Ofer Zwikael (Australia)

The uniqueness of management in New Zealand – the project management case

Abstract

Management behavior is highly dependent upon culture. Understanding the management culture of a nation is an increasingly important task in a global market. The objective of this paper is to better understand the management culture in New Zealand. This paper analyzes the common management practices in New Zealand, focusing on project management. This paper presents the results of the first vast project management study held in New Zealand, and compares project management capabilities in New Zealand with those in other countries. Data have been collected from 752 project managers and their supervisors in New Zealand, Australia, China, Japan, Israel, and India. Significant differences in the management style and behavior have been found among these countries. For example, New Zealand project managers pay relatively more attention to communication management and risk management, as compared with project managers from other countries. On the other hand, there is relatively low emphasis on learning from experience.

Keywords: project management, planning, New Zealand, top management support.
JEL Classification: H43, M10, O22, O32.

Introduction

Management behavior is dependent, among other things, upon culture. Culture among nations is well identified and studied, e.g. House et al. (2004) and Hofstede (2001). Understanding the management culture of a nation is highly important in a global market, where customers, suppliers and partners may come from different backgrounds and cultures. This paper analyzes the common management practices by New Zealand managers.

Modern society in New Zealand is a blend of three main elements: transplanted European culture, indigenous traditions and Asian influences arising from changed patterns of trade and immigration (Avery et al., 1999). The literature has identified the unique New Zealand culture in several studies. According to the GLOBE study (House et al., 2004), New Zealanders have high performance orientation, as New Zealand managers tend to make decisions that support excellence in the organization. Hofstede (2001) suggests that the New Zealand culture is based on high individualism, low power distance between bosses and their subordinates and low uncertainty avoidance. Peter (1996) suggests New Zealanders have strong team skills.

However, no study yet, has investigated the uniqueness of management in New Zealand in the area of project management. The importance of project management continuously increases, as organizations use projects not only as a revenue-making tool, but also to improve operational processes, and to implement strategic plans. This paper introduces the relevant literature, the research framework, field study and results, aimed at better understanding the management culture in New Zealand through the project management case.

1. Literature review

This section introduces the relevant literature in the areas of project management and cultural diversity.

1.1. Project management. A project is defined as any series of activities and tasks that have a specific objective to be completed within certain specifications, have defined start and end dates and funding limits (Kerzner, 2006). A project has four phases: initiation, planning, execution, and closure (PMI, 2004). Each project has objectives to achieve, defined end dates to meet, and limited funding and resources to use. A unique feature of projects is their high level of uncertainty, derived from the following characteristics:

1. Short schedule – projects are a temporary effort; hence have an expected completion date. In many cases, the project funder requires the project deadline to be as short as possible, so benefits from the project can be gained quickly.
2. Inadequate or uncertain budget – as a project funder would like to maximize benefits, while minimising expenses, the project budget is usually limited to the minimum amount of money needed for the project to be executed.
3. Frequently changing requirements – as each project is unique, and has not been done in the past, its specific requirements should be defined early. However, during project approval, the funder does not always have a clear vision of his/her needs. During project execution, when outputs become clearer and more tangible, additional or different requirements may be introduced by the funder. These may cause a change in the scope, duration, cost, and level of project risk.

4. The project team – a project team is a unique type of organizational unit, different in nature from other entities. The project team is cross-functional, involving employees from different organizational business units. These people may have different backgrounds, education, expertise areas, and share a different set of values and expectations about the project.
5. Multiple stakeholders – every project has several stakeholders that can influence (or be influenced by) its results. These stakeholders may include the funder, end-users, project team members, top managers and suppliers, as well as employees from other departments of the performing organisation. In some cases, these stakeholders have different expectations from the project.

This study investigates project management capabilities in New Zealand. In order to focus on the most important project management capabilities to be investigated in this study, the project management literature has been analyzed. Table 1 presents a list of critical success factors in the project management literature (Fortune and White, 2006). This list is ranked, based on the number of citations each factor has had in the project management critical success factor literature.

Table 1. Critical success factors in the project management literature

Critical success factor	Number of citations
Top management support	39
Clear realistic objectives	31
Project plan	29
Communication	27
User/client involvement	24
Project team	20
Effective change management	19

1.2. Cultural diversity. 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 projects have international stakeholders, it becomes very important to identify cultural differences, which may have to be bridged when executing such projects.

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, 2001). 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 and 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. Cultural differences were found in most of these studies, indicating different behavior and decision making patterns in different countries.

2. Research framework

Following the high importance of project planning and top management support, as analyzed in the literature review, this paper focuses on these two project management areas. As a result, the research model includes 'project planning' and 'top management support' processes that reflect project management capabilities. Sixteen project-planning processes and 17 top management support processes have been adapted from Zwikael and Globerson (2004) and are also discussed in Zwikael and Sadeh (2007) and Zwikael (2008). These 33 processes act as the independent variables.

In order to investigate the influence of these processes on results, 'project success' is also measured. Project success is traditionally measured using the 'golden triangle', which means completing the project on time, within budget and to specification (PMI, 2004). This is the operational mindset, which is influenced by the 'get the job done' approach (Dvir et al., 2006). However, several studies support the inclusion of customer satisfaction as the fourth dimension of success (e.g., Kerzner, 2006; Voetsch, 2004; Zwikael and Globerson, 2006). Accordingly, four project success variables were used as the dependent variables of this research: schedule overrun, cost overrun, project performance, and customer satisfaction.

Finally, the impact of three moderating variables has been investigated: country (New Zealand versus other countries), region and industry (within New Zealand). The model used in this research is presented in Figure 1.

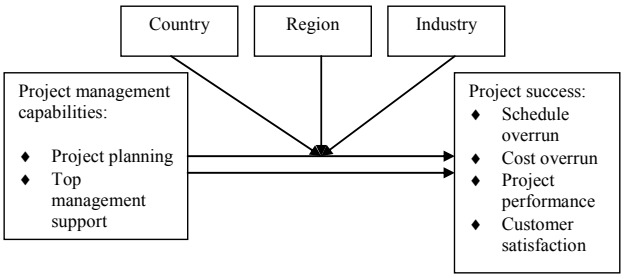

Fig. 1. The research model

This research framework includes several limitations that have to be stated. The study focuses on the planning phase of a project. The justification for this involves the different managerial behavior in different project phases (e.g., Pinto and Slevin, 1988). A delimitation of this study is with the limited number of countries in this study, because of its New Zealand focus. However, no analysis of different ethnicities in New Zealand has been conducted in this study.

2.1. Data collection. Based on the research model, a questionnaire was developed. The objective of this questionnaire was to collect data regarding managerial processes executed in projects and the success of these projects. In the questionnaires, project managers were asked to estimate the frequency of use of project planning practices (using a 1-5 Likert scale) in the most recently completed projects they have managed. In order for project managers to make accurate estimates, the relevant processes and tools were introduced to all project managers who participated in this research. While the independent variables have been collected from project managers, the dependent variables have been collected from their supervisors to avoid 'same source bias'. Hence, project success results were reported by the supervisors of the project managers using the following four project success dimensions:

1. Cost overrun was measured in percentages from the original plan.
2. Schedule overrun was measured in percentages from the original plan.
3. Project performance was measured on a scale of one (low performance) to ten (high performance).
4. Customer satisfaction was measured on a scale of one (low customer satisfaction) to ten (high customer satisfaction).

This questionnaire was administered to project managers from eight different industries, in six countries, in different sides of the world (New Zealand, Australia, China, Japan, Israel, and India) during the years 2002-2007. Initial data collection involved project managers who are members in the Project Management Institute (PMI), which supported this study in each of these countries. Yet, recognizing the danger of this type of data collection as a sole source, the other half of questionnaires have been collected from organizations selected and personally visited by the research team. The two groups were compared to make sure that they both lead to similar conclusions. A questionnaire was included in the final data analysis, only if at least 80% of its items had been responded to. The number of projects included in the research according to their country of origin and industry is presented in Table 2.

Table 2. Distribution of questionnaires by countries and industries

Industry \ Country	New Zealand	Australia	China	Japan	Israel	India
Engineering	45	4	1	1	44	3
Software	44	4	2	78	95	14
Production	15	0	1	33	15	0
Construction	15	1	1	0	5	1
Communications	59	1	0	1	37	1
Maintenance	0	0	0	0	0	0
Services	31	7	2	10	10	1
Government	91	5	1	2	69	0
Others	2	0	0	0	0	0
Total number of valid questionnaires	302	22	8	125	275	20

752 valid questionnaires were collected from these six countries. While a large number of questionnaires have been collected in New Zealand, Israel and Japan, the study in India, Australia, and China, has just begun. As a result, this paper focuses on results found in New Zealand, and conclusions regarding other countries should be analyzed with much care.

3. Results

This section includes data analysis and discussion. First, project success results are compared among countries, then project management capabilities are analyzed.

3.1. Project success. Project success has been measured using four variables. The first two

measures, schedule and cost overruns, are presented in Figure 2.

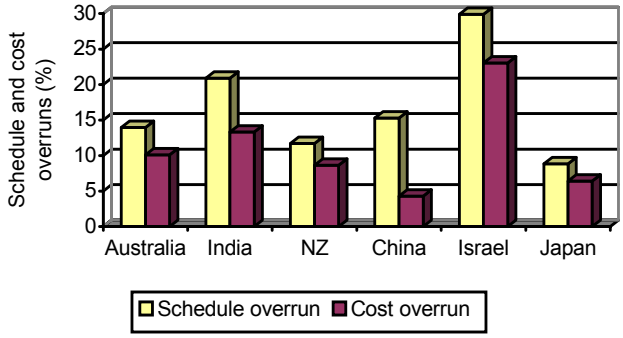

Fig. 2. Schedule and cost overruns in different countries

NZ projects have relatively small deviations from schedule and cost targets. Japanese project managers excel in meeting their commitments. Israeli projects face higher schedule and cost overruns, as compared to other countries. Reasons for these differences are not the focus of this paper, however, a discussion on the cultural differences between Japan and Israel can be found in Zwikael et al. (2005). In all countries, cost overruns are higher than schedule overruns.

Project performances and customer satisfaction also measure the level of project success. A comparison among the countries is presented in Figure 3.

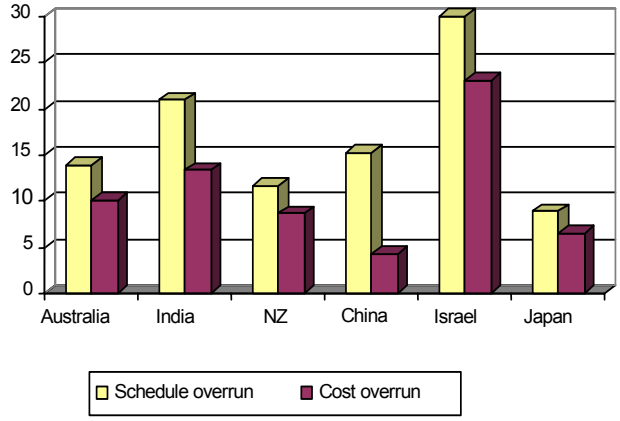

Fig. 3. Project performances and customer satisfaction in different countries

New Zealand projects achieve relatively high results. Japanese projects, which meet schedule targets, do not deliver all outputs to the customer.

3.2. Project management capabilities. Project management capabilities have been calculated, on the scale of 1 (low) to 5 (high), to evaluate the ability of project managers to perform all required project processes. Project management capabilities are calculated as the average extent of use of processes included in both project management areas included in the model – project planning and top management support. Figure 4 compares the results among the countries.

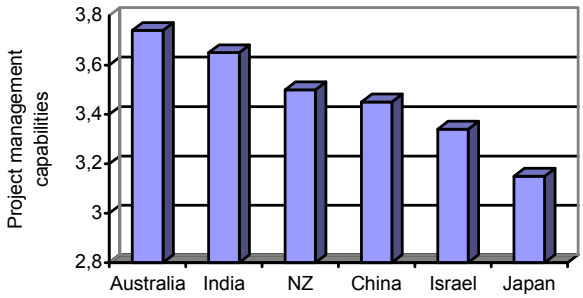

Fig. 4. Project management capabilities among different countries

Project managers from Australia and India were found to have the best project management capabilities. New Zealand is third in this list, with better results than China, Israel and Japan. However, it is also interesting to analyze the areas managers from different countries focus on. For this purpose, a drill down analysis into the project planning area has been conducted. A comparison among countries is presented in Figure 5. These results analyze the extent of use of project management processes included in each of the nine project management knowledge areas (PMI, 2004).

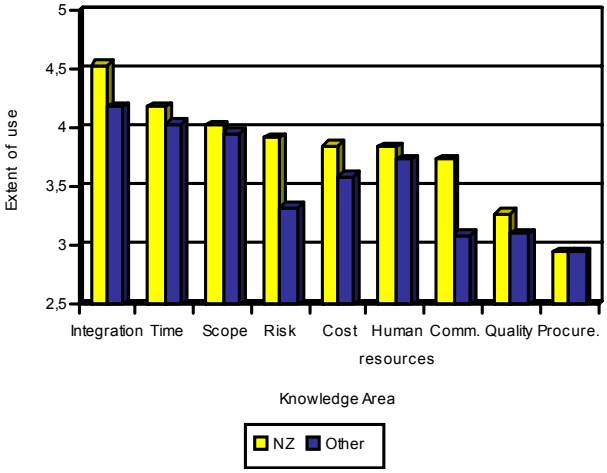

Fig. 5. Project manager planning capabilities among different countries

As can be seen in Figure 5, New Zealand project managers invest high effort in risk and communication management, as compared to other countries. These results can be explained by the culture literature. According to Hofstede (2001), New Zealand is ranked 50th out of 53 countries, with a low power distance index. This means that in New Zealand, there is less concentration of authority and managers rely on personal experience (not formal rules). Consultative leadership brings better results than authoritative leadership (Hofstede, 2001; House et al., 2004).

Figure 6 analyzes the second project management area – top management support. Results indicate the extent of use of top management support processes in different countries, on the scale of 1 (low top management support) to 5 (high top management support).

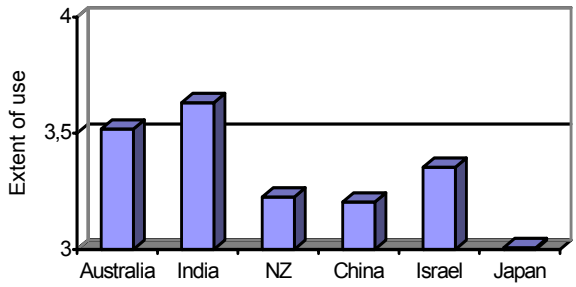

Fig. 6. Top management support capabilities among different countries

The results in Figure 6 show low top management support in New Zealand. Again, these results can be explained by the general cultural literature. As New Zealand has a low power distance index, there is not much concentration on authority (Hofstede, 2001; House et al., 2004). Senior managers allow their employees more freedom in deciding on the way to achieve agreed targets, than in other countries. This behavior also leads to less top management involvement and support.

Drilling down these results into the process level, the following findings are unique to New Zealand: (1) low learning from previous projects, (2) high communications between project managers and senior managers, and (3) high organizational risk management.

3.3. Project management capabilities within New Zealand. In addition to the international comparison presented in the previous sections, this section analyzes project management capabilities in different regions and industries within New Zealand. This analysis includes both a high-level comparison and a detailed comparison of project planning and top management support areas.

First, project management capabilities in five different regions in New Zealand have been compared. These regions include the three large cities (Auckland, Wellington and Christchurch), as well as the small town in the North Island and the small towns in the South Islands. Results are presented in Figure 7.

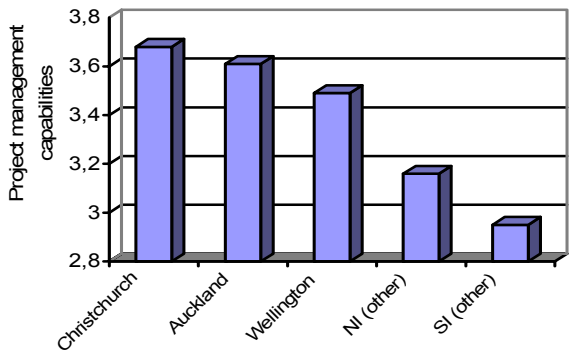

Fig. 7. Project management capabilities among different regions in New Zealand

Project managers from Christchurch were found to have the best project management capabilities, followed by project managers from Auckland and Wellington. Project managers from other cities and towns in the North and South Islands have the lowest results.

Finally, Figure 8 presents project management capabilities among different industry sectors in New Zealand.

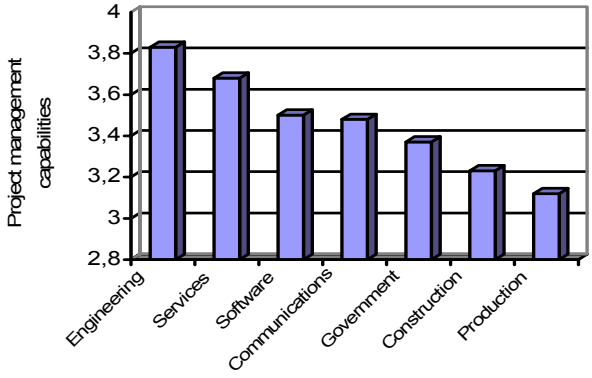

Fig. 8. Project management capabilities among different industries in New Zealand

Project managers from Engineering and Services organizations were found to have the best project management capabilities, followed by project managers from software and communications organizations. Project managers from production organizations have the lowest results.

Conclusions

This paper analyzes project management behavior in organizations across different countries. Results identify the typically strong and weak areas in New Zealand. Strong project management capabilities within New Zealand include high emphasis on risk management and communications management. This focus has been found to be very strong both with project managers and with their supervisors. These results can be explained by the culture literature, which suggests that New Zealand culture is based on low power distance and low uncertainty avoidance (Hofstede, 2001; House et al., 2004).

Areas which New Zealand managers do not focus on, as compared to managers from other countries, are mainly those related to top management support. For example, senior managers do not give their employees enough guidelines regarding the way a project should be managed, but leave it to the personal choice of each project manager. Alternatively, in many other countries a set of procedures instructs project managers while managing a project. Another finding relates to the involvement of executives in project management. It has been found that there is too little learning from previous projects, possibly

due to lack of organizational infrastructure in learning, data collection and knowledge management. New Zealand managers may investigate how to implement a knowledge management system that is tailored to the unique New Zealand culture.

With the regional analysis in New Zealand, it has been found that Christchurch leads the list, as the city with the highest project management capabilities. Other organizations, especially from small towns in the South Island, may benefit from a benchmarking exercise using the project management knowledge gained in organizations in big cities.

Limitations of this study include a low number of data collected in some countries and industries, hence making some conclusions weak. However, all the results that focus on New Zealand rely on a large number of questionnaires. Future research may include more studies in other management areas focusing on New Zealand, in order to better understand the unique New Zealand culture.

References

1. Avery G., Everett A., Finkelde A., Wallace K. (1999). Emerging trends in Australian and New Zealand management development practices in the twenty-first century. *The Journal of Management Development*, 18 (1): 94.
2. Baba K. (1996). Development of construction management based on regional culture, in Langford, D.A. and Retik, A. (Eds), The Organisation and Management of Construction: Shaping Theory and Practice, Vol. 1, E and FN Spon, London.
3. Dvir D., Sadeh A., Malach-Pines A. (2006) Projects and Project Managers: The Relationship between Project Managers' Personality, Project Types, and Project Success. *Project Management Journal*, 37 (5): 36-48.
4. Fortune J., White D. (2006). Framing of project critical success factors by a systems model. *International Journal of Project Management*, 24 (1): 53-65.
5. Hoecklin L. (1996). Managing Cultural Differences: Strategies for Competitive Advantage, AddisonWesley, Wokingham.
6. Hofstede G. (2001). *Culture's consequences.* 2nd edition. Newbury Park (CA): Sage Publications.
7. House R. J., Hanges P. J., Javidan M., Dorfman P. W., Gupta V. (2004). Culture, leadership, and organisations: the GLOBE study of 62 societies. Sage publication. Thousand Oaks, US.
8. Jackson T., Artola M. C. (1997). Ethical beliefs and management behavior: A cross-cultural comparison. *Journal of Business Ethics*, 16 (11): 1163-1173.
9. Kerzner H. (2006). *Project Management: A Systems Approach to Planning, Scheduling and Controlling.* 9th edition, John Wiley and Sons.
10. Lavingia N. J. (2001). Pacesetter project performance. AACE International Transactions. Morgantown: p. PM2.1-PM2.3.
11. Peter M. (1996). New Zealand's management skills rival the best. *Management*, 43 (2): 85.
12. Pinto J K, Slevin D P (1988) Critical Success Factors across the Project Life Cycle. *Project Management Journal*, 19 (3): 67-75.
13. PMI Standards Committee (2004). *A Guide to the Project Management Body of Knowledge – 3rd edition.* Newtown Square, PA: Project Management Institute.
14. 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*,12 (6): 234-239.
15. Voetsch R. J. (2004). The current state of project risk management practices among risk sensitive project management professionals. The George Washington University PhD, 559 pages; AAT 3112236.
16. Zwikael O., Globerson S. (2004). Evaluating the Quality of Project Planning: A Model and Field Results. *International Journal of Production Research*, 42 (8): 1545-1556.
17. Zwikael O., Globerson S. (2006). From Critical Success Factors to Critical Success Processes. *International Journal of Production Research*, 44 (17): 3433-3449.
18. 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.
19. Zwikael, O., Sadeh, A. (2007). Planning effort as an effective risk management tool. *Journal of Operations Management*, 25 (4), 755-767.
20. Zwikael, O. (2008). Top management involvement in project management – exclusive support practices for different project scenarios. *International Journal of Managing Projects in Business*, 1 (3): 387-403.