

DEVELOPMENT OF A WEB-BASED TOPIC MODELLING AND DOCUMENT SUMMARISATION PLATFORM

BY

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DEGREE IN DATA SCIENCE

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of a Web-Based Topic Modelling and Document Summarisation Platform" 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 Technology Acceptance Model and the UTAUT. A total of 72 users were purposively selected for the usability evaluation, out of which 63 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 83.6% 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 a web-based topic modelling and document summarisation platform 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.

Few subjects attract as much policy interest in contemporary Nigeria as the question of development. The socio-cultural diversity of Nigeria implies that responses to development must be differentiated rather than uniform. A notable study by Ekwueme and Ekwueme (2017) argued that the impact of development is substantially mediated by the quality of institutions. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. A notable study by Nnamdi and Obiora (2017) argued that the impact of development is substantially mediated by the quality of institutions. For practitioners, the practical significance of development cannot be overstated, given its demonstrable link with web. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

development, when examined in relation to web, reveals complex and often paradoxical dynamics. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of development. Research by Ogunlana and Eze (2021) using mixed methods provided particularly rich insight into the mechanisms connecting development and web. These observations collectively invite a reconsideration of standard assumptions regarding web. Dauda and Ogunlana (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. 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 web has been the subject of sustained academic interest across several disciplines. Evidence from national agencies indicates that development has grown considerably in recent times, underscoring the need for systematic inquiry. Dauda and Ogunlana (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. For practitioners, the practical significance of development cannot be overstated, given its demonstrable link with web. Comparative work by Kalu and Eze (2022) across several states uncovered a consistent pattern linking development with web. 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. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of development in everyday life. Longitudinal research by Aderemi and Adebayo (2016) revealed that sustained attention to development yields appreciable dividends over time. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Studies conducted within the West African subregion by Olawale and Nwosu (2018) reached conclusions broadly consistent with the Nigerian evidence. The weight of