National College of Ireland

PERSISTENT COVID-19: INVESTIGATING THE IMPACT ON COURIER COMPANIES IN NIGERIA

BY

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Abstract

The ramifications of the COVID-19 pandemic are global, the nature of the impact is a function of several factors in specific local country contexts. For a developing country like Nigeria, the effects of the pandemic can be exacerbated by already existing challenges which are onerous. Therefore, this study is warranted to understand specifically the impact of the pandemic on the operations of courier companies in Nigeria. Although the pandemic is still ongoing, the period under review is 2020 to 2021, during which the pandemic had the greatest impact globally. The focus on the courier service industry is justified by the role that courier companies play in disaster situations when human mobility is greatly limited. Using a qualitative approach with two sets of questionnaires designed to cover both the demand and supply side of courier service, this study elicited responses from managers of courier companies in Nigeria and their clients, primarily e-shops and individual e-customers. The total number of participants was 206. Both descriptive and inferential analysis were implemented with various results that indicated that the pandemic has had a significant impact on service quality of courier companies in Nigeria. Moreover, results also show that the most significant challenge that courier companies in Nigeria faced during the worst period of the pandemic were in connection to the various restrictions of government. Challenges were generally less associated with costs. This study also found that both courier companies and clients perceived that the pandemic to has created more challenges than opportunities. Recommendations are made, both in terms of policy implication and practical industry initiatives.

Keywords: *COVID-19, Courier, Companies, Nigeria*

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CHAPTER ONE

INTRODUCTION

1.1   Background

The effects of the economic crisis, political waves of nationalism, and Brexit, including, most crucially, the US trade war, are all issues that globalisation is now addressing. Another significant setback for globalisation has been handed by the COVID-19 epidemic. The series of incidents seems to have supported the ideas of anti-globalists who contends, among other things, claim that globalisation is to blame for COVID-19 becoming a global issue (Urata and Doan, 2022). One key reason for the spread of the virus has been identified as the ease with which people may travel to other parts of the world (Folarin and Ayodele, 2021). The epidemic appears to have helped justify selective economic deglobalization as a requirement for sovereign policy-making due to the problems that resulted in global supply networks (Novy, 2020). Is deglobalization the solution again for the post-COVID-19 pandemic world, though? As far as global trade is concerned, global cooperation is essential when it comes to commerce since it is the driving force behind economic change and growth. Deglobalization is not the solution based only on the trade's potential to generate income (Scott and Wilkinson, 2020). Reforms are unquestionably required to address some of the paradoxes brought on by globalisation, though. These changes will start by looking at how the COVID-19 epidemic has affected important market areas concerning globalised commerce. Considering that it is a significant facilitator of commerce, the market for courier services is one of these areas that should not be disregarded. The introduction of several aeroplanes because of infrastructural improvements, tariff reductions, and the relaxation of constraints on international commercial markets are just a few examples of how the onset of globalisation has facilitated the rise in courier companies (Somasundaram, Balasubramani and Krishnamoorthy, 2013). Thus, the courier industry serves as an example of the positive benefits of globalisation.

This business, which includes quick door-to-door delivery & pick-up, transportation of letters including mail-related goods, and parcel (package) delivery, is extremely competitive (Rauyruen and Miller, 2007). These services are usually combined with additional value-added services to enhance the delivery experience for users. They are

typically provided on a business-to-business (B2B), business-to-customer (B2C), and occasionally customer-to-customer (C2C) basis. The intricate web of actors and procedures that are launched when a client hits an online buy button for cross-border package commerce is depicted in Figure 1.1 below. Contrary to courier and package services, express deliveries are typically time-bound, with a variety of high shipments coming within just a few days or at a set time and date. Given the nature of the actions done to improve the problem, the structure of these services leaves them vulnerable to the COVID-19 pandemic. However, because opportunities and problems frequently coexist, the effects of COVID-19 on firms might be either favourable or negative, or perhaps both. It may be feasible for businesses to take advantage of the opportunities presented by the pandemic, depending on how they view the disease and how they position themselves. For instance, the pandemic in Malaysia usually hindered traditional courier services, but it also opened up new digital prospects due to inter-company reliance on e-business firms (Izzah, Dilaila and Yao, 2021). Additionally, this has increased interest in combining technology like the usage of robots for courier services (Yahya, 2021). The use of drones, for example, has made contactless delivery services possible.
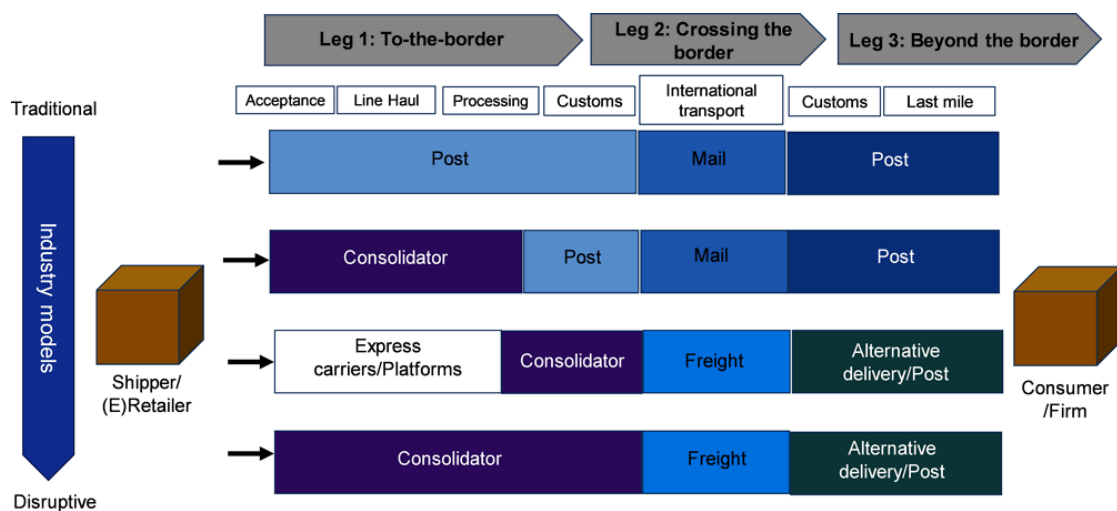
Figure 1.1: The intricate web of players who make sure packages reach their destination. Citation: Accenture (2019).

There appears to be no end in sight to the ongoing COVID-19 outbreak. Many strategies have been implemented to bring the pandemic to a halt. For instance, several nations, including Nigeria, entered a state of lockdown, which included restricting travel both

domestically and internationally. However, the pandemic's effects on companies were not limited to the lockdown. The pandemic was an existential crisis, due to the numerous responses to the epidemic, global economic activity had to temporarily halt (Kumari and Toshniwal, 2020). The lockdown, which was formerly the most common tactic, spread around the world. Numerous industries that courier services rely on, like manufacturing, were shut down. On the flip side, others faced sky-high increases in demand. International travel limits, local air travel limitations, a ban on social and cultural events, and general mobility restrictions were all part of Nigeria's response to COVID-19 (Fuwape, Okpalaonwuka and Ogunjo, 2020). In Nigeria, the impacts of the Coronavirus have been nothing short of disastrous since the index case was reported on February 27, 2020. (Ajide, Ibrahim, and Julius, 2020). Nigeria announced a state-wide lockdown on March 30, 2020, in line with the international procedure (Ajide, Ibrahim and Alimi, 2020). On April 27, 2020, this was prolonged for another two weeks. Consequently, the country's unsustainable economic implications spurred the government to propose a planned and gradual lifting of the lockdown, which took effect on May 5, 2020 (Ajide, Ibrahim, and Julius, 2020). There will undoubtedly be unforeseen implications for the courier company sector as a result of this abrupt stop to economic activity.

The NIPOST Act of 2004 created a Nigerian Postal Service (NIPOST), which has the authority to licence, control, and manage the country's courier industry (Egbejule, 2022). Since then, the courier services business has expanded tremendously, and as of November 2014, 293 courier firms were operating in Nigeria (Ugwu, 2015 in Tiamiyu and Eigbe, 2018). The top businesses in the Nigerian courier sector include international giants like DHL, FEDEX/RSE, UPS, and IAS/TNT Express as well as recent local startups like IFEX, ABEX, Tranex, Tradeways, or Courier Masters (Orolugbagbe, 2010 in Tiamiyu and Eigbe, 2018). FedEx Corporation, Deutsche Post DHL Group, and United Parcel Service Inc. are the market leaders in the $347 billion global courier & delivery services market (IBISWorld, 2021). The above leads to the conclusion that the courier and delivery services business is significant by all standards and, as a result, might result in massive advantages if enhanced.

1.2   Research Justification

The globalised commerce environment depends on the courier services sector. This Coronavirus Disease 2019 (COVID-19) outbreak has significantly hampered business activities in almost every nation around the globe. Although diseases and pandemics have always influenced global supply chains, the current COVID-19 pandemic is unprecedented and widespread (Boccaletti et al., 2020). The type of response, which included worldwide lockdowns and work limitations, is unrelated to this. Similar to most other nations, Nigeria's federal government-imposed limitations on travel among states and cities, and state governments added further rules. These precautions, along with the potential for a coronavirus pandemic, caused unexpected issues for businesses. For instance, the COVID19 epidemic posed a serious threat to courier services' capacity to deliver prompt and efficient services (Owuso and Jaja, 2022). There is no question that corporate operations won't revert to pre-COVID-19 conditions, even though the epidemic is now weakening amid the easing of COVID-19 restrictions (Ingrassia et al., 2020). Developing any model for company operations after the COVID-19 outbreak and any other upcoming globalization-related paradoxes requires an awareness of the influence of the pandemic on the industry's operations. Efforts need to be repeated at the national or regional level, even though some have been made at the global level. This explains why Nigeria is the subject of this investigation.

1.3   Research Problem

By 2020, the COVID-19 virus had such a significant impact on the world that it was difficult to see things returning to the way they were before the epidemic shortly. The economic effects of the epidemic have been catastrophic. Numerous countries used lockdowns and stay-at-home measures to address the issue, which practically stopped economic growth over many periods (Kumari and Toshniwal, 2020). The overall state of the economy was the worst it had been during the Great Depression of the 1920s through the 1930s (Urata and Doan, 2022). Due to COVID-19 limitations, the courier and delivery service industries in several nations faced serious interruptions to frequent post and courier services, resulting in delays or non-operation in specific regions. Courier deliveries that normally take two- or three-days during lockdowns are taking two weeks or longer, according to several universities (Shaughnessy, 2020). Many nations are completely removing limitations and resuming normal life as a result of

changing worldwide attitudes on the chronic nature of COVID-19 and the succeeding coronavirus variations' lack of severity in terms of fatalities and hospitalizations. As a result, 2020 and 2021 will probably be remembered as one of the deadliest years of COVID-19. It would thus seem to be extremely relevant to look at those years and draw lessons that can aid in lessening the adverse effects of future conflict that may occur as a result of continuous globalisation. The fact that the pandemic stopped all worldwide manufacturing has major implications for the courier company business, due to Vidya et Prabheesh (2020).

Gulc (2021) emphasised the necessity for more study that considers both the exterior (individuals or company consumers) and internal (organisations) viewpoints, saying that there is a dearth of literature on the subject. Direct selling and fulfilment centres are two of the several business models for shipping and distribution channels associated with cross-border commerce for digitally purchased commodities (OECD, 2020). Majority of the time, direct selling is employed for products with greater value or sporadic demand and comparatively smaller sales. Sending goods directly from a firm to a customer is known as direct selling. Products with more consistent and predictable sales quantities are employed in fulfilment hubs, which are preferred by major online retailers. When a customer puts their online order, the order is completed by shipping from the closest warehouse since fulfilment centres are placed closer to customers. The COVID-19 limits that have been adopted in many countries have made the entire procedure processes for the two concepts much more challenging.

1.4 Research Questions and Hypotheses

The COVID-19 pandemic has been described as persistent in literature (Fournier et al., 2020; Volgger, Taplin and Aebli, 2021; Huang et al., 2021; Alu et al., 2022) How the COVID-19 pandemic might affect courier services in Nigeria in 2020 and 2021 is the main study issue. The following is a list of other research issues. The questionnaire will be made available based on comparable high-level studies from Gulc (2021), UNCTAD (2020), & Zou, Huo, and Li (2020). This study's goal is to determine how Nigeria's courier services may be impacted by the COVID-19 pandemic in the years 2020 and 2021. The pandemic which started in 2019, has been persistent, with those years being the worst-hit period. Based on COVID-19 experiences in 2020 and 2021, the ensuing research queries.

1. What effect does COVID-19 have on the calibre of the courier service?

2. What were the COVID-19 pandemic's biggest obstacles for courier delivery?

3. What do courier firms in Nigeria think about the ongoing COVID-19 pandemic?

The following are some of the study's hypotheses:

H1$_0$: COVID-19 has no appreciable effect on Nigeria's courier service quality.

H2$_0$: The difficulties caused by COVID-19 and how Nigerian courier firms see the COVID-19 epidemic are not significantly related.

1.5   Structure of the Research

This dissertation follows a five-chapter structure. The first chapter gives an introduction. The second chapter examines the current situation of the literature review. The methodology is spelt out in the third chapter. The fourth chapter contains the results and discussion of the findings, while the fifth has the conclusion.

CHAPTER TWO

LITERATURE REVIEW

2.1   Preamble

The study's literature review is presented in this chapter. The goal of this study is to determine how the COVID-19 outbreak would impact courier services in Nigeria in 2020 and 2021. The themes that form discussions in the following sections and subsections are generated from the topic of the study, research questions, objectives and hypotheses. The chapter is structured as follows: an introduction, a conceptual evaluation of the literature based on the key topics and terminology developed, a conceptual review of key concepts in literature, an evidence-based assessment of related research, and a summary with highlighted areas of misinformation.

2.2   The Supply Chain, Logistics and Courier Services Industry

To meet the demands of the end consumer, the supply chain is made up of many types of (judgement and implementation) procedures and (material, information, and financial) flows that occur both inside and across supply chain stages (FAO and INRAE, 2020; Alakaş and Eren, 2021). In addition to the manufacturer and its suppliers, the supply chain may also include transporters, warehouses, merchants, and customers (depending on the logistical flows) (Flynn, 2021). Most definitions of logistics place more focus on the efficient movement of goods, services, and relevant metadata from the point of origin to the point of consumption than only from the point - of - sale to the site of consumption to fulfil customer expectations (Grant, 2012). These definitions consequently give the impression that customers and consumers are somehow involved in the logistics process, such as when importing goods produced elsewhere in the current global supply chain network or planning online deliveries to the home (or another location, such as a pick-up location, another retail chain, or a package storage room) (Aspara, Grant and Holmlund, 2020). Physical distribution is unquestionably significant in supply networks. One of the linkages in the supply chain is logistics, which is distinct (Schlegelmilch, 2022). The portion of the supply chain known as logistics deals with the organisation, management, and storage of goods and services from their point of origin to their final destination (Correia, Teixeira and

Marques, 2021). Researchers attribute SCM's beginnings to the logistics function's history, and some belief SCM and logistics to be interchangeable words (Roy, 2021; Lanzini, Ubacht and Greeff, 2021). Consequently, the terms supply chain and logistics are sometimes used together.

Since the turn of the millennium, the internet has brought in a retailing revolution by offering consumers a new, easy means of buying (Akbari and Do 2021). Since the turn of the millennium, the internet has brought in a retailing revolution by offering consumers a new, easy means of buying (Akbari and Do 2021). E-commerce, or online retail, is today a booming industry that offers a diverse array of goods as well as services (Radhakrishnan, 2021). The merchant now handles many of the physical aspects of the fulfilment process that were formerly handled by the consumer in-store and elsewhere. A retailer's distribution system is made more difficult by the "last mile" procedure, which is the last application of conventional logistics management procedures from "place of origin to point of consumption" (Movaheddin, 2021). The online shopping procedure includes packing, selecting, sending, transporting, retrieving, and returning actual items (Difrancesco, van Schilt and Winkenbach, 2021). Moreover, a commodity bought online or "virtually" must be delivered to the customer at the proper location, at the proper moment, in the right quantities, and even in satisfactory condition for the customer to use it. Courier companies are heavily dependent on this industry to provide these services (Edward, 2021). Globally, the epidemic prompted the use of e-commerce, which prohibited movement and constraints. Thus, this links the supply chain, where goods must go to final consumers via logistics management and where the viability of courier services is dependent (Thuy Tran, 2021).

2.3   The Courier Services Industry

Most communications were delivered by hand before automated courier services were available utilising several methods, like runners, homing pigeons, horseback riders, & foot messengers who travelled long distances (Norris, 2021). Anabasii, a sort of horse- and chariot-mounted messenger, were used by the ancient Greeks and Romans to carry messages and directions across long distances (Taylor, 2022). For shipments and consignments needing transit across longer distance networks, bike or motorbike couriers are frequently utilised in today's cities; they use sea lanes, highways, trains, and airlines. Organizations that use Just-In-Time (JIT) inventory management

commonly employ onboard couriers. These are persons who, mostly on commercial airlines, can fly anywhere in the world at any time (Kumar, 2018). For instance, recent commercial expansion has led to a sharp rise in direct-to-consumer deliveries, highlighting the importance of "last-mile" operations (Mariki, 2021). Concerning home delivery, customers have several delivery choices, including lockers or pick-up locations. With these click-and-collect alternatives, customers may make online purchases and pick up their purchases from a retailer in person (Mancini and Gansterer, 2021). Providing such services efficiently is getting increasingly difficult due to escalating complexity, dynamism, and uncertainty (Cho, Ozment and Sink, 2008).

Because they act as a conduit between companies and customers, courier services are crucial in the modern world. In most nations, receiving goods and having them delivered the exact day or in a few days has now become the holy grail (Dones and Young, 2020). A courier service moves mail, packages, and messages from one place to another. Couriers differ from typical postal services in terms of speed, security, signature, specialisation, tracking, and personalisation of express services, as well as majority of standard mail services' speedy delivery times. All levels of courier services are offered, spanning local to regions to national to international. The biggest courier firms that operate internationally and often employ a hub and spoke model are DHL, EMS International, TNT, UPS, FedEx, & Aramex (Kumar,2018). The growth of international e-commerce behemoths including Amazon and Alibaba has drawn considerable focus in recent years to couriers, express, & parcel (CEP) delivery companies (Sullivan, 2021). A highly established and specialised market exists in China, where the sector's fastest-growing segment is (Liu, Yang and Shi, 2021, Yueh, 2020). Thanks to the market, people can purchase almost anything with the touch of a finger (Sullivan and Kern, 2021). On the other hand, due to several operational problems including high prices, poor efficiency, and a lack of an integrated intermodal transportation network, local logistics networks continue to be unable to keep up with demand (Giuffrida, Jiang and Mangiaracina, 2021).

Depending on its position, delivery speed, commodities offered, or objects transported, a courier service may be defined (Tang et al., 2022). There are three well-known categories of courier delivery companies: local services, time-sensitive services, and international services (Dunlap, 2020). Despite being positioned in between supply

chain management and postal services, courier services have their unique qualities, including secured timely delivery to that same hour, a money-back guarantee, proof of shipment purchase, door-to-door delivery to the addressee, the ability to track shipping in a tracking-tracing framework, as well as the role of a specific messenger - shipping company (Hagen and Scheel-Kopeinig, 2021). The uniqueness of courier companies has drawn a lot of manufacturing and trade companies as well as individual customers (Gulc, 2017). Fast-moving consumer products and e-commerce websites have been blamed for the establishment of courier service firms and an increase in their numbers (Himanshu, Chandel and Bhagwat, 2022). On-time delivery is one of the most crucial elements of e-commerce businesses. Every e-commerce company is searching for a dependable courier company that can send its products at a fair price (Kumar,2018). Supply chain management is responsible for monitoring all raw material movement and transportation, product and service handling and packaging, warehousing and storage, and allocation through numerous channels to reach the consumer's door securely and on time (Czinkota et al., 2021). The courier service, a distinctive TSL service, has recently become an essential link in the logistical supply chains of many trades, manufacturing, and service organisations (Jarocka and Wang, 2018). Technology and service model advancements in the courier industry are changing customer behaviour and upending supply and travel networks (Khan and Shaheen, 2022).

The global courier, express, & parcel industry (CEP) has lately experienced tremendous growth, and it is anticipated that this trend will continue in the years to come. According to estimates, the worldwide courier market size was estimated at 306 billion u.s. dollars in 2018 and would expand by 8 to 10 per cent annually to 400 billion u.s. dollars by 2024. (Statista, 2019). The rise of internet shopping has been a significant factor in the expansion of courier services in recent years (Zhen et al., 2021). Online customers are attracted to features like several shipping options, real-time delivery details, the opportunity to rearrange deliveries, and same-day delivery (Gulc, 2017). Regular online consumers reported excellent experiences using courier companies: 78 per cent believed receiving their most recent order was straightforward, while % stated their best recent return experience was positive (DPD Group, 2019). Technology improvements have led to a change in the courier service model from conventional door-to-door deliveries to a self-service one characterized by non-interfaces and cutting-edge logistical technologies (PWC, 2019). In courier operations, data is produced in

practically every fundamental customer- and item-related service activity, adding up to an infinite number of transactions overall (Jintana, Sopadang and Ramingwong, 2021). Customers' names, addresses, & phone numbers were logged in real-time, together with information about the sale transaction, such as the time, date, weight, quantity of items, and service fees (Chonsowat and Sopadang, 2019). Courier companies use data analytics to make decisions, identify target clients, evaluate client demand, and build customised goods for each client. However, it's crucial to find out if this information is put to good use by learning from the opinions of customers and building new business models, this information may be able to help businesses grow (Jintana, Sopadang and Ramingwong, 2021). This enhancement might help a new service position flourish and acquire a competitive edge (Jintana, Sopadang and Ramingwong, 2021). Demand for courier services has substantially grown because of the potential COVID-19 pandemic. In response to demand, courier services sent supplies of food, groceries, paperwork, technology, clothes, and other necessities (Fenech, Falzon and Bugeja, 2020). This is perhaps an aspect of the pandemic that offers both opportunities and challenges.

2.4 Courier Services in Nigeria

Providing courier services is essential to the economic sector (Ayodele, 2022). Courier services are expanding quickly all over the world as a result of the e-commerce boom and globalisation. Courier services had to transform into organisations that could make quick deliveries in response to the growth of consumerism, e-commerce, as well as the introduction of online retailers (Villa and Monzón, 2021). They had to move from using trucks and buses because they couldn't navigate around traffic jams and then get to their objectives swiftly to using tricycles and motorbikes. The introduction of these less-expensive trucks opened the market to smaller companies in Nigeria, particularly as the regulatory authority, this same Nigerian Postal Service ("NIPOST"), remained largely in charge of overseeing businesses with high-profit margins including DHL, ABC, & GIG (Ogbonna, Ogbonna and Makinde, 2022). These courier services offer ongoing freight tracking using several techniques (Reardon et al., 2021). The courier-tracking systems often combine cellular-based technologies for communication including data messaging with satellite-based systems for data messaging, and these systems are normally only usable in populated areas or along major thoroughfares using mobile telephone service (Reardon et al., 2021).

Additionally, the absence of regulatory restrictions allowed for greater access, which led to the emergence of several new companies that specialise in providing services to people including Micro Small & Medium Enterprises (MSMEs). The large companies in the transportation business were forced to start using tricycles and motorcycles to deliver to people and MSMEs as a result of the implementation of these emerging MSME-focused couriers & logistic services creating a bubble (Aelex, 2021). Following this, the ban on the use of motorcycles for business purposes in Lagos, which was announced in January 2020, helped the industry because majority of companies that provided commercial rides, such as Gokada and Max.ng were pressured to switch to delivery services to survive. The restriction was seized upon by industry steamrollers, most notably GIG, who bought platforms for logistics and courier services like 1st Ride (Paul, 2020). The rules that apply to operators in other sectors of the Nigerian economy frequently also apply to players in the logistics sector. Nigerian logistics companies are governed under the Nigerian Postal Services Act, 2004, which has been in force since 2001. However, in July 2020, Nigeria's minister of communication and digital economy, "Dr Isa Ali Ibrahim Pantami," issued a new order for the regulation of courier and logistics companies. 2021) (Balogun, Mbah, and Omoniyi). The goal of the new rule 2020 for couriers and logistics firms, according to the minister of communication & digital economy, is to increase activities in this industry in Nigeria (Balogun, Mbah and Omoniyi, 2021). The previous law favored big players in the logistics and courier industries, but the new rule offers opportunities for a wider range of businesses. The directive's objective was to make it possible for operators of all types to be identified with a particular address and position that can be tracked both before and after utilising their services (Balogun, Mbah and Omoniyi, 2021). This measure is expected to lessen the likelihood that shady operators would exploit the industry's lack of regulation to do illegal business (Elebeke, 2020). In the delivery industry, courier services maintain a distinctive position. The key to keeping the cost of sending a package low is to pick up, move, and deliver packages as quickly and effectively as you can (Zenikov, 2021). You may be confident that your shipment will arrive on schedule and at a reasonable price, thanks to the way the parcel delivery network is set up (Yldz, 2021).

2.5   Theoretical Review

This study explores the nature of the COVID-19 pandemic's impact on businesses using the situational attribution theory as its foundation and guiding principle. The idea outlines the necessity for solutions that address both the nature and distinctive qualities of organisations in the sector, in addition to the spread and effects of the crisis on the firm. Although a crisis may have a significant influence on an organisation, Coombs (2007) contends that if steps taken to lessen the effects are inadequate, the issue may escalate. According to Simon (1976), the goal of behavioural theory is to make it clear how companies may be understood through their decision-making procedures, as these processes are essential to comprehending organisational phenomena. This shows that management decisions influence a company's capacity for change in the context of this research. In their behavioural theory of business, Cyert and March (1963) were among the first to question whether organisations had a broad knowledge base and prioritise profit maximisation. The behaviour of organisations has been predicted using their idea. Firms, they believe, may expand more successfully by satisficing rather than maximising goals. The management decision-making process should take into account uncertainty, such as that brought on by unexpected occurrences in the corporate environment or the unforeseen impacts of an organization's operations. Most companies in the past chose to rely on verified facts rather than speculative estimations to protect themselves against uncertainty, and some organisations still do so today (Endres, 2018). Instead of long-term actions like future-focused environmental forecasting with an integrated understanding of uncertainty, this manifests as short-term-focused behaviours (Mahoney and Rueschemeyer, 2003). An organisation adopts standard operating procedures, as a result, adopts reactive rather than proactive policy, and becomes more and more inactive.

According to the contingency theory (Burns and Stalker, 1961), organisations need to "fit" within the constraints imposed by their surroundings. Unlike previous theories that held that there were no universally applicable organisational principles, it also contends that there is a best-practice organisational structure or design for any context. For instance, a more static and adaptable organisational structure may be preferred in a more stable or dynamic setting. According to the contingency hypothesis, the organisational structure is impacted by the company's size, business strategy, and manufacturing process. The capacity of managers to modify the organisational design

or structure considering the scenario, i.e., the external environment and the company's current state, is referred to as organisational adaptation in the firm's contingency theory (Lewin & Volberda, 1999). In contrast to proactive management or environmental impact, the firm's contingency theory, which is a component of an organisational dynamic capabilities' framework, emphasises the reactive response to circumstances.

2.6   Empirical Review of Related Studies

Ivanov (2020) claims that pandemics are a subset of the supply chain (SC) risks characterised by high uncertainty, disruption spread (often known as the "ripple effect"), and sustained disruption. The study's simulation brought to light several cutting-edge research issues about COVID-19's effects on global supply networks. The paper uses the coronavirus, as an illustration, to show how simulation-based methods may be utilised to examine and foresee the effects of pandemic breakouts on SC performance. Business analysts Acee-Eke and Ikegwuru, scholars Ikegwuru and Harcourt, and Ivanov (2020) have all previously noticed the effects of COVID-19 on logistical operations. Borca *et al* (2021) asserted that a study of numerous studies found that the virus's influence has resulted in some remarkable positive advancements in the sector. Significant reductions in global emissions and a growth in support for sustainability are among the primary impacts of the COVID-19 crisis, including decreased freight and vehicle traffic. The growth of third-party logistics services and the introduction of e-commerce companies with effective delivery choices were two of the most noticeable shifts in the logistics and transportation sector during the COVID-19 pandemic. More companies are outsourcing supply chain tasks like order processing, shipping, and storage despite the pandemic, which helps the market and boosts earnings (Wang et al., 2021; Bratt, Sroufe, and Broman, 2021; Lin et al., 2021).

Desai (2021) claims that in the event of a COVID-19 pandemic, there are opportunities for short-, mid-, & long-term development and sustainability, notably for businesses in the logistics and courier sector. According to Luman, Soroka, and Konings (2021), the COVID-19 pandemic has fostered innovation and increased e-commerce and e-logistics services. More e-commerce and e-logistics enterprises have formed to accommodate the increased demand for these services. Shipping companies such as DHL and UPS are examples, as are real estate logistics businesses such as Walmart's online storage services. As more logistics companies use multi-hub networks to carry

packages overseas, constraints mount and scheduling operations becomes considerably more challenging (Kathuria et al, 2020). This study, which was guided by a structured literature review, provided an examination of the impact of pandemic breakouts on the existence of courier services. The COVID-19 outbreak has a substantial impact on all supply chain participants, and there is concern that cost-cutting & value differentiation is potential answers to the current problems. These factors have an impact on logistics operations.

2.7   Conclusion

The COVID-19 pandemic outbreak serves as an example of the devastation that pandemics and epidemics may do to courier services. Actions taken to stop the spread of COVID-19, such as attempting to restrict travel, tightening border controls, or establishing new border regulations (or protections in place for those in terms of carrying and inspecting goods), have had varying degrees of impact on the different modes of parcel transportation, despite being necessary. On the one hand, the Nigerian government is capable of debt, subpar institutions, destitution, abject poverty, widespread corruption, and greed, all of which have over time grown to be accepted as facts and standards in society. This is true of most African administrations (Aregbeshola and Khan, 2018; Adeniran and Sidiq, 2018). People were extremely unhappy and frustrated with their government's choice to implement a lockdown in reaction to the COVID-19 epidemic, especially because no meaningful steps were taken to lessen citizen loss and living circumstances (The African Report, 2020). The worst impacted were businesses and corporations since they had to either cease all activities as a result of government directives or operate at a level that was inefficient, inconvenient, and inconsistent with prior corporate norms and standards (Assaad and El-adaway, 2021; Butt, 2021). Furthermore, the COVID-19 situation is not the only one that Nigeria's economy is facing. Other challenges include financial hardships, rapid technical improvements, the predominance of foreign courier services, and the requirement for the formation of new courier businesses in Nigeria. The results of this study should be used by management in courier firms to estimate the short- and long-term consequences of pandemic breakouts on logistics organisations and establish contingency plans. Basic ideas, theories, and empirical research on the issue of continuing COVID effects on courier services have been addressed in this chapter. By addressing and emphasising

the effects of chronic COVID-19 on courier services, this study seeks to close this gap. To the best of my knowledge, Nigeria has not been the subject of such research.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter's goal is to describe the approach taken to respond to the study's research questions and accomplish its goals. Investigating the effects of a protracted COVID-19 epidemic on courier services in Nigeria is the main goal of this study. A research methodology's main purpose is to describe the steps used to accomplish the study's objectives and provide answers to its specific research questions. In general, this study employed online surveys to gather its data. As a result, this study adopted a qualitative methodology. The use of a questionnaire survey was made to preserve the participants' right to anonymity while being particularly helpful for obtaining data from a large number of people (Escolas et al., 2020). It is also reasonably priced 2018 (Bluman). The steps involved in conducting a questionnaire survey are covered in the sections that follow. These include identifying the research objectives, identifying the population and sample, selecting how to collect feedback, designing the questionnaire, testing it with a pilot survey, conducting the main survey, and analysing the results.

3.2 Research Design

This study uses a descriptive research survey to address the research topics covered in the preceding section. Descriptive research objective is to describe phenomena and their features (Pangaribuan, Ali and Mauluddin, 2020). The study's methodology places more emphasis on what happened than on how or why it occurred (Nassaji, 2015). To gather data, observational and survey approaches are frequently used (Gall, Gall and Borg, 2007; Silver et al., 2013). One variable can be expressed and compared to a standard to resolve univariate, normative, or correlative concerns, or descriptive research can be used to explain the relationship between two or more components (Bickman, Rog and Best, 2009). A descriptive survey is another way to collect data by conducting interviews with people or distributing questionnaires to a sample of the population that is representative of the entire community. To provide answers to the questions posed, this research employs a Likert-type scale. The freedom to select any response based on any line of reasoning is ensured as a result. The Likert-type scale allows researchers to access study participants' ideas, attitudes, and behaviours concerning the study's topic and objectives. Additionally, Likert scale questions make

it simple to operationalize beliefs and views (Casaca and Lyridis, 2020). In this study, the statements used in the Likert scales offer a continuum of potential responses that include a variety of gradations for agreeing with the facts as expressed or gauging effect.

3.3   Data Collection Instrument

The practice of acquiring information from a sample of the research population is known as data collection (Morzy, Valduriez and Bellatreche, 2015). The primary data collection instrument in this study was a self-administered questionnaire. The instrument, which is described as a self-report data collection tool that study participants complete, was a questionnaire (Christensen, Johnson and Turner, 2015). Questionnaires are used to assess participants' opinions and impressions, as well as self-reported demographic data. You can pick between closed-ended (where respondents must select from the researcher's reply) and open-ended questions while conducting surveys (where respondents provide answers in their own words). Many participants in the courier services industry responded to online surveys that were sent for this study using Google Forms. Due to the literature's identification of two demographic categories, this study makes use of two distinct sets of questionnaires. Gulc (2021) identified a research gap related to the lack of a thorough approach regarding factors that influence the quality of courier services from the perspectives of three stakeholder groups: e-commerce sites, delivery services, and e-clients, which prompted the development of the two questionnaires.

A single questionnaire is distributed to both e-shops and e-customers to examine the impact of COVID-19 more completely on the delivery business from a service standpoint. Because they both use courier services, they are both in a better position. The other questionnaire is geared toward the courier businesses themselves, who are in a better position to assess the issues that COVID-19 will provide for the courier sector. These are consistent with the study's goals. The problems viewpoint may highlight possibilities while the service perspective may highlight places for improvement. The questionnaires that are distributed typically have parts that are intended to measure a specific aspect of the research topics. In each instance, the initial phase is dedicated to gathering background data, including participant demographics. The research questions section includes inquiries meant to accomplish the study's goals. In the study questions

section, various interval scales of the Likert type are utilised. The questions in each section are designed to evaluate a certain variable. There are at least two questions for each variable and sub-variable. Questions in the section on demographic data are multiple-choice. The information was gathered with a high degree of precision using the nominal scale. This study uses a descriptive survey because it helps to concentrate the data on the ideal characteristics that the research topic seeks to achieve.

3.4   Research Population and Sample

All the people or things being examined together are referred to as the population but selecting a sample of the population to study is referred to as sampling (Rahi, 2017). As a result, the population in a particular empirical environment is typically significantly impacted by the study question or topic attributes of interest. The two distinct sets of questions employed in this study, which were described in the section above, indicate that the participants of this research appear to be Nigerian e-clients of the courier services organisation, or e-customers and e-shops. The study's second group of participants included Nigerian courier company managers. The preceding section outlined the justification for this decision. In a particular empirical investigation, a sample is a predetermined (drawn) subset of the population that is used to investigate or evaluate the unit of analysis on the variable(s) of interest. The Nigerian courier services business is the primary focus of this study. Although it is difficult to pinpoint the precise number of e-clients for Nigeria's courier service business, 293 courier companies have been identified in the literature (Ugwu, 2015 in Tiamiyu and Eigbe, 2018). Therefore, the sample contains at least 204 e-clients of courier services and 100 questionnaire responses from diverse courier business managers. Based on Israel's description of the accuracy levels, this computation was made (2012). A minimum of 304 people were taken into consideration overall.

3.5   Sampling Technique

As mentioned in the previous section, convenience sampling was used for this investigation. According to Toro, Garca-Garca, et al. (2020), convenience sampling is a non-probabilistic sampling approach in which participants are selected depending on their availability. The simplicity of obtaining a sample serves as the primary selection criterion (Stockemer, 2019). Convenience sampling has the benefits of being less expensive and time-consuming. Any sampling unit combination that excludes all the

sample units that make up the population might also have an influence (Martinez-Falero, Martin-Fernandez and Garcia-Abril, 2016). To increase the accuracy of their studies and their trust in the degree of sample size variation over time, researchers have made use of new technology. Every study project depends on choosing the best sampling approach because there are many affecting elements. These elements comprise the population of the study, the permitted sampling error, and the objective of the investigation. The study's self-administered questions were distributed via (online) Google Forms. Respondents received online invites using social media sites including Facebook, Twitter, Instagram, and WhatsApp. Emails were used to send invitations as well. The sources of the connections were openly accessible print and internet sources and platforms.

3.6   Data Analysis

The act of obtaining raw data and turning it into knowledge that may help users make decisions is known as data analysis (Karaca, Cattani and De, 2019). The purpose of data collection and analysis is to provide answers, test hypotheses, or support claims. To show how frequently and how probable a measured variable occurs, descriptive statistics will be used to summarise and present data as percentages and frequencies. Tables and charts are used as a result. The objective of this study was to evaluate the effect of a long-term COVID-19 pandemic on Nigerian courier firms using inferential statistics, particularly factor analysis. Chi-square was also used to examine connections and respond to study questions.

3.7   Reliability and Validity of Research Instrument and Pilot Study

How effectively the measure specifies the idea that is supposed to be measured determines the concept of research validity (Hair et al., 2007). Thus, face validity and concept validity were utilised in this investigation. Construct validity was employed since the constructs used to build the questionnaire were sourced and well-founded in the literature. The COVID-19 challenges were modified from those of UNCTAD (2020). The goal is to gauge pertains to what matters most to the courier sector. The Gulc measurements of courier service quality was modified (2021). The goal is to evaluate COVID-19's impact, which is why the possible responses are No Impact, Weak Impact, Medium Impact, and High Impact. Additionally, the conceptual framework of the study was connected to each component of the questionnaire. 15

respondents representing the various participant groups were consulted as part of pilot research to apply face validity and assess the suitability of the questions selected for each construct. To ensure that each portion is used to examine data for a particular aim, the questionnaire instruments used in this study were divided into sections. The volunteers were asked to test the questionnaire for applicability and offer input on its usefulness, clarity, and objectionability. Before being employed in the actual data collecting procedure, the research instrument was modified considering the findings of the pilot study. The pilot research participants' remarks were mostly insignificant, worrying about addressing the vagueness of questions. As a result, questions were changed and made simpler. There were no significant changes, though.

Table 3.1: Reliability and Descriptive Statistics for Challenges Construct

	N	Mean	Std. Deviation	Variance	Cronbach's Alpha	Internal Consistency
The pandemic disrupted the supply chain (lockdown, market closures, transport)	104	3.87	1.207	1.457	0.715	0.823
The COVID-19 disrupted logistics due to restrictions on movements	104	3.88	1.349	1.819		
Courier and e-commerce were not prioritized by the government	104	3.53	1.461	2.135		
The pandemic increased the cost of office operations	104	2.48	1.292	1.670		
Higher transport and delivery costs	104	3.49	1.441	2.078		

Table 3.1: Reliability and Descriptive Statistics for Challenges Construct

	N	Mean	Std. Deviation	Variance	Cronbach's Alpha	Internal Consistency
Valid N (listwise)	104					

Table 3.1 presents a summary of the selected descriptive statistics for challenges construct. It could be seen that all the mean values are above 3.0, which is the average of the 5-Point Likert scale utilized for the research instrument in this study, except for item 4 (The pandemic increased the cost of office operation). Based on the high mean scores, it could be said that there is relatively high degree of agreement for all the question relating to challenges of COVID-19. Table 1 provides an overview of all main variables' means, standard deviations, and the variance explained on each Likert-scale to further describe the items for each construct.

The study employed Cronbach's Alpha for reliability test, which has a value of 0.715, indicating 71.5% reliability score. That indicates that the section under the research instrument are consistent with the objectives the study sought to achieve.

Table 3.2: Reliability and Descriptive Statistics for Perception towards COVID-19 for Courier Companies

	N	Mean	Std. Deviation	Variance	Cronbach's Alpha	Internal Consistency
The COVID-19 pandemic period of 2020-2021 was bad for courier companies in Nigeria (Challenges were more opportunities)	104	3.53	1.343	1.805	0.691	0.782

	N	Mean	Std. Deviation	Variance		
The COVID-19 pandemic period of 2020-2021 was good for courier companies in Nigeria (Opportunities were more than challenges)	104	2.56	1.313	1.725		
Valid N (listwise)	104					

Table 3.2 presents a summary of the selected descriptive statistics and reliability for perception construct used for courier companies. It could be seen that all the mean values are above 3.0, which is the average of the 5-Point Likert scale utilized for the research instrument in this study, except for item 2 in the construct (The COVID-19 pandemic period of 2020-2021 was good for courier companies in Nigeria (Opportunities were more than challenges)). Based on the high mean scores, it could be said that there is relatively high degree of agreement for item 1 relating to perception towards COVID-19 among courier company. Table 1 provides an overview of all main variables' means, standard deviations, and the variance explained on each Likert-scale to further describe the items for each construct.

The study employed Cronbach's Alpha for reliability test, which has a value of 0.691, indicating 69.1% reliability score. That indicates that the section under the research instrument are consistent with the objectives the study sought to achieve.

Table 3.3: Descriptive Statistics and Reliability for Impact of COVID-19

	N	Mean	Std. Deviation	Variance	Cronbach's Alpha	Internal Consistency
Reliability	206	2.67	.696	.484	0.647	0.693
Cultured and courteous behaviour of courier company employees	206	2.08	1.151	1.325		

Easy contact with the courier company	206	2.57	1.110	1.232		
Efficient communication between courier company employees and clients	206	2.07	.929	.864		
Assurance	206	2.25	.678	.460		
Responsiveness of courier company to reported problems	206	2.47	.991	.982		
Efficient and fast order processing	206	1.77	.960	.921		
Flexibility in the choice or change of date and place of service	206	2.57	1.296	1.681		
Responsiveness	206	2.32	.729	.531		
Valid N (listwise)	206					

Table 3.3 presents a summary of the selected descriptive statistics and reliability for impact of COVID-19 construct. It could be seen that all the mean values are below 3.0, which is the average of the 5-Point Likert scale utilized for the research instrument in this study. Based on the low mean scores, it could be said that there is relatively high degree of disagreement for all the question relating to impact of COVID-19. Table 1 provides an overview of all main variables' means, standard deviations, and the variance explained on each Likert-scale to further describe the items for each construct.

The study employed Cronbach's Alpha for reliability test, which has a value of 0.647, indicating 64.7% reliability score. That indicates that the section under the research instrument are consistent with the objectives the study sought to achieve.

Table 3.4: Reliability and Descriptive Statistics for Perception towards COVID-19 for e-clients of Courier Services

	N	Mean	Std. Deviation	Variance	Cronbach's Alpha	Internal Consistency
The COVID-19 pandemic period of 2020-2021 was bad for courier companies in Nigeria (Challenges were more opportunities)	206	3.02	1.245	1.551	0.798	0.812
The COVID-19 pandemic period of 2020-2021 was good for courier companies in Nigeria (Opportunities were more than challenges)	206	2.84	1.278	1.634		
Valid N (listwise)	206					

Table 3.4 presents a summary of the selected descriptive statistics. It could be seen that all the mean values are above 3.5, which is the average of the 7-Point Likert scale utilized for the research instrument in this study. Based on the high mean scores, it could be said that there is relatively high degree of agreement for all the question relating to perceived authenticity, attractiveness, trustworthiness, and purchase intention of social media users. Table 1 provides an overview of all main variables' means, standard deviations, and the variance explained on each Likert-scale to further describe the items for each construct.

The study employed Cronbach's Alpha for reliability test, which has a value of 0.798, indicating 79.8% reliability score. That indicates that the section under the research instrument are consistent with the objectives the study sought to achieve.

3.8   Ethical Considerations

Participants were asked for their informed permission to make sure that ethics were considered, and that all participation was voluntary. Anytime without giving the researcher any warning, participants might leave the study. Respondents may easily remain anonymous because they were not required to disclose any sensitive personal information on the questionnaire. Since the information was gathered online for this study's participants, email addresses weren't required to track responses to questionnaires. The following informed consent principles were upheld throughout the survey research process: confidentiality of participant information; impartiality; participant protection; ensuring social responsibility and non-discrimination; and integrity, care, and honesty.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1　Introduction

The findings and related discussion are presented in this chapter. Depending on the research variables and the study's research topics, this also includes data analysis and interpretation. The descriptive statistics of the demographic data from the two questionnaires are followed by inferential statistics in this chapter. To create a visual representation of the data, the responses to the surveys are summarised in tables and figures. The general discussion section of this chapter follows after that.

4.2　Descriptive Statistics

To offer numerical summaries of the respondents' replies, tables and charts are used in this section. The next subsections include a presentation of them.

4.2.1 Section A: Information Gathered from Courier Companies

Table 1: Number of Employees

	Frequency	Per cent	Valid Percent	Cumulative Percent
50 or less	40	38.5	38.5	38.5
51–100	33	31.7	31.7	70.2
101–300	6	5.8	5.8	76.0
301–500	13	12.5	12.5	88.5
501–1000	12	11.5	11.5	100.0
Total	104	100.0	100.0	
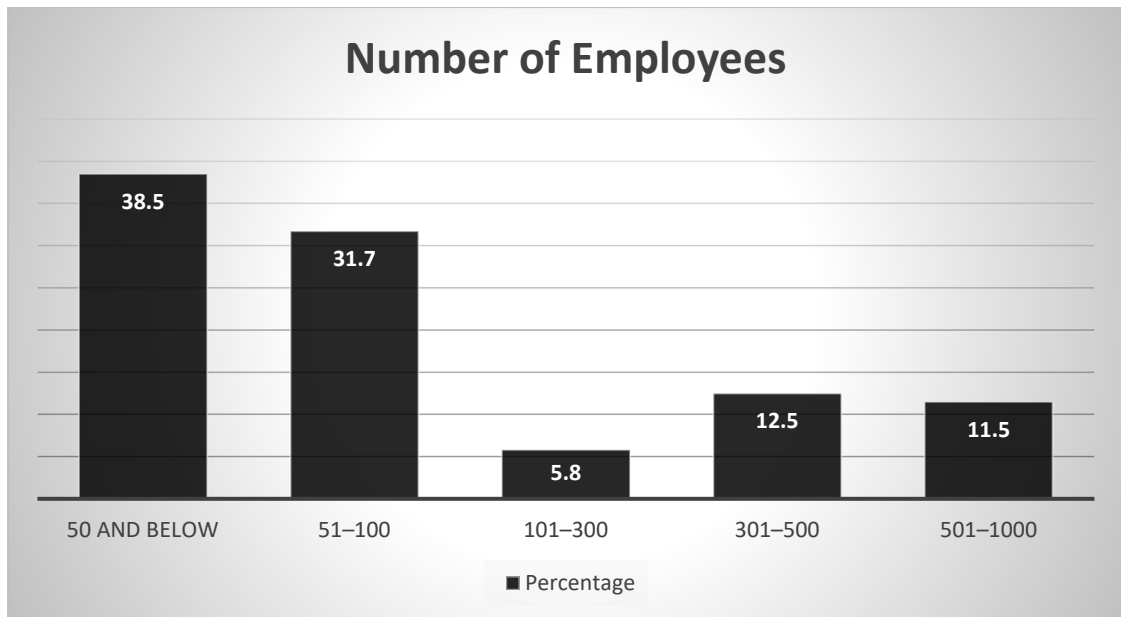
Figure 1: Employee Count

The number of workers at the courier companies used as the case study for the research is shown in Table 1 and Figure 1 above. 38.5 per cent of companies employ less than 50 people, while 31.7 per cent employ between 51 and 100 people. Only 5.8 per cent say their organisation employs between 101 and 300 individuals, 12.5 per cent believe it employs between 301 and 500 persons, and 11.5 per cent believe it employs between 501 and 1000 people. It demonstrates that the majority of courier businesses employ between one and one hundred people.

Table 2: Extent production and operations have been affected by this pandemic

	Frequency	Per cent	Valid Percent	Cumulative Percent
Positive results	18	17.3	17.3	17.3
No notable effects	18	17.3	17.3	17.3
minimal effect	9	8.7	8.7	43.3
large influence	27	26.0	26.0	69.2
a very negative effect	32	30.8	30.8	100.0
Total	104	100.0	100.0	

Extent production and operations has been affected by this pandemic
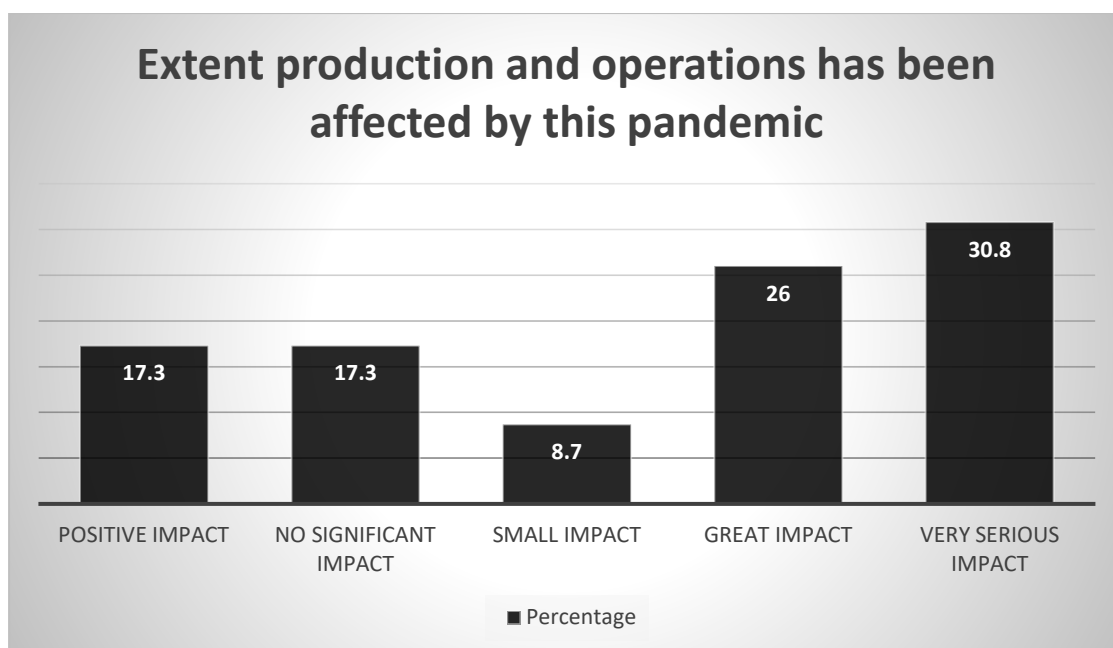
The pandemic's influence on production and operations is seen in Figure 2.

According to Table 2 and Figure 2, the majority of courier business employees (30.8 per cent) feel the pandemic has had a substantial influence on their firms' operations and output, whereas 26% of respondents agreed. A small number of respondents said they believed the pandemic had a minor impact on their companies' operations and production. 17.3 per cent of respondents believe that the epidemic has little to no effect on their business. Additionally, 17.3% of respondents think that the pandemic has a favorable effect on their companies' operations and productivity. The data show that the epidemic has a terrible impact on how the courier service operates.

Table 3: The pandemic disrupted the supply chain (lockdown, market closures, transport)

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strongly Object	9	8.7	8.7	8.7
Disagree	6	5.8	5.8	14.4
Neutral	11	10.6	10.6	25.0
Agree	42	40.4	40.4	65.4
strongly concur	36	34.6	34.6	100.0
Total	104	100.0	100.0	
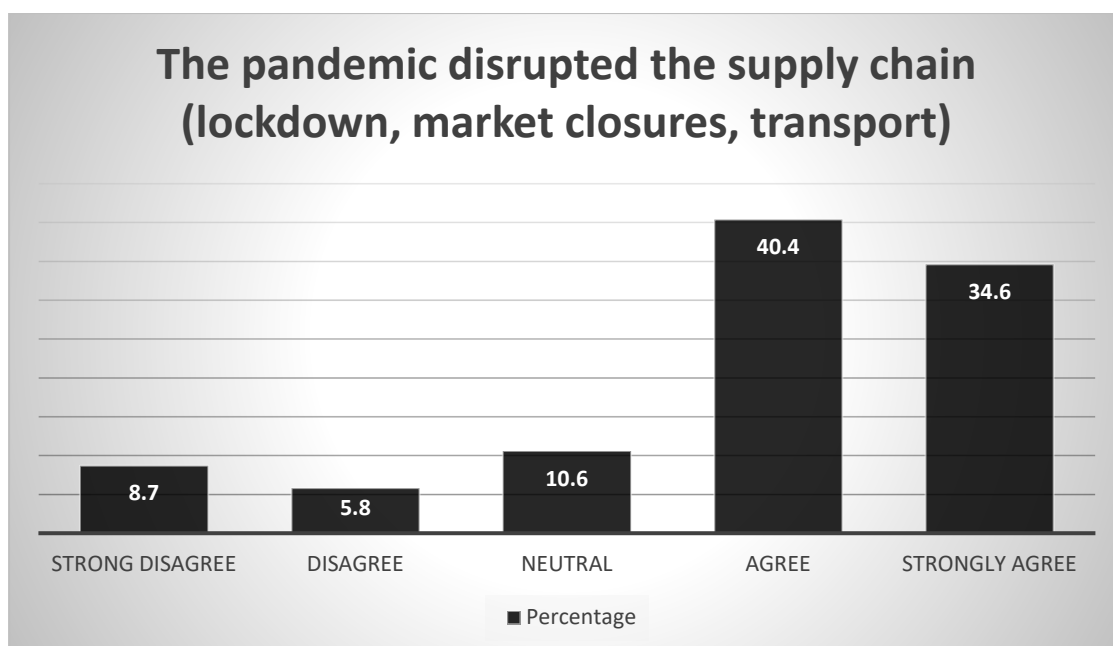
The outbreak's negative effects on supply chains are shown in Figure 3.

The majority of responders (75%) strongly agree or concur that the pandemic impacted the supply chain at their courier business (lockdown, market closures, transportation). This is seen in Table 3 and Figure 3. 10.6% of them have a neutral opinion, 5.8% have a disagreeable opinion, and 8.7% have a highly disagreeable opinion. According to the data, the pandemic had a substantial influence on the distribution network of courier services.

Table 4: The COVID-19 disrupted logistics due to restrictions on movements

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strongly Object	11	10.6	10.6	10.6
Disagree	10	9.6	9.6	20.2
Neutral	5	4.8	4.8	25.0
Agree	33	31.7	31.7	56.7
strongly concur	45	43.3	43.3	100.0
Total	104	100.0	100.0	
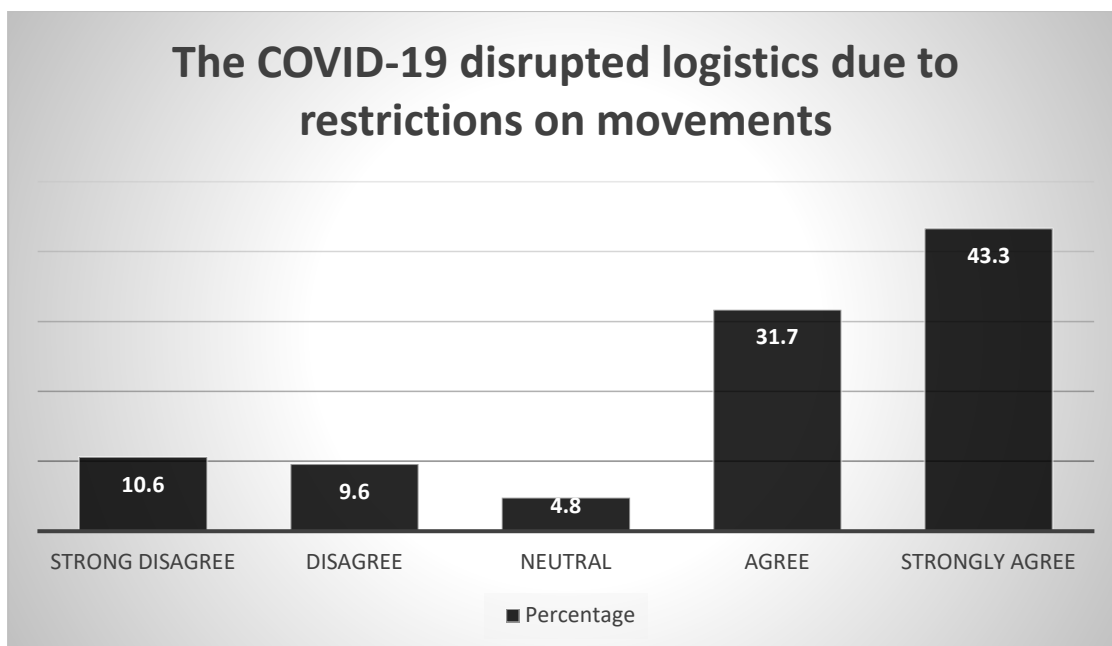
Figure 4: COVID-19's Effect on Logistics

Table 4 and Figure 4 show that 43.3 % of respondents strongly agree, 31.7 % agree, 4.8 % are neutral, 9.6 % disagree, and 10.6 % angrily disagree that Covid-19 damaged their businesses' logistics by imposing transportation restrictions. The average response suggests that respondents agree with this statement, which is 3.83. 75 per cent of respondents agreed with the study, which suggested that the Covid-19 epidemic affected logistics as a result of transportation restrictions.

Table 5: Courier and e-commerce were not prioritized by the government

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strongly Object	16	15.4	15.4	15.4
Disagree	15	14.4	14.4	29.8
Neutral	5	4.8	4.8	34.6
Agree	34	32.7	32.7	67.3
strongly concur	34	32.7	32.7	100.0
Total	104	100.0	100.0	

Courier and e-commerce were not prioritized by the government

| STRONG DISAGREE | DISAGREE | NEUTRAL | AGREE | STRONGLY AGREE |
| 15.4 | 14.4 | 4.8 | 32.7 | 32.7 |

■ Percentage
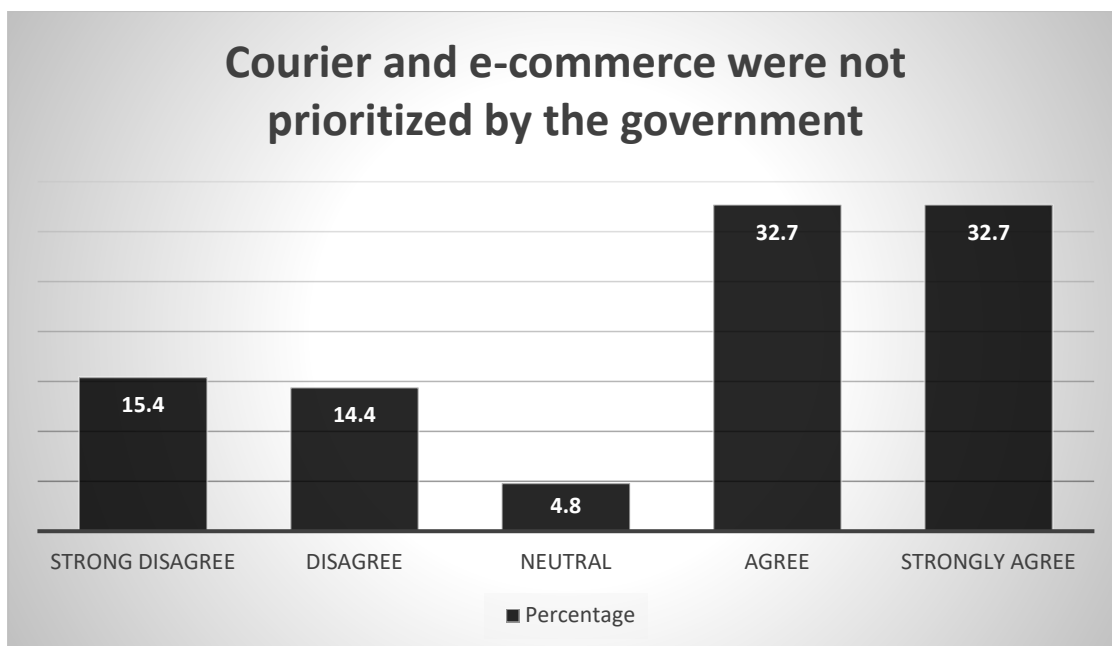
Fig . 5 shows how the government did not place a high premium on shipping and online purchasing.

Figure 5 and Table 5 above demonstrate how the government gave courier services and online shopping top priority during the outbreak. According to 65.4 per cent of respondents, they strongly believe that the government did not give them a priority. A total of 29.8% of them strongly disagree with the assertion. The research revealed that throughout the pandemic, the government did not give courier and e-commerce companies top priority.

Table 6: The pandemic increased the cost of office operations

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strongly Object	25	24.0	24.0	24.0
Disagree	44	42.3	42.3	66.3
Neutral	3	2.9	2.9	69.2
Agree	24	23.1	23.1	92.3
Strongly concur	8	7.7	7.7	100.0
Total	100	100.0	100.0	
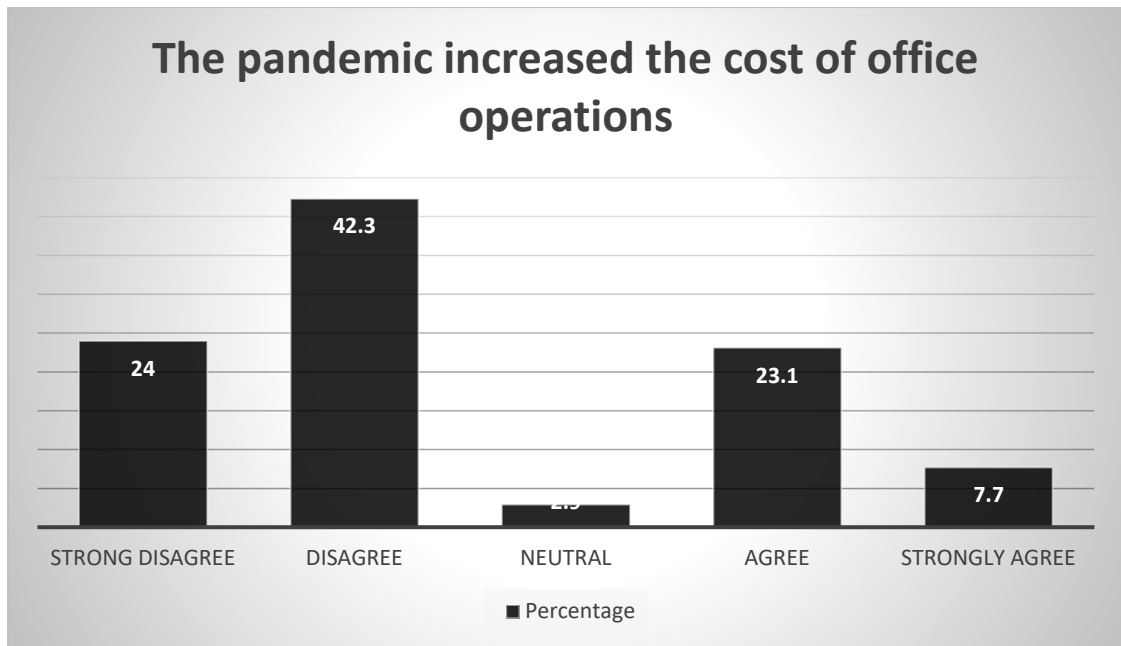
Figure 6 illustrates how the epidemic increased the cost of maintaining offices.

According to Table 6 and Figure 6, 24 per cent of the population strongly disagree, 42.3 per cent disagree, 3 per cent are neutral, 23.1 per cent agree, and 7.7 per cent highly agree that the pandemic increased operational expenses. The median response (2.53) reveals that respondents' opinions on the statement are mostly unfavourable. The outcome here showed that most employees did not think that the epidemic has raised office operating costs.

Table 7: Higher transport and delivery costs

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strongly Object	16	15.4	15.4	15.4
Disagree	14	13.5	13.5	28.8
Neutral	9	8.7	8.7	37.5
Agree	33	31.7	31.7	69.2
strongly concur	32	30.8	30.8	100.0
Total	104	100.0	100.0	
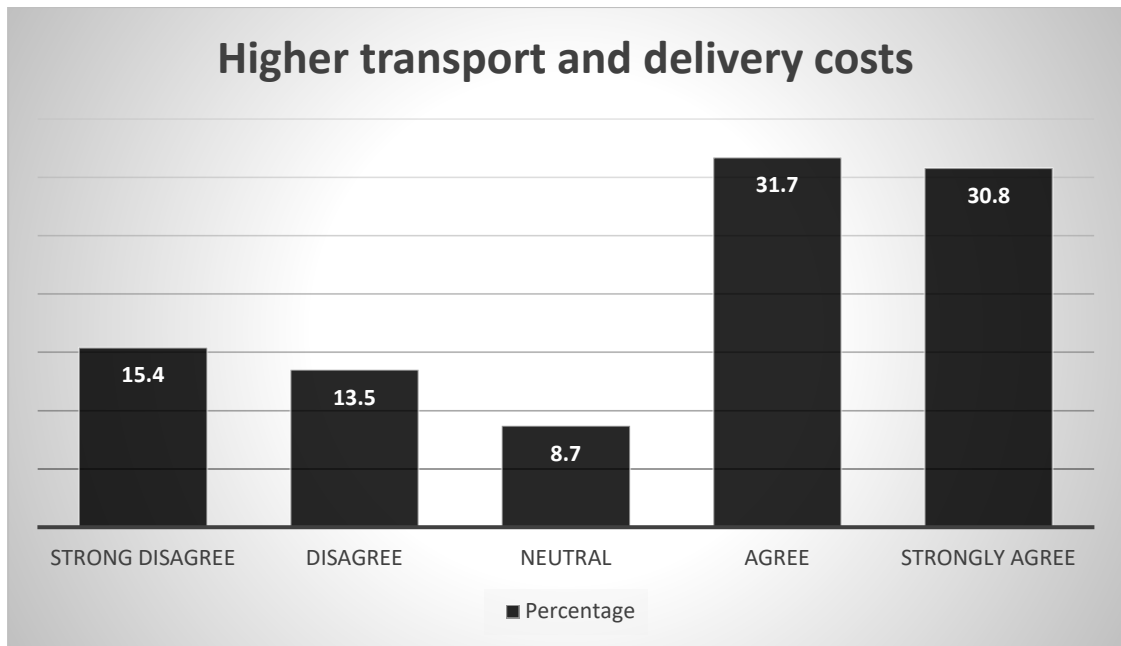
Increasing Delivery and Transportation Costs, Figure 7

According to Table 7 and Figure 7, 31.7 per cent agree, 31.8 per cent strongly agree, 9.7 per cent highly agree, 13.5 per cent disagree, and 15.4 per cent vehemently disagree that Covid-19 increased shipping and delivery prices. Employee recognition led to the conclusion that the outbreak raised the cost of delivery and transportation.

Table 8: Challenges of Covid-19 were more than Opportunities

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strongly Object	12	11.5	11.5	11.5
Disagree	15	14.4	14.4	26.0
Neutral	12	11.5	11.5	37.5
Agree	36	34.6	34.6	72.1
strongly concur	29	27.9	27.9	100.0
Total	104	100.0	100.0	

Perceptions of courier companies towards Covid-19 (Challenges more than Opportunities)

	Percentage
STRONG DISAGREE	11.5
DISAGREE	14.4
NEUTRAL	11.5
AGREE	34.6
STRONGLY AGREE	27.9
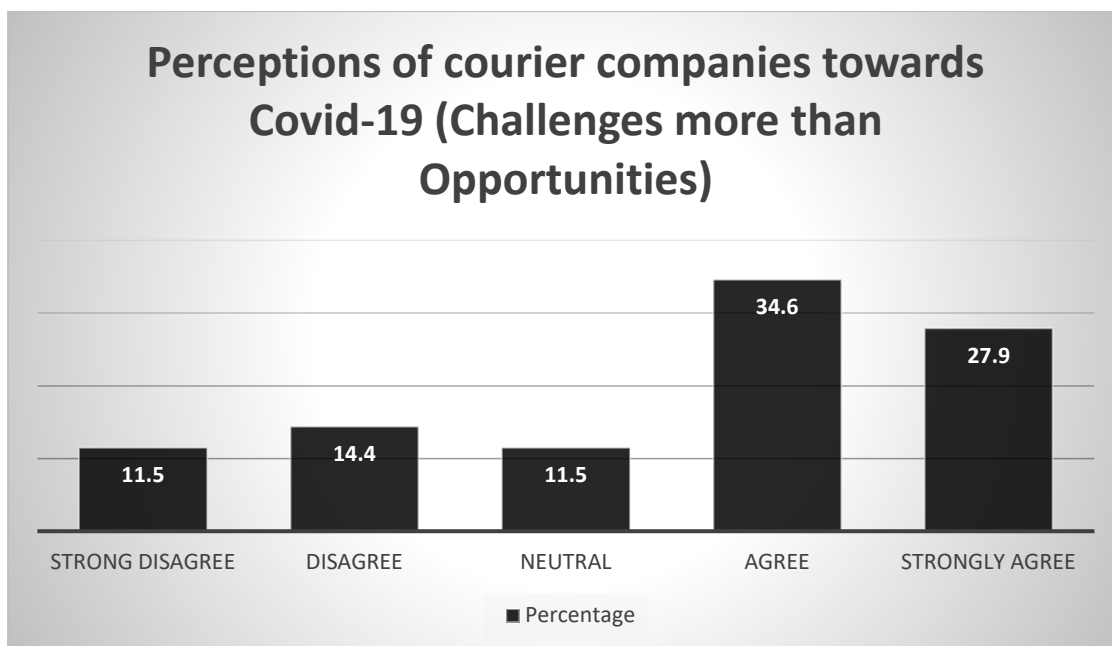
Figure 8 demonstrates that Covid-19's drawbacks exceeded its advantages.

Information on courier businesses' perspectives on Covid-19 is provided in Table 8 and Figure 8. 11.5 per cent of respondents strongly disagree, 14.4 per cent disagree, 11.5 per cent are indifferent, 34.6 per cent agree, and 27.9 per cent strongly believe that the obstacles of Covid-19 outweighed the potential. Given the foregoing finding, it is clear that a large portion of the workforce saw the epidemic as posing greater problems to their firms.

Table 9: Opportunities of Covid-19 were more than Challenges

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strongly Object	28	26.9	26.9	26.9
Disagree	28	26.9	26.9	53.8
Neutral	20	19.2	19.2	73.1
Agree	18	17.3	17.3	90.4
strongly concur	10	9.6	9.6	100.0
Total	104	100.0	100.0	
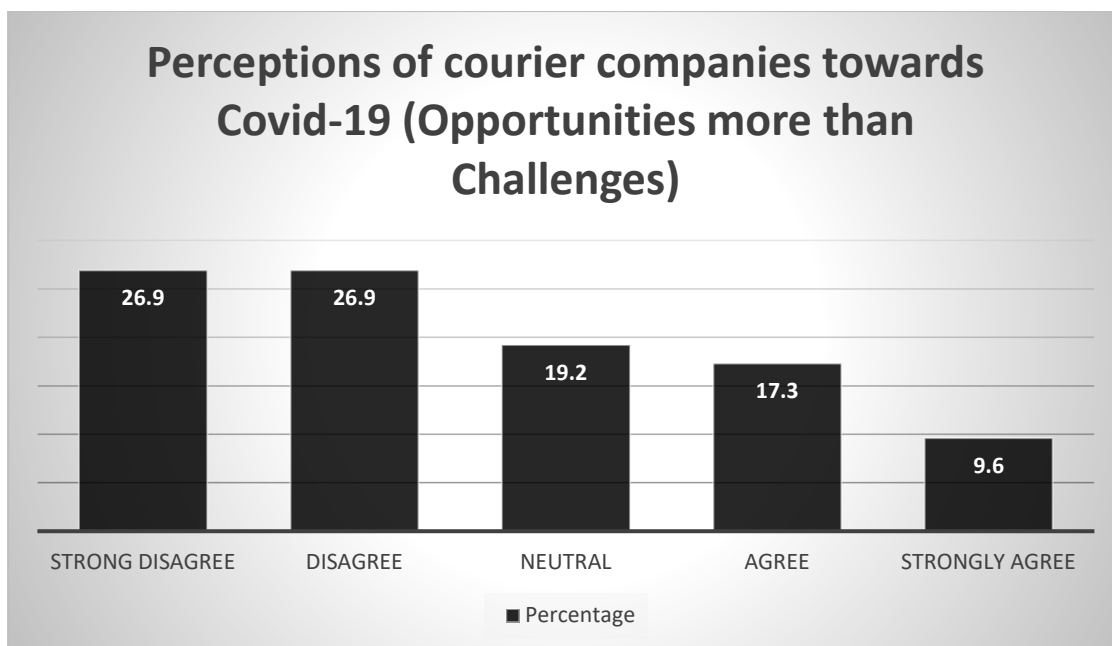
Figure 9: Covid-19's benefits outweighed its drawbacks.

Additionally, information on courier businesses' perceptions of Covid-19 is included in Table 9 and Figure 9. The assertion that Covid-19's prospects were greater than its obstacles is strongly disagreed with by 26.9 per cent of respondents, 19.2 per cent of whom are neutral, 17.3 per cent of whom agree, and 9.6 per cent of whom strongly agree. Since many employees do not think that Covid-19 presents more opportunities than obstacles, the outcome is the exact reverse of the prior claim.

4.2.2 Section B: Information Gathered from Courier Clients
Table 10: Courier Customer

	Frequency	Per cent	Valid Percent	Cumulative Percent
E-Shop	95	46.1	46.1	46.1
E-Customer	111	53.9	53.9	100.0
Total	206	100.0	100.0	
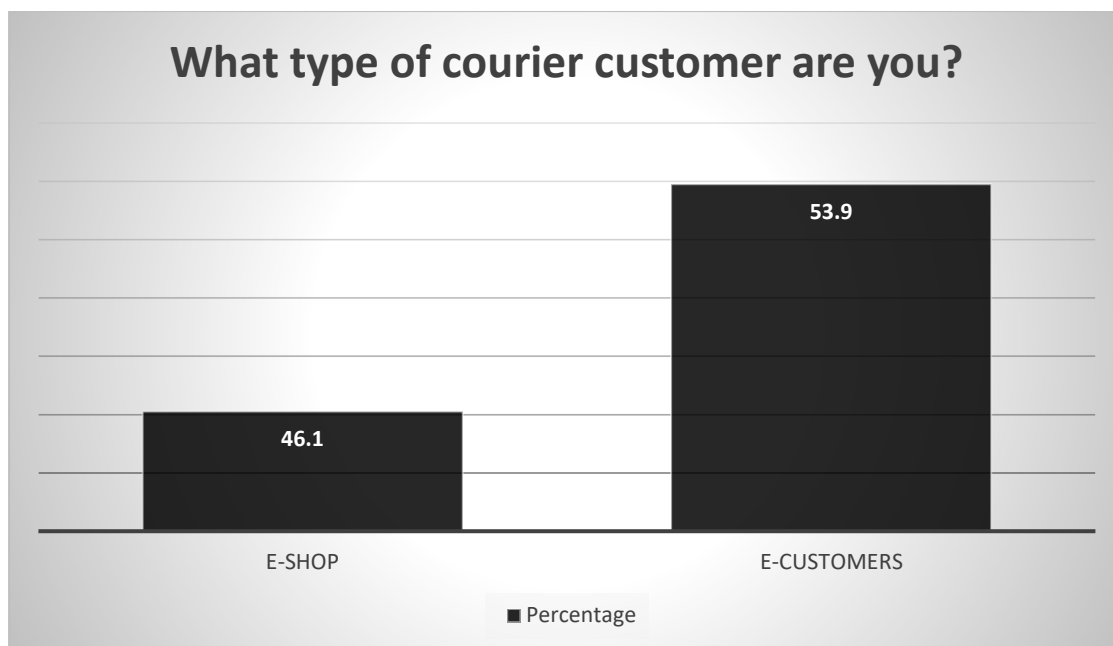
Figure 10 depicts the spread of E-Courier customers.

Moreover, half of the respondents (53.9%) are online shoppers, and 46.1% regularly make purchases online, according to Table 10 and Figure 10. This suggests that many consumers prefer to purchase products and services via online retailers, or more specifically, e-commerce companies.

Table 11: Patronage of Courier Services in 2020-2021

	Frequency	Per cent	Valid Percent	Cumulative Percent
No patronage exists.	51	24.8	24.8	24.8
Weak patronage	94	45.6	45.6	70.4
Medium patronage	28	13.6	13.6	84.0
High patronage	33	16.0	16.0	100.0
Total	206	100.0	100.0	
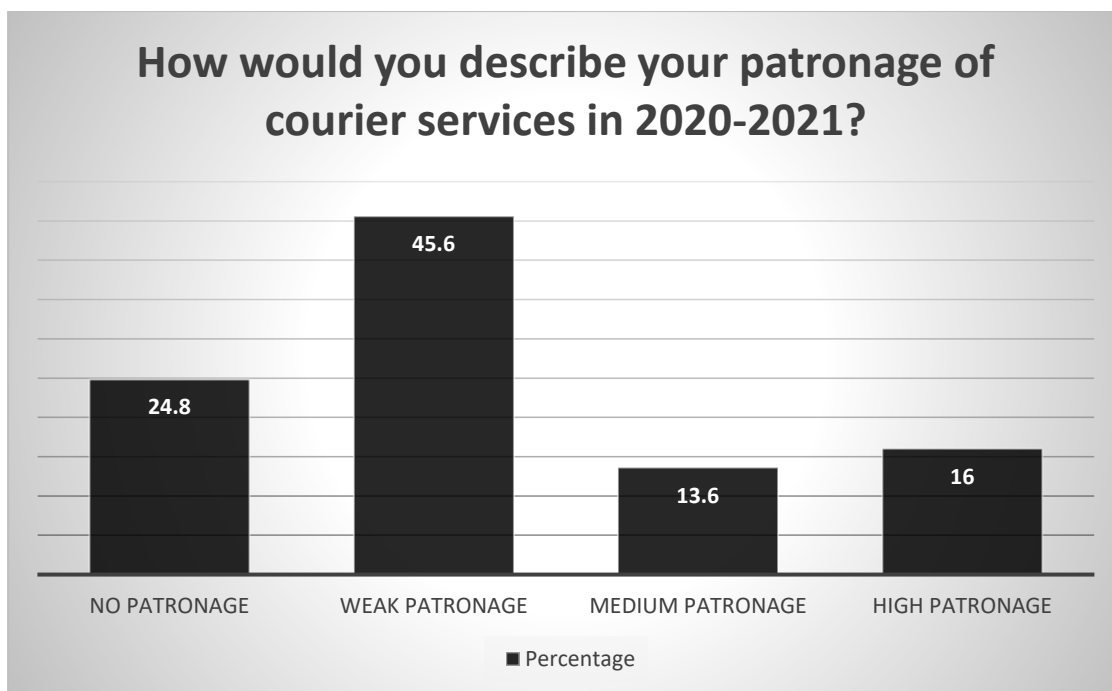
Courier Service Patronage in 2020-2021 (Fig. 11)

According to Table 11 and Figure 11, in 2020-2021, 24.8 per cent of respondents did not use courier services, 45.6 per cent used them just sometimes, 13.6 per cent used them fairly regularly, and 16 per cent used them frequently. The outcome here showed that courier services were less active in 2020–2021 since many clients felt their support was lacking at the time.

Table 12: Timeliness of Delivery

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Affect	72	35.0	35.0	35.0
moderate impact	52	25.2	25.2	60.2
Low Impact	34	16.5	16.5	16.5
No Effect	48	23.3	23.3	100.0
Total	206	100.0	100.0	
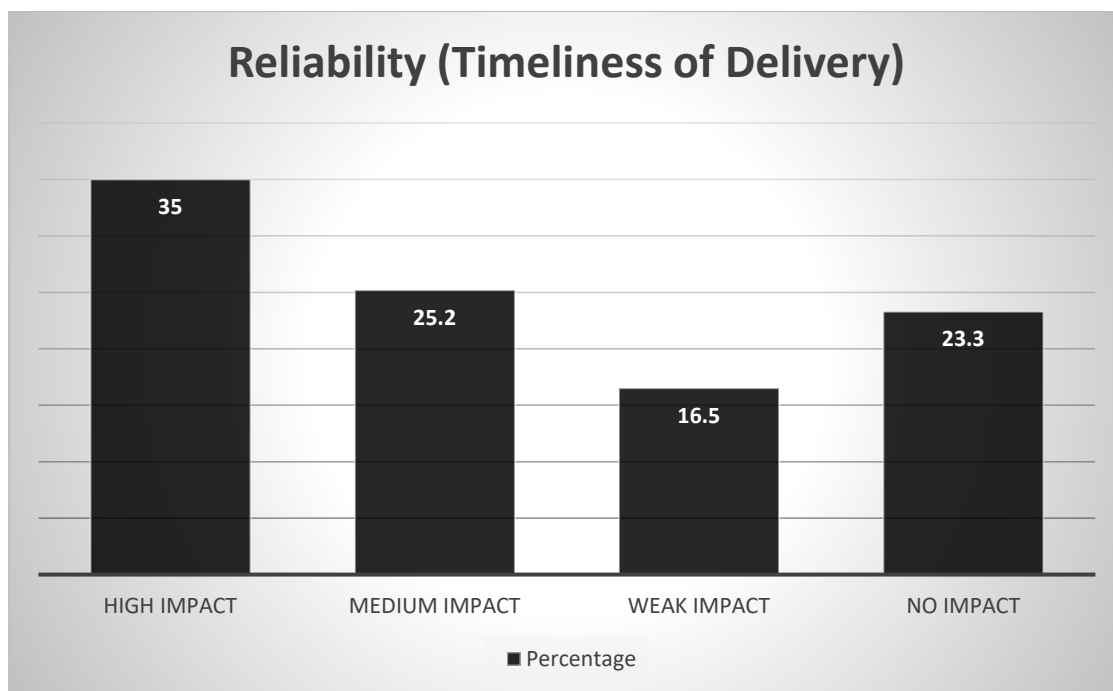
Exhibit 12: Timeliness of Delivery

Table 12 and Figure 12 show that 35% of respondents said that Covid-19 had a significant impact on the timeliness of their deliveries, 25.2 % said the outbreak had a medium impact, 16.5 % said it had a little impact, and 23.3 % stated it had no impact. Table 12 and Figure 12 show that 35% of respondents said that Covid-19 had a significant impact on the timeliness of their deliveries, 25.2 % said the outbreak had a medium influence, 16.5 % said it had a little impact, and 23.3 % stated it had no impact.

Table 13: Compliance and Completeness of the Order

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Affect	37	18.0	18.0	18.0
Medium Influence	48	23.3	23.3	41.3
Weak Influence	48	23.3	23.3	64.6
No Effect	73	35.4	35.4	100.0
Total	206	100.0	100.0	
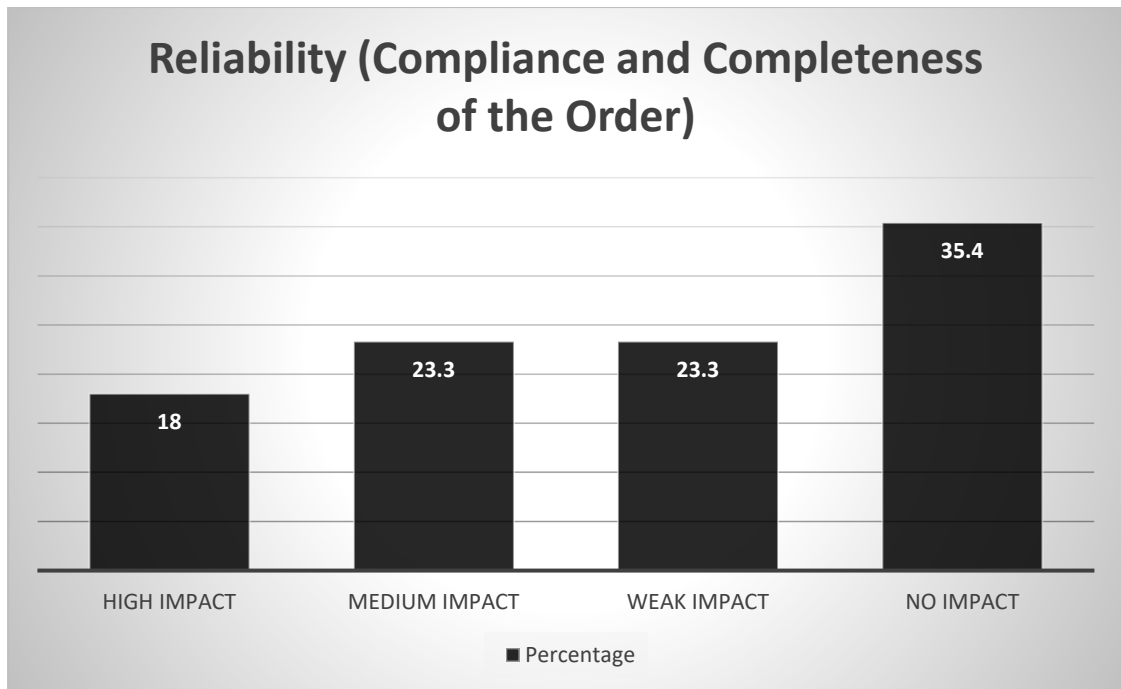
Figure 13: The order's conclusion & completion

Table 13 & Figure 13 show that 35.4% of respondents indicated that Covid-19 had no impact on the uniformity and correctness of their order, whereas 23.3% indicated a moderate impact, 23.3% a medium impact, and 18% a large impact. The data in the table made it very evident that the customers did not think the epidemic had any impact on the accuracy and thoroughness of their orders.

Table 14: Lack of Damage to the Shipment

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Impact	15	7.3	7.3	7.3
Medium Impact	69	33.5	33.5	40.8
Weak Impact	47	22.8	22.8	63.6
No Impact	75	36.4	36.4	100.0
Total	206	100.0	100.0	
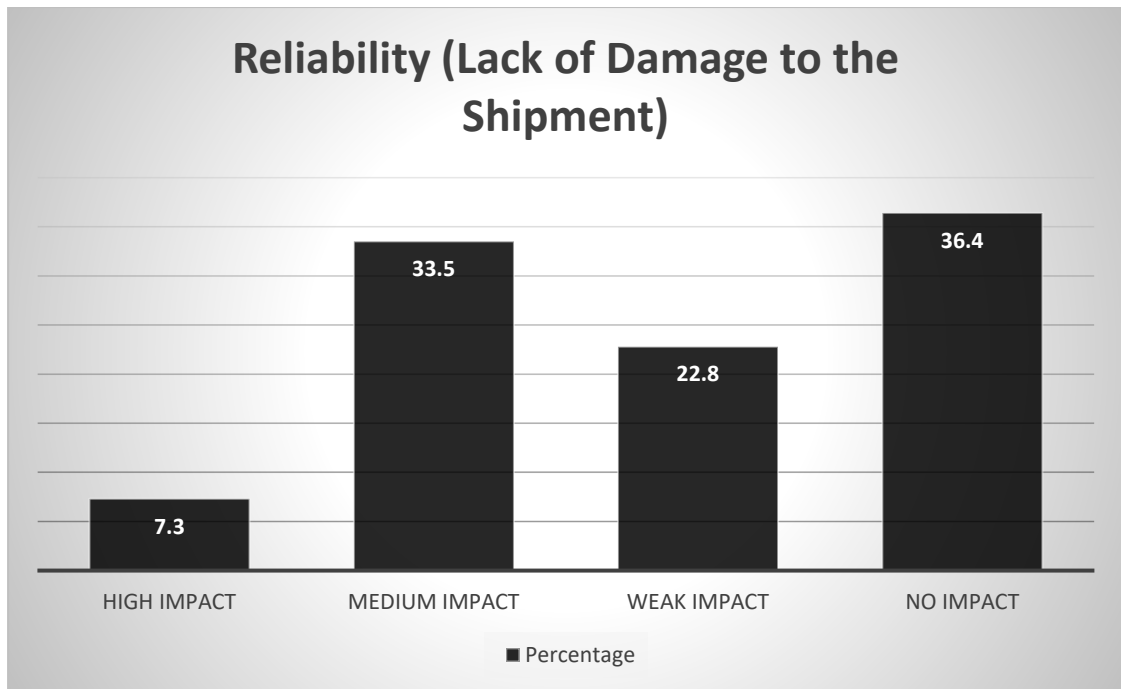
Fig. 14: The shipment is undamaged.

Only 7.3 per cent of survey participants believed Covid-19 had a major influence on the absence of shipment damage, whereas 33.5 per cent, 22.8 per cent, and 36.4 per cent said it had no impact. These results were shown in Table 14 and Figure 14. According to the conclusion, there are divergent views on whether COVID-19 had an impact on the shipment's absence of damage. This could be the result of the variety of experiences they have.

Table 15: Reliability

	Frequency	Per cent	Valid Percent	Cumulative Percent
Medium Impact	94	45.6	45.6	45.6
Weak Impact	85	41.3	41.3	86.9
No Impact	27	13.1	13.1	100.0
Total	206	100.0	100.0	
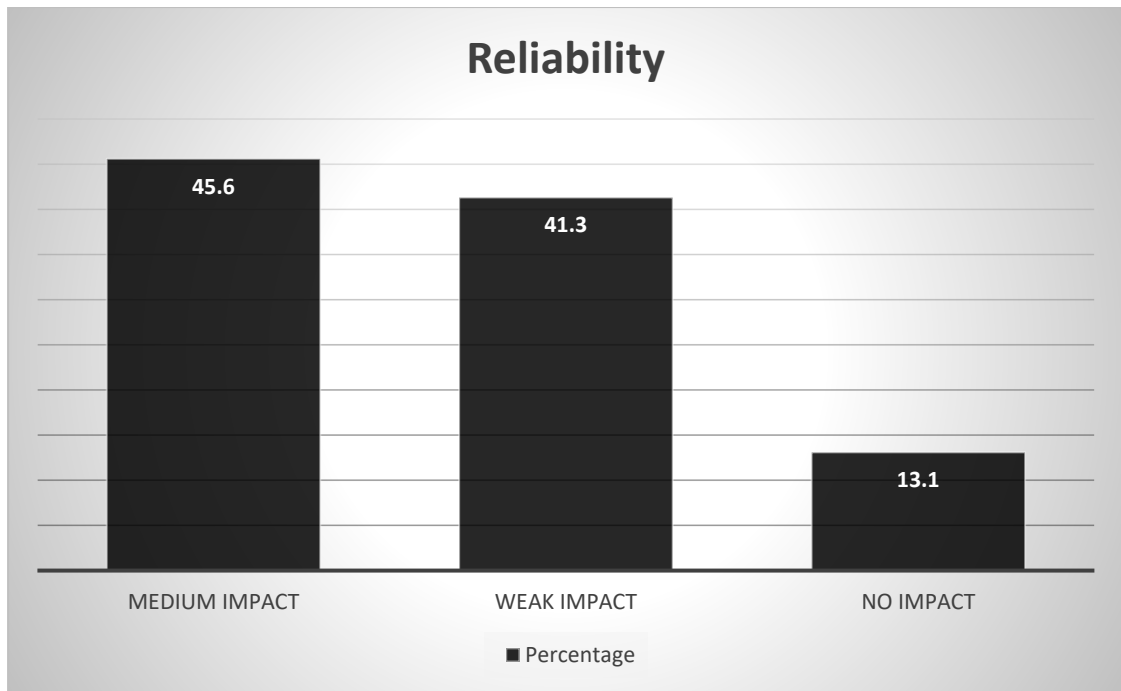
Fig 15: Reliability

According to Table 15 & Figure 15, more than half of the respondents (45.6%) said that Covid-19 had a medium influence on the dependability of couriers, 41.3% thought it had a light impact, and 13.1% thought it had no impact. The majority of customers concurred that the epidemic had little impact on how reliable courier services were.

Table 16: Cultured and courteous behaviour of courier company employees

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Impact	91	44.2	44.2	44.2
Medium Impact	44	21.4	21.4	65.5
Weak Impact	34	16.5	16.5	82.0
No Impact	37	18.0	18.0	100.0
Total	206	100.0	100.0	
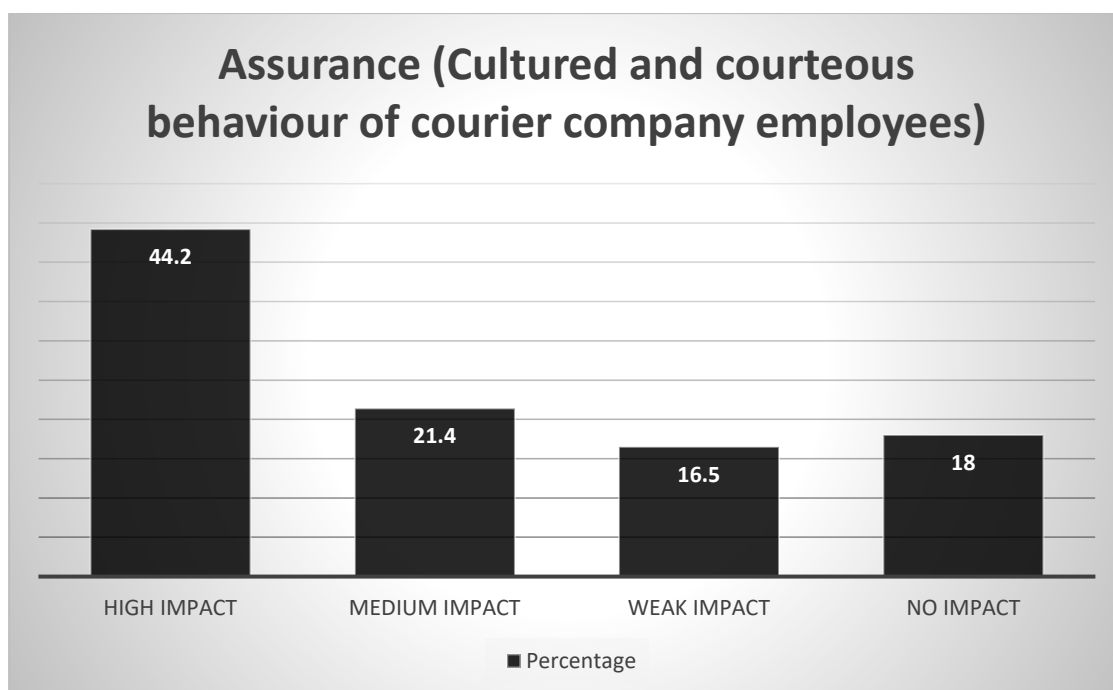
Figure 16: Courier crew professionalism and civility

According to Table 16 and Figure 16, 44.2 per cent of respondents believe Covid-19 has had a significant impact on courier company employees' politeness and culture, 21.4 per cent believe it has had a medium or minor impact, 16.5 per cent believe it has had a negligible impact, and 18 per cent believe it has had no impact at all. The figures show that Covid-19 significantly changed how courier business employees behaved, which may be connected to the safety procedures in effect.

Table 17: Easy Contact with the Courier Company

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Effect	45	21.8	21.8	21.8
moderate impact	55	26.7	26.7	48.5
Low Impact	50	24.3	24.3	72.8
No Effect	56	27.2	27.2	100.0
Total	206	100.0	100.0	
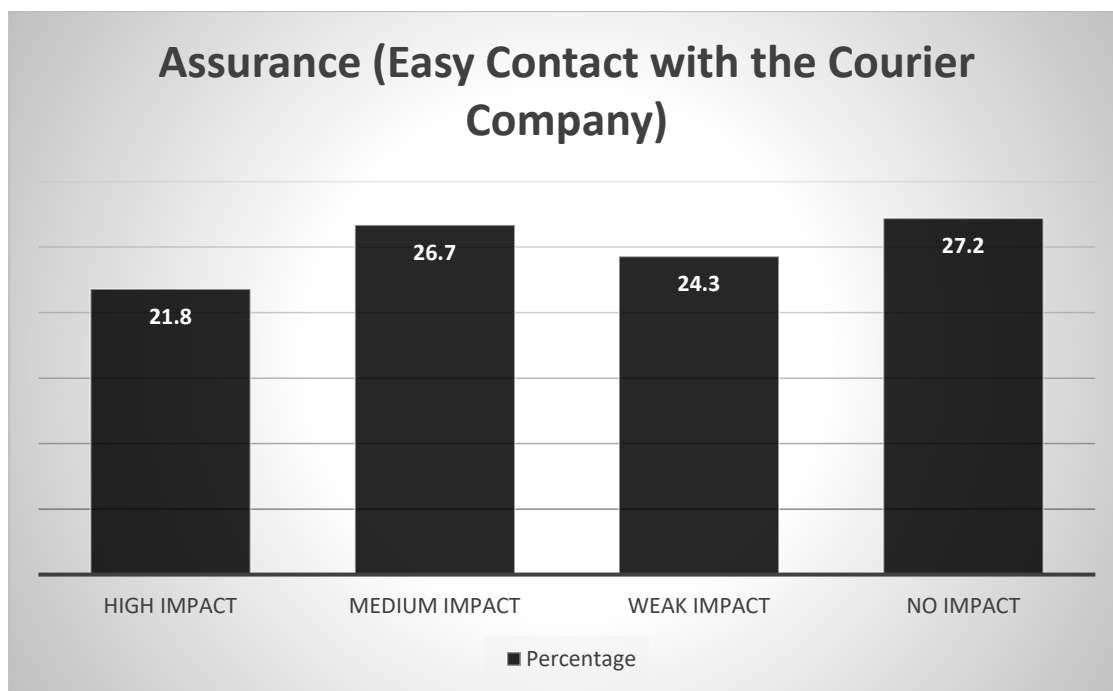
Fig. 17: Simple Methods for Reaching the Courier Company

According to Table 17 and Figure 17, 21.8 per cent of respondents believe that Covid-19 has had a significant impact on how easy it is to contact a courier company, 26.7 per cent think it has had a medium impact, 24.3 per cent think it has had a weak impact, and 27.2 per cent think it has had no impact at all. Customers' opinions on how responsive the courier services they utilised during the epidemic varied.

Table 18: Efficient communication between courier company employees and clients

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Effect	68	33.0	33.0	33.0
moderate impact	70	34.0	34.0	67.0
Low Impact	54	26.2	26.2	93.2
No Effect	14	6.8	6.8	100.0
Total	206	100.0	100.0	

Assurance (Efficient communication between courier company employees and clients)
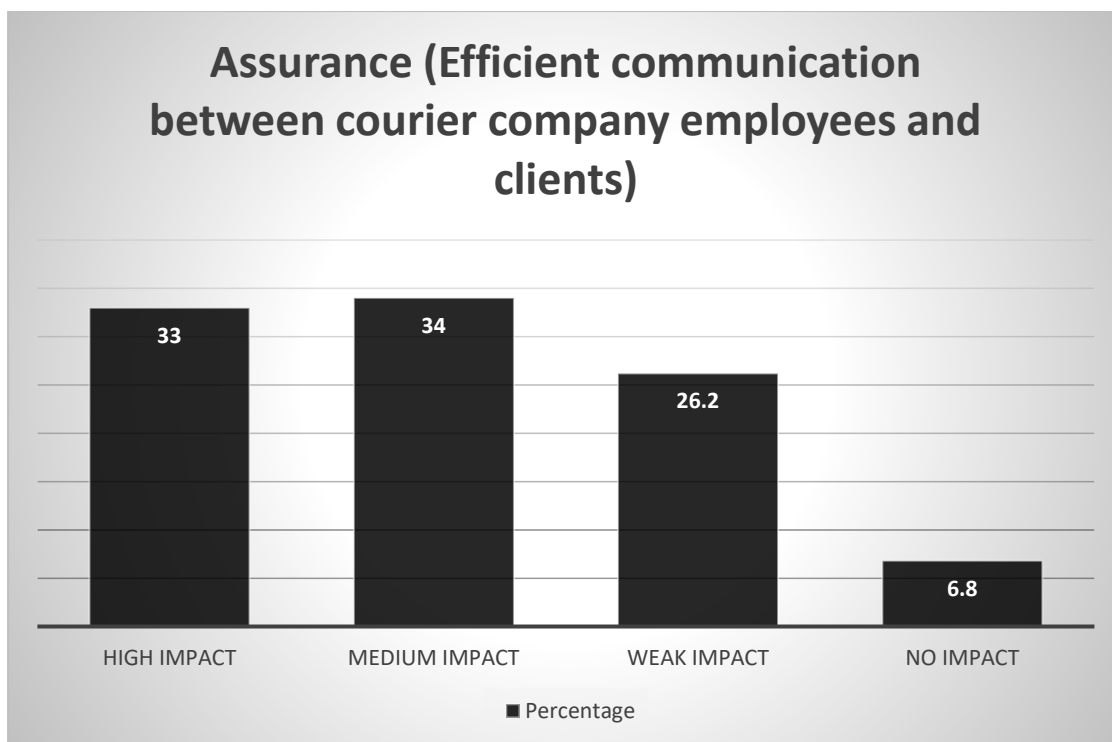
Fig. 18: Effective client-employee communication in a delivery business

According to Table 18 and Figure 18, 33 per cent of respondents believe that Covid-19 had a significant influence on how well courier business employees and clients communicated, 34 per cent think it had a medium impact, 26.2% think it had a moderate impact, and 6.8% think it had no impact at all. The results above show that the pandemic had an impact on courier business communication over the period. The top responses were high impact and medium impact.

Table 19: Assurance

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Impact	26	12.6	12.6	12.6
Medium Impact	105	51.0	51.0	63.0
Weak Impact	73	35.4	35.4	99.0
No Impact	2	1.0	1.0	100.0
Total	206	100.0	100.0	
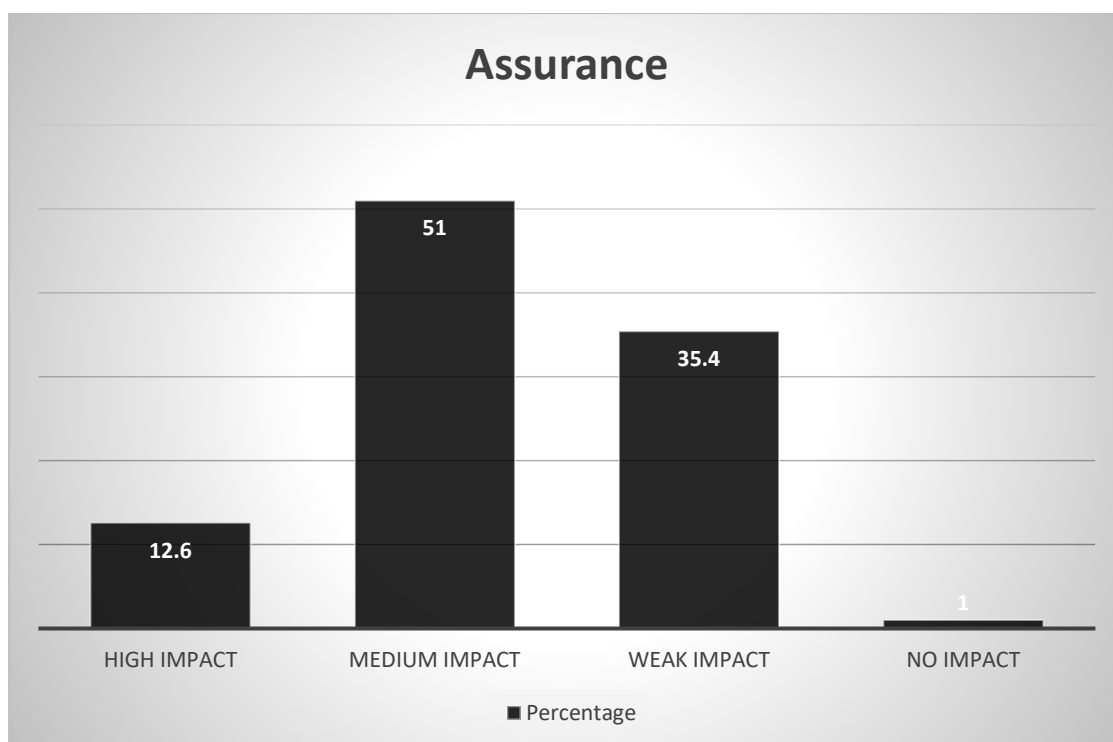
Fig 19: Assurance

The impact of Covid-19 on the overall number of assurance statements is seen in Table 19 & Figure 19. Covid-19 had a medium influence on courier businesses' assurance, according to 51% of respondents; 35.4 per cent believed it had a weak impact, 12.6 per cent thought it had a big impact, and just 1 respondent considered it had no impact. The pandemic's moderate influence on courier businesses' assurance was found. Customers' experiences during the peak of the epidemic have an impact on the result.

Table 20: Responsiveness of Courier Company to Reported Problems

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Impact	43	20.9	20.9	20.9
Medium Impact	56	27.2	27.2	48.1
Weak Impact	75	36.4	36.4	84.5
No Impact	32	15.5	15.5	100.0
Total	206	100.0	100.0	
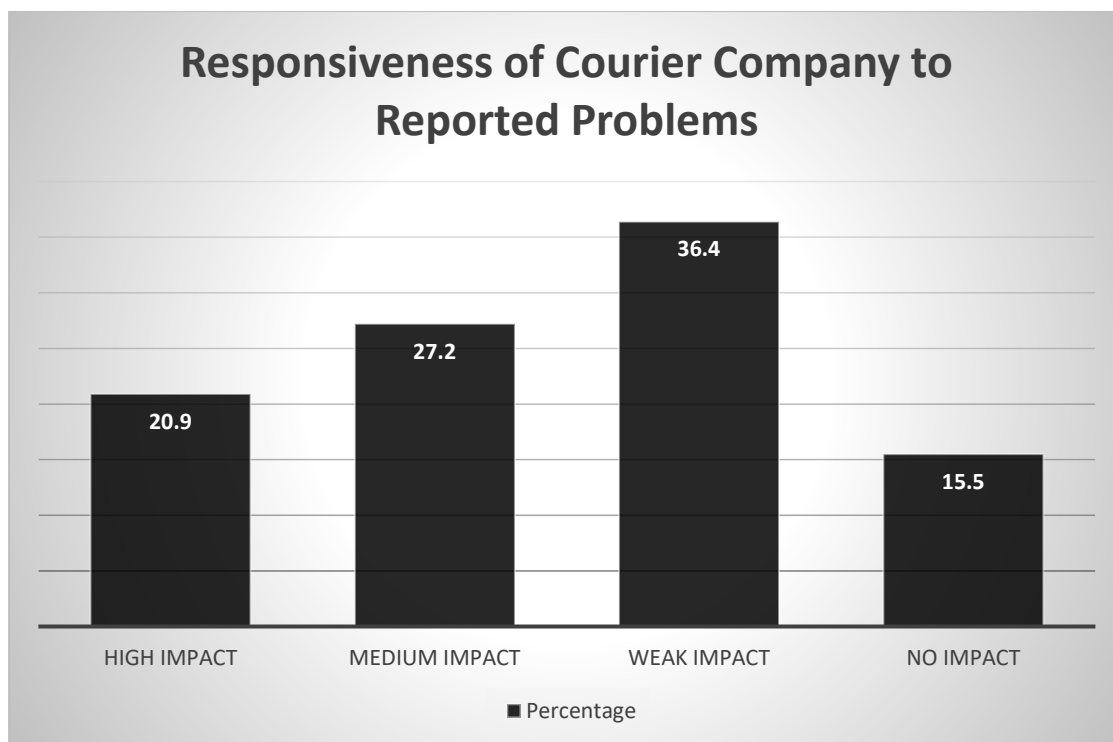
Figure 20 shows The Courier Company's response to complaints.

Covid-19 had a significant influence on the courier company's reaction to reported issues, according to Table 20 and Figure 20, whereas 27.2 per cent of respondents thought it had a medium impact, 36.4 per cent thought it had a moderate impact, and 15.5 per cent thought it had no impact at all. Given the aforementioned, it is logical to presume that the epidemic there had little to no impact on courier services' timeliness.

Table 21: Efficient and Fast Order Processing

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Impact	103	50.0	50.0	50.0
Medium Impact	69	33.5	33.5	83.5
Weak Impact	13	6.3	6.3	89.8
No Impact	21	10.2	10.2	100.0
Total	206	100.0	100.0	
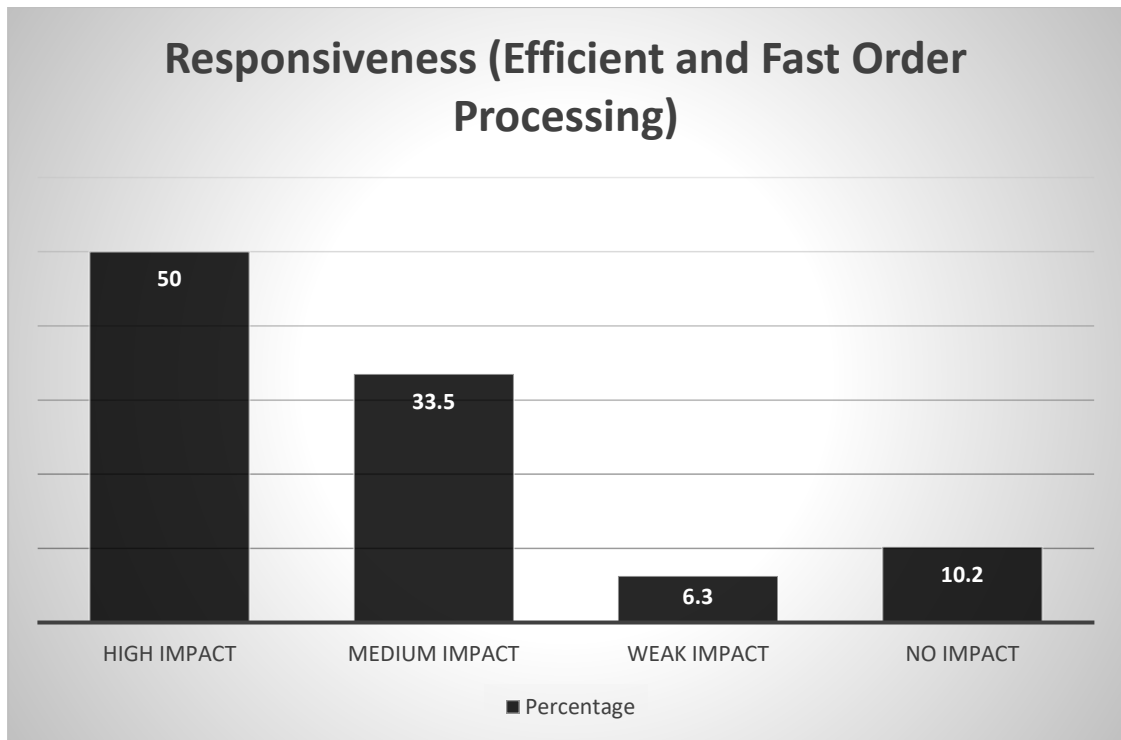
Delivering orders quickly and efficiently (Figure 21)

According to Table 21 and Figure 21, Covid-19 had a significant influence on the timely and accurate processing of orders, with 33.5 per cent of respondents attributing a considerable impact, 6.3 per cent attributing a mild impact, and 10.2 per cent attributing no impact.

Table 22: Flexibility in the Choice or Change of Date and Place of Service

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Effect	65	31.6	31.6	31.6
moderate impact	41	19.9	19.9	51.5
Low Impact	18	8.7	8.7	60.2
No Effect	82	39.8	39.8	100.0
Total	206	100.0	100.0	
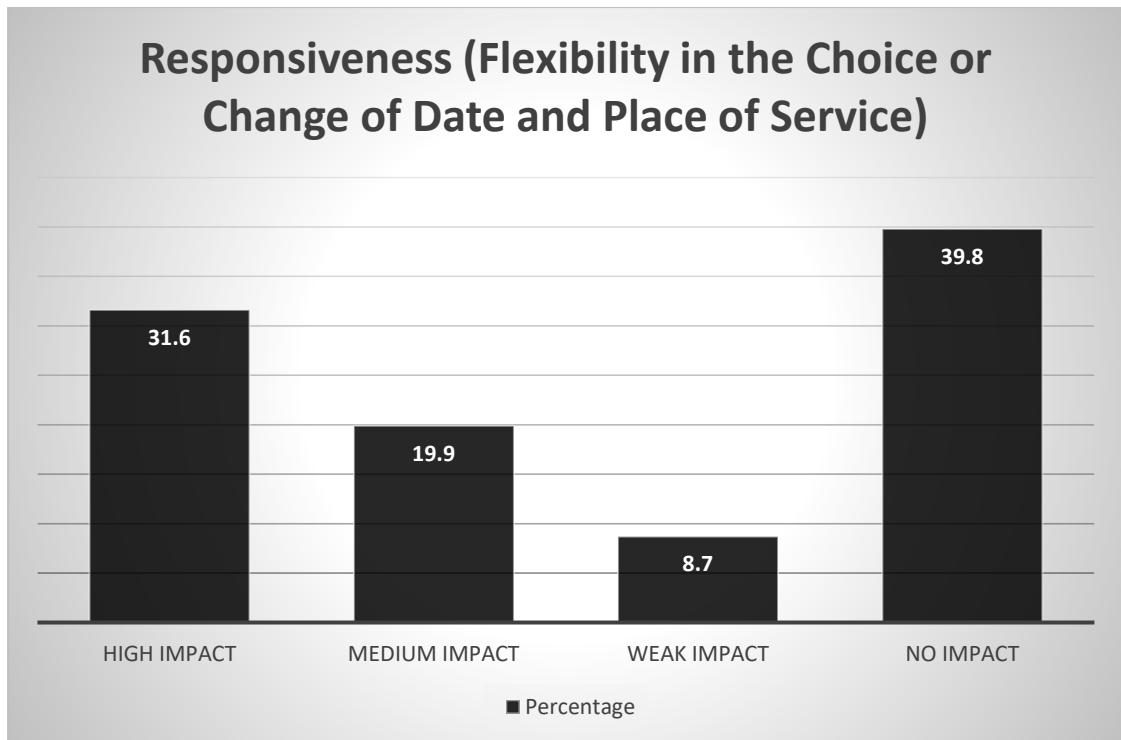
Figure 22: Service Date and Location Flexibility Option or Change

Covid-19 had no impact on 39.8% of respondents, a little impact on 8.7% of respondents, a medium impact on 19.9% of respondents, a strong impact on 31.6 per cent of respondents, and no impact on the decision-making process or the ability to modify the date and location of the service (Table 22 and Figure 22).

Table 23: Responsiveness

	Frequency	Per cent	Valid Percent	Cumulative Percent
High Effect	21	10.2	10.2	10.2
moderate impact	109	52.9	52.9	63.1
Low Impact	65	31.6	31.6	94.7
No Effect	11	5.3	5.3	100.0
Total	206	100.0	100.0	
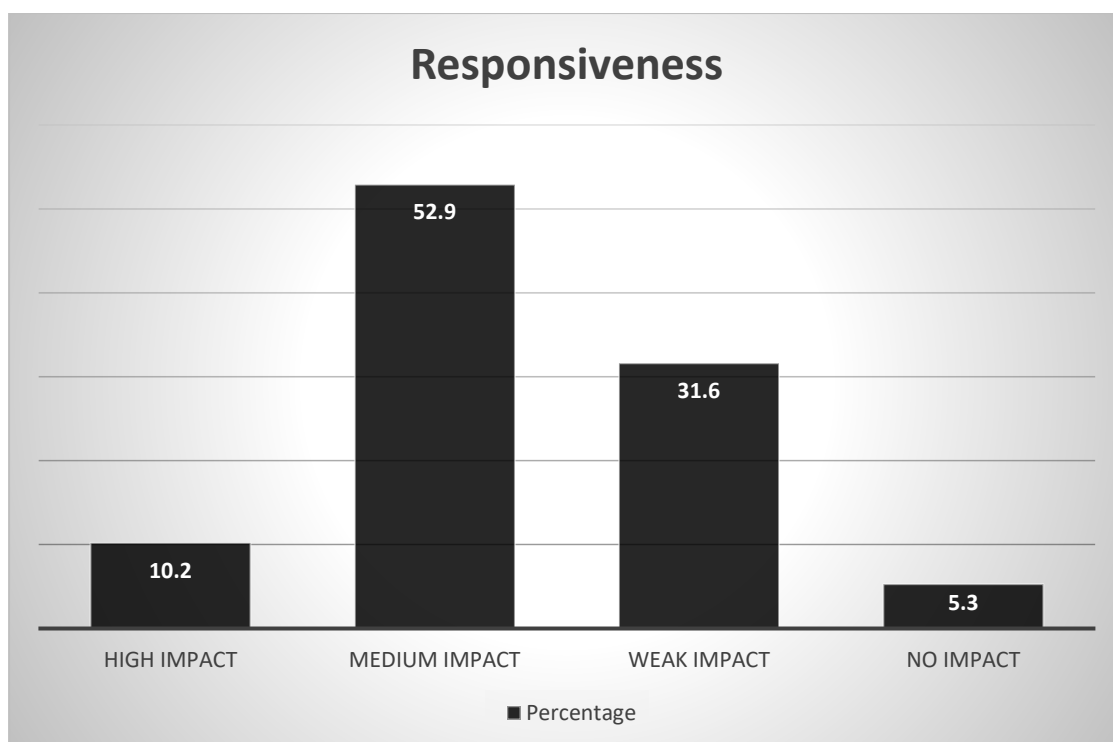
Fig 23: Responsiveness

The opinions of respondents on how Covid-19 has affected courier service responsiveness are shown in Table 23 and Figure 23 above. 52.9 per cent of respondents believe Covid-19 had a moderate impact on responsiveness, whereas 31.6 per cent believe the outbreak there was little to no influence, 10.2 per cent believe it had a significant impact, and only 5.3 per cent believe it had no impact.

Table 24: Challenges were more than Opportunities

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strongly Object	17	8.3	8.3	8.3
Disagree	75	36.4	36.4	44.7
Neutral	32	15.5	15.5	60.2
Agree	51	24.8	24.8	85.0
strongly concur	31	15.0	15.0	100.0
Total	206	100.0	100.0	
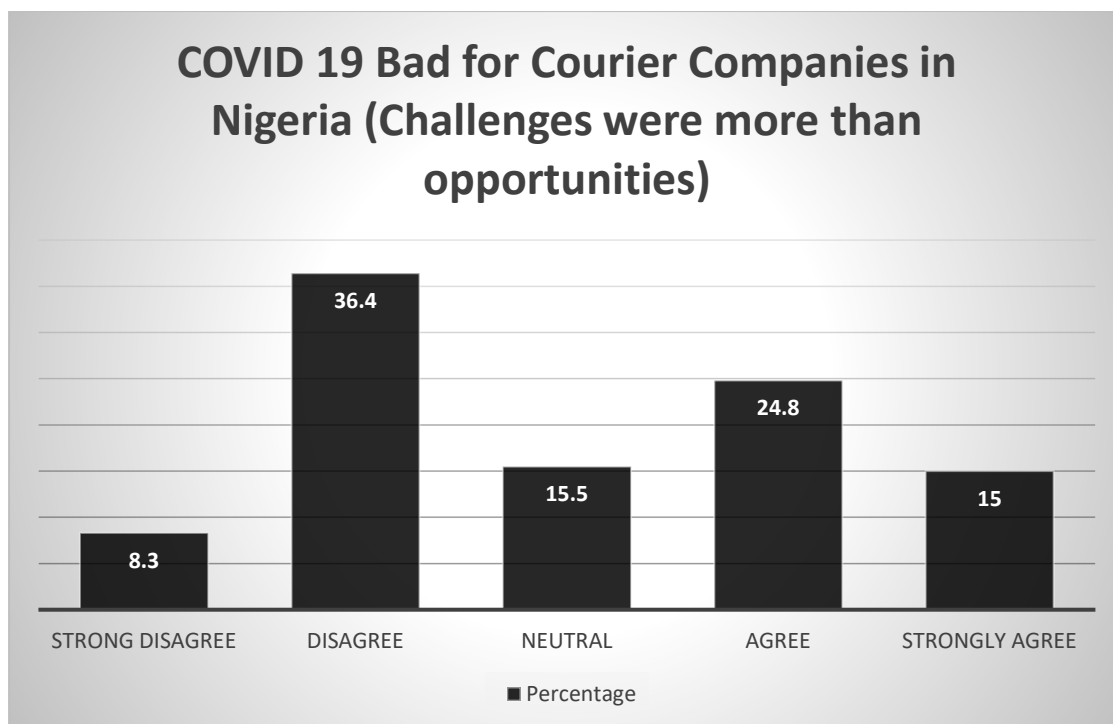
Covid-19's difficulties exceeded its possibilities (Fig. 24).

Table 24 and Figure 24 show that of those who say that Covid-19 presented more challenges than opportunities, 15.5% strongly agree, 24.8% believe it, 15.5% aren't sure, 36.4% disagree, and 8.3% disagree. Many customers did not consider the outbreak to be a problem or a barrier to providing services.

Table 25: Opportunities of Covid-19 were more than Challenges

	Frequency	Per cent	Valid Percent	Cumulative Percent
Strong Disagree	35	17.0	17.0	17.0
Disagree	58	28.2	28.2	45.1
Neutral	40	19.4	19.4	64.6
Agree	50	24.3	24.3	88.8
Strongly agree	23	11.2	11.2	100.0
Total	206	100.0	100.0	
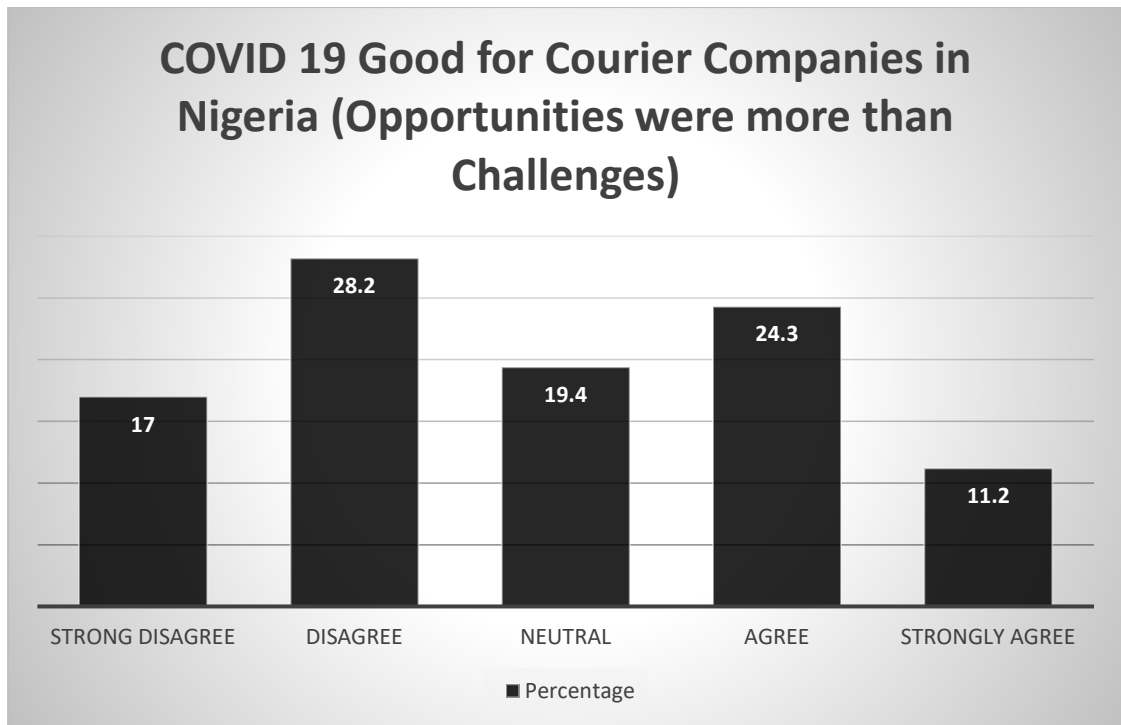
Figure 25: Covid-19's benefits outweighed its drawbacks.

Information on the perspective of E-clients about Covid-19 is shown in Table 25 and Figure 25. There were more opportunities than challenges during the COVID-19 pandemic, according to 11.2 per cent of respondents who strongly agree with this statement, 24.3 per cent of respondents who agree, 19.4 per cent of respondents who are neutral, 28.2 per cent of respondents who disagree, and 17per cent of respondents who strongly disagree. The majority of clients disagree that the epidemic presented the courier services with more opportunities than obstacles. This can be because they had trouble transporting the goods to their intended location.

4.3   Inferential Statistics

To determine whether there is a substantial correlation between COVID-19 worries and how Nigerian courier firms see the COVID-19 pandemic, this section will employ statistical Chi-Squared approaches.

4.3.1 Test of Hypotheses

Through the course of the research, two possibilities will be looked at:

$H1_0$: The quality of Nigeria's courier services is unaffected by COVID-19.

H2$_0$: The difficulties caused by COVID-19 and how Nigerian courier firms see the COVID-19 epidemic are not significantly related.

Chi-Squared Analysis

Table 26: Chi-Square Tests Showing Impact of COVID-19 on courier service quality

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.153[a]	12	.000
Likelihood Ratio	48.615	12	.000
Linear-by-Linear Association	7.979	1	.005
N of Valid Cases	100		

a. 11 (55.0%) of the cells had anticipated values of less than 5. The bare minimum expected count is 1.36.

The Chi-squared results in Table 26 show how Covid-19 has an impact on the courier service grade. A 35.153 score on the Pearson Chi-Square test had a significance level of 0.000. This suggests that Covid-19 has a significant effect on the calibre of the delivery service. The h0 is therefore rejected, and it is determined that Covid-19 significantly affects the calibre of Nigeria's courier service.

Table 27: Chi-Square Tests Showing the relationship between the challenges posed by COVID-19 and the perception of courier companies in Nigeria towards the COVID-19 pandemic

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.791[a]	16	.001
Likelihood Ratio	31.606	16	.011
Linear-by-Linear Association	2.324	1	.127
N of Valid Cases	100		

a. 17 (68.0 per cent) of the cells had anticipated numbers less than 5. The predicted count must be at least .60.

The issues caused by COVID-19 and courier firms' perceptions of the COVID-19 pandemic in Nigeria are related, as seen in Table 27's Chi-squared results. The Pearson Chi-Square, with a level of 40.791 and a significance threshold of 0.001, suggests a substantial association between the challenges caused by COVID-19 and how Nigerian courier businesses perceive the pandemic. The study's second hypothesis was disproved, leading to the conclusion that there is a substantial correlation between the difficulties caused by COVID-19 and how courier firms in Nigeria see the epidemic.

4.3.2 Factor Analyses: Challenges of COVID-19 for Courier Companies in Nigeria

The study used factor analysis to identify what the COVID-19 outbreak's biggest problems were for Nigerian courier companies.

Table 28:   KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.572
Bartlett's Test of Sphericity	Approx. Chi-Square	13.669
	Df	10
	Sig.	.009

Table 28 presents the findings of the KMO and Bartlett's test, which evaluates how well the gathered data is appropriate for factor analysis. It assesses sample adequacy for the entire model as well as for each variable. KMO must be more than 0.5 and Bartlett's test of sphericity must be significant for data to be deemed suitable for factor analysis. The significance level for Bartlett's test is 0.009, and the KMO coefficient is 0.572. It suggests that the information used to calculate the factor loadings was appropriate.

Table 29:   Communalities

Communalities		
	Initial	Extraction
The outbreak hampered the supply chain (lockdown, market closures, transport)	1.000	.542
The mobility limitations of COVID-19 caused logistical issues.	1.000	.741
The government does not place a high priority on courier and online shopping	1.000	.772
The pandemic drove up the price of running an office.	1.000	.572
Fees for transportation and delivery are being raised.	1.000	.515
The extraction technique is Principal Component Analysis.		

The proportion of variation that is explained by the retrieved components is represented by commonalities. The percentage of each item's variance that can be explained by its variables or components is shown by the extraction number above. According to the results above, the extraction value is much greater than 0.5. This suggests that each model component has a close relationship with the other parts of the set. Low extraction values indicate that the responses were not well worded, and that the responder did not fully comprehend the questions.

Table 30:   Total Variance Explained

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.442	28.833	28.833	1.442	28.833	28.833
2	.996	19.917	48.750			
3	.942	18.845	67.595			
4	.915	18.307	85.902			
5	.705	14.098	100.000			
Extraction Method: Principal Component Analysis.						

All the retrieved components are displayed in the total variance explained. The findings reveal elements and variables that need to be kept. An element or component is kept as long as its Eigen value is greater than 1.0.

Table 31:   Principal Component Matrix

Principal Component Matrix[a]	Component
	1
The outbreak made the distribution network challenging (lockdown, market closures, transport)	.204
The mobility limitations of COVID-19 caused logistical issues.	.584
The government does not prioritise courier and online commerce.	.521
The pandemic drove up the price of running an office.	-.757
Higher delivery and transportation expenses	.464
Principal Component Analysis is the extraction technique.	
a. One component was extracted.	

The primary component analysis findings, as well as the unique values of each question connected to COVID-19's most serious challenges for courier services in Nigeria, are displayed in the table above. Uniqueness provides the percentage of the common varieties of the variable that is unrelated to the variables. The variance is what makes a variable "unique" and apart from other variables. The importance of the variable in the factor model decreases with increasing "uniqueness," and increases with decreasing "uniqueness." This strategy is used in this study to identify the COVID-19 problems that are most important to courier businesses in Nigeria. Table 31 above demonstrates that the pandemic's rise in-office operating expenses is the biggest obstacle. This is because they have the lowest values of any group as a result of their negative uniqueness value.

4.3.3 Factor Analyses: Perception of Courier Companies in Nigeria Towards COVID-19

The attitudes of courier companies toward the COVID-19 pandemic are shown in the graph below.

Table 32:   KMO and Bartlett's Test

KMO and Bartlett's Test		
A measure of Kaiser-Meyer-Olkin Sampling Adequacy.		.502
Sphericity Test by Bartlett	Approx. Chi-Square	84.643
	Df	1
	Sig.	.000

Table 32 contains the results of the KMO and Bartlett's test, which assesses how well the gathered material is appropriate for factor analysis. For the entire model as a whole and each variable in the model, sampling adequacy is evaluated. For the data to be regarded as suitable for factor analysis, Bartlett's test of sphericity must be substantial and KMO must be more than 0.5. Using Bartlett's test with a significance threshold of 0.000, the KMO coefficient is 0.502. It implies that the data used may be subjected to factor analysis.

Table 33: Communalities

Communalities	Initial	Extraction
For Nigerian courier companies, the COVID-19 outbreak of 2020–2021 proved terrible (Challenges were more opportunities)	1.000	.792
The COVID-19 epidemic in 2020–2021 was good for Nigerian courier businesses (Opportunities were more than challenges)	1.000	.792
The principal component analysis is the extraction method.		

Commonalities are a representation of the percentage of variance that the recovered components can explain. The percentage of variance for each item that is explained by the variables or components is shown by the extraction value above. The extraction value is substantially more than 0.5, according to the aforementioned result. This suggests that each component of the model is tightly connected to the others. Items with

low extraction values are regarded as poorly constructed since the respondent does not understand the questions.

Table 34:   Total Variance Explained

Total Variance Explained						
Component	Initial Eigenvalues			Loading Extraction Sums Squared		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.583	79.167	79.167	1.583	79.167	79.167
2	.417	20.833	100.000			
The extraction technique is principal component analysis.						

All the retrieved components are shown in the total variance explained. Which elements and factors should be retained are suggested by the results. One factor or component exceeds the Eigenvalue of 1.0 and is maintained as a result.

Table 35: Principal Component Matrix

Principal Component Matrix[a]	
	Component
	1
For Nigerian courier companies, the COVID-19 outbreak of 2020–2021 proved terrible (Challenges were more opportunities)	-.890
The 2020–2021 COVID-19 outbreak period was advantageous for Nigerian courier companies (Opportunities were more than challenges)	.890
The extraction technique is principal component analysis.	
a. One component was extracted.	

The outcomes of the main component analysis for each of the questions on the opinions of the courier industry towards the COVID-19 epidemic in Nigeria are displayed in the table below. Uniqueness provides the portion of the common varieties of the variable that is not related to the components. The variance does not apply to other variables and is "unique" to the variable. The factor model's weight for the variable decreases with increasing "uniqueness," while its relevance increases with decreasing "uniqueness.

Table 35 gives the basic impression that the Nigerian courier industry did not benefit from the COVID-19 outbreak in the years 2020–2021. This is because they have the lowest values of any group as a result of their negative uniqueness value.

4.4   Discussion of Findings

The courier services industry in Nigeria is generally untapped. A government official who works for NIPOST, the regulator of the industry, admitted that only about 20 per cent of the potential of the industry is exploited (Okonji, 2019). This is also reflected in the fact that the majority of respondents work for courier companies with less than 100 employees, indicating a medium-sized operation throughout the industry. This may not be unconnected with the ease of doing business. Nigeria was rated 112th on the Logistics Performance Index and 145th for Ease of Doing Business in 2018 out of 190 nations (United States ITA, 2021). Challenges include insecurity, instability, political, environmental, and cultural inequalities that have all contributed to the demise of numerous businesses, particularly micro, small, and medium-sized companies, as well as the relocation of large corporations to other nations. The Nigerian economy has several general economic issues, such as extreme inequality, widening wealth disparities between the North and the South, insufficient infrastructure, a convoluted and opaque regulatory environment, corruption, and a rising population (Ukanwa, 2022). Although government mismanagement is large to be blamed, the state of the industry is also reflected in literature, with limited research on the Nigerian industry based on the comprehensive literature search carried out concerning this study. In some ways, this study's determination to research the impact of COVID-19 on business is pioneering work that contributes to breaking down barriers and bringing the industry's situation to the forefront of public conversation and debate. However, it is important to note that the situation with the global courier services industry does not improve to a great extent. Globally, there is a dearth of research concerning courier services (Gulc, 2021). Therefore, concerning comparing the results of this study with similar findings in the literature, there is a very limited number of references available.

The COVID-19 epidemic had a significant influence on the operations of various organisations, according to the managers who responded to the questionnaires issued to courier companies. To validate the responses of these managers at the various courier companies, a hypothesis was also designed and tested (H1). The null hypothesis was

rejected, leading to the conclusion that the pandemic had a significant impact on courier operations. Further investigation into how the managers rated the challenges posed by the pandemic shows disruption of the supply chain (lockdown, market closures, transport) and restriction of movement posed the greatest impact descriptively. These results agreed with the results obtained by the multi-country survey by UNCTAD (2020) which posed the same challenges to companies. Moreover, there was an agreement between the findings of this study and the report in the area of increased costs associated with COVID-19. In both this study and the report, cost-related challenges were generally rated low. Most respondents believed that the outbreak did not lead to a rise in office operations as far as the cost of running the business was concerned. Most of the businesses' use of the work-from-home method may help to explain this. This reduced the cost of running an office by allowing workers whose duties could be done remotely to work from home. Furthermore, the epidemic encouraged businesses to use technical and inventive methods, resulting in cost savings. It was also discovered that the epidemic increased transportation and delivery expenses. This result is at odds with the findings of Izzah, Dilaila, and Yao (2021), who found that the pandemic increased the expense of office operations. However, inferential research showed that the expense of running offices was the biggest issue facing courier services. However, the result of the inferential analysis is ignored due to the negative uniqueness value obtained. Since the costs of business operations were not significantly impacted as measured descriptively, although the COVID-19 pandemic presented more opportunities, courier companies could not maximize the opportunities. This is explained by the government-imposed shutdown, which compelled many businesses (including courier firms) to stop operations during the period. However, due to the low level of operations, corporations were compelled to adopt austerity measures such as laying off employees or paying a small fraction of their income.

According to courier businesses, Covid-19 affected logistics and the supply chain since the majority of clients locked their doors and travel was prohibited. Market closures and restrictions (closing and opening times) also impacted the supply chain, forcing courier firms to rearrange travel to marketplaces based on opening days. This was also the situation in Poland, where courier firms' response to the epidemic included ordering office employees to leave, lowering compensation, and laying off unneeded personnel (Bylen, 2020). Therefore, considering the low levels of COVID-19 deaths in Nigeria,

one could argue that the move by the government to copy lockdown policies from western countries was unjust to companies. Respondent data verified this, with the vast majority of respondents believing that the government did not promote courier and E-commerce, instead focusing on enterprises that perform and create services and items deemed necessary.

The study's inferential analysis revealed a substantial association between the issues provided by COVID-19 and the perspective of courier firms in Nigeria about the COVID-19 pandemic. In other words, the courier companies viewed the pandemic as more of a challenge than an opportunity. This was further supported by a poll question in which every respondent believed that difficulties were more significant than opportunities. This concurs with the findings of Cruden, Campbell, and Saldana (2021), who concluded that the epidemic caused more problems for courier services. However, courier clients' assessments of Covid-19 difficulties against potential were mostly neutral. Information gathered from courier services clients showed that their patronage level was weak during the period under review. This was consistent with the findings of Unnikrishnan (2020), who discovered that Covid-19 had a considerable impact on customer demand. Cruden, Campbell, and Saldana (2021) discovered minimal patronage in their investigations as well, showing that most individuals were unable to utilise courier service due to constraints. From the service point of view, the hypothesis designed showed a significant impact on courier service quality. Descriptively, the most influential aspects are effective and rapid order processing, the cultured and polite demeanour of courier business staff, and delivery timeliness. The areas of high impact are in general agreement with the findings of (Gulc, 2021). These are the key aspects that courier companies in Nigeria should focus on in any COVID-19 recovery model for courier companies in Nigeria.

CHAPTER FIVE

CONCLUSION

5.1   Summary of Major Findings

This study found, among other things, that the courier companies in Nigeria are operating on a small scale with less than 100 employees. This study also found that the COVID-19 pandemic had a significant impact on the operations of courier companies in Nigeria. The most significant impacts were not associated with costs but rather restrictions on people. Consequently, government-led restriction policies posed the greatest challenge that the industry faced in 2020 and 2021, the years under review. The data also found that courier service quality was most influenced in three areas: order processing efficiency and speed, cultured and polite behaviour of courier firm staff, and delivery timeliness. Moreover, from the perspectives of both courier companies and clients, the pandemic was generally viewed to have created more challenges than opportunities.

5.2   Conclusion

The conclusion of this study in this section is presented through the lens of the objectives which the study set out to achieve. This study's primary objective was to examine how the COVID-19 pandemic affected the level of service provided by courier companies in Nigeria. Particular focus was given to 2020 and 2021 which was adjudged to be the worst period of the pandemic. The corresponding findings revealed that COVID-19 has had a significant impact on courier companies in Nigeria, consistent with findings from around the world. However, the subsequent analysis found that the dimensions of service quality most influenced include order processing efficiency and speed, cultured and polite behaviour of courier business staff, and delivery punctuality. The second goal of this study was to explore and identify the most critical pandemic problems for courier firms in Nigeria. This study concludes that the most significant challenge that courier companies faced in Nigeria was government-induced in the form of the various restrictions that were put in place. Perhaps restrictions were justifiable in other global contexts, the local context of COVID-19 infections and death rates in Nigeria did not warrant such extreme measures. This study also concludes that the most significant challenges of COVID-19 concerning the operations of courier companies were not financial in nature. The final goal of this study was to examine how courier

industry players in Nigeria see the pandemic in terms of possibilities and problems. This study concludes that both providers and clients of courier services felt the pandemic created more challenges than opportunities.

5.3   Recommendation, Limitation and Future Studies

The courier services sector in Nigeria was already dealing with significant problems before the epidemic, however, the recommendations presented below are especially based on the study's findings and conclusions.

•   Courier companies in Nigeria have suffered severe consequences as a result of unnecessary government-imposed COVID restrictions. Given that most established courier companies are foreign and operate on a small scale, hostile business policies could stifle what is left of the little incentive that keeps them in the Nigerian market. The least the government can now do is to design special policies that would support the operations of courier companies. This can include measures such as tax exemption, tax postponement, tax reduction and possibly compensation. This is important for any model designed for COVID-19 recovery.

•   Courier companies in Nigeria must, as a matter of service quality, invest in improving the speed of order processing and timeliness of delivery. These are the identified priority dimensions of service quality concerning the Nigerian market. For achieving a high level of courier service quality, factors relating to interaction, communication, and responsiveness of workers are very crucial. Moreover, companies should focus more on the interpersonal and communication abilities of staff members who deal directly with clients. This could be achieved through technology or training employees so that they can better handle clients in times of extreme pressure.

•   The major courier industry stakeholders (namely the Nigerian government and courier companies) should keep investing in the expansion of infrastructure (such as the network of roads in the case of the government and pick-up or drop-off locations in the case of courier companies) and cutting-edge information technology that allows access to mobile and individualized service to guarantee timely and effective parcel delivery. It is essential to put into practice ideas targeted at further automating courier services including using artificial intelligence to cut down on service delivery times.

•   With regards to potential future disasters, the government is admonished to investigate the local context of the industry in Nigeria before adopting and implementing foreign policies that could be draconian and crippling to especially small and medium enterprises.

•   As the pandemic persists, courier companies should continue to provide updated health recommendations and safety instructions to employees. Companies should also explore options for reducing costs of operations such as through remote work, contactless or autonomous delivery and operating with fully digital processes. In terms of crisis as the COVID-19 pandemic, customers tend to increase their reliance on digital means for continuing patronage.

This study has some limitations that create opportunities for future research. Concerning time, this study is limited to 2020 and 2021 as clearly stated to respondents in the questionnaire used. The study is limited to the local context of Nigeria. It may not reflect what is obtainable in other countries even as Nigeria presents a unique context that is most likely different from other countries. Therefore, future research can explore the situation in other countries so that challenges can be better addressed in those specific local contexts. Furthermore, the economic impact of the COVID-19 pandemic is not restricted to the courier business as explored here. Therefore, for future study, a cross-industry analysis could also be useful so that other industries in Nigeria can be studied. If the pandemic persists beyond the current short term, similar research can be conducted in the next 24 months to determine further time-impact of the pandemic on courier service quality. The fact that this study used a survey method to collect data makes it particularly susceptible to response or survey bias. Therefore, future studies could consider adopting a purely analytical approach, based on measurable data.

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APPENDIX I

COURIER COMPANIES ONLINE RESEARCH QUESTIONNAIRE

INFORMATION FOR PARTICIPANTS

Dear Respondents,

My name is Oluwafisayowa, Omotoyosi Olujuyitan, a Master's student studying International Business at the National College of Ireland, Dublin, Ireland. This survey is about research called "PERSISTENT COVID-19: INVESTIGATING THE IMPACT ON COURIER COMPANIES IN NIGERIA." The questionnaire is divided into three pieces. Section A asks for demographics, while Sections B and C inquire about the challenges, opportunities, and impressions of COVID-19 predicated on your involvement in Nigeria from 2020 to 2021.

This questionnaire should take you about 10 minutes to complete. Your participation in this survey is important and completely voluntary. The information from this poll will be kept private and anonymous and used exclusively for academic purposes. Your completed surveys will be collected, reviewed, and kept securely.

Thank you for your input and answer.

INFORMED CONSENT

Do you agree to voluntarily fill out this questionnaire after reading the information above?

(   ) Yes (Please continue with the questionnaire)

(   ) No (Please do not continue with the questionnaire. Only those who have granted their permission may complete this questionnaire.)

SECTION A

Pick the one that most accurately reflects you.

1. How many employees are there in your company?

- 50 and below
- 51–100
- 101–300
- 301–500
- 501–1000
- 1001–4999
- 5000 and above

2. How has the outbreak affected your company's production and operations?

- The significant effect results in severe challenges in corporate operations and insolvency.
- Significant impact: activities are barely maintained
- Small effect, occasional operational issues, but overall stability
- There is no substantial influence.
- Positive influence, creating new prospects for growth

SECTION B

Please score the following assertions based on your experience with the COVID-19 pandemic in 2020-2022 and courier operations in Nigeria over the same period: Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SA) (SD). Select the one that best expresses your viewpoint.

	Challenges of COVID-19	SA	A	N	D	SD
	The epidemic shook the supply system (lockdown, market closures, transport)					
	Because of mobility constraints, COVID-19 hampered logistics.					
	The government did not emphasise couriers and e-commerce.					
	The epidemic increased the expense of running a business.					
	Increased transportation and delivery expenses					

SECTION C: RESEARCH QUESTIONS

Please score the following assertions based on your experience with the COVID-19 pandemic in 2020-2022 and courier operations in Nigeria over the same period: Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SA) (SD). Select the one that best expresses your viewpoint.

	Perception towards COVID-19	SA	A	N	D	SD
	The COVID-19 epidemic era of 2020-2021 was disastrous for Nigerian courier firms (Challenges were more opportunities)					
	The COVID-19 epidemic era of 2020-2021 was beneficial to Nigerian courier firms (Opportunities were more than challenges)					

APPENDIX II

COURIER e-CLIENTS ONLINE RESEARCH QUESTIONNAIRE

INFORMATION FOR PARTICIPANTS

Dear Respondents,

My name is Oluwafisayowa, Omotoyosi Olujuyitan, a Master's student studying International Business at the National College of Ireland, Dublin, Ireland. The study named "PERSISTENT COVID-19: INVESTIGATING THE IMPACT ON COURIER COMPANIES IN NIGERIA" is the subject of this survey. There are three sections to the questionnaire. Section A contains demographic questions, while Sections B and C ask about the obstacles, possibilities, and perceptions of COVID-19 based on your experience in Nigeria from 2020 to 2021.

It should take you around 5 minutes to complete this quiz. Your participation in this survey is crucial and entirely voluntary. The information from this poll will be kept private and anonymous and used exclusively for academic purposes. Your completed surveys will be collected, reviewed, and kept securely.

Thank you for your input and answer.

INFORMED CONSENT

Do you agree to voluntarily fill out this questionnaire after reading the information above?

(   ) Yes (Please continue with the questionnaire)

(   ) No (Please do not continue with the questionnaire. Only those who have granted their permission may complete this questionnaire.)

SECTION A

Pick the one that most accurately reflects you.

1. What type of courier customer are you?

- e-shop
- e-customer

2. In 2020-2021, how would you define your use of courier services?

- No patronage
- Weak patronage
- Medium patronage
- High patronage

SECTION B

Please assess the influence of COVID-19 on the following courier service quality criteria using the scale given, based on your experience with courier businesses in Nigeria before the COVID-19 pandemic and subsequent experience after the pandemic began (period 2020-2021).

	Impact of COVID-19	No Impact	Weak Impact	Medium Impact	High Impact
	Reliability				
	Delivery timeliness				
	Order conformity and completeness				
	The cargo was not damaged.				
	Assurance				
	Courier firm workers' politeness and culture				
	Courier personnel' politeness and culture				
	Contacting the courier business is simple.				
	Responsiveness				
	Simple communication with the courier company				
	Communication with the courier provider is simple.				
	Flexibility in selecting or changing the day and location of service				

SECTION C:

Please score the following claims based on your experience with the COVID-19 pandemic in 2020-2022 and courier services in Nigeria during the same period: Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SA) (SD). Select the one that best expresses your viewpoint.

	Perception towards COVID-19	SA	A	N	D	SD
	The COVID-19 epidemic era of 2020-2021 was disastrous for Nigerian courier firms (Challenges were more opportunities)					
	The COVID-19 epidemic era of 2020-2021 was beneficial to Nigerian courier firms (Opportunities were more than challenges)					