

DEVELOPMENT OF A REQUIREMENTS MANAGEMENT AND TRACEABILITY SYSTEM

BY

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of a Requirements Management and Traceability 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 60 users were purposively selected for the usability evaluation, out of which 51 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 86.5% 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 requirements management and traceability 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.

development occupies a prominent position in contemporary debates about requirements and national development. Globalisation and technological change have intensified both the opportunities and the challenges associated with development. The aggregate picture emerging from Adigun and Nwosu (2023) points to a modest but consistent association between development and the outcomes of interest. Accordingly, there is a growing consensus that deliberate policy action is required. An examination by Kalu and Famuyide (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. These developments carry important implications for policy and practice in information technology. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

development, when examined in relation to requirements, reveals complex and often paradoxical dynamics. Auxiliary variables, including education, income, and location, further condition how development is experienced across communities. An examination by Osinachi and Nwosu (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Longitudinal research by Bakare and Olawale (2016) revealed that sustained attention to development yields appreciable dividends over time. Such findings reinforce the argument that development 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.

development, when examined in relation to requirements, reveals complex and often paradoxical dynamics. Nigeria's federal structure and its diverse cultural geography ensure that the experience of development varies considerably from one region to another. A notable study by Bakare and Olawale (2017) argued that the impact of development is substantially mediated by the quality of institutions. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Research by Ogbeide and Olawale (2021) using mixed methods provided particularly rich insight into the mechanisms connecting development and requirements. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Contemporary scholarship increasingly frames development as inseparable from the broader question of requirements. National policies and programmes have sought, with varying degrees of success, to respond to the realities of development and requirements. The aggregate picture emerging from Ibrahim and Osinachi