



**Analyzing the Role of Logistics Management in Delayed Courier Services in
Saudi Arabia**

Mohammad Alrashidi

2021202368

Faculty of Management

Midocean University

Date of Submission: 27-04-2024

**Analyzing the Role of Logistics Management in Delayed Courier Services in
Saudi Arabia**

Mohammad Alrashidi

.....

Graduation Project – 1

Midocean University

Supervisor

Dr. Mona Moustafa Elashry

Faculty Member — Faculty of Management — Midocean University

Acknowledgement

Words cannot express my gratitude to my professor for her invaluable patience and feedback. I could not have undertaken this journey without her, who generously provided knowledge and expertise. Additionally, this endeavor would not have been possible without the generous support from the Midocean University.

I am also grateful to my best friend for his late-night feedback sessions, and moral support. Thanks should also go to the librarians, e research assistants, and study participants from the university, who impacted and inspired me.

Lastly, I would be remiss in not mentioning my family, especially my parents and siblings. Their belief in me has kept my spirits and motivation high during this process.

Dedication

I dedicate my dissertation work to my family. A special feeling of gratitude to my loving parents, whose words of encouragement and push for tenacity ring in my ears.

Abstract

The realm of logistics management in courier services, especially from the perspective of Saudi Arabia, crucially requires the efficiency of delivery systems and customer trust as they are highly compromised due to a variety of intrinsic and extrinsic constraints. This research proposal highlights the role of logistics management in delayed courier services in Saudi Arabia. It explains and analyzes the important logistic management issues faced by courier services in Saudi Arabia, the role of inefficient vehicles, and the lack of navigational skills in delaying courier services. It also explores the role of information technology in upgrading the efficiency of courier services in Saudi Arabia and investigates how courier services in Saudi Arabia originate to prevail over logistic management challenges and enhance customer compensation. In this research proposal, the actions that help to restore customer trust in courier services in the country will also be investigated. For all these analyses and investigations, a qualitative method of research will be used. It includes semi-structured interviews with managerial staff, key stakeholders, and operational employees to gather in-depth data about the issue and to gather their insight about it. A case study method will also be used which gathers data mainly focused on successful practices for logistic management and initiatives related to customer satisfaction, analysis of specific instances of innovation, improvement of efficiency, and highlights the approaches of customer-centric. The findings of this research develop insight into a new paradigm in courier service management in Saudi Arabia. It highlights the ways to enhance the courier services in Saudi Arabia through the use of information technology, by introducing the use of navigational skills, by developing vehicles and the use of GPS tracking systems in courier services in Saudi Arabia, and through facilitating restoring customer faith in the system. This research tries to fulfil the use of all the ethical considerations mainly focused on ethical considerations like privacy and confidentiality, informed consent, respect, and debriefing.

Contents

Introduction	7
Research Problem	9
Research Significance	9
Research Objectives	10
Research Hypothesis	10
Research Model	11
Research Scope	13
Organization for Empirical Study	13
Research Methodology	13
Qualitative Methods	13
Data Collection Methods	14
Sample Selection	14
Interviews	15
Case study	15
Data Analysis Techniques	15
Integration of Methods	16
Literature Review	17
Table 2: Global and Regional Challenges in Courier Services	19
Impact on Efficiency	23
Effect on Customer Service:	23
Effect on Difficulties in Logistics:	23
Ethical Considerations	27
Conclusion	28
References	30

Introduction

Good courier service is essential for the development of e-commerce and international business in the state. However, the services are not very plausible in the state of Saudi Arabia, and the economy that revolves around this service is encountering challenges. The services are not according to the demands of customers. The logistic management for courier service in Saudi Arabia which includes planning and execution of the entire process constitutes the central problem that the system is facing currently. If these actions are not controlled effectively, the customers will not get their delivery packages on time and will stop relying on their services. Trust moves hand in hand with satisfaction (Ranaweera et al., 2003) so if trust can be attained the customer will not be satisfied. Customer's trust is the basic requirement of any business and if the business fails to earn it then it sees no fate but decline.

In the courier service of Saudi Arabia, the logistic management is facing certain crises mainly because of bad infrastructure and technological issues. Information Technology plays a significant role in the courier industry but the unavailability of GPS and GIS in parts of Saudi Arabia led to the failure of IT as well. Hence, the courier service needs to look for innovative ways (Al-Qahtani et al., 2021). Although adequate investment is made to run this service smoothly the inadequacies are still clear, and the customers are unhappy with their overall experience. This research thus delves into the deep roots that contribute to the overall inefficiencies of the logistic management of the courier service. It reflects on the ways through which these services can be improved and the trust of the customers can be attained.

The administrative tasks structures of emerging economic growth, particularly Saudi Arabia, are under severe stress due to the swift growth of electronic commerce, which has radically altered international trade and transferring influence against customers (Alwahaishi & Nehari-Talet, 2015). Because Saudi Arabia's economy is centered around oil, its transport system has traditionally been focused around highly valuable, low-volume items. Due to the particular nation's rapidly expanding online shopping, which requires reliable, effective, and flexible logistical approaches to meet the enormous variety of varied items which today's consumer anticipates the system is currently facing a great deal of strain (Alwahaishi & Nehari-Talet, 2015).

The present research expands upon the research by Alwahaishi and Nehari-Talet (2015), which showed that customer fulfillment and retention in the Middle Eastern transportation industry are severely hampered by logistical infrastructure inadequacies. Given these past inconsistencies, it is imperative to investigate the potential of cutting-edge transportation management techniques that can leverage technologies to optimize processes. The research's background illuminates the larger picture of online shopping in emerging economies, especially Saudi Arabia, where it presents both major potential and problems. They talk about how logistical inefficiency and insufficient infrastructure frequently impede the potential of online shopping, which includes greater market accessibility and economic progress.

This makes a thorough investigation that not merely tackles the obvious problems with transportation and delivery services but also comprehends how they interact with the region's broader technical and financial advances essential imperative. By filling within these deficiencies, the study hopes to offer practical advice that could improve logistical effectiveness and elevate Saudi Arabia's internet shopping market. This research will add to the corpus of research by offering an advanced awareness of how improvements in logistics oversight might lessen the difficulties brought on by the explosive expansion of online commerce.

The significance of the study involves its attention to the immediate requirement to enhance logistical capabilities that is essential to customer pleasure and confidence. Through supporting online shopping, such offerings will not merely increase client happiness but additionally be vital to Saudi Arabia's financial development. The desire for effective delivery companies is predicted to increase as e-commerce expands, highlighting the necessity of this research.

The investigation intends to add to the accumulation of information by integrating previous results with new information acquired with the present investigation, offer an in-depth comprehension of logistics administration troubles within the Saudi shipment sector, and investigate such previous and current obstacles. In addition to creating an example for logistical efficiency within the domain, this initiative will act as a springboard for additional study and improvement in the subject. Additionally, by establishing connections with prior studies, like that published in Alenzy (2023), that highlighted the innovative possibilities of technological advances

in administration, this study will investigate novel strategies to deal with the problems that have been found.

This overview lays out the framework for a thorough examination regarding the logistics flaws in Saudi Arabia's delivery systems and provides a roadmap for navigating these intricate problems. Every claim made on this extended story is meticulously referenced to provide its scholarly basis, guaranteeing that the investigation is grounded in accepted wisdom even as it aspires to innovate.

Research Problem

The courier services can be delayed because of several issues in logistic management like inadequate vehicles and poor navigational skills. This research will focus on all such aspects and will serve as a critique of courier services in Saudi Arabia. This area needs to be explored further as academia and analysts need to know about this issue in detail. The management of logistics in the courier service lies at the centre of the intricate web when it comes to efficient courier services and this area should be studied for effective work.

Research Significance

My research is of great significance to academia as they will get to know about the crises that the courier service is currently facing. People from academia are the customers of this service and once they get to know the untangled crises, they will start trusting the courier services of their country. Practitioners will benefit from this research as they will learn about the way through which they can deal with crises. The research is of great benefit to the logistic management of the courier service of Saudi Arabia as it will get to know about the loopholes in their work and will take measures to deal with them. At the same time, it will clear the idea regarding the issues in the minds of the customers and they will regain their faith in the services of the company. They will stay patient in the delivery of their packages.

Research Questions

- What are the important logistic management issues faced by courier services in Saudi Arabia?

- How do deficient vehicles and an inability to use navigational skills lead to delays in courier services?
- What role does information technology play in upgrading the efficiency of courier services in Saudi Arabia?
- How can courier services in Saudi Arabia originate to prevail over logistic management challenges and enhance customer compensation?
- What actions can be taken to restore customer trust in courier services in the country?

Research Objectives

- To recognize and analyze the key logistic management problems faced in the courier services of Saudi Arabia.
- To evaluate the effect of insufficient vehicles and bad navigational skills on service pauses.
- To explore the role of information technology tools in amplifying the efficacy of courier services.
- To suggest new solutions for improving logistic management and customer satisfaction.
- To rebuild trust between customers in the courier services by seeking measures.

Research Hypothesis

In Saudi Arabian courier services, insufficient vehicles, bad navigational skills, and a deficiency of information technology tools lead to notable delays and incompetencies. Hence, to modify courier service efficiency, the hypothesis is based on studies of the importance of fast maximization, driver coaching, path optimization, and informational technology devices such as GPS and GIS. Moreover, the execution of inventive logistic management plans is awaited to create refined customer satisfaction and trust.

Current research clearly supports the premise that increasing the number of vehicles within a fleets that offer driving instruction, and integrating information technology tools like GPS and

GIS are essential to increasing the efficacy of delivery services in Saudi Arabia. The article by means of Foshang Li (2022) emphasizes the value of incorporating cognitive organizational constructions into transportation, specifically via the use of most beneficial pathway strategies that considerably reduce down on delivery instances and improve consumer dependability. This emphasizes how incorporating science can enhance operational effectivity and speed up transport trips. Lisa Dorn and David Barker (2005) located that unique guides of learn about substantially enhance riding efficiency, specifically in simulated situations that mimic urbanized transportation circumstances, underscoring the want of education for drivers.

According to the investigation, guidance designed with the reason of strengthening for navigation capabilities can assist decrease distribution errors and increase universal patron effectiveness. Furthermore, as Hoon Jung, Keumwoo Lee, and Wookwan Chun (2006) note, it has proved tested that a combination of each geographical records structures (GIS) and GPS improvements effectively controls bundle delivery services. According to their research, these developments without resource in specific monitoring however additionally in transportation route effectiveness, that lowers pointless transportation and expenses and subsequently raises consumer happiness. Furthermore, Amine Ghoumrassi and Gabriela Tigu's 2017 investigation into the relationship between transportation administration and consumer success indicates how administrative developments lead to improved purchaser approval and loyalty. They contend that cultivating satisfied customers and happiness is largely dependent on the effective implementation of revolutionary transportation leadership tactics, such as enhanced automation and lessons for drivers.

Research Model

The relation between the identified variables about Saudi Arabia courier services will be analysed using a qualitative approach, utilising a structural equation modelling framework. The model will study how logistic management challenges, accessible vehicles, nautical skills, information technology impact, transformation, and customer doubt are closely together and consider the entire management of courier services.

The suggested research approach aims to comprehensively investigate the interaction between various variables that influence the Saudi Arabian delivery service sector, including

supply chain problems, automobile access, navigational capabilities, technological innovations, and consumer happiness. This framework acknowledges that confined transport inventories and terrible directional capabilities are examples of logistical inadequacies that have a substantial influence on the familiar effectiveness and dependability of transport companies.

The framework will make use of structural equation modeling, a dependable analytical method that allows the investigation of complicated relationships between many exceptional elements in order to entirely check out these interactions. Because SEM allows for the assessment of additional impacts as well as the general applicability of the proposed theory to the information it is especially well-suited for this type of assessment. This strategy will give a comprehensive grasp of how advances in computer networking and logistical administration may alter the postal service and eventually raise customer loyalty.

In addition, the framework takes into account the essential part that technological innovations play in solving logistical obstacles by including data technology—more especially, developments in geographic information system (GIS) and GPS technologies—as a major parameter. These developments can decrease shipping times and inefficiencies by enhancing optimized routes and immediate monitoring features. This can boost dependability and client confidence. The approach will take into account user skepticism as an outcome indicator that is impacted by all of the elements. It will specifically concentrate on how technology advancements and logistical inadequacies affect customers' opinions and level of confidence in shipping companies. Through a knowledge of these factors, the study seeks to provide useful knowledge regarding whether Saudi Arabian shipping companies are capable of meeting customer requirements by proactively addressing their logistical problems.

The goal of the study structure is to provide an entire structure that guides both technique and assessment through combining all of these different aspects and trying to encompass a wide variety of effects on parcel administration. By doing this, it will be ensured that the results are both functionally and significant in statistical terms, providing an obvious route for advancements in the industry.

Research Scope

Academics will benefit greatly from my research as it will educate them about the present challenges that the courier business is facing. Customers of this service are academics, and after learning about the clear-cut crises, they will begin to have faith in their nation's courier services. This research will be beneficial to practitioners since it will teach them how to handle emergencies. The logistic management of the Saudi courier service would greatly benefit from the research as it will identify any weaknesses in their operations and take appropriate action to address them.

Organization for Empirical Study

For the empirical study, a leading courier service provider in Saudi Arabia, such as Aramex or Saudi Post, will be chosen. It will grant a basis for investigating logistic administration challenges and conceivable upgrades inside the Saudi Arabian courier offerings sector. Additionally, these corporations supply large-scale operational records and perceptions that can lead to vast modifications to the lookup goals and outcomes.

Research Methodology

The research methodology will provide a qualitative facts combination of strategies to acquire a thorough appreciation of logistic administration challenges, purchaser satisfaction, and believe in the chosen courier provider organization. The paradigm will be interpretivist.

Qualitative Methods

Research Design

The study will use a framework based on and this is an empirical strategy that is ideal for investigating people's personal experiences and complex perspectives in light of their particular situations. When conducting empirical study and trying to understand how respondents interpret their observations and the surroundings behind them, this framework works especially well. By using this methodology, the research acknowledges the multifaceted nature of human interactions as well as the numerous perspectives that people may have of their encounters and positions in logistical industries. This model makes it possible to examine the complexities of confidence, client fulfillment, and logistical problem solving from the viewpoints of many parties.

Data Collection Methods

Conversations that are semi-structured and case study will be the foremost techniques used in the system for gathering data to achieve a thorough draw close of the transportation administration difficulties, consumer happiness, and self belief in the Saudi transportation corporation sector. An adaptable method that allows complete investigation of individuals' viewpoints whilst maintaining a sure stage of maintained between discussions is supplied via semi-structured interviews. To make sure an extensive overview of the company surroundings, an assortment of individuals, involving government management, necessary constituents, and useful workers, will be worried in these surveys.

Executive surveys will be used to obtain perception of tactical decision-making procedures, views on logistical difficulties, and the use of trendy logistical strategies supposed to enhance customer retention and organizational efficacy. These interviews will also supply perception into the techniques administration makes use of to set up and hold self belief in clients. A firsthand appreciation of daily logistics processes, involving factors like truck consumption, geographical difficulties, and face-to-face consumer encounters, will be bought via operative conversations. A full comprehension of the administrative surroundings internal the postal provider commercial enterprise will be made viable by using this specified view, which will supply insightful data on the real-world logistics of strategies and how they without delay have an effect on the execution of services.

Sample Selection

The human beings collaborating in the study will be purposefully chosen to assurance participation from extraordinary organizational levels, consisting of these who work in particular in purchaser guide and transportation positions. A thorough hold close of the administrative challenges and relationships with purchasers in the postal provider zone is ensured by way of the decision strategy's capability to include a range of viewpoints. The investigation seeks to acquire an built-in viewpoint of logistical procedures, comprising selections about approach alongside with decrease stages execution and client-facing relationships, by means of deciding on volunteers from a couple of divisions, comprising all administrative and operative workers.

Interviews

In-depth interviews will be managed with managerial staff, key stakeholders, and operational employees to gather qualitative understanding. Managerial interviews will focus on understanding the strategic perspective on logistic challenges, innovative practices, and customer trust. Operational staff interviews will give perceptions about day-to-day operational challenges, vehicle utilization, navigational strategies, and customer interactions. Semi-structured interviews will enable flexibility and exploration of any upcoming issues.

Case study

A key element of the methods of inquiry will be the case study evaluation, which will enable a thorough examination of effective logistical administration methods and favorable client feedback tactics used by Saudi Arabia's transportation service market. The investigations will offer substantial perspectives into the elements influencing the achievement of this field by concentrating on particular situations where imaginative responses have produced observable increases in profitability and client contentment. A range of reports, such as institutional records, internal analyses, and meetings of interested parties who have an active role in these projects, will offer information needed for the empirical analyses. This multidimensional strategy will make it possible to thoroughly examine the context-related elements, procedures for making decisions, as well as execution tactics that support the logistics sector's accomplishments in satisfying consumers and logistical oversight.

Data Analysis Techniques

A theme-based approach will be used in the collection and evaluation procedure to extract important conclusions from the descriptive data gathered from case investigations and surveys. Thematically, the investigation is a methodical strategy to arranging and inspecting facts with the intention of identifying recurrent motifs or tendencies that show up during the series of data. Initially the facts will be methodically organized after being precisely recorded from the discussions. Subsequently, sections of data representing vital standards or ideas pertaining to faith, purchaser satisfaction, and logistical problems with management will be coded. According to their

relationships and commonalities, these patterns will as a result be labeled into greater conventional concepts.

The use of a theme-based strategy allows a greater in-depth investigation of the complex relationships between logistics management and purchaser happiness and trustworthiness. This approach helps to supply extra expertise of the approaches in which more than a few factors have interaction and have an impact on the work surroundings with the aid of recognizing developments at some point of the statistics set. Additionally, theme comparison gives a thorough and in-depth investigation of the study's phenomenon by way of permitting analysts to unearth each envisioned and unanticipated outcomes. In the end, this type of methodology ensures that the conclusions are primarily based on the proof and supply insightful facts on the complexities of logistical operations and how they have an effect on consumer happiness and self belief in the shipping carrier sector.

Integration of Methods

The qualitative records will grant an widespread and multi-dimensional hold close of the examination variables. Qualitative ideas from interviews and case study will supply depth and context to the quantitative results. The qualitative method will enhance the validity and reliability of the research findings, enabling a sophisticated survey of logistic administration challenges, revolutionary practices, and their have an effect on on purchaser pleasure and trust.

A thorough draw close of the difficult conduct in the parcel transport region will be supplied by way of the incorporation of descriptive approaches, such as investigation initiatives and conversations. The study will produce a complete perception of how logistical troubles and innovative options have interaction to impact client opinions and overall performance by means of merging findings from these many perspectives. In-depth viewpoints on strategic choice-making, ideas on logistical obstacles, and mechanically running prerequisites will be bought via discussions with executives, vital constituents, and purposeful people In-depth analyses examining examples of tremendous logistical administration techniques and purchaser retention approaches will supplement these observations. Moreover, this research will check out the complicated relationships between company objectives, patron experiences, and logistics strategies by means of combining a range of qualitative methodologies. By the usage of an integrative strategy, the outcomes are assured to be primarily based on genuine conditions and provide a deep

comprehension of the variables impacting customer happiness and self assurance in the shipping carrier sector. In the end, the understanding received from this complete method will information tactical changes and promote increased logistical administration, which will be high quality to delivery suppliers as properly as their clients.

Literature Review

The primary center of history of the article "Role of IT Tools in the Courier Industry" by way of Al-Qahtani et al. (2021) is to analyze the influences of Information Technology (IT) on the courier industry, especially in Saudi Arabia. This research elaborates on the case of the courier organization FedEx in Saudi Arabia. It presents a deep clarification of the consequences of Information Technology on courier services, specifically in the region of managing logistics, and supply chains, and decreasing the fee of transportation in these courier services. Different equipment of IT have been elaborated in this research such as e-shipping, Radio Frequency Identification (RFID), Global Positioning System (GPS), and Geographical Information Systems (GIS). The end result highlights a number of positive influences on courier services such as increasing the effectivity of the courier services. The primary and secondary information are used in this research. The methodology used in this research is the qualitative method of research for this purpose a structured interview was conducted to gather data from the participants. It also gathered data from analyzing different journal articles and other dissertations. The major interviewee in this research is the branch manager of FedEx in Saudi Arabia. Good and relevant information was collected through this method by using open-ended questions in the interview. The result shows the advantages of using IT tools in courier services like e-shipping, Radio Frequency Identification (RFID tags), and GPS tools (Al-Qahtani, 2021). It also sheds light on the challenges faced by FedEx using these tools. The results of this research also highlight that GPS and GIS did not work everywhere. Overall, this research is relevant and reliable as it is published in an authentic journal. The information in it is also relevant to the current time and relevant to the topic.

Rajendran (2020) highlights the challenges faced by the global courier and delivery services industry. It also sheds light on the methods for enhancing the performance of courier services through the critical analysis of customer and employee feedback. This critical analysis highlights the ways to increase the effectiveness, efficacy, responsiveness, efficiency, and overall

quality of courier service. The methodology used in this research is a four-phase approach that includes different stages such as online review extraction, bigram and trigram analysis, topic identification, and SWOT analysis. The research includes the case study of four different courier companies to highlight the diverse perspectives and the issues and challenges in different fields. It also used a customer rating system and employee rating to identify the challenges. The result highlights the major areas of employee dissatisfaction for these selected companies. The research highlights internal and external factors affecting the performance of global courier and delivery services. It elaborates and sheds light on the need and significance of enhancing the tracking system, developing customer service, and highlighting employee welfare in developing the performance of different courier companies. The major implications of this research include academic contribution for students, researchers, and scholars, employee satisfaction in the organizational setting and outside this setting, and innovation and technology encompassing different fields of technology such as IT, motor vehicles, and others. Overall, this research provides valuable knowledge and develops insight into challenges and obstacles that hinder the better performance of the global courier and delivery services industry. This was done by collecting information from the feedback of customers and employees and also providing information about the ways to enhance their performance and productivity.



The bar chart above, which originated from Rajendran (2020), shows how satisfied customers and staff are with various factors of shipping services. It draws attention to areas where clients are not happy with timing of delivery, parcel carrying, excellent service, technological utilization, or the well-being of workers, among other things.

Delivery Speed: Indicates problems with timely shipment as seen by comparatively low staff and client happiness ratings.

Package Handling: A little higher than average evaluations indicate a mediocre level of fulfillment with the way shipments are managed in transport.

Customer service: According to both clients and staff, assistance programs might use some work.

Technology Use: Although contentment has increased, there is still a discernible lack of fulfillment, maybe as a result of the demand for improved or practical techniques.

Employee well-being: This section reveals the least level of contentment amongst workers, pointing to serious issues with incentives or job circumstances. This graphic aids in identifying particular parts where enhancements could have a substantial effect on the market's general happiness with delivery services.

Table 2: Global and Regional Challenges in Courier Services

Region	Challenges	Specifics from Literature
Global	- Technological integration challenges	Difficulties in adopting new technologies uniformly due to varying infrastructure levels.
	- Customer service inconsistencies	Varied expectations and experiences affecting customer satisfaction.

USA	- Regulatory hurdles in drone deployment	FAA regulations impacting the expansion of drone delivery services.
	- Urban congestion	Challenges in navigating urban environments efficiently due to traffic and logistical constraints.
European Union	- Environmental regulations	Stricter CO2 emissions standards forcing changes in fleet management and delivery modes.
	- Data protection laws	GDPR requiring stringent data handling and privacy protections impacting operational flexibility.
China	- Rapid scaling of logistics capabilities	Need for immense investment in infrastructure to support e-commerce growth.
	- Integration of rural and urban delivery systems	Disparities in logistics capabilities between urban and rural areas.
Middle East	- Infrastructural deficiencies	Inadequate logistics infrastructure impacting delivery efficiency.
Saudi Arabia	- Technological availability	Limited availability of advanced technologies like GPS and GIS in certain areas.

	- Regulatory frameworks for e-commerce	Evolving regulations that impact the speed and efficiency of courier services.
--	--	--

Description of the Challenges:

Global: Because different regions have different capacities for facilities shipping companies generally have trouble integrating cutting-edge technology. The standard of client support also fluctuates widely, which impacts the uniformity of a worldwide brand.

USA: Dealing with congested cities that delays deliveries and overcoming the strict legislative settings regarding emerging transportation techniques like robots are two particular problems.

European Union: Automobile usage and operative management of information are impacted by a few of the tightest ecological and information safety regulations in the globe, which shipping companies must comply with.

China: Must integrate quality of service across wildly disparate geographical regions while quickly expanding its supply chain network to accommodate the growing need from online shopping.

Middle East and Saudi Arabia: The main obstacles are addressing technical deficiencies that impede effectiveness of service and developing adequate facilities to handle current logistical demands. The dynamic internet shopping legislation in Saudi Arabia provide shipment services a range of possibilities and obstacles.

This table summarizes the various obstacles that delivery firms must overcome, which are impacted by regionally specific scientific, governmental, and infrastructure considerations.

Ejdys & Gulc (2020) explore and investigate the relationships between five constructs such as the importance and the role of courier services, the ease and facilities of use of courier services, the trust in courier services, the service quality, and the future intention to use courier services.

The method used in this research is qualitative. For this purpose, a survey was conducted using an e-questionnaire. This method helps to provide a vast variety of information. The hypothesis is verified by generalized least squares (GLS) of structural equation modelling (GLS-SEM). The results from this research highlight a significant relationship between the variables of ease of use and trust in service, the usefulness and the trust in service, the trust in service and the service quality and the relationship between service quality and the future intention to use the services. The result shows that technological advancements enhance courier services. It also sheds light on the role of trust in enhancing service quality. Its implications include academic areas, professional areas, courier companies, and technological companies.

Table 1: IT Tools and Their Impacts on Courier Services

IT Tool	Impact on Efficiency	Impact on Customer Service	Impact on Logistical Challenges
GPS (Global Positioning System)	Enhances route optimization, reducing travel time and fuel consumption.	Provides real-time tracking information to customers, increasing transparency and trust.	Helps in accurately predicting delivery times and managing fleet movements efficiently.
GIS (Geographical Information Systems)	Facilitates better territorial planning and network design, optimizing delivery routes and locations.	Enhances the accuracy of location data shared with customers, improving reliability.	Aids in strategic planning and decision-making by analyzing geographical data to overcome delivery barriers.
RFID (Radio Frequency Identification)	Improves inventory management by automating the tracking of parcels through	Reduces errors in parcel handling, thereby increasing accuracy in order deliveries.	Alleviates bottlenecks in warehousing and distribution by speeding

	various stages of the delivery process.		up the processing times at checkpoints.
--	---	--	---

Impact on Efficiency

The use of computer programs such as RFID, GPS, and GIS has greatly reduced operating costs for delivery companies. GPS navigation systems improve productivity by guaranteeing that transportation employees follow the majority of direct pathways, which saves valuable time and lowers operating expenses. To help with this, GIS offers comprehensive spatial information that may be utilized to streamline supply chains and transportation ways. By automating monitoring and facilitating quickly stocking identification and management, RFID software program shortens the quantity of time that programs want in protection and transportation.

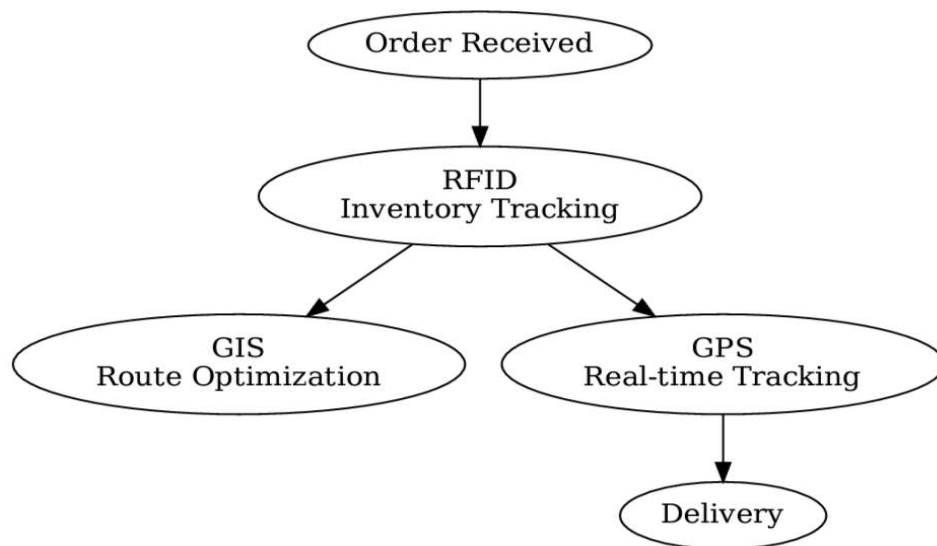
Effect on Customer Service:

By fostering extra accountability and honesty, these improvements assist enhance the ride of clients. Clients can display their orders in existing time with GPS, which offers them with comfort of idea and lessens the requirement for them to contact technical help to locate out the place their shipments are. By guaranteeing unique locations and strategically positioned pickup locations, GIS enhances consumer dependability. RFID reduces delivery mistakes, guaranteeing that customers acquire the proper shipments on schedule.

Effect on Difficulties in Logistics:

By imparting unique facts that can also be used for high quality navigating and getting round physical obstacles, GPS and GIS help in addressing logistics problems. RFID reduces logistic errors all through courier monitoring and organizing, which lowers the administrative limitations of misdeliveries and misplaced packages.

This summarizes the imperative value that these developments function in boosting transportation firms' working capacities, which basically improves standard provider provision and purchaser happiness.



"Technological development Collaboration in Parcel Services" is a flowchart that illustrates how extraordinary improvements simplify the order-to-delivery procedure. Radio Frequency Identification or RFID is first carried out for inventory administration upon receipt of a buy order. With the assist of this kind of technology, shipments may also be straight away recognized and tracked alongside the courier's logistical network, guaranteeing unique and environment friendly management. The optimization of routes closely depends on GIS (Geographical Information Systems), after monitoring of supplies. This application minimizes experience time and lowers

working costs by using examining map records to pick out the majority of viable cargo pathways. In addition, the Global Positioning System (GPS) approves both the courier organization and the recipient to study the parcel's route in instantaneously, which improves the transportation approach's effectivity and dependability. When these developments work together, the cargo procedure is carried out easily and successfully, contributing to the final transportation stage to the place where the package deal is delivered to the recipient.

AlGhamdi et al. (2011) explain the adoption of online retailing in Saudi Arabia. It explains both the positive and negative influences of retailers in Saudi Arabia. A qualitative method of research was used by conducting an interview of the sample population of retail sector decision-makers in Saudi Arabia. The survey interview helps to explain both positive and negative issues influencing retailer adoption of electronic retailing systems in Saudi Arabia. The result shows that technical issues, infrastructure issues, lack of trust in online systems, and traditional shopping culture are the major factors that cause negative impacts while the facilitating factors include an increase in governmental support and an increase in initiatives for online systems and technological development, development of educational programs related to e-commerce, and safety and protection in online payment options to eliminate any kind of risks. This helps in the adoption of electronic retailing systems in Saudi Arabia and shifts more towards a courier system for buying and selling products.

Hendayani & Dharmawan (2020) highlight the strategies for improving the quality of logistics courier services mainly focused on the courier services provided by PT Tiki Jalur Nugraha Ekakurir (JNE). This study aims to review and analyze the classification model that is the most appropriate for the dataset, explore the rating of sentiments and dimensions to measure the quality of logistics company services and identify the problems that need to be prioritized. The priorities are based on three different levels on the basis of frequencies that include high, medium, and low levels. This classification was done by ABC analysis. The sample of this research is all the tweets in the month of September including 97.82% of negative sentiments and 2.18% of positive sentiments. The results show the need for enhancing communication and response time, presenting well timed deliveries to customers, and client satisfaction. It additionally sheds light on the effectiveness of the use of sentiment evaluation to control and enhance service quality in the logistics sector.

AL-Hussain & AL-Sayegh (2016) discover the expectations of Total Quality Management (TQM) practices inside the courier service industry in Kuwait. A qualitative approach of research was used with the aid of conducting interviews and surveys. These interviews and surveys have been performed amongst the employees, managers, and stakeholders of the courier company. This questionnaire was disbursed amongst the participants of 23 courier agencies in Kuwait. The findings exhibit a discrepancy between the expectations of TQM practices and their realistic application. This additionally highlights the important barriers in courier services in Kuwait which includes cultural factors, resistance to change, and lack of education programs, workshops, and different development programs.

The research study offers a thorough analysis of how Information Technology (IT) has affected the shipping sector, especially in Saudi Arabia, stressing both the advantages and disadvantages of new technical developments. Nonetheless, there are significant deficiencies in the literature at the moment, especially when it comes to how well computer technologies work to solve logistics problems in places with poor access to technology, like Saudi Arabia's countryside. Although it has been demonstrated that IT tools such as GPS and GIS increase productivity, there hasn't been plenty of debate about how these instruments should be used.

Furthermore, disparities emerge about the degree of delight amongst clients and staff throughout exclusive study efforts, suggesting the necessity for greater investigation into the variables impacting purchaser pleasure and employee well-being. The specific difficulties that transport help stumble upon in more than a few technological advances and geographical settings need to be the challenge of extra learn about in order to shut these discrepancies (Al-Qahtani et al., 2021; Rajendran, 2020; Ejdays & Gulc, 2020; AlGhamdi et al., 2011; Hendayani & Dharmawan, 2020; AL-Hussain & AL-Sayegh, 2016).

With a central point on the outcomes of technological sources on productivity, purchaser service, and logistics challenges, the investigation assessment provides beneficial important points about the feature of IT resources in the delivery sector. The advantages of IT options like RFID, GPS, and GIS for enhancing customer fulfillment, operational efficiency, and coping with logistics difficulties are amongst the essential conclusions. Furthermore, issues including

legislative structures, technology accessibility, and infrastructure deficits are noted, especially in areas including Saudi Arabia along with the countries of the Middle East.

By emphasizing the value of IT technologies and techniques for improving excellent service in the transportation sector, this overview contributes to the formulation of the study topic. It emphasizes how important it is to deal with technical constraints and legal barriers in order to improve the general efficiency. Through the integration of these perspectives, the study endeavors to formulate methods that optimize delivery companies by utilizing information technology resources, as well as efficiently resolving current difficulties.

Ethical Considerations

The research will focus on fulfilling all the ethical considerations in data collection, interviews, data analysis, and presentation of data to fulfil the need for professionalism. This research will use various ethical considerations such as privacy and confidentiality, informed consent, respect, debriefing, and data management and sharing. In my research, I will provide informed consent to all the participants in written form. This will help the participants to be aware of our research and what will be going to happen in this research. After reading the informed consent, they have free will to participate or withdraw from the research. The participants have rights of privacy and confidentiality and it will be ensured that their data will not expose their identity in public. The participants have the right to conflict of interest and they have the right to withdraw from the interview whenever they want. After the research, the participants will be debriefed about the research to eliminate any kind of deception in the research.

The data management and result or information sharing will be done by ensuring the use of ethical considerations and making sure that the results and the data in this research are reliable, valid, accurate, and relevant to the current situation and making sure that the confidentiality of participants should not be compromised and to present data without exposing the participant's identity. In this research, I will use different AI tools to enhance our research information and increase the accuracy of our research. For this purpose, different AI tools are used to find relevant and reliable articles according to the topic of the research, AI tools also help to analyze the articles

in less time by providing more data in less time and also help to find relevant information. The AI tools are also used in this research for the generation of citations such as Scribrr is used in our research for reference generation in APA style. The AI tools are also used to check grammar and plagiarism in our research which helps to make good quality information and manage grammar errors if any according to checkers such as QuillBot for grammar and plagiarism checking. The data gained from AI tools are paraphrased and then written in the research to eliminate any kind of AI detection. This helps to get research with zero AI after AI detection.

Conclusion

To sum up, this research proposal develops insight into a vital evaluation of the challenges in logistical management confronted by courier services, mainly in Saudi Arabia. The effects discover the challenges confronted by courier organizations in Saudi Arabia and shed light on the need for systemic development and innovation to improve the operational efficiency and efficacy of courier services and their customer satisfaction. These research findings shed light on the critical requirement of taking initiatives in the development and advancements of technological infrastructure through the use of high information technological systems. It also explores the role and importance of navigation systems in courier services and how they develop the performance of courier services. The results also develop knowledge and insight into the effects of the use of advanced vehicles in courier services and their effects in increasing the performance, efficacy, and efficiency of the courier system in Saudi Arabia. For this purpose, the research collected data from different participants and analysed of research by utilizing a qualitative method of research. It used interviews and case studies for data collection. This interview and case study method facilitates providing efficient, reliable, diverse, and accurate knowledge relevant to the topic and also provides an understanding of the challenges of courier services that cause obstructions in the courier services. The ethical considerations followed in this research include privacy and confidentiality, informed consent, respect, debriefing, and data management and sharing. The implications of this research include developing knowledge and insight for students, employees, academia, practitioners, and industry stakeholders. Through this research, we can develop and enhance the courier services in Saudi Arabia and reduce the delay in courier services by developing and introducing innovations in this system. Overall, this research not only highlights the key challenges faced by the courier system and their services in Saudi Arabia but also highlights the

changes that help in the development of courier services and enhance their performance by using technological innovations, high information technologies, navigation systems, and developed and advanced vehicles.

Apart from examining the obstacles and prospects present in the Saudi Arabian transport sector, this study emphasizes the significance of adjusting to emerging technologies and promoting creativity. Through the utilization of cutting-edge automobiles, satellite navigation systems, and high-tech solutions, shipping companies can improve their operating productivity and satisfy the changing demands of their clientele. In addition, the adherence to moral values in this study guarantees the authenticity and reliability of the results, encouraging conscientious methods of inquiry. The ramifications go above academics to include participants, business professionals, and legislators who may use the knowledge gathered to really enhance shipping services. In the end, this study adds to the larger conversation about technological advances and logistics administration, opening the door for a better and quicker transportation network in Saudi Arabia as well as worldwide.

References

- AlGhamdi, R., Drew, S., & Al-Ghaith, W. (2011). Factors Influencing e-commerce Adoption by Retailers in Saudi Arabia: a qualitative analysis. *The Electronic Journal of Information Systems in Developing Countries*, 47(1), 1–23. doi:10.1002/j.1681-4835.2011.tb00335.x
- AL-Husain, R. A., & AL-Sayegh, W. A. (2016). Analysis of The Expectation of TQM Practices In Courier Service Providers In Kuwait: An Empirical Study. *Arab Journal of Administrative Sciences*, 23(1). 43-66. https://www.researchgate.net/profile/Raed-Al-Husain/publication/292960497_Analysis_of_the_Expectation_of_TQM_Practices_in_Courier_Service_Providers_in_Kuwait_An_Empirical_Study/links/56b88c3008ae5ad3605f3ce8/Analysis-of-the-Expectation-of-TQM-Practices-in-Courier-Service-Providers-in-Kuwait-An-Empirical-Study.pdf
- Al-Qahtani, A., Chuman, M., & Kouki, R. (2021). Role of IT Tools in the Courier Industry. *Palarch's Journal Of Archaeology Of Egypt/ Egyptology*. 18(12), 227-234. <https://archives.palarch.nl/index.php/jae/article/view/7874/7379>
- Alwahaishi, S., & Nehari-Talet, A. (2015). Opportunities and Challenges for the Electronic Commerce Deployment in Developing Countries. In *E-Commerce* (pp. 2339-2350). IGI Global. https://www.academia.edu/20890883/Opportunities_and_Challenges_for_the_Electronic_Commerce_Deployment_in_Developing_Countries_Discussed_in_a_Case_of_Saudi_Arabia
- Alenzy, M. Z. (2023). The Role of Logistics Capability Management and Supply Chain Integration in Improving Logistics Performance of Logistics Service Providers in Saudi Arabia. Doctoral thesis, RMIT University. <https://researchrepository.rmit.edu.au/esploro/outputs/9922243109301341>

Dorn, L., & Barker, D. (2005). The effects of driver training on simulated driving performance. *Accident Analysis & Prevention*, 37(1), 63-69. DOI:[10.1016/j.aap.2004.06.005](https://doi.org/10.1016/j.aap.2004.06.005)

Ejdys, J., & Gulc, A. (2020, October 31). Trust in courier services and its antecedents as a determinant of perceived service quality and future intention to use courier service.

Sustainability, 12(21), <https://doi.org/10.3390/su12219088>

Ghoumrassi, A., & Tigu, G. (2017). The impact of the logistics management in customer satisfaction. *Proceedings of the International Conference on Business Excellence*, 11(1). DOI:[10.1515/picbe-2017-0031](https://doi.org/10.1515/picbe-2017-0031)

Hendayani, R., & Dharmawan, M. C. (2020). Strategies for Improving the Quality of Logistics Courier Services Through Priority Problem-solving Based on Multiclass

Classification. *IOP Conference Series: Materials Science and Engineering*, 879,

012051. doi:10.1088/1757-899x/879/1/012051

Jung, H., Lee, K., & Chun, W. (2006). Integration of GIS, GPS, and optimization technologies for the effective control of parcel delivery service. *Computers & Industrial Engineering*, 51(1), 154-162. DOI:[10.1016/j.cie.2006.07.007](https://doi.org/10.1016/j.cie.2006.07.007)

Li, F. (2022). Logistics Distribution Path Optimization Algorithm Based on Intelligent Management System. *Computational Intelligence and Neuroscience*, 2022(1), 1-12. DOI:[10.1155/2022/3699990](https://doi.org/10.1155/2022/3699990)

Ranaweera, C., & Prabhu, J. (2003). On the relative importance of customer satisfaction and trust

as determinants of customer retention and positive word of mouth. *Journal of Targeting,*

Measurement and Analysis for marketing, 12, 82-90.

<https://link.springer.com/article/10.1057/palgrave.jt.5740100>

Rajendran, S. (2020). Improving the performance of global courier & delivery services

Industry by analyzing the voice of customers and employees using text analytics.

International Journal of Logistics Research and Applications, 24(5), 473–493.

doi:10.1080/13675567.2020.1769042