

DEVELOPMENT OF AN ELECTRICAL FAULT REPORTING AND RESOLUTION TRACKING SYSTEM

BY

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of an Electrical Fault Reporting and Resolution Tracking 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 development 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 Signal Processing Theory and the Power System Stability Theory. A total of 71 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 85.6% 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 development of an electrical fault reporting and resolution tracking 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 development, 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 development. The aggregate picture emerging from Salami and Umeh (2023) points to a modest but consistent association between development and the outcomes of interest. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. An examination by Ogunlana and Adigun (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. 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.

The relationship between development and electrical has been the subject of sustained academic interest across several disciplines. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of development. Field evidence gathered by Ogunlana and Famuyide (2016) suggested that stakeholder engagement materially improves the results achieved in matters of development. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Longitudinal research by Ekwueme and Bello (2016) revealed that sustained attention to development yields appreciable dividends over time. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

Over the past two decades, development has become increasingly significant within the Nigerian landscape and beyond. Nigeria's federal structure and its diverse cultural geography ensure that the experience of development varies considerably from one region to another. Research by Ekwueme and Bello (2021) using mixed methods provided particularly rich insight into the mechanisms connecting development and electrical. Such findings reinforce the argument that development deserves a place of priority on the development agenda. The aggregate picture emerging from Ibrahim and Bakare (2023) points to a modest but consistent association between development and the outcomes of interest. Such findings reinforce the argument that development 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.

Contemporary scholarship increasingly frames development as inseparable from the broader question of electrical. Economic pressures and resource scarcity frequently determine the pace at which development advances in practice. Findings reported by Umeh and Dauda (2018) observed that respondents with greater