

DESIGN AND IMPLEMENTATION OF AN ONLINE SURVEY AND DATA COLLECTION SYSTEM

BY

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DEGREE IN STATISTICS

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Design and Implementation of an Online Survey and Data Collection 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 Statistics, 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 66 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 82.8% 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 an online survey and data collection 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. Evidence from national agencies indicates that design has grown considerably in recent times, underscoring the need for systematic inquiry. Field evidence gathered by Eze and Umeh (2016) suggested that stakeholder engagement materially improves the results achieved in matters of design. Such findings reinforce the argument that design deserves a place of priority on the development agenda. Findings reported by Alade and Oyelaran (2018) observed that respondents with greater exposure to design recorded markedly different results. These developments carry important implications for policy and practice in statistics. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

design occupies a prominent position in contemporary debates about implementation and national development. In Nigeria, the intersection of design and implementation is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. Studies by Dauda and Ogunlana (2019) largely support the view that design exerts a measurable influence on outcomes of interest. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. The work of Osinachi and Eze (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. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Scholars have long recognised design as a critical determinant of outcomes in statistics. Nigeria's federal structure and its diverse cultural geography ensure that the experience of design varies considerably from one region to another. Osinachi and Eze (2020), in a survey of relevant stakeholders, concluded that the benefits of design are unevenly distributed across groups. These developments carry important implications for policy and practice in statistics. The work of Adekunle and Adekunle (2023) extended earlier analyses by demonstrating that implementation reinforces the effects of design. For practitioners, the practical significance of design cannot be overstated, given its demonstrable link with implementation. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Few subjects attract as much policy interest in contemporary Nigeria as the question of design. Globalisation and technological change have intensified both the opportunities and the challenges associated with design. The work of Famuyide and Aderemi (2023) extended earlier analyses by demonstrating that implementation reinforces the effects of design. These observations collectively invite a reconsideration of standard assumptions regarding implementation. The work of Nwosu and Salami (2023) extended earlier analyses by