4					1		1
Consultant			1		1		2
Research Organisation	1		1		1		3
SME	1						1
Vendor–Accounting & Business Software for SMEs	1		2		13		16
Vendor–Accounting Practice Platform					1		1
Vendor–ICT Solutions			2				2
<b>TOTAL</b>	<b>3</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>26</b>
<b>T3: Transformation in SME Landscape</b>							
Accounting Profession Association				2		1	3
Big 4		1		1		2	4
Consultant			1	1	3	2	7
Next Big 8					1		1
Non-Accounting Professional Association						1	1
Non-SME Commercial Business			1		2	1	4
Research Institution or Academic				1	3		4
SME	1				4		5
SMP				1			1
Vendor–Accounting & Business Software for SMEs					5		5
Vendor–ICT Solutions	1	1		2	4	1	9
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>8</b>	<b>22</b>	<b>8</b>	<b>44</b>
<b>T4: Paradigm Shift in Professional Public Accounting Practice</b>							
Accounting Profession Association				3		2	5
Big 4			1	1	6	2	10
Bookkeeper					2		2
Consultant			2	3	6	2	13
Government Agency						1	1
Law Firm						1	1
Mid-tier Firms			2		4		6
Next Big 8			1	2	7		10
Non-Government Regulatory Body						1	1
Non-SME Commercial Business				2			2
SME					1		1
SMP			1	1	3	3	8
Vendor–Business & Accounting Software for SMEs				2	2	3	7
Vendor–ICT Solutions				1			1
Vendor–Accounting Practice Platform					1	1	2
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>15</b>	<b>32</b>	<b>16</b>	<b>70</b>
<b>GRAND TOTAL T1 + T2 + T3 + T4</b>	<b>16</b>	<b>17</b>	<b>16</b>	<b>28</b>	<b>71</b>	<b>28</b>	<b>176</b>

The article–actor count represents the aggregate number of connections revealed between each article and each type of actor as a result of coding conducted for the article count and actor count. Therefore, while the article count represents the total number of articles tagged to one of the four themes (i.e., 91) and the actor count represents the total number of actors of all 19 types of actors who authored and were directly quoted in the article (i.e., 228), the article–actor count is the total number of connections that each of the 91 articles has with any of those 19 types of actors (i.e., 176). The connection between an article and a type of actor was counted only once, even though that type of actor appeared more than once in that article. The connection represents the relationship, whereas the number of appearances represents the strength of the relationship. Figure 6.3 summarises the results presented in Table 6.5 graphically to show the increasing trend throughout the three stages over the seven-year period.



**LEGEND:**  
**T1:** SBR Implementation  
**T2:** Competition in the Provision of Cloud Accounting for SMEs  
**T3:** Transformation in SMEs' Landscape  
**T4:** Paradigm Shift in Professional Public Accounting Practice

Paired t-tests were conducted on the result of the article–actor count per type of actors per theme to determine whether the increasing trend shown in Figure 6.3 was significant. Table 6.6 presents the results of the paired t-tests.

**Table 6.6: Results of Paired t-tests on Article–Actor Count per Types of Actors per Theme**

	Stage 1 to Stage 2				Stage 2 to Stage 3			
	T1	T2	T3	T4	T1	T2	T3	T4
<b>t Stat</b>	-2.6261	1.1430	1.8371	3.4499	-0.6222	0.9748	2.7273	2.9737
<b>P(T&lt;=t) one-tail</b>	<b>0.0086</b>	0.1340	<b>0.0414</b>	<b>0.0014</b>	0.2708	0.1713	<b>0.0069</b>	<b>0.0041</b>

The above paired t-tests, which were conducted to identify the significance of an increase in the information load shared between different types of actors (RQ1b), generated similar results to the paired t-tests conducted earlier (RQ1a, Table 6.4). There was a significant

increasing trend throughout the three stages for the discussion around T3 (p-value=0.0414 and 0.0069) and T4 (p-value=0.0014 and 0.0041). While T2 was increasing, it was not significant (p-value= 0.1340 and 0.1713). Further, T1 significantly dropped from Stage 1 to Stage 2 (p-value=0.0086) and continued to decline.

The results, therefore, show that throughout the three stages, there was a significant increase in information load that actors shared in discussions around the changing professional public accounting practice (T4) and SME space (T3). At the same time, however, there was a decrease in discussion around SBR implementation (T1), which was the dominant theme in Stage 1. Although T4 was the dominant theme in Stage 2 and Stage 3 and had the highest increase in information load shared as it attracted most diverse actors and thus had the highest number of actors involved; there was a substantial increase in the information load shared around T3 in Stage 3. The sharp increase was due to the fact that the number of different types of actors involved around T3 tripled. This suggests that the changing SME landscape was becoming one of the more important factors affecting the changing exchange relations between different types of actors (i.e., field transformation in professional public accounting practice). Further, there was no significant increase in information load shared between different types of actors around competition in the provision of cloud accounting (T2) because this discussion was dominated by Software Vendor and attracted the least number of types of actors. This finding is relevant to the results of RQ1a.

Overall, the results from the quantitative content analysis (see Tables 6.3 and 6.5) and paired t-tests (see Tables 6.4 and 6.6) indicate that each increase in the discussion attracted a higher rate of increase in the number of diverse types of actors involved. It means that this further analysis found that there was an increase in the information load that these different types of actors shared (RQ1b)—not just an increase in the extent to which different types of actors interact (RQ1a). In addition, an increase in the information load shared (RQ1b) provides evidence of not only an increase in the number of discussions and number of actors that became involved, but also an increase in the types of themes and the tendency towards specific themes. The results of RQ1b therefore show an increased awareness on the part of the actors involved that they were moving towards a common debate (RQ1c). Again, this lends support for the presence of an emergent field, which is explained further in the next section.

### **6.3.3 RQ1c: Is there a development of a mutual awareness that they are involved in a common debate?**

A set of network maps was generated to identify the development of a mutual awareness that different types of actors were involved in a common debate (RQ1c) (see Figures 6.4–6.6).

Evidence from the previous sections (RQ1a and RQ1b) provides insights into this development. An increase in both the interactions between the different types of actors and the information load they shared indicated a move towards a discussion on the paradigm shift in professional public accounting practice in serving SMEs (T4), as the commodification of traditional accounting work due to the digital innovation leads to transformation in the SME landscape (T3).

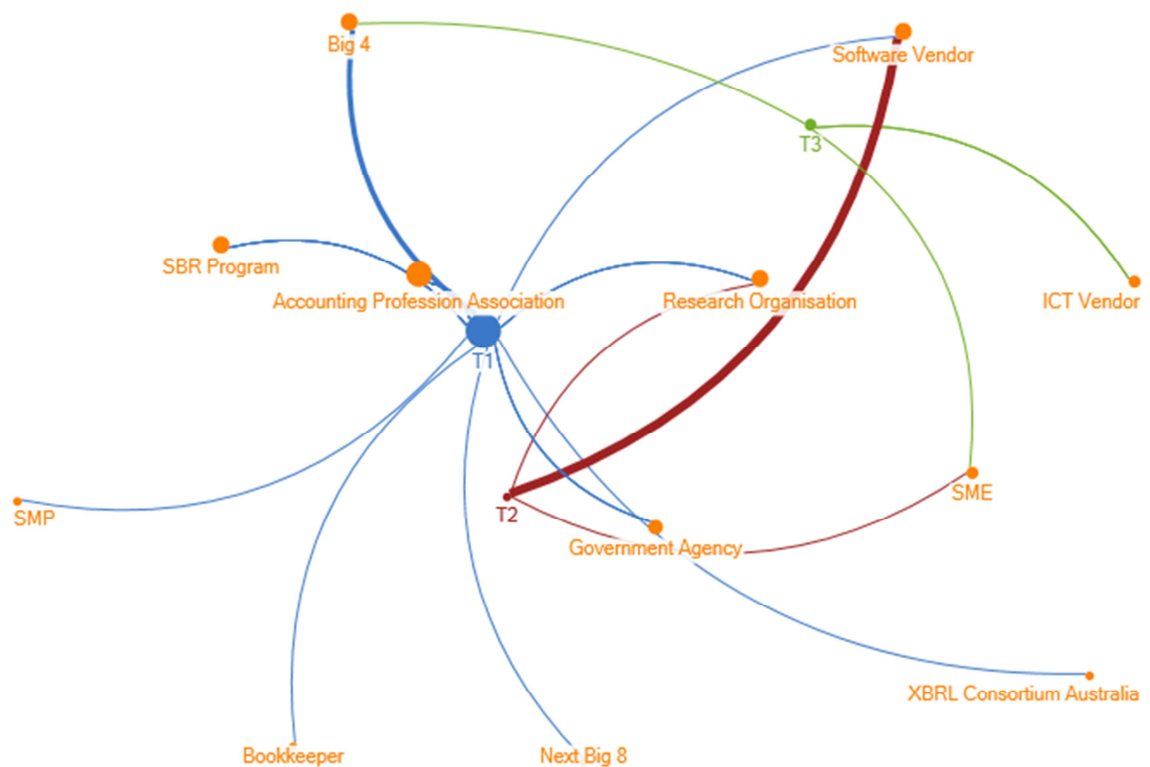
The set of network maps enables the examination of the development of a mutual awareness that these different types of actors were involved in a common debate. It provides a graphical display of the changing exchange of relations (interactions patterns) between different types of actors and the information load they shared, including the strength of their relationships. Accordingly, the connection between the articles and types of actors is the basis for generating this set of network maps. However, since the set of network maps represents a graphical display of the organisational field (i.e., a proxy to identify field transformation in professional public accounting practice grounded on the issue-based exchange of relations), these network maps need to show the changing interactions between different organisational populations (types of actors) and the information load they share (themes). Thus, the connection data used were taken from the perspective of the connection between the article themes and types of actors. This connection represents the higher-level relationship between the articles and types of actors.

The generation of a set of network maps based on the themes and types of actors was possible because each article in Nvivo was assigned attributes. These attributes specified the theme and the stage so that all types of actors identified in each article were also associated with the theme and stage of the article. The assignment of attributes to articles was important because, by using the query feature in Nvivo, these attributes enable the generation of figures for analysis such as network maps, charts and network trees, as well as a list of raw data in Microsoft Excel format for further analysis. To ensure the consistency and validity of the data, in generating these data into Microsoft Excel format, two different types of query operations were performed. The first one was *Group Query* based on *Item coded* at Types of Actors Node and Sources. The second one was *Cross-tabulate how content is coded* based on Types of Actors Node and Sources, which was executed through Query Wizard. Both queries resulted in a summary of data and a link to relevant references, as well as figures. The *Group Query* generated network maps and the *Cross-tabulate how content is coded Query* generated a charts or graphs. These figures later served as a basis to ensure the validity of more complex charts or graphs generated using Microsoft Excel, as well as network maps generated using Microsoft Excel templates, NodeXL.

Network Overview, Discovery and Exploration for Excel (NodeXL) is a template in Microsoft Excel for generating more complex network maps that enable the better depiction of linkages between actors and nature of linkages (exchange of relations). It is a free and open-source template for Microsoft Excel that can be obtained from the Microsoft Office Marketplace or from <http://nodexl.codeplex.com/>. It is created and maintained by a team in the Social Media Research Foundation, a not-for-profit organisation based in California, US.

Figures 6.4–6.6 are network maps for Stages 1–3 respectively. This set of network maps was generated using NodeXL based on the article–actor count for each type of actor in each theme and each stage. These were laid out based on the Fruchterman–Reingold algorithm. The changes in the network maps indicate organisational field transformation and potentially also institutional transitions, as evidenced by changes in the interaction pattern between organisational population (types of actors) and the information load they share (themes).

**Figure 6.4: Network Map—Stage 1**



**LEGEND:**

- T1: SBR Implementation
- T2: Competition in the Provision of Cloud Accounting for SMEs
- T3: Transformation in SMEs' Landscape
- T4: Paradigm Shift in Professional Public Accounting Practice

Figure 6.5: Network Map—Stage 2

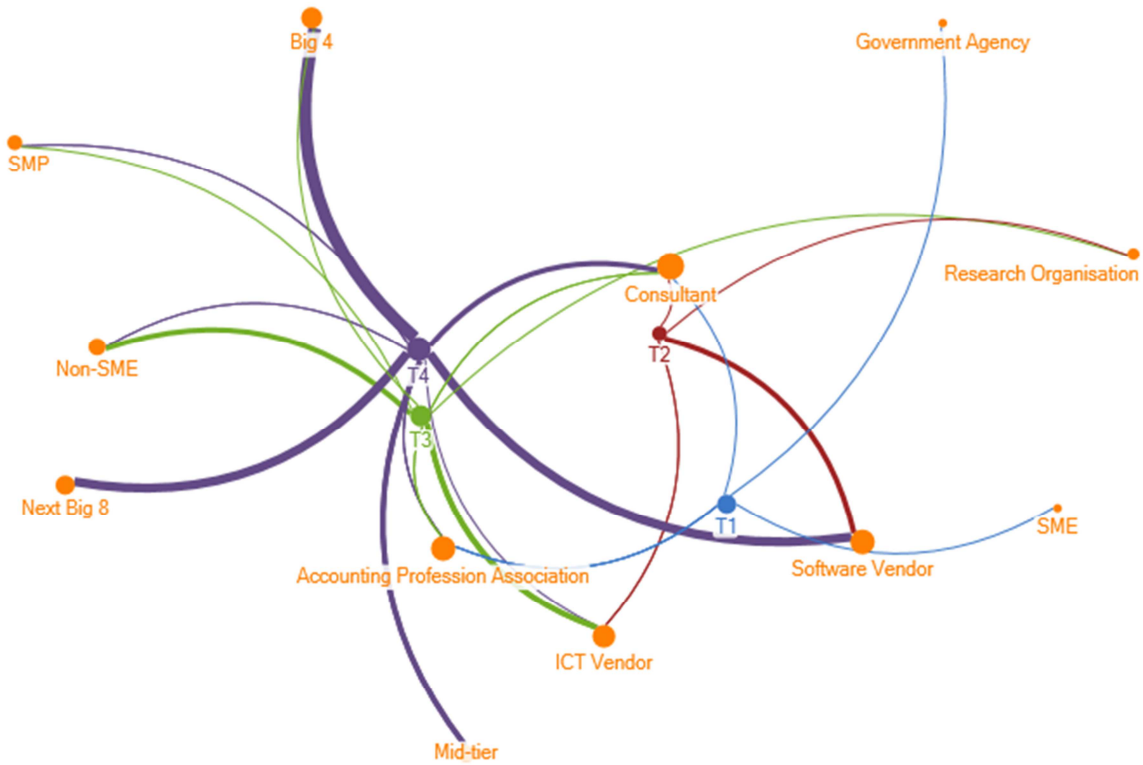
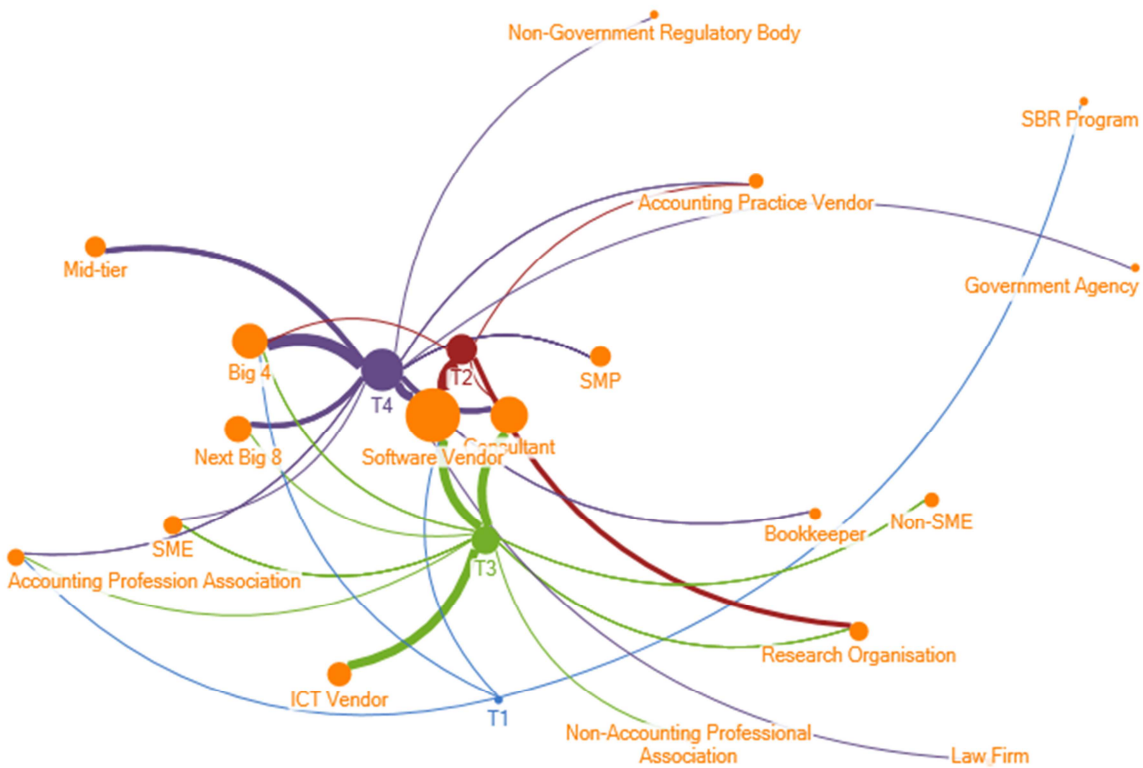


Figure 6.6: Network Map—Stage 3



**LEGEND:**

- T1: SBR Implementation
- T2: Competition in the Provision of Cloud Accounting for SMEs
- T3: Transformation in SMEs' Landscape
- T4: Paradigm Shift in Professional Public Accounting Practice



The colour of the nodes (displayed as circles)<sup>36</sup> represents the following: (1) orange for Types of Actors; and (2) blue, red, green and purple for Article Themes (i.e., T1, T2, T3 and T4 respectively). The size of the nodes for Types of Actors represents the total number of actors, whereas the size of the nodes for Article Themes represents the total number of articles. The bigger the size, the larger the total number of actors or articles.

The line that connects nodes—in this case between Type of Actors nodes and Theme nodes—represents the relationship<sup>37</sup> between these nodes. Each connection line may consist of a number of connections because a type of actor may appear in more than one article under that theme. However, NodeXL generates these connection lines right on top of each other. Accordingly, in each network map, only one connection line is visible between a Type of Actor node and a Theme node.

These connection lines between a type of actor and articles within a theme determine the strength of the relationship between them. Thus, the higher the number of articles within a theme that a type of actor appeared in, the more connection lines there are between them and the stronger the relationship is with that theme. In NodeXL, it is referred to as the weight of the relationship<sup>38</sup> between the nodes. This is important because in NodeXL, the Fruchterman–Reingold algorithm takes into account this weighting in determining the topology of the nodes in each network map. The algorithm works by placing vertices randomly and then independently calculating the attractive and repulsive forces between the nodes based on the connections between them (i.e., the weight) (Sharma et al., 2010). The sum of the force vectors (based on the weight) determines which direction a node should move and thus how it is positioned in a network (Sharma, Khurana, Shneiderman, Scharrenbroich, & Locke, 2010; The Social Media Research Foundation, 2012). Therefore, the larger the weight—that is, the stronger the relationship between a type of actor and a theme—the stronger the attractive force exerted to each other so that these nodes will end up close to each other. Thus, types of actors that have a similar pattern with a theme are attracted to each other, and those with a different pattern are repulsed from each other.

The thickness of the connection line between a Type of Actors node and a Theme node represents the width<sup>39</sup> of the connection line between a type of actor and an article under that

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<sup>36</sup> In NodeXL, nodes are referred to as *vertices*.

<sup>37</sup> In NodeXL, relationships are referred to as *edges*—that is, relationships between a type of actor and many articles (i.e., article-actor count).

<sup>38</sup> In NodeXL it is referred to as *edge weight* and is calculated by counting duplicate connection lines (edges) between two nodes. So this is the higher level of relationship, not between a type of actor and many articles but between a type of actor and a theme.

<sup>39</sup> In NodeXL, the width of the connection line is referred to as the *edge width*—that is, the number of actors that a type of actors appeared in an article (i.e., actor count).

theme with the strongest relationship (i.e., with the highest actor count). As discussed earlier, connection lines between a Type of Actors node and many articles under a Theme node were displayed on top of each other. Therefore, the thickness of the line between them represents a connection between a type of actor and an article with the strongest relationship, as other connection lines that are not as thick are not visible.

To interpret the effect of the weight and width of the connection line, the network map of the first stage is used as an example. As displayed in Figure 6.4, the APA is positioned closer to the first theme, SBR Implementation (T1), than the Big 4. However, the Big 4 at some point have a stronger relationship with T1, as the APA appeared in more articles that discuss SBR implementation than the Big 4. However, the number of Big 4 appearing in one or more of those articles was higher than that of APA. This shows that the APA actively became involved in the debate on SBR implementation, but the involvement of the Big 4 in one or more of the debates was more important—that is, an article tends to quote representatives of different Big 4, but only one of the APA. The SBR Program was positioned closer to the APA than the Big 4 because the SBR Program, similar to the APA, was only actively involved in the discussions around SBR implementation, while the Big 4 were interested in other issues as well (i.e., the changing SME space).

Thus, the development of mutual awareness towards a common debate displayed by the set of network maps was marked by an increase in the closeness of different types of actors towards a theme and the size of that Theme node throughout these three stages. Therefore, the move towards the development of awareness regarding a common debate was identified by examining the set of networks (see Figures 6.4–6.6).

In Stage 1 (see Figure 6.4), the focus was on SBR implementation (T1) dominated by the APA and the SBR Program. Other types of actors were sparsely located. Therefore, in the first stage, mutual awareness towards a common debate has not yet developed. Stage 2 (see Figure 6.5) was in a state of flux where the number and types of actors involved were sparsely positioned, and the types of actors that became involved changed because there were sharp changes in the discussions, from a focus on SBR implementation in the first stage (see Figure 6.4) towards a new focus on the changing space in the second stage. Here, different types of actors have not yet shown mutual awareness towards a common debate. However, it was evident that the focus was on the newly emerged debate around the shift in professional public accounting practice (T4). In Stage 3 (see Figure 6.6), awareness towards a common debate developed as the debates were further closing in on T4. However, it was also closely related to the changing landscape in the SME space (T3). This supports earlier analysis in RQ1a and RQ1b, where T4

was the dominant and most significantly affected an increase in the extent of interactions between different types of actors. However, from the perspective of information load share, T3 also significantly increased. Here, all types of actors identified only in the first stage (except XBRL Consortium) and those emerging in the second stage became involved in the third stage.

Overall, the development of awareness towards a common debate in Stage 3 shows that actors positioned close to each other around the dominant theme (T4), represent types of actors who have a significant interest in this issue. That is, those who affected, and who were affected by, the change as identified earlier (RQ1a), namely Software Vendor, Consultant, the Big 4, the Next Big 8 and SMP (see Figure 6.6). These represent actors with the most connections or information load shared. This indicates that Mid-tier sub-group, which is positioned on the far left (see Figure 6.6), were less involved or less interested on the issue compared to other sub-groups. The total Mid-tier actors who were involved were equal to SMP, but SMP have higher information load shared than Mid-tier, as SMP were actively involved in more discussions and that comprise of various actors than Mid-tier. Thus, compared to Mid-tier, SMP is positioned more closely to the dominant theme (T4) and other actors that have interests over this issue such as Software Vendor and Consultant and to some extent also Accounting Practice Vendor and Bookkeeper.

Interestingly, the Big 4 and Next Big 8 were more involved than SMP in the discussions around the changing professional public accounting practice, thus are positioned more closely to the dominant theme (T4) than SMP. Digital innovation has the capacity to disrupt, in particular, the jurisdiction of SMP. However, as the time progressed, these larger sub-groups, especially the Big 4, show substantial interest in this issue. The Big 4, who in Stage 2 were less involved than the Next Big 8 in discussing the shift in public accounting practice (T4), in Stage 3 became the sub-group that were most involved in this issue. Figure 6.6 shows that the Big 4 are the closest to that issue compared to Next Big 8, SMP and Mid-tier. The Big 4 also have the strongest connection to this issue. This indicates that the Big 4 were becoming significantly attracted to this issue, which is traditionally not their primary domain.

Therefore, this set of network maps provides evidence for RQ1c, as well as all three sub-questions of RQ1. First, the set of network maps displays the changes throughout the three stages over the seven-year period highlighting: (i) an increase in the extent to which certain actors interact, as it shows the changing but increasing number of actors and types of actors per theme (RQ1a); and (ii) an increase in the information load they shared, as it shows an increase in the number of discussions followed by an increase in the number and types of actors involved (RQ1b). Second, it enables the identification of the development of awareness

towards a common debate (RQ1c) because both an increase in the extent to which certain actors interact and an increase in the information load shared by these types of actors showed a movement towards a common theme—that is, the paradigm shift in professional public accounting practice (T4), particularly in serving SMEs.

Further evidence of the development of awareness towards a common debate was identified in the final stage of the seven-year period, Stage 3. Both *BRW* and *Charter* published the same number of articles around T4, which is the theme that in each media has the highest number of actors involved (i.e., the highest number of actors directly quoted). However, the types of actors and number of actors involved in the *BRW* discussion were much higher than *Charter*. This suggests the importance and the role of the market on the field transformation in professional public accounting practice.

Additional evidence also suggests the role of the market in the field transformation. Throughout the three stages, as represented in *Charter*, the APA facilitated SMP, who were significantly affected, almost equally as it facilitated the Big 4 in speaking about the issues (Ramirez, 2009). SMP presented in *Charter* were equally presented in *BRW*. However, the number of Big 4 presented in *BRW* was more than double the number of SMP. Although *Charter* presented no Next Big 8 and fewer Mid-tier firms than SMP, *BRW* presented a significantly higher number of Next Big 8 than SMP. *BRW* may have facilitated more of larger firms than *Charter* because it was driven by commercial interests. *BRW* might see that involving larger influential firms would make their publications more attractive. Conversely, *BRW* might receive payment from these larger firms that have the resources and self-interest to market for themselves.

Overall, the evidence thus far supports the earlier analysis that there is intraprofessional competition over the SME space, driven by the logic of the market (capitalism). This drive from the market was likely due to the war between software vendors, which includes advocating for the change in the SME landscape and therefore creating a push for a shift in professional public accounting practice. This push possibly becomes the driver of field transformation in professional public accounting practice as digital innovation impacts the way public accountants work and this push has the capacity to fuel intraprofessional competition (i.e., creating institutional war). This leads to the second research question dealing with the nature of the exchange relations between actors.

#### **6.4 What is the Nature of the Exchange Relations between Actors, including the Institutional Logic of Each Actor Reflected in the Exchanges?**

This section addresses the second research question: ‘What is the nature of the exchange relations between actors, including the institutional logic of each actor reflected in the exchanges?’ (RQ2). The aim is to obtain insights into the impact of the digital innovation on the social structure of professional public accounting practice in Australia through examining the exchange relations between different sub-groups of accountants in public practice with those outside. The digital innovation has the capacity to disrupt the nature of professional knowledge, the client relationship and jurisdictional control, particularly of SMPs (i.e., the servicing of SMEs). The disruptive circumstances threaten the nature of professional work, which can create a ripple of change to other related issues, namely location of work, firm size, firm structure, client base and ultimately professional values (Abbott, 1988; Malhotra & Morris, 2009).

The analysis is based on four data sources: the article review from RQ1, interviews, discussion forums, and direct observations. The interview, discussion forum and direct observation data sources expand the organisational populations addressed in RQ1, beyond 19. Numerous references will be made to various individual entities that comprise the organisational populations (actors) involved. The coded identification of the various entities involved in interviews, discussion forums or direct observations (data source) are summarised in Table 6.10 (page 197). There, they are grouped according to their organisational populations; and in the case of the representatives of the accounting firms, the status of the individuals is also provided. It is recognised that identifying the accounting firm’s division of the individual representatives would add weight to the discussion. However, this information is excluded to promote anonymity. The list of articles and their coded identifications is summarised in Appendix 6.1 (pp. 256-267).

The ensuing analysis is shaped by the framework for analysing organisational field transformation provided in Chapter 4 (see Tables 4.2–4.5, pages 113, 117, 120 and 123). As with RQ1, the discussion in this section is divided into the three stages, and the perspective taken to examine field transformation is based on the organisational populations. The analysis is expected to reveal the structuration process, including the chain of events triggered by the digital innovation, which increasingly led to the commodification of traditional accounting work over the seven year period involved, and the threats and new opportunities associated with the digital innovation. Further, the analysis provides an opportunity to gain further insights into the emergent field centring on servicing SMEs, which will, in turn, provide insight

into the impact of the digital innovation on the social structure of professional public accounting practice in Australia.

Table 6.10: List of Actors

Organisation	Representative	Data Source
<b>SMP</b>		
SMP A	P11 (Director)	Interview 9
SMP B	P18 (Director)	Interview 14
SMP C	P20 (Director)	Interview 17
SMP D	P21 (Director)	Interview 18
SMP E	P30 (Managing Director)	Interview 27
SMP F	P31 (Principal)	Interview 28
SMP G	D22 (Principal)	Discussion Forum 2
SMP H	D23 (Director)	Discussion Forum 2, Direct Observation 4
SMP I	D25 (Principal)	Discussion Forum 2
SMP J	D27 (Principal)	Discussion Forum 2
SMP K	D32 (Director)	Discussion Forum 3
SMP L	D34 (General Manager)	Discussion Forum 3
SMP M	D42 (Chief Accountant)	Discussion Forum 4
SMP N	O1 (Managing Director)	Direct Observation 4
SMP O	O2 (Partner)	Direct Observation 4
<b>Mid-tier</b>		
Mid-tier A	PP3 (Director)	Supplementary Interview 3
	D21 (Director)	Discussion Forum 2
Mid-tier B	D26 (Director)	Discussion Forum 2
<b>Next Big 8</b>		
Next Big 8 A	P12 (Executive Director)	Interview 10, Interview 15
Next Big 8 B	P25 (Director)	Interview 22
<b>Big 4</b>		
Big4 A	P13 (Director)	Interview 11
	D24 (Director)	Discussion Forum 2
	D43 (National Lead)	Discussion Forum 4
Big4 B	P23 (Senior)	Interview 20
Big4 C	P26 (Manager)	Interview 23
<b>Accounting Professional Association</b>		
APA 3	D31	DF3, DF4
<b>Bookkeeper</b>		
Bookkeeping Firm A	PP1	Supplementary Interview 1
Bookkeeping Firm B	PP2	Supplementary Interview 2
Bookkeeping Firm C	PP4	Supplementary Interview 4

Organisation	Representative	Data Source
<b>Bookkeeping Association</b>		
BA 1	P9	Interview 7
<b>Consultant</b>		
Consultant A	P10	Interview 8
Consultant B	P29	Interview 26
<b>Government Agency</b>		
GA 1	P8	Interview 6
<b>Non-SME</b>		
Non-SME A (Not-for-Profit)	P22	Interview 19
Non-SME B (Commercial Business)	P27	Interview 24
<b>SBR Program</b>		
Treasury	P1	Interview 1
	P2, P3	Interview 2
	P4, P5	Interview 3
	P6	Interview 4
ATO	P7	Interview 5, Interview 13
<b>Tax Association</b>		
TA 1	P19	Interview 16
<b>Vendor - Accounting and Business Software for SMEs</b>		
Vendor A	P14, P15, P16, P17	Interview 12
Vendor B (incumbent)	P24	Interview 21, Discussion Forum 4
	D17	Discussion Forum 1
	D35	Discussion Forum 3
Vendor C (incumbent)	P28	Interview 25
	D14	Discussion Forum 1
Vendor D (incumbent)	D34	Discussion Forum 3
Vendor E (incumbent)	D11	Discussion Forum 1
	D41	Discussion Forum 4
Vendor F	D12	Discussion Forum 1
Xero	P32, P33, P34	Interview 29
	D16	Discussion Forum 1
<b>Vendor - Accounting Practice Platform</b>		
Vendor G	D13	Discussion Forum 1
Vendor H	D15	Discussion Forum 1
Vendor I	D18	Discussion Forum 1
Vendor J	D28	Discussion Forum 2

### 6.4.1 Stage 1

Based on the network map (see Figure 6.4 page 189), Stage 1 (1 July 2007 to 30 June 2010) was dominated by the SBR Implementation (T1) theme, as this stage was triggered by the commencement of the SBR Program. This government initiative signifies regulative pressure and reflects a bureaucratic logic. That is, through standardisation, the government aimed to achieve cost efficiency and effectiveness for compliance reporting and monitoring in order to increase both submissions from businesses and improve the conduct of supervisory activities. SBR represents the commodification of traditional accounting work because, as discussed in Chapter 2, the standardisation enables the pre-filling of data, thereby automating much of this work. This threatens the professional status of accountants in public practice because increased commodification breaks down the boundaries of professional knowledge and thus their professional work (Abbott, 1988; Fournier, 2000).

The government recognised the threat from SBR to the professional work of accountants in public practice. As a result, through its SBR Program, the government consulted with one of the APA<sup>40</sup> and the Big 4 in the ongoing general development of the SBR from the beginning (Madden, 2008, 2009; SBR, 2008). This consultation extended into collaboration and ultimately led to what the government referred to as a 'co-design approach'. This involved a number of stakeholders, predominantly consisting of representatives for businesses, particularly small businesses, business intermediaries and commercial vendors for accounting and business software (Madden, 2009). The government recognised that the business intermediaries group, which comprised accountants, tax agents, financial advisors, payroll specialists and bookkeepers, as well as business and industry associations, represented a large and important group of stakeholders that would be key to the adoption of SBR (Madden, 2009).

In particular, accountants were regarded as a significant group of business intermediaries. Their involvement was regarded as beneficial for the initial focus of the SBR Program in the first phase of its implementation (Madden, 2008, 2009). This was because the focus was on business and financial reporting across participating agencies, namely the ABS, APRA, ASIC, the ATO and State Revenue Offices (SROs). Specifically, the key focus was on financial reporting, as the SBR Program identified a potential reduction from 9,648 to 2,838 data items across 87 forms largely covering the reporting of financial statements, superannuation, income tax, payroll tax and the BAS (Madden, 2009). Further, the emphasis was on financial reporting to

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<sup>40</sup> The APA, as indicated in RQ1, consists of three accounting professional associations in Australia, namely the Institute of Chartered Accountants Australia (ICAA) (in 2014, ICAA became CAANZ), the Certified Public Accountants Australia (CPAA) and the Institute of Public Accountants (IPA) (prior to 11 March 2011, IPA was known as National Institute of Accountants (NIA)). However, in the beginning, ICAA was more heavily and directly involved because it was the key member of the SBR BAF (ICAA, 2008; SBR, 2008).



ASIC and the ATO following global trends in this area—that is, the US and Japan for financial reporting to market regulators, and the Netherlands and the UK for tax-related reporting (Apostolou & Nanopoulos, 2009; Biesheuvel, 2009; Madden, 2009; XBRL International, n.d.-a). Accordingly, reporting to ASIC was intended first to regulate the financial statement reporting mechanism of listed public entities. Reporting to the ATO, on the other hand, was intended to first reduce the burden of recurring reporting faced by all businesses; thus, it started with tax file number declarations and then focused on the BAS and corporate income tax returns (Madden, 2009).

The foregoing discussion indicates that the involvement of accountants in Stage 1 was crucial. Thus, in addition to engaging in ongoing general consultation with the APA and the Big 4, the government involved the Big 4 in the consultation regarding the SBR Business Case (benefits), along with nine other crucial stakeholders (SBR, 2008) – the ATO Small Business Advisory Group (SBAG), ATO Software Developers Consultative Forum, Tax Commissioners Small Business Consultative Forum, Software Developers Forum, Australian Tax Practitioners Forum (ATPF), Charities Consultative Committee, Financial Services Industry Partnership (FSIP), ELS<sup>41</sup> Software Developers’ Forum, and individual software developers (SBR, 2008).

The first challenge for the SBR Program was to have the SBR channel up and running for its scoped financial reporting by 1 July 2010 (Madden, 2009; S1\_T1\_6\_Charter\_2007\_11). To achieve this, the government recognised that software vendors had an important role to play in making SBR available. As a result, the SBR Program engaged in extensive consultation and collaboration with software vendors (Madden, 2009, 2010).

The extensive involvement of the SBR Program with accountants and software vendors is reflected in Figure 6.4 (page 189). While the APA had the highest actor count (9), SBR Program, Research Organisation, Big 4 and Software Vendor had an equal level of involvement (4). These five types of actors dominated the debate. The APA and the SBR Program only became involved in the discussion around the issue of SBR implementation (T1). The remaining three actors, to varying degrees, became involved in the discussion around T2 and T3.

Further, Figure 6.4 indicates that, except for the Big 4, there was low involvement from accountants in public practice. Not only were the Big 4 one of 10 groups that were consulted by the SBR Program for the SBR Business Case, but they also supported the SBR Program in testing the business case (SBR, 2008). Two of the Big 4 collaborated with the SBR Program in

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<sup>41</sup> ELS stands for Electronic Lodgment Service. It is an electronic online system that enables registered tax agents to lodge income tax returns and other forms, as well as create reports to assist with managing workloads. It will be replaced by the SBR. For further information, see <https://www.ato.gov.au/Tax-professionals/Electronic-lodgment-service/>.

conducting pilot tests for the SBR Business Case to show the benefits of using SBR (Interview 11; Article S1\_T1\_1\_BRW\_2008\_05). The government may have involved the Big 4 because it deemed them to be influential in effecting regulatory change (Cooper & Robson, 2006).<sup>42</sup> At the same time, the Big 4's willingness to participate may have been self-serving.

The low involvement of the remaining sub-groups may be explained as follows:

First, unlike the Big 4, who have the capacity to speak for themselves, the non-Big 4 sub-groups tend to depend on the APA to represent them (Lander et al., 2013; Ramirez, 2009). Indeed, in Stage 1, apart from the Big 4, accountants were represented by the APA (Madden, 2008; SBR, 2008). The APA was a member of the SBR Business Advisory Forum (BAF), which facilitates the SBR Program to collaborate with businesses and reporting professionals through representatives from industry groups and professional associations. The APA may have joined the SBR BAF because it needed to facilitate the non-Big 4 members, especially those serving small businesses such as SMPs. This is due to the agenda for SBR development increasingly moving towards the small business space, a segment of businesses in Australia that comprises 96 per cent of the population (ABS, 2014a).

An increasing focus on small businesses was evident in March 2008 when the SBR Program was incorporated into COAG's BRCWG reform agenda. The BRCWG was co-chaired by the Minister for Finance and Deregulation and the then Minister for Small Business, Independent Contractors and the Service Economy. Indeed, one of the reasons the APA joined the SBR BAF was as part of its initiative to reduce the reporting burden for SMEs, especially small businesses, in following International Financial Reporting Standards (IFRS)<sup>43</sup> (ICAA, 2008, pp. 14-15). Thereby, the APA's high level of involvement (see Table 6.2), which suggests an attempt to influence the outcome of SBR for the benefits of its members, was also to ensure effective communication with small businesses in order to reduce their reporting burden (ICAA, 2008). Accordingly, the APA's high involvement, together with the non-Big 4 sub-groups' low involvement in Stage 1 (see Figure 6.2), suggest that the non-Big 4 sub-groups, especially SMPs, might not yet be aware of SBR or, alternatively, its implications for their jurisdiction. The government's move to involve the APA was a way to raise awareness of the accounting profession at large, of which the non-Big 4 sub-groups comprise the larger part of the

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<sup>42</sup> Based on an informal discussion with representatives of the SBR Program, the Big 4's support and involvement is important for the government.

<sup>43</sup> In 2002, the Australian Accounting Standard Board (AASB) announced its commitment to adopt, instead of just converging its standards with, International Financial Reporting Standards (IFRS) developed by the International Accounting Standards Board (IASB). IFRS started to develop its XBRL taxonomy in 2002 and first released it in 2005. The taxonomy represents hierarchical dictionaries for electronic XBRL-based reporting. IFRS Taxonomy for SMEs was initially released separately from the main IFRS Taxonomy, but since April 2010, they have been released under the same IFRS Taxonomy. The development of the SBR taxonomy was expected to align with the IFRS taxonomy (IFRS, n.d.-a, n.d.-b; Thomson, 2009)

community, and to involve them in the development of SBR. In addition, raising the non-Big 4 sub-groups awareness was deemed crucial to help raise small businesses' awareness.

Second, at this point, if the majority of the non-Big 4 sub-groups were aware of SBR, they may not have been as interested as the Big 4 in adopting SBR. As the ensuing discussion suggests, the reasons concern limited resources and cost-benefits, with respect to first, reporting to ASIC and second, reporting to the ATO.

Financial statement reporting to ASIC and the possibility that it was going to be mandated following the global XBRL-based financial reporting trend was seen by the non-Big 4 sub-groups as a burden, particularly for larger firms such as the Next Big 8, which were competing with the Big 4 for the same type of client base. That is, businesses that are required to directly and indirectly lodge their financial reports to ASIC such as public and proprietary companies and registered investment schemes, totalling approximately 27,000 entities (The Treasury, 2012, p. 14). As per the quotation below, the executive director of Next Big 8 A interviewed in 2013 (P12), identified such concerns as she had been involved in XBRL development in Australia since early 2000. P12 indicated that the Big 4 would have the resources and the ability to attract and train skilful professionals, so they would be able to comply and gain benefits from it, whereas others would be burdened by it. P12 emphasised that the non-Big 4 sub-groups would not have the resources or the ability, including partner time dedicated to learning about this new standard. P12 highlighted that the Big 4's push for a mandate, particularly for listed public entities financial reporting, was due to the use of the XBRL-based standard, which was in line with the Big 4s' global strategy, as XBRL was becoming the global standard for financial reporting. Further, unlike the Big 4, the non-Big 4 sub-groups had not built sufficient resources for XBRL-based reporting. In addition, P12 believed that with the adoption of IFRS, the need for them to learn and use a SBR taxonomy for local reporting instead of using the IFRS taxonomy for both local and global reporting (see footnote 43 on the previous page), put undue strain on the limited resources of the non-Big 4 sub-groups:

XBRL Australia started up, and I think I can't remember the exact configuration now, but the accounting bodies were supporting it and the stock exchange was driving it at the time, but it was really, that was pre any taxonomy actually [being] in place ... I think XBRL was formed in 2001 2002 something like that, XBRL Australia, [was] trying to come up with the taxonomy that would fit the Australian working environment and it didn't really make sense because as we moved to international standards, why would you provide a taxonomy for Australia when we could go straight to IFRS and that was what happened in the end. But at that time as well there were a number of big four partners who were actively involved. I was quite envious because they, they dedicated a lot of resources into building taxonomies and you know dedicated partner time, partners and directors into that. (P12, *Next Big 8, Interview 10, p. 2*)

My observation is all the expertise is in the big four [At the time of the interview, the training had not yet offered by the accounting professional associations] ... I mean I'm so envious ... [of the Big 4] ... because one they dedicated resources early on so they sort of [grew up] with it so they started developing expertise when the accounting was not so complex so that's skill set is already there. And then I think to build on that skill set is not so difficult. I mean it's still quite a challenge but it's feasible. Whereas I think for those accountants who have never been involved in XBRL, and now ... I think we said it [reporting to ASIC] needs to be voluntary. And as in the private market because it's just too difficult. Even for our Australian listed market, they're small companies, this is quite an impossible then. I think I can see with the really large companies that have got resources, is not a big deal to get two people working on it for a year or whatever, even at [an] expert ... salary, it still is not that expensive. ... and I think that the fact that we've gotten [an] SBR taxonomy and not an IFRS is also problematic because whoever is providing software here has to make sure that they're using SBR tags, which I think are aligned with IFRS, but ... not identical to IFRS. So, from software providers, if they could use IFRS tags and sell that product globally, that would make so much more sense and an Australia service provider, having to use SBR tags to service Australia it's just the economies of scales don't make any sense at all. (P12, *Next Big 8, Interview 10, p. 4*)

P12's explanation about the burden of adopting SBR for ASIC reporting was later confirmed in the responses from a diverse set of stakeholders to the government's consultative SBR Options Paper released in November 2012 (Stage 3). The Paper dealt with options for SBR implementation in Australia (The Treasury, 2012). It raised the potential for mandating the submission of financial statements to ASIC. Its release indicated that the issue of mandating SBR-based submissions, especially for financial reporting to ASIC, was critical as it had been a major concern for accountants since the inception of SBR (Stage 1).

Responses to the Options Paper by two of the Next Big 8, two of the Big 4 and a joint submission by two of the APA (APA 1 and APA 2) show competing views, as suggested earlier. The Big 4 supported the mandate for reporting to ASIC, whereas the Next Big 8 did not. The Big 4s' support was contrary to the views of their typical client base (i.e., large businesses). In addition, the representative of chief financial officers from Australia's large enterprises, the Group of 100 Inc., indicated that although they supported the SBR initiative, they did not support the mandate (Bowen, 2013). However, the APAs supported the mandate in a similar manner to Big 4, but suggested to first focus on the top 100 listed entities (Malley & White, 2013). This again suggests that the Big 4 were more actively involved and that the APAs sided with the Big 4 on this matter because the top 100 listed entities are largely catered for by the Big 4.<sup>44</sup> Again, this is a threat to the Next Big 8 because if they do not have the resources to

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<sup>44</sup> Based on an informal discussion with one representative of one of the APA, the associations did not have time to ask for submissions from their members. Therefore, they invited only the Big 6 (all of the Big 4 and two of the Next Big 8) for a meeting because financial audit services in Australia are dominated by them. Two of the Big 4 and one of the Next Big 8 came. One of the Big 4 sent their responses to the association because they could not attend. However, two of the Next Big 8 (in which one attended the meeting) sent their submissions directly to the

cater for these top 100 listed entities, they will lose these clients to the Big 4. The issue of limited resources, as discussed earlier, was raised by P12 (Next Big 8 A). There were no responses to the paper from other sub-groups, Mid-tier and SMPs.

Overall, based on P12's response, the cost of adopting SBR for the non-Big 4 would be much greater than the benefits—not only for them, but also for their smaller clients. P12 indicated that SBR may not increase efficiency and added that it may not lead to clients pressuring them to reduce their fees because there are costs associated with the adoption. P12 went on to explain that the firm already had a proprietary system that could do what the government asked, so higher costs from using SBR meant that practitioners would be better off using their existing system or software.

I don't see how it could be more efficient. I think more efficient from a regulator's perspective, absolutely ... that absolutely makes sense and [I can] give you better quality data internally if you [want to] set up your own database; that makes sense as well. But between the client and the accounting firm, I don't see any difference, quite. Once you get the initial setup done, I think it's pretty much business as usual. There's definitely a cost to get that tagging done initially ... I just don't see how it [SBR and therefore commodification] would impact accounting firms' revenue really because you still have to explain the information to them ... I don't see how ... [commodification] earns justification for reduced fee. (P12, *Next Big 8, Interview 10, p. 21*)

The views expressed by P12 show that she resisted the bureaucratic logic underpinning SBR and in that sense was maintaining the traditional normative logic or professionalism. That is, challenging the adequacy of the SBR Program and therefore the government intervention in their professional domain. This in turn, is about maintaining professional integrity and professional competence and due care.

The other reason, the non-Big 4 sub-groups may not have been interested in adopting SBR relates to the use of the SBR channel, especially to report to the ATO. It was considered a burden on small practitioners (i.e., SMPs) from a cost–benefit perspective. Although two of the APAs supported the SBR development, the Head of Reporting of one of the APAs at that time indicated that:

Many large reporting entities upgrade their software once or twice a year and for these businesses changing over to SBR compatible software will be implemented as part of their normal upgrades. For small practitioners and entities that may only report to one or two of the relevant government agencies, the cost savings aren't quite as obvious. (APA, *Article S1\_T1\_10\_Charter\_2008\_11, p. 37*)

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government and showed different views than the APA's submission. This shows that the APA's submission on this matter reflects the Big 4's views.

Here, the APA sided with the SMPs. This may be because unlike in the case of reporting to ASIC, requirements to report to the ATO apply to all businesses. While listed public entities were largely catered for by the Big 4, the majority of businesses in Australia are small businesses that are mostly being catered for by smaller practitioners such as SMPs. SBR had not yet gone live in Stage 1, and there was no clarity on the types of software or facilities for adopting SBR. Thus, the APA understood that from the perspective of costs versus benefits, smaller practitioners with limited resources would face difficulties in adopting SBR. Potentially, the accounting profession supported listed public entities reporting to ASIC because it primarily affected large businesses and larger sub-groups that have the resources to adopt SBR, and the benefits for the public at large were more obvious:

For businesses, analysts and investors to access and use publicly available information to calculate financial ratios, reviews [sic] competitor information or predict lending risk will lead to substantial savings and improved transparency in a variety of ways. (APA, *Article S1\_T1\_10\_Charter\_2008\_11*, p. 38)

The APAs' view in relation to the lack of clear and sufficient SBR benefits for small practitioners was later confirmed by one of the SMPs (P11), who was interviewed in 2013 but was involved in some XBRL work with the Auditing and Assurance Standard Board (AUASB) prior to Stage 2 (i.e., prior to July 2010, before the SBR channel went online). P11 indicated that, from the time she was involved in XBRL work to the time of the interview, she believed that the dissemination of information about the potential benefits of SBR to both accountants and small businesses had not reached the wider audience. She suggested that smaller practitioners would adopt if they had adequate SBR knowledge, and that it had been made clear that SBR leads to increased efficiency and improved quality of work. In addition, P11 indicated for SMPs there were tensions between benefits and costs as they have limited resources. She stated, from the financial audit perspective, there seemed to be potential benefits:

Yes because from [the] audit perspective, it would make my life a lot easier ... If these [line items] all are transparent ... if I were to audit based on line items, and I can see the full composition of each revenue, assets, liability and expense, and equity lines, if I can see that, that would help me significantly. That might mean that I would have to do [a] heck [of] a lot more work too because instead of just having a look at balances, you know asset balances, I'd be also looking at these transactions. And that would force me to go further than I would otherwise. (P11, *SMP A, Interview 9*, pp. 5–6)

However, P11 also indicated that for SMPs focusing on tax-related reporting, there were no clear significant benefits: 'Is it [SBR] really [in] the interest of these accounting advisors?' (P11, *SMP A, Interview 9*, p. 5). She went on to state "Because it [SBR and therefore commodification] is going to mean the shrinkage in their fees' (P11, *SMP A, Interview 9*, p. 5).

P11 recognised this problem of a lack of clear benefits, including the threat to income, despite acknowledging that the APAs were involved in the establishment of XBRL Australia together with the Big 4, who supported the government in the development of XBRL-based reporting standard (i.e., SBR).

Overall, through this problem of a lack of clarity about the benefits as opposed to the costs of SBR, P11 highlighted two issues that contributed to the low involvement of accountants in general. First, the non-Big 4 subgroups' awareness and knowledge of SBR were dependent upon the APAs. Second, the non-Big 4 sub-groups were uninterested because SBR was considered unimportant for their work. However, this resistance may also have been due to a lack of sufficient knowledge.

How practitioners are placed to operate in this sort of environment, I really think this is where, I think the Institute of Chartered Accountants and CPA Australia, I really think they need to get together and put something out. (*P11, SMP A, Interview 11, p. 7*)

Yes. Each of the individual accounting bodies as well as the small bodies [e.g. tax associations] that [represent] small tax practitioners and all that ... these bodies need to [act as] one [on] these things. It needs to dribble right out. It cannot just stay in Canberra, that level. It has to come to the community, effective communication. (*P11, SMP A, Interview 11, p. 15*)

Although P12 (Next Big 8 A) showed competitive tendencies towards the Big 4 in servicing large clients and P11 (SMP A) identified the potential loss of income arising from the adoption of SBR as one of her concerns, in general their resistance to SBR, reflected normative behaviour (professionalism). Similar to P12, P11 showed resistance to state/government pressures. Both P12 and P11 indicated challenges that their clients would face and questioned the costs of SBR compared to its benefits in improving the quality of their work. In addition, P12 supported P11—that is, in the beginning, the focus was on the benefits for the financial audit and listed public entities. However, for reporting to the ATO, it would have significant implications for smaller practitioners such as SMPs, whose primary client base comprises small businesses.

These concerns from the non-Big 4 sub-groups suggest that the Big 4 were seen as having the capacity to leverage on their existing resources—not just financial, but also expertise. Differences in the types of client base, and thus professional work and possibly also professional values, appeared to affect the non-Big 4 sub-groups, and particularly SMPs, in viewing how they could leverage efficiencies to defend or redefine their jurisdiction.

Different views between the non-Big 4 sub-groups and Big 4 with respect to SBR adoption were also identified in the first stage in the article review. The representative of one of the two

Big 4 who became involved in the SBR Business Case pilot testing stated that, ‘We found that unprofitable jobs became profitable’ (Article S1\_T1\_1\_BRW\_2008\_05, par. 8). The Big 4 promoted the benefits of SBR as reducing costs, increasing efficiency and enabling accountants to transition to the role of financial advisors and provide more value-adding services to clients (Article S1\_T1\_1\_BRW\_2008\_05). The emphasis on efficiency reflects the Big 4s’ interest in engaging in practices that maximise profits, thereby revealing their support for commercial logic (Lander et al., 2013). This is in contrast to smaller practitioners, because those benefits do not align with the types of professional work that smaller practitioners offer, as they deal primarily with local smaller clients that are less demanding; thus, these practitioners tend to adhere to professionalism, the traditional normative logic (Lander et al., 2013). In Stage 1, since SBR was still under development and cloud accounting had not disrupted the SME space, there was no change to the professional work of accountants in public practice at large. Therefore, there was no change to any of the remaining boundaries namely location of work, firm size, firm structure, client base and professional values. The APAs were careful regarding the changes affecting smaller practitioners. Therefore, in Stage 1, based on the results of the article review and interviews, the non-Big 4 sub-groups, especially SMPs in general, still showed normative logic.

The previous discussion indicates that the tendency for commercial logic was possibly not the only factor that led some of the Big 4 to become involved in the SBR Business Case pilot testing with the government. The Big 4 may have been attempting to re-shape the role of accountants at large—that is, to gain a legitimate position in the new space. According to the literature, the Big 4 have the power to influence the accounting profession and businesses (Abbott, 1988; Battilana, Leca, & Boxenbaum, 2009; Cooper & Robson, 2006; Covalleski et al., 2003; Greenwood et al., 2002). In addition, as indicated earlier, the Big 4 were one of the dominant actors in Stage 1. The dominance is consistent with the picture painted in the literature. That is, the Big 4 encouraged other practitioners to adopt because, in order for SBR to be successfully implemented and for Big 4 to enjoy the benefits of SBR, mass adoption is crucial (Troshani & Lymer, 2010). However, again, the non-Big 4 sub-groups in general were still not aware of, or interested in becoming, involved in embracing the change.

Figure 6.2 (page 177) shows the Big 4’s potential interest in expanding the role of accountants by embracing the digital innovation. The Big 4 became involved in the discussions beyond SBR implementation (T1)—that is, the Transformation in the SME Landscape (T3). This indicates their potential self-interest in the digital innovation beyond SBR—that is, as a leverage for the Big 4’s multidisciplinary services. Here, the Big 4 became involved in the discussion on cloud computing. Although cloud computing applies to all business sizes, there was an emphasis on



SMEs because the discussion was on SaaS—that is, cloud-based software—to digitise the processing and management of business information. SaaS typically targets SMEs because they represent a segment of businesses that would most benefit from this. SaaS enables SMEs to access resources that they could not afford to have in-house. The Big 4 may have started to recognise that the trend towards cloud-based software could create more opportunities for providing multidisciplinary services beyond accounting, such as technology and other business transformation services, even to SMEs who were not their typical client base.

The Big 4's interest in expanding their market share through the digital innovation was also evident when interviewing P13, a director, from Big 4 A (Interview 11). P13 had been involved since the inception of the SBR Program in 2007. P13 indicated that when the government consulted with the Big 4, the business case that Big 4 A provided to the government, proposed that SBR should cover more comprehensive compliance reporting—not only financial reporting. P13 indicated that the aim was to digitise and transform the firm's compliance business and to extend the benefits of XBRL/SBR-based data so the data could be re-used to inform other services that benefit clients, such as business advisory. At the time of the interview in 2013 (Stage 3), Big 4 A had recognised further opportunities to expand beyond compliance (e.g., finance transformation project, including serving smaller businesses). However, they had not shown a clear interest in expanding into the SME space:

So, we have [an] innovation program that we run inside Big 4 A, I've had some ideas how we could transform the business, then [the] compliance business that I was in. A lot of the work that we were doing was around the digitisation of the data that we were creating and we re-used that and met with [a] few developers, and principally [Name of the Partner], who is a partner in the practice said you need to go away and research XBRL, and so through that research we then presented to the executives [of the accounting firm] then the executives bought in to the concept that we need to do something about XBRL, now whether it's to ignore it flat out or actually do something, there was a lot of awareness and through that awareness ... we created some prototypes and really started to use the technology. [This was] re-introduced to Paul Madden [Head of SBR Program in Stage 1] through Treasury when they were first putting together the business case. [We] spoke about our experience and then it sort of grew from there. So we've stayed involved up until a few years ago at the program level but then now as a business we [are] sort of looking at it how it's [going to] impact our compliance business as an intermediary as opposed to being involved in the project itself ... Yes [compliance beyond financial audit]. So compliance we do compliances, tax compliances as well as financial reporting compliances or compliance can mean many things to people. But in our world it means preparation of tax returns and forms that need to be lodged to [a] statutory body. And that's [what] we're typically engaged to provide or services that we're engaged to provide. (P13, Big 4 A, Interview 11, pp. 1–2)

Yes [SBR-related services will go beyond compliance], [it] absolutely will form part of any sort of finance transformation project that we do. But we're not talking about someone upgrading their version of MYOB or changing from MYOB. We're talking about multi-million dollar project[s] where we're actually completely re-organising the finance function and part of that will be how they then report to government. ... I think there's ... opportunity [for expansion] at that smaller level [businesses that use off-the-self SMEs accounting software such as MYOB], [however] it's just not part of our core business. (P13, Big 4 A, Interview 11, pp. 10–11)

Therefore, unlike the Big 4, public accountants in general were not aware or interested because the non-Big 4 sub-groups, especially SMPs, lacked resources and cost-benefits issues (Greenwood et al., 2002; Lander et al., 2013; Ramirez, 2009). In addition, the SME space—the primary client base of SMPs—had not been disrupted. Based on the results of the article review, the issue about the changing SME landscape started to emerge in early 2010—around the time of the Big 4s' involvement in T3. This emerged after the issue on Competition in the Provision of Cloud Accounting for SMEs (T2) was brought up primarily by the Software Vendor. The emergence of the discussion around T2 coincided with the first release of the Australian version of Xero cloud accounting in September 2008. However, at this stage, Xero had not established itself in Australia. The market was still dominated by the incumbent vendors through their desktop-based products (Vallence, 2013). Again, in Stage 1, there was no change to the professional work of accountants in the public practice at large.

Although the non-Big 4 sub-groups had not yet become attracted to using the digital innovation to expand their jurisdiction, as in the case of the Big 4, a few of the non-Big 4 sub-groups supported the need to reduce time spent on non-value-adding compliance services (S1\_T1\_5\_BRW\_2010\_03). However, in general, the accounting profession beyond the Big 4 resisted the SBR at this stage. The APA also maintained a balanced view, potentially reflecting an attempt to satisfy both Big 4 and non-Big 4 members. On one hand, it expressed scepticism about the benefits of SBR, especially for smaller practitioners (Article S1\_T1\_10\_Charter\_2008). Conversely, there was a continuing effort to highlight the benefits of SBR, especially for smaller practitioners. It facilitated messages from the President of XBRL Australia and the Head of the SBR Program at that time in promoting the business case for SMPs and for accountants in general (Article S1\_T1\_8\_Charter\_2008\_03; S1\_T1\_17\_Charter\_2010\_05). That is, instead of replacing some of the work of accountants, SBR increases efficiency for compliance work and enables accountants to focus on analysis and advisory.

Further, regardless of the APAs' support for the Big 4, and in assisting the government with SBR development, it recognised the need to facilitate its members at large to convey their input on SBR development. According to the CEO of one of the APAs at that time:

The Institute is helping educate members on SBR and, in turn, identifies member concerns to Treasury. To date, the Institute has helped put Treasury [SBR Program] in contact with members, who are now influencing the development of the system via direct user feedback. (APA, Article S1\_T1\_9\_Charter\_2008\_11, p. 16)

Overall, this indicates that the existence of the normative pillar in Stage 1 was still strong. A strong normative pillar means that although the accounting professional community recognised to varying degrees the potential benefits of SBR and to some extent assisted in the development of SBR, in general, they were critical and cautious of the potential implications of SBR for their professional work and its effects on their clients.

In general, accountants, especially SMPs, had not shown interest in adopting SBR, so they did not demand software to support it and did not advise their clients about it. Further, a lack of sufficient demand from practitioners and businesses, as well as an unclear timeline for a possible government mandate in Stage 1, led to resistance from incumbent (accounting) software vendors. These vendors were reluctant to develop the software in this early stage because there was no sufficient and sustainable market. This issue was identified by studies examining SBR development up to Stage 2 (Productivity Commission, 2012; Zakowska et al., 2012), and also by this study. Two incumbent software vendors interviewed in 2013 indicated such concerns. Although the interview took place in 2013 (Stage 3), the incumbent software vendors recognised that larger firms, including Mid-tier at that time, had started to become interested in SBR. However, SMPs had not. These vendors largely served small businesses; thereby, the demand from accountants of these small businesses (i.e., SMPs) was important:

So maybe it's the education, maybe it's the incentive. And if the accountants aren't driving and pushing it, obviously the big end of town is and the mid-tier firms [e.g., Next Big 8], but for small accountants in suburban practices who have [altogether] 500,000 clients isn't pushing it, then the small business goes 'Well why would I do that? My accountant is not telling me to do this. He's not doing it.' Then it doesn't make sense (*Vendor B, P24, Interview 21, p. 10*).

So yes that is helpful for business, but when you look at it. As I said at the beginning, you look at that in the scheme of things - the priority, the work that we have, our clients are screaming for either different features, better features within the existing product or new features and SBR does not rate. And they're the ones setting the priority, not us. So we effectively do what our clients want obviously within reason, because we listen to them, we engage with them (*Vendor C, P28, Interview 25, p. 2*).

In addition, software vendors were heavily invested in developing their software to be able to communicate with the existing ATO reporting channel, particularly the ELS. Therefore, there was no push for software vendors to implement it either. Overall, there was no demand-pull from end-users such as businesses and accounting practitioners, and no supply-push from software vendors for SBR-enabled software.

The government was also aware that the incentives for vendors were tied to profits, which in turn required a sufficient and sustainable market demand. This was revealed in an interview in November 2012 with one of the personnel of the SBR Program, P3 (Interview 2), who was responsible for dealing with the stakeholders of the SBR development. P3 recognised the importance of the support from software vendors, especially the incumbent, because they would push accounting practitioners and businesses to adopt SBR:

So [we] engaged software developers very early. We took very much a co-design process, we engaged them very early, had a lot of forums, where we talked about high level design (*P3, SBR Program, Interview 2, p. 6*)

So ... the hardest thing has been actually engaging the [software developers]. There has been no compelling reason for the accounting software developers to go on board. It always ... comes back to the software developers because they're the biggest [incumbents], they're the ones who drive a lot of this for us. If they're not interested, then that makes our trouble a lot harder. (*P3, SBR Program, Interview 2, p. 25*)

This situation shows that the capacity of regulatory activities to exercise coercive pressure often depends on the response of the regulated and the market, therein, the normative and cultural-cognitive pillars (Dobbin & Sutton, 1998; Scott, 2014). The regulatory pillar in this stage could not dominate or create further regulative pressures in the professional public accounting practice. In the absence of a mandate, as in the case of SBR, there was a lack of support from accounting professionals as a whole, regardless of the Big 4's support for the SBR Program. The APAs also maintained a balanced view. In addition, there was lack of support from software vendors, whose entrepreneurialism could have enabled them to enforce the government bureaucracy logic underlying the regulative pillar (i.e., efficiency) upon the accounting profession, especially in public practice.

As discussed in Chapter 4, the regulative, normative and cultural-cognitive pillars may co-exist and be interconnected, where one may be dominant at any given time as the professional field evolves (Hirsch, 1997; Hoffman, 1999). The normative pillar represents the professionalism or traditional normative logic of the accounting profession. It involves maintaining independence from the market and client, as well as from the state or government (Suddaby et al., 2009). In that sense the accounting profession is self-regulated. However, in Australia, self-regulation

operates within a co-regulatory framework environment (ICAA). That is, no single regulatory body is responsible for regulating the accounting profession, as this involves regulators, government standard-setting bodies, the Accounting Professional and Ethical Standards Board (APESB) and the three professional bodies: ICAA, CPAA and IPA. Thus, to some extent, a government-imposed regulative pillar exists when it is supported by the profession. In Stage 1, therefore, the normative pillar remained the dominant pillar because increased regulative pressure was not supported.

Further, there was no increased dominance of the cultural-cognitive pillar. The Big 4's support for the change did not affect the accounting profession at large as non-Big 4 sub-groups resisted the SBR. The cultural-cognitive pillar prevails when a new practice, albeit related to commercial logic, is accepted as the current way of practice by the accounting profession at large (Greenwood et al., 2002). The cultural-cognitive pillar is about the ability to adapt to rapid change and to keep the professional jurisdictions and identity fluid (Scott 2014, pp. 66-70, 122-123). The literature identifies that, to some extent, the accounting profession has this flexibility (Malhotra & Morris, 2009; Malhotra et al., 2006). Resistance to adoption on the part of non-Big 4 subgroups, including a lack of engagement, reflects their attempt to protect their jurisdictions from the commodification. This in turn indicates that in Stage 1 the traditional normative logic dominated and similarly the normative pillar.

In summary, the commodification of traditional accounting work due to digital innovation had the capacity to significantly affect the domain of smaller practitioners and also to affect the profession at large. However, at this stage the digital innovation did not have such an effect, because not only was there resistance to the development of SBR, the SBR channel was not yet launched. Thus, it can be concluded that there were no changes in the nature of professional knowledge, the client relationship and thus jurisdictional control, which affect professional work. Therefore, in Stage 1, the existing social structure was maintained.

#### **6.4.2 Stage 2**

Stage 2, covering 1 July 2010 to 30 June 2012, was the period where SBR went live and the drive towards cloud-based solutions, particularly for SMEs, started to emerge. As the discussion surrounding the commodification of the traditional accounting work progressed through Stage 2, the types of actors that became involved increased (see Figure 6.2 page 177). There were also changes in the number of actors involved for each type of actor, as well as the themes under discussion.

In this stage, the Paradigm Shift in Professional Public Accounting Practice (T4) in serving SMEs emerged. It became the dominant theme. That is, it had the highest article count (8) and actor count (33), and types of actors involved (i.e., the debate surrounding T4 was more intense than for the other themes). However, the discussions around the paradigm shift (T4) was not significantly more than the discussion around Competition in the Provision of Cloud Accounting for SMEs (T2) and Transformation in SMEs' Landscape (T3) because the discussions around the latter two themes also increased in Stage 2 (see Figures 6.1 and 6.2 pages 176–177). Conversely, discussion around SBR Implementation (T1) declined significantly, shifting from the dominant theme in Stage 1 to the least occurring theme in Stage 2 (see Figure 6.2 page 177). The changes in the themes in Stage 2 were followed by changes in the types of actors involved in each theme. This indicates that there were changes in the interactions between the actors, as each actor involved in this stage had a different focus or self-interest (see Figure 6.5 page 190). Therefore, it is important to understand the implications of these changes for professional public accounting practice, including the boundaries between sub-groups, as the number of public accountants involved tripled, and they predominantly engaged in the discussion around the paradigm shift in professional public accounting practice, specifically in serving SMEs (T4). Two main factors contributed to this situation.

First, Stage 2 was the period in which SBR went live, but adoption was still low due to limited software availability (Productivity Commission, 2012). SBR went live on 1 July 2010, and a couple of SBR-enabled software packages were launched shortly afterwards. One was a middleware desktop-based software developed by a member of the Big 4, Big 4 A, in collaboration with a software vendor specialising in middleware products. This product initially designed to be compatible with one of the incumbent accounting software for SMEs with the largest market share in Australia. The other was a cloud-based full-suite accounting software package produced by a new start-up software vendor, Vendor A, which claimed to be the first to integrate SBR-enabled accounting software and practice management. By the end of 2010, eight SBR software packages had been certified (SBR, n.d.-a). Most of the software packages were first launched in early 2011. Some of those that were launched at that time were still being developed. Thus, the vendors were offering users a free licence to use the product in order to gain feedback regarding further improvements. All of these certified software packages sought to be compatible with the existing accounting software for SMEs (ATO, 2010).

However, only one was developed by an incumbent software vendor, Vendor B, and it was middleware for their existing product. Perhaps it would have been too costly to SBR-enable the existing product, and SBR at that time was still in the early phase of its implementation. Interestingly, one of the eight SBR software packages was developed by an SMP, SMP F.

Therefore, out of the eight packages, two were developed by accounting firms and only one was developed by an incumbent software vendor. This indicates that different interests were at play.

These different interests became evident towards the end of Stage 2. The results of the SBR Program's consultation with stakeholders, coupled with recommendations from the Productivity Commission, showed a need to cater for compliance reporting that had wider implications for the economy, such as broader red-tape reduction (Productivity Commission, 2012). This led to a shift in the focus of SBR development to ATO-related submissions, given that all businesses must report to the ATO. Importantly, this shift to the ATO aligns with the primary aim of SBR, which is to have a single national channel that reduces the burden on the economy from compliance costs (Productivity Commission, 2012). Therefore, in Stage 2, the government formally announced that the focus of SBR development was now on ATO submissions. In a speech to the CPA Professional Accountants Group Annual Dinner in Sydney on 2 February 2012, the ATO Commissioner publicly announced the ATO's intention to transition ELS to SBR (D'Ascenzo, 2012).

The announcement created a further drive for the development of SBR software, but SBR adoption rates in Stage 2 were still low (Productivity Commission, 2012). The critical reason for the slow take-up was that none of the incumbent software vendors had SBR-enabled their existing products. This had a significant effect on adoption because incumbent software vendors comprise the largest market share. In addition, although there were a few middleware software available and an incumbent software vendor, Vendor B, had also created a middleware software; encouraging users to install a middleware software to an existing desktop-based accounting system was challenging (Productivity Commission, 2012). In this stage, there was clearer direction with the development of SBR, and thus potential profitability for software vendors. However, incumbent software vendors were focusing their attention on another issue that held greater promise for their profitability margins: the cloud accounting disruption.

This leads to the second factor. In Stage 2, Xero started to disrupt the SME space in Australia with its cloud accounting product. As discussed in Chapter 2, the design of its product and its business model enabled it to be disruptive. Xero's commitment to seize the Australian market was also marked by the establishment of its first headquarters in Australia in October 2010. During Stage 2, Xero increasingly targeted small businesses, especially those that had previously not used any accounting software (Drury et al., 2012; Markus, 2013). In doing so, it experienced a significant increase in its Australian customer base. It tripled its customer base

for two consecutive years (Drury et al., 2012; Norman, 2011). In 2011, Xero reported a fivefold increase in revenue from Australian customers, and in 2012 it became the fastest-growing software vendor in Australia (Drury et al., 2012; Markus, 2013; Norman, 2011).

Xero's disruption to the SME space in Australia was seen by the incumbent software vendors as a threat to their market share. At that time, the incumbent software vendors were still championing their desktop-based software. Accordingly, instead of focusing on SBR development, the incumbent software vendors focused on the increasing competition in cloud accounting. This was indicated by the Head of product development of an incumbent software vendor, P28 (Vendor C). P28 recognised not only was Xero disrupting the accounting software industry and changing the industry standard from desktop- to cloud-based software; its market share was increasing. As a result, in Stage 2, Vendor C, which had not put SBR development as its top priority, further de-emphasised the priority level of SBR development as it focused significant parts of the resources to its top priority. That is, developing its own cloud accounting product to be competitive and to increase its market share. Although P28 identified that SBR could be seamlessly integrated to cloud accounting, P28 did not believe that enabling SBR at that time would make any difference. P28 stated that the focus should be on developing cloud accounting that meets its clients' needs as it is the core system that enables integration with other technologies/add-ons and collaboration with other stakeholders (e.g., accountants, suppliers and customers). Thus, once cloud accounting becomes the standard, SBR and other add-ons would be adopted.

It is [the cloud and SBR can be seamlessly integrated]. But I think the software developers have been more attuned to where the industry is going, i.e., the cloud, than the government [SBR] ... I don't know whether you've interviewed them [Xero] but a wholly online product. So the industry was already moving ... it takes a couple of years of development before you get there, and quite some time ... So having a product in the cloud [cloud accounting] is a huge selling point. Having the feature in the cloud that allows you lodge electronically [SBR being enabled in a product] is not a feature that gains sales or decrease our market share (*P28, Vendor C, Interview 25, p. 11*)

Another incumbent software vendor, Vendor B, also indicated that the strategy of focusing on the development of the cloud was appropriate because SBR had not matured, and that the demand from small businesses was for cloud accounting rather than SBR. P24, the General Manager of Vendor B, also implied that Xero was driving the accounting industry to move towards cloud-based accounting software. Similar to Vendor C, Vendor B also highlighted that once everything had moved online, it would be easier to see the benefits of SBR, and so SBR would then be adopted. Here, P24 also brought up the importance of raising awareness about the benefits of the digital innovation as a whole rather than just the benefits of SBR as SBR



could be misconstrued as a mere commodification (i.e., standardisation and automation) that only provides benefits to the government:

So it was removing the perception of a particular thing like SBR and actually just saying, 'We're here to help you in digital'. So if we actually removed that and say it's all online now, then people get online. Like 15 years ago online banking was still a very new [product]. Five years ago cloud accounting was very new. Now people are just going 'well I've got my financial records in the cloud—it's all OK'. Whereas now we can say we interact with the government online and this is all the great things you can do, maybe that's the awareness now rather than talking about SBR, because SBR is still that little bit daunting. It's the 'What's in it for me?' If we say you can do everything with e-government you want to do and e-government, e-records, all those sorts of things going forward are a big deal—perhaps that's an approach. (P24, Vendor B, Interview 21, p. 12)

The view that SBR would be naturally adopted once cloud accounting became the standard was recognised by the start-up vendor that released cloud-based SBR-enabled accounting and practice management software. When interviewed in 2013, Vendor A (Interview 12) indicated that in 2010 it was difficult to compete with the incumbent accounting software for SMEs because users would not switch to other accounting software just to adopt SBR. Further, both SBR and a cloud-based complete accounting suite were in the early stage and represented a new paradigm.

Accordingly, Vendor A's initial full-suite SBR-enabled cloud-based accounting software did not gain traction. This led Vendor A to release SBR middleware software in early 2011. It was also fully cloud-based although at that time, other vendors' SBR middleware software were still desktop-based. The pure cloud-based nature of Vendor A's SBR software made it similar to an add-on application—that is, added or connected to the main or core accounting and business software when needed, and there is no installation or upgrades. In releasing the cloud-based SBR middleware software, it aimed to attract users by tapping into the existing users of the incumbent software vendors. Cloud-based middleware software for SBR lodgement was seen as the best option to facilitate better integration with existing accounting software for SMEs, and to facilitate challenges faced by connecting to the government's digital channel, which was still continuously being developed. In turn, this approach showed promising results, and it aligned with an increasing trend towards cloud accounting due to Xero's disruption. In 2012, Vendor A received increasing requests to integrate with Xero.

The government recognised Vendor A's strategies and shared the same view that the push towards cloud accounting for SMEs due to Xero's disruption would help boost SBR adoption. When government representatives from the SBR Program were interviewed in November 2012 (Interview 2), December 2012 (Interview 4) and January 2013 (Interview 5), they stated that Xero's disruption was putting more businesses online. This was deemed to facilitate SBR

adoption because in Stage 2 SBR had just gone live, and the government's focus to push for SBR adoption was on those businesses already using accounting software, as those that were still using manual processes were considered difficult to convert (Interview 2).

Interestingly on that [issue] our focus, when it came to our break for an SBR, we were told paper was not our focus ... Do not look at people who are operating on paper, you have to convert those who are already online only. You're not allowed to look at paper ... They were out of scope for us ... And the rationale around that was because they're already online, the behavioural change isn't as big. You just need to move them from one system to another. Whereas getting someone from paper onto going online, it's a massive change. (P3, *SBR Program, Interview 2, pp. 31–32*)

However, the government believed that cloud-based add-on alone was not sufficient to boost SBR adoption. They believed that SBR adoption would be significantly benefited through the integration of SBR into the core cloud accounting (i.e., SBR-enabled the software). In addition, as stated earlier, the critical reason of low adoption was that none of the incumbent software vendors SBR-enabled their software. The government identified that Xero's disruption was not only pushing the incumbent software vendors to move towards cloud accounting but to also SBR-enabled their products.

So they [Vendor A], so they weren't, they're not [the top incumbent software vendor], they're not like that [because Vendor A's product is a third party add-on not the core software], but you've got like Xero, who's coming from New Zealand, who are now fighting hard against [the incumbent software vendor with the largest market share] ... when they came to Australia they were a small player, but they've taken market share at a great rate, and again they're a cloud provider ... The beauty about it, I'm really happy everyone's going cloud because as soon as these people [software vendors] put out the integrated [not third-party add-on] SBR product, which they will, no-one has to buy an update, it just happens. If you're in the cloud and they release the integrated product, you just have it. (P6, *SBR Program, Interview 4, p. 19*)

That's right. And if you look at some of the new players in the market, the most aggressive players [that plan to integrate SBR] in the software developers market are those that are embracing cloud technology, Xero. (P7, *SBR Program, Interview 5, p. 38*)

Overall, again, Xero's disruption in Stage 2 was significant. Although it shifted the focus from SBR towards cloud accounting, it had the capacity to facilitate SBR adoption, which was still low in this stage. The government, the SBR Program, believed that although cloud accounting may facilitate SBR adoption, another important reason of low SBR adoption by public accountants may be attributed to potential threats to their professional work due to commodification. Here, the government's position is linked to what P24 (Vendor B) identified earlier. That is, SBR may be seen as a mere commodification sanctioned by the government, and thus its benefits to others as part of the digital innovation as a whole may be overlooked. However, for similar reasons (i.e., commodification), Xero's disruption in this stage was

identified as creating threats to professional work as it led to increased commodification of traditional accounting work, particularly in serving SMEs. Xero's disruption digitalised more small businesses—the largest segment of businesses in Australia—and it had a greater effect on the SME space. However, as explained in Chapter 2, this not only exacerbated the threats, but it also created opportunities for accountants in public practice, especially SMPs.

Therefore, the threats and opportunities arising from SBR and cloud accounting (i.e., the digital innovation) potentially led to public accountants' increased involvement around the issue of the paradigm shift in serving SMEs (T4) in Stage 2. This will be again examined through the exchange relations between different sub-groups of accountants and other actors. As displayed in Figure 6.2 (page 177), multiple actors were involved. Indeed in Stage 2, public accountants had the highest actor count (18). However, public accountants, in turn, comprised the sub-groups—Big 4 (6), Next Big 8 (5), Mid-tier (4) and SMP (3). It is important to separate them into four different types of actors because each has a different self-interest. Therefore, from that perspective, the Consultant had the highest actor count (10). After the Consultant, the Software Vendor and the APA had an equal number of actors involved (8). It is critical to examine the interactions between public accountants and these actors in order to investigate whether or not in Stage 2 public accountants remained resistant to adopting the digital innovation. The developments outlined above suggest that public accountants who serve SMEs may be pressured into adopting the digital innovation.

The digital innovation in Stage 2 was primarily driven by Xero's disruption. Further, the potential effect of the threats and opportunities arising from the nature of the digital innovation became substantial, because Xero's disruption increasingly triggered competition between vendors (T2). The competition had the capacity to transform the SME space (T3) and drive accountants to shift their paradigm in serving SMEs (T4), because to survive, accountants need to adapt. The paradigm shift is referred to in practice as the post-compliance world (i.e., moving towards advisory) because the digital innovation commodifies much of the repetitive and routine professional work that largely comprises the compliance work. When professional accounting work is increasingly automated, accountants may lose some of their work (threats). However, at the same time, as discussed in Chapter 2, human factors, such as professional advice given by accountants, become critical in making computer-generated results useful for businesses (opportunities).

The foregoing discussion signals the potential implications of accountants' interactions with software vendors in Stage 2—that is, due to Xero's disruption, software vendors may have pushed accountants and SMEs to adopt their cloud accounting products. However, in Stage 2,

the incumbent accounting software vendors had not released or revamped their cloud accounting products to compete with Xero. In addition, the rate of SBR adoption was still low. Therefore, software vendors may not have pressured accountants towards the paradigm shift, but started to raise awareness of the issue. Figure 6.2 shows that software vendors were predominantly engaged in the issue of the paradigm shift (T4) but almost equally in the issues of vendor competition (T2). This suggests that software vendors' interests in Stage 2 regarding the issue of the paradigm shift in public accounting practice was in relation to their concerns over the imminent war between software vendors.

While the focus of software vendors was on T4 and T2, the APA was split between the issue of SBR implementation (T1) and the paradigm shift (T4) (see Table 6.3 page 175). However, the APAs were unlikely to drive accountants to depart from their traditional normative logic. Conversely, consultants—who based on the results of article review only became involved in Stage 2—became the dominant actors and predominantly engaged in the discussion around the paradigm shift. It is possible that consultants were acting out of self-interest and drove accountants towards this issue (see Figure 6.5 page 190).

The results of the article review revealed such a drive from consultants. They argued that, with the increasing commodification of traditional accounting work, accountants need to change to survive:

Cloud-based accounting is becoming a prominent feature of the profession's landscape ... Accountants could become redundant unless they find ways to add value ... So when there's less compliance, there will be less work. That's why advisory will be such a strong area going forward. Accountants that stick to the traditional accounting model will cease to survive. (*Consultant, Article S2\_T4\_1\_BRW\_2011\_10, par. 26–27*)

Consultants also warned accountants in public practice of the necessity of having a sound risk management strategy in the face of a changing landscape, particularly fuelled by digital innovations such as mobile devices and cloud computing:

A breach of security could result in sensitive information being accessed with potentially catastrophic consequences such as identity theft. For the organisation itself, ineffective data backups can threaten the entire business should fire, flood or other events destroy its systems. From an efficiency and client/customer service perspective, poor organisation of data will result in significant loss of time and efficiency as employees have to spend considerable time finding documents, research and other information to enable an efficient service. (*Consultant, S2\_T4\_4\_Charter\_2011\_05, p. 16*)

The push from consultants may have occurred because accounting firms at this stage may have been in a wait-and-see position regarding emerging technological changes (CCH, 2013a). The SME space was in a state of flux with many possible outcomes. Here consultants appealed to

accountants' normative logic, by highlighting the need to maintain professional competence in the era of increased commodification and to ensure confidentiality was followed. At the same time, however, consultants would have been driven by market opportunities, such as providing advice to accounting firms on the effects of the digital innovation on professional public accounting practice. Based on the results of the article review, 60 per cent of the consultants were advising professional service firms (PSFs). Therefore, the push from consultants, which was commercially motivated, was not only likely to enable accountants to survive, but it also had the capacity to affect their professional values.

As displayed in Figure 6.2 (page 177), Mid-tier firms first became involved in the debate in Stage 2, and their discussion was solely on the paradigm shift (T4). However, a greater number of the Next Big 8 became involved compared to Mid-tier. Further, the Big 4, who had shown an interest in this space since Stage 1, also increased significantly. As stated earlier, the Big 4 are identified as having competing logics—both traditional normative and commercial (Malsch & Gendron, 2013; Suddaby et al., 2009). Conversely, Mid-tier firms have traditionally been identified as having high adherence to traditional logic or professionalism (Lander et al., 2013; Suddaby et al., 2009). Typically, Mid-tier firms exhibited the highest independence enforcement (i.e., professionalism), and unlike the Big 4, Mid-tier firms were selective in adopting practices related to commercial logic (Lander et al., 2013; Suddaby et al., 2009). However, the Next Big 8's greater involvement in the issue surrounding the paradigm shift may or may not indicate a more aggressive tendency towards commercial logic following the Big 4 rather than the rest of the Mid-tier firms.

As per the following quotation from the article review, the Next Big 8's increased involvement in the debate points to a shift in their logic due to changes in professional work and location of work:

This [cloud] brings an entirely new dimension to mobile technology and serviceability. Our people can now sit anywhere in the world and login to the office system, working seamlessly as if they were sitting at their own desk ... Our audit teams, particularly, need mobile technology to operate onsite during audit engagements. Similarly, our business advisers can meet with a client on premises and retrieve any electronic information available in the office. Both our auditors and business advisers use a custom built software suite purpose built for mobile application. (*Next Big 8, Article S2\_T4\_3\_Charter\_2011\_05, pp. 10 and 12*)

Further, the foregoing comment shows how important it was for the member of the Next Big 8 to position themselves in the changing environment within public practice and beyond. This need to adapt reflects the inevitability of digital innovation. It is transforming how business is done and capitalism is viewed in professional public accounting practice (Thrift, 2006).

However, again, the Mid-tier's involvement indicates that they may have recognised that their survival was threatened and thus also become interested in adopting practices related to commercial logic.

A regional Mid-tier indicated that it had managed to carve out a niche and go beyond traditional accounting services to provide a variety of services, including business planning, cash flow management and finance broking, as cloud accounting enabled it to expand, become multidisciplinary and move into the cities and other states:

Regional accounting firms are more like GPs these days. They work across a variety of areas and with lots of different people. We've found that many of our clients are now focused on succession planning and wealth creation, and many of them are using self-managed superannuation funds. (*Mid-tier, Article S2\_T4\_2\_BRW\_2011\_10, par. 4*)

This reflects an increasing tendency towards the adoption of innovative practices by the middle layer sub-groups—not only how they provide their service offerings or professional work, but also how they run their practice, which indicates changes in location of work, client base and firm structure. These changes also indicate changing professional values towards commercial logic to the extent that they are engaging in multi-disciplinary services and are, therefore, seeking to serve the interest of the client and maximize their profit.

This increased tendency towards commercial logic was also evident with respect to SMPs. One of the directors of an SMP F (P31)—who had developed SBR middleware software (cloud-based add-on) in Stage 2—pointed out the firm's interests in this digital space. Although SMP F identified the increasing threats to its professional work as the digital innovation rapidly commodified much of its work, it found a way to leverage technology. It provides professional expertise through the software by offering users implementation support and monthly assistance support from its qualified tax personnel. This means that it not only offers those services to businesses, but also to other business intermediaries such as bookkeepers, tax agents and accounting firms. Here, P31 saw how to hold onto its existing but changing jurisdiction, while also seeing the many potential opportunities (instead of risks) that could be created. This indicates an entrepreneurial tendency and thus commercial logic:

I think my interest, sort of, grew over the years as we obviously had to leverage technology in the accounting firm and before I got started with the SBR Project, I had already started a business out of India ... and we still utilise that ... which is a back office, so a lot of our compliance processing goes over there and now we actually support probably ... 20 or 30 accounting firms that use that same platform. So, in having set that up, there was quite a lot of requirement for understanding technologies and remote terminal service probably was first, sort of, introduction to that, hosting stuff for people remotely. So, along the way I'd sort of tinkered with different technology sets and I guess, got interested through that route. (*P31, SMP F, Interview 28, p. 2*)

You see, ... most accountants will view what I'm doing as very high risk ... Yes and you see, it [SMP F SBR middleware software] actually puts out a whole new set of possibilities because what we're actually focussing on is building very deep automation into this so that, almost you know, the man on the street or the bookkeeper will be able to come along, connect to the accounting system, pay a few dollars and he'll be able to automatically fill very complex forms. (P31, SMP F, Interview 28, p. 13)

In addition, P31 indicated that the firm developed and released its SBR middleware software because it saw that many opportunities could arise, especially with the trend towards cloud or online accounting. This was also evidenced by the fact that its first focus was to integrate with Xero:

So, I mean, it [the transition to cloud accounting] is happening and certainly, you know, that's where our effort to build [the cloud-based middleware / add-on SBR software, was] ahead of that curve and be ready for... for being able to connect to those accounting systems as they come online was, you know, that was the whole... one of the drivers. (P31, SMP F, Interview 28, p. 15)

Further, P31 recognised that the current disruption particularly affected the small business space, which is their space, but predicted that the digital innovation would eventually escalate and shift the paradigm in professional public accounting practice as a whole. Therefore, in responding to the changing public accounting practice, as discussed earlier, SMP F wanted to be ahead of the game to be able to connect SBR to cloud accounting and therefore advance the compliance processing it has been building as an offshore business unit, which also serves other intermediary or accounting practitioners (both non-professionals and professionals). Thus, SMP F also showed a propensity for competition, which again indicates a tendency towards commercial logic.

SMP F's tendency towards commercial logic is in contrast to Lander et al. (2013), who suggest that small practitioners may have a high tendency towards professionalism similar to Mid-tier firms. Lander et al. (2013) call for further micro-level research on the institutional logic of smaller practitioners because how these practitioners respond to a disturbance may be subject to different dynamics across different sets of actors within an organisational field. In Stage 2, the number of SMPs involved in the debate increased, but the total number of SMPs involved was the lowest compared to the Big 4, Next Big 8 and even Mid-tier, which had just become involved in this stage. Therefore, although there were increasing indications that SMPs were going to be significantly affected, they did not dominate discussions.

In Stage 2, there may have only been a small number of SMPs that had a similar line of thinking as SMP F. For that reason, at this stage, whether SMPs had a tendency towards commercial logic was still not clear. The accounting literature indicates that although SMPs are more

closely identified with traditional professional work, and thus have a higher tendency towards adherence to traditional normative logic, they may engage in practices related to commercial logic depending on the situation that drives them (Sikka, 2009; Suddaby et al., 2009). The factors that drive them are having the skills and resources to go beyond traditional accounting work as well as having powerful clients who demand them to move in such a direction; factors which may not necessarily be present in this stage (Lander et al., 2013; Ramirez, 2009). Therefore, since the digital innovation has the capacity to change these factors, SMPs may eventually be driven towards practices related to commercial logic. Again, in this stage, the competition had just started between software vendors and had not turned into a war because none of the incumbent software vendors had released their new or revamped cloud accounting products to compete with Xero.

Accordingly, in this stage, it is not yet clear how SMPs responded to this changing game. The article review revealed that SMPs that were quoted in the articles indicated the need to embrace the change. However, interview data collected in 2013 revealed that in Stage 2, three sole practitioners—P11 (SMP A), P18 (SMP B) and P21 (SMP D)—had not adopted the digital innovation and still focused on traditional accounting work. This is in contrast to SMP F who in Stage 2 had started to not only see the need to go beyond compliance, but also to develop cloud-based SBR middleware software. Further analysis on the foregoing three SMPs is presented in Stage 3.

Again, SMPs' logic mainly tended towards traditional normative logic, although SMP F's response to the digital disruption suggested the rebuilding of professional boundaries around the logic of the market or commercial logic, which provides empirical support to Fournier's (2000) concept of professionalism. In this stage, cloud accounting was still in its infancy (Macpherson, 2012c; Timson, 2011). Thus, SMPs who had limited skills and resources and a tendency to depend on the accounting profession association (Ramirez, 2009) might still be in a wait-and-see state.

Overall, the increase in the number of the non-Big 4 sub-groups that became involved suggests that they had either started to feel more affected by the outcome, or they wanted to influence the outcome of the impact of the digital innovation. This is also evidenced by the release of the *Charter* supplement *Business Software and Technology Guide* in May 2011 (mid Stage 2) due to demand from ICAA members (ICAA, n.d.-b). The release of the supplement signalled the pressing need for accountants to gain a greater understanding of the changing environment due to rapid developments in digital innovations.



The discussion so far suggests that potentially the non-Big 4 sub-groups such as SMPs had redefined their professional work, location of work, firm structure and professional values around the commercial logic, following the Big 4. Conversely, there were potential changes in the professional work and client-base of the Big 4 as they became interested in the SME space. This is due the digital innovation disrupting the nature of professional knowledge, client-relationship and jurisdictional control of SMPs. Accordingly, there was an indication of stronger intraprofessional competition between sub-groups in professional public accounting practice rather than competition from non-professionals and other professionals, which is in contrast to the findings prior studies (Cooper & Taylor, 2000; Edwards et al., 2007; Suddaby & Greenwood, 2001). Fierce intraprofessional competition may further increase the adoption of commercial logic. Indeed, based on the results of the article review, there was a significant increase in the number of public accountants who became involved and only one non-professional became involved in Stage 2.

In summary, in Stage 2, the need to be compliant by adopting SBR was becoming less of an issue. Instead, the need to identify a strategy to manage an increasingly competitive professional public accounting practice—that is, intraprofessional competition specifically in servicing SMEs—was becoming more apparent. Although, the digital innovation had not created significant impact on SMPs and professional public accounting practice at large and that normative pillar was still strong; the cultural-cognitive pillar had a growing presence. This indicates that the structuration process—that is, field transformation and institutional change—was progressing. However, in Stage 2, the social structure of professional public accounting practice was essentially maintained. Thus, subsequent development of the digital innovation in Stage 3 raised the need to examine this issue further.

#### **6.4.3 Stage 3**

In this final stage of the seven-year period, 1 July 2012 to 30 June 2014, based on the results of the article review undertaken for RQ1, the debate surrounding the servicing of the SME space, continued to centre on the issue of a paradigm shift in professional public accounting practice (T4) at a level of engagement beyond that reached in Stage 2 (see Figures 6.5 and 6.6). Stage 3, was triggered by two critical events: the surge of SBR submissions in July 2012, which indicated progressive SBR adoption; and intensified competition between software vendors with respect to cloud accounting. The heightened competition was precipitated because in October 2012, the incumbent software vendor with the largest market share released its new cloud accounting product, which was designed to rival the Xero product.

Based on the results of the article review, the competition, which started in Stage 2 with Xero disrupting the Australian market, led to a 'war' for market share between software vendors in Stage 3. In Stage 3, not only did Xero's market share increase significantly, it did so, in part, by progressively encroached on the market share of the incumbent software vendors. Subsequent to the incumbent software vendor with the largest market share releasing its cloud accounting product to rival Xero, other incumbent software vendors released their cloud accounting products or revamped their existing cloud-based products following the Xero cloud accounting model (Howarth, 2014; O'Neill, 2013; Vallence, 2013; Williams, 2012). This 'war' further spurred the development of cloud-based innovations that integrated with cloud accounting as each software vendor strived to make its cloud accounting the core of the cloud-based ecosystem (Head, 2013).

The results of the article review revealed that the increasing focus on the paradigm shift (T4) in Stage 3 was due to the increasing competition in the provision of cloud accounting for SMEs (T2), which also led to changing the SME space (T3). In addition, although the discussion on SBR implementation (T1) declined significantly in Stage 3, the surge of SBR submissions drove further integration of SBR with cloud accounting (Impact Management Group, 2012; Leeper, 2013). Together, these developments promoted the adoption of an integrated cloud-based ecosystem that highly automates and standardises accounting and business processes from data entry—which includes data from various stakeholders that a business deals with, for example, banks, customers and vendors—to reporting to the government (i.e., the digital innovation).

Thus, in Stage 3, the digital innovation was identified as the source of paradigm shift in professional public accounting practice, specifically in serving SMEs. The new paradigm, which is referred to as the post-compliance world, represents an increasing shift in the focus of professional public accounting practice towards value-adding services such as advisory over the provision of compliance services (Camm, 2012; Gettler, 2014; Kellerman & Walker, 2013). This is due to the nature of the digital innovation, which leads to the commodification of traditional accounting (compliance) work and at the same time, creates threats and new opportunities for accountants in public practice. This notion of a post-compliance world has been heavily promoted by software vendors and supported by consultants.

A director of one of the Next Big 8 (P25, Interview 22), attributed the post-compliance world to the digital innovation commodifying traditional accounting work, especially in serving SMEs. He maintained that the SBR mechanism fitted with the nature of cloud-based solutions, which together disrupt the work of accountants as business intermediaries. P25 started looking into

SBR due to the push towards cloud-based solutions, primarily by Xero. He acknowledged that cloud accounting provides a platform to integrate other cloud-based innovations, including SBR. Thus he recognised that the government's intention to replace the existing ATO system with SBR and the rapid trend towards cloud accounting gave accountants little choice other than to adopt the digital innovation. Here P25 identified that the digital innovation disrupted the nature of professional knowledge, client relationship, jurisdictional control and thus professional work:

The real threat or what I see as a threat to the accounting industry from cloud-based systems is that they're the first ones that have actually started connecting all the data together ... And they look like being an expert system where there is only one point of data entry ... if the government has return free filing ... they'll just collect the data from the cloud provider ... It also depends on how good the SBR Framework is. If you get something back, if it's return free filing, for example, and you give it to your accountant and your accountant ticks it off and says, 'That's right', how many years are you going to keep going back to your accountant? So unless your accountant can actually provide some value and make [a] significant change ... if the government gets SBR right, then no I think the adoption will be very strong ... I mean why do people come to accountants? They come to accountants for advice, not for tax returns, and for compliance. So, yes, it could be a very good thing, but it's a very scary thing to ... knowing that potentially, if I look at my practice, I would estimate that it will reduce my fees by 50–60% not SBR, [but] cloud technology and expert systems will, but SBR is just the icing on the cake. SBR will force people to adopt that, I think. It [cloud accounting] will provide the channel for the easy adoption of it [SBR]. (P25, *Next Big 8 B, Interview 22, p. 3–5*)

P25 also acknowledged that Xero's disruption of professional public accounting practice, which led to the 'war' between software vendors, is creating pressure on accountants to adopt the digital innovation. P25's view was shared directly or indirectly by the majority of accountants in interviews and discussion forums—although, as the following quotation from an SMP reveals, to a varying degree some were sceptical about losing out if they did not adopt promptly.

We haven't made a decision. We don't see the need to transfer everybody into cloud computing at the moment. We just don't see the need. A lot of people don't understand the fundamentals of it and how it works. (P20, *SMP C, Interview 17, p. 13*)

P20 went on to state, however, that the pressure from the software vendors would make adoption inevitable:

But I think what's going to happen, people are going to be forced to go to cloud computing because your traditional systems and software that we are using at the moment will not be supported. So they're going to force people to go to the cloud, so they're not going to give you the support for ... existing software that you've got that isn't in the cloud, and that's how the [incumbent software vendor with the largest market share is] going to transition everybody out [of the existing desktop-based software]. (P20, *SMP C, Interview 17, p. 13*)

This push to adopt was also acknowledged by two of the incumbent software vendors Vendor E (D11) and Vendor B (D17). These vendors recognised that software vendors have been pushing accountants to change, or in their words, 'overselling' cloud accounting. However, Xero (D16), on the other hand, as the initial disruptor did not agree that software vendors had been overselling cloud accounting because they believed that the cloud-based ecosystem is the new logical model in this digital era and prompt adoption would yield significant benefits not just for accountants but also their SME clients. The notion of a 'new logical model in this digital era' acknowledges a shift in the cultural-cognitive pillar (i.e., new practices that represent a shift in the way continuous search for new sources of profit is pursued, which, in turn, reflects changes in capitalism) (Thrift, 2006).

Indeed, P25 agreed with Xero that cloud accounting is going to be the new standard and that Next Big 8 B needs to become progressive or they would be heavily impacted (i.e., lose out on the first mover advantage). P25 believed that in the post-compliance era, public accountants need to turn threats from the digital innovation into new opportunities. This involves leveraging the efficiencies gained to refocus the business model and thus service offerings, from compliance-based to advisory-based. According to P25, this move requires accountants to transform the way they serve SMEs, and it represents a way to adapt in order to survive. Here P25 puts an emphasis on the need to be innovative and viewed this as the accepted way of practice although it may involve departure from core accounting work.

Honestly I think, as you know we're doing a series of Xero seminars, we are really going to push our clients into it. Within two or three years we probably won't take a client unless they have a cloud-based expert system because it will be too expensive for us to handle. ... Yes, that's got to be the way it has to go, so we're trying to embrace that, and what I see is SBR will just be an add-on to that, that will just be a different channel. So ultimately we just won't even process tax returns ... it will just go straight through. So we will look after the accounts. We will structure it and we will tell the client when to push the button and it will just be lodged through their own system. ... It just means that we're going to have a different advisory model to sell. ... Definitely [the digital innovation] will change our business model. ... We will move away from a compliance-based practice to an advisory-based practice. It's the reason people used to go to accountants; can you help me grow my business? (P25, Next Big 8 B, Interview 22, p. 6)

P25 also went on to indicate that they needed to be more client-oriented and to find a new source of competitive advantage (i.e., new source of sustainable profit) as they change from being compliance-based to advisory-based.

We'll be working for the business [client] but it won't be to do that [intermediary] role. In that equation, in the interface between the government and taxpayer, at the moment we're an intermediary and intermediaries can be replaced by technology ... We no longer hold the key to the gate ... Unfortunately I will be off doing something else. (P25, Next Big 8 B, Interview 22, p. 15)

P25's view on the need to promptly embrace the shift towards the post-compliance world was also supported by another Next Big 8 member (S3\_T4\_12\_BRW\_2014\_02). This Next Big 8 became the first Xero partner in Australia to achieve platinum status in Australia. That is, the first to have 1,000 clients on Xero (Ridd, 2013).

As discussed in Chapter 2, the nature of the digital innovation enables accountants to move beyond the traditional jurisdiction. In addition, the push to adopt by software vendors advocates the shift to a new paradigm into the post-compliance era and has the capacity to promote the logic of commercialism. The 'war' between software vendors' is a financially motivated 'fight' over market share; thus, engendering similar motives in accountants in public practice. For example, through attractive partnership programs with software vendors, public accountants are encouraged to become proactive in putting their clients, particularly small businesses, into cloud accounting, inadvertently making them the salespersons (instruments) of software vendors (see Appendix 2.2, pages 44-48). In encouraging accountants to change, software vendors were selling the benefits of cloud accounting by highlighting the cost savings or efficiency for accounting practice and opportunities for profit maximisation—that is, promoting the shift into more profitable services such as advisory, and even expanding into non-accounting services such as human resources and real-estate advisory. The push encourages accountants to become more entrepreneurial, innovative, client-driven and profit-oriented. At the same time, therefore, the shift in values undermines the traditional notion of professional independence from the market and, possibly, professional competence and due care. This loss of professionalism may be especially relevant for SMPs, if they rush to embrace change because they feel more threatened than larger sub-groups, but do not have the capacity to provide multidisciplinary services similar to those of larger sub-groups such as the Big 4.

This ramification of the software vendors' push, especially for SMPs, was acknowledged by one of the incumbent software vendors, Vendor B (D35), cited below. He recognised that in an attempt to be progressive, accountants may become overly innovative and thus overlook the need to ensure their professional competence before following the new trend, which includes redesigning their business model from compliance-based to advisory-based. D35 indicated that accountants would fail to survive, to a large extent, if they did not base the change on their core competencies. That is, although traditional accounting work is highly commodified, this and the underlying professional knowledge must be used as a leverage to move into the advisory-based business model in order to differentiate the value of accountants' services with other professionals. In addition, D35 attributed the ability of accountants to change the culture of their practice, such as becoming more client-oriented, as a critical success factor. The

compliance-based practice was associated with the traditional form of practice where accountants distanced themselves from clients. That is, less client-interactions and acting as the intermediary between the government and clients. The advisory-based practice needs more proactive and frequent interactions with clients as accountants will have to deal with more comprehensive business operation issues than just year-end compliance issues. Similar to P25—software vendor, D35, as per the following quotation—points to a change in professional work as the digital innovation disrupts the nature of professional knowledge, client relationship and jurisdictional control.

Yeah it's [extra service that accountants can offer] actually really interesting. I sat with two accounting firms over the last three months. One of them is a good mate of mine and I promised I wouldn't say his name because it didn't work out so well for him. Both of them wanted to move into advisory and they know I'm really passionate about progressive accounting firms and how business models are changing. And so we talked about bringing in a business coaching channel in which they offer—so a different division, business coaching. And one was very successful at it and one was an absolute failure. And I think it came down to what [D31, another discussant who is the representative of an accounting professional association, APA 3] said [about] core competencies and capabilities. You can't just offer it unless you're adding value. You know there's a lot of this business coaching, [which involves] ... going down to an aspect of culture and trying to help companies with their culture and there's a lot of detail to that, there's a lot of knowledge to that and it's a service that I think if you want to provide I think you've got to invest in properly and ... to make sure you've got the right resources in there, the people who understand that space. It's not something ... that you can add that quickly I believe. And also I think the one, the one that moved into business coaching they started to forget about the core competencies of the tax returns and the fundamentals of what accounting firms offer. (*D35, Vendor B, Discussion Forum 3, p. 28*)

However, the push from software vendors was recognised and viewed by the government from a positive perspective. The government found that it no longer needed to promote the benefits of SBR, as SBR went along with the whole set of the cloud-based ecosystem (i.e., the digital innovation of interest in this study). The government believed the push would create a more efficient economy, which would be beneficial for all stakeholders:

Now the software developers are getting the software out there, and they're advertising their software, so they're taking over a bit of our role, which is what we hoped, and they'll be trying to flog their own product because they want to sell. So in some ways we don't have to advertise as much, or even sort of promote the benefits of it [SBR], because the software developers now do that for us. (*P6, SBR Program, Interview 4, p. 20*)

Software vendors, in particular Xero and incumbent vendors, acknowledge the importance of SBR and took advantage of the government's SBR plan as a way to promote their post-compliance agenda used to push adoption. The integration of SBR supports the end-to-end automation from data entry to reporting to government and this becomes critical as the

government's plan—which includes completing the SBR channel for reporting to the ATO in June 2015 and decommissioning the ATO legacy system soon afterwards—represents a *de facto* mandate.

The foregoing discussion indicates that the war between software vendors is a driving factor that is leading to field transformation and institutional change in professional public accounting practice. The results of the article review, which show the field transformation through a set of network maps, also support that proposition: from Stage 2 to Stage 3 software vendors were increasingly driving the shift, and consultants, particularly those who provide advice for accounting firms or PSFs, assisted in that respect (see Figures 6.5 and 6.6 page 190). Thus, the driving force for change is exogenous in nature (i.e., beyond the control of the profession and from parties that do not seek to compete for the jurisdictions of professional public accounting practice). Notably, the business media, more than the accounting professional media, may also facilitate the push because it is the medium where software vendors and consultants have more liberty in advertising their products and services to reach a wider audience.

However, one of the consultants interviewed, P29 (Consulting Firm B), was critical of the role of software vendors in the transformation and believed that businesses and accounting firms should adopt the digital innovation strategically based on what is best for them. As a qualified accountant with a long history as a senior employee in one of the Big 4, P29 has expertise in PSFs and a background in IT, as well as a focus on efficiency. He was fully aware of the potential implications of the digital innovation, but he believed that consultants should not be pushing it onto their clients just because they are selling certain technology or because of the current technological trend. Nevertheless, he also acknowledged that due to the pressing need to increase efficiency and be competitive, accountants might be compelled to adopt, which would ultimately lead to changes to the business model in the accounting industry, for example, increased offshoring, which involves changes in the professional work and location of work and, to some extent, firm structure and firm size. He also indicated the potential of clients in driving their accountants to adopt, stating that such technology would become essential for accounting firms in servicing their clients. At the same time, P29 recognised the need for accountants to behave normatively—that is, to maintain their independence from, or objectivity in relation to the market, client demands, and state (government) pressures, as well as ensuring professional competence and due care. That is, P29 saw that the 'change' promoted by software vendors and, more importantly, the nature of the digital innovation, had the capacity to shift public accountants' professional work and ultimately professional values, away from the core traditional profession. Here, P29 highlighted that public

accountants must be aware of the threats to their professionalism when pursuing new opportunities enabled by the digital innovation.

Indeed, public accountants need to carefully deal with the threats and opportunities to professional accounting work accruing from the nature of the digital innovation as these are a major source of competition to the existing incumbent professionals involved in servicing the SME space, in particular, SMPs. The source of the competition is threefold: non-professionals (bookkeepers); non-accounting professionals (inter-professional competition); and other sub-groups within professional public practice (intraprofessional competition). The nature of the competition will first be addressed from the perspective of software vendors and, subsequently more directly from the non-professional, inter-professional and intraprofessional perspectives, respectively.

Despite growing debate around the issue of competition, software vendors seemed reluctant to acknowledge that accountants faced increased competition in the SME space. When asked about the blurring of segregation between bookkeepers and accountants as increased automation highly commodified traditional accounting work, Software Vendor B avoided providing a straightforward response. This is in part due to software vendors not wanting their products to be seen as creating threats to public accountants, despite knowing that the professional public accounting practice is disrupted:

It's [the competition between accountants and bookkeepers] a really interesting discussion I think and it's going to evolve. We, I think as a software provider it's very hard, it's very dangerous for us to give a definite opinion on it. All we've got to do is give the tools necessary for both accountants and bookkeepers to add that extra value. So I think from my perspective the traditional model is that it would be sitting in the accountants space but the evolutionary industry I think is dependent on who is progressive in that space. (*Vendor B, D35, Discussion Forum 3, p. 24*)

The discussion shows that public accountants, particularly in the small business space, face competition with non-professionals such as bookkeepers due to the increasing commodification of traditional accounting work. At the same time, public accountants face increasing competition with other professionals and between sub-groups within the public accounting practice. This has the capacity to make accountants become more aggressive in responding to the change, which may lead to accountants further departing from their traditional normative logic. Software vendors' marketing pitch suggested such competition, but they were trying to manage it because both accountants and bookkeepers represent their critical client base and, again, software vendors did not want their products to be seen as creating such threats (direct observation 1 to 5). Software vendors attempted to manage the issue of imminent competition by highlighting the opportunities.



First, with respect to the competition between public accountants and bookkeepers, on the one hand, software vendors supported bookkeepers to ‘step up’—that is, to provide value-adding services. On the other hand, however, they suggested that accountants should include taking back bookkeeping as a bundle of services with other compliance and value-adding services e.g., an outsourced management accounting or CFO role, because increased automation, and access any time, from anywhere and on any device would remove the low-status work associated with bookkeeping and other compliance services. This in turn provides a basis for high-status advisory work that provides more value for clients and ultimately higher financial rewards for accountants. This scenario is reflected in Figure 6.8 below. The Figure, outlines a vendor’s presentation at the Accountants’ Technology Showcase Australia (ATSA) conference in 2013 regarding add-on software that was later acquired by the incumbent vendor with the largest market share (direct observation 4). Accountants were encouraged to reclaim bookkeeping into their bundle of services for financial gain, to charge these services as a bundle instead of per hour, and to inform their clients that this would be beneficial to them. That is, clients will not only save money but they will get a comprehensive management accounting service from accountants and will no longer need bookkeepers.

**Figure 6.8: Future Accounting Practice**

<b>Today: Bookkeeping + Accountant</b>		<b>Tomorrow: Management Accounting</b>	
Bookkeeper	\$12,000	Management accounting	\$12,000
(\$1,000 per month made up of 20 hours per month spent on payroll, filing, bills, data entry, bank reconciliation at \$50 per hour)		(\$1,000 per month made up of 12.5 hours per month for creditors, debtors, payroll, BAS, management reports and year end)	
Accountant Year End	\$3,000	<b>Client saves</b>	<b>\$3,000</b>
<u>TOTAL</u>	<u>\$15,000</u>	<b>&amp; gets a virtual CFO service</b>	
Profit per client	\$1,000	<b>Practice profit</b>	<b>\$4,100</b>
		<b>Based on technology &amp; processes</b>	

The foregoing scenario also reflects the potential for the digital innovation to threaten the traditional domain of management accountants. However, this will be dealt with in greater detail later in this chapter.

Second, with respect to the matter of competition between public accountants (i.e., intraprofessional competition), software vendors regularly used case studies of successful accountants, often SMPs, to highlight the fact that those who had adopted the digital innovation were successful such as they achieved greater efficiency, happier clients and increased profits. They stated that in order to survive, public accountants needed to adapt, as

SMEs would switch to accountants with expertise in cloud accounting to gain increased efficiency in the running of their business, including collaborating to grow their businesses (high-value-adding services). Here, the software vendors' marketing pitch highlights the fact that the digital innovation disrupts the nature of accountants' professional knowledge, and that it also changes the client relationship and the jurisdiction control of accountants in public practice, especially smaller practitioners.

Despite attempts by software vendors to underplay the imminent competition between accountants and bookkeepers, such competition over the SME space was recognised by bookkeepers. Here the discussion moves to address the perspectives of non-professionals and public accountants. In responding to competition with public accountants, especially over bookkeeping, bookkeepers generally claimed they were more receptive to technology than the aging accountants in Australia, and that they were more knowledgeable about the clients' business than accountants (direct observation 1; Interview S1; Interview S2). Bookkeepers indicated that they had the competitive advantage in this changing world:

It's the other way round, we tend to find that we tend to be a little bit more ... on the ball [about] what's going on than what they [public accountants] do .... I think the main reason for that is the fact that because we deal with business on a day to day basis, and day to day solutions, so our interaction with the client is very different on a lot of levels, not only ... from a professional services position, but as I say because we are more about assisting the client day to day ... and utilising technology and stuff, we tend to find that we tend to bring technology forward a lot quicker than what the accounting firms do. And it's just... it's purely because we sit in a different space. You know, we work with this stuff every day, and the accountants don't, and that's okay. (PP2, *Bookkeeping B*, Interview S2, p. 9)

Bookkeepers also suggested that, with the digital innovation, they can do additional work that they were unable to do previously, such as providing additional analysis on a client's financial performance due to time efficiency gained, presenting the output of their work in a more sophisticated manner and collaborating with accountants in an effective manner, which made them look more professional. This is indicative of digital innovation breaking down boundaries across the accounting services industry in general. In defending their position, bookkeepers pushed for new segregation between accountants, suggesting that bookkeepers do the compliance part and accountants focus on the advisory part:

... that's [what] we want, we want the accountant and us both to be working for the client, and them using their expertise so that, you know if you like, the bookkeeper's doing all the stuff that they don't need to do, that they can just have given to them, so that then they can be helping the client make good decisions. (PP1, *Bookkeeping A*, Interview S1, p. 12)

As one way of achieving this, bookkeepers indicated that they support tax reform in Australia to ease the burden on small businesses, as they too want more relaxed regulation regarding who could do certain compliance work, especially as compliance services became highly commodified by the digital innovation. They are also striving to expand their jurisdiction to include for more types of work so that those previously restricted to tax agents could also be offered by BAS agents. They believed that a basis for the expansion lay with the fact that bookkeepers had become more professional because they now have their own associations in Australia. Further, the merger of the ICAA and NZICA into the CAANZ potentially raising the professional status of bookkeepers, as the NZICA also extended membership to accounting technicians. Overall, bookkeepers' responses suggested the need to redefine the jurisdiction between them and public accountants, which prior studies found had been settled in the past (Abbott, 1988; Edwards et al., 2007).

Public accountants recognised this potential encroachment by non-professionals as a threat, even though they also realised that they were currently able to control much of the compliance space because they were protected by the regulation—the tax agent licence. Relaxed tax regulation would mean losing this privilege, as the digital innovation enables non-professionals, other professionals and SMEs to do some of the compliance work:

OK, so you see we have a little bit of a monopoly on the ability to fill some of these complex forms and historically that monopoly has been created by the fact that our technologies have not been widely disbursed. So, if you wanted to fill a Company Tax Return, you'd have ... to buy tax filling software and if you had to buy the tax filling software, you'd have to ... buy a licence, which you wouldn't bother to buy unless you were going to buy more than ... one form. But, now you've got this type of technology that's readily available online. So I can see a very near future and it won't just be bookkeepers. I'd expect it would be, you know, low-level tech guys, sort of, getting moved out of their [hardware jurisdiction as by adopting cloud accounting, end-users typically can significantly reduce their IT hardware investment]. You know, they no longer have the opportunity to sell and implement hardware, but still quite technically able. I see them going, as consultants going 'Well, you know what, I can help you get your AUSkey. I can help you install your AUSkey. I can connect your accounting system. I can connect your cloud accounting system to a server like Lodge-IT [SBR add-on] and I won't push your button to lodge, but guess what, you know, you can then lodge all your stuff yourself. I'm just the facilitator to get you there'. I think that's another, sort of, real strong threat to the accounting intermediary, where it will either be bookkeepers and/or, you know, low-level tech guys doing that sort of consulting-type role and helping ... business owners bypass intermediaries like accountants. (P31, SMP F, Interview 28, p. 17)

Cloud-based solutions have ... gotten direct feeds from banks, from various other people, and they've created the interchange where the data all mixes together ... so once data enters the system you don't need to manipulate it. So if you don't need to manipulate it you don't need your accountant to do anything with you, and then if the Government has return free filing, for example for tax returns, they'll just collect the data from the cloud provider or you'll be able to lodge it. All your data direct with the Tax Office and then they will manipulate it and give you your tax return ... Yes, because return free filing will kill a large part of the accounting industry. (P25, *Next Big 8 B, Interview 22, p. 3*)

Public accountants generally saw the threats that the digital innovation brought, especially with regards to the compliance work. However, they believed that even with more relaxed regulations, they would still be able to defend their jurisdiction because they believed they have superior competence in this space. Thus, public accountants believed that they would be able to provide additional or more comprehensive services to SMEs. However, they realised that they needed to be more involved with their clients in the same way that bookkeepers are more engaged with day-to-day matters, as well as leveraging the digital innovation to their advantage:

I'd probably look to him [bookkeeper as] if I was his client. But because they're working on a daily basis with a business, the accountant comes in or the tax guy comes in [with] a helicopter view and provides some ancillary services and they go. But the client probably has a closer working relationship with the bookkeeper but then I've known, I've met bookkeepers who wouldn't even know what a KPI [financial and business performance analysis] is and how to build it. So you know it depends on the individual situation ... Absolutely. Yeah, particularly with the technology. I mean I'm familiar with Fathom, I've used the product and it's a very good product. And it's a presentation product ... it takes all your data, it sucks it in, it puts it in the format and then suddenly you look like you've spent all this time preparing all this work and saying 'Hey here's the end result'. So look, it's a really awesome product, yeah, it works well with the cloud accounting software packages so. I think there's a role possibly for both [accountants and bookkeepers], but it depends on the engagement level the service provider is giving to a client. (D32, *SMP K, Discussion Forum 3, p. 25*)

Further, accountants saw the advantage of taking bookkeeping back as a bundle of services (i.e., end-to-end compliance and advisory services). Reclaiming the bookkeeping space signalled accountants' defence to protect their jurisdiction. An example is SMP H, a fully cloud-based practice primarily based on Xero. According to D23, the Managing Director of SMP H, they have taken bookkeeping back as a bundle of services with compliance services (e.g., tax) together with management accounting services. D23 emphasised that this was a way to survive the threat of digital innovation to their jurisdiction—that is, SMP jurisdiction that traditionally focused on compliance work. Importantly, D26 from Mid-tier B, which at the time had not adopted cloud-based solutions, also indicated the potential opportunities for them in having a single ledger and taking back bookkeeping as a bundle of services. Mid-tier B is a

regional practice that plans to slowly move towards cloud-based practice for the majority of its clients, as it is currently constrained by its Internet connection and the types of software available to cater to different clients' needs.

In addition, public accountants argued that commodification by the digital innovation, such as highly automated compliance work, in turn required higher knowledge or expertise. Accountants maintained that automation calls for the setting and monitoring of the system, in order for the system to generate accurate and reliable output. Here, accountants have a competitive advantage over non-professionals such as bookkeepers, and other non-accounting professionals. In addition, such output becomes the basis for more value-adding services, as accountants are pushed to offer services beyond what they currently provide (core accounting work) in order to survive:

Yes, in setting up [client's cloud-based accounting and business system]. So I think instead of us becoming processors of data we will be managers of the rules for the system. ... And it's going to change the way [professional work is done]... there are quite a number of my staff who won't survive the transition because they won't know what to do, they won't have an advisory focus, they won't know how to talk to their clients, and that's going to be much more of the role of an accountant into the future, I think. I still think there's a really strong role for accountants ... I think accountants will still be the primary interface to the business and legal world for their clients. (P25, *Next Big 8 B, Interview 22, p. 7*)

So I think there's opportunity there [advisory services for SMEs], but not as much as probably doing a couple of other things. I think the big one is that accountants can push into the business in a deeper way with the current client base they have and take a bigger piece of the pie ... acting more like the CFO and understanding some of the technology better and being like a coach. ... So there's this opportunity to position yourself as something bigger than just being the accountant and actually try and retrain the market in a blue ocean sense<sup>45</sup>, as the harbour guys call it, position yourself like *Cirque du Soleil* [i.e., extremely creative and distinctive] as the premium offering who really wants to offer something special, take away the animals that are really expensive and don't make much money, just have humans and good music and things like that and reposition the practice into a different sort of business model. Then you don't look like all of your competitors, and you're not like the thousands of other accountants out there. (D32, *SMP K, Discussion Forum 3, p. 27*)

The foregoing accountants' views indicate that the commodification of traditional accounting work through increased automation and standardisation will not necessarily lead to the loss of professional status over such work. Instead, as discussed in Chapter 2, the commodification removes repetitive low-status work, enables efficient real-time client-accountant interactions, emphasises the need for supervisory and professional judgment, and in doing so ultimately

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<sup>45</sup> It refers to a strategy discussed in *Blue Ocean Strategy*, a book by W. Chan Kim and Renée Mauborgne, which was published in 2005. The strategy dictates that companies can achieve their success by creating blue oceans of uncontested market space rather than battling competitors. In this case, focusing companies' energy to unlock new demand and making competition irrelevant.

pushes the focus to high-status or more value-adding work. In regards to reclaiming bookkeeping, this would reverse past arrangements that saw digital innovation led the profession to shed bookkeeping to bookkeepers due to the technical nature of the work, high client interaction, and low-status of the work (Abbott, 1988; Edwards et al., 2007; Ramirez, 2009). Public accountants' move—to reclaim bookkeeping and use it together with other commodified traditional accounting work as leverage for providing broader services—changes their professional work and they become more involved with clients on a more frequent basis. This indicates changes in their professional values or traditional normative logic as they become more innovative, client-driven and competitive.

This debate over the reclaiming of bookkeeping also extended to the continuing role of bookkeepers. That is, whether SMEs, especially small businesses, need bookkeepers. Here, accountants' views were split on whether accountants need to work with bookkeepers. On one hand, accountants believed that they needed to respect bookkeepers' position by redefining the jurisdiction between them. Conversely, accountants believed that SMEs would be better off adopting the digital innovation and working directly with accountants who have superior knowledge to oversee it—that is, competency to set, monitor and provide advice on the accounting and business processes. This latter view considers that the work or role of bookkeepers could be replaced by the digital innovation. Public accountants with this more aggressive stance were typically progressive and identified the commodification of traditional accounting work as the death of bookkeepers—not the loss of their jurisdiction to non-professionals.

However, P30 (SMP E), although progressive, did not believe in the death of bookkeepers. He believed that the jurisdictions between public accountants and bookkeepers would be re-defined as digital innovation, especially cloud accounting, would enable accountants to better collaborate with bookkeepers. P30, has been a public accountant and he opened his own practice in 2009. He saw the move towards cloud-based practice and in 2012 joined Xero. His role was to help accountants and bookkeepers to not only adopt cloud accounting but adopt the digital innovation to create a cloud-based ecosystem with Xero's cloud accounting as the core system. P30 worked with Xero during Stage 3, that is between 2012 to 2014. During this time P30 maintained his practice on a part-time basis and re-designed his practice to be fully cloud-based. Here, although he indicated the automation would enable accountants to take back bookkeeping and, similar to D35 (Vendor B), believed that compliance is the 'bread and butter' (p. 3) for accountants that would form the basis for the new advisory-based business model; he maintained a normative stance in regards to bookkeepers. He (P30) suggested that bookkeepers would still be needed as some accountants would not do compliance work

because they only provide advisory or consulting services. This highlighted his earlier comments that cloud accounting would significantly improve collaboration between public accountants and bookkeepers. Overall, P30 indicated that competition with bookkeepers and automation would not threaten public accountants. He also indicated that automation would not reduce revenue if accountants were able to be productive. That is, using the time gained from the automation to provide other non-compliance services, which are beyond the jurisdiction of bookkeepers.

They [public accountants] will still do the compliance because compliance is the bread and butter, but rather than having that as the active component, it's more just the assessing – you will do it anyway and it will be just... it will form part of the work you will do. Because obviously you get the bank feed and things like that coming through live [therefore] you can process them straight away, [however] on the flip side of that the compliance will almost be automatically done, if you will, so just doing your day to day transactions that will compile your BAS, then obviously through the portal you can lodge your BAS and then it just comes time at the end of the year, you're in there and have a look at it and you might only have to do several journals to balance it or a couple of adjustments. But because it's there you've got 99 per cent of it done, so you literally, by default, you're taking care of all the compliance, so then you can spend more of your time with clients saying [for example] 'You have done well.' You can do analysis and say things are up this quarter, maybe put on some staff or what not, and yes, holistically compliance will just be a part of the package that you do anyway. (P30, SMP E, Interview 27, pp. 3-4)

And there are both sides, bookkeepers who do think, 'oh I will lose revenue from it', and accountants might think I will lose revenue and so there are few of that thinking, [however] then there are people that are thinking, but you will still need to have your bookkeeper and you will still need to have your accountants because some accountants don't provide bookkeeping services whatsoever ... like they [some public accountants] just don't do the bookkeeping service because literally they do consulting. Some of them do business health checks, so they might not be the compliance accountant for a particular business, but every twelve months this business [come and says to accountants dealing with the business health checks] 'these are the financials from my accountant, how do you think I am going?' So there are a couple of different business structures there as accountants we're not all directly compliance focused, but there won't be a loss of revenue for anybody, if anything you're making yourself more productive with your time. (P30, SMP E, Interview 27, pp. 11)

In addition to reclaiming bookkeeping, accountants were attempting to protect their jurisdiction from non-professionals by exercising their professional power using loopholes in software vendors' partnership program, in particular, Xero's partnership program (Macpherson, 2014c). The partnership program created conflicts between public accountants and bookkeepers because to earn more points, public accountants need to be registered as a client's advisor. As explained in Appendix 2.2 (pp. 44-48), an accountant or a bookkeeper earns points if he/she becomes the registered partner for a client. The points that they earn increase their partnership status with Xero, enabling them, for example, to move from bronze to silver

level, and thus higher non-monetary and monetary rewards. An accountant and a bookkeeper might be working with the same client, with the accountant being the registered partner for the subscription with Xero. Conversely, an accountant and a bookkeeper might be working with the same client, with the bookkeeper being the registered partner for the subscription. The latter often resulted in conflicts between the parties. Accountants are typically more powerful and can steal bookkeepers' clients, which is referred to as licence poaching, by asking clients to list them as the registered partner instead of the bookkeeper. This meant that the bookkeeper was no longer the registered partner for that client and their partnership status would drop from silver to bronze level. On the other hand accountants would increase their status level from bronze to silver level. Not only was this seen by bookkeepers as stealing their clients and their rewards from Xero, but also the potential of stealing the clients altogether where accountants took over all the work and bookkeepers were no longer needed by the clients. Where this occurred, accountants were, therefore, becoming more entrepreneurial and profit-oriented.

This aggressive move by public accountants to protect their jurisdiction from outsiders through jurisdictional expansion into the bookkeeping and consulting domain, which involves a change in professional work and thus professional values, was also matched by a rise in intraprofessional competition as public accountants become more innovative, client-driven and more competitive. Intraprofessional competition in public accounting practice is complex because the digital innovation opens this space up for competition. The digital innovation has the capacity to attract accountants to join public practice, or to leave, depending on their capacity to keep up with the changes, the inevitability of which demands embracing the digital innovation. A number of public accountants interviewed stated that the digital innovation is about the survival of the fittest, and the challenge to survive would come from not only non-professionals and other non-accounting professionals, but most critically also from intraprofessional competition at the SMP level, and from larger sub-groups:

I think ... the clients will go to their accountant first and foremost for advice about anything. Whether it's estate planning, their tax return, I need a new entity set up they'll go to their accountant first. So to continue and develop that trust and advisory relationship given that there are so many businesses now moving to cloud technology they have to ... get into that space if they want to keep growing with their clients. I see a lot of clients who say 'Oh look you know my accountant is at the end of their career, they're 60, 65 they're going to retire in a couple of years. They don't want to learn new software, they don't want to learn Xero, they don't want to learn Saasu, they don't want to learn Reckon so I'm just going to change now because they're not interested and I'll just find a new accountant because they're going to retire in a few years anyway'. That's a very common theme amongst a lot of clients that I work with. (*D32, SMP K, Discussion Forum 3, p. 19*)



The digital innovation intensified intraprofessional competition because the commodification of traditional accounting work created new opportunities for accountants. The intraprofessional competition issues raised by accountants were complex. One such source of competition is a new niche for management accountants to encroach into public practice in the form of business coaching, bookkeeping and as outsourced management accountants. Examining this type of intraprofessional competition in detail is beyond the scope of this thesis. However, an interview revealed that a qualified accountant who worked during the day as a management accountant (PP4) also ran a bookkeeping firm (Bookkeeping C).

PP4 largely provides bookkeeping services and has to deal with the business's accountants for tax-related services. However, she also offers services related to management accounting, such as budgeting and analysis of the business's financial performance. The flexibility that cloud accounting offers was seen as an avenue for a management accountant to enter public practice. She started her firm in 2011 because she saw that she could take advantage of her expertise in management accounting through cloud accounting, especially Xero. Accordingly, she only took clients if they are already on cloud accounting or agreed to be switched to cloud accounting, in particular, to Xero. She revealed that her clients' accountants agreed to her moving the clients to cloud accounting. She indicated that up to the time of interview in 2013, she only employed Xero's product because—although Xero needed to develop more features—it provided the most ease of access. However, it may have been because Xero was the only software vendor at that time that did not charge practitioners to use its product and its partnership program offered attractive rewards for practitioners who converted SMEs to Xero:

No, actually when I get the client I usually talk them [in] to using Xero. So if they're happy with that, whatever they're using at the time, I'm just going to use Xero, but otherwise if they are happy I'm just for, yes, whatever they're using. But most, all my clients at the moment [are] really happy for me to actually [put them in Xero]. (PP4, *Bookkeeping C, Interview S4, p. 14*)

Accountants offering bookkeeping and (outsourced) management accounting services are not new, but digital innovation opens the door for them to expand these services. SMP L, which was established in 2007, provides bookkeeping by qualified accountants, as they claimed that there was an increasing shortage of quality bookkeeping. D34 (SMP L) signified that they also leveraged on accountants' competence to provide the full extent of management consulting services for smaller businesses. Accordingly, SMP L identifies itself as both a bookkeeping and management accounting firm. The digital innovation enables SMP L to flourish by facilitating its aim to implement a robust system of larger businesses to help smaller businesses obtain a

clear picture of their performance. Thus, SMP L leverages the digital innovation not only to provide better basic bookkeeping and management accounting services, but also to provide virtual CFO services. In practice, virtual CFO refers to the outsourced role of chief financial officer, as smaller businesses typically cannot afford to have an in-house CFO. SMP L does not provide tax services, except BAS and GST. It often needs to work with its clients' public accountants for other tax services such as income tax returns. However, in the post-compliance world, where public accountants strive to move beyond compliance, the jurisdictions between the firms increasingly overlap. D34 maintained that SMP L always ensures that the work it offers does not create conflicts with the public accountants their clients work with. On that one hand, D34 demonstrated normative logic (i.e., not competing with other accounting firms or maintaining collegiality), but on the other hand, he supports the need to be innovative in their service offerings. As the General Manager of SMP L, however, D34 is not an accountant. Rather, he has a background in psychology and provides assistance to the Managing Director of SMP L, who is an accountant and the founder of the company, in business development, recruitment and human resources as well as client management.

D34's (SMP L) view regarding competition, however, was in contrast to views raised by other SMPs, for example SMP K, who earlier emphasised that in this new era, there would be increased competition in professional public accounting practice and accountants needed to revamp their practice by leveraging the technology and being innovative in their service offerings (i.e., focusing on unlocking new distinctive opportunities to overcome competition).

Overall, the foregoing discussion shows that accountants in public practice, especially SMPs, need to be better equipped to compete not only with non-professionals and other professionals, but also with accountants entering public practice in different forms. For example, PP4 (Bookkeeping Firm C) indicated that, as a technology-savvy management accountant, she could leverage her expertise to run a business on the side as a mobile bookkeeper. Savvy-ness in technology was one of the main issues being discussed in the discussion forums. Thus, public accountants, SMPs in particular, believed that they have to be better educated and trained in order to offer services in the post-compliance era, not only for dealing with managing a digital practice or providing technology advice to businesses, but also for understanding how to set up the rules both in dealing with cloud accounting and SBR. SMPs that have succeeded in transforming their practice, often departing from the traditional accounting firm, indicated that knowledge in technology played a big part, not only in being able to provide advice, but also in making them more efficient:

I actually use a lot of [cloud-based digital] systems, so my business is extremely automated. A lot of the information I get from clients ... I have clients all over Australia and [some] I've never even met in person... Skype is wonderful, we love Skype ... we worked on a system for them to be able to provide me [with] the information necessary and to get the information in the system and work with that data to be able to provide the advisory services. So the systems that I have that I work with clients [cloud-based ecosystem] and the systems that I have [internally] in my own business make me extremely efficient ... therefore there's more [financial] value in [the] time than I'm actually working with them directly so I still know that I'm making money basically ... It's a matter of opening up your mind to realise that you can achieve that, and have all that in the cloud, to be able to make you more efficient because the more efficient you make yourself, the better value you can give your clients around the advisory work. (D43, SMP M, Discussion Forum 4, minute 46:40–50:00)

The need for accountants to revamp their practice to be more technology-based firm was also supported by an incumbent software vendor, Vendor D. P34 (Vendor D) indicated that this type of firm will drive higher profit.

They [public accounting firms] are actually [analogous to] a Tech company now. They're not accounting [based] and tax is almost secondary. They need to understand [that they are] technology companies first and foremost. They're the ones that will drive higher [accounting firm] valuations because the people coming into [who] buy those firms will [know] that these guys have a great set up, they're efficient, they've [will] work out that those business models are probably pretty well automated, they've thought through things, they're also thinking ... the business-owner-centric way they're not just about a single software product. So they're a different type of [accounting] firm but those firms will drive higher returns. (D34, Vendor D, Discussion Forum 3, p. 6).

In response to this need to revamp their practice in the digital era, public accountants, especially SMPs, raised the issue of how universities and the professional associations have not provided sufficient education and training in this changing world. In regards to the issue of further education and training, it was in this context that the issue of intraprofessional competition between sub-groups, especially from the larger ones, emerged. This issue was not only raised by interviewees but also by public accountants who attended discussion forums (discussion forums 3 and 4)<sup>46</sup>. These accountants, who were mainly SMPs, indicated that potential employees with double degrees would be attracted and recruited mainly by the Big 4. Further, they realised that they would not have resources similar to those of the Big 4 to conduct in-house training and thus raised the importance of the accounting professional associations and even software vendors in helping smaller practitioners in their professional development. That is, to develop their soft skills and IT-related skills so that they can leverage the digital innovation and adapt their business model from compliance-based to advisory-

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<sup>46</sup> Discussion forums 1 and 2 used a mobile application to submit questions to the moderator, thus it was difficult to identify the identity of the attendants who asked the questions.

based. They also expected training that focused on how to re-design their professional services offering, specifically to small businesses. This indicates that smaller practitioners were concerned about their capability to adapt in order to survive and they recognised that the Big 4 have the competitive advantage in the provision of advisory services, which together with financial incentives, provided basis for the Big 4 to successfully encroach into their jurisdictions.

The discussion thus far shows that intraprofessional competition over the SME space could accrue not only between sub-groups in public accounting practice, but also between different segments of the accounting profession, that is, public and management accounting. However, as indicated earlier, this study and, therefore, the remaining discussion, focuses on intraprofessional competition between sub-groups within public accounting practice.

Intraprofessional competition that SMPs are likely to face to from larger sub-groups is evident, in the response of the Next Big 8 to the digital disruption. As discussed earlier, a number of Next Big 8 recognised the change and the need to promptly embrace it in order to establish a strong base in the SME space before the Big 4 began to encroach. P25 (Next Big 8 B) indicated that the firm was already in competition with the Big 4 over the large businesses client base. Thus, as digital innovation disrupted the small business space, Next Big 8 B was forced to expand its service offering to the small business space, in order to strengthen its position in this type of client base. This required multidisciplinary skills such as those of the Big 4. P25 recognised that the Big 4 would soon encroach into small business space because one of his small business clients had been approached by two of the Big 4 to provide a non-accounting advisory service. He stressed that this small businesses space was not previously a level playing field for the Big 4. However, he considered it would soon be dominated by the Big 4, thus leaving a limited advisory niche for accountants who serve small businesses.

The results of the article review (RQ1) show that larger sub-groups, The Big 4 and Next Big 8, became interested in this space more than those of smaller sub-groups such as Mid-tier and SMP. Based on the highest level of involvement, after the software vendors and consultants, the Big 4 and Next Big 8 were next, followed by equally Mid-tier and SMPs (see Figure 6.2). The results show that in the face of digital innovation, the Big 4 and Next Big 8 are becoming aggressive in establishing a strong base in the small business space. At the same time, although Mid-tier and the SMP equally showed an interest in embracing the change, further evidence from CI and discussion forums, although limited, suggests that the Mid-tier firms were more wary in adopting the change than not only Next Big 8 but also SMPs. The Next Big 8 already have such a tendency (Beaton, 2013), but the disruption due to the digital innovation further

amplifies that tendency. The Next Big 8 showed an increased tendency towards commercial logic and in particular, the need to compete with the Big 4 in order to protect their jurisdiction from the Big 4. As for SMPs, which will be discussed in greater detail later in this chapter, they felt that their survival was most threatened because digital innovation significantly affects their jurisdiction. Thus, compared to other sub-groups, Mid-tier firms showed the most tendency towards normative logic in resisting the change.

A partner from a regional Mid-tier, PP3 from Mid-tier A (Interview S3), was interviewed at the beginning of 2013. She indicated that the firm was developing its own cloud-based platform for practice efficiency, but it had not yet adopted SBR. She was sceptical of cloud accounting and its implications for accountants in serving SMEs. Similar to D26 from Mid-tier B, discussed earlier, PP3 maintained that the Internet was the main problem for businesses in regional areas in embracing the digital innovation, and that not all of their clients could move to the cloud due to the nature of their business. In addition, D26 raised the issue of confidentiality with respect to data security on the cloud as hindering adoption. The interview with PP3 was conducted in 2013 and took place several months prior to the second discussion forum, where a different partner, D21, from another branch of the same firm (Mid-tier A) was involved as one of the discussants. Unlike PP3, D21 recognised the potential effect of the digital innovation for their practice and clients, and supported the need for accountants to change in the wake of the digital innovation. However, similar to PP3, D21 believed that improving practice efficiency—that is, digitalising their practice platform using a cloud-based solution—would be their main target rather than pushing their clients to go on the cloud.

In general, both Mid-tier firms A and B looked forward to putting their clients on the cloud, but they indicated that they would keep dealing with clients using desktop solutions, particularly larger clients. Both also indicated that they would not become fully cloud-based firms because it did not suit all of their clients. Here, the Mid-tier showed a tendency towards normative logic, as they maintained their independence from the market trend. Both Mid-tier firms believed that accountants should be the one advising clients on the type of software that they need to use and not be dictated to by software vendors. However, the resistance from these Mid-tier firms was potentially because they were regional firms where a reliable Internet connection impeded adoption, and the unique nature of their client base.

Mid-tier's resistance to change was also identified in a study by Lander et al. (2013), which also suggested the need to look into whether SMPs have similar tendencies as Mid-tier in that respect. As discussed earlier, this study finds that SMPs, which traditionally tend to adhere to normative logic (Hanlon, 1996; Ramirez, 2009), showed a higher tendency towards commercial

logic than Mid-tier firms in the face of the digital innovation. SMPs were more competitive and became entrepreneurial, innovative and client-driven because they felt that their survival was threatened. They felt the pressure to adopt the digital innovation and embrace the change. Further, although the Mid-tier were largely resistant to the change in this stage, SMPs recognised imminent intense intraprofessional competition from larger sub-groups once the Big 4 encroached into this space.

Those challenges not only led to changes in the professional work and location of work of SMPs, but also their firm structure and, to some extent, firm size. This was identified when observing a sharing session between SMPs (direct observation 4). SMPs identified the need to transform themselves to be efficient and competitive. Three SMPs, namely SMP H, SMP N and SMP O, attended the sharing session. They were all Xero partners, as the sharing session was facilitated by Xero. The SMPs indicated that they had transformed and become fully cloud-based SMPs, and they had refocused their services around advisory. SMP H and SMP N built their practice based on a model that departed from the traditional accounting firm structure—that is, they adopted the bureaucratic model led by a Managing Director or CEO, while SMP O maintained the traditional partnership form.

SMP H, represented by its Managing Director, D23, had been vocal in promoting the new business model of public accounting practice. She emphasised that digital innovation commodified much of traditional accounting work (compliance). Thus, she believed that prompt adoption to gain first mover advantage is critical as it enables accountants to reap the benefits of the digital innovation. That is, adopting the technology reduced costs and increased profits, not only from increased efficiency but also from the software vendor partnership program. D23 also highlighted the importance of being innovative in running her practice by leveraging the digital innovation. SMP H stressed the need to turn threats into opportunities. Similar to SMP H, SMP N, as a firm, was built with technology in mind. DO1, the CEO of SMP N, left his previous firm and built his own practice based on Xero and adopted the bureaucratic model, because the partner in the previous firm would not embrace the new business model. Although SMP O maintained the traditional partnership model, both SMP N and SMP O only accept clients in Xero and present themselves as having core expertise in business advisory (i.e., growing businesses). Conversely, SMP H maintained the need to highlight itself as a professional accountant firm, but claimed that it was 'not the average accountant' because of how it delivered its work and dealt with its clients. D23 (SMP H) indicated that she did not lock clients on to Xero, as the firm would like to be able to provide businesses with a range of cloud-based solutions, as not all businesses fit with Xero. Here, D23 maintained an element of normative logic by displaying independence from the market (Xero) because although the firm

primarily uses Xero, it does not compromise its professional judgment as it provides clients with the best solution for their businesses.

D23, who was also one of the discussants in the second discussion forum, raised critical issues surrounding the digital innovation, which was shared by other SMPs (SMP G, SMP I and SMP J), with respect to cloud accounting becoming standard system for SMEs and practitioners, which would, in turn, require changes in public accounting firm's business model. However, these SMPs had at that time not adopted the digital innovation, but were aware of the needed to eventually do so in order to survive. These SMPs also referred to the fact that limited resources meant they had to prioritise over educating their clients and investing in new technology, and that they were constrained by unreliable internet access.

Overall, the foregoing observations provides evidence of a shift in the SMP business model, which involves changes in professional work, location of work and firm structure and to some extent firm size, driven not just by the need to be efficient and competitive, but also by the need to increase profit, which is indicative of the commercial logic. This, in turn, indicates that the shift into a new business model leads to a change in professional values. In other words, although normative pillar remained important, the role of accountants and professionalism were being redefined around the commercial logic.

The foregoing discussion points to an increased dominance of the cultural-cognitive pillar in professional public accounting practice in Stage 3, not only due to the nature of the digital innovation and the pressure to adopt driving practitioners to embrace the commercial logic, but also the threats from intense intraprofessional competition, especially by competition from the Big 4. In Stage 3, the Big 4 started to encroach into the SME space, which in time has the capacity to dominate SMPs' jurisdiction. Nearing the conclusion of Stage 3, in June 2014, one of the Big 4 (Big 4 A) became the first Big 4 in Australia and the first in its global chain to launch a fully-cloud based private business division targeting small businesses. This was in contrast to Big 4 A's initial response, as discussed earlier, where P13 (Interview 11) indicated that its focus was not on the SME space, although it saw the opportunity arising from the use of digital innovation. Several months after the interview with P13, D24, a representative from Big 4 A, who attended the second discussion forum in 2013, revealed that Big 4 A was already building its own cloud-based platform for its private client division, but then Xero disrupted the space, which led to incumbent vendors developing similar products. As a result, Big 4 A revamped its platform to include a number of cloud accounting products such as Xero and the related add-ons, and it re-designed its business model to enable it to strengthen its position in the small businesses space. This was highlighted by D43, who attended the fourth discussion

forum that took place subsequent to the launch of the new platform/division, in relation to the re-invention of accounting processes and the way public accountants work:

We were about to be disrupted ... from the likes such as Intuit, Xero, [and] MYOB that were actually driving a change that was possible between accountants and their clients and an expectation from the clients [of] what was desirable. So in many way, although professionals services were two-years out from disruption and [an] attack [to the accounting industry] was happening right then ... To address this, you can do it in a couple of way, you can embrace the technology and ... move your clients to the cloud and you can provide services in that way or you can go beyond that. So rather than allowing us to be disrupted ... we re-invented the way we work, re-invented the accounting processes... So we invented XXX [New Platform/Division], which is [a] fundamental twist of a number of aspects of what you're describing as a Virtual CFO. (D43, Big4 A, Discussion Forum 4, minute 16:00–17:45)

D43 also stated that Big 4 A had reclaimed bookkeeping, which it would not have done so in the past, because it needed to ensure the output was accurate and reliable as a basis for providing further services. With increasing automation and standardisation, bookkeeping became part of the bundle of services that it offered. Small businesses would be able to select a bundled service and pay a fixed amount on a monthly basis. The services would be similar to outsourced management accounting, or to some extent, as a CFO or CEO for smaller businesses, depending on the level of advisory required:

We've done a number of things very differently. We shifted back into bookkeeping, which historically [is] something we wouldn't have done (D43, Big4 A, Discussion Forum 4, minute 17:55–18:05).

He then went on to state:

We've done it in a more digital way than traditionally, so we've removed a lot of manual work from bookkeeping that's so we know that the data that we're advising on is real-time and that it's a standard that we can rely on. (D43, Big4 A, Discussion Forum 4, minute 18:05–18:40)

The new division marked the Big 4's all-encompassing expansion into the SME space. This provides further evidence of intense intraprofessional competition between sub-groups over the SME space, notably in serving small businesses. In addition, Big 4 A indicated that this was the way forward, and that anyone failing to follow their 'new way' may struggle in providing services in the digital era. It is argued here that the seven-year period ending on 30<sup>th</sup> June 2014, which started with the launch of the SBR Program, marks the era of the structuration process of field transformation in professional public accounting practice. D43 (Big 4 A) validated this proposition by highlighting the importance of SBR (i.e., ATO real-time reporting



channel) and the need for accountants to immediately embrace the change from then on (July 2014) to survive:

If that's happening with ATO in real-time, you better be [giving] your clients real-time accounting advice. And anyone that has not made the sort of shift that we have made, it will struggle to do that. (*D43, Big4 A, Discussion Forum 4, minute 1:25:00–1:27:10*)

The Big 4 are traditionally regarded as leaders in the new way of practice (Cooper & Robson, 2006) and since this SME space traditionally was the jurisdictions of smaller practitioners, the Big 4's encroachment represents the turning point in field transformation and institutional change in professional public accounting practice in serving SMEs. Not only because this encroachment lays down a strong basis for a new way in practice of serving SMEs that involves embracing commercial logic, but it also has the capacity to further drive the already increasing dominance of the cultural-cognitive pillar in professional public accounting practice. Although in Stage 3 the other Big 4 (Big 4 B and Big 4 C) have not shown an interest in this space. Both indicated that serving SMEs especially small businesses was not their domain, but it is possible that they may soon follow. One of the Big 4 not interviewed, launched a new Xero-based division to serve small businesses in the UK, just shortly prior to Big 4 A doing so (Adhikari, 2014; Turner, 2014).

As discussed earlier, the Big 4's encroachment into the SME space threatened the domain of the sub-groups in the lower social structure, particularly SMPs for whom compliance is their 'bread and butter'. Similar trends to those identified through observations and discussion forums were also apparent in the interviews with the SMPs. Two SMPs, SMP C and SMP D, were first interviewed in 2013 and then followed-up in 2014 after Big 4 A launched its new division. During that period SMP C had fully transformed the firm, which was formally finalised in August 2014 (post-Stage 3). However, SMP D had just considered transforming. Initially, although SMP D recognised the potential implications of cloud accounting and SBR for professional public accounting practice, it was sceptical about the impact of the digital innovation and was still running traditional compliance and desk-top based accounting firms. However, SMP D had merged with another SMP at the end of 2013, and the new partner was pushing the use of cloud accounting because it was planning to open an offshore office. Similarly, once SMP C formally merged with another SMP, it adopted the bureaucratic model, as a fully Xero-based firm headed by a CEO, and P20 (SMP C) identified herself as a principal consultant. Previously, P20 had suggested that a fully Xero-based firm would limit a firm's capacity to meet the needs of clients because Xero might not fit all businesses, and as professionals accountants they should provide a range of choices. However, once merged, the firm became fully Xero-based and placed an emphasis on advisory. P20 indicated that it

needed to be efficient, so it did not hesitate to adapt to the new model of practice because 'from [a] cost and productivity aspect many firms moving this way' (p. 28). P20 also advised that in the future, the firm would examine the possibility of global clients or opening offshore offices. This was in contrast to her initial, more traditional, view of the role of accountants, and she admitted the need to adjust to the changing market, which suggests redefinition of her professional values around the commercial logic.

The change that public accountants, especially SMPs, were undergoing provides evidence of institution transitions in professional public accounting practice towards the cultural-cognitive pillar. The increased dominance of the cultural-cognitive pillar, particularly in the SMP domain, represents not only a shift in their role but also their notion of professionalism, which, in the ethos of the Big 4, is being redefined around the commercial logic. This is in contrast to the literature where SMPs traditionally were identified as mainly engaging in traditional accounting work (i.e., compliance services) and having adherence to traditional normative logic (Greenwood et al., 2002; Hanlon, 1996; Ramirez, 2009). This is the case because SMPs typically serve small businesses that generally are dependent on their accountants and do not demand multidisciplinary services unlike in the case of large businesses, which are the client-base of the Big 4 (Ramirez, 2009). However, at that time, the digital innovation had not affected the SME space and the profession to the extent it has now, especially in Australia.

Such redefinition of the role of public accountants, especially SMPs, and their professionalism, was supported primarily by one of the APAs that mainly deals with SMPs, APA 3. The need to adapt in order to survive was then acknowledged by the representative of APA 3, D31. APA 3 showed strong support for accountants, especially SMPs, to revolutionise their practice, be innovative, find a niche to differentiate them and have additional skills not only in technology, but also in the multidisciplinary area:

And we're saying there's a challenge for a practitioner to sit down and say to the extent that they can, if you're a sole practitioner it's very difficult to take time away from your business to work on. But if you can get that time take a step back and say 'Is this business model sustainable?' and our suggestion is that in the longer term a business model focusing solely on income tax returns and compliance based activity is not sustainable. And so we're encouraging as many members as possible to think about integrating their businesses both vertically and horizontally. Look at other lines you know business advisory services, financial advisory services because that's what clients want, they don't walk in the door of an accounting practice and say 'Here's my tax return can you help me?' and then expect to be shopped down the street to another business to say here's my, you know go and see my mate down the road [who is] a financial planner. They want a single point of entry, a single contact point to get all the services they need. (APA 3, D31, Discussion Forum 3, pp. 4–5)

D31 also highlighted the importance of growing the practice by gaining efficiency through cloud-based systems and looking to the potential of outsourcing and offshoring, which he said members were often afraid to do. Here D31, as the representative of APA 3, encouraged SMPs to follow a similar path to SMP F. As discussed in section 6.4.2 (Stage 2), SMP F was being entrepreneurial as it went on the launch its own SBR cloud-based add-on that was first aimed to be compatible to Xero. This is due to, according to one of its directors, P31, SMP F wanting to not only to increase efficiency through deep automation and seamless integration with its offshore office in India, but also to enjoy first mover advantage. Indeed, P31 indicated other SMPs saw their move as risky.

However, disruption by the digital innovation is inevitable. D31 (APA 3) emphasised the fact that, as cloud accounting disrupted the SME space, they are obliged, as professional accountants, to learn about the change and embrace it. He suggested that understanding the change in the market means having the public interest at heart because the public come to an accountant for expertise, advice and professionalism. He indicated that professionalism meant being up-to-date and current (i.e., matters of competence and due care), and those who could not keep up should not be practicing:

It's about just first being switched onto the fact that this is what's happening in the market place and being able to say, [when] you're client walks in the door and says 'I'm interested in cloud based accounting systems' and you look at them and start blinking. I mean ... those practitioners should not be in the profession. You know if you are not up to speed with what's happening you shouldn't be practicing. And that's what being a professional is all about. (APA 3, D31, Discussion Forum 3, pp. 19–20)

In addition, D31 emphasised the need for public accountants to shift to the new practice or they would not survive:

So if the professionals and the practitioners are not engaged in these [five external drivers of growth in the accounting profession over the next five years, which do not have anything to do with compliance] and are not switched on—such as you<sup>47</sup> turning on your software skills as I tend to agree—you better start to think about it because again the profession will move on and clients will leave you behind. If you are not prepared to offer those, have a very open transparent frank discussion with clients in whatever forums, online, skype, [face-to-face meeting over] coffee, whatever. A client will find someone who will and so for us our message is continue to enhance that skills but more importantly get on to the trajectory growth [advisory-based practice]. (D31, APA 3, Discussion Forum 4, minute 1:30:33.0 - 1:31:03.0)

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<sup>47</sup> An audience member who asked a question in the Q&A session about how to move to advisory after learning how to use the software and he raised the need for the accounting professional associations and software vendors to provide soft skills training to smaller practitioners who do not have in-house capacity similar to that of the Big 4.

This assertion from APA 3 not only provides further evidence of the increasing dominance of the cultural-cognitive pillar, but, at the same time, what constitutes professionalism. APA 3 supported its member to be innovative and agile in responding to the market trend, which again signifies that professionalism is being redefined around the commercial logic. As discussed in Chapter 4, cultural-cognitive pillar reflects the logic of the market (capitalism) as the current environment or drivers lead actors to adopt new innovative practices—based on self-interest and to maximise benefits (profits)—as they strive to gain legitimacy to survive. However, as discussed earlier in this section, the capitalism shifted and adopting the digital innovation is inevitable for both SMEs and their accountants. Thus the digital innovation leads to changes that are increasingly becoming the accepted way of practice for public accountants.

On one hand, the changes in practice, which indicates increased commercial logic, have the potential to threaten the maintenance of professional competence and due care and independence from the market, the client and government (e.g., the case where SMPs jumped into the bandwagon, becoming an outsourced CFO without having the appropriate expertise). On the other hand, the changes represent a new form of capitalism (i.e., a shift in the way continuous search for new sources of profit is pursued) (Thrift, 2006). However, this change has not displaced normative logic as the change is inevitable. Public accountants, with adequate professional training, must embrace it to maintain a legitimate position and control their work in order to retain a claim over professional status and ultimately financial rewards (Abbott, 1988). In that sense, embracing the change means maintaining professional competence and due care to their client-base as the new way of practice becomes the accepted practice.

The increased dominance of the cultural-cognitive pillar in Stage 3 was because this stage represented a period of great uncertainty and information scarcity, which drove accountants to develop new practices that were innovative and entrepreneurial as competition became more intense. Although the new practices increasingly became the accepted belief in practice in Stage 3, they had not yet become the universally accepted norm. There is the potential that post-Stage 3, this may become the accepted norm because, as discussed earlier, the Big 4 began to expand into this space at the end of Stage 3 and this has the capacity to provide a strong basis for the new way of practice. However, a detailed analysis of the post-Stage 3 period is beyond the scope of this study. Nonetheless, during Stage 3, it was evident that the new way of practice was becoming the norm as the APAs' increasingly provided professional updates to their members regarding the changes. Further, during Stage 3, D31 indicated that APA 3 had started incorporating digital or technology-related training into its certification and

continuing professional development, such as how to provide accounting system migration services and IT strategy advice for small businesses.

However, in Stage 3, the increasing focus on SMEs' advice has not been given proper attention in Australia. This type of service needs to receive more attention from the professional associations, especially now that the digital innovation has had a substantial effect. In the UK, for example, the ICAEW Business Advice Service was launched in 2011, and the ICAEW Business Finance Advice scheme was launched in 2013. These are aimed to promote the use of an ICAEW chartered accountant by SMEs and start-ups to obtain business and finance advice and—in collaboration with the UK government and other accounting bodies—to help them identify qualified accountants (ICAEW, n.d.-a, n.d.-b).

Indeed this issue of advisory-based practice was critical with respect to adopting the digital innovation. An incumbent software vendor, Vendor E, recognised the need of public accountants especially SMPs to have technology-related expertise as well as the soft skill to embrace the change. Vendor E, as indicated by its Managing Director, D41, provides training to public accountants not only for using its cloud-accounting product but also the technology-related skills and soft skills needed to switch their practice to be cloud-based and advisory-based.

In addition, to the lack of soft skills and expertise to switch the practice to advisory-based, public accountants, were reluctant to adopt the digital innovation because there is a need to look into the confidentiality issues in regards to data security on the cloud (Gonzalez, 2015; Raval, 2015); the relationship with software vendors in regards to maintaining independence or objectivity; and the management of the lien in regards to the provision of professional services within a cloud-based single-ledger system. In Stage 3, these issues have been raised but formal solutions from the APAs or the regulatory bodies such as the APESB were not in place. For example, the need to further regulate about commission from software vendors (third parties) in connection to the sale of goods or services to a client. The Code of Ethics has indicated that accepting such commission 'creates a self-interest threat to objectivity and professional competence and due care' (APESB, 2013, § 240.5). This ethical issue about the software vendors' partnership program as a potential threat to objectivity was also raised by accountants in public practice as they recognised that the attractive rewards may lead accountants to advise clients to adopt software not suitable or too expensive for the clients (Macpherson, 2014b). The Big 4 will have more conflicts in relation to this if they are also the auditors of the software vendors (Macpherson, 2014a). Big 4 A avoids this conflict by collaborating with a third party software provider so that their clients purchase the software

through this third party based on their advice. In this case, Big 4 A also maintains independence or objectivity from software vendors and so not to be seen as pushing clients towards certain software.

Although the cultural-cognitive pillar began to gain dominance in Stage 3, it did not displace the normative pillar. An example displayed by one of the APAs, is that through its professional media, it informed its members of the need to adopt in order to adapt, but to act appropriately, such as by ensuring due professional competence, not to be driven by competition, and to make decisions based on professional judgment rather than following market trend and client pressures (Article S3\_T4\_19\_Charter\_2014\_03).

This institutional transition towards the increased dominance of the cultural-cognitive pillar represents field transformation and institutional change in professional public accounting practice, specifically in one of its facet, the servicing of SMEs. Servicing SMEs represents the largest share of professional public accounting practice in Australia, which as discussed in Chapter 4, in terms of the number of clients and the dollar value involved. This indicates that the digital innovation is a considerable force for change for professional public accounting practice in Australia. It emanates from the nature of the digital innovation and the push to adopt, which was driven primarily by software vendors and fostered by the government (SBR Program) and supported by consultants. This force of change represented an exogenous shock involving a chain of disruptive events that threw an entire industry into a quantum change, causing a restructuring process through the relocation of boundaries and an alteration of the basis of competition (Meyer, Brooks, & Goes, 1990). This resulted in diverse actors with disparate purposes gathering to perform sense-making work over an issue—that is, the commodification of traditional accounting work in serving SMEs. The issue was the central unit that coalesced the field and led to institutional transitions in professional public accounting practice of increased dominance of the cultural-cognitive pillar—that is, professionalism was converging towards commercialism. Based on the evidence, intense intraprofessional competition (i.e., institutional war) significantly contributed to the increased dominance of the cultural-cognitive pillar in professional public accounting practice. Thus, intense intraprofessional competition is the critical force fuelling field transformation and institutional change.

In summary, the field transformation and institutional change indicate changes in issues defining the boundaries between sub-groups within the social structure of professional public accounting practice in Australia. This is because the digital innovation (its nature and the push to adopt) disrupts the nature of professional knowledge, the client relationship and

jurisdictional control, particularly of SMPs. The disruptive situation is leading to changes in professional work and other related issues, culminating in changes in professional values. The next section discusses the impact of the digital innovation on the social structure of professional public accounting practice.

## **6.5 Impact of the Digital Innovation on the Social Structure of Professional Public Accounting Practice**

This section provides a summary of this chapter and provides the link to the overarching research question: 'Is digital innovation impacting the social structure of professional public accounting practice in Australia?' Based on the discussions throughout this chapter, this study provides evidence that the digital innovation (as well as its nature and the push to adopt) is disrupting professional public accounting practice in Australia. This study finds that field transformation and institutional change as a result of the disruption have implications for the social structure of professional public accounting practice—that is, reducing the disparity of boundaries between sub-groups.

The literature identifies professional work, location of work, firm size, firm structure, client base and professional values as related issues defining the boundaries. These boundaries have been identified in the literature as defining the hierarchical position of these sub-groups (Greenwood et al., 2005; Greenwood et al., 2002; Lander et al., 2013; Malhotra et al., 2006; Ramirez, 2009). As discussed in previous chapters, for example, from a professional perspective, bookkeeping work and the client base of small businesses are typically associated with low status. Associating with the provision of high-status work and an elite network of clients translates to the ability to accumulate financial resources. These feed back to the maintenance (or elevation) of intraprofessional status, which enables the recruitment of skilled professionals, the production of a prestigious reputation and ultimately the ability to charge a premium fee. From the commercial perspective, small businesses in general were not considered a lucrative market for larger sub-groups. However, based on the evidence presented in this thesis, since the digital innovation disrupted the nature of professional knowledge, the client relationship and the jurisdictional control of SMPs, it transformed the associated status in servicing SMEs—that is, it was no longer associated with low status—and consequently sparked intraprofessional competition. Thus, the disparity in professional work, the client base and professional values between sub-groups became less conspicuous, as they progressively drove reduced disparity in the location of work and the firm structure, which is explained below.

First, this study finds that, as SMPs are striving to survive, they are increasingly offering diversified or multidisciplinary professional work, and in doing so, are becoming client- and profit-oriented. SMPs are being driven to engage in innovative and entrepreneurial practices to identify avenues for generating sustainable income and to increase efficiency in order to maximise profits. This shows that SMPs have increased their commercial drive, and that their logic is converging towards commercialism (Greenwood et al., 2005; Greenwood et al., 2002; Lander et al., 2013; Ramirez, 2009). Evidence shows that this tendency towards commercial logic is supported by the accounting profession association, which mainly deals with SMPs, APA 3. This indicates that the professional work and values of SMPs are becoming similar to the Big 4, which is in contrast to what prior studies have found (Lander et al., 2013; Suddaby et al., 2009).

Second, SMPs are becoming less embedded in their local context, as they increasingly strive to expand the location of their work. Their ability to access clients nationally and those with international affiliations as well as their ability to open offshore offices to access cheaper qualified resources for further efficiency, are increasingly what SMPs are striving to achieve. Again, this indicates that SMPs' location of work is becoming similar to that of the Big 4, but on a smaller scale. Conversely, the Next Big 8 and the Big 4s' interests in establishing a strong presence in the small business space by utilising the digital innovation indicate that they are strengthening their position locally. This shows that the local context may no longer predominantly be associated with SMPs, which is in contrast with the literature from which the traditional social structure is derived (Hanlon, 1997b; Lander et al., 2013).

Third, these changes are also impacting how some SMPs are structuring their firms, moving away from a traditional partnership to a more bureaucratic firm structure. Traditionally, bureaucratic firms have been associated with the Big 4, and smaller practitioners such as Mid-tier firms and SMPs are primarily in the form of a traditional partnership (Greenwood et al., 2002; Lander et al., 2013; Malhotra et al., 2006; Ramirez, 2009). This new practice also raises the notion of changing accountants' role as business advisors among SMPs, which traditionally did not occur in the space of smaller practitioners (Greenwood et al., 2002; Ramirez, 2009). This indicates that SMPs' professional identity is converging towards that of the Big 4. The Next Big 8s' interest in following the Big 4s' steps also indicates convergence towards the Big 4s' professional identity. However, this study finds limited evidence that Mid-tier firms are showing a similar tendency to SMPs.

Fourth, the evidence presented in Section 6.4 indicates a tendency for SMPs to merge with other SMPs to strengthen their resources and power in order to 'fight' those in the upper



hierarchy of the social structure (Abbott, 1988). The need to increase resources and power indicates SMPs' efforts to elevate their position in the social structure (Abbott, 1988). However, this is potentially difficult to achieve, as the Next Big 8, which have been identified as increasingly competing with the Big 4 over large and global clients, are aggressive in adopting the change associated with the digital innovation. This is because they want to strengthen their position in the smaller businesses' client base before the Big 4 take over much of the market share. In addition, the Next Big 8 are following the Big 4 by striving to expand their market share and their multidisciplinary services through mergers. Therefore, the Big 4's expansion into the small business space—such as opening a special division that is fully digitised to serve this market—as well as their competitive advantage in multidisciplinary practice and their continued merging with multidisciplinary firms, indicates that the Big 4 may become pervasively dominant in the near future—not only globally, but also in the small and local market (Golsby-Smith, 2013; White, 2014). This shows that reduced disparity in size is unlikely, and smaller firms are competing with larger firms over what used to be their primary domain—the servicing of SMEs, and specifically local small businesses.

Overall, the evidence shows that the digital innovation is reducing disparity between the sub-groups within the social structure of professional public accounting practice based on professional work, the client base and professional values, as well as the location of work and the firm structure. This study does not find any evidence of reduced disparity in size.

In conclusion, this study finds that the digital innovation is impacting the social structure of professional public accounting practice. It may not be leading to changes in the hierarchical position per se, but appears to be weakening the definition of the boundaries between the sub-groups. The critical issues defining the boundaries between the sub-groups, which distinguish them and thus determine the hierarchical position in professional public accounting, are now largely based on the firm size and combination of capital. The capital is cultural (prestige education of the professionals), social (elite network that enables the recruitment of high-status clients and professionals), economic (financial resources) and symbolic (reputation). As professionalism is converging towards commercialism, this study suggests that the latter two forms of capital are the most critical.

## APPENDIX 6.1: List of Articles<sup>48</sup>

No	Article ID	Title	What the article is about	Article Type	
1	S1_T1_1_BRW_2008_05	Duty to share	Promotes the benefits of SBR, including favourable results from SBR Business Case tests conducted by two of the Big 4.	N	S T A G E  1
2	S1_T1_2_BRW_2009_07	Tag team cuts data duplication	Highlights the importance of software vendors' participation in achieving the objectives and thus realising the benefits of SBR.	N	
3	S1_T1_3_BRW_2009_08	Test for ATO reform	Discussion about funding for an academic researcher to explore the potential benefits of SBR in reducing the compliance burden from a tax perspective.	N	
4	S1_T1_4_BRW_2009_11	Simplifying the system	Promotes SBR for efficiency in revenue and tax compliance/reporting from the perspective of businesses, tax agents, accountants/auditors (accounting firms) and multiple government agencies.	N	
5	S1_T1_5_BRW_2010_03	Record exposure	Sells the benefits of SBR and encourages accountants to take advantage of SBR. Promotes the need for accountants to strengthen their expertise beyond compliance because online or cloud-based technology will open competition in new areas. Discusses how compliance work will be replaced by such technology.	N	
6	S1_T1_6_Charter_2007_11	Standard Business Reporting	Professional/technical update on the launch of the SBR Program and an invitation to join the SBR international conference in Brisbane, where the government aims to inform the accounting, finance and software development communities of the effect that SBR will have on their work.	S	
7	S1_T1_7_Charter_2007_12	XBRL Update	Professional/technical update on the output of the international workshop in Canberra on the use of XBRL for global standards and the SBR Program.	S	
8	S1_T1_8_Charter_2008_03	A day in the life...	A business case for SMPs. The story of a hypothetical SMP that can transform its practice after adopting SBR—that is, how increased compliance efficiency and ability to focus on higher-value services changes how accountants work and interact with clients.	N	
9	S1_T1_9_Charter_2008_11	Driving change	Highlights the effect of SBR in changing the accounting profession, especially SMPs. Promotes the benefits of SBR as radically changing how accountants traditionally work and train accountants—that is, moving from a focus on compliance towards a focus on business needs.	N	

<sup>48</sup> The summary of what the article is about was typically taken directly from the articles.

No	Article ID	Title	What the article is about	Article Type
10	S1_T1_10_Charter_2008_11	Streamlining data reporting	Promotes the benefits of SBR as streamlined financial reporting to government agencies such as the ATO and ASIC. Discusses how SBR and XBRL work, including the benefits of SBR for the accounting profession, such as cost efficiency and improved accuracy for better professional judgment. Discusses benefits for businesses, such as consistent financial reporting, which is beneficial for attracting investors and lending purposes.	N
11	S1_T1_11_Charter_2008_12	Leading the profession	Discusses key issues and highlights of the ICAA leadership project that aims to influence the government in order to have a profound positive effect on the business and accounting professions. The project involves advising the federal government on the various proposals of SBR initiatives, including the project's support for the corporate governance of APRA superfunds and a single regulatory regime for the entire not-for-profit sector.	NS
12	S1_T1_12_Charter_2009_04	SBR Conference	Professional/technical update on the SBR conference to be held in Sydney and Melbourne, highlighting the importance of SBR for those who play a significant role in reporting financial information to the government.	S
13	S1_T1_13_Charter_2009_08	Developments in SBR	Professional/technical update on the output of the SBR conference in Sydney and Melbourne regarding SBR development in Australia, what SBR means for business, accountants and software developers, and what needs to be done to implement SBR.	S
14	S1_T1_14_Charter_2009_11	Tax and compliance	Summarises the ATO's tax and compliance initiatives, such as the annual compliance arrangement, stimulus payment and community awareness of the importance of tax. Overall, these initiatives are supported by the ATO business model, which is increasingly becoming online and towards the use of SBR for lodgement, which is considered effective, and development is ongoing.	NS
15	S1_T1_15_Charter_2010_03	SBR as easy as ABC	Professional/technical update on free SBR training module from the SBR website as preparation for the SBR launch in July.	S
16	S1_T1_16_Charter_2010_04	Financial reporting and disclosure	Summarises the results of ASIC's review of the 30 June 2009 financial reports and details issues that require further attention. For example, the appropriateness of the going concern assumption in the preparation of financial reports; the correctness of the treatment of any off-balance sheet arrangements; the full disclosure of the significance of financial instruments, the associated risks and how the entity manages those risks; and the importance of SBR voluntary lodgement commencing 1 July 2010 for Australian companies, registered schemes, disclosing entities and financial services licensees.	NS

No	Article ID	Title	What the article is about	Article Type	
17	S1_T1_17_Charter_2010_05	AUSkey opens door to SBR	Promotes the benefits of SBR for accountants both in business and in practice.	N	
18	S1_T2_1_BRW_2008_08	First among rivals	Highlights the benefits of SaaS and cloud computing as tools for small businesses in competing with larger businesses, but with agility and affordability. Compares a list of products/vendors.	N	
19	S1_T3_1_BRW_2010_05	Cloud computing: fruit of the boom	Presents a case where a small business uses cloud-based technology for marketing, accounting and the customer database, and links them all to enable five staff to serve more than 40,000 customers. Focuses on the effect of cloud computing on running the business rather than the accounting itself.	N	
20	S1_T3_2_Charter_2010_03	Computing in the clouds	Discusses the increasing trend and effect of the use of cloud computing for businesses, which leads to increased efficiency for internal and external collaboration, seamless integration and data exchange, and scalability, but also the loss of internal function to outsourcing and data security issues.	N	
21	S2_T1_1_BRW_2010_07	AUSkey cuts red tape	Promotes SBR as compliance cost-saving mechanism and appeals to businesses and accountants by noting the ICAA's support. Highlights multi-agency involvement and how it will help agencies to focus on businesses' needs and accountants to focus on providing businesses with higher-level services.	N	S T A G E  2
22	S2_T1_2_BRW_2010_08	Small business, big poll hopes	COSBOA voices its concerns about SBR to politicians running for the election. Focuses on reducing compliance costs that burden small businesses.	NS	
23	S2_T1_3_Charter_2010_09	SBR implementation guide for auditors	Professional/technical update on the issue of a Bulletin entitled Standard Business Reporting and XBRL: Information for Audit and Assurance Practitioners by the AUASB. Provides information about how XBRL works and discusses the introduction of SBR in Australia and how it may affect audit and assurance practitioners' work.	S	
24	S2_T1_4_Charter_2010_09	SBR opens for business	Reminder that the SBR channel has been active since 1 July 2010. Lists the types of forms that are already being catered for.	S	
25	S2_T1_5_Charter_2011_11	XBRL, making the world turn faster	Promotes SBR as an XBRL-based standard and explains XBRL as a global standard for financial reporting. Focuses on disseminating business cases for SBR and its positive effect for Australia, but an adequate mechanism needs to be in place to foster implementation and adoption.	N	
26	S2_T2_1_BRW_2011_02	Gaining altitude on fresh ideas	The trend towards moving software applications and data storage into 'the cloud' leads to a monumental shift that changes the way software is developed, delivered and commercialised, which is becoming highly profitable.	N	

No	Article ID	Title	What the article is about	Article Type
27	S2_T2_2_BRW_2012_02	MYOB gears up for the cloud	Moves the centrepiece of MYOB work towards the ubiquitous personal computer that is permanently linked to the Internet, cloud-based and hosted. Refocuses on the Australian and NZ markets for this new technology. It aims to change the culture of small businesses and SMPs that are servicing them through the use of technology (cloud)—e.g., paperless, streamlined exchange of data.	N
28	S2_T2_3_BRW_2012_03	Shifting to the stratosphere	The changing nature of software delivery (i.e., via the 'cloud') is promoted by software vendors as benefiting not only small businesses, but also those who need to have global and international access.	N
29	S2_T3_1_BRW_2010_11	Silver lining	Discusses cloud accounting, which works like ERP for small businesses, especially software such as Xero and Saasu, which are purely cloud-based and provide increasing agility to small businesses, giving them a competitive advantage and the ability to do the work themselves from anywhere. Larger businesses are now trailing behind in this space. Cloud accounting is cost-efficient; thus, this is about cloud accounting giving small businesses the power to become competitive.	N
30	S2_T3_2_BRW_2011_01	A year of resolve	Discusses different strategies/resolutions that business operators aim to achieve in 2011. However, only the first case is taken into consideration in the article review because it covers a consulting firm whose focus is helping businesses grow by offering software and advisory services, and working on moving its software into the cloud.	NS
31	S2_T3_3_Charter_2010_09	Making virtual teams a reality	Highlights the trend towards virtual teamwork as a result of the rise in ubiquitous technology and applications used in business practice to increase productivity, expand global business and decrease the carbon footprint. Discusses the implications for accountants in businesses and the issue that virtual teams require specific management strategies.	N
32	S2_T3_4_Charter_2012_02	Head in the clouds	Professional/technical update on issues about future ICT security risks for businesses. Encourages accountants to read the ACS report published on its website, and reminds accountants to read the ICAA's published report on similar IT issues.	S
33	S2_T3_5_Charter_2012_05	Growing concern: the challenge of big data	Discusses the growth of data in the digital era. Larger businesses can afford software to help them manage large amounts of data. Smaller businesses do not have the financial resources, but they increasingly need assistance to design their systems and make meaning of the data they have. This is an area where accountants in public practice can exploit new opportunities.	N

No	Article ID	Title	What the article is about	Article Type
34	S2_T3_6_Charter_2012_06	To remain relevant, adapt	Highlights the effect of digital innovation, where cloud computing is the buzzword, but the full wave of that transformation is yet to arrive. However, the push to change the traditional business model is already rife. Businesses that do not adapt (press ahead with technology) may not survive.	N
35	S2_T4_1_BRW_2011_10	Accountancy 100: calculated to win	Discusses the change in accountants' services to offer advisory services, especially in relation to technology, performance improvement and risk management. This is due to uncertainty in the global economy and increased demand for advisory services from businesses. Further, advisory has potential long-term growth—technology is replacing compliance work, as cloud-based accounting is becoming a prominent feature of the profession's landscape. The top firms, especially the top 12 firms, plan to expand their service offerings to smaller clients.	N
36	S2_T4_2_BRW_2011_10	Money spinners	Discusses the move that regional accountants made in diversifying their services by expanding their advisory services to both accounting and non-accounting areas, as well as expanding their reach for clients using cloud accounting.	NS
37	S2_T4_3_Charter_2011_05	On the move	Mobility technology offers the freedom to work anywhere, provides significant cost savings and is transforming the way Chartered Accountants do business.	N
38	S2_T4_4_Charter_2011_05	Safety net	Data and equipment loss is devastating for Chartered Accountant; thus, sound risk management is necessary. This is due to the changing landscape in business practices—in particular, those that are fuelled by rapidly adopted technology such as mobile and cloud computing introduce a high degree of risk if they are not properly managed.	N
39	S2_T4_5_Charter_2011_09	Technology in practice	Professional/technical update on an upcoming technology showcase conference for accountants. Highlights that technology is a major driver of efficiency for accounting firms, where a failure to acquire or effectively implement the right technologies may affect profitability, efficiency and client service.	S
40	S2_T4_6_Charter_2012_02	CumuloNumbers	With the increasing uptake of cloud-based SaaS, organisations are being forced to rethink the way they consume IT and challenge inefficient, non-value-added business processes. Focuses on key factors that weigh up SaaS. Reckon cloud accounting is used as a case.	N
41	S2_T4_7_Charter_2012_05	Counting the cost of cloud	Across business, practice and government, Chartered Accountants are increasingly being asked to weigh up the costs of cloud computing. Focuses on the costs and benefits of cloud computing, including SaaS.	N

No	Article ID	Title	What the article is about	Article Type
42	S2_T4_8_Charter_2012_05	The evolution of technology in business	Technology is making businesses smarter and faster, and the pace of change is set to continue. This is changing businesses and the way Chartered Accountants run their practices, including interacting with their business clients.	N
43	S3_T1_1_Charter_2013_03	A new wave of SBR change	Promotes the benefits of SBR and encourages all stakeholders to adopt SBR and support SBR development. It also highlights factors affecting slow adoption.	N
44	S3_T2_1_BRW_2013_04	Accounting software wars move to the cloud	Discusses the war between accounting software vendors over SMEs regarding the provision of cloud-based software. Highlights how an increasing number of cloud-based software, such as Xero, SaaS and JCurve, have pushed incumbent vendors such as MYOB and Reckon to move into this space.	N
45	S3_T2_2_BRW_2013_05	Reckon founder Greg Wilkinson takes a tablet	Discusses the move made by Reckon founder who developed innovative POS software for retailers that integrates with a range of other cloud-based applications.	N
46	S3_T2_3_BRW_2013_07	Xero accounting software gets its very own Dummies book	Discusses the release of the Xero for Dummies book by an author independent from Xero, and who wrote a Dummies book for rival MYOB. The founder of Xero asked the author to write the book.	N
47	S3_T2_4_BRW_2013_10	simPRO takes 30pc stake in mid-market cloud accounting outfit Gem Software Solutions	simPRO has taken a 30 per cent stake in cloud-based accounting software creator Gem Software Solutions and plans to increase to a majority. This is because simPRO aligned itself with Xero but found their clients to be too big for Xero. As a result, it had to push clients to move to cloud-based software, but that can cater to the mid-market.	N
48	S3_T2_5_BRW_2013_10	Xero raises another \$159m to fuel global growth	Xero raised \$159 million of new capital from its investors as it positions itself for global growth. This shows accountants and SMEs, including other accounting software vendors, Xero's potential strong position in the future, as it is rapidly expanding.	N
49	S3_T2_6_BRW_2013_11	How your accounting software could convince your bank to give you a loan: Intuit CEO explains	Discusses Quickbooks software in addition to its cloud accounting for managing Big data for SMEs. Promotes the use of Quickbooks cloud-based accounting for SMEs to better manage and present their financial data for the purpose of bank loans and other matters.	N
50	S3_T2_7_BRW_2013_11	Xero targets financial planners in a bid to push \$30m revenue mark	Xero is aggressively chasing financial planners to adopt its software. Xero's move will increase competition between accountants and financial planners, although the real motive is that Xero wants to raise more revenue and thus increase its market share.	N

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No	Article ID	Title	What the article is about	Article Type
51	S3_T2_8_BRW_2014_01	MYOB hopes hiring blitz will help fend off Xero	MYOB is in the throes of a hiring frenzy, adding new recruits at the rate of one a day as it gears up to defend its patch against rivals and release two new cloud-based products.	N
52	S3_T2_9_BRW_2014_02	'Craig Winkler brings validation': Practice Ignition founder hopes his new investor will convince local venture capital	The second largest shareholder of Xero, who was the founder of MYOB, invests in start-ups to support increased digital accounting practice. This is an indication to accounting firms to embrace the digital disruption and change their relationship or business model with their clients not only through cloud accounting, but also through digital practice.	N
53	S3_T2_10_BRW_2014_02	Why a Microsoft CEO was among investors of \$1m in Sydney start-up Maestrano	Discusses a cloud-based platform that integrates a range of open-source cloud applications that are not just limited to accounting, but that are similar to an ERP and targeted at small businesses. The business model is designed to rival others because it does not lock small businesses into a contract, and it enables them to choose a monthly or hourly plan.	N
54	S3_T2_13_BRW_2014_03	Software start-up Vend completes \$22m capital raising with Valar Ventures and Square Peg	A start-up that offers cloud-based software for bricks-and-mortar retailers and plugs in to a range of e-commerce systems received funding from large technology investors such as Valar Ventures and Square Peg, as well as the second largest shareholder of Xero, to expand in Australia and North America.	N
55	S3_T2_12_BRW_2014_05	MYOB and Intuit acquisitions show start-up opportunity in accounting software competition	The large incumbent software vendors in Australia—MYOB and Intuit—are competing to acquire start-ups in order to expand the breadth of their cloud accounting. This fuels the growth of innovative start-ups and the development of software that can be integrated into the large vendors' systems.	N
56	S3_T2_13_BRW_2014_06	Software start-up Kounta wins MYOB investment	MYOB is aggressively buying more start-ups after competing with Intuit in the purchase of cloud-based document management software. This is a cloud-based POS that can also integrate with Xero, MYOB's biggest rival in this space.	N
57	S3_T3_1_BRW_2013_03	Choosing a cloud computing service provider	Advises businesses on what to look for when choosing a cloud computing service provider, especially for small businesses with limited financial resources.	N
58	S3_T3_2_BRW_2013_03	Cloud computing: what exactly is on offer?	Explains different types of cloud-based services that businesses can obtain, such as SaaS, platform-as-a-service and whether to use a hybrid model. Provides advice on the use of cloud computing for small businesses and those that require flexibility, such as start-ups and seasonal businesses.	N



No	Article ID	Title	What the article is about	Article Type
59	S3_T3_3_BRW_2013_03	Shopping in the cloud: heaven sent for retail	Discusses the benefits of cloud computing for the retail sector, which deals with a diverse network of small branch offices and stores, including franchises, as well as seasonal business spikes.	N
60	S3_T3_4_BRW_2013_04	Businesses keep their feet on the ground and their sights on the cloud	Explains that the move towards the use of cloud computing and online activities is inevitable. The flexibility of the cloud offered by Xero and others is especially beneficial for small businesses, but it requires a new mindset and skills, including risk management.	N
61	S3_T3_5_BRW_2013_04	Winning with SMEs: why big business is thinking small	SMEs are becoming powerful players in the market, and digital innovations such as Xero cloud accounting enable them to have flexibility and affordability in running their operations. SMEs are increasingly being considered by big businesses as potential reputable partners.	N
62	S3_T3_6_BRW_2013_09	Starting a business: tap the cloud for SAAS or do it the hard way	Discusses the ease of starting a business now compared to a decade ago as a result of digital innovations such as SaaS, which includes MYOB cloud accounting. Related applications significantly improve collaboration in managing businesses.	N
63	S3_T3_7_BRW_2013_10	Want your business to boom? Ditch the shoebox of receipts and monitor expenses electronically	Advocates SMEs to use cloud accounting or online accounting because it provides flexibility to better manage their business and enables them to focus on growth, including increasing their credibility for taking a loan because improved accounting systems means much clarity in how the business is doing.	N
64	S3_T3_8_BRW_2014_05	The cloud guide for mid-market business: know the jargon, know the providers before you make your move	Discusses different jargon used to describe different types of cloud-based products for mid-market businesses. Analyses a list of products, from Microsoft's public cloud operating system Azure to Xero's cloud accounting.	N
65	S3_T3_9_Charter_2012_11	Exiting the cloud	Discusses the concern that, as more businesses embrace the benefits attached to storing data remotely on servers located across the globe, many are failing to consider the potential exit costs and issues should the sky collapse on their cloud-based services.	N
66	S3_T3_10_Charter_2013_04	Confronting risk can breed confidence	Organisations today face a riskier and more complex world. The article discusses the top 5 macro and micro risks. For macro risks, after the macro economy, digital disruption ranked second, followed by cyber attack. Advancements in technology contribute to the third micro risk, fraud.	N

No	Article ID	Title	What the article is about	Article Type
67	S3_T3_11_Charter_2014_02	Enterprise resource planning comes of age	A raft of new technology, such as cloud computing, social media, big data and add-on technology, are revolutionising ERP, thereby refocusing ERP on timely information in the right place and agility to make the right decision.	N
68	S3_T4_1_BRW_2012_08	Most successful business of the year (turnover under \$100m): Job Capital	About a payroll specialist firm that expanded its services, including going global, because of cloud accounting. Real-time access and increased efficiency enabled the firm to better serve SMEs and to partner with accounting firms in servicing SMEs.	N
69	S3_T4_2_BRW_2012_11	Accounting 100: the fight for the top	A fierce battle is raging over coveted top rankings for accounting firms. The top 100 are venturing into new services, including business coaching, data analytics, technology consulting and property investment advice. Due to the rise of social media and a focus on technology investment, accountants at the top and bottom ends of the revenue scale use cloud-based systems to deliver real-time information to clients, to have a close control on costs and to redesign their workplaces such as their firm structure.	N
70	S3_T4_3_BRW_2012_11	Australia's 20 fastest growing accounting firms revealed	Accounting firms face increasing competition with each other. They expand their share first through mergers and acquisitions, and then by investing in new service streams that were not previously possible, stockbroking, financial services and technology consulting. This is because the digital innovation is changing their business model.	N
71	S3_T4_4_BRW_2012_11	How technology is transforming accountants	Accountants are under pressure to improve their ways of doing business and, as with most other professions, much of this change is due to rapid technological changes such as the move to the cloud.	N
72	S3_T4_5_BRW_2012_11	Technology tops investment at the big accounting firms	The biggest structural shift taking place in the profession is in the technology space. More than 70 per cent of the top 100 accounting firms identified that more investment in new technology was required in 2013. New technology such as cloud accounting is not only increasing efficiency and thereby profitability, but also changing clients' engagement with businesses.	N
73	S3_T4_6_BRW_2012_11	Top firms use digital tools to capture new, and old, data	With thousands of clients on their books, top firms are now aggregating industry data and using that sector's knowledge to provide better individual business advice. Web-based solutions will have a significant effect on accounting firms, and more accountants will share and store information in the cloud.	N

No	Article ID	Title	What the article is about	Article Type
74	S3_T4_7_BRW_2013_03	Client choice awards: savvy, digital, global: the face of the new professional	Discusses increased competition among both intra- and interprofessionals in public accounting practice due to digital disruption and globalisation. It involves diversification and consolidation as a way to expand services and the client base.	N
75	S3_T4_8_BRW_2013_04	Why SMEs still trust accountants over financial planners	SMEs consider accountants their most trusted advisors, but they will leave accountants that do not embrace the cloud. Postulates the need for accountants to embrace the cloud because SMEs are embracing it and will have increasing power to choose their business advisors.	N
76	S3_T4_9_BRW_2013_10	Kill or be killed: BRW top 100 accounting firms 2013	Increasing focus on digital technology and Asia not only forces large and mid-tier firms to aggressively diversify and expand, but also smaller firms.	N
77	S3_T4_10_BRW_2013_11	Giam Swiegers: Deloitte's Mr Fix-It looks to his legacy	Discusses how Deloitte, as the underdog among the Big 4, is catching up because it embraced the digital disruption and became agile and innovative, such as through partnering with software vendors like Xero and strengthening its position with the smaller client base, start-ups and small businesses.	N
78	S3_T4_11_BRW_2013_12	Accountants brace for big challenges in 2014 as costs bite across economy	Discusses how technological change, audit reform and new financial planning rules will hit the accounting profession in 2014. It will force career changes and consolidation, and create clients who are less dependent on their accountants. Competition, especially among the Big 4, is getting stronger.	N
79	S3_T4_12_BRW_2014_02	How to know when MYOB is more or less than Xero	The number 5 top firm, Crowe Horwath, becomes the first platinum member of Xero and explains the difference between MYOB and Xero. Provide insights into accountants regarding the changing nature of the game in this space and the increased level of competition, especially for the SME market.	N
80	S3_T4_13_Charter_2012_08	Cloud resource for accountants	Professional/technical update on a new program launched with the goal of helping accountants and bookkeepers recommend cloud software to clients so they can avoid buying expensive and complicated server-based software.	S
81	S3_T4_14_Charter_2013_04	Public practice revolution	Technology, globalisation and demographics are reshaping the accounting profession, commoditising services and reducing accounting firms' profit margins. Public practice accountants will have to change the way they operate. The accounting firm of tomorrow is likely to offer services from the cloud, with access to their clients' books in real time.	N

No	Article ID	Title	What the article is about	Article Type
82	S3_T4_15_Charter_2013_05	A new way of doing business	The profession has changed, and new technology has been introduced. A different business model is emerging for the profession and the twenty-first century accounting firm, which leverage cloud-based technology, social media, particularly Twitter, and Skype video conferencing in servicing SMEs.	N
83	S3_T4_16_Charter_2013_06	Wake up call	Professional/technical update on the increasing preference of SME owners in Australia for accountants who use cloud-based computing software. Encourages accountants to read more about the future of cloud computing.	S
84	S3_T4_17_Charter_2013_06	Short fuse, big bang	Explains the potential of technology to rewrite the rules of business to help keep ahead of the pack because digital disruption is rapidly changing public accounting practice.	N
85	S3_T4_18_Charter_2013_09	How to transition to a paperless business	Chartered Accountants have many technology options to choose from, but transitioning to a paperless office is not about choosing, installing and using technology; rather, it is about implementing the right strategy to improve business and considering compliance obligations before making the decision to transition.	N
86	S3_T4_19_Charter_2014_03	How to prepare a business for digital disruption	Digital disruption is changing the way Chartered Accountants work, facilitated by technology. Successful business leaders will start changing their own businesses by identifying where they can diversify and engaging with clients.	N
87	S3_T4_20_Charter_2014_03	The 'new world' in small business technology	A new world is emerging in accounting practice and in the way small businesses use technology to manage their financial records. These shifting paradigms present tantalising opportunities for accountants.	N
88	S3_T4_21_Charter_2014_05	Creating extra days: How mobile is making more time for business	The Australian small business sector is mobile mad, with 93 per cent using a smartphone or tablet. Mobile devices are saving small businesses as much as 7.5 hours a week, and more for some Gen Y business owners, who save as much as 20 hours a week. The effect for accountants is that small businesses are redefining the relationship with their accounting partners by using their devices and remote access to data to work in new ways. Accountants must keep pace.	N

No	Article ID	Title	What the article is about	Article Type
89	S3_T4_22_Charter_2014_05	Outsourcing: know the dangers, manage the risks	An increasing number of accounting businesses have been using technology to outsource back-office services, including audit and transactions, through dedicated software. Towards the end of 2013, 76 per cent of the BRW top 100 accounting firms aimed to spend main capital expenditure on technology system upgrades, with most expected to migrate to cloud-based accounting systems. This will increase the rate of back-end outsourcing; however, there are risks with technology-driven outsourcing. A contractor is not necessarily beholden to the same set of rules about privacy and matters of commercial-in-confidence.	N
90	S3_T4_23_Charter_2014_05	Standards on controls	With the increasing use of cloud computing and the outsourcing of non-core functions of an entity, there are many circumstances in which assurance on controls may be required. The AUASB is developing a new standard on controls assurance to better articulate how to scope, conduct and report on assurance engagements on controls, which will replace the existing standard, AUS 810 Special Purpose Reports on the Effectiveness of Controls Procedures.	N
91	S3_T4_24_Charter_2014_05	Take back control of your GST processing	Integrating many processes in the compliance value chain is crucial for tax, finance and accounting professionals. The ATO asserts that mistakes are inevitable if firms persist in using Excel spreadsheets. Thus, in Australia, the shift towards cloud/web-based solutions is the primary focus for these professionals (expected to be about 79.46 per cent over the next 12 months).	N

**Note:**

Colour Code

- Blue = T1: SBR Implementation
- Red = T2: Competition in the Provision of Cloud Accounting for SMEs
- Green = T3: Transformation in SMEs' Landscape
- Purple = T4: Paradigm Shift in Professional Public Accounting Practice

Article Type

- N = Normal/standard article, and the main theme is either T1, T2, T3 or T4.
- S = Special article, generally short (e.g., professional/technical update), and the main theme is either T1, T2, T3 or T4.
- NS = Normal/standard article, but the main theme is only related to one theme (T1, T2, T3 or T4); that is, one of the themes is a sub-theme/secondary theme.

## Chapter 7 Conclusion

This thesis examined the impact of digital innovation on the social structure of professional public accounting practice in Australia. The digital innovation involved represents a cloud-based ecosystem, which stems from SBR and cloud accounting. The argument that the digital innovation impacts the social structure of professional public accounting practice is based on the premise that the digital innovation has the capacity to affect the six related issues that form the boundaries between the sub-groups: professional work, location of work, firm size, firm structure, client base and professional values. This is due to the digital innovation disrupting the nature of professional accounting knowledge, the client relationship between accountants and their clients and jurisdictional control, particularly for SMPs, as the digital innovation transforms the SME space, the primary domain of SMPs (Malhotra & Morris, 2009). The disruptive circumstances in turn affect the nature of professional work. On the one hand, the professional work is commodified, which undermines the social status of the work. At the same time, however, it enhances the status of the professional work due to the higher order expertise (supervision) associated with the commodification and higher professional judgment with respect to the expansion into multidisciplinary work. A change in professional work is critical in creating a ripple of change in other related issues, namely location of work, firm size, firm structure, client base and ultimately professional values (Abbott, 1988; Malhotra & Morris, 2009).

The findings in Chapter 6 demonstrate that the digital innovation is impacting the social structure of professional public accounting practice in Australia. That is, this study finds that the boundaries associated with professional work, location of work, firm structure, client base and professional values have become less distinct. This is attributable to SMPs increasingly becoming multidisciplinary practices and having a tendency towards a commercial logic; and larger sub-groups such as the Big 4 and Next Big 8 expanding their share of the market for servicing small businesses, including reclaiming bookkeeping as part of their portfolio of services. Further, the results indicate that the professional identities of public accountants in Australia are less fragmented as professional values converge towards commercialism. Firm size and the combinations of capitals that each sub-group possesses are, on the other hand, becoming more relevant in differentiating between them.

Following on from those findings, the theoretical contributions of this study are threefold. First, the study advances our understanding of the implications of the commodification of professional work for the professionalisation of public accounting practice. Unlike prior studies

dealing with the commodification of the financial audit, which are confined to examining the professionalisation of public accounting practice from the perspective of the Big 4 (Covaleski et al., 2003; Greenwood et al., 2002), this study examines the process from the perspective of SMPs. This study also shows that the commodification of traditional accounting (compliance) work in serving SMEs, which represents the facet of professional field that is the domain of SMPs, is not only affecting the professionalisation of SMPs. It is also spilling over to public accounting practice at large. In that way, the study demonstrates how smaller practitioners' response to a disturbance is subject to different dynamics as they do not possess professional power akin to that of the Big 4 and thereby their strategies in defending and expanding their jurisdiction are different.

Second, this study provides a more nuanced understanding than prior studies of the competitive forces arising from the commodification of professional work and its implications for the professionalisation of public accounting practice (Covaleski et al., 2003; Greenwood et al., 2002). Prior studies focus on inter-organisational competition within the domain of the Big 4. This study, however, deals with forces emanating from non-professional, non-accounting professional and most importantly intraprofessional competition. Thus, this study demonstrates that competition affecting the professionalisation of the public accounting practice can be multidimensional. In doing so, it extends our understanding of the impact of intraprofessional competition in public accounting practice (Caramanis, 1999, 2005) and the impact of commodification on professional accounting work and strategies for redefining jurisdiction (i.e., jurisdictional settlement) with non-professional and non-accounting professional (Cooper & Taylor, 2000; Edwards et al., 2007; Walker, 2004).

Third, unlike prior studies that are confined to examining endogenous shock, this study enriches our understanding of field transformation and institutional change in the accounting professional field arising from the commodification of professional work as it is associated with exogenous shock. Further, this study demonstrates that the accounting professional associations and the Big 4, typically identified as the central actors of professionalisation, did not have the power to prevent the disruption arising from the exogenous shock. This is attributable to the fact that the nature of the technologies involved differed. The audit automation behind the commodification of the financial audit initiated by Big firms involved in-house built proprietary systems (Manson et al., 2001; Manson et al., 1998). On the other hand, the digital innovation behind the commodification of traditional accounting work in serving SMEs, is commercial off-the-shelf software imposed upon the accounting profession, where mass adoption creates network effects.

In addition to the foregoing three main theoretical contributions, this study also contributes to prior accounting professionalisation literature in general. Prior studies focus on exogenous shock arising from regulatory changes (Caramanis, 1999, 2002, 2005; Walker, 2004). This study goes beyond regulatory change to include private sector commercial forces (Sikka & Willmott, 1995).

Further, by examining the changes in the boundaries of the social structure of public accounting practice from the perspective of small practitioners, this study provides further understanding of intra-professional differences within the accounting profession (Ramirez, 2009), which contributes to the literature of professional services firms (Malhotra et al., 2006). Existing literature have been too focused in examining accounting professional services firms from the perspective of Big firms compared to other professions rather than comparing it with different layers within the accounting profession (i.e., with smaller practitioners), which is under-researched (Lander et al., 2013; Malhotra et al., 2006).

Finally, this study also enriches our understanding of the nature of the professional values of the public accounting practice as a whole. Prior studies find that due primarily to disparity in the nature of professional work and client-base, professional values are fragmented because such disparity leads to divergence in client interaction and the associated status attached to professional work and client-base (Khalifa, 2013; Suddaby et al., 2009). This study, on the other hand, demonstrates how commodification can lead to convergence in professional values (i.e., towards commercial logic). This also signals a change in the domain of the Big 4 as it expands significantly not only to neighbouring jurisdictions but also the jurisdictions of smaller practitioners. Future studies may enrich our understanding of the Big 4's domain with respect to their global and local context. In previous studies local context was associated only with smaller practitioners especially SMPs (Hanlon, 1997a; Lander et al., 2013; Ramirez, 2009).

The practical contributions of this study are twofold. First, the findings hold important implications for the structure of education and training at the tertiary level (i.e., to equip new graduates with essentials skill), as well as for continuing professional development (i.e., to retrain or to improve the skills of existing professionals). These are critical because employers, especially accounting firms, now expect that new graduates possess skills in setting up a cloud-based system for small businesses or at least the knowledge to navigate between clients within a fully cloud-based practice system. New graduates are also expected to have better ability to analyse and provide advice based on a given set of financial data. Further, existing accounting professionals—especially SMPs as they have limited resources for in-house



training—increasingly demand training to improve their consulting and business advisory skills because they understand the importance of these skills in order to survive.

Second, to the extent that the survival of SMPs is threatened, accounting professional association may have a role to play in protecting (overseeing) their members. The oversight is important because SMPs make up the largest part of public accounting practice and their role as the accountants of small businesses has traditionally been critical in helping SMEs, the engine of the economy, to grow. SMPs typically have a close relationship and sound understanding of the SME business environment and issues related to it (IFAC, 2014, 2015; Ramirez, 2009) (IFAC, 2014, 2015). SMPs also tend to offer face-to-face interactions and more personalised services to SMEs, their primary client base. On the other hand, larger sub-groups such as the Big 4, may increasingly employ strategies that involve servicing SMEs in a manner that treats them as commodities. For example, through online platforms and call centres. In view of that, the Big 4 may not be able to effectively cater to the needs of SMEs (Rainey, 2016). Despite the increasing use of technology, generally, face-to-face interactions are still critical to establish and nurture human relationships underlying business relationships especially in a case where the work requires negotiation or discussion to reach common understanding (Kraut, Fussell, Brennan, & Siegel, 2002; Nardi & Whittaker, 2002).

Thus, oversight is important to not only maintain the balance in the market for servicing SMEs (i.e., ensuring the market does not become dominated by larger sub-groups), but also to monitor the quality of services provided to SMEs by different sub-groups. Further, competition between sub-groups may hamper the quality of services provided to SMEs. That is, intraprofessional competition has the capacity to undermine the independence of public accountants as a whole in the quest to survive and in the face of pressure from external actors (Sikka & Willmott, 1995). The problem could compound over time because digital innovation is likely to keep advancing.

Turning now to the limitations of the study, they are fourfold. First, while mixed methods research provides flexibility in examining a dynamic or rapidly changing environment and facilitates studying complex phenomena consisting of interrelated events from multiple perspectives by integrating qualitative experiences and quantitative measures (Creswell, 2014; Miles et al., 2014; Singleton & Straits, 2005, pp. 308-309), the data gained cannot be said to be statistically representative of professional public accounting practice in Australia. Second, this study does not capture the full impact of the digital innovation on the social structure of professional public accounting practice. The impact is in its infancy in Australia (i.e., it is ongoing). However, this study does capture the critical turning point of field transformation

and institutional change, which marked the end of Stage 3. Third, the loss of context from the transcription of interviews and discussion forums means the interpretation of the data may not capture the complex nuances of the participants' responses. Finally, overseas studies have been used to draw inferences about the value system of the local Australian professional public accounting practice. However, this does not appear to have been a problem (i.e., the professional value system identified in prior studies seems to be consistent with the Australian context).

In conclusion, the opportunities for further research are as follows. First, as stated earlier, the impact of the digital innovation is in its infancy. Therefore, the magnitude of the impact is yet to be revealed. It is important to further examine this issue subsequent to 30 June 2014, especially the period from 1 July 2014 to 30 June 2015, as it is regarded in the popular literature as the watershed period. That is, the period after the critical turning point (i.e., the Big 4 encroachment), where accountants in public practice, especially SMPs, were aggressively adopting the digital innovation and moving towards multidisciplinary (Deloitte, 2012; Hill, 2014). SMPs potentially are facing further pressures because the Big 4 in Australia are becoming more aggressive in expanding their domain as they are merging with consulting firms in order to broaden their pool of expertise and range of multidisciplinary services, strengthening their global network of digital capabilities and encroaching into the small business space (Public Accountant, 2014; Swan, 2015; Warmoll, 2015; White, 2014).

Second, the issue could be examined from the perspective of the SMEs, who are a critical party in the overall debate. Third, further examination of the views of the Next Big 8 and the Mid-tier would be important to gain even further understanding than that provided in this study with respect to those sub-groups. Fourth, as mentioned earlier, the Big 4's encroachment into the small business space begs the question of the domain of the Big 4 with respect to defining their local context. Lastly, there is also the question of intra-professional competition between public practice and management accounting due to the digital innovation.

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