

DEVELOPMENT OF A CUSTOMER CHURN PREDICTION AND RETENTION ANALYTICS PLATFORM

BY

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DEGREE IN DATA SCIENCE

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of a Customer Churn Prediction and Retention Analytics Platform" 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 62 users were purposively selected for the usability evaluation, out of which 54 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 84.5% 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 customer churn prediction and retention analytics platform 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 data science. In Nigeria, the intersection of development and customer is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. Ibrahim and Adekunle (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 customer. Studies by Nwosu and Chukwu (2019) largely support the view that development exerts a measurable influence on outcomes of interest. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

Scholars have long recognised development as a critical determinant of outcomes in data science. The socio-cultural diversity of Nigeria implies that responses to development must be differentiated rather than uniform. Research by Musa and Musa (2021) using mixed methods provided particularly rich insight into the mechanisms connecting development and customer. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. The aggregate picture emerging from Musa and Dauda (2023) points to a modest but consistent association between development and the outcomes of interest. These observations collectively invite a reconsideration of standard assumptions regarding customer. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

The relationship between development and customer has been the subject of sustained academic interest across several disciplines. Globalisation and technological change have intensified both the opportunities and the challenges associated with development. Findings reported by Musa and Dauda (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 customer. Longitudinal research by Nwosu and Ekwueme (2016) revealed that sustained attention to development yields appreciable dividends over time. 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.

Contemporary scholarship increasingly frames development as inseparable from the broader question of customer. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream development into routine governance. Comparative work by Okonkwo and Famuyide (2022) across several states uncovered a consistent pattern linking development with customer. For practitioners, the