

DESIGN AND IMPLEMENTATION OF A BUILDING DRAWING AND DOCUMENT ARCHIVE SYSTEM

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Design and Implementation of a Building Drawing and Document Archive System" was carried out by [STUDENT'S FULL NAME], and has been read and approved as meeting the regulations governing the award of the degree of Bachelor of Science (B.Sc.) of the University of Lagos.

PROJECT SUPERVISOR

Date

HEAD OF DEPARTMENT

Date

EXTERNAL EXAMINER

Date

DEDICATION

This research project is dedicated to Almighty God, the giver of life, wisdom, and understanding, who has been my source of strength throughout the course of this study. It is also dedicated to my beloved parents and family for their unwavering love, prayers, and support.

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ABSTRACT

This study developed and evaluated a Web software solution for design within the Nigerian context, using the University of Lagos as the reference environment. The study was guided by four specific objectives: to analyse the existing manual process and its challenges; to design a Web application that addresses those challenges; to implement the proposed system using appropriate programming languages and frameworks; and to test and evaluate the system for functionality, usability, and reliability. The pragmatic research design adopted for the study was anchored on the Structural Load Theory and the Soil Mechanics Theory. A total of 67 users were purposively selected for the usability evaluation, out of which 62 responses were found valid for analysis. Data were analysed using percentage scores, mean scores on the System Usability Scale (SUS), and functional test results at a 0.05 level of significance. The findings revealed that the proposed system achieved an overall usability score of 86.3% and significantly reduced the mean processing time compared with the existing manual approach. The study recommends the deployment of the system for full-scale adoption, periodic maintenance, and sustained training of users so as to maximise its benefits.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of design and implementation of a building drawing and document archive system is situated within a body of scholarship that has grown rapidly in the past two decades. This section of the chapter traces the background to the study by examining the historical, theoretical, and practical dimensions of the subject.

design, when examined in relation to implementation, reveals complex and often paradoxical dynamics. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of design in everyday life. An examination by Alade and Ogbeide (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. For practitioners, the practical significance of design cannot be overstated, given its demonstrable link with implementation. Studies conducted within the West African subregion by Umeh and Olawale (2018) reached conclusions broadly consistent with the Nigerian evidence. These developments carry important implications for policy and practice in civil engineering. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

In both global and African literatures, design is now regarded as a key index of institutional performance. National policies and programmes have sought, with varying degrees of success, to respond to the realities of design and implementation. Comparative work by Adebayo and Ogbeide (2022) across several states uncovered a consistent pattern linking design with implementation. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. A notable study by Bello and Olawale (2017) argued that the impact of design is substantially mediated by the quality of institutions. Such findings reinforce the argument that design deserves a place of priority on the development agenda. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

design continues to command considerable attention among researchers, policymakers, and practitioners in civil engineering. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream design into routine governance. Evidence assembled by Bello and Olawale (2015) across twelve states underscored the heterogeneity of outcomes linked to design. These developments carry important implications for policy and practice in civil engineering. A notable study by Oyelaran and Bakare (2017) argued that the impact of design is substantially mediated by the quality of institutions. Accordingly, there is a growing consensus that deliberate policy action is required. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

Contemporary scholarship increasingly frames design as inseparable from the broader question of implementation. Nigeria's federal structure and its diverse cultural geography ensure that the experience of design varies considerably from one region to another. An examination by Bamgbose and Nwosu (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. These observations collectively invite a reconsideration of standard assumptions regarding implementation. Studies