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**THE COMPETENCY CRITERIA OF
BUILDING INFORMATION
MODELLING (BIM) MANAGERS
AMONG CONSTRUCTION
STAKEHOLDERS IN MALAYSIA**

**NURMAZLINA NABILAH BINTI
MOHD AZMI**

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ABSTRACT

BIM offers numerous advantages that can assist contractors in managing their projects effectively and effortlessly. BIM has the potential to be widely adopted in the construction industry and to be expanded into the architecture, engineering, and construction (AEC) industry. Malaysian Government through CIDB has been promoting the use of BIM since 2013 and it had been proven through various research that the adoption of BIM in the construction industry has many benefits and challenges to the stakeholders. A review of the literature finds a lack of research that focuses on the competencies of BIM managers in Malaysia. Therefore, this research aims to identify the common and most important competencies for BIM managers among construction stakeholders in Malaysia. This research applied Individual BIM Competencies (IBC) approach and of having been categorized into eight competencies variables: managerial, administrative, functional, operational, technical, implementation, supportive, and research and development. The data of this study were collected through an online questionnaire survey that was distributed by e-mail and WhatsApp to 63 companies registered with CIDB myBIM Centre. A descriptive test was employed to identify and analyse the set of competencies of BIM managers. To focus on the most important set of competencies, the highest score shared the same mean score and standard deviation. Those sets of competencies are strategic planning and organizational management. These sets of competencies are under Managerial competency.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The chapter begins with an overview of the research, followed by a statement of the problem. Next, research questions and objectives were developed in response to the problem statements. Additionally, this chapter will discuss in detail the study's significance, scope, and limitations.

1.1 Research Background

Organizations should be aware of their employees' skills, talents, and abilities to progress toward a satisfying job, and career competencies are introduced to help them do so (Beheshtifar, 2011). Crawford proposed three types of competencies in 2005: knowledge and skill, job execution capability, and performance in the workplace (Crawford & Aitken, 2018). Meanwhile, the International Project Management Association (IPMA) 2015 divides competence into three categories: people, practice, and perspective, emphasizing that competency is a set of skills that must be measured for a specific role within an organization (Wong, 2020). To allow an organization to focus on its core business, professional personnel would be hired to maintain and manage the project effectively. Manager competencies, member competencies, and external stability have significant positive relationships to the success criteria and have a significant impact on project performance (Thi & Swierczek, 2010).

Building Information Modelling (BIM) is an old-new and ever-changing concept, technology, and method of construction. It's been a while since BIM obligated itself as a necessity, not just a luxury, due to the massive benefits it's brought to the Architecture, Engineering, and Construction (AEC) industry (Hammoud, 2021). Professional, organizational, and educational institutions have begun to implement BIM software tools and adjust their existing delivery systems to meet changing market demands (Succar et al., 2013). BIM methodology is gaining acceptance in all sectors of the construction industry, beginning with architectural design, and progressing