DESIGN AND IMPLEMENTATION OF A FAKE NEWS DETECTION SYSTEM USING MACHINE LEARNING

BY

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Design and Implementation of a Fake News Detection System Using Machine Learning" 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

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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 Computer Science, 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 76 users were purposively selected for the usability evaluation, out of which 68 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 87.6% 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 fake news detection system using machine learning 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.

Contemporary scholarship increasingly frames design as inseparable from the broader question of implementation. Economic pressures and resource scarcity frequently determine the pace at which design advances in practice. A notable study by Umeh and Ogbeide (2017) argued that the impact of design is substantially mediated by the quality of institutions. For practitioners, the practical significance of design cannot be overstated, given its demonstrable link with implementation. Field evidence gathered by Osinachi and Obiora (2016) suggested that stakeholder engagement materially improves the results achieved in matters of design. 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.

A growing corpus of literature draws attention to the pivotal role of design in shaping developmental trajectories. National policies and programmes have sought, with varying degrees of success, to respond to the realities of design and implementation. Research by Adigun and Adebayo (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. Studies by Adigun and Olawale (2019) largely support the view that design exerts a measurable influence on outcomes of interest. Such findings reinforce the argument that design deserves a place of priority on the development agenda. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

In both global and African literatures, design is now regarded as a key index of institutional performance. Globalisation and technological change have intensified both the opportunities and the challenges associated with design. Field evidence gathered by Adigun and Olawale (2016) suggested that stakeholder engagement materially improves the results achieved in matters of design. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. An examination by Okonkwo and Famuyide (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. For practitioners, the practical significance of design cannot be overstated, given its demonstrable link with implementation. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

In both global and African literatures, design is now regarded as a key index of institutional performance. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of design. The aggregate picture emerging from Adeniyi and Aderemi (2023) points to a modest but consistent association between design and the outcomes of interest. The weight of evidence