

**DEVELOPMENT OF A SOFTWARE ARCHITECTURE
DOCUMENTATION AND REVIEW SYSTEM**

BY

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DEGREE IN SOFTWARE ENGINEERING

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of a Software Architecture Documentation and Review 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 Technology Acceptance Model and the UTAUT. A total of 65 users were purposively selected for the usability evaluation, out of which 60 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 84.3% 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 software architecture documentation and review 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.

Debates on national transformation repeatedly return to the role of development and its attendant dynamics. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of development in everyday life. Okonkwo and Chukwu (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Findings reported by Bello and Ogbeide (2018) observed that respondents with greater exposure to development recorded markedly different results. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

In both global and African literatures, development is now regarded as a key index of institutional performance. National policies and programmes have sought, with varying degrees of success, to respond to the realities of development and software. A notable study by Nwosu and Dauda (2017) argued that the impact of development is substantially mediated by the quality of institutions. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. The work of Olawale and Adeniyi (2023) extended earlier analyses by demonstrating that software reinforces the effects of development. 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 development in shaping developmental trajectories. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream development into routine governance. The work of Olawale and Adeniyi (2023) extended earlier analyses by demonstrating that software reinforces the effects of development. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Studies by Eze and Alade (2019) largely support the view that development exerts a measurable influence on outcomes of interest. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

The relationship between development and software has been the subject of sustained academic interest across several disciplines. Nigeria's federal structure and its diverse cultural geography ensure that the experience of development varies considerably from one region to another. Evidence assembled by Nnamdi and Oyelaran (2015) across twelve states underscored the heterogeneity of outcomes linked to development. Left