

Final Project 1

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Project Template

Faculty of Management
Midocean University

Project title

**Evaluating the Effectiveness of Queue Management
System (QMS) in Enhancing Customer Satisfaction
and Service Efficiency: A Case Study of STC
Channels**

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Chapter 1: Introduction

1.1. Research Background

Customer satisfaction is considered one of the major aspects that all organizations, especially service organizations, have to give attention to in today's competitive business environment. Telecommunication companies, like STC in Saudi Arabia, are continuously working to advance their service and operational efficiency. Among one of the key systems that would help the organization to improve its service quality and operational efficiency is the Queue Management System.

The QMS will handle customer flow, reduce waiting time, and provide professional service delivery. Nonetheless, with the modern queue system in place, some service centers still suffer from the problems of long queues and complaints from customers. Therefore, an assessment shall be carried out on the effectiveness of QMS in enhancing customer satisfaction and employee efficiency.

This study focuses on STC Channels Service Centers in Saudi Arabia. The study assesses whether the implemented QMS actually improves customer experience and supports employees to provide faster and better services.

Areas of improvement would also be identified, along with recommendations provided to enhance system performance.

1.2. Research Problem

Although the STC Channels has implemented an advanced Queue Management System to enhance the customer experience, several service centers continue to face customer dissatisfaction, long waiting times, and low productivity among the staff. The issue is a lack of explicit assessment of QMS efficiency regarding the

established goals and objectives. There is some data on how the system affects customer satisfaction, performance of personnel, and service efficiency in general. Therefore, the research problem may be stated as:

- How efficiently does the Queue Management System at STC Channels Service Centers improve customer satisfaction and service efficiency

1.3. Research Significance

In this section, the student should clarify the importance of the study at the theoretical level, and the empirical level

1.3.1. At the theoretical level

The findings from this study add to existing knowledge on service management and customer experience. It shall help explain how technological systems, such as QMS, may influence the performance of an organization and customers who are satisfied with its services. This research ensures value addition in academia, studying the relationship between system effectiveness, customer behavior, and service quality in the Saudi telecommunication sector.

1.3.2. At the practical level

The results of this research will be beneficial for the management of STC Channels. The findings will be able to locate loopholes in the existing QMS process and assist decision-making processes in enhancing the customer service process. Additionally,

this study will provide support for other service oriented organizations in Saudi Arabia by proposing an installation or enhancement of queue management solutions.

1.4. Research Questions

This research tries to answer the following main and sub-questions:

Main Question:

How effective is the Queue Management System in improving customer satisfaction and service efficiency at STC Channels Service Centers?

Sub-Questions:

- How does the QMS influence customer waiting time and service perception?
- What is the relationship between QMS efficiency and employee performance?
- How do customers perceive service quality since the implementation of the new QMS?
- What kind of difficulties do employees face in using the QMS system?
- How would STC Channels improve the current QMS to achieve better satisfaction and efficiency?

1.5. Research Objectives

The objectives of this study are:

1. To evaluate the effectiveness of QMS in enhancing customer satisfaction at STC Channels.
2. To examine the relationship between QMS performance and employee efficiency.
3. To identify operational challenges in using the QMS at service centers.

4. To provide recommendations for improving QMS effectiveness and service operations.
5. To contribute to the understanding of how digital service systems influence customer experience in Saudi telecommunications.

1.6. Research Hypotheses

Based on the research questions and objectives, the following hypotheses are proposed:

- **H1:** There is a significant positive relationship between QMS effectiveness and customer satisfaction.
- **H2:** There is a significant positive relationship between QMS effectiveness and employee service efficiency.
- **H3:** Customer satisfaction mediates the relationship between QMS efficiency and overall service quality.
- **H4:** Employee training moderates the relationship between QMS implementation and service performance.

1.7. Research Model

The conceptual model for this study is designed as follows:

Independent Variable:

- Queue Management System (QMS) Effectiveness

Mediating Variable:

- Customer Satisfaction

Dependent Variable:

- Service Efficiency

Moderating Variable:

- Employee Training

1.8. Research Methodology

This study will use a **quantitative research approach** supported by descriptive analysis.

- **Research Philosophy:** Positivism (focused on measurable and observable data).
- **Approach:** Deductive – testing the proposed hypotheses.
- **Research Design:** Cross-sectional survey using structured questionnaires.
- **Population:** Employees and customers of STC Channels Service Centers.
- **Sampling Method:** Stratified random sampling to ensure representation of both customers and employees.
- **Data Collection:** Online and paper-based questionnaires distributed across selected STC branches.
- **Data Analysis Tools:** SPSS or Excel for descriptive statistics, correlation, and regression analysis.

1.9. Suggested Industry/Organization for the Empirical Study

The empirical study will be conducted at **STC Channels**, which is the retail and customer service division of the **Saudi Telecom Company (STC)** — the leading telecommunication provider in the Kingdom of Saudi Arabia. STC Channels

manages more than 300 service centers across the country, offering a variety of services such as SIM registration, bill payment, device sales, and technical support.

1.10. The Suggested Project Structure

- ❖ Introduction
- ❖ Literature Review
- ❖ Research Methodology
- ❖ Data Analysis and Results
- ❖ Discussion, Recommendations, and Conclusion

Chapter 2: Literature Review

1.11. Introduction

This section provides a brief overview of the literature related to the research topic. It reviews previous studies on queue management systems and their role in improving customer satisfaction and employee performance.

The purpose is to understand existing knowledge and highlight research gaps.

1.12. The independent variable

The independent variable in this study is the Queue Management System (QMS).

QMS refers to digital systems used to organize customer flow and reduce waiting time in service centers.

Recent studies in Saudi Arabia show that QMS helps improve service efficiency and supports digital transformation in service organizations.

1.13. The dependent variable

The dependent variables are customer satisfaction and employee performance.

Customer satisfaction reflects customers' evaluation of the service received.

Employee performance refers to how efficiently employees deliver services.

Local studies indicate that shorter waiting times lead to higher customer satisfaction and better employee performance.

1.14. The relationship between the independent and the dependent variables

Previous studies show a positive relationship between QMS and customer satisfaction.

When QMS is implemented, waiting time is reduced and service quality improves.

This structured environment also helps employees manage workload better, which enhances performance.

Therefore, QMS has a direct positive impact on both dependent variables.

1.15. Conclusion

This literature review highlights the importance of queue management systems in service organizations.

Local and recent studies confirm their positive effect on customer satisfaction and employee performance.

However, limited research focuses on specific service organizations, which supports the need for this study.

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