

CONSTRUCTION PROJECT MANAGEMENT FOR BEGINNERS

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Abstract: This book is written to address these challenges by providing practical and actionable steps for both aspiring and practicing construction managers. Readers will also find valuable insights on coordinating with all stakeholders-clients, contractors, consultants, suppliers and regulators- to ensure smooth project execution.

By summarizing the fundamental knowledge required in project supervision, this book aims to equip readers with the tools and confidence to manage projects effectively. Whether you are a student preparing for a career in construction, a beginner taking your first steps as a project manager, or a professional seeking to strengthen your skills, the content here is designed to support your growth.

Ultimately, the success or failure of a construction projects rests heavily on the project manager's competence and leadership. We hope this book will serve as a reliable guide for those committed to delivering projects that meet quality, cost and schedule expectations-while upholding integrity, safety and professionalism in every step of the journey.

Keywords: Communication, development, leadership, quality, strategic

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First Published 2026

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Editor:
SITI MARIAM MOHHAR

Published by:
Penerbit UTHM
Universiti Tun Hussein Onn Malaysia
86400 Parit Raja,
Batu Pahat, Johor
Tel: 07-453 8698/8529
Fax: 07-453 6145

Website: <http://penerbit.uthm.edu.my>
E-mail: pemasaran.uthm@gmail.com

Penerbit UTHM is a member of
Majlis Penerbitan Ilmiah Malaysia (MAPIM)

Printed by:
Attin Press Sdn. Bhd.
No 8, Jalan Perindustrian PP4,
Taman Perindustrian Putra Permai,
43300 Seri Kembangan, Selangor.
No. Tel: 03-89390660



Cataloguing-in-Publication Data

National Library of Malaysia

A catalogue record for this book is available
from the National Library of Malaysia

ISBN 978-629-490-291-6





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Preface

Every great building begins with a vision, but it is the skill of a construction manager that transforms that vision into reality. Behind every successful project lies careful planning, strong leadership, and the ability to overcome challenges with wisdom and determination. This book was written to inspire and guide those who aspire to take on that responsibility.

The construction industry today is expanding rapidly and taking on new dimensions. With projects becoming more complex and demanding, construction managers are required to navigate challenges ranging from cost control and scheduling to environmental, health, and safety regulations. These growing responsibilities highlight the need for competent, well-prepared managers who can ensure that the project are delivered successfully and accepted by clients.

Unfortunately, many projects face delays, cost overruns, and quality issues. From my observations, a lack of comprehensive planning and ineffective supervision often lead to problems such as missed deadlines, budget leaks, and poor workmanship. Common issues include inefficient management, over-reliance on sub-contractors, and the selection of underqualified contractors. These shortcomings not only damage the reputation of construction professionals but also compromise the client's satisfaction and the overall success of the project.

Ir. Shamsulakmar bin Abdul Munir



1 Project Delivery



1.1 Introduction to Construction Management

A project is a unique set of processes consisting of coordinated and controlled activities with start and finish dates, undertaken to achieve an objective. Achievement of the project objective requires deliverables conforming to specific requirements, and includes multiple constraints such as time, cost, and resources.

Construction management is the art of directing and coordinating human resources, methods, tools, and materials throughout the life of a project by using modern management techniques to achieve pre-determined objectives of scope, cost, time, quality, and stakeholder satisfaction. Construction management is the application of knowledge, skills, tools, and techniques to project activities to meet or exceed stakeholder needs and expectations from a project.

Construction management includes the integration of the various phases of the project life cycle. It involves planning, budgeting, coordinating, and supervising a construction project from start to finish. Project management is required at all stage of project development starting from the idea up to the project handover. The construction management system serves as a guide for the overall coordination of the project.

A successful project requires efficient management to ensure that the client's requirements are met in terms of cost, time and quality. It requires the cooperation of all parties involved. Whether from superiors to subordinates. Construction project manager needs to have the ability to identify and solve problems, communicate well and ensure work idea and solution is implemented.

Management elements in the construction management process should be applied in each stage of construction lifecycle. Various management methods need to be used so that everything goes



2 Project Implementation





4 Project Governance



Project governance provides a framework that defines how decisions are made, responsibilities are distributed, and how issues are resolved throughout the project lifecycle. A strong governance structure helps reduce miscommunication, streamline decision-making, and ensure that the project progresses smoothly without unnecessary delays or conflicts. To support effective project governance, the following actions are typically implemented:

- i. Escalation of contractor issues to the Project Manager (PM) or Construction Manager (CM) for timely decisions and resolutions.
- ii. Channelling consultant concerns to the client or project owner for formal feedback and appropriate action.
- iii. Maintaining close coordination among all project team members to manage challenges and ensure alignment in decision-making.

This structure helps to ensure that everyone involved understands their role, reports to the right level of authority, and contributes towards achieving the overall project goals.

4.1 Accountability in Project Management

Accountability is the obligation to take responsibility for decisions, actions, and outcomes. In construction projects, this refers to the duties and expectations placed on individuals or teams to carry out their roles with transparency, integrity, and effectiveness. Accountability ensures that tasks are performed according to the required standards and that any issues are addressed promptly, with responsible parties held answerable for their actions or inactions.

In the context of construction project management, accountability plays a critical role across all stages from planning to supervision and completion. Project managers are expected to lead with responsibility and uphold project quality, safety, and performance. The following points highlight key areas where accountability must be practiced:

5 Success Factor



Successful site management is measured when a project achieves the target of elements cost, time, and quality. To achieve this target, on-site management needs to control all factors that affect cost, on-site work scheduling and the quality of goods and work carried out. The site manager will deal with all stages of construction involving the superiors that is the client up to the unskilled labour. All participants in the construction have their respective roles. These roles and responsibilities should be explained so that there will be no conflict during the process. Good site management requires a construction manager who is competent in all aspects.

The successful completion of a project depends largely on the ability of the engineer as a manager to coordinate the project's journey with the staffs. Construction management, as a discipline, requires a multitude of personal traits, skills, and qualities. The main task of the construction manager is to be responsible for monitoring and ensuring that the construction process runs smoothly and meets the client's needs.

5.1 Construction Project Manager Failure

There may be countless reasons, as varied as the individuals themselves, but that's not what truly matters. Taking the time to reflect deeply on this question can provide valuable insights into ourselves as construction project managers. These are the cause of project manager failure: -

i. Non-communication

Engineers can be average in technical ability but the perception of people on them is the real key to his or her success. Just because a person has a degree or qualifications does not mean that one can function well in an environment with high personnel interaction that the construction industry requires. Engineers must often resolve complex problems that require interactions

6 Leadership Factor



6.1 Leadership

With all that in mind, the basic tool of leadership either in project implementation or administration is the ability to lead. The primary purpose of project leadership is to accomplish results that contribute to the success of project delivery. When a person is in the project team, leadership skills are not only technical. Behaviour qualities are more critical:

i. Inspiring

It is understandable that to achieve greatness, one must first seek it in within oneself and then set the example through words and actions. When word and deeds are aligned, others will want to emulate them. Leaders know that success isn't just about what is accomplished in one's career life, it's about what they inspire others to do. A great leader needs to be a role model. Leaders need to wisely apply their personalities and minds to change attitude and other human behaviours. They must understand the hearts and skills of others and be able to influence them to act through their actions.

ii. Compelling vision and strategy

Every great leadership success always starts with a vision, and the most successful leaders know how to create distinctive strategies that connect to the strategic plans of the organization. A vision reduces uncertainty and provides focus. Effective engineer leaders can express the vision to inspire others towards achieving them. Not only does vision gives people direction and purpose, but they ensure that the employees are working towards the overall organizational goals.

A construction manager must have some ideas about change, about how the future could be different. Vision then, is based on two components: creativity and intellectual drive. One must try to think outside the box to have good visions and to come

A decorative graphic featuring several black gears of different sizes. A large horizontal line with a vertical drop at its right end is positioned above the word 'Bibliography'. Another horizontal line with a vertical drop at its right end is positioned below the word. The gears are arranged around these lines, with some overlapping them.

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Biography



Ir. Shamsulakmar Abdul Munir has 37 years of experience serving in various positions within the Malaysian Government after graduating with a Bachelor of Science (Civil) from the University of Missouri at Rolla, USA. Beginning his career as a project engineer, he went on to hold key roles in the Public Works Department

(JKR), including Civil Engineer, Construction Engineer, District Engineer, Senior Assistant Director (Road), Technical Advisor to the Auditor General's Office, Senior Assistant Director of the Road Facility Maintenance Branch, and Director of the Building Facility Maintenance Branch. Over the course of his career, he has gained extensive expertise in engineering, auditing, and leadership, equipping him with valuable management tools relevant to both technical and leadership roles. Even in retirement, he remains actively involved in the construction industry, sharing his knowledge and contributing to its continued growth.

Noor Khazanah A Rahman was born in Johor Darul Tazim. He is a graduate from University Technology Malaysia with a Bachelor in Civil Engineering. He has worked with several private companies and has served for 13 years in the Johor State Public Works Department (JKR) before continuing his service as an instructor engineer at University Tun Hussein Onn Malaysia. She is active in writing modules for learning and teaching and has produced several civil engineering books.





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ISBN 978-629-490-291-6

0 4 5 0 0



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