

#### Ain Shams University

Faculty of Engineering

Department of Structural Engineering

# CRITICAL FACTORS AFFECTING STAKEHOLDER MANAGEMENT IN CONSTRUCTION PROJECTS

By

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# **Statement**

This thesis is submitted as a partial fulfillment of degree of Master of Science in Civil Engineering (Structures), Faculty of Engineering, Ain shams University.

The author carried out the work included in this thesis, and no part of it has been submitted for a degree or qualification at any other scientific entity.

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#### **ABSTRACT:**

Stakeholders play a significant role in either project success or failure. The effective management of stakeholders in residential and commercial construction projects has a great contribution to the project success. This importance of effective management is due to the conflict among stakeholders which is considered as a traditional construction aspect. The probability that the project will be completed successfully is reduced due to conflict between the project team and one or more stakeholders which generated from the lack of stakeholders' management. This study provides the most critical factors impacting the process of stakeholder's management for residential and commercial construction project in Egypt.

Different factors affecting the trend of stakeholder's management were extracted through literature review form many references aiming to cover the chief objective of the research which is identifying and prioritizing the most efficient factors impacting the process of stakeholders management for residential and commercial construction projects ,30 factors were elected for conducting the research those factors were included into 6 groups (Precondition, Stakeholder Identification, Stakeholder Assessment, Decision making, Continuous support & a General factors group) to facilitate the analyzing process, then a face to face interviews with recommended experts in the field of project management for the validation of the questionnaire prior distribution were conducted accordingly a wide range survey was provided for collecting individuals' responses concerning the factors importance for the purpose of prioritizing them according to their effectiveness, impact and influence.

The Survey was emailed through an online survey web site to 136 selected professionals & 19 surveys were handed manually to represent different directions & opinions in construction industry to share their experience extracting the most factors affecting the process of stakeholder's management.

Selected professionals have been either contacted through an on line specific web sites groups represent Stakeholders Management or selected manually trying to reach the most valuable opinion according to professionalism and experience for each individual person. Out of 136 & 19 participants 100 responses (64.5%) were received then the manual printed surveys were manually entered in the online survey to allow dealing with one type of data (Computerized based).

The collected responses were analyzed using the SPSS program than MATLAB program and the results were compared for the purpose of ensuring the most impacting factors.

The result indicates that the most effective Five factors that have a great influence on proper and effective stakeholders management include: Managing Stakeholders with social responsibilities, Exploring stakeholders needs and constraints in projects, Formulating appropriate strategies to manage stakeholders, Build trust between project top management and the most engaged stakeholders in the project, Defining & formulating a clear statement of Project Missions.

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#### CHAPTER (1)

#### INTRODUCTION

## 1.1 General

In this chapter an introduction to project management in construction industry will be overviewed to allow different individuals to be aware of both trades and the relationship between them. Moreover, the research importance, objective and scope of work will be highlighted and introduced.

The use of project management processes to implement organizational strategy has assumed center stage relevance in the 21<sup>st</sup> century (Bredillet, 2010; Gareis, 1989; Peters, 2008).

Earlier, many modern organizations, such as Pfizer pharmaceuticals and Boeing for airports, have long moved from function-based management structures to "projectized" organizations, with outstanding results (Morris & Jamieson, 2005; Pinto, 2002). These "projectized" organizations employ integrated use of project management best practices and critical success factors (CSFs) to ensure successful delivery of organizational projects. The results of deploying such CSFs on projects, are improvement in operational efficiency (Close, 2006), competitiveness (Bredillet, 2005; Ingason & Jonasson, 2009), and overall organizational effectiveness (Boynton & Zmund, 1984; Walker & Dart, 2011).

Project management critical success factors are project management practices and processes which consistent application leads to successful projects (Fortune & White, 2006; Leidecker& Bruno, 1984; Pinto &Slevin, 1989). They are the inputs to the overall project management system that leads to better project performance (Cooke-Davies, 2002; Tabish& Jha,2011). Project management researchers have attempted to find success factors for projects since the 1960s (Baker, Murphy, & Fisher, 1983; Cooke-Davies, 2002; Pinto &Slevin, 1988a;). This search for CSFs is driven by the notion that project success is repeatable (Tabish&Jha, 2011),and that there are factors which their consistent application always leads to successful project outcomes, and improved organizational performance (Chan, Scott, & Chan, 2004; De Wit, 1988; Pinto &Slevin, 1989; Yong &Mustaffa, 2012).

The construction industry is very competitive and risky. To reach successful deliverables, the project should be well-managed. Consequently, stakeholders should be well-managed as well. Successful stakeholders' management means the ability to identify, manage and meet their expectations in addition to addressing the conflicting ranges of needs. Managers have to arrange their strategies to optimize the needs of the stakeholders through efficient management. "Reaching project success point is different from the point of view of each stakeholder. A project that may seem to be successful to the client but on the other hand the same project maybe completely unsuccessful for both the contractors and the end users" (Toor and Ogunlana). For that reason, this research aims to define why do we need to manage stakeholders in residential and commercial construction projects and what are the critical factors that affect this process in all of the construction phases, prior and throughout execution stages, trying to achieve a win-win situation for all of the relevant parties whom are involved in the project.

The construction industry is considered to be a tool for the society to achieve planned goals of both rural and urban development. At the same time it becomes more and more complicated due to the construction process complexity, and the huge number of involved parties including clients, users, designers, regulator, contractors, suppliers and many others. However, many trials have made a remarkable progress for the purpose of improving the process of stakeholders' management.

Yet, still in construction field, there is no formal framework developed completely (Chinyio and Akintoye, 2008). From previous studies, it has been concluded that either for only one stage, as in stakeholder identification (Smith & Love ,2004), and stakeholder influence analysis by Newcombe (2003) or in the case of several stages studies, they are considered to be so far neither coherent nor detailed to be applied in practice. For example, Karlsen(2002) studied "Identification of Stakeholders" in addition to "Analyzing the Stakeholders" as a starting stage for stakeholders' management, taking into consideration that he ignored the stage of "Gathering Information about Stakeholders", which was considered by others such as Young(2006) to be important.

Accordingly, it is concluded that further studies and researches should be applied to identify or develop a formal approach for the interest of both the stakeholders and the project. In this research, the stakeholder's management concept is defined as a process,