# CHAPTER THREE

## RESEARCH METHODOLOGY

### 3.0 Research Methodology

This chapter outlines the methodological framework that will be employed to investigate "The Role of Technology in Property Management and Valuation: A Case Study of Kwara State Housing Corporation." It details the research design, the types and sources of data, the instruments for data collection, the target population, the sampling strategy, and the methods that will be used to analyze the collected data to address the research objectives.

### 3.1 Introduction

This chapter provides a comprehensive overview of the research methodology adopted for this study. It articulates the philosophical underpinnings of the research approach, the specific strategies for data collection, and the analytical techniques that will be applied to answer the research questions and achieve the stated objectives. The aim is to ensure a rigorous and systematic investigation into the role of technology in property management and valuation within the context of the Kwara State Housing Corporation.

### 3.2 The Research Design

This study will employ a **mixed-methods research design**, combining both qualitative and quantitative data collection and analysis techniques. This approach is deemed appropriate as it allows for a more comprehensive understanding of the phenomenon under investigation.

**Quantitative Approach:** A survey questionnaire will be used to collect numerical data on the extent of technology adoption, perceived usefulness, perceived ease of use, and the impact of technology on efficiency and accuracy. This will allow for statistical analysis and the identification of patterns and relationships.

**Qualitative Approach:** Semi-structured interviews will be conducted with key personnel at the Kwara State Housing Corporation to gather in-depth insights into their experiences with technology, the challenges faced, and their perspectives on the influence of technology on their work processes.

Qualitative data will provide rich contextual information and complement the quantitative findings.

The case study approach, focusing on the Kwara State Housing Corporation, will allow for an in-depth examination of technology adoption within a specific organizational context.

## 3.3 Data Types and Sources

This study will utilize both primary and secondary data sources:

- **Primary Data:**
    - **Survey Data:** Collected through questionnaires administered to property managers, valuation officers, and other relevant staff at the Kwara State Housing Corporation.
    - **Interview Data:** Gathered through semi-structured interviews with key informants within the Housing Corporation.
- **Secondary Data:**
    - Organizational documents, such as reports on technology adoption, property management procedures, and valuation guidelines.
    - Relevant academic literature, industry reports, and online resources on technology in property management and valuation.

## 3.4 Instrument for Data Collection

The following instruments will be used for data collection:

- **Questionnaire:** A structured questionnaire will be designed to gather quantitative data on various aspects of technology adoption, including:
    - Types of technology currently used.
    - Frequency and extent of technology usage.
    - Perceived usefulness and ease of use of the technologies (based on the TAM).
    - Perceived impact of technology on efficiency, accuracy, and decision-making.

    - Challenges and benefits associated with technology adoption. The questionnaire will utilize a Likert scale for most questions to allow for quantifiable responses.
- **Interview Guide:** A semi-structured interview guide will be developed to facilitate the qualitative data collection process. The guide will include open-ended questions related to:
    - Experiences with technology in property management and valuation.
    - Perceived benefits and drawbacks of using technology.
    - Challenges encountered during technology adoption and implementation.
    - Suggestions for improving technology integration.
    - Perspectives on the future role of technology within the Housing Corporation.

## 3.5 Target Population

The target population for this study will be all employees of the Kwara State Housing Corporation involved in property management and valuation processes. This includes property managers, valuation officers, IT personnel supporting these functions, and relevant administrative staff.

## 3.6 Sample Frame

The sample frame will be a comprehensive list of all employees within the Kwara State Housing Corporation who are directly or indirectly involved in property management and valuation. This list will be obtained from the Human Resources department of the Corporation.

## 3.7 Sample Size

A sample size will be determined using appropriate statistical formulas to ensure representativeness and allow for meaningful quantitative analysis. Considering the potential size of the target population, a sample size of 63.4766 will be selected. This number will be justified based on factors such as the desired level of confidence, margin of error, and the variability within the population. For the qualitative component, a purposive sampling

approach will be used to select key informants who possess rich insights and experiences related to technology adoption within the Corporation. The number of interviewees will be determined by data saturation, where data collection continues until no new significant information is being obtained.

## 3.8 Sampling Procedure

A **stratified random sampling** technique will be employed for the quantitative data collection to ensure representation from different departments or units involved in property management and valuation within the Kwara State Housing Corporation. The strata will be based on job roles (e.g., property managers, valuation officers). Simple random sampling will then be applied within each stratum to select the participants.

For the qualitative data, **purposive sampling** will be used to select key informants who have significant experience and knowledge regarding technology adoption within the Corporation. This may include heads of departments, senior property managers, and valuation experts.

## 3.9 Method of Data Analysis

The data collected will be analyzed using both quantitative and qualitative methods:

- **Quantitative Data Analysis:**
    - Descriptive statistics (e.g., frequencies, percentages, means, standard deviations) will be used to summarize the demographic characteristics of the respondents and the extent of technology adoption.
    - Inferential statistics (e.g., correlation analysis, regression analysis, t-tests, ANOVA) will be employed to examine the relationships between variables, such as perceived usefulness, perceived ease of use, and technology adoption, as well as the impact of technology on efficiency and accuracy. Statistical Package for Social Sciences (SPSS) or similar software will be used for this analysis.

- **Qualitative Data Analysis:**
    - The interview data will be transcribed verbatim and analyzed using thematic analysis. This involves identifying recurring themes, patterns, and meanings within the interview transcripts to provide a rich understanding of the participants' experiences and perspectives. NVivo or similar qualitative data analysis software may be used to assist in this process.
- **Integration of Quantitative and Qualitative Data:** The findings from the quantitative and qualitative analyses will be triangulated to provide a more comprehensive and nuanced understanding of the role of technology in property management and valuation at the Kwara State Housing Corporation. Quantitative findings may be supported and explained by the qualitative insights, and vice versa.