### **CHAPTER ONE**

#### 1.0 Introduction

The real estate sector has undergone significant transformation in recent years, largely driven by technological advancements. Property management and valuation, traditionally characterized by manual processes and face-to-face interactions, are increasingly becoming digitized and automated. This study examines how technology is reshaping property management and valuation practices, with specific focus on the Kwara State Housing Corporation Estate.

# 1.1 Background to the Study

The real estate industry, traditionally dependent on manual processes, is currently experiencing a significant digital transformation. Technological advancements are reshaping various aspects of property management and valuation, fundamentally changing the way properties are managed, assessed, and traded (Ogunleye & Alao, 2020; Olatunji, 2022).

In property management, the integration of technology has led to greater efficiency and enhanced service delivery. For example, property management software now automates tasks such as rent collection, lease administration, maintenance scheduling, and financial reporting. This automation reduces administrative costs, saves time, and improves both accuracy and transparency (Adegbite & Ajayi, 2021).

Similarly, the field of property valuation has been significantly influenced by technological innovations. Advanced valuation models, driven by artificial intelligence and machine learning, can process large datasets to generate accurate property valuations. These models consider variables such as location, property dimensions, market conditions, and economic trends, resulting in more reliable and unbiased assessments (Okonkwo et al., 2023; Adeyemi, 2024).

This research focuses on examining the impact of these technological advancements on property management and valuation within the context of the Kwara State Housing Corporation Estate. By analyzing real-world applications in this case study, the study aims to highlight the potential benefits and challenges associated with integrating technology in the real estate sector (Babatunde, 2023).

#### 1.2 Statement of Problem

Despite the potential benefits of technology in property management and valuation, several challenges persist. Limited adoption of technological solutions in property management practices within Kwara State, Resistance to change from traditional methods to digital platforms. High initial costs of implementing property management software and digital tools, Inadequate technical expertise among property managers and valuers, Concerns about data security and privacy, Integration challenges between new technologies and existing systems. Reliability of digital valuation methods compared to traditional approaches.

#### 1.3 Research Questions

- 1. What is the current level of technology adoption in property management and valuation at Kwara State Housing Corporation Estate?
- 2. How effective are digital solutions in improving property management efficiency and valuation accuracy?
- 3. What are the major challenges facing the implementation of property technology in Kwara State's real estate sector?
- 4. How does technology impact the accuracy and reliability of property valuations?
- 5. What are the cost implications of implementing property management technology?

### 1.4 Research Hypothesis

Null Hypothesis (H0):

- 1. H01: There is no significant relationship between technology adoption and property management efficiency at Kwara State Housing Corporation Estate.
- 2. H02: The implementation of digital solutions has no significant impact on property valuation accuracy.
- 3. H03: There is no significant difference in operational costs between traditional and technology-based property management methods.

### Alternative Hypothesis (H1):

- 1. H11: There is a significant relationship between technology adoption and property management efficiency at Kwara State Housing Corporation Estate.
- 2. H12: The implementation of digital solutions has a significant impact on property valuation accuracy.
- 3. H13: There is a significant difference in operational costs between traditional and technology-based property management methods.

# 1.5 Aim and Objectives

#### Aim:

The aim of this research work is the role of technology in property management at Kwara State Housing Corporation Estate.

# Objectives are to;

- i. Identify the current state of technology adoption in property management and valuation at Kwara State Housing Corporation Estate.
- ii. Identify the challenges and limitations associated with the adoption and implementation of technology in the estate.
- iii. Identify the specific technological tools and software currently employed by the Kwara State Housing Corporation Estate for property management and valuation.

## 1.6 Justification of the Study

This research is significant for several compelling reasons:

- 1. Knowledge Gap: Limited research exists on technology adoption in property management within the Nigerian context, particularly in Kwara State. This study will contribute to the existing body of knowledge.
- 2. Industry Relevance: The findings will provide valuable insights for:
  - Property managers seeking to modernize their operations
  - Real estate investors making technology investment decisions
  - Policy makers developing regulations for digital property management
  - Educational institutions training future property professionals
- 3. Economic Importance: The study will help identify potential cost savings and efficiency gains through technology adoption, benefiting both property managers and tenants.
- 4. Technological Evolution: As the real estate sector continues to digitize, understanding the role of technology becomes crucial for staying competitive in the market.
- 5. Local Context: The study will provide specific insights into technology adoption challenges and opportunities within the Kwara State context.

# 1.7 Scope of Study

This study focuses on examining the role of technology in property management and valuation, specifically within the context of the Kwara State Housing Corporation Estate. The scope covers the technological tools and processes used to manage properties and conduct property valuations, highlighting their practical applications, benefits, and challenges.

#### 1.9 Definition of Terms

- 1. **Property Management:** The operation, control, and oversight of real estate and physical property. This includes residential, commercial, and land real estate (Thorncroft, 2020).
- 2. **Property Valuation:** The process of developing an opinion of value for real property, usually market value (Appraisal Institute, 2021).

- 3. **PropTech (Property Technology):** The application of information technology and platform economics to real estate markets (Baum, 2017).
- 4. **Geographic Information System (GIS):** A computer system for capturing, storing, checking, and displaying data related to positions on Earth's surface (ESRI, 2022).
- 5. **Computer-Aided Valuation (CAV):** The use of computer software to assist in property valuation through statistical analysis and modeling (Royal Institution of Chartered Surveyors, 2021).
- 6. **Digital Property Management:** The use of software and technology platforms to automate and streamline property management tasks (Property Management Institute, 2023).
- 7. **Virtual Property Tour:** A simulation of an existing location created using still images, videos, or 3D rendering technology (National Association of Realtors, 2022).
- 8. **Big Data Analytics:** The process of examining large and varied data sets to uncover information including hidden patterns, unknown correlations, market trends, and customer preferences (MIT Technology Review, 2023).
- 9. **Valuation:** Valuation is the process of determining the current worth of an asset or liability. It involves estimating the fair market value of a property, business, or other asset. Valuation methods can include comparable sales analysis, income capitalization, and cost approach. Reference: Investopedia: https://www.investopedia.com/terms/v/valuation.asp
- 10. **Technology:** Technology refers to the application of scientific knowledge for practical purposes. It encompasses a wide range of tools, techniques, and systems that 1 are used to solve problems, improve efficiency, and enhance human life. Reference: Merriam-Webster: https://www.britannica.com/technology/technology
- 11. **Property:** Property is a legal term that refers to anything that can be owned, including real estate, personal possessions, and intellectual property. Real property, also known as real estate, consists of land and any structures built on it, such as buildings and houses. Personal property, on the other hand, refers to movable items like cars, furniture, and jewelry.

Reference: Cornell Law School: https://www.law.cornell.edu/wex/property