



**DEPARTMENT OF BUILT ENVIRONMENT STUDIES  
AND TECHNOLOGY  
COLLEGE OF BUILT ENVIRONMENT  
UNIVERSITI TEKNOLOGI MARA PERAK BRANCH**

**THE IMPLEMENTATION OF INDUSTRIAL  
REVOLUTION 4.0 IN CONSTRUCTION  
INDUSTRY**

**AIMAN HAIKAL BIN MOHD AZIZ**

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## **DECLARATION**

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

Student's signature	:	
Student's name	:	AIMAN HAIKAL BIN MOHD AZIZ
Date	:	FEBRUARY 2024

## **ABSTRACT**

The phrase "Fourth Industrial Revolution" was initially created in 2011 at the Hannover Fair with the intention of advancing the German economy. This revolution has been defined by lots of definitions and arguments. It can be summed up as a set of technologies or a period of digitalization that formulates the integration of all parties involved in the value chain as a whole. Fundamental shifts in how we work, live, and interact with one another will be brought about by IR4.0. IR4.0 offers a chance to assist everyone in utilizing innovative technologies in order to establish an inclusive, human-centered future, from leaders to policymakers, researchers to operators, and people from all socioeconomic classes and countries. Therefore, this research is aimed to determine the challenges faced by consultants towards the implementation of Industrial Revolution 4.0 and provide valuable insight for enhancing IR 4.0 in Malaysian construction industry. The two objectives of the research are; (1) to determine the challenges of Industrial Revolution 4.0 implementation among consultants in construction industry; (2) to encourage the implementation of Industrial Revolution 4.0 among consultant in construction industry. This research was using quantitative method where the questionnaires were distributed to consultant firms in Selangor area. The data gathered will be analyzed using Statistical Packages for Social Science (SPSS) version 27 and the methods that will be used to analyze the data are frequency analysis and descriptive analysis. The findings indicated that most of the respondent from the consultant firms are fully aware of the challenges to implement IR4.0 such as high implementation cost, high requirements and data protection and cybersecurity. As for the strategies to encourage the implementation, all consultant firms need to apply Internet of Things (IoT) sensor in construction process. Future research is essential, as the consultant firms may encounter numerous challenges that warrant further investigation for the construction industry to be able to implement the IR4.0.

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