

UNIVERSITI TEKNOLOGI MARA

**THE CRITICAL FACTORS CAUSING
DELAYS IN GOVERNMENT
CONSTRUCTION PROJECTS**

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ABSTRACT

Delay is something that causes biggest problems often experienced on construction project sites. The parties that mainly involved in ensuring the success of a construction projects are owners, contractors and consultants. Construction delays will lead to bad relations between these parties and the cost of a construction project will be increased along the addition of the time given. Delays generally regarded as the most common problem, complex, risky and frequently encountered in a construction project. The vital objective of this study was to identify the critical causes of delays in Government construction projects. An intensive literature review was carried out to identify the causes of delays in construction projects. Then, a questionnaire survey was employed to collect data from 298 participants' from the Public Works Department (JKR) officers selected based on random sampling from different sectors or background of expertise. The totals of 38 causes of delay were integrated in the questionnaires which were grouped under four main categories: Owner related (10 factors), Contractor related (9 factors), Consultant related (10 factors) and External related (9 factors). The data obtained from the survey use a Likert Scale and ranked according to its significance by using Relative Important Index (RII) and Mean Index Score (MIS). As a results, the study found that the group of contractor related was ranked the top most critical causes of delays with $RII = 0.853$, followed by owner related factors ($RII = 0.809$), consultant related ($RII = 0.799$) and external related ($RII = 0.767$). Furthermore, the results reveal that the top ten causes behind the group of delays in public construction projects in Malaysia are: (1) Contractors' financial instability ($RII = 0.905$); (2) Major changes in project scope during construct work ($RII = 0.874$); (3) Ineffective planning and scheduling ($RII = 0.866$); (4) Shortage of labors at construction sites ($RII = 0.862$); (5) Slow in making decisions ($RII = 0.860$); (6) Poor communication and coordination between involved parties ($RII = 0.856$); (7) Poor financial management ($RII = 0.855$); (8) Poor coordination with contractors and other stakeholders ($RII = 0.854$); (9) Delay in sub contractor's work ($RII = 0.852$); and (10) Rework due to mistake ($RII = 0.848$). Finally, the findings of the study can help the parties involved in the Government construction projects to give out appropriate solutions for countering the delay. Herewith are presented some recommendations to minimize these project delays.

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CHAPTER ONE

INTRODUCTION

1.1 Preambles

For the introductory part, the first section of this chapter focuses on the background of the study (research background) which provides a comprehensive overview of how the Malaysian Government gears a long-term national programme through the Malaysia Plan before a development project could be implemented. The second section explains about the problem statement of the study which introduces the reader to the significance of the topic. The third and fourth section states the research questions and objectives, whereas the following section explains on the information regarding the scope of study which highlights the subject that's covered in the research project. The significance of this study will be discussed in the sixth section. The last section explains on the definition of terms used in the study which is intended to guide readers understand commonly used terms when reading, interpreting, and evaluating this research paper.

1.2 Research Background

The Eleventh Malaysia Plan (11MP) is the final acceleration of the development plan towards Vision 2020 which seeks the prosperity and well-being of the people. There are six strategic thrusts for the plan to succeed – Inclusion, People's Prosperity, Human Capital, Green Growth, Infrastructure, and Innovation and Productivity (Economic Planning Unit, 2015). In the Eleventh Malaysia Plan, the Government had an emphasis on improving project management and implementation by public sector project managers. This is because the Government has provided a huge allocation for annual development budget to boost investment, trade and industry, as well as driving Malaysia towards a developed and high-income nation by the year 2020. Therefore, the construction industry is the tool through which a country achieves its goals of urban and rural development for the well-being of people. However, it is becoming more complex because of the sophistication of the