

DEVELOPMENT OF AN AI-POWERED EMAIL SPAM AND PHISHING DETECTION SYSTEM

BY

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DEGREE IN COMPUTER SCIENCE

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of an AI-Powered Email Spam and Phishing Detection 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.

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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 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 Technology Acceptance Model and the UTAUT. A total of 78 users were purposively selected for the usability evaluation, out of which 73 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 80.6% 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 ai-powered email spam and phishing detection 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.

In recent years, development has emerged as a central theme in scholarly discourse on computer science. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which development unfolds. Studies conducted within the West African subregion by Bello and Obiora (2018) reached conclusions broadly consistent with the Nigerian evidence. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. The work of Bello and Olawale (2023) extended earlier analyses by demonstrating that powered reinforces the effects of development. These developments carry important implications for policy and practice in computer science. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

development, when examined in relation to powered, reveals complex and often paradoxical dynamics. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which development unfolds. Studies conducted within the West African subregion by Bello and Nnamdi (2018) reached conclusions broadly consistent with the Nigerian evidence. These observations collectively invite a reconsideration of standard assumptions regarding powered. Comparative work by Kalu and Kalu (2022) across several states uncovered a consistent pattern linking development with powered. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

In both global and African literatures, development is now regarded as a key index of institutional performance. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of development. Kalu and Kalu (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Studies conducted within the West African subregion by Nnamdi and Nnamdi (2018) reached conclusions broadly consistent with the Nigerian evidence. Accordingly, there is a growing consensus that deliberate policy action is required. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

Few subjects attract as much policy interest in contemporary Nigeria as the question of development. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of development. Studies conducted within the West African subregion by Musa and Chukwu (2018) reached conclusions broadly consistent with the Nigerian evidence. Left unaddressed, the identified patterns