

**KEYWORDS** ■ project manager skills ■ selection emphasis ■ industry type

# A LONGITUDINAL STUDY of the required skills of PROJECT MANAGERS

## ABSTRACT

There is no formula for finding the right project manager in today's dynamic project and organizational contexts. While some research has investigated and identified various skills and competencies project managers should demonstrate, less is known about the structure of project manager skills and competencies needed to fit the changing project environment and the impact of industry type on such structures. The objective of this research is to explore how the emphasis of organizations in selecting project managers shifts over time and how it differs with industry type. It is expected that the findings of this study will provide insight into the prevailing state of project manager selection.

## INTRODUCTION

A Project is a new time-bound effort with several related and interdependent tasks to create a unique product or service that adds value; this value could be tangible or intangible. Project management is concerned with completing a project on time, within budget, and according to the project specifications while satisfying both the customer and project team expectations. Under a dynamic and complex project environment, a project manager should demonstrate his/her competency in balancing people and technical tasks to effectively manage various stakeholders and accomplish unique outcomes with limited resources and within critical time constraints (Jacques, 2008). Additionally, in many organiza-

tions, projects are managed using teams a project manager may not have the discretion to select. Compounding this, some of the project team members are engaged in more than one project (Anantatmula, 2010). Kerzner (2006) stated that projects fail to meet time and cost targets due to poor morale, lack of motivation, poor human relations, poor productivity, and lack of commitment from employees. Obviously, people-related issues play a crucial role in project performance, underlining the importance of project manager's management and leadership roles.

Needless to say, the project manager is a major resource to the project along with the team, the materials, and other inputs. Therefore, the selection of a project manager with the right skills

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and competencies is critical to the project success (Meredith and Mantel, 2009). Knowing what project managers do and what kind of observable skills they should demonstrate constitute a very important step for project manager selection (El-Sabaa, 2001). According to Strang (2003), managing projects successfully requires a mixture of skills including interpersonal ability, technical competencies, and the capability to understand the situation and then dynamically integrate appropriate leadership behaviors. Meredith and Mantel (2009) categorized the skills needed for a project manager into six areas: communication, organizational, team building, leadership, coping, and technical skills. However, there is surprisingly little agreement among researchers on what competencies contribute most to the criteria for project manager selection (Holzle, 2010).

Much of the research in the last several decades has focused on technical skills as the most important competency in selecting a project manager (Adams & Campbell, 1988; Atkins, 1980; Bassellier et al., 2001). However, in recent years, the "human side" of project management has increasingly been identified as a critical component of the project manager's competency associated with project management success (Anantatmula, 2008; Cooke-Davies, 2002; Cowie, 2003).

This difference in project manager selection can also be reflected by industry type. Different industries have different HRM practices (Hue-mann, 2007) due to the differing industry-specific work cultures and the degree of complexity and dynamism of project environments (Anantatmula, 2010). For example, an IT company, a technical-intensive industry, may emphasize the technical competency of a project manager compared to a traditional industry.

There is no correct formula for finding the right project manager in a complex project context and as discussed above, past research, to a limited extent, has investigated and identified various skills and competencies for project manager

selection. However, less is known about the trend of real-world project manager selection practices to fit the changing project environment and the impact of industry type on those practices.

The objective of this paper is to explore how the selection emphasis shifts over time and how it differs with industry type. It is expected that the findings of this study will provide insight into the prevailing skills and competencies set of project managers. Further, it is expected that this study will provide general guidelines for project managers to fit themselves into a more dynamic project management profession.

The paper is structured as follows: section 2 builds on different streams of research from human resource management and project management disciplines to summarize project manager selection practices in various industries. This is followed by a research methodology section to present our research method and rationale. Thereafter, the main findings are presented and discussed in section 4 and section 5. The paper concludes with the implications of the findings on project manager selection practice and general guidance for project managers to align individual competencies with the dynamic project environment.

## 1. Literature Review

Turner (2006) and Huemann, Keagan, and Turner (2007) considered a project as a distinctive social system where the patterns of actions, communication paths and rules are different from the organizational environment. Consequently, the project manager needs a different set of capabilities and competencies (Holzle, 2010, Bogdan, 2011) to adapt to a complex project context and to manage projects successfully. The needed compe-

tencies include: technical skills and project-specific expertise, the capability to understand the situation and organizations, and interpersonal skills and appropriate leadership behaviors (Strang, 2003; Collins, 1998). Other researchers also proposed that technical skills, conceptual skills, negotiation skills, and human skills are essential for a good project manager (Goodwin, 1993; Katz, 1991).

### 1.1 Technical Skills and Competencies

El-Sabaa (2001) argues that successful project managers should have relevant competencies and knowledge of the technology required by the projects they manage. Such technical skills usually involve specialized and domain specific knowledge, and analytical abilities in using the tools and techniques of the specific discipline such as engineering, information systems, and construction. In addition, project managers should also master communication skills both in writing and oral to manage various project processes (Zavadskas, 2008; Skulmoski and Hartman, 2009; Bogdan, 2011).

While a project manager must possess good technical skills and be intimately familiar with the technical field to which the project belongs, his/her emphasis must be on project management and not just on technical details (Avots, 1969) because the role of a project manager evolves from being the technique-based administrator towards a more managerial position.

### 1.2 Project-Specific Management Skills

The project-specific skills allow a project manager to understand the project as a special case of management. It includes understanding project constraints and assumptions, and recognizing how the various functions of a project depend on one another and how stakeholders impact project performance (El-Sabaa, 2001).

The required project management expertise can be obtained from project management experiences and demonstrated by project managers past performance (Crawford and Pollack, 2007; Zavadskas, 2008; Córdoba and Piki, 2012). Therefore, many current PM selection frameworks are

reliant on their project management credibility, i.e., how the PM is perceived both technically and administratively by the various stakeholders in the project: the client, senior executives, departments, the team, etc., (Meredith & Mantel, 2012; Madfer et al, 2012). Organizations often select high performers into project management roles by digging into specific situations the candidates have been in, their decision-making processes, their outcomes and what the project managers learned from these experiences (Baker, 2008). According to Holzle (2010), project-specific experience and expertise are highly significant in selecting project managers for 90% of organizations investigated.

### 1.3 General Conceptual and Organizational Skills

In addition to the hard constraints of time, cost, scope and quality that need to be balanced and satisfied, a project has more ambiguous goals to be reached, such as the strategic objectives of the organization and/or the objectives of the internal and external stakeholders which can impact on the project. Therefore, a project manager potentially has to also contend with organizational politics, and the external environment and stakeholders' influence (Rosenau, 1998; Fisher, 2011). These factors have a fundamental effect on the structure of skills required by a project manager (Gudarzi, 2011). According to El-Sabaa (2001), general conceptual and organizational skills are necessary for the project manager to work effectively with various stakeholders of the organization in which the project is embedded and to build a cooperative effort inside and outside the team the project manager leads. Such skills can be demonstrated in the way the project manager understands the organizational mechanisms and recognizes the interests and attitudes of those stakeholders, including his/her superiors, equals, subordinates and the way he/she manages these people.

### 1.4 Leadership and “Human” Skills

Organizational and management skills can't be separated from leadership and interpersonal-

al skills, the leadership skill of a PM should be demonstrated when selecting project managers (Toor and Ofori, 2008; Muller and Turner, 2010) to cope with multitude of issues faced on modern project management organizations (Gudarzi, 2011). Norrie and Walker (2004) define project leadership as “the higher pursuit of the project team's creating purposeful and strategic action that will augment the organization's business strategy and achieve results within the norms and values of the organization”. A study by Jacques, et al, in 2008 suggests that such a new leadership style can be presented by a balance between concern for task and concern for people.

As suggested by Druskat (2006) and later by Clarke (2010), behind a project manager's effectiveness in performing “human” skills lies a high level of emotional intelligence (EI). EI has three dimensions, sensitivity/conscientiousness, motivation and, influence (Muller and Turner, 2010). They suggest that sensitivity or conscientiousness to the needs and expectations of others in the project plays a large part in developing people skills for project managers thereby contributing to a greater project success (El-Sabaa, 2001; Rudolph et al. 2008).

The nature of project work, such as being more fluid, flexible and reactive, has given rise to work pressure for project managers and team members (Asquin, 2010) and therefore exacerbates the problems experienced under normal conditions (Midler, 1995). Various indicators show that such pressure has a dangerously damaging effect on working conditions (Askenazy, 2005). Therefore, Project managers need stress management skills (Gudarzi, 2011; Zavadskas et al, 2008) which allow the project manager to improve his/her personal attitude, capability and, personal objectives towards creating a successful work and life balance, while handling the complexity of a project and developing trust between team members and themselves (Bogdan, 2011).

Work motivation is a driver to an organization's performance. Project management literature consistently emphasizes the importance of the project manager's skills in inspiring and empowering followers (Prabhakar, 2005; Jacques et al., 2008). According to Dwivedula and Bredil-

let (2010), work motivation in a project context includes: initiatives directed towards empowering the employee, providing a motivating work environment, adequate pay, and, challenging and interesting work. Other important dimensions to work motivation have been identified as goal clarity, feedback on performance and, effective communication among the project team members (Turner, 2003).

### 1.5 Trends of Project Manager Selection

While it is usually agreed that effective project management rests on the four basic skills: leadership and human skill, conceptual and organizational skill, project-specific management expertise, and technical skills (Katz, 1991), and that the emphasis of a project manager must be on the overall view and not on any single aspect of skills (Avots, 1969), there is surprisingly little agreement among project practitioners and researchers on the frequencies of various skills and competencies used by organizations in selecting their project managers, and how such frequencies change over time.

Much of the research in the last several decades has found that among various skills and competencies the technical skills were more frequently used by organizations in selecting project managers for improving the performance of project professionals (Bassellier et al., 2001; Adams & Campbell, 1988; Atkins, 1980, Lavender, 1996) because technical skills are required to aid decision making and provide credibility (Thamhain, 1991; Wysocki & Lewis, 2001).

However, in recent years, projects are characterized with dynamic boundaries and complex contexts with multi-stakeholders to be managed (Soderlund, 2006); the role of the project manager has evolved from task-oriented administrator towards a much more managerial position (Holzle, 2010). Hence, the “human side” of project management has been identified by more researchers as a critical component of the project manager's role associated with project management success (Cooke-Davies, 2002; Cowie, 2003; El-Sabaa, 2001). Therefore, one might expect a trend that project managers should be primarily selected



on the basis of management potential rather than technical abilities (*El-Sabaa, 2001*), in other words, the frequencies of various skills used by organizations in selecting project managers have changed over time.

El-Sabaa (2001) analyzed 126 projects and concluded that human (*soft*) skills represented the most essential project manager skill, with a percentile score of 85.3%. Conceptual and organizational skill, with a percentile score of 79.6%, represented a second essential project manager skill. In comparison, technical skill, with a percentile score of 50.46% represented the least essential project manager skill. Similarly, Zavadskas (2008) conducted a literature survey and concluded that the most important criteria for a project manager in construction manager selection are personal skills (23 times mentioned in the literature) followed by organizational and project management skills (18 times mentioned), leaving technical skills (5 times mentioned) to be the least important skills in selecting project managers. Several other studies made similar conclusions (*Wong, 2007; Zhu, 2006; Lechler, 1997; Hauschildt, 2000; Kwak, 2009; Bogdan, 2011; Gudarzi, 2011*) and believed that project management has been evolving to the extent that it is more about people management than task orientation to fit project's increasingly complex context.

Holzle (2010) also found that project-specific management expertise are most significant for 90% of all the 20 surveyed organizations, and 80% of all the surveyed organizations view the social and interpersonal competence of the project manager as the most important competence, directly followed by leadership competence (*as requested by 50% of all organizations*). Similarly, Skulimoski and Hartman (2009) interviewed 33 project professionals with an average of approximately 21 years of experience and found that project management skills and knowledge were the most crucial competencies in the planning, implementation, and closeout phases of the projects. In addition, according to Jiang and Klein (1998), the most important skills of IS project managers were shown to be interviewing, directing, and managing. Similar conclusions were also drawn by Rosenau (1998), Avots (1969) and Fisher (2011).

However, contrary to this trend that the people management skills, particularly project-specific expertise, become the most important in selecting project managers, it was surprising for Darrell, Baccarini, and Love (2010) to find that project managers were still mainly selected based on their technical competence and problem-solving abilities.

### 1.6 Impact of Industry Type on Project Managers Selection

According to Anantatmula (2010) and Huemann (2007), the leadership and technology roles of project managers could be industry-specific due to differing industry-specific work cultures and the degree of ambiguity, complexity, and dynamism of project environments. Different industry-type may lead to different HRM practices. By comparing project selection practices in the IT industry with those in other industries, we can discover the correlation between industry type and the frequencies of PM skills and competencies used by organizations in selecting project managers. Understanding IT project manager selection practices is important for several reasons. First, IT is the most non-traditional industry with high technology intensity (*Huemann, 2007*). Second, relatively little empirical research has investigated HRM issues of IT professionals (*Wickramasinghe, 2010*).

Bullen (2009) studied project manager selection in the IT industry and found that both IT clients and provider firms are seeking skills such as client-facing capabilities, project management, and business domain knowledge over technical capabilities. Bullen's results suggest that a highly valued project manager would be a person with broad technical skills and deep business skills. In particular, the data on project manager positions shows a real need for project-specific management skills and business skills (*Bullen, 2009*). Based on the study on project manager competencies across industries, El-Sabaa (2001) found no significant variations in the profile of project manager skills among the three sectors (*agricultural projects; IT projects and Electricity projects*). In each sector, human skill represented the most essential

project manager skill and technical skill represented the least essential project manager skill (*El-Sabaa, 2001*). It seems that project managers, who are equipped with sufficient people skills and project management skills, can migrate across industry types (*Baker, 2008*).

In summary, the literature review reveals that, although there has been a growing emphasis on the shift of project manager's competencies over time, there is little data that is available to describe such a shift and provides an objective understanding of the current project manager selection practices. The disagreement among many researchers regarding the changes of selection emphasis over time and across industry necessitates a further study.

## 2. Research Methodology

The literature review identifies various skills and competencies in selecting project managers, such as: candidates' technical competencies, conceptual and organizational skills, project-specific management skills, and people skills. However, different scholars gave different conclusions regarding what skills were more frequently used by organizations. In addition, how the usage frequencies change over time and how they differ with industry type still remains unanswered. The aim of the present paper is to contribute to knowledge in this area by conducting a longitudinal survey and testing its results.

Based on the literature review and research questions, we propose the following hypotheses:

- ❶ Hypothesis 1: There is no significant difference between IT industry and the others in term of the frequencies of skills and competencies used by organizations in selecting project managers.
- ❷ Hypothesis 2: There is no significant change over time in term of the frequencies of skills and competencies used by organizations in selecting project managers.

We collected data on the frequencies of skills and competencies used by organizations in selecting project managers from project management professionals between 2003 and 2011, and for

each year the data were collected independently; participants in this study are experienced project managers. In order to elicit the answers to the research questions a content analysis was carried out on respondent's answer to the question:

"Are technical skills, project management credibility, organizational skills, leadership skills, writing/oral skills, stress management skills, sensibility and drive used by your organizations in selecting project managers?"

Although we have chosen project manager's skills set by Meredith and Mantel and initiated this study in 2003, review of literature at that time and research studies thereafter as discussed in the literature review section are aligned with the skill set and reveal a broad classification of the required project management skills into technical, people, and organizational skills are similar to the skills identified for this study.

The answers provided by those project management professionals to this open-ended question are broad and not specific. For this reason content analysis is used to interpret and collect participant's answers. The number of years in project management positions, gender, and industry type were also collected for this study. This method provides an excellent opportunity for us to perform cross-industry, cross-organizational and longevity research into the accuracy of HRM practices regarding the project management profession.

Content Analysis is a social science research methodology developed more than 55 years ago (*Berelson, 1952*). As listed by Kassarian in his seminal article of 1977, various definitions of this methodology have been attempted over the years with the more recent definition by Naccarato and Neuendorf (1998) summing up these earlier attempts simply and concisely: "Content analysis may be defined as the systematic, objective, quantitative analysis of message characteristics."

The methodology is typically used in consumer behavior research involving media advertising, printed materials, and other verbal and non-verbal communications (*Kolbe et al., 1991*). Validity of the research is reached by adhering to the three characteristics of the process: objective, systematic, and quantitative (*Kassarjian, 1977*).

Objectivity stipulates that the categories of analysis be defined so precisely that different

	# of Respondents	% of Respondents
1. Gender:		
Female	67	37%
Male	113	63%
2. Years of Project and PM Experience:		
2 – 5	102	57%
6 – 10	38	21%
11 & above	40	22%
3. Industry:		
IT	85	47%
Others	95	53%

TABLE 1. Summary of Respondent Profile

Skills and competencies	Usage frequencies in all industries (%)	Ranking in the skills set for all industries	Usage frequencies in IT industry (%)	Ranking of the skill of IT industry	Usage frequencies in NON-IT industries (%)	Ranking of the skill in NON-IT industry
Technical	81.56	1	86.25	1	77.32	1
PM credibility	73.18	2	76.25	2	71.13	2
Organizational	66.48	3	66.25	4	67.01	3
Leadership	66.29	4	68.75	3	64.58	4
Writing/oral	64.25	5	66.25	5	62.89	5
Stress management	58.66	6	55	6	61.86	6
Sensibility	45.25	7	41.25	7	48.45	7
Drive	22.35	8	25	8	24.74	8

TABLE 2. Summary of the Responses

analysts may apply them to the same body of content and secure the same result (Berelson, 1952). Systematization means that a) the inclusion or exclusion of communication content or analytical categories is done according to consistently applied rules (Holsti, 1968) and b) it is done to examine scientific problems or hypotheses (Berelson, 1952). The first is needed to avoid data being

collected that could support the researcher’s views and the second to ensure that the findings have theoretical relevance and can be generalized (Kassarjian, 1977). In quantification, we are dealing with the measurement of the extent or omission of any category. The implication being that the data collected is amenable to statistical

methods for interpretation and inference (Kassarjian, 1977).

### 3. Results

Data for this study was collected from one hundred eighty (N=180) project management professionals in the years 2003, and from 2007 through 2011. In this sample 57% had 2-5 years’ experience in projects and project management; 21% had 6-10 years’ experience, and 22% had 11 years or above experience. It is to be noted that most of these participants have additional years of work experience that is not necessarily related to project management. This means that the participants in this research represent a good cross-section of the project management profession in terms of experience, age, sex, and industry. Table 1 shows a summary of the respondent profile.

Compared with the PMI Project Management Salary Survey (2000 edition) in which 25% of the respondents indicated they were female, the gender distribution for this study was more even with 37% (N=67) indicating they were female and 63% (N=113) indicating they were male.

Within the IT category, industries such as banking & finance, education, medical insurance, healthcare, hospitals and communications were represented with 85 respondents. While in the category other than IT, the armed forces, automotive, construction, consulting, entertainment, law, manufacturing, not-for-profit, pharmaceutical, public administration/government, retail, security, tourism, transport and utilities were represented with 95 respondents.

#### 3.1 Summary of results

Based on literature, eight skills and competencies are identified, they were: technical skills, project management credibility, organizational skills, leadership skills, writing/oral skills, stress management skills, sensibility and drive.

Respondents identified the skills and competencies that were used in their organizations and based on these counts, the usage frequencies and

percentage of various skills and competencies were presented.

Table 2 provides an overview of the usage frequencies of these organizations for each skills and competencies, and how they are ranked in the skills set for project manager selection. The results suggest that the selection emphasis is on technical competency and project-specific credibility. Specifically, technical competency is considered by 81.56% organizations to be the necessary competency for a project manager. Such a high frequency makes technical knowhow the number one in the competencies and skills set, which is followed by project management credibility and experiences with frequency of 73.18%. Apart from those top two skills are organizational skills, leadership skills, writing/oral skills, and sensibility in that order whose usage frequencies range from 66.48% to 58.66%, constructing the second group. Among the lowest frequencies are stress management skills and drive.

#### 3.2 Testing Hypothesis H1

Table 2 also compares the skill rankings for the organizations in IT industry with those in NON-IT industries. The results show that the order of usage frequencies of various skills in IT organizations is the same as in NON-IT organizations except that writing/oral skills are prioritized higher by IT organizations. In addition, the results present the fact that that technical competency and project experiences are more emphasized by IT organizations than NON-IT ones, the usage frequencies of technical competency and project experiences in IT organizations are 86.25% and 76.25% respectively, while they are 77.32% and 71.13% in NON-IT organizations.

As presented in Table 3, to examine if there is significant difference between IT organizations and NON-IT organizations in terms of usage frequencies of the eight skills and competencies, we use Chi square to test the homogeneity of proportions for each skill and competency.

Using α=0.05, the critical value of Xα² is 3.841 with degree of freedom=(2-1)(2-1)=1. All the calculated x² as presented in Table 3 are less than the critical value 3.841, thus we accept H1 at



the 0.05 significance level. There is no significant difference of usage frequencies of the skills and competencies between IT organizations and Non-IT organizations.

3.3 Test Hypothesis H2

**Table 4** compares the usage frequencies of each skill and competency between the period of year 2003 -2008 and the period of year 2009 through 2011 respectively. Our research question is how the frequencies change over time.

Chi-square test for homogeneity of proportions was used to examine if there is a significant difference of usage frequencies of the skills and competencies between the two time periods. Using  $\alpha=0.05$ , the critical value of  $\chi^2$  is 3.841 with degree of freedom =  $(2-1) (2-1) = 1$ .

All the calculated  $\chi^2$  as presented in **Table 4** are less than the critical value 3.841, thus we accept H2 at the 0.05 significance level. There is no significant difference of usage frequencies of the skills and competencies between the period of year 2003-2008 and the period of year 2009 - 2011. In other words, the frequencies of the skills used by the surveyed organizations remains the same “within experimental error” in the past ten years.

4. Discussion

The analysis of the survey produced some interesting results, many of which were not expected at the outset. A summary of the key observations from the study are as follows.

Firstly, the selection emphasis of organizations remains the same in the past ten years. The skills set of project managers suggests organizations’ emphasis on technical competency and project-specific credibility of project managers, which are followed by organizational and “human” skills. Interestingly, this selection emphasis has not changed over time as many researchers predicted.

Our research results confirm the conclusions reached by Darrell et al., (2010) that most project

managers were still selected mainly based on their technical competence and problem-solving abilities. This finding does not support the trend of project manager skills predicted by many researchers, such as El-Sabaa (2001), Wong (2007), Posner (1987), Zhu (2006), Lechler (1997), Hauschildt (2000), Kwak (2009), Bogdan (2011), and Gudarzi, (2011) who believed that project management today is more about people management than about technique orientation and that project managers should be selected accordingly.

The possible explanation for this difference is that projects have been considered by most organizations as the means to deliver new products, services and innovative solutions in an increasingly knowledge-intensive environment (Whitley, 2006; Turner, 2003; Turner, 2006), thus, demanding technical skills of their project managers.

This difference also leads to a question about the role that a project has in organizations—whether it is viewed as a strategic enabler, core competency of an organization or as a tactical and temporary solution. It seems that project management is viewed as important by organizations but has not yet fully developed as an organizational capability. As a result, the role of the project management is still defined as an accumulative description of technical tasks and the project manager as an administrative staff with expertise for the execution of projects (Huemann, 2000). Although some organizations are considering the need to rebalance their project manager skills for more general management capabilities and deep technological skills (SÖDERLUND and Bredin, 2006), putting “soft” skills first in the project, manager selection process cannot yet be considered a trend.

The second important result of our study suggests that there is no significant difference of usage frequencies of PM skills between IT and NON-IT industries, which is aligned with the conclusion drawn by El-Sabaa (2001) and Baker (2008) who found that there is no significant variations in the profile of project manager skills between IT and Non-IT industries, even though the selection emphasis observed in this research

is different from previous ones. Our results suggest that organizations emphasize technical skills and project experiences for both IT and Non-IT industries while previous research indicated that organizations tend to focus on business knowledge and project management skills over technical capabilities.

However, we found that IT organizations tend to emphasize more on technical skills of PM than NON-IT organizations. Such a difference of needs for technical skills between IT industry and Non-IT industries is presented in **Table 2** where a higher percentage of IT organizations required the project manager to have technical skills (86.25% in IT organizations vs 77.32% in Non-IT organizations) and project-specific expertise (76.25% in IT organizations vs 71.13% in Non-IT organizations) than Non- IT industries. This finding can be possibly explained by the nature of IT projects which are more technology intensive and innovation-oriented than in other industries, and thus, tend to highlight more needs for technical skills of project managers than those in NON-IT industries.

Finally, the results also suggest that organizations do not tend to emphasize the psychological capability of project managers, such as stress management skills, sensibility and drive in selecting project managers. The support rates for these capabilities are 59%, 45% and 22% respectively. This result can possibly be explained by the subjective nature of these psychological capabilities which organizations may hesitate to include those capabilities in selection criteria for assessing candidates’ capacity.

5. Conclusion

The purpose of this paper was to present a retrospective look at the practices of project manager selection across various industries over the past 10 years and enhance the understanding of role of project management in organizations.

By conducting a longitudinal analysis, the study provides evidence for organizations’ empha-

sis on technical skills and the project-specific credibility of candidates more than on their general management or people skills. The study also showed that this preference of organizations also applied across industries. It seems that the organizations’ view on the role of a project manager has not changed over the past years as many researchers expected; a project manager is still regarded as an executer of a project who needs to be equipped with unique technical expertise to complete the temporary tasks of the project rather than as a strategic enabler.

Our research results seem to be contrary to the trend proposed by many researchers that project management is becoming more about people management in the context of project manager selection. The difference can be partly explained by the nature of a project, that is, projects are the means to deliver new products, services and innovative solutions in increasingly knowledge-intensive environments, thus, demanding a high level of technical skill from the project manager. It may also be explained by the progress of project management maturity in organizations, with standardized processes and procedures that relieve the project manager of excessive people management responsibilities.

Our finding that the selection emphasis on technical skills irrespective of industry type suggests that, although the difference between industry type, as highlighted by many past research studies, have some impact in project manager selection, that impact is not big enough to change its emphasis for selecting project managers.

The study also could impact on how a project manager places importance for training and education for career progression. Irrespective of industry type, project managers are still technical or project management-oriented rather than general management-oriented. Consequently, their careers will be more shaped by project management knowledge and techniques rather than general people skills. This finding highlights the “unique” nature of the project management profession.



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