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# A Study on Crisis Management in Construction Projects

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**ABSTRACT**: A crisis is a sudden and an unexpected event that threatens to disrupt an organization's operations and poses both a financial and a reputational threat. The accelerated globalization required the companies to differentiate themselves in order to compete with those situations and this reflected on introducing different management strategies. Within this context, the terms "crisis" and "change" are now what the companies are to be dealt with. Both situations bring about uncertainty that led the companies to search for new strategies in order to sustain those uncertainties. The construction companies, who grasp the importance of crisis, have felt the need to incorporate crisis management towards the aim of passing through such crisis situations with the least possible loss and gaining competitive advantage. The main objective of this paper is to study the importance of crisis management in construction projects and analyzing the factors influencing crisis management in construction projects.

**KEYWORDS**: Crisis, Change, unexpected event, reputational threat, uncertainties.

### I. INTRODUCTION

Crisis is a situation faced by a group or an organization, which they are unable to cope with, by the use of normal routine procedures. It can occur as a result of unpredictable events and unforeseeable consequences. Both are common feature of construction companies because of the long-term nature of projects. Therefore it demands for their effective management in preventing crisis and resolving them if such situation occurs. The elements of crisis include a threat to the organization, element of surprise, short decision time and need for change.

Crisis management is a continuous process that includes both proactive and reactive actions with the aim of identifying the crisis, planning a response to the crisis, confronting the crisis, and resolving the crisis. Crisis management process constitutes three main periods that are before, during and after the crisis. They are 1) precrisis includes crisis preparation and planning, where the organization remains uninformed until a crisis is triggered; 2) crisis includes the trigger event and ensuing damage; and 3) postcrisis includes learning from the past experiences, which then informs the precrisis stage.

The crisis management can be well explained on the basis of a conceptual framework that perceives crisis management as a cyclic phenomenon that includes different phases. The phases of the crisis management cycle are 1) prevention phase that involves detecting warning signals and taking actions to mitigate the crisis, 2) preparation phase that involves diagnosing vulnerabilities and developing the crisis plan, 3) response phase that covers the work during an actual incident, with the purpose to get control of the situation and to mitigate its negative consequences and finally, 4) recovery phase covers measures taken in order to rebuild and restore what has been ruined or damaged during the crisis.

#### II. RELATED WORK

Markus Hallgren et.al observed the nature of crises and their remedies that have interfered with project progress of an international construction company are reviewed in this study. Different crises were studied in a "projects-as-practice" approach. Characterization was made of both the nature of these crises and how they were managed. Management of projects carries a certain allure for individuals who shun routine, work-a-day life styles. The uncertainty associated with producing unique output implies that each day can bring new experiences. In this regard,



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Pavlak discussed the fire fighting aspects of management associated with disruptions that threaten projects and crises those affect organizations. As suggested from the literature, both abrupt and cumulative were observed in a project as practice study of an international construction firm despite the company's approach to risk management. Therefore ultimate responsibility for their treatment of various crises lay with the project manager.

Selim Sahina et.al viewed crisis management as a process that includes catching and evaluating crisis signals and needs to take and implement necessary precautions in order to overcome a crisis with a minimal damage. Detecting the early warning signals of a crisis contributes firms to hinder the occurrence of the crisis and to survive without huge financial losses.Factors that contribute construction firms to survive with zero defect can be listed as follows:

- 1. Catching indirect signals before a crisis.
- 2. Developing proactive methods to defend themselves against the crisis.
- 3. Taking the crisis under control.
- 4. Taking required measures after the crisis for the recovery of the firm.
- 5. Recording the lessons learned from the crisis.

Maria Giannacouroua et. al ascertained crises as unusual events that threaten basic structures, introduce high uncertainty and impose time pressures in decision making. A sample of Greek companies was focused to present a preliminary investigation on the impact of crisis on the choice of managerial practices, innovation and formalization. The managers' perceptions regarding uncertainty and expectations about the future of the crisis will be presented since they have been found to influence understanding and shape courses of action. The financial strength and competitive advantage of companies as well as manager's perceptions regarding environmental uncertainty and expectations about the future of the crisis will be presented since they have been found to influence understanding and shape courses of action.

Michal Vondruska considered crises as a common feature of construction projects because of the long-term nature of projects. Crises manifest themselves in sudden outbreaks of a large number of otherwise minor unmanaged risks, or in sudden harmful influence of a major risk. Resulting crisis of a construction project endangers primary goals of the project (budget, deadline, quality) as well as good-will and know-how of company that is in charge. The use of crisis communication as a form of crisis management is utilized in construction crisis management. Resulting crisis of a construction project endangers primary goals of the project (budget, deadline, quality) as well as good-will and know-how of company that is in charge. Good communication is essential for efficient crisis management because information is the antidote to uncertainty that crisis generate. For construction crisis management to be functional, transfer of information about current state of crisis needs to be timely, reliable, and properly represented.

Ian I. Mitroff et. al estimated corporate crises as disasters precipitated by people, organizational structures, economics, and/or technology that cause extensive damage to human life and natural and social environments. They inevitably debilitate both the financial structure and the reputation of a large organization. To manage crises effectively, organizations must first be aware of all the phases and steps involved in the entire process of crisis management. Next, they must be aware of the differences between the phases.

Emin Ocal et. al observed various economical crises that have affected Turkish economy and construction industry has always been among the hardest hit; giving the idea that a comprehensive approach to crisis management is unavoidable. Thus, a questionnaire survey was undertaken by the top management of 120 construction companies to investigate the degree of crisis management applications throughout the industry. The results showed that government policies and instable market conditions were the most important causes of crisis for Turkish construction companies. Meanwhile, only a small number of the companies utilized a systematic crisis management and the extent of crisis management applications varied depending on the size and the structure of the companies.

P. S. Sriraj et.al reported that organizational crisis management has become a very important and fundamental tool for the survival and growth of a firm or corporation. Well-known examples of major crises include the Bhopal chemical spill and the Exxon-Valdez oil spill. One of the main reasons for the enormous losses associated with these events could have been partly because of the lack of coordination and preparedness between the components of the organizations concerned. Conventional methods of dealing with crises have not been successful in preparing organizations for future crisis events, and the extent of the learning process associated with such events has been grossly underestimated in the past. With the help of systems methodologies such as soft systems methodology, this paper has highlighted the systemic nature of such events in preparing a crisis management plan for a city, organization or community.



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Granville King Corporations with established crisis management teams are able to communicate and effectively respond in the event of a crisis. The purpose of this paper is to suggest effective crisis management depends upon several team-related factors that may influence an organization's response and its ethical responsibility. Prior to a crisis, it is the responsibility of the organization and the crisis management team to periodically update the crisis plans, teaches new skills to the crisis team, reassess the crisis portfolio, and make any improvements in the crisis communication system.

Marek Tomastika et.al In today's tough competitive setting we can assume that organizations will increasingly compete for the most able employees who continue to deepen their knowledge, which are able to use not only normal but also crisis management. The managerial competency consists of skills and abilities contribute to the excellent performance of crisis managers. Crisis manager must be a strong managerial personality able to cope with mentally and physically demanding process & recovery of a company. Crisis manager has to deal with crisis situations well, it is necessary to constantly develop their managerial competency.

#### III. CONCLUSION

Crises are unusual events that threaten basic structures, introduce high uncertainty. Both abrupt and cumulative factors were observed in a project as practice of an international construction firm despite the company's approach to risk management. Crises are a common feature of construction projects because of the long-term nature of projects. Crises manifest themselves in sudden outbreaks of a large number of minor unmanaged risks, or in sudden harmful influence of a major risk. The supplier relationships, design and technical factors, price hike, inadequacy of human resource and environmental factors are some of the important aspects that are to be considered in managing crisis in an organization.

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