



**COLLEGE OF BUILT ENVIRONMENT
UNIVERSITI TEKNOLOGI MARA**

**AWARENESS LEVEL AMONG VALUATION PRACTITIONERS ON THE
USE OF THE GEOGRAPHIC INFORMATION SYSTEM (GIS) IN REAL
ESTATE VALUATION**

**Academic report submitted in partial fulfilment of the requirement
for the award of the degree
Bachelor of Real Estate Management (Honours)**

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ABSTRACT

The property valuation process has long relied on manual methods, leading to energy-consuming, time-consuming, and costly procedures. However, the emergence of Geographical Information Systems (GIS) has transformed this landscape, offering enhanced data precision and effectiveness in real estate valuation. Yet, the emphasis of GIS in real estate valuation has been limited, necessitating further investigation. The study explores the potential use of GIS in real estate valuation through existing literature, identifying four main themes: data visualization, price prediction models, mass valuation, and cloud storage, highlighting its versatility and potential to revolutionize traditional valuation practices. An online questionnaire survey revealed a significant lack of awareness among practitioners regarding GIS and its benefits, necessitating targeted awareness campaigns and comprehensive training programs. Integrating GIS with traditional methods can lead to more well-informed valuation practices and better decision-making processes. Further studies should encompass a more diverse sample of valuation practitioners and qualitative approaches to gain deeper insights into perceptions and barriers to GIS adoption. Notably, exploring the broader impact of GIS on real estate valuation, including accuracy improvements, cost-savings, and time reduction, will foster wider acceptance of GIS within the industry, alongside promoting hands-on demonstrations for effective adoption.

Keywords: *real estate valuation, geographic information system, awareness, valuation practitioners.*

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Property valuation had been carried out manually since the profession was introduced in this country a very long time ago. The manual process follows the sequence from obtaining the instruction from the client followed by the registration of the valuation case, usually in files. Afterwards, the subject property data collection is carried out to check the details from JPPH and PTG which later an inspection of the said property shall commence. To obtain the evidence, comparable search is compulsory by searching the recent transactions of similar properties and the site analysis is done by inspecting the site, hence determine the range of land value per square feet, then only the estimation of land value is done based on the range calculated which leads to the market value of the land. Lastly, the respective valuer shall prepare the valuation report alongside with their opinion of value.

In this digitalization era, the real estate profession had also evolved from documenting the data manually in files to segregating the information inside a property software on a computer. The culmination of new technologies brought more accuracy and reliability in data analysis which improves its precision and effectiveness to which the Geographical Information System (GIS) comes into the picture of real estate valuation. GIS is an automated database management system that records, stores, fetches, analyses, and displays data based on location using spatial or geographic coordinates (Ayedun et al., 2022). To ensure consistent use of real estate valuation data, a database built on the Relational Database Management System (RDBMS) can be used to store and exhibit geolocation data, criteria for similar properties, graphs, and imperative charts of the study of the valuation data (Buyong, 1998b).