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**CHALLENGES THAT HINDER THE MALAYSIAN CONSTRUCTION  
CONTRACTOR FROM EMBRACING THE IR 4.0**

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**MARCH 2024**

### ***DECLARATION***

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

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## **ABSTRACT**

Industrial Revolution 4.0 has brought changes in the construction industry technologies like AI, IoT, and robotics are revolutionising how buildings are designed, constructed, and managed. These advancements undoubtedly have enhanced safety and improved efficiency throughout the construction lifecycle. Embracing IR 4.0 enables the industry to leverage innovation, leading to smarter, more sustainable, cost-effective construction practices. However, the implementation of IR 4.0 in the Malaysian Construction Industry is yet to be embraced, thus this study was made to determine the challenges in adapting IR 4.0 among Malaysian contractors. The primary objectives of this research are to determine the level of readiness of the contractor for IR 4.0 adoption and implementation, identify the challenges that hinder the contractor from adopting and utilising IR 4.0, and determine the changes and modifications that can be anticipated in the construction projects if IR 4.0 is implemented. The research methodology used for this research is the quantitative method where the questionnaires were being distributed to a total of 278 respondents from G7 contractors located in Kuala Lumpur with only 90 of the questionnaires returned which brought a 33% response rate. The result gained from the 90 questionnaires indicated the level of readiness of the contractors for the IR 4.0 adoption and implementation, challenges that hinder the contractors from adopting and utilising the IR 4.0, and changes and modifications that can be anticipated in the construction projects if IR 4.0 is implemented.

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# TABLE OF CONTENT

<b>ABSTRACT .....</b>	<b>I</b>
<b>ACKNOWLEDGEMENT .....</b>	<b>II</b>
<b>TABLE OF CONTENT .....</b>	<b>III</b>
<b>LIST OF FIGURES .....</b>	<b>VII</b>
<b>LIST OF TABLES .....</b>	<b>VIII</b>
<b>CHAPTER 1 .....</b>	<b>1</b>
<b>1.1 BACKGROUND OF RESEARCH .....</b>	<b>1</b>
<b>1.2 PROBLEM STATEMENT .....</b>	<b>3</b>
<b>1.3 RESEARCH AIM.....</b>	<b>5</b>
<b>1.4 RESEARCH QUESTION .....</b>	<b>6</b>
<b>1.5 RESEARCH OBJECTIVES.....</b>	<b>6</b>
<b>1.6 SCOPE OF RESEARCH .....</b>	<b>7</b>
<b>1.7 RESEARCH METHODOLOGY .....</b>	<b>7</b>
<b>1.8 SUMMARY .....</b>	<b>9</b>
<b>CHAPTER 2.....</b>	<b>10</b>
<b>2.1 INTRODUCTION .....</b>	<b>10</b>
<b>2.2 OVERVIEW OF THE IR 4.0.....</b>	<b>10</b>
<b>2.3 IR 4.0. IN CONSTRUCTION INDUSTRY .....</b>	<b>12</b>