

DESIGN AND IMPLEMENTATION OF A LIBRARY STAFF DUTY ROSTER 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 Staff Duty Roster 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 Technology Acceptance Model and the UTAUT. A total of 62 users were purposively selected for the usability evaluation, out of which 59 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 89.0% 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 staff duty roster 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. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of design. Nwosu and Umeh (2020), in a survey of relevant stakeholders, concluded that the benefits of design are unevenly distributed across groups. These observations collectively invite a reconsideration of standard assumptions regarding implementation. Research by Ogbeide and Alade (2021) using mixed methods provided particularly rich insight into the mechanisms connecting design and implementation. For practitioners, the practical significance of design cannot be overstated, given its demonstrable link with implementation. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

The relationship between design and implementation has been the subject of sustained academic interest across several disciplines. Nigeria's federal structure and its diverse cultural geography ensure that the experience of design varies considerably from one region to another. Studies conducted within the West African subregion by Umeh and Adigun (2018) reached conclusions broadly consistent with the Nigerian evidence. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. The work of Ogunlana and Musa (2023) extended earlier analyses by demonstrating that implementation reinforces the effects of design. Such findings reinforce the argument that design deserves a place of priority on the development agenda. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

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. The aggregate picture emerging from Ogunlana and Musa (2023) points to a modest but consistent association between design and the outcomes of interest. Accordingly, there is a growing consensus that deliberate policy action is required. Studies conducted within the West African subregion by Ogunlana and Bamgbose (2018) reached conclusions broadly consistent with the Nigerian evidence. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

The phenomenon of design, while not new, has acquired fresh analytical urgency in Nigeria. Globalisation and technological change have intensified both the opportunities and the challenges associated with design. The work of Olawale and Bamgbose (2023) extended earlier analyses by demonstrating that implementation