

DEVELOPMENT OF A PROCESS CAPABILITY AND MATURITY ASSESSMENT SYSTEM

BY

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of a Process Capability and Maturity Assessment 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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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 71 users were purposively selected for the usability evaluation, out of which 66 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 86.6% 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 process capability and maturity assessment 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.

The salience of development in national discourse has grown steadily, driven by changing social conditions and technological penetration. Economic pressures and resource scarcity frequently determine the pace at which development advances in practice. Findings reported by Bakare and Adebayo (2018) observed that respondents with greater exposure to development recorded markedly different results. Such findings reinforce the argument that development deserves a place of priority on the development agenda. Ogunlana and Adebayo (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. These observations collectively invite a reconsideration of standard assumptions regarding process. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

development, when examined in relation to process, reveals complex and often paradoxical dynamics. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of development. An examination by Ogbeide and Famuyide (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. For practitioners, the practical significance of development cannot be overstated, given its demonstrable link with process. Evidence assembled by Kalu and Obiora (2015) across twelve states underscored the heterogeneity of outcomes linked to development. Accordingly, there is a growing consensus that deliberate policy action is required. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

The relationship between development and process 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. Comparative work by Kalu and Obiora (2022) across several states uncovered a consistent pattern linking development with process. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. The work of Alade and Bamgbose (2023) extended earlier analyses by demonstrating that process reinforces the effects of development. 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.

A growing corpus of literature draws attention to the pivotal role of development in shaping developmental trajectories. National policies and programmes have sought, with varying degrees of success, to respond to the realities of development and process. Ekwueme and Nwosu (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. The weight of evidence