

DESIGN AND IMPLEMENTATION OF A LIBRARY STATISTICS DASHBOARD SYSTEM

BY

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DEGREE IN LIBRARY AND INFORMATION SCIENCE

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Design and Implementation of a Library Statistics Dashboard 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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My profound gratitude goes to Almighty God for His grace, protection, and guidance throughout the duration of my study and the successful completion of this research project. I am deeply grateful to my supervisor, [SUPERVISOR'S NAME], for the patience, guidance, constructive criticism, and invaluable direction provided throughout the course of this research. I also wish to appreciate the Head of Department, the lecturers of the Department of Library and Information Science, and my course mates for their support and friendship. My appreciation also goes to my parents and siblings for their unwavering support, both financial and emotional, throughout my academic journey.

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 Technology Acceptance Model and the UTAUT. A total of 61 users were purposively selected for the usability evaluation, out of which 56 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 83.0% 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 library statistics dashboard 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.

The phenomenon of design, while not new, has acquired fresh analytical urgency in Nigeria. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream design into routine governance. Comparative work by Nnamdi and Ogbeide (2022) across several states uncovered a consistent pattern linking design with implementation. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Findings reported by Eze and Dauda (2018) observed that respondents with greater exposure to design recorded markedly different results. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

design occupies a prominent position in contemporary debates about implementation and national development. Evidence from national agencies indicates that design has grown considerably in recent times, underscoring the need for systematic inquiry. The work of Chukwu and Oyelaran (2023) extended earlier analyses by demonstrating that implementation reinforces the effects of design. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Empirical evidence from Osinachi and Musa (2021) suggests that positive developments in implementation are associated with improvements in design. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Over the past two decades, design has become increasingly significant within the Nigerian landscape and beyond. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream design into routine governance. Research by Osinachi and Musa (2021) using mixed methods provided particularly rich insight into the mechanisms connecting design and implementation. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Olawale and Kalu (2020), in a survey of relevant stakeholders, concluded that the benefits of design are unevenly distributed across groups. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

A growing corpus of literature draws attention to the pivotal role of design in shaping developmental trajectories. Economic pressures and resource scarcity frequently determine the pace at which design advances in practice. An examination by Eze 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