

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Digital mapping refers to the process of creating and using digital maps to represent and analysis geographic data, it involves the use of geographic information system (GIS) software to create, edit, and, analyse digital maps.

In the context of surveying and Geo-informatics digital mapping enhance efficiency of spatial data collection, analysis and visualisation making it essential for a range of applications including urban and environmental monitoring and disaster management.

Digital mapping has revolutionised the field of surveying, enabling the creation of accurate and detailed maps that can be used for a variety of purposes including land use planning, infrastructure development and environment monitoring. This project aims to explore the application of digital mapping in surveying with a focus on land use planning in Nigeria. Digital mapping allows for more accurate data collection and analysis, reducing errors and improving the reliability of survey results.

Digital mapping automates many tasks such as data collection and analysis, allowing surveyors to focus on higher level tasks and improving overall efficiency.

Digital mapping reduces the need for physical equipment and materials, making it a cost effective option for surveying projects.

A Map is a visual representation of an area typically showing the relationships between element of that space such as roads, rivers, and building. Maps can be physical, digital or a combination of both and they are serving various purposes including navigation, planning and organization.

Mapping Involves carrying out observation for the natural and artificial features on the earth surface and represent them in form that is understandable to the end user either as a chart, map or Plan. Digital mapping began in the 1960s with the development of computer aided design (CAD) software The Introduction of geographic Information system and global positioning system technologies further accelerated the adoption of digital mapping in Surveying.

1.2 STATEMENT OF PROBLEM

The lack of a digital map for Adewole Federal Staff school hinders efficient navigation, facility management. The school current mapping system is outdated and the data is not accurate.

1.3 AIM OF THE PROJECT

The aim of the project is to carry out a digital mapping of Federal Staff School Adewole, Kano Road Ilorin, Kwara State

1.4 OBJECTIVE OF THE PROJECT

- i. To show the position of artificial feature.
- ii. To Develop a digital mapping system that prides accurate and up-to-date mapping Information
- iii. To collect and analyzed data on the current see of mapping in Federal Staff School Adewole, including data on accuracy, access, efficiency.
- iv. To determine the perimeter and area of the project.

1.5 SCOPE OF THE PROJECT

The scope of this project includes the development of a digital mapping system that addresses the limitation of the current mapping system.

- **Data collection:** Collect data on the current state of mapping in Federal Staff School Adewole, including data on accuracy, access, efficiency.
- **Testing and Evaluation:** Test and evaluate the digital mapping System to ensure that it meets the need of the supervisor approval.
- **System Development:** Develop a digital mapping system that Includes data collection, analysis and dissemination tools.
- Information presentation

1.6 SPECIFICATION OF THE PROJECT

The project aims to develop a digital mapping system that provides accurate and up-to-date mapping information to Federal Staff School Adewole.

- The distance between the pillar should not be more than 250m

- A closed traverse will be carried out for field work
- The Scale should not be more than 1: 2500

1.7 PROJECT LOCATION

The project area is Federal Staff School, Kano Road, Adewole Estate Ilorin, Kwara State which covered the Primary and Secondary School on the geographical coordinate of Easting and Northing

LAT 4°513 E

LONG 8.4727°N

LAT 4° 30'47"

LONG 8 28' 40"N

1.8 PARTICIPANT OF THE PROJECT

This includes the list of the student Involved in the project

S/N	NAME	MATRIC NO.	ROLE PLAYED
1.	IBITOYE JOSHUA AYOKUNLE	HND/23/SGI/FT/0047	AUTHOR
2.	OJO ADEBISI MOTUNRATO	HND/23/SGI/FT/0041	MEMBER
3.	OSUNLEKE HABEEB OLAIDE	HND/22/SG1/FT 052	MEMBER
4.	ADEBAYO BLESSING MARY	HND/23/SGI/FT/0042	MEMBER
5.	DADA ELIZABETH OLUWAPELUMI	HND/23/SGI/FT/0043	MEMBER
6.	OLADIMEJI RAPHEAL OLUWASEUN	HND/23/SGI/FT/0045	MEMBER
7.	AKINYEJO EZEKIEL DAMILOLA	HND/23/SGI/FT/0051	MEMBER