

# Strategic project selection in public sector: Construction projects of the Ministry of Defence in Thailand

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## Abstract

Effective and efficient selection of projects in strategy-focused environments is extremely vital for maintaining organizational sustainability. The process of decision making presents itself as a complex scenario involving multi stages, more especially in the public sector. Such scenarios facade as bottlenecks to the success of projects because breaking down complexities is inconceivable without a proper understanding of its content. Therefore, the objective of this paper is to explore and gain an in-depth understanding of the factors influencing three stages of the project selection process namely, conceptual stage, design stage, and final approval stage. In order to achieve this, data related to factors influencing construction project selection in the Thailand's Ministry of Defence was collected and analyzed. The obtained result herein shows that 19 out of 32 factors influencing project selection in the three stages are significantly different. © 2006 Elsevier Ltd and IPMA. All rights reserved.

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## 1. Introduction

In today's dynamic environment, organizations need to adjust themselves for the common goal of sustainability. In order to accomplish this goal, top management of organizations must have a vision which incorporates the well-crafted and well-understood strategies of the organization [1]. Many studies reveal that organizations emphasizing on strategic management generally out-perform those which do not [2–7]. The most difficult stage in strategic management is not how organizations formulate strategy but how they implement it [8,9]. One of the most important steps in strategy implementation is project (or program or activity) selection, which is the organization's essence in accomplishing its ultimate goal. Kaplan and Norton [9] confirmed the importance of project selection by stating

that a critical component for linking strategy to short-term actions is opting for new initiatives.

The impact of the Thailand's economic crisis in 1997 has not only been invasive and far-reaching but has also led to the need for excessive resources for the course of sustainability development in every sector. The public sector has been greatly instrumental towards the country's development and has therefore, had to adjust itself towards the goal of sustainable development of the country. In the past decades, the public sector had steadily expanded into a vast organization with numerous rules, regulations, and intricate procedures. On the other hand, public sector organizations focused on compliance with prevailing regulations rather than on results or meeting the needs of society. These then inevitably lead to ineffective budget utilization. Consequently, a major core function of the existing management components which the Thai government needs to reform is Budget Management. This reform should thus focus on improving the budget management system by placing emphasis on outputs and outcomes. It is believed that effective budget management

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will lead to improved public management processes and will serve as a mechanism to control and examine the utilization of resources for the general public. Such system forces governmental organizations to consider the much larger picture at the conceptual stage, emphasize on the strategic importance of projects at the design stage, and look far beyond set missions to enhance added value to the country at the final approval stage of construction projects. A study of the various factors influencing project selection after such strategic performance-based budgeting is implemented by the Thai government would contribute to improving this process. Thailand's Ministry of Defence (MOD) is chosen as the focus of this study due to its nature of work which consists of state defence and development. In order to achieve optimal utilization of public resources, military budget needs to be effectively utilized not only in times of trouble (wars and unrests, etc.) but also at other times. This is with special reference to the budget allotted for military construction projects, for which the socio-economic value can be regarded as high as national security.

Construction project selection process in the Thai Ministry of Defence is very long, taking at least 18 months from the submittal of proposal up to the budget allocation. There are many staff officers working in the areas of planning and budgeting and have at least 4 committees such as Project Selection Committee and Resource Management Committee being involved in this process. Extremely diversifying factors are considered along this process such as, national security and socio-economic value. Moreover, under the public reform program, the Royal Thai Government needs that MOD involves more in country development by aiming to achieve maximum value from construction project investments in MOD. This leads MOD to impose new factors for considering construction projects. Therefore, the objective of this research study is to explore and gain an in-depth understanding of the factors influencing the three stages of the military construction project selection process namely conceptual stage, design stage, and final approval stage. It is expected that the output of this study can be utilized as the basis for improving the processes and criteria of construction project selection in MOD.

## 2. Overview of project selection

There are many studies on the process of project selection and each of them examines project selection in differing perspectives [10–19]. However, only a few studies have investigated the factors influencing project selection [16–19]. One such research study is by Mohanty [16], which developed a project selection process by the multiple-criteria decision making method. The researcher defined an attractive project as being characterized by: (1) being a viable proposition, (2) having a competent team and a well-structured organization, (3) being a reliable source of capital and other resources, and (4) with a potentially high

investment-return ratio. However, organizations normally prefer to select projects that require minimum investment, require a low degree of competency, can be completed in the shortest time, and have the highest return potential. In reality, ideal projects are difficult to find and thus, the most acceptable project is selected by comparing with other existing proposed projects.

Table 1 presents survey results of above mentioned researchers: Mohanty [16] classifies the criteria influencing project selection into two categories: intrinsic and extrinsic. Okpala [17] conducted a survey on the selection criteria employed in Nigeria and identified 10 factors influencing project selection. Similarly, Rengarajan and Jagannathan [18] developed a scoring model for project selection in the R&D Division of an electrical equipment manufacturer and found 13 factors influencing project selection. Jiang and Klein [19] studied project selection criteria based on strategic orientation and pointed out six groups of factors influencing project selection. On the other hand, an international financial institution like the World Bank appraises infrastructure projects based on the tabulated nine issues [20]. In summary, all factors in Table 1 are comprehensive as they depend on the type of projects and/or the stage of project selection process being considered. However, due to the implementation of the strategic performance-based budgeting by the Thai government, these factors need to be improved and adapted to comply with the new system which was aimed at changing the public sector governance from a public administration to a management approach.

### 2.1. Framework for strategic project selection in the public sector

Literature on strategic management and public management shows that the process of translating strategic formulation into strategic implementation using budget allocation as a tool is critical for the success of an organization [9,21–23]. There are two important stages in the process of selecting projects for budget allocation: initiative conceptualization stage and resource allocation stage, respectively (as termed in this paper). These two stages may be classified into three further sub-stages: conceptual stage, design stage, and final approval stage.

As shown in Fig. 1, once an organization has an established vision and thereafter develops strategies, sets objectives, performance indicators, and strategic targets, the conceptual stage begins with creating functional initiatives. Strategic initiatives are generated from the various existing functional units as compared with strategic transformation, which is implemented top-down. There are a group of factors influencing project selection at this conceptual stage.

On selecting projects at the conceptual stage, the conceptual budget is then identified. Thereafter, all selected functional initiatives are studied for further information and comprehensive understanding. Projects may then be

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