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Research Clusters

The **Dr Shahryar Sorooshian**, *Senior lecturer, University Malaysia Pahang* has created research clusters, that bring together a eminent group of research with common academic interests, allowing for meaningful ways to promote interdisciplinary and community collaboration, and strengthen high-impact research. The goal is to support the expansion of scholarship and innovative research by identifying and developing existing areas of excellence within the University Malaysia Pahang, which include aging, behavior, health, society, social environment, and management as well as provide a framework for research and training at the doctoral level. Each cluster receives significant funding in combination with external support to provide the team a lake of shared resources that can be used for research, teaching and scholarly dialogue. In that Journal of Management and Science-JMS has been dedicated to this research cluster with Professor **Dr Shahryar Sorooshian** which is publishing the research framework.

Project Analysis: A Research Gap

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ABSTRACT: This Paper is a short communication in the form of a research proposal to highlight the gap of research in project management area. This study focuses on construction projects and suggests research objectives for further studies, with a research roadmap for younger researchers

Keywords: project; Construction industry; Gap of research; Delay source

INTRODUCTION

The roots of construction industry can be traced back to the times when human beings tried to build their own shelters in the ancient times. The construction industry is regarded as a vivid indicator of the economy conditions in each country. The considerable impact of this industry on the overall health of the economy makes it an interesting and crucial area of interest for researchers, economists, and policy-makers alike. The current research aims to present an analysis on the causes of failure of the construction project's schedules. A construction project, similar to any other project, is expected to be completed in a certain time that is specified ahead of starting the physical task of the project during the early phases. A construction project involves a considerable amount of funding that goes to staff, machinery and the capital investment therefore any delay in the completion time will result in huge losses. The delays can impact other parties involved in the construction projects. Some of the main effects of delays can be named as time overrun, cost overrun, disputes between different parties, settlements, lawsuits, and total abandonment [1,2].

EXPLORE THE PROBLEM

The construction companies in many countries around the world experience significant delays. In the United Arab Emirates, a study by Faridi and El-Sayegh [3] revealed that 50% of construction projects encounter delays. In India, a study conducted by the Infrastructure and Project Monitoring Division of the Ministry of Statistics and Program Implementation in 2004 reported that out of 646 central sector projects costing about \$50 trillion, approximately 40% are behind schedule, with delays ranging from 1 to 252 months [4]. In the United Kingdom (U.K.), a report by Building Cost Information Service (BCIS) found that nearly 40% of all studied projects had overrun the contract period [5]. In Saudi Arabia, Assaf and Al-Hejji [6] found that only 30% of construction projects were completed within the scheduled completion dates and that the average time overrun was between 10% and 30%. About 17.3% (of 417 government contract projects) in Malaysia were considered sick (more than 3 months of delay or abandoned) [2]. Many cases for delay in construction industry also have been argued in UAE [7] and Jordan [8]. The available literature and studies that have been performed all around the world indicate that the delays occurring in a project result in an increase in the cost of the project, which makes it difficult to handle the project. [9,10].

In order to be able to prevent delays or decrease them, the construction project managers have to discover the main causes of these delays and also find the proper strategies to deal with them and reduce their effects. Generally, the aim of project management is to facilitate the projects to reach the predefined goals of with employing knowledge, skills, tools and techniques. Therefore, project management is only could be achieved by a combination of management through different levels of project ranging from the early phases of initializing, planning and designing to execution phases and supervisory and control tasks [11,12].

The delays in projects are happened as a result of malfunctions in the employed project management strategies. The critical issue of project delays in the construction industry is not limited to a certain economy or country and generally happens in all economies globally. It has been extensively reported in the literature and the existing surveys that proper performance of the construction industry is vital for the overall development of the economy [13]. Therefore, it is necessary to establish comprehensive understandings of the causes of delays in this industry in order to be able to empower construction industry to reduce delays through managing the available sources. It could only be achieved when all the crucial factors that are involved in delaying the construction projects could be identified, risk based ranked, and contorted. The parties that are responsible for these causes should also be recognized so that the reasons of delays could be traced in different stages of the project and within any of the involved parties.

CONCLUSION AND RESEARCH SUGGESTION

There has been a growing interest among researchers and experts in better understanding of the roots and causes of the failures in construction projects. Moreover, it is essential for the project managers to have a comprehensive understanding of the project setbacks [14]. Based on the literature studies, it can be inferred that the earlier studies concentrated on either the causes of delay or the effects. However, some studies have alluded to the probable link between the causes and effects of delays without a systematic analysis. With this research, all the delay factors will be categorized into fundamental groups based on their similarities and differences. On the contrary to the available literature, in this research, we take an integrated approach and attempt to link the causes and the effects of delays in construction industry through a systematic analysis. Furthermore, with modification of available risk analysis methods, a

reliability analysis will be conducted to test and benchmark the industry. This research also offers better understanding among all parties involved in the construction project to be aware of the delay factors and therefore enhance their performance in order to reach their predefined goals more efficiently.

Based on the problem statement and the gaps in the available literature, the following research objectives are set for further studies.

- To identify delay modes in construction projects and to develop a systematic framework to categorize them.
- To rank delay modes, and to analyze reliability of the construction industry.

In order to investigate the concern of project management issues in construction industry, a semi structure interviews session and questionnaire survey is suggested for further studies. Interview study will focus on respondent's opinion, experience and knowledge of ergonomics in new product and production design. The questionnaire questions concerns to consideration the influences of delay sources.

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REFERENCES

- [15] Aibinu, AA and GO Jagboro 2002. The effects of construction delays on project delivery in Nigerian construction industry. *International Journal of Project Management* 20: 593-599.
- [16] Sambasivan, M. and Y.W. Soon . 2007. Causes and effects of delays in Malaysian construction industry. *International Journal of Project Management* 25: 517-526.
- [17] Lyster, K. C., and Jha, K. N. 2006. —Critical Factors Affecting Schedule Performance: Evidence from Indian Construction Projects. *Journal of Construction Engineering and Management*, ASCE, 132(8), 871-881.
- [18] Faridi, A. S., and El-Sayegh, S. M. 2006. —Significant Factors Causing Delay in the UAE Construction Industry. *Construction Management and Economics*, 24, 1167-1176.
- [19] Lowsley, S., and Linnett, C. 2006. —About Time: Delay Analysis in Construction. *RICS Business Services Limited*.
- [20] Assaf S.A, Al-Hejji S. 2006, Causes of delay in large construction projects. *Int J Project Manage*; 24(4):349–57.
- [21] Saad Hegazy, 2013, Delay analysis Methodology in UAE construction Projects, *PM World Journal*, 1(2):1-21.
- [22] Sweis, G., Sweis, R., Abu Hammad, A. and Shboul, A., 2008, Delays in construction projects: the case of Jordan. *International journal of project management*, 26 (6) 665-674
- [23] Pandey M.K., Dandotiya A., Trivedi M.K, Bhadoriya S.S., Ramasesh G. R., 2012, Delay Computation Using Fuzzy Logic Approach, *IJ. Intelligent Systems and Applications*, 11: 84-90
- [24] Nuhu Braimah, 2013, Construction Delay Analysis Techniques—A Review of Application Issues and Improvement Needs, *Buildings*, 3: 506-53.
- [25] Norzima Zulkifli, Shahryar Sorooshian, Chow Kok Hou, 2011, *Effective Project Management*, LAP Lambert Academic Publishing.
- [26] Saladis, F. P. And kerzner, h. 2011. Bringing the pmbok guide to life: a companion for the practicing project manager: *Technovation* 6(11): 435-446.
- [27] Sorooshian.S, Norzima.Z, Yusof.I, Rosnah. M.Y, 2011, Multi-criteria structured educational factors for project managers, *International engineering and technology education Conference*, Malaysia
- [28] Abdullah, A.A., H.A. Rahman, Z. Harun, A.M. Alashwal and A.M. Beksin ,2010. Literature mapping: A bird's eye view on classification of factors influencing project success. *Afr. J. Bus. Manage* 4: 4174-4182.
