DECODING STUDENT RETENTION AND CHURN OF VODAFONE(TELECEL - SCHOOL PROVIDED SIM CARD) IN KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (KNUST) - A SURVIVAL ANALYSIS APPROACH

INTRODUCTION

1.1 BACKGROUNG OF STUDY

Ghana's telecommunications industry has experienced significant growth in recent years, with companies like Vodafone playing a crucial role in providing mobile and internet services to people across the country (Bandim,2022). The industry is highly competitive, and retaining customers is vital for sustaining market share and profitability. Customer Churn, also known as customer attrition, refers to the loss of subscribers or customer who cease using a company’s service or product within a given period of time. (Koranchirath, 2024). Understanding the reasons behind customer churn helps to develop effective retention strategies and keep a loyal customer base.

From Wikipedia, Vodafone Ghana, formerly known as Ghana Telecom, is the national telecommunications company of Ghana. As of January 2020, it had approximately 9.3 million mobile voice subscribers, representing 13.81% of Ghana's market share. Since 2008, Vodafone Ghana has been operating the Ghana Satellite Earth Station after becoming the majority shareholder.

On July 3, 2008, Vodafone announced that it had finalized an agreement to acquire 70% of Ghana Telecom from the Ghanaian government for a sum of US$900 million, with an estimated total value of US$1.3 billion.

Following the completion of the transaction on August 17, 2008, Vodafone became the majority shareholder with a 70% share in the company, while the Ghanaian government retained a 30% ownership.

In 2016, Vodafone partnered with Kwame Nkrumah University of Science and Technology (KNUST) to provide enhanced high-speed internet and Wi-Fi connectivity to all faculties across the university's Ghana campuses. This collaboration included providing telecommunications services to its student community, including SIM cards and data plans.

However, in February 2023, the telecel Group acquired Vodafone’s 70% shares in Ghana Telecom, rebranding the company as Telecel. This rebranding aimed to improve service offerings, including voice and data services, money transfers, and business solutions.

Student churn is a significant issue for telecom companies. It represents a loss of revenue and increases the cost of acquiring new customers. In the highly competitive telecom market, where students have multiple service provider options, retaining students becomes even more challenging. Companies use modern technology, computers software and survival analysis approach models to identify at -risk students and devise strategies to enhance retention rates. This method of recognizing unsatisfied customers is known as Churn Prediction.

Previous studies have explored various factors that influence customer churn in a telecommunications company, such as network quality, pricing, and customer service. This study aims to focus on the KNUST student population, uncover and analyze data gathered from students, apply survival analysis models to identify patterns related to churn (such as demographics, usage patterns, etc.), develop retention strategies, evaluate the success of these efforts, and make informed decisions.

1.2 PROBLEM STATEMENT

Regardless of efforts made by KNUST partnered with Telecel company to provide affordable and accessible mobile communications services to students, Telecel ‘s SIM card program provided by the school continues to experience high rates of student churn and retention issues resulting in revenue loss and student experiences. There is a lack of understanding about the factors driving student churn and retention, making it difficult to develop effective strategies to address this issue(kapur,2018).

This project aims to investigate the factors contributing to student churn and retention and develop survival analysis model for detecting at-risk students, and design specific strategies to improve retention rates and reduce churn. It also seeks to enhance Telecel’s services, improve student experience, and foster long- term relationships with Telecel company and the University.

1.3 OBJECTIVES

Main Objective:

* To develop a survival analysis techniques model to detect at- risk students to improve student retention and reduce churn of Telecel at KNUST.

Specific Objectives:

* Exploring the factors that influence student churn and retention.
* Using survival analysis models to identify student at risk of churning.
* Analysing time -to- event data to understand the patterns and timing of student churn.
* Identifying strategies to improve retention rates and reduce churn.

1.4 RESEARCH QUESTIONS

* What factors influence student retention and churn for Telecel services at KNUST?
* What is the relationship between student demographics (e.g. age, gender, year of study) and churn behaviour?
* How does churn rate vary with different Telecel services (e.g. voice service, data service, internet service)?
* How does the quality of Telecel network and services (e.g. coverage, internet speed) influence student retention and churn?
* How can Telecel services be optimised to better meet the needs and preferences of KNUST students?

1.5 SIGNIFICANCE OF THE STUDY

The study will offer a comprehensive understanding of the factors impacting student retention and churn for Vodafone. This will enable the development of precise strategies to enhance retention rates and minimize churn, directly benefiting Vodafone's customer base and revenue stream.

The study will empower KNUST to improve the telecom services offered to its students. By identifying the factors influencing student retention and churn, KNUST can work closely with Telecel to guarantee the delivery of top-notch, dependable services to its students, thereby solidifying the partnership between KNUST and Telecel.

The study is all about understanding what students want from Telecel services. By knowing their specific needs and preferences, we can make the services even better. This means improved connectivity, service plans, and less hassle from switching providers. Ultimately, it ensures a more stable and reliable service for students.

1.6 STRUCTURE OF THE STUDY

The study on student retention and churn for Telecel services at KNUST aimed to investigate the factors influencing student’s decision to use or stop using the Telecel services. The study followed a structured approach;

Chapter one of the study deals with the introduction of customer retention and churn in the telecommunications services sectors.

Chapter two talks about review of existing literature on customer retention and churn prediction.

Chapter three of the study discusses the methodology used in the study.

Chapter four focuses on data collection, analysis and also discusses the results and significance of the results to the study.

Chapter five delves into the conclusion and summarizes the results obtained. Based on the findings, recommendations were formulated.

Chapter six consists of references.

1.7 LIMITATION OF THE STUDY

* Limited scope of participants: The study only considered undergraduate students.
* Geographical scope: The study was limited to KNUST and may not be applicable to other universities.