Cultural Differences in Project Management Capabilities:

A Field Study

Zwikael, O., Shimizu, K., Globerson, S. (2005). Cultural differences in project management processes: a field study. *International Journal of Project Management*, 23 (6), 454-462.

Abstract

This paper presents a study on identifying differences in project management style, between two different cultures, the Japanese and the Israeli. Management styles were evaluated on the nine classical project management areas, as defined by PMBOK, and on the organizational support required for a proper project management infrastructure. A total of 425 project managers were involved in the study, out of which 337 were from Israel and 88 were from Japan. Significant cultural differences were found between the two countries. Israeli project managers are more focused on performing "Scope" and "Time" management processes, assisted by project management software, while formal "Communications" and "Cost" management are more frequently used by Japanese project managers. It was also found that Japanese organizations use clear and measurable success measures for each project, while project objectives in Israel are often quite foggy. Differences in efforts made by project managers and management of the organization on specific project processes are demonstrated and discussed in this paper. These differences are manifested by smaller costs and schedule overruns in Japanese organizations, while Israeli customers of local projects seem to obtain better technical performance at the end of the project. The Israeli customer, however, is much more impacted by superior technical performance and easily forgives cost and schedule overruns.

Introduction

Project managers in different countries run projects of similar nature, but in different ways. Differences may derive from cultural distinctions, as well as unequal importance given by project managers and their customers, to the various success measures of the project. Since many present projects have international stakeholders, it becomes very important to identify cultural differences, which may have to be bridged when executing such projects. For instance, Kumar (1996) describes a software development project where most of the developers were in India and the client in the U.S. In this case, they were separated by thousands of miles, 12 time zones, and by cultural and religious differences, but were still working on the same project, characterizing a single project involving multiple non-collocated sites.

Culture is defined as a collective phenomenon, because it is at least partly shared with people who live or lived within the same social environment where it was learned (Hofstede, 1980). Baba (1996) classifies differences in cultures into three categories: (1) traditional organization structure; (2) managerial differences; and (3) differences in fundamental concept and philosophy which contracts and laws are based on. Mismanaging cultural differences can render otherwise successful managers and organizations ineffective and frustrated when working across cultures. When successfully managed, however, differences in the culture can lead to innovative business practices, faster and better learning within the organization, and sustainable sources of competitive advantage (Hoecklin, 1996).

The task of comparing organizational performance in different countries attracts a lot of attention, as can be traced in the management literature. For example, Toren et. al. (1997) compared managerial task preferences and evaluation of work characteristics in the USA, Japan, Israel, Italy and Australia. Nijkamp, et. al. (2001) compared environmental quality in 12 European countries. Jackson & Artola (1997) initiated a cross-cultural empirical study, which examines ethical beliefs and behaviors among French and German managers, and compared results with previous studies of American and Israeli managers. Igbaria & Zviran (1996) examined the effect of national environments on end-user computing characteristics in American, Israeli and Taiwanese companies. Koschatzky, et. al. (1996) compared sensor technology processes in the USA, Europe and Japan. Cultural differences were found in most of these studies, indicating different behavior and decision making patterns in different countries.

The objective of this paper is to compare performance of project management processes, among project managers coming from two countries – Japan and Israel. Since Israel represent in its culture the western industrial world, findings of this paper may identify project management characteristics of these countries, as well as of the Japanese culture. While managing multicultural projects, this research may be practical when one of the project stakeholders is located either in a western country or in Japan. Our findings, based on a vast field study, will follow a literary review which will focus on the cultural background and known differences in the management culture of these two countries.

Cultural Background

Until the beginning of the previous century, Japan was an agrarian nation, structured as a rigid pyramidal hierarchy, with the farming families at the bottom, led by a resident samurai and isolated from other countries (Hisatoshi, 1994). After World War II, Japanese competitive strategy evolved from one of low wages, such as textiles, to capital-intensive scale economies. Then, Japan turned to flexible production, using Just-In-Time (JIT) inventory techniques to provide lower cost and greater variety with a shorter life cycle (Musselwhite, 1990).

These historical events have stamped some major impact on the unique Japanese culture. The dichotomy between the nation and the outside world, the "we-versus-they" viewpoint, still continues to inform Japanese notions of the world and is another important factor in Japan's competitive environment (Hisatoshi, 1994). Major differences between Japanese employees and western ones were identified in the literature (i.e. Pizam & Reichel, 1977).

Some explanations for the results cited above can be found in the Japanese education and culture. The unique Japanese educational system maintains that the group always comes first (Hisatoshi, 1994). Wong (1996) found that Japanese managers' decisions were mostly based on being trustworthy and reliable members of the company. The Japanese are known for their commitment to gaining, maintaining, and expanding market share around the world, using product innovation strategies that challenge their resources and technology (Coe, 1990).

The Israeli managerial culture seems to be of a similar nature to that of the western world, especially the American one, as is demonstrated by the following examples. One study has shown that when analyzing work characteristics, Israeli and American employees share similar attitudes (Toren, et. al, 1997). Another study that had analyzed managerial behavior in different countries also found similarities between American managers and Israeli managers (Pizam & Reichel, 1977).

Although Israel is a small and relatively young country, many Israeli high-tech companies are listed on the NASDAQ Stock Exchange in the United States and many other companies had been purchased by foreign companies. The Israeli government also offers many incentives to attract foreign capital (Metwalli & Tang, 2003). The collection of data mentioned above ultimately points to the fact that in spite of its size, the Israeli economy is a recognizable one in the western world.

The management culture accepted by many managers in Israel is that of improvisation, of "putting out fires", and of a short-term management perspective (Ronen, 1992). This culture is probably a result of a country which has struggled daily for survival over a long period of time, and has grown accustomed to providing immediate solutions to ongoing crises and problems (Weinshall, 1993).

Following the above, it is expected to identify differences in management styles and capabilities between Japan and Israel. The nine project management knowledge areas included in the Project Management Body of Knowledge, known as PMBOK® (PMI Standards committee, 2004), were used for studying the subject. The following paragraphs summarize previous findings on the comparison between these two countries, grouped according to the nine knowledge areas.

Time - Shortening projects' duration is highly critical for global competition in both countries, which are continuously searching for new ways to reduce duration. For example, Jacobs & Herbig (1998) found that the use of overlapping during the development phase is a critical success factor for Japanese organizations, wishing to expedite product development. Israeli project managers were found to invest most of their efforts in schedule planning (Globerson & Zwikael, 2002).

Cost - Japan's system of forecasting, monitoring and interpreting costs is fundamentally different from that of its western counterpart. Japanese companies make sure that employees understand how their work is translated into the company's performance. The people responsible for projecting and measuring product costs are not narrowly schooled accountants, as is common in the west, but typically have rotated among several departments before taking on a cost-planning job and thus have developed broad perspectives (Jacobs & Herbig, 1998). While the Japanese engineer is highly involved in financial decisions and tends to consider the impact of the design on costs or manufacturability, Israeli engineers are mostly focused on technical details.

Quality – Japan is well known for its high standards of quality management and control. In Japan, not only top management, but department and section heads as well, feel an extremely strong sense of responsibility for the quality of products they present to their customers. Dumaine (1991) found that Japanese companies spend more time than Americans do in planning (40% versus 25%) and waste less of their time debugging finished products (5% versus 15%). One of the main reasons for these results is that Japanese companies regard the existence of defects as a matter of shame, reflecting on company honor (Jacobs & Herbig, 1998).

Human Resources – In both countries this area is considered to be very important, but is nevertheless treated differently. In Japan, a self-organizing project team was found to be one of the critical success factors (Jacobs & Herbig, 1998). In Israel, on the other hand, individual work is more common, and team work does not have the same operational meaning (Mitki & Shani, 1995).

Communications – Communication patterns vary between low-context countries (such as the United States) and high-context countries (such as Japan). In low-context patterns, most information is contained in explicit codes, such as spoken or written words, whereas in high-context patterns, sending and receiving messages is highly dependent upon the physical context and non-verbal communication (Dowenes et. al, 2002). The overlapping product design approach in Japan forces information sharing, trust and loyalty to the corporation (Hisatoshi, 1994). Information sharing was also found to be one of the critical success factors in Japan (Jacobs & Herbig, 1998). On the other hand, the Israeli project team usually experiences performance loss, due to the absence of specific goals and communication (Toren, et. al, 1997).

No specific findings were traced on the other four knowledge areas: "Integration", "Scope", "Risk" and "Procurement". Table 1 summarized the above, comparing Japan and Israel according to nine knowledge areas.

Project Knowledge Area	Managerial Importance
Integration	No specific findings
Scope	No specific findings
Time	Of high importance in both countries.
Cost	Higher importance in Japanese organizations
Quality	Higher importance in Japanese organizations
Human Resources	Of high importance in both countries
Communications	Higher importance in Japanese organizations
Risk	No specific findings
Procurement	No specific findings

Table 1 – Managerial culture in Japan and Israel according to literature

Following the major differences highlighted in this literature review, research hypotheses are described in the next section.

Research hypotheses

From the literary survey discussed above, one may expect some differences between the attitudes of project managers, coming from these two cultures. The differences may be expressed through the importance that project managers assign to the different project processes and the efforts that they exert on each. The following is a list of hypotheses related to expected differences between the two:

1. Communications – Japanese managers pay more attention to formal organizational communication and invest more efforts in communication processes within the project.
2. Cost – Japanese managers pay more attention to cost management and more frequently perform project processes that are involved with cost planning.
3. Quality – Japanese managers are traditionally known for their quality management approaches. Hence, it is expected that Japanese project managers will exert more efforts in quality processes within the project.

Assuming that the above hypotheses are correct, one may also expect the following one:

4. Project success - Projects are completed with more successful outcomes in Japan than in Israel.

Since planning is the first crucial stage in projects, this study focuses on the efforts that project managers and organizations invest in planning processes. The study uses a Project Management Planning Quality (PMPQ) model, which was recently introduced by Zwikael & Globerson (2004). This model was used in the present research for analyzing the frequency of use of each project planning process in Japan and in Israel. Since PMPQ model was used as the measurement tool for this research, the next section describes it briefly.

The PMPQ model

The PMPQ model evaluates the overall quality of project planning. It is based on the processes to be performed during the planning phase of a project, both by project managers and the organization. The model involves project planning processes that are defined by PMBOK (PMI Standards Committee, 2004), which has been widely recognized as the main body of knowledge in the project management area, and has been accepted as a standard by the American National Standard Institute (ANSI).

One major product was identified for each of the 16 planning processes included in the PMBOK. For example, the major product that project managers should generate as output for the "scope definition" planning process is a WBS chart. Each planning product is generated at the end of the planning process. The extent of use of a planning product is easy to estimate and therefore was used to express the frequency in which a process is performed. Yet, the quality of planning is not impacted only by processes that are performed by a project manager, but also depends on organizational support. Therefore, the second group of items in the PMPQ model includes 17 organizational support processes.

All together, there are 33 products in the PMPQ model. A questionnaire, presented in Appendix A, was used for collecting the required data for the model. Participants were requested to evaluate the use intensity of the 33 planning products, by using a scale ranging from one (low extent of use) to five (high extent of use). Participants were also requested to evaluate the following four project success dimensions: Cost overrun and schedule overrun, measured in percentages from the original plan; and technical performance and customer satisfaction, measured on a scale of one to ten (1 representing low technical performance and low customer

satisfaction, and 10 representing high technical performance and high customer satisfaction).

Data Collection

The questionnaire was administered to project managers in Israel and Japan during the years 2001-2003. In Israel, 337 project managers completed the questionnaires, in 26 different workshops, of which 16 were administered as part of internal organizational project management-training program. Each of these 16 workshops included an average of 13 individuals. The other 10 workshops were open to project managers from different organizations. Approximately half of the organizations which participated in the Israeli sample are global ones (i.e. Motorola). In Japan, 88 questionnaires were completed in 11 organizations. The types of projects sampled in each country are presented in Table 2.

Type of project	**Japan**	**Israel**
Engineering	18%	24%
Software	70%	51%
Communications	4%	20%
Services	8%	5%
Overall	**100%**	**100%**

Table 2 – Distribution of Project Types included in the Study

The analysis of Table 2 reveals that the source of questionnaires in both countries was similar, including about 20% from engineering projects and less than 10% of service projects. In both countries more than 70% of the projects were performed in the hi-tech industry, where in Israel more projects involved

communications, while in Japan most of this group included software projects. Moreover, project managers from both countries estimated a similar level of risk in their projects, which was found in the questionnaires as 6.6 on the scale of 1 to 10.

A questionnaire was included in the final data analysis, only if at least 80% of its data had been completed. Using the above criterion, 358 questionnaires remained for the final analysis, of which 275 were completed in Israel and 83 in Japan.

The model's reliability was calculated using a number of statistical tests, such as Cronbach's alpha. Results were considerably higher (0.91 and 0.93 respectively) than the minimum value required by the statistical literature (Garmezy et. al., 1967), both for the entire model, and for its components. Results were also found to be independent of the person answering the questions, be it a project manager or a senior manager.

An overall Project Planning Index (PPI) was calculated out of the questionnaires as the weighted average of all 33 items. This index presents the overall extent of use of planning processes on a scale of one to five. The model's validity was evaluated by comparing the overall PPI with the projects' success. It was found that the overall project planning index was highly correlated with the perception of project success, as measured by cost, time, performance envelope and customer satisfaction. A summary of the analysis is presented in Table 3. All results are statistically significant with p-values under .01.

Success Measure	The Intersect	Regression Slope	R	p-value
Cost Overrun	108%	-25%	0.52	< **0.001**
Schedule Overrun	94%	-18%	0.53	< **0.001**
Technical Performance	6.2	0.5	0.57	= **0.001**
Customer Satisfaction	6.1	0.6	0.51	< **0.001**

Table 3 – Validity Tests for the PMPQ Model

The PPI was found to be highly correlated with each of the project's final results. The conclusion from the above statistical analysis is that the PMPQ model is reliable and valid and can be used to evaluate the extent of use of project planning.

Results and Analysis

Analysis of the results will first concentrate on comparing projects' success in both countries, followed by a detailed analysis of project processes use intensity.

Project Success

Project success, is measured by using the following four criteria: cost overrun, schedule overrun, technical performance, and customer satisfaction. Results of the reported study for the first two criteria are presented in Figure 1.

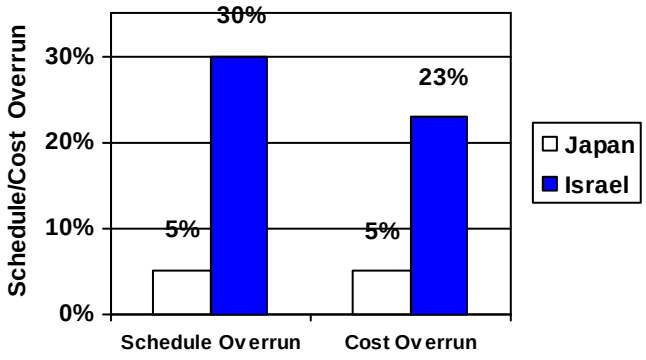

Figure 1 – Average Schedule and Cost Overruns in Japan and Israel

As can be seen from Figure 1, cost and schedule performance are significantly lower in Japan (p-value<0.001). The average cost overrun in Israel is more than 4 times higher than in Japan, with the schedule overrun being six times higher in Israel. These findings may be a result of the importance of meeting schedule objectives, as is reflected in the Japanese culture.

Opposite results were obtained for the other two criteria, namely technical performances and customer satisfaction, as can be seen in Figure 2.

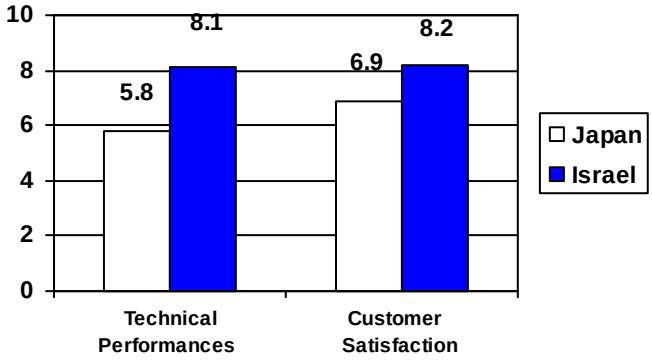

Figure 2 – Average Technical Performances and Customer Satisfaction in Japan and Israel

Project managers in Israel perceive a higher customers' satisfaction with project results than Japanese project managers do (p-value<0.001). This is in spite of the higher cost and schedule overruns generated on projects in Israel. This finding can be interpreted in two ways. The first explanation is that Japanese project managers have higher expectations concerning performance and are stricter in their evaluation, while Israeli managers are more liberal. This explanation can be backed up by the analysis of the Israeli characteristics presented earlier by Ronen (1992). Therefore, Japanese managers assign a lower score to similar performance levels, in comparison to Israeli managers' evaluation. The second explanation is that Israeli customers pay more attention to superior technical performance, rather than to cost and schedule overruns. Since Israeli industry is technologically driven and gains its strength from technological innovation and leadership, managers in Israel are not very strict in delaying the project's completion and spending over-budget, in some cases it improves the technical performance.

Following these results and analysis, we are unable to accept the hypothesis claimed that there is a significant difference in the level of project success between the two countries. What was found is a different attitude towards the measure of project success. While Japanese managers and customers emphasize more the achievement of schedule and cost targets, the Israeli managers are much more impacted by superior technical performance. In order to achieve state of the art performance, up until the date of project completion, they may accept higher overruns in time and cost.

Since project's performance is impacted by the extent of use of project planning processes, its analysis may shed additional light on the subject. The overall extent of use of project planning was found to be of a similar level in Israel (showing an average score of 3.2 out of 5) and Japan (showing an average score of 3.3), with no significant difference between the two. However, significant differences were found while drilling down this analysis into the two groups of the model, project manager's expertise and organizational support, as demonstrated below.

Project manager's expertise

Although the average extent of use of planning processes is of similar value, there may be differences among the use intensity of single planning processes. Table 4 presents the use intensity of each of the 16 planning processes for the two countries and the significance of the differences, based on a t-test analysis.

Project Process	Average Japan n=83	Average Israel n=275	p-value
Activity definition	3.7	4.1	0.001 **
Staff acquisition	3.3	3.6	0.015 *
Project plan development	3.7	4.0	0.021 *
Resource planning	3.5	3.7	0.022 *
Activity duration estimating	4.0	4.2	0.035 *
Scope planning	3.9	4.1	0.072
Procurement planning	2.9	3.0	0.350
Organizational planning	3.7	3.8	0.256
Risk management planning	2.8	2.8	0.491
Quality planning	3.0	2.9	0.450
Activity sequencing	3.6	3.5	0.372
Schedule development	4.1	4.0	0.312
Scope definition	3.8	3.7	0.125
Cost budgeting	3.4	3.2	0.138
Communications planning	2.9	2.4	<0.001 **
Cost estimating	4.1	3.0	<0.001 **

Table 4 – Use Intensity of Planning Processes in Japan and Israel
(** $p \leq 0.01$; * $p \leq 0.05$)

An analysis of Table 4 reveals that a significant difference exists between the countries in seven out of 16 planning processes. Israeli project managers perform five planning processes significantly more frequently than do Japanese managers. These processes center around the knowledge area of schedule planning, such as listing the activities to be included in the project, estimation of duration, estimating labor requirement and acquiring the staff required to perform these activities. These planning processes are considered essential for project planning in the western hemisphere and are supported by project management software.

On the other hand, Japanese project managers more frequently perform two planning processes: cost estimation and communications planning. The above findings confirm the first two hypotheses of this research. The first confirmed hypothesis refers to the communications planning process, and states that communication in Japan obtains higher emphasize. The communication system in Japan uses both intensive formal and informal communications among project stakeholders, throughout the entire project. In Israel, communications is typically verbal and hardly formulated, neither by the project manager, nor by management.

The second hypothesis assumes that special attention is given by Japanese project managers to cost planning. It was found that Japanese project managers pay significantly more attention to cost estimating and budgeting. This fact may derive from the higher importance assigned by the Japanese management culture to meeting cost objectives.

The third hypothesis, which assumes a better quality plan by Japanese project managers, was rejected. While quality management is considered very important and popular in Japan, Israeli managers also do not compromise on the quality of their product. It seems that the Israeli culture is willing to trade cost and time measures, with higher quality of the final product.

Organizational support processes

The second group of processes analyzed in this study, which impact a project's success, is organizational support processes, aimed at supporting project managers. Unlike the overall similarity in the use intensity of the project manager's expertise group (PMBOK related planning processes), there is a significant difference (p-value<0.001) in the use intensity of the organizational support processes, where Israeli companies support their project managers to a much higher extent compared to their Japanese counterparts. This may be due to the fact that Israel is exposed to an American influence in many aspects of life and that the Japanese culture does not tend to easily adopt external models. Analysis of the 17 organizational support processes is presented in Table 5.

Organizational Support Process	Average Japan n=83	Average Israel n=275	p-value
Use of standard project management software	2.5	4.2	<0.001 **
Communication between the project manager and the organization during the planning phase	2.9	3.9	<0.001 **
Use of new project tools and techniques	2.1	2.8	<0.001 **
Existence of interactive inter-departmental project planning groups	2.7	3.5	<0.001 **
Project manager assignment	3.0	3.6	<0.001 **
Project office involvement	2.4	2.7	0.015 *
Use of organizational projects data warehouse	2.5	2.8	0.007 **
Supportive project organizational structure	3.0	3.4	<0.001 **
Organizational projects' quality management	2.8	3.0	0.085
Existence of projects' procedures	3.6	3.7	0.112
Involvement of the project manager during the initiation stage	3.8	3.9	0.228
On going project management training programs	2.8	2.7	0.277
Refreshing project procedures	3.2	3.0	0.128
Organizational projects risk management	3.0	2.8	0.109
Organizational projects resource planning	3.3	3.1	0.076
Existence of project success measurement	3.5	3.3	0.040 *
Project-based organization	4.1	3.6	<0.001 **

Table 5 – Organizational Support Processes in Japan and Israel
(** $p \leq 0.01$; * $p \leq 0.05$)

Analysis of Table 5 reveals a significant difference between the countries, in 10 out of 17 support processes; Israeli companies perform eight planning processes significantly more frequently, while Japanese management has an advantage in two other processes.

The first major difference is found in the extent of use of project management software, where Israeli organizations support its project managers with significantly much more software packages. The use of project management tools was also found to be more common in Israel, which may serve as a major explanation for the previous findings. Since Israeli project managers are better supported by project office and software, such as MS-project, they concentrate more on executing planning

processes that are supported by these tools. This finding explains the previous ones, stating that Israeli project managers perform much more scope and schedule planning.

Japanese organizations, on the other hand, pay significantly more attention to defining success measures to the project, whereas Israeli management prefers some vagueness regarding the outcomes of the project. This may be a means to maintain the Israeli desire to leave some room for on going negotiation and changing of objectives throughout the project.

Another interesting finding is related to the preferred organizational structure. While Israeli organizations usually prefer the matrix structure, Japanese organizations prefer the project-based organization to support project management. The above finding is in line with the Japanese need for a clear line of command, which is a major attribute of a project structure, whereas functioning under the matrix structure requires a lot of informal communication which crosses departmental borders. However, let us not forget that the matrix structure gives a stronger support for learning, since know-how is accumulated in functional departments. Therefore, the organization is able to use more advanced technologies and methods for all of it projects.

Conclusion

There are significant differences between the way that project management is being exercised in Israel and Japan. Some may be due to cultural differences, while others may result from differences in management styles. The differences were found in both project managers' functions as well as in the support systems offered by the organization towards executing projects.

Japanese organizations emphasize more measurements of success. As such there is probably more awareness to the typical performance measures, resulting in

lower deviation between the desired and actual cost and completion time. This is not the case with both technical performance and customer satisfaction, in which Israeli project managers perceive that their performance is higher. The discrepancy between the two countries may be a result of either cultural differences concerning the perception of performance, or a real difference, resulting from the willingness of Israeli managers to over-run the cost and schedule in order to achieve better technical performance and customer satisfaction.

Although the average use intensity of project planning processes is of similar value for the two countries, there are differences with regard to the use intensity of specific processes. For example, Israeli project managers use more intensive planning processes required for scheduling planning, such as activity definition and activity duration estimation. It is interesting to note that although Israeli project managers pay more attention to time planning, their projects result in higher schedule overruns, as compared to projects performed in Japan. These may indicate that schedule overrun at the end of the project is impacted by other processes, such as quality management or risk management together with schedule planning.

On the other hand, Japanese managers make more use of the communication planning process. Emphasizing communication management by the Japanese project managers may not be a surprise, since teamwork is highly regarded in Japan, and this cannot be practiced without an effective communication system.

Although this paper focuses only on the planning phase of the project, the findings may reflect managerial cultural differences between the two countries and the conclusions can be further elaborated on in the entire project management life cycle. Since the importance of global project management is growing, similar studies should follow in other countries as well, using the PMPQ model as the mean.

References

- Baba, K. (1996), "Development of construction management based on regional culture", in Langford, D.A. and Retik, A. (Eds), The Organization and Management of Construction: Shaping Theory and Practice, Vol. 1, E & FN Spon, London.
- Coe, B. J. (1990). Strategy in retreat: pricing drops out. *Journal of Business & Industrial Marketing*, 5, 1, Winter/Spring, p. 5-25.
- Downes, M., Hemmasi, M., Graf, L. A., Kelley, L. & Huff, L. (2002). The propensity to trust: A comparative study of United States and Japanese managers. International Journal of Management. Poole: Dec, 19, 4, p. 614-621
- Dumaine, B. (1991). Closing the innovation gap. *Fortune*, December 2, p. 56-60.
- Hisatoshi, Y. (1994). Complementary competition in Japan. *Research Technology Management* . Washington: Mar/Apr, 37, 2, p. 49-54.
- Hoecklin, L. (1996), Managing Cultural Differences: Strategies for Competitive Advantage, AddisonWesley, Wokingham.
- Hofstede, G. (1980). Culture 's Consequences: International Differences in Work Related Values. Newbury Park, CA: Sage.
- Garmezy, N., Harlow, H. F., Jones, L. V. & Stevenson, H. W., (1967). Principles of general psychology. New York, Ronald Press Co.
- Globerson, S.; Zwikael, O. (2002). The impact of the project manager on project management planning processes. *Project Management Journal*, 33(3), p.58-64
- Igbaria, M. & Zviran, M. (1996). Comparison of end-user computing characteristics in the U.S., Israel and Taiwan. *Information & Management.* Amsterdam: Jan, 30, 1; p. 1-13.
- Jackson, T. & Artola, M. C. (1997). Ethical beliefs and management behavior: A cross-cultural comparison. *Journal of Business Ethics*. Dordrecht: Aug 16, 11; p. 1163-1173.
- Jacobs, L. & Herbig, P. (1998). Japanese product development strategies. *The Journal of Business & Industrial Marketing*. Santa Barbara, 13, 2, p. 132.
- Koschatzky, K., Frenkel, A., Grupp, H. & Maital, S. (1996). A technometric assessment of sensor technology in Israel vs. Europe, the USA and

Japan. *International Journal of Technology Management*. Geneva: 11, 5, 6; p. 667-687.

- Kumar, K., & Willcocks, L. P. (1996). Offshore Outsourcing: A Country Too Far? Paper presented at the European Conference on Information Systems, Lissabon, Portugal.
- Metwalli, A. M.; Tang, R. Y. (2003). Merger and acquisition activity in the Middle East and a four-country comparison. *International Journal of Commerce & Management*. Indiana: 13, 1; pg. 81.
- Mitki, Y.; Shani, A. B. (1995). Cultural challenges in TQM implementation: Some learning from the Israeli experience. Revue Canadienne des Sciences de l'Administration. Montreal: Jun, 12, 2; p. 161-170.
- Musselwhite, W. C., (1990). Time-Based Innovation: The New Competitive Advantage. *Training and Development Journal*. Jan, 44, 1; p. 53-56.
- Nijkamp, P., Bergh, J. & Verhoef, E. (2001). Comparative research on spatial quality in Europe: Motivation and approach. *International Journal of Environmental Technology and Management*. Wolverton Mill: 1, 3; pg. 203
- Pizam, A. & Reichel, A. (1977). Cultural determinants of managerial behavior. *Management International Review*. Wiesbaden: 17, 2; pg. 65
- PMI Standards Committee. (2004). A Guide to the Project Management Body of Knowledge. Newtown Square, PA: Project Management Institute.
- Ronen, B. (1992). TQM and the state of Israel. *Total Quality Management*, 1, 3-4.
- Toren, N., Konrad, A. M., Yoshioka, I. & Kashlak, R. (1997). A cross-national cross-gender study of managerial task preferences and evaluation of work characteristics. *Women in Management. Review*. Bradford, 12, 6, 234-239.
- Weinshall, T. O. (1993). *Societal culture and management*. New York: de Gruyter.
- Wong, M. L. (1996). Managing organizational culture in a Japanese organization in Hong Kong. *International Executive*. New York: Nov/Dec, 38, 6; p. 807-824.
- Zwikael, O. & Globerson, S. (2004). Evaluating the Quality of Project Planning: A Model and Field Results. *International Journal of Production Research*, 42, 8, p. 1545-1556.

Appendix A - Project Planning Assessment Questionnaire

For each planning product written, please mark the most suitable answer referring to the projects you were recently involved in, according to the following scale:

5 - The product is always obtained
4 - The product is quite frequently obtained
3 - The product is frequently obtained
2 - The product is seldom obtained
1 - The product is hardly ever obtained
A - The product is irrelevant to the projects I am involved in
B - I do not know whether the product is obtained

Part A – Project Planning

Planning Product	*Never*				*Always*	Irrelevant	Do not know
1. Project Plan	1	2	3	4	5	A	B
2. Project Deliverables	1	2	3	4	5	A	B
3. WBS (Work Breakdown Structure) Chart	1	2	3	4	5	A	B
4. Project Activities	1	2	3	4	5	A	B
5. PERT or Gantt Chart	1	2	3	4	5	A	B
6. Activity Duration Estimate	1	2	3	4	5	A	B
7. Activity Start and End Dates	1	2	3	4	5	A	B
8. Activity Required Resources	1	2	3	4	5	A	B
9. Resource Cost	1	2	3	4	5	A	B
10. Time-phased Budget	1	2	3	4	5	A	B
11. Quality Management Plan	1	2	3	4	5	A	B
12. Role and Responsibility Assignments	1	2	3	4	5	A	B
13. Project Staff Assignments	1	2	3	4	5	A	B
14. Communications Management Plan	1	2	3	4	5	A	B
15. Risk Management Plan	1	2	3	4	5	A	B
16. Procurement Management Plan	1	2	3	4	5	A	B

Part B – Organizational Support

Planning Product	*Never*				*Always*	Irrelevant	Do not know
17. Project-Based Organization	1	2	3	4	5	A	B
18. Extent of Existence of Projects' Procedures	1	2	3	4	5	A	B
19. Appropriate Project Manager Assignment	1	2	3	4	5	A	B
20. Extent of Refreshing Project Procedures	1	2	3	4	5	A	B
21. Extent of Involvement of the Project Manager during Initiation Stage	1	2	3	4	5	A	B
22. Extent of Communication between the Project Manager and the Organization during the Planning Phase	1	2	3	4	5	A	B
23. Extent of Existence of Project Success Measurement	1	2	3	4	5	A	B
24. Extent of Supportive Project Organizational Structure	1	2	3	4	5	A	B
25. Extent of Existence of Interactive Inter-Departmental Project Planning Groups	1	2	3	4	5	A	B
26. Extent of Organizational Projects Resource Planning	1	2	3	4	5	A	B
27. Extent of Organizational Projects Risk Management	1	2	3	4	5	A	B
28. Extent of Organizational Projects Quality Management	1	2	3	4	5	A	B
29. Extent of On Going Project Management Training Programs	1	2	3	4	5	A	B
30. Extent of Project Office Involvement	1	2	3	4	5	A	B
31. Extent of Use of Standard Project Management Software (e.g. Ms-Project)	1	2	3	4	5	A	B
32. Extent of Use of Organizational Projects Data Warehouse	1	2	3	4	5	A	B
33. Extent of Use of New Project Tools and Techniques	1	2	3	4	5	A	B