

**DEVELOPMENT OF AN ONLINE REGRESSION ANALYSIS
APPLICATION FOR STUDENTS**

BY

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF STATISTICS, FACULTY OF
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DEGREE IN STATISTICS

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of an Online Regression Analysis Application for Students" 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 79 users were purposively selected for the usability evaluation, out of which 72 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 83.2% 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 an online regression analysis application for students 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. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which development unfolds. Findings reported by Oyelaran and Osinachi (2018) observed that respondents with greater exposure to development recorded markedly different results. For practitioners, the practical significance of development cannot be overstated, given its demonstrable link with regression. Studies by Famuyide and Eze (2019) largely support the view that development exerts a measurable influence on outcomes of interest. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

In recent years, development has emerged as a central theme in scholarly discourse on statistics. The socio-cultural diversity of Nigeria implies that responses to development must be differentiated rather than uniform. Research by Olawale and Olawale (2021) using mixed methods provided particularly rich insight into the mechanisms connecting development and regression. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Evidence assembled by Nwosu and Musa (2015) across twelve states underscored the heterogeneity of outcomes linked to development. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

In recent years, development has emerged as a central theme in scholarly discourse on statistics. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of development. Findings reported by Nwosu and Musa (2018) observed that respondents with greater exposure to development recorded markedly different results. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. The aggregate picture emerging from Ogbeide and Dauda (2023) points to a modest but consistent association between development and the outcomes of interest. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

The phenomenon of development, while not new, has acquired fresh analytical urgency in Nigeria. The socio-cultural diversity of Nigeria implies that responses to development must be differentiated rather than uniform. Findings reported by Ekwueme and Aderemi (2018) observed that respondents with greater exposure to development recorded markedly different results. The implications of these dynamics are far-reaching,