FACTORS AFFECTING THE PROJECT MANAGEMENT COMPETENCES OF GOVERNMENT DEPARTMENTS IN SARAWAK

Mohamad Danial Bin Beti

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ABSTRACT

TITLE: Factors Affecting the Project Management Competences of Government Departments in Sarawak

The present study was borne out of the arising discussions over the inefficiency of public sector organizations to undertake project implementation, upon which project management competences were highlighted as the main deferring factor for this quandary. Such problems are evident in Malaysia in general, and in Sarawak, in particular, in which improvements to project management competences among government officers have left a lot to be desired. Thus, the study wishes to explore the effects of environmental factors in the organization on the individual project management competency behaviours, to explain such claimed deficiency, after Boyatzis’ (1982) “effective job performance” model. Data was thus collected from 155 respondents from project personnel in government bodies in the Kuching Division using self-administered questionnaire survey with 90 returned replies. The demographic profile, achievement-orientation levels, perception of organizational climate, organizational culture and nature of work were each elicited using specific scales to measure the required variables. From the analysis of data collected, it was inferred that organizational climate and nature of work were significantly related to achievement-orientation competency. Organizational culture was not significantly related to achievement-orientation. The findings supported previous studies on the effects of organizational factors such as climate and job characteristics, on the disposition of employees’ towards performance, job satisfaction, commitment, among others. In conclusion, the present study was able to achieve its intended
objectives and the results could be used to contribute to the improvements of the government delivery system.
TAJUK:  Faktor-faktor yang mempengaruhi kecekapan pengurusan projek di kalangan jabatan-jabatan kerajaan di Sarawak

Kesimpulannya, kajian ini telah mencapai objektif yang ditetapkan dan penemuan ini dapat menyumbang kepada penambahan baik sistem penyampaian kerajaan.
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CHAPTER 1

INTRODUCTION

1.1 Background

There have been several discussions over the inefficiency of public sector organizations to undertake project implementation (Rwelamila, 2007). Such inefficiency has been blamed, among others, on project individuals’ lack of competence in handling and managing projects. Public sector “project-oriented organisations” (POOs) are expected to push through development agendas through successful implementation and completion of development projects, which include public infrastructures, within time, on budget and achieve desired quality. As emphasized by Gareis (2004), POOs are expected to consistently pursue project management competences to sustain their competitive edge, since project management principles are embedded into their core business processes. However, as the case may be in South Africa and many other non-industrialised countries, government capacity constraints in the form of limited budget and high staff turnover, has deterred any efforts to enhance project management competences within such organizations. The importance of Project Management (PM) Competency is subtly propagated by the Project Management Institute (PMI)’s (2004) definition of PM competency, which was described as “the application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholders’ needs and expectations”.
The present research will study the project management competences of public sector project-oriented organizations in Sarawak at the individual level and the factors that may significantly affect such competences. Individual-level PM competency is selected over broad organization-level competence because PM competence of project-oriented organizations require that the relevant practices of project management are embedded in the structure, procedures, documentations, standard templates, among others, which would require a different approach to data collection and analysis. Secondly, the underlying theory deals with the subject of individual competency behaviour, after Kurt Lewin’s classical psychological model of behaviour, in which “behaviour is a function of the person and the environment” (Boyatzis, 1982).

The nucleus of the present study is based upon Boyatzis’ (1982) “effective job performance” model which highlighted that competencies are causally related to effective and superior job performance, as well as the underlying relationship between competencies with job demands and organizational environment. The link between PM competency and Boyatzis’ framework is carefully integrated by Crawford (2007), which concluded that core personality characteristics of project personnel as part and parcel of PM competency. It was also decided that “Achievement-Orientation” competency behaviour be selected to gauge the PM competency level of personnel in public sector POOs as the selected competency behaviour is most frequently observed in “Technical Professionals” and “Managers” (Spencer & Spencer, 1993), as well as identified as one of the “Personal Competencies” cluster under the Project Management Competency Development (PMCD) Framework (PMI, 2002). In addition, it was reported that there exists an association between achievement-orientation and
competency displays in individuals (Elliot & Harackiewicz, 1994; Ross, Rausch & Canada, 2003; Engeser & Langens, 2010).

The environmental factors that will be the focus of this study are the “Organizational Climate”, “Organizational Culture” and “Nature of Work”, which constitute the variables that are hypothesized to significantly influence PM competencies of individuals. The organizational climate and culture, representing the structure, policy, and working atmosphere, influences organization’s members’ behavioural display which is either deemed appropriate and acceptable or vice versa, to the organization that they belong to (Boyatzis, 1982). Nature of work represents the “demands of the job” which Boyatzis (1982) argued that would prompt an individual to respond to, with such capability showcasing the individual’s “competencies”.

1.1.1 The Sarawak Scenario

The rapid development in the State of Sarawak has brought about numerous infrastructure projects for the benefit of the people, by improving the livelihood of the people and to spur economic growth. Several government agencies, which include Ministries, Departments, Statutory Bodies and Local Authorities have been tasked to undertake the implementation and development of the various projects in the State. An example is the Sarawak Sewerage Services Department that was set up under the Sewerage Systems and Services Ordinance, 2005 to develop and implement all sewerage-related projects in the State,
as well as to monitor and regulate the operation and maintenance of sewerage systems throughout the State.

Under the 9th Malaysia Plan (Year 2006 to 2010), the Department was tasked to implement and develop five sewerage-related infrastructure projects, located in Kuching, Sibu, Miri and Bintulu. The five projects were expected to benefit the population of the urban centres in the four major towns and cities upon commission. However, a review of the project performance based on submitted progress reports and monitoring records throughout 2009 to 2010, revealed that most of projects have experienced delays in the implementation schedule. As a consequence, there appears to be a disparity between the desired expectations and the actual outcomes which leaves a lot to be desired. The problem also exists in almost all other project-oriented government agencies in the State, whereby the project expenditure performance and status of project progress, which are used to gauge the performance of project implementation, is below the National threshold standard.

Overall, the performance of projects implemented nationwide has compelled Majlis Tindakan Negara circa Meeting 1/2009 to point out the issue of poor project management as part of the problems arising from the 9th Malaysia Plan project implementation. Among the recommendations of the Council include the need to strengthen the planning and monitoring unit of government agencies and to improve the project management competence of government officers. The importance of a project management competence in all project-oriented government agencies was highlighted under Arahan No.1, 2010 Majlis Tindakan Negara, whereby the Council has proposed the establishment of a “Project Monitoring Unit” to monitor implementation of projects and programs.
1.2 Problem Statement

As highlighted in the above section, there is much to be desired of the performance of the public sector POOs in Malaysia in general, and Sarawak, in particular. The level of PM competence of project personnel is questionable; the Government’s acknowledgement and efforts to enhance the competence level of relevant personnel is a first step towards addressing the problem. Nevertheless, the peculiar working environment and nature of work in public sector organizations may hinder the effective enhancement initiatives, as highlighted by Wimalasiri (1993) which argued that public sector employees are risk-averse and bureaucratic, and thus not achievement-oriented, as concluded from the employees’ perception of their workplace. Wimalasiri (1993) added that such structured work setting in the public sector may affect productivity and productive behaviour.

Therefore, the research wishes to determine the project management competency of project personnel in the State’s project-oriented government agencies as well as to determine the factors affecting the project management competency in these agencies.

1.3 Research Objectives

The objectives of the research are as follows:

- To investigate if organizational climate will affect project management competency
- To examine if organizational culture will affect project management competency
- To inspect if nature of work will affect project management competency
1.4 Research Questions

The aim of this research is to find out the probable answers to the research question: *Which of all the factors are heavily affecting the project management competency of the project-oriented organization?* Specifically, the research wishes to determine the following:

- *Will organizational climate affect project management competency?*
- *Will organizational culture affect project management competency?*
- *Will nature of work affect project management competency?*

1.5 Definition of Key Terms

One of the most fundamental terms used in this study is “project-oriented organization” (POO), which identifies the relevant agency of interest to the present research. An explicit definition of POOs as propagated by Gareis (2004), identifies such organizations as adopting a “management by projects” strategy, and for that reason, a POO will have an explicit project management culture, uses temporary organizations for the performance of medium to large scale business processes (projects), manages a project portfolio of different project types, while having specific permanent PM units within their organization structure. Deitrich, Jarvenpaa, Karjalainen and Artto (2002) concurred with Gareis (2004) on the point that POOs’ enduring objective is to manage project portfolios systematically across their whole operation. Within a similar context, Rwelamila (2007) identified public sector organizations handling large numbers of infrastructure projects (project portfolios), which
included departments, ministries, parastatal and other statutory organizations, qualified as project-oriented organizations.

The definition for “project management competency” adopted in this research is “...a combination of knowledge (qualification), skills (ability to do a task), and core personality characteristics (motives + traits + self concepts) that lead to superior results...” based on Crawford (2007). In the present research, “achievement-orientation” competency behaviour is used as a proxy to measure the project management competency of project personnel in POOs, and is defined as “a concern for working well or for competing against a standard of excellence” (Spencer & Spencer, 1993).

“Organizational climate” is defined as “a summary perception of the organization's work environment that is descriptive rather than evaluative” (Wimalasiri, 1993). Meanwhile, “organizational culture” is a set of key values, assumptions, understandings and norms that is shared by members of an organization and taught to new members as correct (Lee, 2008). “Nature of work” is often defined as a description or characteristics of an individual’s job or task at work (Orpen, 1985; Li, Wang, Taylor, She & He, 2008; Johari, Che Mit & Yahya, 2009).

1.6 Significance of the Study

Within the academic research context, there have been several studies carried out to explore the organizational environment factors in terms of comparative analysis in various
work settings, such as public-private comparison, as well as their impact on other work-related consequences, such as job satisfaction, organizational citizenship behaviour, performance, and competence at work, among others. Meanwhile, project management competency studies in Malaysia are focused on the technical competencies requirements, rather than intrinsic behavioural values of project management competence. Therefore, the present research will integrate the PM competence from the behavioural perspective, and the organizational factors that is posited to influence the behavioural displays of the organization’s members. Lastly, the findings of the study would add to the body of knowledge with regards to competency and project management field within the Sarawak context.

On a practical note, the research is able to assist project-oriented organizations from the public sector to address the issues related to project performances and end-results, thus facilitating the improvement of the organization and its employees. This could be strategically done by identifying and targeting the possible factors affecting competency based on established theories. The exploratory and assessment-driven study could be used as part of the organization’s strategic management and reflective exercise.

1.7 Scope of the Study

The research is carried out in selected project-oriented organizations among the State government agencies based in Kuching. The findings of the research may lack generalization to a broader spectrum of project-oriented organizations across sectors, let alone across a
variety of government agencies in Sarawak, from both the State and Federal bodies which are project-focused. Due to budget and time constraint, the research could only be carried out in selected organizations of interest. However, to leverage the shortcomings, the selected agencies should fulfil the criteria of being a project-oriented organization and extensively undertakes project management practices. At the same time, the human resource is proportioned such that the technical capacity or project know-how is substantially representative.

1.8 Organization of Chapters

The following Chapter 2 will elaborate and review literatures to define both the dependent and independent variables, namely project management competency, represented by achievement-orientation, organizational climate and culture, and nature of work. A further discussion to explore the antecedents and consequences of the dependent variable will also be presented in Chapter 2. Next, the probable relationships between the variables form past studies, the underlying theories that support the relationships, and the theoretical framework will be reviewed, before arriving to the hypothesis to be tested in this study. Chapter 3 will outline the methodologies involved in data collection and analysis, before the results are presented and interpreted based on the data analysis selected for this study in Chapter 4.
CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter will review literatures related to the subject matter of the research, to elaborate on the model upon which the present study is largely constructed of: Boyatzis' (1982) "effective job performance" model. The model explains the relationships of competences and other extrinsic factors towards the attainment of effective performance. Since the present study concerns the competencies in individuals and the factors antecedent to such behaviour, the model is posited to be seminal to encapsulate the relationships of human behaviour, i.e. competencies related to project management and their environment, i.e. the organizational setting point-of-view. The underlying theory of concern to the present research, include Kurt Lewin's (1935) "field theory" which led to the "psychological model of behaviour", the "person-environment fit theory" (Caplan, 1987; Holland, 1997) and the "theory of achievement motivation" (Atkinson, 1957; McClelland, 1961); together with the model mentioned earlier, composes the construct for the theoretical framework of this study which will be further reviewed and elaborated. The framework highlights the organizational variables and their hypothesised relations with the degree of competency of project personnel in project-oriented organizations, serves to guide the direction of how the research will be conducted.
2.2 Definition of Model

The "competency" concept is explicated from Boyatzis' (1982) "effective job performance" framework. Effective job performance is best describes accomplishing expected outcomes of a certain job through certain manners which are consistent to and within the context of the organization setting (Boyatzis, 1982).

According to Boyatzis (1982), the model can be thought of as an adaptation of Kurt Lewin's classical "psychological model of behaviour", in which "behaviour is a function of the person and the environment". The framework, as shown in Figure 2.1, explores the relationships between the three critical components: (1) individual's competencies, (2) job demands, and (3) organizational environment, which suggests that effective action, and therefore performance will be attained if the critical components are consistent or "fit" (Boyatzis, 1982).

Figure 2.1: A model of effective job performance (Boyatzis, 1982)
Boyatzis (1982) posits the theory that “competencies (characteristics) are causally related to effective and/or superior performance in a job”. Thus, the possession of the characteristics precedes and leads to effective and/or superior performance in that job. The theoretical prediction of the causal relationship permits an empirical relationship between the characteristic as an independent variable and job performance as a dependent variable (Boyatzis, 1982).

2.3 Antecedents of Competency

Boyatzis’ effective job performance framework underlies several key relationships between the critical components; (1) a relationship between the individual’s competencies and the job’s demands, and (2) a relationship between the individual’s competencies and the organizational environment. According to Boyatzis (1982), when the job’s demands on an individual to produce the desired results require the demonstration of specific actions, the individual’s inner resources is drawn for the capability to respond, thus displaying his or her “competencies”. Therefore, competencies are influenced by the job’s demands.

The organizational environment and cultural aspects affects the organization’s members, such that they may determine the kind of behaviour deemed appropriate and acceptable, and vice versa, to be displayed, and are explained as follows (Boyatzis, 1982):

- Organizational climate or culture, describing the organization’s structure, policies and procedures impact on its members, whether used as an indicator variable or whether the structure, policies and procedures are used directly, the atmosphere or the
environment that the organization creates and transmits to its members affects their performance.

- The mission, goals and objectives of the organization, whether in the public or private sector, will also affect the value and normative messages given to the managers, as well as the affect of degree of clarity, understanding the rationale behind their development, and the procedure utilized in establishing these philosophies.

- The economic, political, social and religious conditions of the culture in which the organization exist, the cultural values determining the status and respect given to people in management, as well as the particular products and reputation of organization, will affect the manager’s behaviour.

Thus, competencies determining the courses of action towards effective performance are influenced by the organizational environment.

Boyatzis (1982) also argued that each competency may exist within the individual at various levels; motives and traits exist at the “unconscious” level, self-image or social role at the “conscious” level and skill at the “behavioural” level. Each level may affect the person’s temperament to use the competency differently, reflected in the “frequency” with which the person applies the competencies in his or her job, as well as in the “degree” to which the competency is applied in any situation (Boyatzis, 1982).

By looking at the underlying characteristics themselves, in particular self-image and social role, these dispositions are deemed as mediators of motives and traits in determining actual behaviour, such that where motives and trait levels of competency exist, self-image and social role levels of the competency help in the selection of actions to be taken (Boyatzis,