

**CENTRE OF STUDIES FOR QUANTITY SURVEYING
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**THE USAGE OF DIGITAL TECHNOLOGIES
AMONG CONSULTANT FIRMS IN MANAGING
CONSTRUCTION PROJECTS IN KLANG
VALLEY**

Dissertation submitted in partial fulfilment of the requirement for
the award of Bachelor of Quantity Surveying (Honours)

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DECLARATION

"I declare that this dissertation is the result of my own research and that all sources are acknowledged in the references"

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ABSTRACT

The construction industry, known for its traditional methods, is adjusting to the digital revolution to keep up with digital technologies. The use of digital technologies in Malaysia's construction industry is affected due to a lack of skills and knowledge among professionals on the usage of digital technologies and the high cost of adopting digital technologies. This research therefore investigates the adoption of digital technologies among consultant firms in managing construction projects in Klang Valley using a questionnaire survey. The data was analysed using descriptive statistics obtained the frequency and cross-tabulation. The results of the analysis revealed most of the consultant firms in Klang Valley adopted digital technologies in their firms consisting of four categories of digital technologies. The most significant digital technologies used are barcode technologies for data acquisition technologies, computers for data processing and storage technologies, wireless technology for communication, and Building Information Modelling (BIM) for intelligent systems. The use of digital technologies in construction sector encountered various challenges, ranging from high capital cost and lack of awareness and knowledge of benefits digital technologies. It is essential to develop a comprehension solution in mitigate the challenges in adopting digital technologies such as educate the employers on the cost info of digital technologies, government initiatives to provide facilities and funding, and enhancing the quality of cybersecurity measures of firms. This study highlights the types, challenges, and solutions in mitigating challenges in adopting digital technologies for the improvement of construction industry in Malaysia.

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TABLE OF CONTENTS

ABSTRACT.....	i
ACKNOWLEDGEMENT.....	ii
LIST OF FIGURES.....	iv
LIST OF TABLES.....	v
LIST OF ABBREVIATIONS	6
CHAPTER 1.....	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND OF RESEARCH	1
1.3 PROBLEM STATEMENT	5
1.4 RESEARCH AIM.....	7
1.5 RESEARCH OBJECTIVES	7
1.6 RESEARCH QUESTIONS.....	8
1.7 METHODOLOGY.....	8
1.8 SCOPE OF RESEARCH.....	11
1.9 CHAPTER ORGANIZATION	11
CHAPTER 2.....	13
2.1 INTRODUCTION.....	13
2.2 DEFINITIONS.....	13
2.3 DIGITAL TECHNOLOGIES IN CONSTRUCTION.....	16
2.4 CHALLENGES USING DIGITAL TECHNOLOGIES AMONG CONSULTANT FIRMS.....	42