

The Impact of Owner's Project Manager on the Outcomes of Construction Projects

Summery

The quest for finding and understanding the main factors for successful construction projects has continued for several decades of research with a goal of improving efficiency, profitability and growth of firms, as well as creating and maintaining a competitive advantage in a robust industry. For many years, researchers have tried to find new methods, better processes, and new materials while using new and modern applications. According to a recent publication by the World Economic Forum, vibrant organizations that strive to improve and advance their technologies, management methods and training are most likely to create a competitive advantage and over-perform the market.

As part of this on-going efforts to shed light over the primary roots of a successful project, one of the most important aspects to consider is the impact of the construction project manager on the overall success of a project. In Israel, today, although not formally but de-facto, the construction project manager's responsibilities also include responsibility for the 'inspection'. In fact, the project manager's role is formally undefined, and there is no mandatory obligation by law to have this position filled in any construction project. As a result, and as can be learned from past research, the actual influence of the project manager on the quality of the construction product is quite limited.

In order to enhance the productivity of the construction industry, and by that – to be able to meet the projected growth rate, it is essential to determine the practical and well-defined project manager's functions. It is essential to define the required education, experience and training in order to become a certified project manager ,as well as, his/her responsibilities in the construction project. The Zeiler committee was formed to investigate the construction industry in Israel as a result of the "Versailles Halls" tragedy. The committee's recommendations, as per the importance of the project manager role in the

construction project, were very definite, and lined up perfectly with previous research findings according to which, although there are construction deficiencies in most of the construction projects, the project management spotted no more than 3% of them. In other words, the project management function, as defined today, is incapable of discovering and mending quality problems in the project.

This research draws guidelines for the definition of the project manager's functions, using in-depth research of construction projects, and by comparing the construction industry in Israel to other developed and modern countries.

The primary purpose of the research was to assess the impact of a project manager on the outcomes of the project in terms of budget, schedule, and quality, and to define an effective and efficient inspection mechanism that will be able to prevent major quality deficiencies, or at least – spot them in early stages. At the end of the research we recommend a formal definition of the project manager's functions in the construction industry in Israel.

The research includes three levels:

1. Literature and market review

In this part, the research reviewed the construction industry conditions in other developed countries, such as the USA, France, UK, and Australia, and compared them to the construction industry in Israel. This part focused on the impact of the project manager on the overall performance of the project.

2. Detailed Field Survey

By using a detailed and focused survey, the research analyzed construction projects in Israel, which were recently completed. The projects were selected from variant fields of construction.

3. Detailed Interviews Survey

By reaching 15 of the most experienced figures in the industry, the research team gathered the knowledge and wisdom that has been gained during many years of experience. The primary goal of this part was to uncover and crystalize the main principles that make a successful project manager, and eventually lead to a successful project.

The main findings of the research were as follows:

- Among all his/her duties, the project manager in Israel is also responsible for the inspection. This situation is different from the other developed western countries that were reviewed in this research, in which project management and inspection are strictly separated in order to prevent conflicts of interest. Those western countries adopted the proactive approach, according to which they use their authority to ensure the quality of the construction and its compliance with all the rules and regulations.
- In Israel, it is very common for fresh engineers to start their career with managing a large scale project. However, according to the study of other countries, this path is not recommended for creating successful project managers.

According to the findings, it is better for an engineer to start as a designer or as a practitioner, and only after gaining significant experience they can evolve to project management. In Israel, the process is often opposite: Engineers start managing projects, and only then they partially learn the basics of design and construction methods. In this situation, and for as long as a project manager is also responsible for inspection, it is essential to promote a regulation that will define what are the needed requirements and experience for an individual to be licensed as a project manager.

There is a significant gap in performance between the private and the public sectors: The private sector outperforms the public sector in achieving the budget and schedule objectives of the project.

- Entrepreneurs in the private sector that use in-house project management, instead or in addition to external services, typically have significantly better performance.
- Although more expensive, the in-house management system is more likely to reduce the overall cost of the project, hence using such management system is usually a good investment.