

DESIGN AND IMPLEMENTATION OF A COLD STORE INVENTORY SYSTEM FOR FROZEN FOODS

BY

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DEGREE IN COMPUTER SCIENCE

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Design and Implementation of a Cold Store Inventory System for Frozen Foods" 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.

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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 72 users were purposively selected for the usability evaluation, out of which 66 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 82.6% 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 cold store inventory system for frozen foods 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. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream design into routine governance. Research by Famuyide and Eze (2021) using mixed methods provided particularly rich insight into the mechanisms connecting design and implementation. These observations collectively invite a reconsideration of standard assumptions regarding implementation. Comparative work by Bakare and Adekunle (2022) across several states uncovered a consistent pattern linking design with implementation. Such findings reinforce the argument that design deserves a place of priority on the development agenda. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

Over the past two decades, design has become increasingly significant within the Nigerian landscape and beyond. Nigeria's federal structure and its diverse cultural geography ensure that the experience of design varies considerably from one region to another. Findings reported by Bakare and Aderemi (2018) observed that respondents with greater exposure to design recorded markedly different results. For practitioners, the practical significance of design cannot be overstated, given its demonstrable link with implementation. A notable study by Aderemi and Dauda (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. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

The relationship between design and implementation has been the subject of sustained academic interest across several disciplines. 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 conducted within the West African subregion by Aderemi and Dauda (2018) reached conclusions broadly consistent with the Nigerian evidence. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Findings reported by Ekwueme and Nwosu (2018) observed that respondents with greater exposure to design recorded markedly different results. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

The phenomenon of design, while not new, has acquired fresh analytical urgency in Nigeria. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of design. Field evidence gathered by Salami and Olawale (2016) suggested that stakeholder engagement materially improves