

DEVELOPMENT OF A WEB-BASED EFFORT AND PRODUCTIVITY MEASUREMENT 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 Web-Based Effort and Productivity Measurement 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 77 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 81.9% 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 effort and productivity measurement 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.

In recent years, development has emerged as a central theme in scholarly discourse on software engineering. Evidence from national agencies indicates that development has grown considerably in recent times, underscoring the need for systematic inquiry. Research by Salami and Obiora (2021) using mixed methods provided particularly rich insight into the mechanisms connecting development and web. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. An examination by Adekunle and Nnamdi (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

development occupies a prominent position in contemporary debates about web and national development. Globalisation and technological change have intensified both the opportunities and the challenges associated with development. Longitudinal research by Chukwu and Musa (2016) revealed that sustained attention to development yields appreciable dividends over time. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The work of Adigun and Dauda (2023) extended earlier analyses by demonstrating that web reinforces the effects of development. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

The phenomenon of development, while not new, has acquired fresh analytical urgency in Nigeria. Economic pressures and resource scarcity frequently determine the pace at which development advances in practice. Comparative work by Adigun and Dauda (2022) across several states uncovered a consistent pattern linking development with web. These developments carry important implications for policy and practice in software engineering. The aggregate picture emerging from Bello and Ogbeide (2023) points to a modest but consistent association between development and the outcomes of interest. Such findings reinforce the argument that development deserves a place of priority on the development agenda. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

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