IMPROVING THE PROJECT MANAGEMENT OF LARGE CONSTRUCTION PROJECTS IN DEVELOPING COUNTRIES

ADJUSTING STATE OF THE ART PROJECT MANAGEMENT PRACTICES TO THE VIETNAMESE CONTEXT.
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Adjusting state of the art project management practices to the Vietnamese context

Colophon
Location: Delft, the Netherlands
Date: 13/August/2015
Pages: 80

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Cover photo: Vietnamese construction workers building a mixed residential and commercial project on the outskirts of Ho Chi Minh City, managed by a Taiwanese company. Made by: Chau Doan
“It is always easier to talk about change than to make it.”

— Alvin Toffler
Preface

This work represents a master thesis and is the final part of the Construction Management and Engineering (CME) graduation process, faculty of Civil Engineering in TU Delft, the Netherlands. CME is a two-year master programme that covers the broad area of managing engineering projects. These two years have been a real voyage of both personal and professional discovery. This MSc thesis is based on CME 2200 Graduation Thesis Guideline (2014), written by Julles Verlaan and Rob Schoenmaker. The weight of the graduation project is 36 ECTS points corresponding to 36 weeks, each of which consists of 28 working hours. A planning scheme of the thesis is presented in appendix N.

My master programme at TU Delft addressed the management of construction projects and I decided to do the research in that field. The thesis focuses on the management of light industrial construction projects and is inspired by the current shortfalls and limitations of the approaches used for managing construction projects in developing countries.

This thesis is executed at HaskoningDHV Vietnam. This is a 100% foreign invested company and part of Royal HaskoningDHV from the Netherlands. The company is the leading foreign consultancy company in Vietnam. What attracted me most to this firm are its high reputation and the large construction projects that they are executing. I received great support from the company’s employees during my graduation there. They assisted me with the organisation of the interviews, helped me to understand better the local environment and gave me access to their documentation, for which I am very grateful.

Lastly, I would like to express my gratitude to my graduation committee: Hans Bakker, Marian Bosch-Rekveldt and Martin de Jong, who have supported me during the most exciting and challenging period of my education to date.

Executive summary

Introduction

Construction industry nowadays is becoming more and more global. Many construction companies from the developed world operate overseas. The developing countries are of great interest for these companies, due to their fast-growing economies and big market potential. For the purposes of the current thesis, Vietnam is chosen as an example of a developing country. It is among the fastest growing economies in the South East Asian region and it has had a yearly Gross Domestic Product (GDP) growth of more than 5% for the last several decades. Royal HaskoningDHV is an example of a foreign company which is based in a developed country but which has operated for several decades in Vietnam. This research aims at improving the management of large construction projects in Vietnam by using fit for purpose means. Therefore, the research question is defined as: How to improve the management of Vietnamese large construction projects by using fit for purpose means?

Literature research

To answer this question, a literature research is done in order to explain what Project Management is. Project Management is defined as planning, organizing, monitoring, control and coordination of all aspects of a project and management of all the people involved in it, in order to accomplish the project objectives within the agreed time, budget, and performance and with minimum risk. There are several PM methodologies that are used
worldwide and are based on best practices; Project Management Body of Knowledge (PMBoK) and PRINCE2 are the most well-known among them. Nevertheless, “one size does not fit all” and issues such as lack of material resources, unskilled staff, lack of sufficient funding and inexperienced consultants and contractors make managing projects in developing countries challenging. The different nature of the building industry in developing countries suggests appropriate approaches for managing construction projects.

For successful management of project teams comprising of people from diverse nationalities, it is necessary to have a good understanding of their cultural differences. According to the reviewed literature, Dutch and Vietnamese behave differently towards hierarchy, in-group relations and norms within the society.

The management system of HaskoningDHV Vietnam

The global management system of Royal HaskoningDHV consists of guidelines, tools and practices that help the project managers in their day-to-day work. This system gives the global target of managing projects and is applied in all the 35 countries where the company operates. Each country has to customise and tailor the system at a lower level, taking into consideration the project environment.

Project documentation review and interviews

The data for the exploratory research in the current thesis is taken via case study approach. This case study focuses on the three most recent large projects of HaskoningDHV Vietnam. The presented research is performed on the basis of a two-sided approach, including both project documentation review and interviews. Four people are interviewed for each project – two from HaskoningDHV Vietnam and the other two are a client and a contractor. The purpose of the gathered data is to investigate how Vietnamese projects are managed in practice and to analyse how the management of these projects can be improved. The interviews also include questions related to cultural differences between Dutch and Vietnamese - do they exist and how are they handled in practice.

The results from the interviews and the reviewed documentation show that the reviewed projects have good performance overall. The collaboration with a foreign consultant increases significantly the quality of project management in Vietnam. To a large extent, the three reviewed projects are managed following the local management system of HaskoningDHV Vietnam. In general, the system is found as useful and adequate. However, certain issues are discovered in the projects, such as coordination, communication, change management and schedule control. Lastly, several limitations of the local management system are discovered, which lead to the conclusion that the system has to be updated and improved.

Proposed solutions

The current thesis proposes eight solutions for improving the management of Vietnamese large construction projects. They are based on suggestions of the interviewees, review of the global management system and state of the art project management practices. They are divided into two groups: short and long-term solutions. The short-term solutions are simple tools and practices that can be tested and evaluated for a short period of time. The long-term solutions are process-oriented actions, which provide more structural changes in the current way of managing projects in Vietnam.
Evaluation and implementation of the proposed solutions

The short-term solutions are used in the management of a brewery project. The Construction Manager and the Project Coordinator of this project are interviewed. They are asked to give their opinion both on the short and long-term solutions. The two interviews are used as an evaluation of the solutions. The respondents state that clear benefits can be seen after implementing the short-term solutions within the management of the brewery project and according to them, both short and long-term solutions tend to be useful. Moreover, the quick wins are practical and universal tools and show a high likelihood to be adapted successfully to the PM processes. On the other hand, the long-term solutions lead to more fundamental changes and would require certain adjustments to the currently used management system. The implementation strategies are mainly based on the literature findings on change management and are discussed with the top management team of HaskoningDHV Vietnam.

Conclusions

- Joint venture between Vietnamese and foreign companies can improve the quality of management in Vietnamese large construction projects;
- Foreign managers should adjusting their management practices to the local environment and have a good understanding about the Vietnamese culture.

Recommendations

- Invest more time and resources for the Front-End-Developing phase;
- Client should put less time-pressure, especially in the beginning;
- Contactors should invest more time for planning their activities.

Keywords: management of construction projects, project management, cross-cultural management, fit for purpose, developing countries, Vietnam.
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