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Post Pandemic Recovery

A Reflection of Online Shopping Behavior of Ghanaian Residents

Supervisor
Ch. Prof. Giovanni Vaia

Assistant supervisor
Ch. Prof. Vladi Finotto

Graduand
Clara Emefa Asempapa
882641

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To my family, my greatest inspiration. Thank you for all your unwavering support, encouragement and love even from 1000s of miles away.

To my late grandmothers. I hope I have made you proud.

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TABLE OF CONTENTS

ABSTRACT

COVID-19 has had economic, social, and psychological impacts globally. The retail industry which was affected elicited huge changes in consumer purchasing habits around the world. Policies and restrictions from the pandemic compelled consumer habits to adapt as E-Commerce became the major tool for businesses and consumers to still transact for goods and services. However, its success isn't prevalent in all regions of the world such as Africa due to gaps in income and inequalities, technological facilities, supply chain routes, etc. which will produce a different consumer experience than what is experienced in developed countries. Despite the growing research on consumer behaviour post-pandemic, there hasn't been a lot of information concerning consumers in developing countries, especially in the sub-Saharan region of Africa.

This study fills the gap by uncovering the scarcity of information from a Ghanaian viewpoint by providing more information on online shopping behaviour and accentuating the impact of the pandemic and environmental concerns for online consumers in Ghana. The research method adopted here is a quantitative one with the design being descriptive. Data is collected and analysed from 389 respondents via simple random sampling on an online questionnaire shared on social media and by email. The data was coded and analysed with the Statistical Package for the Social Sciences (SPSS) software Version 26. Descriptive and Inferential statistics were used in representing the results of the study.

The findings revealed that the pandemic did not have much impact on the decision of consumers residing in Ghana to shop more online. Also, consumers do not consider environmental concerns and risks in their decision to shop online. The key habits of consumers were put in 4 categories; user favourites, social media influence, payment methods and delivery methods. The important e-commerce criteria were ranked with clear details of the product including photos, total price and all fees, a fast delivery process with a clearly stated delivery process and simple navigation of the website in the native language were the top 3 criteria. One major limitation of the study was the inability to delve deep into the rationale behind certain key decisions by consumers such as why the pandemic or environmental issues did not impact consumers' online shopping decisions due to the nature of the study. Further research can be undertaken to tackle such issues.

Keywords: E-Commerce, Consumer Behaviour, Online Shopping Behaviour, COVID-19, Post-Pandemic, Ghana

CHAPTER 1: INTRODUCTION

1.1 Background of the study and Problem Statement

Pandemics and epidemics have always influenced all spheres of human society (Olumekor & Polbitsyn, 2021, p.183). Le Goff (1988) who vouches for this, states that the emergence of the Spanish flu and cholera was directly responsible for the devastation of food distribution and economic activities, leading to famine. The Covid-19 pandemic has proven no different. It has considerably had more destructive consequences than most experts feared, taking a toll on human health and life. Olumekor and Polbitsyn (2021) posit that the social, economic, and psychological disruption caused, has much surpassed the impact of any modern virus, necessitating actions by governments at all levels. It had a large local, regional and international impact, with major implications for crisis management and policy solutions (Gupta, Poddar, & Ghosh, 2021) putting governments in a bind, and pushing them to make difficult trade-offs in light of the health, economic, and social difficulties.

By July 2022, the World Health Organization (WHO) declared that over 567 million confirmed cases and over 6.3 million deaths have been reported globally. According to the OECD (2020a), this epidemic has precipitated the worst economic crisis since the World War II sinking the global economy to the deepest recession in decades. The severity of this crisis was quite unprecedented as it catalysed health and economic shocks, and long-term consequences on human capital, productivity, and behaviour which may be long-lasting (Gupta et al., 2021). The different waves of the pandemic made it more difficult for governments to properly follow containment measures to manage the economic impact crisis. It created ridiculing and crippling conditions that have resulted in shifting the organizational and business network entirely.

Aside from the economic impacts, the pandemic created some social and psychological impacts that the world is still trying to recover from. The social distance and security measures evoked certain social and psychological elements associated with the pandemic such as separation from loved ones, loss of freedom, uncertainty about the advancement of the disease, the feeling of helplessness, etc. which affected and still affects society (Cao et al., 2020; Li & Wang, 2020). During the initial waves of the virus, according to a survey by Accenture (2020), 73% of consumers favoured socializing at home and acquired a predilection for social media and other online entertainment platforms. Various research has also shown that social media

platforms and online entertainment platforms experienced a massive increase in user traffic while traditional media witnessed a drop in viewership.

The Covid-19 pandemic had an astonishing impact on people's life and the retail industry globally. Roggeveen and Sethuraman (2020) affirm that although it is evident that there were immediate effects on retail business, long-term effects are yet to be determined. Government restrictions on the operation of shopping malls, service outlets, catering, entertainment, and recreation have resulted in changes in consumer behaviour (Dumanska, Hrytsyna, Kharun & Matviiets, 2021). There was a drastic change in the consumer preferences of people around the world towards purchasing of goods and services.

Hogg, Askegaard, Bamossy and Solomon (2006, p6) defines consumer behaviour as "the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desire". Consumer behaviour varies in response to contextual factors and learns new behaviours based on past experiences, recommendations, and information. (Cueva Estrada, Sumba Nacipucha, & Delgado Figueroa, 2021). The pandemic prompted huge alterations in consumer purchasing habits and tastes all around the world. For instance, research conducted by PwC (2020), showed that the purchasing of necessary commodities such as frozen foods, foodstuffs, beverages, and household supplies increased significantly. There were also instances of panic buying and bulk purchases by customers to alleviate their anxiety about food shortages at the start of the pandemic. This sort of behaviour is consistent with Ragnan, Clyde, and Kasturi (2010)'s prior findings that in the midst of a crisis, customers become more cautious with their purchasing and create a greater value for money. The policies and restrictions that came along with the pandemic compelled consumer habits to adapt in real-time to the new environment and circumstances (Morales, 2021; Olumekor & Polbitsyn, 2021). As a result, it is only natural that an event as monumental as the coronavirus pandemic would alter consumer behaviour (Mohd Dali, Abdul Hamid, Wan Nawang & Wan Mohamed Nazarie, 2020).

Companies were obliged to find alternatives most notably, through *e-commerce* as a means to maintain their sales volumes as a result of limitations placed by governments and the temporary closure of stationary retail stores during the pandemic. Despite the negative effects caused by the pandemic, digitalization noteworthy the e-commerce industry, was accelerated due to the pandemic (OECD, 2020b). The surge in digital usage, such as online learning, shopping, and payments, has created a new normal (Gupta et al., 2021). E-commerce enabled

businesses to provide outstanding transaction services through the internet while also establishing strong business-to-business (B2B) and business-to-consumer (B2C) ties (Nowakowski, 2021). Several researchers have affirmed e-commerce as a very vital platform that shaped the mode of transaction among consumers during the pandemic and will continue to do so post-pandemic due to its convenience, flexibility, and simplicity allowing consumers to save lots of time as well as money by searching for their products easily and making purchases online (Mohd Dali et al., 2020). According to Dumanska et al. (2021), the modern consumer can browse the range of products supplied in real-time, rapidly pick the perfect product, learn about its features, read other consumers' evaluations, select a convenient method and time of delivery, and make online payments through the mobile phone rather than a desktop computer.

Innovative new consumer products and services introduced during the pandemic such as box restaurants, virtual fitness, telehealth, GR codes, online education, drone deliveries etc. have influenced and continue to affect customer behaviour (Gupta et al., 2021). The pandemic and the execution of various policies and measures resulted in a behavioural change in customers as well as changes in how businesses function in the future (Dumanska et al., 2021). Different research has stressed that the innovative techniques employed by businesses during Covid-19, such as online grocery shopping, etc., were likely to become the new order post-pandemic. Consumers who felt at ease with their new habits acquired during the pandemic are more likely to stick with them after the pandemic because of their perceived utility (Maryati, 2020). Retailers must thus, comprehend changes in consumer attitudes about online and physical retail outlets even after the fear of the pandemic has passed for long-term success (Gupta & Mukherjee, 2022).

The magnitude of e-commerce varied greatly across countries and geopolitical regions even before the pandemic hit. For instance, in 2019, the revenue for e-commerce for the continent of Europe was 636 billion euros with 798.4 million online shoppers (ecommercenews, 2022) but was around a measly 21 billion euros with 233.4 million online shoppers for the entire continent of Africa (Statista, 2021), the second largest continent on earth. Abdelrhim and Elsayed (2020) concur by stating that the general success of the application of e-commerce during the pandemic was more prevalent in some areas than others due to factors such as the gap in income and inequalities, access to technological facilities, supply chain routes, etc. on the global scale. This gap of excess disposable income, inadequate infrastructure, cultural norms alongside economic uncertainty, and a lack of social interaction, for developing

economies like Ghana will produce a different consumer experience than what was experienced in developed countries as a consequence of the pandemic.

Ghana was the eighth largest economy in Africa in 2020 according to data from the International Monetary Fund (IMF). The country is mostly an informal economy, with SMEs making a more significant percentage of the economy (Naab & Bans-Akutey, 2021). The arrival of the pandemic demonstrated how and why businesses, particularly small firms in Ghana, should reconsider how they utilise the internet to survive and grow why businesses as several enterprises were thrown into chaos and left many people unemployed (Naab & Bans-Akutey, 2021). Ghanaian consumers just like any other consumer across the world are influenced by cultural, social, personal and psychological factors (Kotler, 2002). According to Dickson and Yao (2020), the COVID-19 pandemic impacted Ghana's economy as businesses in the major industries, such as tourism, banking, malls, trade etc aside essential services, closed down due to the lockdown seriously affected the income of both traditional and modern household workers which influenced their buying decision process. Similarly, some parts of the country that went through the lockdown had to change their consumption habits to adjust to the situation.

To unravel the pandemic's long-term consequences on consumer preferences in purchasing behaviour in the e-commerce industry, it is critical to identify the underlying drivers that have influenced retail consumption patterns (Roggeveen & Sethuraman, 2020). According to (Gupta & Mukherjee (2022), the research world has recognized the Covid-19 pandemic as an unprecedented event and various studies have been popping up to tackle various emerging consumption patterns. Zhang, Liu and Yao (2021) allude that despite shifts in consumption patterns, the evolution mechanism of online consumption under Web 2.0 and social architecture in the post-pandemic era has always been inherited from traditional consumption theories. However, a scrutiny of the literature reveals that even with the staggering disparity of inequalities around the world, in the post-pandemic era, there is little research on consumer behaviour in developing countries, particularly in Africa towards the post-pandemic era.

1.2 Research Objectives

This study follows a recommendation by Zhang et al. (2021) that there is a need for further research to focus on the exploration of online consumers through an intersectional and multidisciplinary approach to elevate the research jungle of online consumer behaviour eventually leading to changes in the value creation model by online consumer behaviour. This

study, therefore, aims to fill the gap and uncover the scarcity of information from a Ghanaian viewpoint by reflecting on the changes in online consumer behaviour. Ghana was chosen because it is the headquarters for the African Continental Free Trade Area (AfCFTA) which is a trade agreement to cover a comprehensive scope of critical areas of Africa's economy, such as digital trade and investment protection, etc. (AfCFTA, 2022). The main objective of this study is to assess the changes in online consumer behaviour of Ghanaian residents in 2021 (post-pandemic) with an emphasis on the e-commerce industry. Based on this, the research can generate tentative judgments on consumer behaviour regarding e-commerce in the post-pandemic era of Ghana (a developing nation), which will contribute to the theoretical base for the digital economy's recovery.

1.2.1 Specific Objectives

1. To assess the main impacts of Covid-19 and environmental concerns for Ghanaian consumers when shopping online
2. To identify key habits and patterns of Ghanaian consumers when shopping online generally and post-pandemic
3. To determine the importance of different e-commerce criteria for Ghanaian consumers when shopping online post-pandemic

1.3 Research Questions

1. What are the main impacts of Covid-19 and environmental concerns for Ghanaian consumers when shopping online?
2. What are the key consumer habits of Ghanaian consumers when shopping online generally and post-pandemic?
3. How important are the different e-commerce criteria to Ghanaian consumers when shopping online post-pandemic?

1.4 Significance of Study

This study will be relevant to researchers as a contribution to the curation of knowledge being generated in post-pandemic research. From a scholarly standpoint, it will benefit researchers in academia in areas related to online consumer behaviour in developing countries especially sub-Saharan Africa by serving as reference material or foundation for other studies. The conclusions of this study will be relevant also to policy decision makers of the Ghanaian economy to advise on policies or tactics to improve the country's digital economy. Additionally,

it will assist businesses, firms, and industry players in Ghana to analyse consumer behaviour in developing strategies that will boost their online business and make them more

1.5 Organization of the Study

The study will be systematically organized into five main chapters:

Chapter One will constitute the introductory chapter comprising sections such as the background of the study, and the objectives of the study. It will further state the research questions and highlight the significance of the study and its scope. Chapter Two will review the literature on the study. The chapter will provide an outline of the existing kinds of literature relating to the pandemic and consumer behaviour in Ghana, the digital economy, and e-commerce by reviewing both theoretical and empirical literature on the study area.

Chapter Three will outline in detail the research design and methodology used in the study. Chapter Four will present, analyse, and discuss the data collected and research findings as well as themes that emerge during the analysis. Chapter Five will finally present the conclusion and recommendations and possible limitations of the study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter covers an overview of the main concepts surrounding the study encompassing consumer behaviour, online shopping behaviour, e-commerce, COVID-19 generally and in Ghana. Theoretical and empirical literature review will be done on these concepts to provide a better understanding of the study.

2.2 Overview of E-commerce

The movement of developing new technologies over the years has succeeded in making the internet a commercial medium that has transformed businesses all over the world so much so that we can be connected from anywhere and anytime we want, with just one click (Ferrera & Kessedjian, 2019). This progression connected the world and paved the way for the growth of e-commerce. The word E-Commerce is abridged from *"Electronic Commerce"*. E-commerce simply means buying and selling the products or services the internet or other networks (Khoshnampour & Nosrati, 2011). E-commerce encompasses a variety of activities such as online ticketing, online banking, and payment gateways.

2.2.1 History and Evolution of E-commerce

It's particularly difficult to make accurate projections about the history of e-commerce. Some authors such as dos Santos et al. (2017) project the history of e-commerce to have begun in the 1990s. Galinari et al. (2015), on the other hand, argue that e-commerce began in the 1970s when it was limited to operations between large corporations that established private communication networks and, using electronic fund transfer systems, conducted financial transactions and document exchanges electronically. According to Albertin (2012), the evolution of EC can be classified into four phases:

- Phase One: organizations used the Internet's features to share information about their products and services which catalysed the development of e-commerce.
- Phase Two: organizations received orders and sent information and instructions about how to use their products and services. During this age, logistics began to have an impact on businesses.
- Phase Three: the use of information technology (IT) to distribute goods and services where some things, including music and software, began to be sold digitally during this phase.

- Phase Four: consolidated e-commerce with the interaction between seller and consumer, no longer sending data or merely delivering goods and services which enabled the ordinary internet user to become a potential consumer with the advancement of IT and widespread use of the Internet.

The concept of e-commerce has changed over time. Ferrera and Kessedjian (2019) expatiate that it was first described as the ability to conduct electronic transactions, such as transmitting papers when an order is placed and subsequent activities like "web commerce" paved the way for the purchasing of services and goods through the internet to be added. Globalization allowed e-commerce to usher in a true revolution in how products, services, and information are sold, providing greater convenience and a wider range of offers and possibilities for consumers, as well as sellers to pursue modern styles of management for increased competitiveness, the necessity to produce innovation, and rising consumer demands. The growth of e-commerce has impacted businesses all around the world with people nowadays looking. Figure 2.1 below illustrates the history and evolution of e-commerce over the years:

THE 1970S

Michael Aldrich, a British gets the idea of teleshopping while walking his dog and invented online shopping

THE 1980S

'85: Gateshead SIS/Tesco is the first B2C online shopping and Mrs Snowball, 72, is the first online home shopper

'85: Nissan UK sells cars and finance with credit checking to customers online from dealers' lots.

'87: Swreg begins to provide software and shareware authors means to sell their products online through an electronic Merchant account

THE 1990S

'90: Tim Berners-Lee writes the first web browser, WorldWideWeb, using a NeXT computer.

'94: Netscape releases the Navigator browser in October under the code name Mozilla. First true e-commerce transactions begin (the first transaction being a sting CD or a Pizza hut pizza) Netscape 1.0 (SSL encryption) is later introduced to make transactions secure.

'95: Amazon.com and eBay are founded. Internet-only radio stations started broadcasting. Dell and Cisco begin to aggressively use the Internet for commercial transactions.

'96: Online sales surpass $1 billion for the year and more than 40 million people have internet access worldwide.

'98: PayPal launches as the first widely used e-commerce payment platform.

'99: Alibaba and peer-to-peer filesharing software Napster launches. ATG Stores launches to sell decorative items for the home online.

THE 2000S

'00: Online sales surpass $25 billion in the U.S. The dotcom bust. Walmart launches its website.

'01: 70% of internet-connected people make online purchases during the holiday shopping season.

'02: Niche retail companies are founded with the concept of selling products through several targeted domains, rather than a central portal.

'03: Amazon.com posts first yearly profit. Apple launches iTunes, the first music digital store. Google launches AdSense for retailers who want to advertise on the web.

'05: "Cyber Monday" is coined and becomes one of the biggest shopping days of the year. Amazon prime is introduced to give shoppers express service and other discounts.

'06: Facebook begins selling advertisements.

'08: First mobile e-commerce purchases are made

'09: The launch of Square, a mobile platform that allows offline merchants to use e-commerce technologies to accept credit and debit card payments anywhere.

THE 2010S

'10: $572 billion of global e-commerce sales. Shopify exceeds 20,000 web stores mostly created by brick-and-mortar small businesses expanding to e-commerce.

'11: Google launches Wallet, a groundbreaking peer-to-peer online payment platform. Facebook launches sponsored stories. WooCommerce is introduced, which becomes the most popular e-commerce site for a decade, hosting more than 3.3 million stores

'13: China overtakes the U.S as the largest e-commerce market. Facebook introduces sponsored posts, linking social media with e-commerce.

'14: Click-and-Collect become very popular with brands offering store pick-up for online purchases.

17': Amazon buys Whole Foods. E-commerce explodes in India.

'19: 3.5 trillion global e-commerce sales recorded. Market share of online retail sales surpasses brick-and-mortar stores for a week in February for the first time in the U.S

THE 2020S

'20: Lockdowns and restrictions imposed due to the pandemic cause e-commerce to be the most convenient form of transaction across the world. Most companies who did not have an online marketplace had to find ways of bridging that gap

'21: Companies recovering from the pandemic and trying to adapt to new trends set by the pandemic

Figure 2.1 Evolution and History of E-Commerce (Source: Nemat, 2011, Ferrera & Kessedjian, 2019; Khoshnampour & Nosrati, 2011; Marfice, 2020)

2.2.2 E-Commerce Categories and Technologies

According to Nemat (2011), the prefix 'e' is gaining traction a lot nowadays, and most, if not all, products are becoming digitally enabled. As a result, it's critical to distinguish between distinct sorts of commerce or businesses that incorporate the 'e' component. Reiterated by da Silveira Coelho et al. (2013), the growth of e-commerce facilitates a big number of electronic transactions, either between companies and customers, between companies, between consumers, and may also involve government organs. It can be classified into numerous forms depending on the type of relationship that exists between different sides of the trade. Figure 2.2 demonstrates the many sorts of transactions that e-commerce can handle.

Acronym	Name	Description
B2B	*Business-to-business*	Transactions between companies.
B2C / C2B	*Business-to-consumer/Consumer-to-business*	Companies making transactions between companies and the end consumer.
C2C	*Consumer-to-consumer*	Transactions between end consumers.
G2C/C2G	*Government-to-consumer/ consumer-to-government*	Transactions between government and end consumers.
B2G/G2B	*Business-to-government/ government-to-business*	Transactions between government and companies.
G2G	*Government-to-government*	Transactions between government departments.

Figure 2.2 Categories of E-Commerce (Source: Adapted from (da Silveira Coelho et al., 2013)

Business-to-business (B2B) describes commerce transactions between businesses, such as between a manufacturer and a wholesaler, or between a wholesaler and a retailer (Nemat, 2011). The volume of B2B (Business-to-Business) transactions is usually much larger than that of B2C (Business-to-Consumer) mainly because in a typical supply chain, there will be several B2B transactions involving subcomponents or raw materials, but only one B2C transaction, specifically the sale of the finished product to the end client (Nemat, 2011). For example, Apple makes several B2B transactions such as buying memory chips, modems, semi-conductors, camera modules, microphones and touch-screen controllers etc from companies such as Samsung, Intel, Panasonic, Micron Technology, etc. in making iPhones or MacBooks as final products which are then sold to consumers.

Business-to-Consumer (B2C) describes the activities of businesses serving end consumers with products and/or services (Nemat, 2011). A person buying an iPhone or MacBook from a retailer is an example of a B2C transaction. Business-to-consumer e-

commerce makes use of the Internet as a retail market channel and, in the case of information, as a delivery method for products and services (Drigas & Leliopoulos, 2013). Amazon and Alibaba are two e-commerce companies that represent B2C e-commerce. Fornefeld, Delaunay and Elixmann (2008) posit that B2C e-commerce services are directly dependent on strong Internet penetration in households, which leads to rapid B2C e-commerce growth.

Consumer-to-consumer (C2C) (or citizen-to-citizen) electronic commerce involves electronically facilitated transactions between consumers through some third party (Nemat, 2011). Consumer-to-consumer (C2C) e-commerce which includes the usage of online auctions, web forums, chat rooms, and third-party consumer listings are more popular than business-to-consumer (B2C) e-commerce (Wang, Wang & Ta, 2002). eBay is an example of an intermediary site that matches consumers a. Such sites charge a commission or a flat fee on purchases made. One of the major hurdles with this type of e-commerce transaction is the trust which is iterated in a study conducted by Gavish and Tucci (2006) where they investigated the number of fraudulent behaviours that occur in one type of C2C e-commerce online auction.

Government-to-Business (abbreviated G2B) or Business-to-Government (B2G) is the online non-commercial interaction between the local and central government and the commercial business sector (Nemat, 2011). According to Lu, Shambour, Xu, Lin and Zhang (2010) G2B entail information distribution, transactions, and interactions with businesses in a variety of ways via e-government websites, intending to lower business costs and provide effective and efficient access to information for business users. Nemat (2011) gives an example of a government website; http://www.dti.gov.uk; where businesses can get information and advice on e-business best practices.

Government-to-Consumer (G2C) or Consumer-to-Government (C2G) is the communication link between a government and private individuals or residents (Nemat, 2011). According to Yapar, Bayrakdar and Yapar (2015), C2G transactions have been more common since their introduction to make payment systems and tax compliance easier, as well as to cut government costs. The authors also advise that state institutions in developed countries must pay more attention to the control of communication with consumers, and higher quality of services at lower expenses. G2C is possible at the federal, state, and local levels.

Government-to-Government (G2G) is the online non-commercial interaction between Government organisations, departments, and authorities and other Government organisations, departments, and authorities (Nemat, 2011). G2G stresses intra agency and inter-agency

communication and collaboration at the federal level and between the federal government and the state and local authorities (Faokunla, 2012, p.39). Faokunla (2012) also asserts that G2G can improve the states' necessary reporting processes, allowing them to help the federal government in providing public services to residents.

Aside from the models and categories, e-commerce is influenced by or influences some applications. According to Kwilinski, Volynets, Berdnik, Holovko and Berzin (2019), e-commerce is conducted, sparking and drawing on innovation and technologies such as:

- Mobile commerce: is any activity associated with a commercial transaction (or potential transaction) involving monetary value that is carried out over wireless and mobile communication networks and employs wireless and mobile devices as a user interface.

- Electronic funds transfer: payments or other money transfers conducted electronically between financial institutions, individuals, and companies

- Supply chain management: the management of a network of interconnected enterprises in charge of offering product and service packages to end consumers.

- Internet marketing: is a type of marketing that blends traditional aspects (product, distribution, promotion, and marketing research) with remote, interactive use of Internet resources, allowing all marketing processes to be faster, lowered, and enhanced in quality.

- Online transaction processing: is a class of technologies that make transaction-oriented applications, often for data entry and retrieval, easier to use and maintain.

- Electronic Data Interchange (EDI); minimises paper use and facilitates inter-office document sharing by turning firm data into an electronic format that computers can comprehend and that is acceptable for recording on any standard paper form.

- Inventory management system: a set of rules and controls that detect, manage, and keep inventory levels in check (Jacobs et al., 2014).

- Automated data collection systems: the process of automatically extracting data from papers and converting them to digital files with the use of appropriate tools and software

2.2.3 Benefits of E-Commerce

E-commerce has made the world interconnected. Businesses today strive to adapt their structures to meet the needs of new customers, who are increasingly concerned with ease. Using new technologies to achieve this goal is a typical method (dos Santos et al., 2017). Over the years, many studies and researchers have identified several benefits and advantages of employing e-commerce related activities for businesses (Currie, 2000; da Silveira Coelho et al., 2013; Ferrera & Kessedjian, 2019; Kiang & Chi, 2001; Morganti, Seidel, Blanquart, Dablanc & Lenz, 2014).

Ecommerce has various cost/performance advantages for businesses, according to Currie (2000). They include lower external and internal communication costs, as well as faster business processes and fewer administrative responsibilities which helps raise companies' profiles and expand their client and supply base (Kiang & Chi, 2001). According to Lefebvre and Lefebvre (2002), e-commerce, provides the business world benefits such a visibility and direct low-cost access to international markets via the Internet, the ability to adapt to market conditions allowing personalization of products and services, engage in specialized marketing or micromarketing using data mining techniques and greater adaptability to changing competitive conditions.

Currie (2000) posits that e-commerce serves as a great source of high revenue generation for present businesses or new ventures. da Silveira Coelho et al. (2013) supports this by revealing in their paper that B2B e-commerce companies in Brazil are those that provide clients with the option of purchasing products and having them delivered to a place specified by the client. E-commerce also acts as a distribution mechanism for goods and services such as software, music, news, consulting services, financial services, and so on, with cheaper shipping costs and rapid availability of these goods and services. E-commerce revenue can also be earned as a consequence of faster processing time, which allows online enterprises to store less data, cutting administrative expenses and overhead maintenance (Kiang & Chi, 2001).

E-commerce provides convenience as consumers have the possibility of purchasing goods and services without leaving their homes which has had an impact on consumer behaviour (Ferrera & Kessedjian, 2019). The authors also argue that e-commerce improves customer service and communication by providing customers with easily available detailed information, direct marketing, and a better brand image that allows customers to connect actively with vendors.

2.2.4 Current Growth and Development of the E-Commerce Industry

The growth and development of the E-commerce Industry has been astonishing even though there have been some bumps on the road. Currently according to Statista (2022), online retail sales amounted to 4.9 trillion U.S dollars worldwide in 2021 with growth forecast of 50% within the next four years making it the fastest growing retail market.
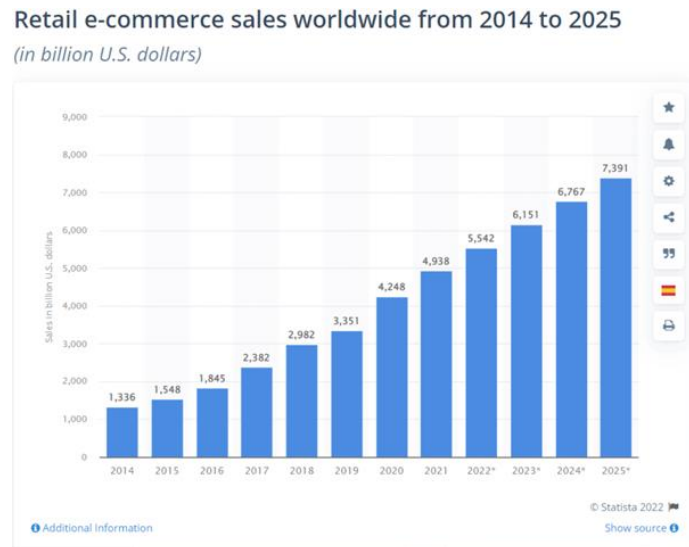

Figure 2.3 Retail E-Commerce Sales Worldwide from 2014 to2025 (Source: Statista, 2022)

According to the latest e-commerce data, consumers are increasingly shifting from brick-and-mortar purchases to online purchases and this trend should not be trivialized at all. The beginning of the e-commerce era saw a steady growth however, there has been a rapid one in recent years. The share of online sales has increasingly been growing in the total retail sales landscape for some time, growing from 17.8% in 2020 to 19.61% in 2021according eMarketer (2021). eMarketer also forecasts that following a 25.7% surge of online sales in 2020, retail ecommerce sales worldwide were expected to climb a further 16.8%.
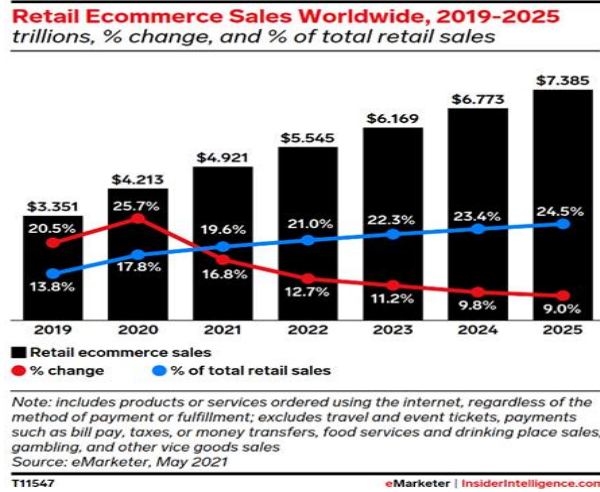
Figure 2.4 Retail E-Commerce Sales Worldwide, 2019-2025 (Source: eMarketer, 2021)

The adoption and expansion of e-commerce is only possible with the penetration of internet globally. A report by Datareportal (2022) shows that global internet users have increased to 4.95 billion as at January 2022 with internet penetration currently at 62.5 percent of the world's total population. The average daily time spent on the internet per user was approximately 7 hours (increased by 4 minutes or 1% per day from last year) which d result in more e-commerce purchases.
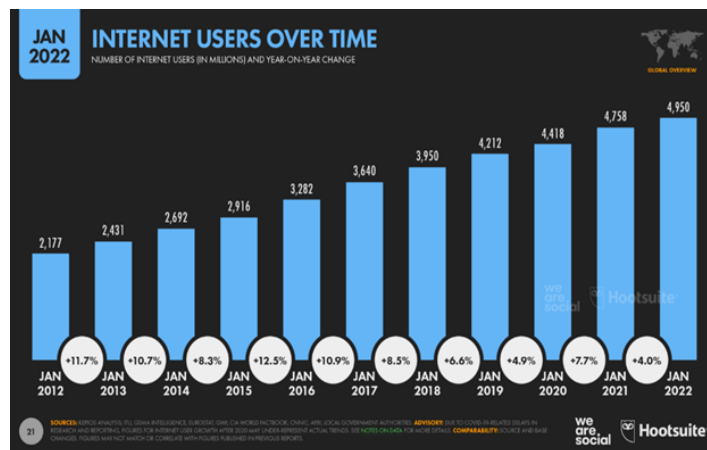
Figure 2.5 Internet Users Over Time (Source: Datareportal, 2022)
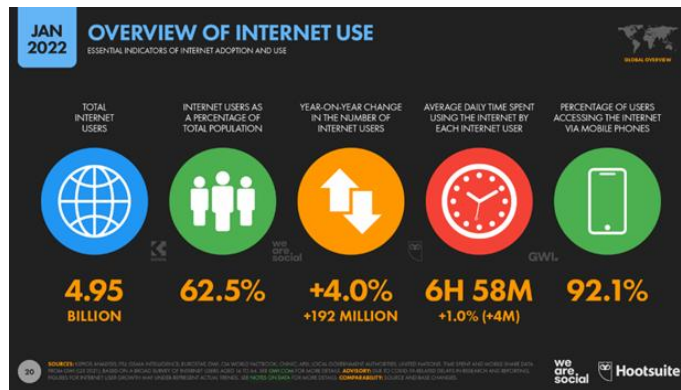
Figure 2. 6 Overview of Internet Use (Source: Datareportal, 2022)

Despite the fact that retail had a difficult year in 2020, eMarketer reports that national markets showed double-digit online growth. Since 2018, the top five ecommerce markets have remained the same and it is expected that China, the United States, the United Kingdom, Japan, and South Korea to be in the top five by 2025. According to Shopify, China continues to dominate the global ecommerce sector, accounting for 52.1 percent of all retail ecommerce sales globally in 2021, with total online sales just over $2 trillion. It also boasts the most digital buyers in the world, with 824.5 million, or 38.5 percent of the total.


Figure 2.7 Top 10 Countries, Ranked by Retail E-Commerce Sales Share, 2021
(Source: eMarketer, 2021)

From Figure 2.7 above, the United States is the second-largest market, but its share is much smaller than China's, at 19.0 percent. According to Digital Commerce 360, consumers spent $870.78 billion online with US retailers in 2021, up from $762.68 billion in 2020. They

also report that, while the 14.2 percent increase in 2021 is less than half of the record-breaking 31.8 percent merchants registered in 2020, it is comparable to pre-pandemic growth levels. India is expected to be the fastest-growing ecommerce market in the next year with a projected increase of 27.0%. Asia-Pacific and North America are expected to still lead the regional rankings. According to eMarketer, because of China's disproportionate influence, Asia-Pacific will account for 60.8 percent of global retail ecommerce sales in 2021. North America will account for 20.3 percent of the market, while Western Europe will account for 12.6 percent.

Data gathered from Statista shows that with a market capitalization of about 1,735 billion dollars as of June 2021, Amazon is the largest consumer internet and online service firm in the world. Among the various internet enterprises in the retail, real estate, mobility, travel, and hospitality industries, Amazon was ranked number with Alibaba.com, a digital commerce platform, in second with a market capitalization of 614.8 billion dollars. Shopify is a very key company in the e-commerce industry. It has the highest market cap (182.1 billion U.S. dollars by June of 2021), only surpassed by online marketplaces like Alibaba and Amazon in the technology industry (Statista, 2021). Shopify's annual sales in 2021 was $4.612 billion, up 57.43% from 2020 (Macrotrends, 2021). According to Builtwith (2021), Shopify is the world's leading ecommerce platform, with over 3,766,071 live websites and a market share of over 32% in the United States with WooCommerce coming close with 3,427,679 live online stores making it the most used open-source ecommerce platform.
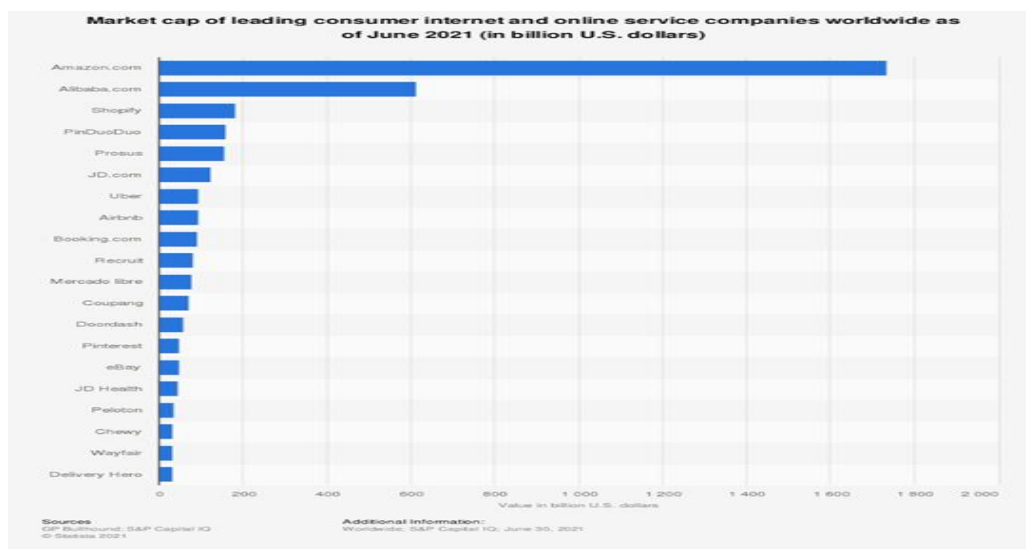
Figure 2.8 Market Cap of Leading Consumer Internet and Online Service Companies Worldwide as of June 2021 (Source: Statista, 2021)

2.2.5 Factors/Drivers Influencing E-Commerce

According to Wymer and Regan (2005), factors that affect or influence the adoption and success of e-commerce in any society can be classified under four categories. They are environmental factors, knowledge factors, organizational factors and technological factors.

Environmental factors are elements that relate to markets, competitive pressures, government rules and regulations, suppliers, vendors, partners and customers (Wymer & Regan, 2005). The environment can either support or hinder adoption of new technologies. Government support remains one of the critical elements for e-commerce development. Government interventions such as knowledge, subsidies, and mobilization assist in providing the enabling infrastructure for e-commerce to thrive has substantially increased the amount of e-commerce and e-business acceptance and use in developed economies (Martinsons, 2008). Enabling conditions such as trusted networks and resources in the environmental context also go a long way to influence e-commerce. For instance, the behavioural intention in the adoption of Internet banking in Malaysia was influenced by the facilitating conditions (Foon & Fah, 2011).

Knowledge factors involve executive knowledge and experience, employee expertise, recognition of needs and opportunities and exposure and experience with technology and change management (Wymer & Regan, 2005). Wymer and Regan (2005) highlight that knowledge factors seem to be more prevalent in the literature than the other three categories of factors. For example, Wojtkowski and Hardesty (2001) iterate that for the successful adoption of e-commerce/e-business Internet technologies (EEIT), people must perceive the need for change and understand why it is necessary with a reasonable working grasp of the new technology.

The third category is organizational factors that are associated directly to availability and use of internal resources (Wymer & Regan, 2005). Organizational factors include enterprise size, type of products and services, capital, human resources, expertise, efficiency, priorities and profitability (Huang, Hart & Wiley, 2004). It is also stressed that growth orientation, ownership structure and size of firms in addition to information intensity of products/processes contribute to the organizational factors to e-commerce adoption. Organizational factors according to Caldeira and Ward (2002) also include availability of financial resources, users' attitudes, organizational structure, human resources, power relationships, and IS/IT competencies.

The last category is technological factors. Technological factors include technology availability, cost, security, reliability and capabilities (Wymer & Regan, 2005). Caldeira and Ward (2002) recognized several technology features such as availability of external expertise and services, quality of software available in the market, vendor support, type of IS/IT solutions available to the firm, IS/IT objectives and assumptions and evaluation of IS/IT benefits. Some of the differences in characteristics and outcomes might be related to whether researchers focused just on e-commerce or employed a broader definition of information technology.

2.2.6 The COVID-19 Pandemic & E-Commerce

Despite being a global catastrophe, the pandemic extended a reproving role that provided a major boost for technological convergence and innovation in terms of emergency control related to economic and social lockdowns (Hussain, 2021). This also propelled governments and leaders across the world to respond to this need by accelerating digitalization and pushing the shift to a digital economy with differing levels of success across countries and regions (CEPAL & Adenauer, 2021). The shift to a digital economy is not a recent concept but, its completion has become paramount fortunately or unfortunately due to the pandemic.

This crisis has greatly impacted several small and medium-size and large organizations, causing them to discover new business strategies for the ensuing time (Seetharaman, 2020). Digital connectivity also proved to be very important for people during the pandemic by providing the chance to telework from home, shop online, access education and other services online, and communicate with friends, family, and even strangers. Digital connectivity and E-commerce became vital for businesses to sustain their operations and improve their economic resilience during this period (CEPAL & Adenauer, 2021). The United Nations Conference on Trade and Development report that there was a dramatic rise in e-commerce due to the movement restrictions brought about by COVID-19 which increased online retail sales' share of total retail sales from 16% to 19% in 2020 (UNCTAD, 2021). There were expectations for e-commerce after the pandemic to continue to increase from a study by Alfonso, Boar, Frost, Gambacorta and Liu (2021) which revealed that 38% of consumers expect to shop online more frequently after the outbreak.

Most purchased items during that period were toilet paper, disposable gloves, bread, milk, frozen meat and vegetables, etc (Nowakowski, 2021) Retail sales of e-commerce shows that COVID-19 has significant impact on e-commerce and its sales are expected to reach $6.5 trillion by 2023 (Jones, 2020). New business models involving e-commerce unearthed during

this period. For instance, virtual shopping, an online shopping experience which allows customers to virtually visit a shop, try on clothing or see a simulation of furniture in their homes began to see a lot of traction. E-learning and telemedicine also gained prominence during the pandemic.

The transition to online purchasing increased both online marketplace profits and costs. Revenues rose in the first half of 2020 for Amazon (34% year on year), Alibaba (27%), JD (28%), Shopify (74%), Rakuten (16%) and Mercado Libre (50%) while Shopify added 62% more new stores between March 13 and April 24 than in the preceding six weeks, as locked-down merchants hurried online (Alfonso et al., 2021). Stock prices for e-commerce platforms increased immediately after the lockdowns were announced in several jurisdictions and marketplaces. The valuations indicate a possible permanent shift in customer behaviour toward online shopping, particularly in areas such as grocery, which previously had less traction online. (Bloomberg, 2020).

Sr.no	Retail website	Millions
1	Amazon.com	4059M
2	Ebay.com	1227M
3	Rakuten.co.jp	804M
4	Samsung.com	648M
5	Walmart.com	614M
6	Appel.com	562M
7	Aliexpress.com	532M
8	Etsy.com	395M
9	Homedepot.com	292M
10	Allegro.pl	272M

Figure 2.9 Top 10 E-commerce Websites during the Pandemic (Source: Adrienko, 2020)

Despite the amazing sales growth, online marketplaces faced some important challenges. Customers' distribution, shipping, and after-sale requirements caused disruptions in the availability of services by e-commerce companies. Amazon for one, saw some productivity losses in its warehouses as a result of the implementation of social distancing restrictions, lengthier breaks for workers, and other coronavirus-related cost-cutting initiatives (Alfonso et al., 2021). Chinese company Alibaba, a giant provider of e-commerce services has struggled to maintain growth rates during the economic slowdown in its domestic market and faced the uncertainty of coronavirus outbreaks (Abdelrhim & Elsayed, 2020). Some e-commerce giants like Alibaba, Amazon, and JD tried to solve this by being innovative and use automated technology such as self-driving cars, robots, and drones to make safe contactless and distanced deliveries to clients (Lin, 2020). The rapid move to digital shopping has also highlighted online consumer protection as a major concern. There was an upsurge in reports of

fraudulent and dishonest acts during the lockdowns, such as internet retailers selling subpar supplies like bogus or dangerous hand sanitizers, surgical facemasks, or disinfectants. To tackle fraud and ensure fair pricing, companies like Amazon, Mercado Libre and others removed offers with excessively high prices on products and shipping from their platforms (Bhatti, Akram, Basit, Khan, Naqvi & Bilal, 2020).

Online retail sales grew markedly in several countries, with the Republic of Korea having the highest share at 25.9% in 2020, up from 20.8% the year before, 2019. As espoused earlier, the general success of the application of e-commerce was more prevalent in some areas than others due to factors such as the gap in income and inequalities, access to technological facilities, supply chain routes, etc. that already existed prior to the occurrence of the pandemic (Abdelrhim & Elsayed, 2020). Even with the promising opportunities for the growth of e-commerce, the pandemic unveiled key challenges to its sustainable growth in some developing countries which include reliable infrastructure, connectivity and access, inadequate trade facilitation, overreliance on cash, weak e-payment regimes, and lack of consumer trust (CEPAL & Adenauer, 2021).

However, there was still a growth rate caused as a result of the pandemic. Alfonso et al., (2021) confirm this in their study where the show that the lower the level of e-commerce in a given country in 2019, the higher the growth rate of e-commerce during the Covid-19 pandemic. For instance, in the 2000's, e-commerce in Pakistan was just about 3% of the whole population (Bhatti, Saad & Gbadebo, 2018) but during the pandemic it was reported that e-commerce in Pakistan was increased by 10% in daily record, and 15% raise in internet users with a 30-40% surge the demands of products (Bhatti et al., 2020).

Economy	Online retail sales ($ billions)			Retail sales ($ billions)			Online share (% of retail sales)		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Australia	13.5	14.4	22.9	239	229	242	5.6	6.3	9.4
Canada	13.9	16.5	28.1	467	462	452	3.0	3.6	6.2
China	1,060.4	1,233.6	1,414.3	5,755	5,957	5,681	18.4	20.7	24.9
Korea (Rep.)	76.8	84.3	104.4	423	406	403	18.2	20.8	25.9
Singapore	1.6	1.9	3.2	34	32	27	4.7	5.9	11.7
United Kingdom	84.0	89.0	130.6	565	564	560	14.9	15.8	23.3
United States	519.6	598.0	791.7	5,269	5,452	5,638	9.9	11.0	14.0
Economies above	1,770	2,038	2,495	12,752	13,102	13,003	14	16	19

Figure 2.10 Online Retail Sales, Selected Economies, 2018-2020

(Source: UNCTAD,2021)

With the introduction of disruptive business models to change the mode of operation and value chain distribution to customers, especially in the post-pandemic domain (Vanapalli et al., 2021), e-commerce companies have been confronted with advanced opportunities and problem solutions with a reproving role of what technological convergence and innovation can do (Hussain, 2021).

2.2.7 E-Commerce in Ghana

African countries stand to benefit significantly from long-term e-commerce initiatives. It is the second largest continent in the world with 54 countries and a population of 1,409,670,038 which is equivalent to 16.72% of the total world population (Worldometer,2022). It is a very youthful population with a median age of 19.7 years. Many products and services such as craft artifacts are distinctive to the continent, and successful facilitation of e-commerce cross-border trading might significantly support local African economies (Manteaw, 2002). Market liberalisation regulations, ICT literacy initiatives, and cybercrime reforms would set the pace for the development of ICT infrastructure in Africa's failing economies. The progress brought forth by the systems will draw more people out of poverty and eventually make basic ICT affordable to everyone.

According to Manteaw (2002), Ghana is one of the few African countries with a liberalized telecom market and a vast array of Internet service providers. Internet user growth in Ghana has been on the rise in the past few years due to the competition by the telecom companies. According to Datareportal (2022), there were 16.99 million internet users in Ghana in January 2022 with an internet penetration rate of 53.0 percent of the total population. At the start of 2022, the median internet connection speed via cellular networks in Ghana is 8.09 Mbps (a decrease of -5.0% in 12 months) while the median fixed internet connection speed is 26.93 Mbps (an increase of +33.7% in 12 months). Data from GSMA Intelligence also reveals that 44.90 million cellular mobile connections were recorded in Ghana at the start of 2022 which is equivalent to 140.0 percent of the total population (Datareportal, 2022). It is valuable to note that many people around the world use more than one mobile connection for various reason such as work or personal use. The is shows a favourable trajectory for growth and acceptance of e-commerce in Ghana.

According to Sengretsi (2020), the first ever ecommerce website in Ghana was eshopafrica.com founded by an English lady called Cordelia Salter-Nour in 1999, with the website launching officially in February of 2001. The site received a lot of international

coverage and dealt in products mostly manufactured in Ghana like baskets, carvings, jewellery, kente cloth and collectibles. Setting up the site was not easy about 20 years ago in Ghana as Africa was still considered a high-risk location then, so payment options were very expensive to incorporate. Many more ecommerce websites have come and gone since then, with new ones appearing on a regular basis especially in the wake of the pandemic. Some of the top ecommerce websites in Ghana today include jumia.com.gh, superprice.com, kikuu.com.gh melcomonline.com, zoobashop.com, etc while Amazon.com, Aliexpress.com, Alibaba.com are the most visited international sites (Sengretsi, 2020).

Business Model	Example	Description
Portal	None	A local portal is unavailable. Users depend largely on international portals such as Google, Yahoo, and Ask.com.
E-tailer	Ghanashoppingmall.com, Ghanabuys.com	Accepts both online and offline payments. Provides free and paid delivery.
Community Provider	Ghanavillage.com, Ghanacommunity.com	Provides discussion boards to facilitate sharing of information, interests, and hobbies. Online networks with chat functions.
Transaction Broker	Ibrokerghana.com, Businessghana.com, carriersinghana.com	Ibroker offers a trading platform to help investors trade and monitor their securities on the Ghana Stock Exchange.
Market Creator	Joymarket, tonaton, Businessghana.com, Myebayghana.com	Creates interactive marketplace experience, where practically anyone can buy & sell or offer practically anything online.
Service Provider	Zipnet, Africa Online, Africanus.net, Iburst Africa, Internet Ghana, Broadband4U, NetSat Ltd	They provide services such as Internet access, Internet transit, domain name registration and hosting, dial-up access, leased line access and colocation.
Content Provider	Myjoyonline.com, Businessghana.com, Myedaily.com	They provide online information such as news, entertainment, sports, and tourism guides.
Mobile Commerce	Zap Services by Zain Airtel Money E-zwich	Zap allows money transfers, utility payment bills, payment for goods and services, and banking services regardless of the type of handset. Airtel Money also allows banking transactions and payment for goods and services. E-zwich is the brand name of the National Switch and Smart card payment system. The e-zwich payment system facilitates accessibility to banking and retail services in Ghana.

Figure 2.11 Overview of B2C Ghanaian E-commerce business models (Extracted from Awiagah et al., 2016)

The sources of traffic for the top ecommerce websites in Ghana could be from organic searches in Google, social media campaigns, email marketing campaigns, referrals from other websites, and also direct traffic. Wopedigital (2020) reports that on average, the most popular sites had 52.67% of all their visitors coming from Google Search, followed by Direct visitors (38.05%), Mail (4.07%), Social (2.65%), Referrals (2.15%) and finally Display ads (0.4%). Most sites have at least one payment method, with some having as many as 4. These payment methods are either online or offline payments or a combination of both. The most popular offline payment method was cash either on delivery or in store. The second most popular offline payment method was Mobile Money offered by telecommunication networks mainly MTN Mobile Money, AirtelTigo Money and Vodafone Cash. The third offline payment was Bank Transfer. Some examples of online payments mostly offered on e-commerce sites in Ghana are SlydePay, PayPal, Flutterwave, expressPay and Hubtel. Card payments in Ghana are mostly done with Visa and MasterCard or locally issued debit cards via GH-Link like eZwich.
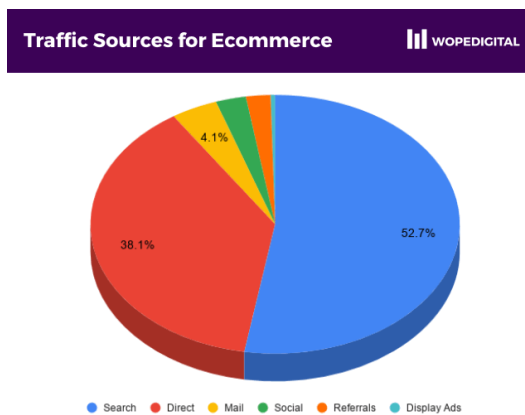
Figure 2.12 Traffic Sources for E-Commerce in Ghana (Sengretsi, 2020)
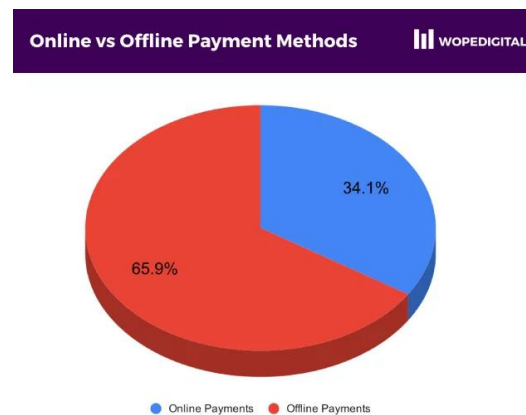
Figure 2.13 Online vs Offline Payment Methods in Ghana (Sengretsi, 2020)

Despite all these progresses, there are still a lot of challenges in the e-commerce sector in Ghana on the side of consumers and companies. An assessment of reviews by consumers of e-commerce companies by Sengretsi (2020) revealed that most reviews are of the businesses themselves and not solely their ecommerce operations whether offline or online. Customer service was the topmost issue for consumers in terms non-response to efforts of communication or rude or unhelpful staff. Delivery was another issue for consumers in terms of items delivered late or not at all, delivery personnel refusing to deliver orders and orders being marked as delivered when they hadn't been. Customers also complained about product quality where they have had issues of wrong items being delivered, faulty items, low quality items and outright fake products instead of the originals. Also returns and refunds in e-commerce operations in Ghana don't seem to work very well. There have also been complaints of alleged fraud, tracking issues and payment issues.

E-commerce businesses in Ghana are also dealing with a range of issues such as expensive international delivery costs and difficulty in accepting international payments. The main issue for E-commerce companies in Ghana according Sengretsi (2020) is the inability to get customers to use their websites. Many consumers who discover likeable products online tend to complete the deal offline using phone conversations, direct messages, and WhatsApp and because cash on delivery is the preferred payment option, they bypass the website entirely. This could largely be attributed to high occurrence of fraud in Ghana and the lack of polices to counter it. Since many e-commerce businesses in Ghana also do not offer a return or refund

policy, a lot of Ghanaians like to shop in a way that they have control over the experience due to trust issues. Ghana also doesn't have a very developed address systems which makes delivery of items a nightmare for companies.

A study by Kwadwo, Martinson, Evans and Esther (2016) disclosed various barriers why small and medium scaled enterprises in Ghana find it difficult to adopt e-commerce successfully. These include lack or inadequate financial resources, lack of e-commerce knowledge and the absence of important regulations and standards of e-commerce. However, most Ghanaian SMEs that have adopted e-commerce mainly use it for the purpose of advertisement and marketing. The authors suggested that regulations and standards need to be set to enable online payments and related transactions. They also advised that socio-cultural practices need to be carefully addressed to enable the citizens and SMEs to trust and patronize e-commerce systems. The government also needs develop appropriate schemes to invest in ICT and building infrastructure.

2.3 Overview of Consumer Behaviour and Consumer Decision-making

The evolution of consumer decision making began around 300 years ago, when early economists such as Nicholas Bernoulli, John von Neumann, and Oskar Morgenstern began to investigate the underlying causes of consumer decision making, mostly from an economic perspective and on the act of purchase (Bray, 2008; Richarme, 2007). Other researchers such as Nowakowski (2021) believe that one of the first theorists that laid groundworks for the economic order was Adam Smith (1723-1790) who preached that the best way to accelerate economic development was to create favourable conditions for free entrepreneurship and let the "invisible hand" of the market do its job. Landreth and Colander (2002) state that Adam Smith believed that market participants chase after their benefits, hence contributing to the satisfaction of social needs.

This classical model reflects a point of view on consumer decision that sees consumers as rational decision makers who are only concerned with self-interest (Zinkhan, 1992). 'Utility Theory' is one of the most prevalent theories of this model. Consumer decisions are rational since individuals take actions that bring the most significant benefits directly to themselves and indirectly to society as a whole (Nowakowski, 2021, p.598). In an economy, demand for commodities is often depicted by the inverse connection between the amount that can be purchased and the price at a particular period, assuming that all other factors remain constant. Cheaper goods mean there will be a higher quantity bought. In a market economy, any changes

in price signify consumers' needs and purchasing power (Landreth & Colander, 2002). Consumers are less sensitive to changes in prices of relatively cheap goods or goods that are not bought often but are inclined to react quickly to changes in prices of necessities/basic goods or expensive products.

Contemporary research on Consumer Behaviour however according to Bray (2008) considers a wide range of consumer-influencing factors and recognises a wide range of consumption activities other than purchasing such as; need recognition, information search, evaluation of alternatives, the building of purchase intention, the act of purchasing, consumption and finally disposal as a broader range of activities that influence consumer decisions (Blackwell, Miniard & Engel, 2001). On this basis, this study adopts two definitions of consumer behaviour as:

"…the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires." (Hogg et al., 2006, p.6).

And

"…the behaviour that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs" (Schiffman & Kanuk, 2007, p.3).

Consumer attitudes are a big worry for marketers in today's turbulent market since an order from this base may be crucial in terms of picking the proper marketing strategy and also making commercial operations effective (Solomon, Marshal & Stuart, 2008). It is always advantageous for a company to understand how consumers will react to various marketing stimuli in order to adapt strategies which will enable them to achieve the desired result with regards to consumer response (Domie, 2013). Consumer decision-making would include a wide range of moods, feelings, attitudes, and behaviour that could imply positive or negative reinforcement of a particular lifestyle (Leon & Leslie, 2000). Consumer behaviour is a lengthy and complex phenomenon (Domie, 2013) and does not just revolve around purchasing of a certain product or service. It generally starts in the mind of the consumer, who recognises the need, analyses new information-related possibilities and a range of alternatives, and identifies the benefits of numerous alternatives before eventually deciding to buy the product.

Consumer behaviour is extremely complicated, and no single model can fully describe it (Zhang et al., 2021). It covers many disciplines such as psychology, society, and computing. Studying Consumer Behaviour is important because knowledge of these tenets of segmentation allows adapting companies to develop sales strategies, taking into account sociological and psychological variables (Nowakowski, 2021). Kotler and Armstrong (2010) believe that obtaining understanding about consumer behaviour can encourage firms to decide on their marketing mix, the 4 P's of marketing: price, product, promotion, and place.

2.3.1 Theoretical Approaches to The Study of Consumer Behaviour

The theoretical approaches to consumer behaviour is being adapted from a book by Bray (2008) which covers various important aspect of consumer behaviour. Bray (2008, p.3) stresses on the fact that several different approaches have been adopted in the study of decision making, drawing on differing traditions of psychology. However, five major approaches emerge from numerous researches. Foxall (1990) asserts that each of these five approaches proposes alternative models of man and emphasises the importance of examining a wide range of variables. These approaches are:

- Economic Man
- Behaviourist
- Humanistic
- Psychodynamic
- Cognitive

Economic Man

Richarme (2007) suggests that the term "economic man" was first used in the late 19th century at the start of more continuous research in that area. Early research assumed that man was entirely rational and self-interested, making decisions based on his ability to maximise utility while exerting the least amount of effort (Bray, 2008). According to Schiffman and Kanuk (2007), to behave rationally in the economic sense, as suggested by this approach, a consumer must be aware of all available consumption options, be capable of correctly rating each alternative, and be able to choose the best course of action. Individuals are frequently described as seeking acceptable rather than optimal choices which is accentuated by Kahneman and Tversky's Prospect Theory (Kahneman & Tversky, 1979) or Herbert Simons Satisficing Theory (Simon 1997) which incorporate bounded rationality. These steps are no longer considered a realistic account of human decision making because consumers rarely have enough information, motivation, or time to make such a "perfect" decision and are frequently influenced by less rational influences such as social relationships and values. (Simon 1997).

Psychodynamic Approach

According to Stewart (1994), this approach finds its origins within psychology which is broadly credited to the work of Sigmund Freud (1856-1939). This viewpoint holds that behaviour is influenced by biological forces or drives that operate outside of conscious thought (Arnold, Robertson and Cooper, 1991). Freud (1923) identifies three aspects of the psyche, namely the Id, the Ego and the Superego. However, from Ribeaux and Poppleton (1978), other experts working in this field, have identified different drives. They exclaim that the central component of the psychodynamic approach is that biological drives, rather than individual cognition or environmental stimuli, determine behaviour.

Behaviourist Approach

Behaviourism is a philosophical family that holds that behaviour is explained by external events and that all that organisms do, including actions, thoughts, and feelings, can be considered behaviours (Bray, 2008). It proves that behaviour can be learned by external events and thus largely discredited the Psychodynamic approach that was predominant in the early 1900's (Watson & Rayner, 1920). Early studies were strongly based on logical positivism, which asserted that objective and empirical methodologies employed in the physical sciences could be applied to the study of consumer behaviour (Eysenck & Keane, 2015).

Behaviour is attributed to factors external of the individual's control. There are different research areas in behaviourism such as; 'Classical Behaviourism', introduced by John Watson, which studies behaviour, with no mental life or internal states being accepted regarding human thoughts as 'covert' speech and adhering to strict monism or 'Radical Behaviourism' which acknowledges the existence of feelings, states of mind and introspection, however still regards these factors as epiphenomenal (Nye, 1979; Skinner, 1938).

According to Bray (2008), in recent years, there has been an evolution leading to a new branch 'Cognitive Behaviourism", that claims that intrapersonal cognitive events and processes are causative and the primary irreducible determinants of overt behaviour (Hillner, 1984, p.107). Behaviourism does not appear to adequately account for the great diversity of response generated by a population exposed to similar, or even near identical stimuli (Bray, 2008, p.5).

Cognitive Approach

The cognitive approach attributes behaviour to intrapersonal cognition. This intrapersonal causality obviously throws into doubt the explanatory capacity of external factors

postulated in behavioural methods; nonetheless, consumers actively seek and receive environmental and social cues as informational inputs helping internal decision making (Stewart, 1994). The individual here is regarded as an 'information processor' (Ribeaux & Poppleton, 1978). Contemporary Cognitive Psychology acknowledges a wide range of factors fundamental to intrapersonal processes including: perception, learning, memory, thinking, emotion and motivation among others (Sternberg, 1996).

Even though this comes from a Radical Behavioural standpoint, Foxall (1990, p.18) highlights four significant strengths of cognitivism in describing consumer behaviour. Firstly, its similarity to common-sense explanations of everyday discourse makes it an intuitively appealing approach of explaining everyday behaviours like as purchasing and consumption. Secondly, consumers' capacity to define their experiences in terms of attitudes, desires, requirements, and reasons guarantees that an explanation progresses in the same terms as the description of what is explained. Thirdly, this brings a measure of unity and consensus to a still young field of inquiry. Lastly, the broad use of cognitive explanation by other social science and humanities fields has aided the conceptual development of this branch of consumer research by allowing the borrowing of theoretical and methodological inputs.

Foxall (1990) on the other hand has criticised the cognitive method for relying too much on abstract and unobservable explaining elements that seldom lend themselves to empirical inspection and judgement. Also, its assumes the consumer is rational, discerning, logical and active in decision making which is questionable (Hogg et al., 2006). Notwithstanding these limitations, a cognitive approach is preferable for investigating ethical purchase behaviour.

Humanistic Approach

Although cognitive models are frequently touted as the best available explanation of consumer choice making, a growing number of academics are noting its shortcomings and releasing new studies seeking to enhance knowledge of specific parts of behaviour (Bray, 2008). These new approaches are described as humanistic since they try to investigate notions that are personal to the individual consumer rather than explain general procedures (Stewart, 1994).

According to Nataraajan and Bagozzi (1999), there are three most pressing areas for research in this approach. To begin, cognitive techniques presume that the client is a rational decision maker, which appears to disregard the relevance of emotion in decision making. Second, new research has begun to delve into the subject of volition. This new work tries to understand and address the discrepancy between customers stated buy intentions and their

actual final purchase behaviour by analysing the volitional phases of decision making. Finally, there is a scarcity of research on the influence of altruistic intents on any consumer behaviour, despite the nearly universal embrace of egoism in marketing theory.

2.3.2 Consumers and Influencing Factors

There are several contributing factors that influence how customers act and reason during the purchase process that surround consumer behaviour. According to Kardes, Cronley and Cline (2014), a careful evaluation of these factors enables many organisations to achieve their marketing plan objectives by establishing dominance of the local market. The factors that motivate consumers' purchasing behaviour are cultural, social, personal and psychological.

Cultural Influence

Culture has a significantly powerful influence on consumers' views with regards to any product (Domie, 2013, p.15). Culture is the foundation for our values, behaviour, beliefs, priorities, and impressions of various items. Linton (1936) defines culture as an aggregation of the sum total of ideas, conditioned emotional responses, and patterns of habitual behaviour which the members of that society have acquired through instruction or imitation and which they share to a greater or less degree. Culture is simply a way of life of a people. Recognizing people's cultural origins can help us understand their consumption choices. All of these differences shape the values of what the customer symbolises and the way the consumer behaves in today's society (Kardes et al., 2014). In may circumstances, consumers choose items and services that are congruent with their cultural tastes, values, and norms.

For instance, in most societies, consumers can be classified into relatively permanent social classes based on shared beliefs, interests, and behaviour. These classes are characterized by several factors like the level of income, education, occupation and wealth and are made up of customers who have certain roles and positions in society (Domie, 2013). Culture, however, is always evolving, and beliefs, values, attitudes, and social systems change throughout time (Kotler & Armstrong, 2010). Considering the values and needs of a certain group provides a firm an edge in developing an appropriate marketing plan.

Social Influence

Several social factors influence consumer's behaviour which comprises of the family, reference groups, status and social roles (Domie, 2013). Any group that has any influence (direct or indirect) on a person's views or behaviour by persuading individuals to adopt new

behaviours and manners, influencing their ideas, values, and self-identity, and creating a desire for contact that may influence their choice of product or brand is considered a reference group. According to Nowakowski (2021), consumer behaviour results from aspirations and the desire to belong to higher social classes. For example, observing opulent living in a group might influence individuals to acquire prestige goods and services. Kotler (2002) advances that that individuals at this stage strive to meet group norms and modify their behaviour to fit their status or function.

Family is another strong influence on customer purchasing behaviour. For instance, people typically embrace the attitude of their parents towards general issues like politics, religion, morals, finances etc. which intends affect the kinds of products and services or brand they patronize. Some groups, such as business associations, trade unions, and religious organisations, are more formal and have less interaction, yet they nonetheless affect an individual's behavioural standards.

Personal Factors

Personal characteristics such as age, life cycle, gender, income, and occupational conditions could influence consumer's buying behaviour. Desires and wants change with time as people grow. Consumers of the same age group tend to have comparable purchasing habits due to their shared experience with events and development (Hogg et al., 2006) which makes marketers target these similar groups. Occupation and income also affect consumer behaviour. They often impact consumers brand preferences and interest in certain services or products (Kotler, 2002, p.91-92). The attribution theory shows that customers are more likely to be dissatisfied if they attribute the difference between expectations and results to external factors outside their control, which producers influence. This can captured regarding a certain product category, functionality, quality, compatibility with the image portrayed in advertising, and so on. Customers anticipate convenience in terms of purchase methods, payment options (including instalment payments), and retail location.

Self-concept, the way an individual sees himself is one thing that also influences consumer behaviour. Actual self-concept is opposed to the ideal self-concept, which is how the person would prefer to perceive himself. Others-self-concept is the way others see the person from the point of view of that person (Kotler, 2002, p.93). Many people will buy things and services because it allows them to be their best selves. In Ghana for instance, personal property

is something people value because it exhibits the characteristics of the one owning them (Domie, 2013, p.17).

Psychological Influence

Psychological influence usually involves features such as motivation, learning, belief, attitudes and perception are influencing the buying behaviour (Domie, 2013). Motivation influences people by successfully forcing them to act in order to attain the desired goal and decrease stress, especially if the need is great enough. Abraham Maslow in his theory, "Maslow's hierarchy of needs", explains motivation as a hierarchic pyramid where consumers' needs are positioned from the most pressing to the least valuable (Domie, 2013). Maslow's hierarchy of needs is a motivational theory that consists of a five-tier model of human needs, generally typically shown in a pyramid form, where lower-level wants must be met before humans can respond to higher-level needs (McLeod, 2007). The theory provides a knowledge of customer desires, thoughts, ideas, and goals. For instance, consumers experiencing absolute deprivation would be expected to buy necessities such as bread, eggs, milk, etc. before thinking about luxurious goods (Nowakowski, 2021). The needs from the bottom to the top are physiological, safety, love and belonging, esteem and self-actualization (Kotler, 2002).

Another theory by Herzberg centres on identifying the elements that are "satisfiers" and "dissatisfiers" factors (Domie, 2013). These "satisfiers" entail a factor that cause satisfaction of the purchase but does not signify the satisfaction of the product itself, while "dissatisfiers" are the factors which create displeasure to the course of buying (Domie, 2013). Kotler (2002) cites that the theory shows that customers are satisfied with the purchase when the "dissatisfiers" are evaded or eliminated.

2.3.3 Online Shopping Behaviour

In the past two decades, the internet has grown significantly, and a relevant digital economy driven by information technology has also grown globally (Mittal, 2013). Following the long-term development of the internet, which has seen rapidly increased web users, new technology for web development and high-speed internet connections, firms can now showcase their products and services on websites. This enables higher chances of attracting more consumers due to enhanced services, accurate information, and detail. Companies have therefore these days, recognized this transformation and have changed their strategies to capture this. Business-to-Consumer (B2C) internet shopping has had such a rapid development in recent times due to benefits the internet provides in aiding consumer choosing their most

suitable product such as convenience, price search and comparison, enhance appropriate use of the product/service, access to detailed information, etc. (Moon, 2004). Darley, Blankson and Luethge (2010) advocate that for a better understanding of choice decisions and underpinnings of online consumer behaviour, the focal point should be shifted slightly from just technology to include the satisfaction of human needs.

There are differences between traditional and online consumer shopping as they have specific characteristics. Mittal (2013) gives an example of a traditional seller who can provide convenience in parking and shopping where consumers may come to read and inspect the quality of items before purchasing, and after service is more directly to customers. However, the conventional shop has fewer items and a higher selling price than the internet business. By contrast, the limits of conventional stores appear to be the benefits of online stores, while the weaknesses of online stores appear to be the advantages of traditional stores.

According to Wolhandler (1999), the internet provides significant convenience for shoppers which happens to be the primary reason for shopping online by consumers. The availability of the internet at any time allows consumers who are time-starved to purchase products they would have wasted time and transportation cost buying in a traditional physical store. Hence, it saves time and money. Firms have also understood that in the past years, new technology might have a significant influence on internet shopping, and as a result, several vital technologies such as virtual reality and 3D methods have been implemented to achieve significant competitive advantages (Mittal, 2013). The usage of information technology in the form of the Internet has enhanced the quality of product information, which aids shopper decision making.

Mittal (2013) cites three main stages that highlight online consumer behaviour. The information search, which helps consumers to search and find suitable products/services for their needs, is the most vital factor. This should allow online businesses to strengthen and improve their information assistance, such as providing more extensive product information and using an internal search engine to boost the efficiency of information search. At the evaluation stage, customers place a high value on the reputation of the E-commerce website and payment security while after-services are most important to consumers in the post-purchase stage.

Consumers use various media in shopping, known as Omnichannel. According to Manss, Kurze and Bornschein (2020), there are four consumer behaviours in the omnichannel

era known as pure offline shopping, pure online shopping, showrooming and webrooming. Making use of only traditional media in the shopping process is pure offline shopping (Manss et al., 2020) while shopping behaviour that uses only digital media throughout the entire shopping process is called pure online shopping. Although showrooming and webrooming are shopping behaviours that blend digital media with physical stores, showrooming uses physical stores to find information on products or services and then make the purchases at online stores (Arora & Sahney, 2017) whereas webrooming uses digital channels to search for information related to products or services and then make the purchases at physical stores (Flavián, Gurrea & Orús, 2019). Showrooms and webroomers are typically used to get the best pricing while also directly ensuring the quality of the items (Sayyida, Hartini, Gunawan & Husin, 2021).

According to Chan, Cheung, Kwong and Limayem (2003), a close examination of the existing literature on online shopping behaviour centres around five major domain areas. Individual/consumer characteristics refers to the factors specific to the consumer such as demographics, values, lifestyle, resources, psychological factors like satisfaction, behavioural characteristics such as frequency of usage, motivation, and experience. Environmental influences include factors like culture, social influence, media, etc. (Kollat, Engel, & Blackwell, 1970). Product/service are characterized by price, quality, product type, frequency of purchase, differentiation, etc. as elements that shape consumers' perception (Jarvenpaa & Todd, 1996). Medium characteristics refers to attributes such as ease of use, quality, security, and reliability among other things of e- commerce systems. Lastly, online merchants and intermediaries' characteristics span across factors like service quality, privacy and security control, brand/reputation, delivery/logistic, after sales services and incentive.

One of the potential risks for the customers in online shopping is trust (Mittal, 2013). People buy things and services depending on their level of trust in the product or service, as well as the sellers, whether in a real store or online (Cassell & Bickmore, 2000). Online trust is the fundamental and necessary component for developing a relationship with online clients (Wang & Emurian, 2005). A study by Cheung and Lee (2006) that sought to understand consumer trust in online shopping revealed that trustworthiness of internet sellers (perceived integrity, perceived competence, and perceived security control) and external environment (third-party recognition and legal framework) have substantial influence on consumer trust in Internet shopping. Singh and Sirdeshmukh (2000) also in their study state that the trustworthiness of e-commerce sites relies on the how much privacy security can be provided. Firms can deal with this by providing third-party verification on e-commerce sites to assure

consumers of reliability and security as well providing detailed information about their business so consumers can cross-check for authenticity (Lohse & Spiller, 1998).

Lee and Chen (2010) in their study based on the impact of flow on online consumer behaviour, postulate that online consumer behaviour is a complicated socio-technical phenomenon that involves and combines many interdependent factors spanning across disciplines such as marketing, psychology, information systems, economics, etc. to shape online consumer behaviour. Therefore, no single model or theory can fully describe and explain it. The authors also make it clear that online consumer behaviour is still under development due to the advancing rate of information technology and the ever-rapidly changing social environment. The authors also make a point that as online consumers are both consumers and information systems users (Koufaris, 2002), e-commerce should be viewed as an information system phenomena in which the customer interacts with a sophisticated information system rather than as a marketing issue driven by information systems when predicting online consumer behaviour.

2.3.4 The Ghanaian Consumer Behaviour

According to the Legatum Prosperity Index, in 2021, Ghana's economy ranked 99th in the world and 9th in Africa. It is mostly an informal economy, and most people are employed in the informal sector. The top industries in the country are mining, energy, tourism, agriculture and telecommunication. In the recent census carried out in 2021, the 30.8 million populated country is a youthful one with a median age of 21 years. Females account for 50.7 percent of the population while males are 46.3 percent of the population. Data from the Ghana Statistical Service (GSS) Survey 7th round show that households in Ghana earned 63,027 Ghana Cedis per annum which is around 8,877 euros (Average exchange rate in 2021: €1 = GH₵7.10). Although there has been a lot of research on consumer behaviour in Ghana, it is very much fragmented and usually specified to particular industries, products, or services. There is a scarcity on general information on Ghanaian consumer behaviour. However, some of these fragmented studies do show a glimpse of what the Ghanaian consumer behaviour

When it comes to preference and tastes, Robert and Patrick (2009) disclose that Ghanaian consumers hold the 'Made in Ghana' label in low regard relative to foreign labels because of assumptions of superior quality and taste. The country of origin is more significant than the price and other product features to Ghanaian consumers while brand name is the least important. early instances of relating specific aspects of country image to preference for foreign

products. This is buttressed by Batra, Ramaswamy, Alden, Steenkamp and Ramachander (2014) who underscores that consumers developing countries favour foreign products not just for perceived quality but also for social status enhancement. For example, people in Ghana gain status from clothes, therefore, it is imperative for some Ghanaian women to show up in a new funeral cloth even the expensive Dutch Wax, every Saturday (de Witte, 2001). Another example is the preference of foreign rice to local rice because of perceive better quality. Ghana is a collectivistic nation, therefore customers make decisions in groups and debate possibilities with others before making a purchasing decision (Mohammed & Zakari, 2021).

A study by Appiadu, Kuma-Kpobee and Vandyck (2021) focused on the apparel shopping styles of Ghanaian female young adults while assessing the applicability of the consumer styles inventory (CSI) in the Ghanaian context. Findings uncovered thatose Ghanaian female young adults adopted multiple shopping styles which were varied but interrelated. The authors discovered that although young female Ghanaian consumers have a unique shopping orientation, their shopping styles are similar to that of young female adults in other countries. High-quality consciousness is found to be the key shopping style of Ghanaian female young adult consumers while brand loyalty is the least shopping orientation. Another key shopping orientation inferred is that consumers who are less brand loyal may have brand variety-seeking behaviours which can be considered as another distinctive shopping orientation among young female consumers in Ghana. However, this study was only focused on undergraduate students who may or may not have strong purchasing power therefore, future research could look into exploring subjects of different occupations, socio-economic status and educational levels to determine if there are similarities in apparel shopping styles among different consumer groups in Ghana.

Another study by Bempong (2017) titled "the effect of green branding on consumer purchasing behaviour: A study of the Ghanaian cosmetic market" shines another candle on Ghanaian consumers regarding environmental concerns. The study discovered that while brand owners go for a green strategy based on a desire to share their personal green values and lifestyle choices with others, customers do not patronize these brands because of a belief in these values and lifestyle, but mostly buy as a result of personal motivations like a need to solve a specific skin/hair issue and bad experiences with other brands. Although there is a high level of knowledge surrounding green cosmetics in Ghana among consumers, they have still not fully bought into it and are occasional buyers of such products and buy cosmetic products they can easily access in terms of location and price. There is also a lack of proper certification

and labelling for green cosmetic products which makes it hard for consumers them apart from mainstream brands. The data was however collected from respondents in the Greater Accra Region, the region in which the capital city located and has more diversity present. Therefore, the data collected cannot be accurately said to be representative of the entire Ghanaian consumer market.

Tchao, Diawuo, Aggor and Kotey (2017) in their research indicate that even though only 10.1% of respondents felt that the internet was safe for purchase and payment transaction in Ghana, they were still willing to shop online if e-commerce was the only means of getting their products. The authors state that Ghanaian consumers are extremely concerned with their online privacy, and they are less willing to disclose personal information online and they were prepared to stay away from websites that require them to submit personal details such as bank account information and location information online. They caution that the concerns about online privacy for Ghanaian consumers could grow rapidly and if not addressed, could adversely affect how they will adopt the increasing e-Commerce platforms in the country. The authors make a recommendation for further studies to develop and test a comprehensive privacy framework for the Ghanaian internet space to prevent the loss of value of online transactions in Ghana and its impact on the economy.

2.3.5 COVID-19 and Global Consumer Behaviour

Sheth (2020a) affirms that while consumption is habitual it is also contextual. Zwanka and Buff (2021) postulate that risk-averse consumption behaviour is usually observed after large-scale event. This was seen during events such as the 9/11 terrorism attack and its impact on the airline industry and tourism worldwide, earthquakes in Haiti, New Zealand and Japan, wildfires in California, and even other epidemics like SARS, the H1N1 virus (Fortin & Uncles, 2011). These changes tend to lead to utilitarian (restocking necessities, replenishing items, replacing items damaged by storms) and hedonic (pursuit of freedom, to defy boredom, celebrate the end of the storm and to rekindle with family and friends) shopping motives both during and after the event (Larson & Shin, 2018, 302-303). Consumers pick up habits over time on what to consume, when and where (Sheth, 2020b).

According to Kennett-Hensel, Sneath, and Lacey (2012), a three-part study carried out post-Hurricane Katrina in the United States shows that that consumer behaviours changed both during the immediate transition after the storm and years later. For instance, there was increased and heightened purchasing/acquisition immediately after the event but then it was

followed by a decline and decrease in consumption in the long-term. Various surveys used in tracking consumer sentiments during the pandemic reported that there was going to be a transformation in consumer behaviour and indicated towards consumer behaviour models taking a different shape (Mehta, Saxena & Purohit, 2020). The nature of this crisis has brought to light the downsides of trade reliance for vital commodities, market complexity, and has cruelly exposed a materialistic culture of purchasing behaviour that was not necessarily motivated by need.

The lockdowns and social distancing imposed by countries worldwide as a containment measure for the pandemic restricted consumers' choice of places to shop creating a location shortage and restriction (Sheth, 2020a). Almost all activities consumers used to engage had to be localized and shifted to homes. During that period, consumers stockpiled essential products such as disinfectants, toilet paper, water, meat bread, etc. for daily consumption leading to temporary shortages as they were uncertain of the future at that time (Zwanka & Buff, 2021). Consumption of discretionary products and services such as automobiles, concerts, restaurants etc. were generally postponed which built up pent-up demand (Sheth, 2020a). Consumers also become frugal in their spending as the became more cautious about to what to buy, focusing on necessities and price (Mehta et al., 2020). Consumers had to learn to improvise due to the constraints faced. Thereby, discarding old and existing habits and replacing them with new ones especially with consumption. For instance, online education gained huge prominence as schools had to find ways to still educate students who were stuck at home.

Digital technology was embraced during this period out of necessity in order to still connect to the world and still enjoy some products and services (Gupta & Mukherjee, 2022). Social media like Facebook, WhatsApp, YouTube, Instagram, TikTok, Twitter, etc increased traffic massively. Social media is quite pervasive in the manner of impact it has on consumer behaviour (Sheth, 2020a). Streaming services such as Netflix, Disney, Amazon Prime kept consumers entertained. Platforms like Ceek and YouTube allowed performers hold virtual concerts for consumers to enjoy. Platforms like Zoom, Google Meet, Skype helped consumers to sat connected to family and friends in order to still keep a social life going. These technological platforms played a significant role in reaching, raising awareness, transacting with, and retaining consumers post-COVID, in addition to word of mouth (Deloitte, 2020). Shopping activities also became localized at homes. As consumers couldn't go out to shop, they sought relief in shopping online and having these products or services being delivered to

their homes (Gupta et al., 2021). Retail e-commerce websites saw massive increase in sales during the pandemic.

Another important trait of consumer behaviour during the pandemic was an increased focus on environmental stewardship (Zwanka & Buff, 2021). The mandatory lockdowns and quarantine witnessed the clearest water in the Venice canal in 65 years (Clifford 2020), reduction of air pollution in China by 30% (Stieg 2020), improvement in the quality of air in New Delhi, India (Davidson 2020), among others showed some consumers that perhaps this "new way" of life could be adopted sparingly in the future as it had a negative impact on the environment. The COVID-19 pandemic pushed physical activity away from gyms and toward parks, trails, and other recreational spaces. The newly discovered love of the outdoors has the potential to revive the nation's parks and public recreational facilities (Zwanka & Buff, 2021).

Sheth (2020a) however, expected that most habits would return back to normal although it was admitted that it is inevitable that some habits acquired during the pandemic would die. This is because some consumers may find these new habits as better alternatives to previous ones because they are more convenient, affordable, and accessible such as the streaming sites or teleworking from home. However, it might not change a lot. Sayyida et al. (2021) admits that although, the COVID-19 pandemic is impacting online retail sales with increased sales, it is quite small when compared to offline retail sales. For instance, online retail sales data from countries like the United States, United Kingdom, Germany, France, Canada and Latin America, shows that online retail sales are very small when compared to offline retail sales while global online retail sales are less than 30% of total retail sales (Sayyida et al., 2021).

During the pandemic, the largest growth in online retail sales happened in the second quarter of 2020, followed by a dip in the third quarter of 2020. This shows that consumers still prefer offline retail shopping o online shopping. One of the reasons is that consumer's still feel the need to touch goods directly before they are purchased and that can only be gotten from physical stores to increase satisfaction in shopping. However, most consumers prefer to use digital information to find product information before buying because of its ease and wide variety of information. Also, even though online education is cheaper and more flexible, higher learning institutions are seemingly returning to onsite education. While some are incorporating a hybrid (remote and onsite) method, some universities are gradually working on moving things back exactly what it was before the pandemic.

A study by Valaskova, Durana and Adamko (2021), nonetheless, that sought to investigate the changes in consumer purchase patterns of as a result of the pandemic in Slovakia revealed that the COVID-19 pandemic has indeed changed normal consumer behaviour and created new shopping habits, forcing consumers to devote more time to the decision-making process. The study confirmed what other studies have said concerning the fact that consumers began to focus on the purchase of essential goods and reduce frequency of shopping as a result of the pandemic, consider the need for shopping and focus only on purchases of essential consumer goods, and reduce the frequency of shopping. It also indicated that these changes in consumer behaviour due to the pandemic are mostly affected by demographic factors such as age, income, and sector of occupation which tells of their purchasing power. The study recommended that businesses that know how to adapt to changing consumer shopping patterns effectively and appropriately will be winners of this crisis.

Another research by Arora et al. (2020) for McKinsey titled "A global view of how consumer behaviour is changing amid COVID-19" during the pandemic showed that consumer had been affected in five key ways which they believed would have a lasting impact. These affected ways are; (1) a shift to value and essentials due to economic slump and uncertainty; (2) flight to digital and omnichannel as most transaction had to switch online due to lockdowns and mandatory quarantines; (3) a shock to loyalty for certain products and brands since they couldn't find them during the pandemic due to disrupted supply chain leading to a change in shopping behaviour; (4) health and "caring" economy as consumers began to pay close attention to businesses that had healthy and hygienic packaging and care for their employees and; (5) homebody economy as more than 70 percent of consumers didn't feel comfortable resuming their "normal" out-of-home activities at that time. The research noted that while there was an overall change in consumer behaviour, there were variations in every country. For instances, consumers in China, India, and the US were most optimistic about economic recovery while European consumers were pessimistic. Also decline in income for consumers varied significantly across countries especially in Brazil, South Africa and India. Consumers' category of products they intended to buy most online was alcohol and Over-the-counter medicine. About 75% of consumers in selected countries except Japan had tried new shopping methods such as online streaming, curbside pickup, online fitness and video chats, professional videoconferencing and telemedicine.

Business have had to adjust to meet these changes in consumer behaviour caused by the pandemic. Most business made extensive use of e-commerce during the pandemic and are

still doing so till date. Businesses are being challenged in terms of implementing strategic changes for long-term sustainability and rethinking existing consumer behaviour models and their utility for businesses and marketing strategies to remain viable across consumer groups. Businesses must, however, also be wary that consumers may go back to old behaviours and thus, must be prepared for that. Nonetheless, there is more research that needs to be done to really determine whether the rate at which the pandemic will affect consumer behaviour in the long term. It would be fascinating to investigate the relationships between this forced consumer behaviour and other characteristics such as crisis learning, simplicity, changing demands, personality, country, culture, thrifty behaviour, and age (Mehta et al., 2020).

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter presents the various methods and procedures used in the collection of research data which detailed the study area, sample size and sampling techniques, research design, research approach, research instruments, data collection procedure and analysis of data. The purpose of this research was to assess online shopping behaviour for residents in Ghana post pandemic.

3.2 Research Approach

Research approaches are plans and procedures for research that cover the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation (Creswell, 2014). The nature of the research problem and the study's audiences influence the choice of a research approach. This study adopted a quantitative approach. Leedy and Ormrod (2001, p.102) define quantitative research as one which "… seek explanations and predictions that will generate to other persons and places. The intent is to establish, confirm, or validate relationships and to develop generalizations that contribute to the theory". Creswell (2014) posits that quantitative research is gathering data so that information may be quantified and statistically treated in order to support or refute "alternative knowledge assertions." The quantitative approach to this study is to establish the relationship between the independent variable, The COVID-19 pandemic and the dependent variable, online shopping behaviour of Ghanaian residents.

3.3 Research Design

De Vos and Fouche (1998) define a research design as a blueprint or detailed plan of how a research study is to be conducted - operationalizing variables so they can be measured, selecting a sample of interest to study, collecting data to be used as a basis for testing hypotheses and analysing the results. The study employed a descriptive research design. Zikmund (2003) describes descriptive research as the process of transforming raw data into understandable information so that it is easier to interpret. The descriptive research approach is a basic research method that examines the situation, as it exists in its current state (Williams, 2007). The descriptive nature of this study is to gather information and identify the attributes of online shopping behaviour in Ghana.

3.4 Study Area

This study will be conducted in Ghana, West Africa. Ghana was the eighth largest economy in Africa in 2020 according to data from the International Monetary Fund (IMF). The country is mostly an informal economy, with SMEs making a more significant percentage of the economy (Naab & Bans-Akutey, 2021). Ghana was chosen for this study because it is the headquarters for the African Continental Free Trade Area (AfCFTA), is a trade agreement between countries in the African Union mandated to cover a comprehensive scope of critical areas of Africa's economy, such as digital trade and investment protection, etc. (AfCFTA, 2022). The AfCFTA is the world's largest new free trade zone since the World Trade Organization (WTO) was established in 1994. As the headquarters of such an important trade agreement, the researcher considered it intriguing to explore certain attributes concerning digitalization towards the aftermath of the pandemic to see how the country is leading the continent in fulfilling this agreement.

3.5 Population and Sampling

3.5.1 Population of the Study

A study population is the aggregation of elements from which the sample elements is actually selected (Babbie, 1992). In research, a population is also defined as a group to which the findings of the study are intended to apply, and is typically made up of individuals who share certain characteristics or a set of features that a study seeks to examine and analyse (Fraenkel & Wallen, 2000). The population for this study is the population of internet users in Ghana which according to Datareportal (2022) is 16.99 million in January 2022, 53.0 percent of the total population at the start of 2022.

3.5.2 Sample Size and Sampling Technique

A sample is a sub-group or representative selection of a population that is examined or tested to obtain statistical data or information about the whole population (Saunders, Lewis & Thornhill, 2009). The sample size for this study was 385. The sample size calculated on Surveymonkey.com at a 95% confidence level and a 5% margin of error with the formula:

$$\text{Sample size} = \frac{\frac{z^2 \times p\,(1-p)}{e^2}}{1 + (\frac{z^2 \times p\,(1-p)}{e^2 N})}$$

Figure 3.1 Sample Size Formula (Sourced from: Surveymonkey.com)

Where: N=population size, e = Margin of error (percentage in decimal form), z = number of standard deviations a given proportion is away from the mean and p= sample proportion.

Respondents for this study were selected based on a simple random probability sampling technique. Thompson (2012) defines simple random sampling is a sampling design in which k distinct items are selected from the n items in the population in such a way that every possible combination of k items is equally likely to be the sample selected. Simply, each member of the population has the same chance of being involved in the sample, and all possible samples of a given size have the same chance of being selected (West, 2016). This method was chosen by the researcher because its advantage of accurately representing the population which fits the nature of this study. Its ease and simplicity were also considered a bonus in gathering data with a lack of time and financial constraints.

3.6 Data Collection

Data collection techniques permit the researcher to systematically collect information about their object of study (people, objects, phenomena) and about the setting finding they occur (Cln, 2013).

3.6.1 Data Collection Instrument

Saunders et al. (2009) defined data as facts, opinions and statistic that have been collected and recorded for reference or for analysis. The authors also list questionnaire, interviews (semi-structured, in-depth and group) and observation as methods that are reliable for data collection. The researcher employed an online questionnaire to collect data. A questionnaire is a research instrument that consists of a series of questions and other prompts designed to elicit information from respondents (Antwi & Owusu-Agyeman, 2020).

It was a structured questionnaire created on Google Forms that were administered to respondents via 4 social media platforms: WhatsApp, Facebook, Twitter and Instagram. They were also shared to some respondents via emails. It was prepared in English language as this is the official language of Ghana. The questionnaire contained closed ended questions. In many cases, the benefits of collecting closed-ended quantitative data prove beneficial in gaining a better understanding of a study problem with collecting answers that are easily quantifiable, fairly easy to analyse, and can reach a large number of people relatively effortlessly and cheaply.

The questions were designed in a way that permitted the collection of crucial information and interpretation by the researcher.

The Questionnaire was created in 5 parts encompassing 37 questions with multiple choice and Likert scaled questions. Part 1 consisted of questions surrounding the general demographical and background information of the respondents. Part 2 centred on the E-commerce behaviours of respondents spanning behavioural frequency, cross-border purchases and product categories. Part 3 was about e-commerce preferences which captured data on preferred device, purchasing channels, source of information, marketplace, payment method, delivery method and time and social media concerning online shopping in Ghana. Part 4 consisted of questions on a 5-point Likert scale to find out the important e-commerce criteria for consumers. Part 5, also on a 5-point Likert scale, sought to capture data on the impact of the pandemic and environmental concerns for consumers in Ghana regarding e-commerce.

3.6.2 Source of Data

Primary data was the main source of data for this research to deliver empirical backing. Primary data is data that is used for a specific purpose for which it was gathered. It was collected using closed-ended questions in the context of the research topic. A structured online survey was utilized to gather information from respondents. To ensure the validity and reliability of our questionnaires, 10% of the sample size was pre-tested on close friends and collegues. This was done to ensure its appropriateness and applicability before beginning data collection. Respondents to the questionnaire were assured of the confidentiality of their responses, allowing them to provide all of the necessary information, allowing the researcher to produce accurate results.

3.7 Data Analysis

The primary data collected from the respondents in the study were sorted for analysis. Data analysis coordinated and carried out in a systematic approach can be visibly communicated to others (Malterud, 2001; Sandelowski, 1995). The researcher becomes the instrument for analysis when conducting data analysis, making decisions about coding, theming, decontextualizing, and recontextualizing the data (Starks &Trinidad, 2007). The survey data was presented and analysed using descriptive and inferential statistics, based around a number of propositions that the study identified. Descriptive statitics was utilized as the information was collected to help identify problems with current practice. Inferential statistics is used to infer from data drawn from the population.

Descriptive statistics was used to illustrate data in a meaningful way such that patterns were deduced from data collected. The research employed measures of central tendency (mean), frequency tables, pie charts, bar graphs and measures of dispersion (standard deviation). The use of these types of descriptive analysis was chosen based on the normality of the data after being tested. A regression analysis was employed as an inferential statistic to test the relationship between consumer's purchasing channel post pandemic and environmental concerns.

The data collected was compared and evaluated using the Statistical Package for Social Sciences (SPSS) Version 26. The is software was also used to test data collected for items in a Likert scale question for Validity and Reliability using the Cronbach's Alpha. The findings were compared to theoretical literatures relevant to the constructs on which the study was based, and references to the literature were made in each case. The inferences made followed an inductive reasoning approach, since the generalizations made stemmed from data extracted from the sample.

CHAPTER 4: RESULTS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents and analyses the data collected from the field. It must be noted that 407 responses were received. However, 389 were valid and analysed for the purpose of this study i.e., they were residents in Ghana which was still a little bit over the sample size. Data collected for the study were quantitatively analysed. The results are presented in the structure of the questionnaire followed by a discussion on the objectives.

4.2 Results and Findings

4.2.1 Social Demographic Results

This section contains results concerning the background information of respondents spanning age, gender, highest educational level, nationality, residence, employment status, income status, device ownership, made an online purchase before and online research. operated.

Table 4.1 Age of Respondents

	Frequency	Percent	Cumulative Percent
Below 18	55	14.1	14.1
18-25	133	34.2	48.3
26-41	137	35.2	83.5
42-57	53	13.6	97.2
58-67	11	2.8	100.0
Total	389	100.0	

Source: Field Data, 2022

Table 4.1 showcases the age ranges of the respondents. The age ranges are grouped according to the various generations. People who fall in age below 18 and 18-25 are Gen Z, 26-41 are millennials, 42- 57 are Gen X and 58-67 are Boomers II (Beresford Research,2022). From the table above, 137 (35.2%) of the respondents are millennials. 133 (34.2%) respondents are between the ages of 18-25 and 55 (14.1%) are below age 18 making the total Gen Z respondents 188 (48.3%). Gen X is represented by 53 (13.6%) respondents while Boomers II have 11 (2.8%) respondents.

Table 4.2 Gender of Respondents

	Frequency	Percent	Cumulative Percent
Male	183	47.0	47.0
Female	200	51.4	98.5
Prefer not to say	6	1.5	100.0
Total	389	100.0	

Source: Field Data, 2022

Table 4.2 displays the gender of the respondents of the survey. The number of females was 200 equivalent to 51.4% which is slightly higher than that of the males which was 183 equivalent to 47%. 6 (1.5%) respondents preferred not to disclose their gender.

Table 4.3 Highest Level of Education of Respondents

	Frequency	Percent	Cumulative Percent
High school diploma or equivalent	112	28.8	28.8
Bachelor's degree or equivalent	200	51.4	80.2
Master's degree or equivalent	63	16.2	96.4
Doctoral degree or equivalent	8	2.1	98.5
A-Level	1	.3	98.7
O-Level	2	.5	99.2
Higher National Diploma	3	.8	100.0
Total	389	100.0	

Source: Field Data, 2022

Table 4.3 highlights the educational level of the respondents in the survey. More than half of the respondents have tertiary education. 200 (51.4%) at least have a Bachelors' degree or equivalent while 63 (16.2%) have a Masters' degree or equivalent and 8 (2.1%) have a Doctoral degree or equivalent. 112 (28.8%) have a high school diploma or equivalent. A few respondents listed other educational levels not contained in the survey. 3 (0.8%) respondents had at least obtained a Higher National Diploma (HND) at a Polytechnic institution whereas 2 (0.5%) and 1 (0.3) respondent have O-Levels and A-Levels as their highest educational level.

Table 4.4 Nationality of Respondents

	Frequency	Percent	Cumulative Percent
Canadian	1	.3	.3
German	1	.3	.5
Ghanaian	381	97.9	98.5
Nigerian	5	1.3	99.7
Togolese	1	.3	100.0
Total	389	100.0	

Source: Field Data, 2022

Table 4.5 Country of Residence of Respondents

	Frequency	Percent	Cumulative Percent
Ghana	389	100.0	100.0

Source: Field Data, 2022

Table 4.4 showcases the nationalities of the respondents. As expected, the majority of the respondents were Ghanaians represented by 381(97.9%) while foreigners were 9. Nigerians were 5 (1.3%) and Canadians, Germans and Togolese were 1 each. Table 4.5 shows that all respondents reside in Ghana making them eligible to participate in this research.
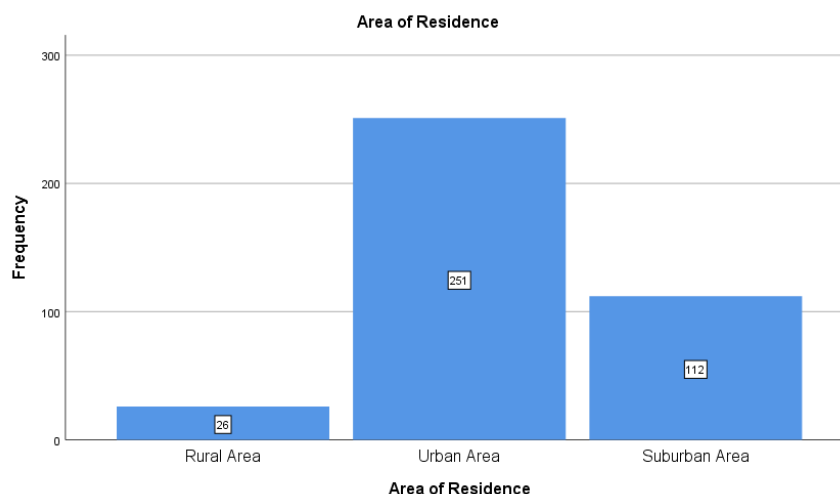
Figure 4.1 Area of Residence

Figure 4.1 presents the living area of respondents. 251 respondents equivalent to 64.5% reside in an Urban area whereas 112 respondents equivalent to 28.8% reside in a Suburban area. Just 26 respondents equivalent to 6.7% live in a Rural area.
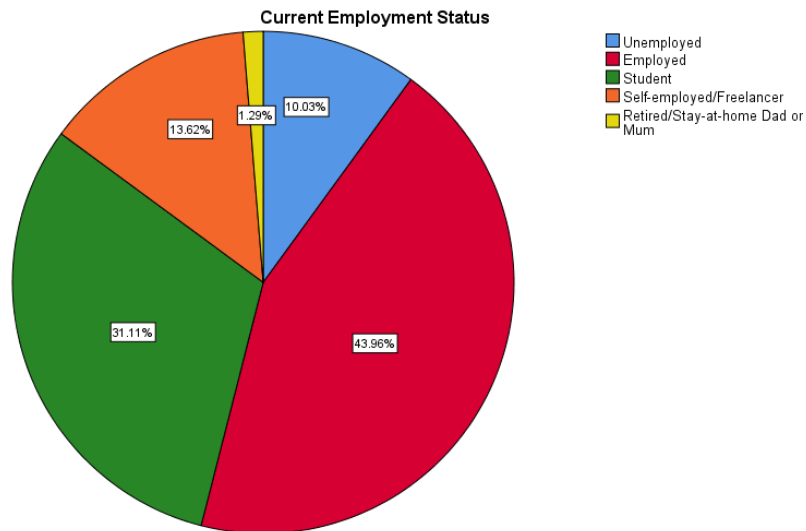
Figure 4.2 Employment Status of Respondents

Figure 4.2 showcases the current employment status of the respondents. While 171 (43.96%) respondents are employed, 39 (10.3%) are unemployed. 53 (13.62%) are self-employed/freelancers and 5 (1.29%) are retired/stay-at-home dad or mum. 121 (31.11%) of the respondents are students.
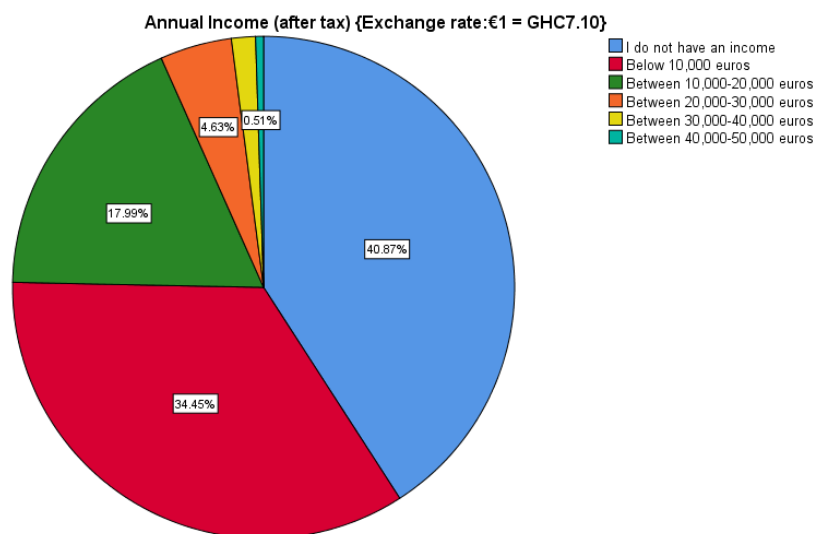
Figure 4.3 Annual Income of Respondents

Figure 4.3 displays the annual income range of respondents in euros with a conversion rate of the average exchange rate for the Ghanaian Cedi to the Euro in 2021 which stood at 1 euro equivalent to 7.10 ghana cedis. 134 (34.5%) earn an income below 10,000 euros, 70 (17.99%) earn between 10,000 euros and 20,000 euros, 18 (4.63%) earn between 20,000 euros and 30,000 euros, 6 (1.5%) respondents earn between 30,000 euros and 40,000 euros and 2 (0.5%) people earn between 40,000 euros and 50,000 euros. A chunk of the respondents, 159 (40.87%) however, do not have an income.
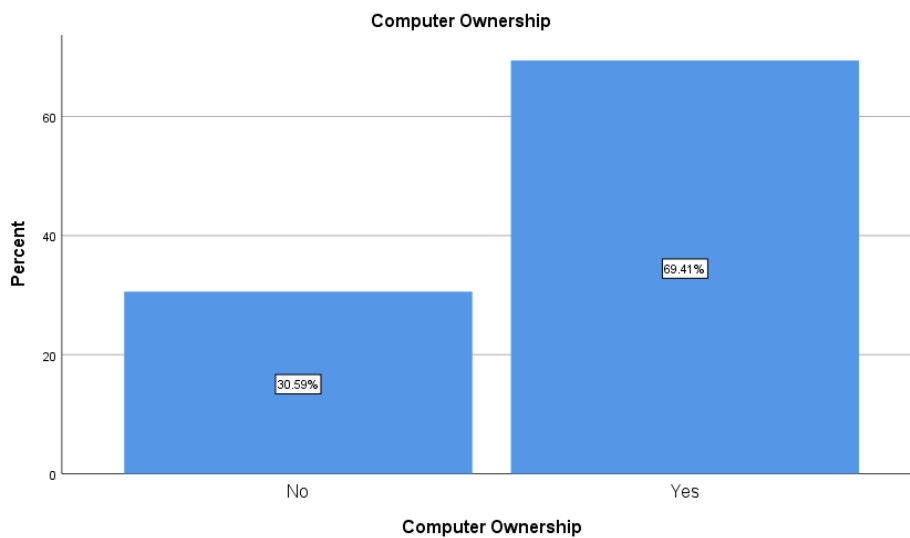
Figure 4.4 Computer Ownership

From Figure 4.4, it shows that 270 (69.41%) of respondents answered "Yes" to owning a computer whereas 119 (30.59%) answered "No" to owning a computer.
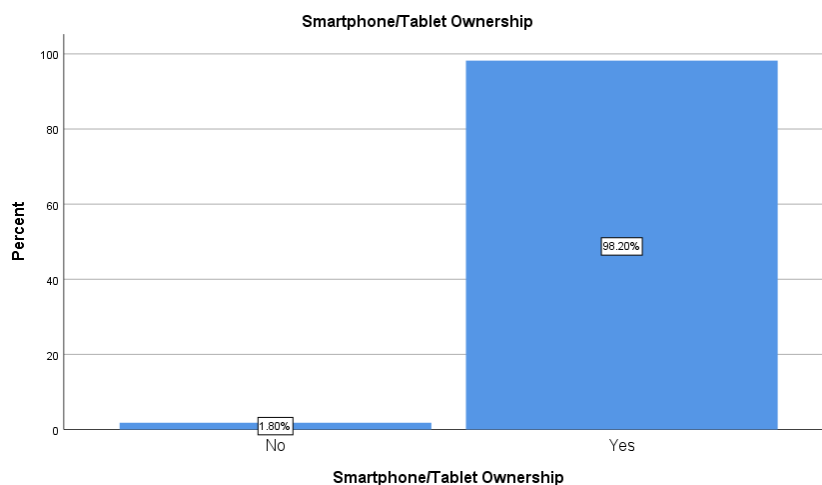
Figure 4.5 Smartphone/Tablet Ownership

Figure 4.5 illustrates that 382 (98.20%) respondents own a smartphone or a tablet while 7 (1.80%) do not own a smartphone or tablet.

Made an Online Purchase before
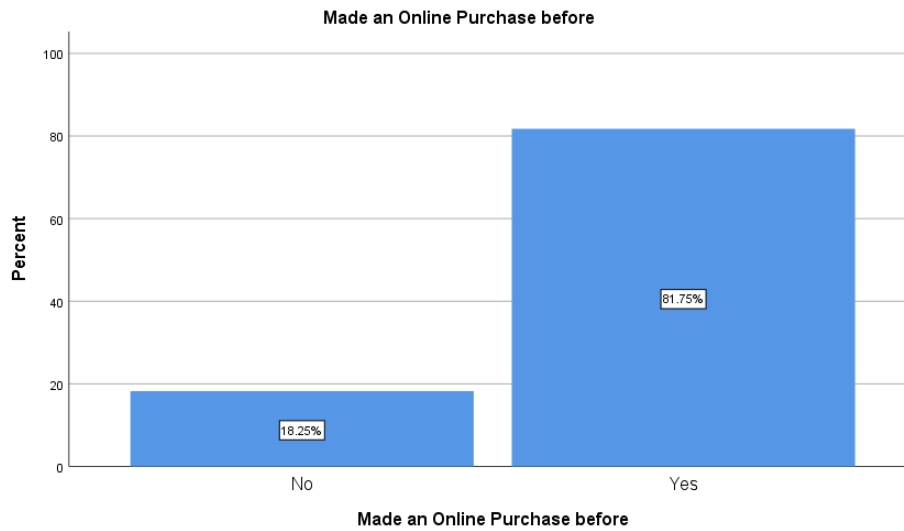
Figure 4.6 Made an Online Purchase Before

Portrayed by Figure 4.6 reveals that 318 (81.75%) respondents answered "Yes" to having made an online purchase before whereas 71 (18.25%) answered "No" to having an online purchase before.

Online Research before making a Purchase
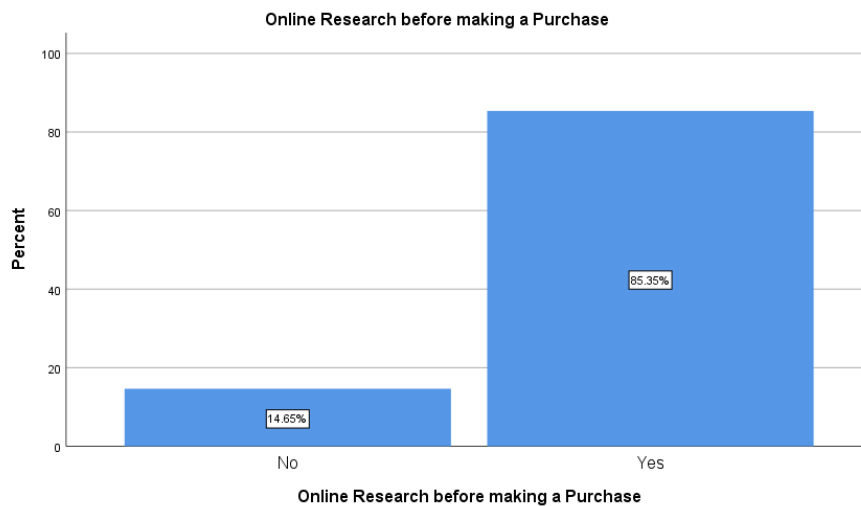
Figure 4.7 Online Research before Making a Purchase

From Figure 4.7, 332 (85.35%) of respondents answered "Yes" to conducting online research before making a purchase while 57 (14.65%) answered "No" to conducting online research before making a purchase.

Table 4.6 Crosstabulation of Made an Online Purchase before * Area of Residence

		Rural Area	Urban Area	Suburban Area	Total
		Area of Residence		
Made an Online Purchase before	No	19	30	22	71
	Yes	7	221	90	318
Total		26	251	112	389

Source: Field Data, 2022

Table 4.6 showcases that in Urban areas 221 respondents have made an online purchase before while 30 have not. In suburban areas, 90 have made a purchase online before while 22 have not. In rural areas, 19 have not made an online purchase before while 7 have made.

4.2.2 E-Commerce Behaviours

4.2.2.1 Behavioural Frequency

The table below displays the results of e-commerce activities respondents participated in the past year, 2021. Survey question was provided in a 6-point Likert scale with responses ranging from 1 = Never, 2 = Once/ Twice a year, 3= Once every few months, 4= Once/ Few times a month, 5 = Once/ Few times a week, and, 6 = Once/ Few times a day.

Reliability Response for Behavioural Frequency

The Cronbach's Alpha coefficient for Behavioural Frequency of e-commerce activities respondents participated in the past year is 0.934 with a 100% validity. Following the rules of thumb by George and Mallery (2003), if the α > 0.9, it is considered to be excellent. This test was carried out using Reliability Analysis of SPSS.

Table 4.7 Descriptive Statistics for Behavioural Frequency of Respondents

	N	Minimum	Maximum	Mean	Std. Deviation
Search for a product/service online	389	1	6	3.22	1.425
Visit online retail sites or e-stores	389	1	6	3.09	1.340
Purchase a product/service online	389	1	6	2.81	1.242
Use mobile phone or tablet to shop online	389	1	6	2.92	1.276

Use a dedicated shopping app on a mobile phone or tablet	389	1	6	2.80	1.297
Buy from a foreign site	389	1	6	1.89	1.150
Buy from an online marketplace	389	1	6	2.58	1.252
Return an online purchase	389	1	6	1.55	.963

Source: Field Data, 2022

Table 4.7 shows that the search for a product/service online ranks first with a mean of 3.22 and a standard deviation of 1.425. Visiting online retail sites or e-stores came recorded a mean of 3.09 and a standard deviation of 1.340. Purchase a product/service online and Use mobile phone or tablet to shop online had means of 2.81 and 2.92 with standard deviations of 1.242 and 1.276. Use a dedicated shopping app on a mobile phone or tablet recorded a mean of 2.80 and a standard deviation of 1.297 while Buy from a foreign site recorded a mean of 1.89 and a standard deviation of 1.150. Buy from an online marketplace logged a mean of 2.58 and a standard deviation of 1.252 while Return an online purchase ranked last with a mean of 1.55 and standard deviation of 0.963.

4.2.2.2 Cross-Border Behaviours

The diagrams below display the data concerning online cross-border behaviours made by respondents.

Figure 4.8 Shopped Online from Sellers outside Ghana Before

Figure 4.8 reveal that 241 (61.95%) of the respondents have never made an online purchase across the borders of Ghana while 148 (38.05%) of the have made online purchases from abroad.
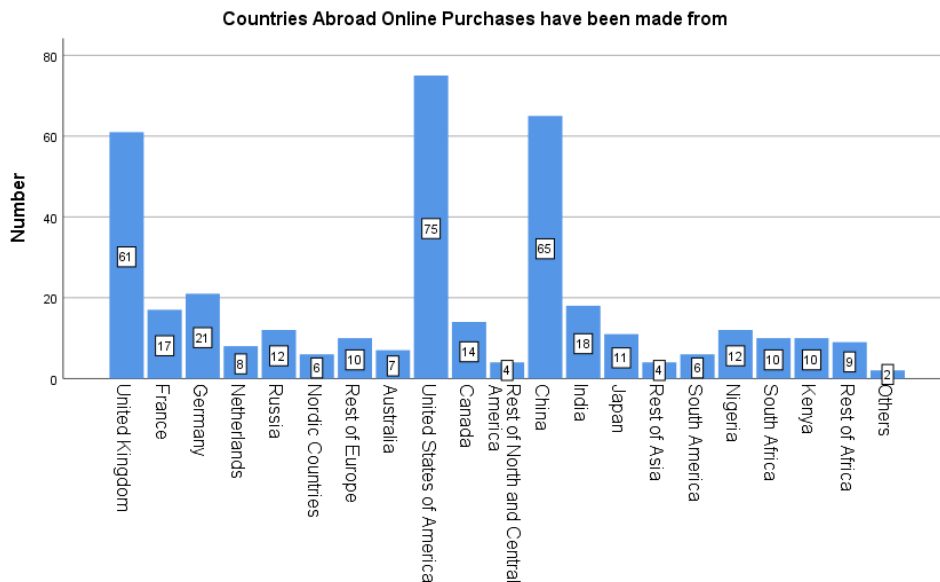
Figure 4.9 Countries Abroad Online Purchases have been Made from

From Figure 4.9, the United States of America (USA), China and the United Kingdom (UK) are the top three countries respondents shop from across the borders of Ghana capturing 75, 66 and 61 selections respectively. Germany, India, France, and Canada followed suit with 21, 18,17 and 14 selections respectively. Nigeria and Russia received 12 selections each, Japan received 11 selections while South Africa, Kenya, and the rest of Europe received 10 selections each. The rest of Africa has 9 selections, the Netherlands has 8 selections, Australia has 7 selections while Nordic countries and South America have 6 selections each. The rest of North and Central America and the rest of Asia have 4 selections each with other regions having 2 selections.
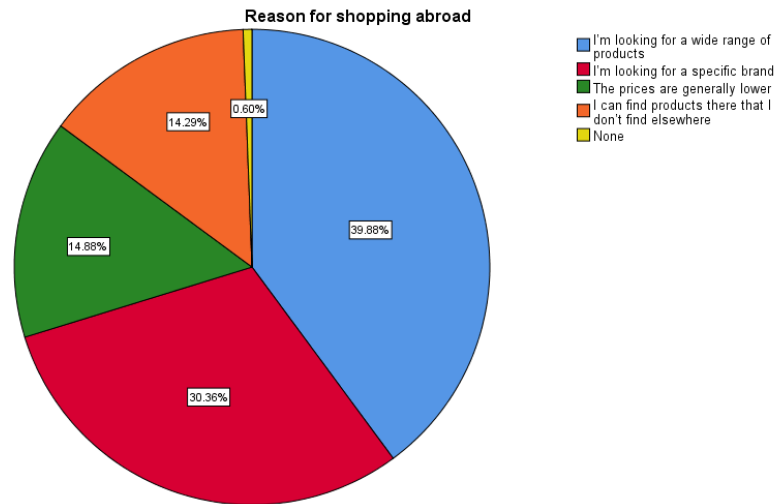
Figure 4.10 Reasons for Shopping Abroad

For reasons why respondents shopped from abroad, 39.88% of respondents who have shopped abroad before were looking for a wide range of products while 30.36% of these respondents were looking for a specific brand. 14.88% shopped from these countries because of generally lower prices whereas 14.29% shopped from these countries because they could find products they couldn't find from anywhere else. 0.60% didn't have any reason for shopping abroad.

4.2.2.3 E-Commerce Product Categories

The data below highlights certain groups of similar products that share related characteristics for consumers when it comes to e-commerce in Ghana.
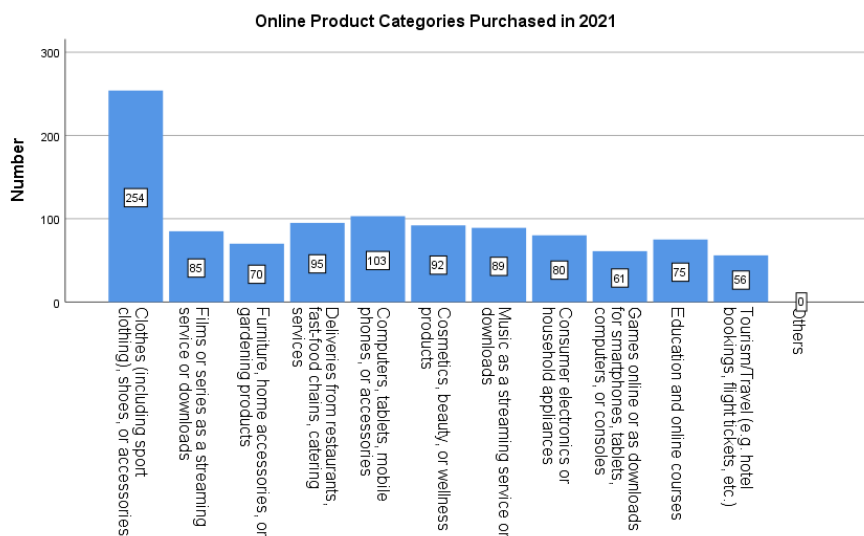
Figure 4.11 Online Product Categories Purchased in 2021

For online product categories purchased in 2021, Clothes (including sport clothing), shoes, or accessories and Computers, tablets, mobile phones, or accessories received 254 and 103 selections respectively. 95, 92, 89, 85 and 80 selections were dispersed by respondents respectively to Deliveries from restaurants, fast-food chains, catering services, Cosmetics, beauty, or wellness products, Music as a streaming service or downloads, Films or series as a streaming service or downloads and Consumer electronics or household appliances. Education and online courses, Furniture, home accessories, or gardening products, Games online or as downloads for smartphones, tablets, computers, or consoles, Tourism/Travel (e.g. hotel bookings, flight tickets, etc.) were selected 75, 70, 61 and 56 times respectively.
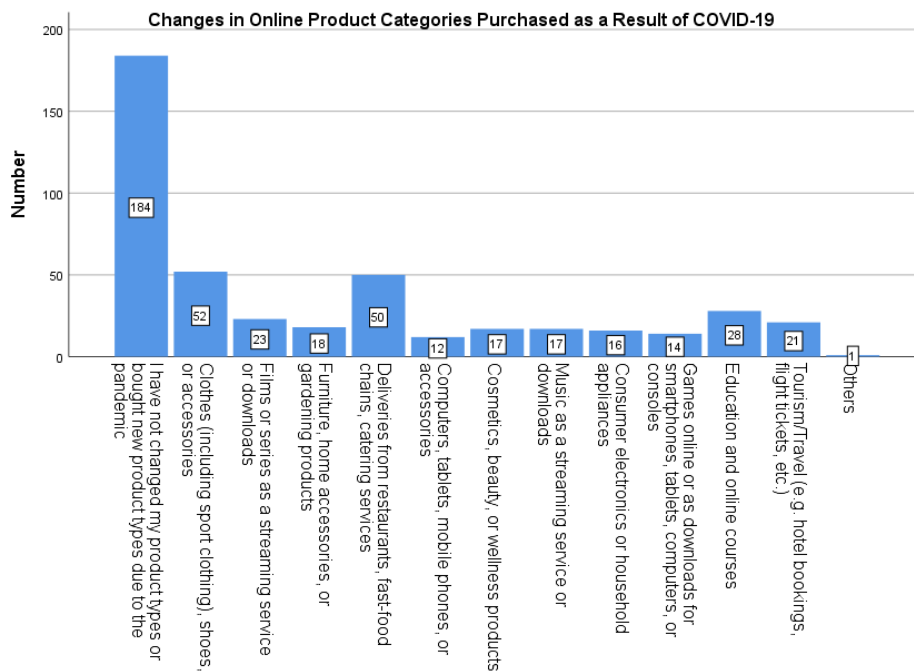
Figure 4.12 Changes in Online Product Categories Purchased as a Result of COVID-19

When it comes to changes in the online purchases of product categories as a result of the pandemic, 184 respondents selected "I have not changed my product types or bought new product types due to the pandemic". Clothes (including sport clothing), shoes, or accessories and Deliveries from restaurants, fast-food chains, catering services received 52 and 50 selections each. Education and online courses, Films or series as a streaming service or downloads and Tourism/Travel (e.g. hotel bookings, flight tickets, etc.) were selected 28, 23 and 21 times respectively. Furniture, home accessories, or gardening products was selected 18 times while Cosmetics, beauty, or wellness products and Music as a streaming service or

downloads received 17 responses each. Consumer electronics or household appliances, Games online or as downloads for smartphones, tablets, computers, or consoles and Computers, tablets, mobile phones received 16, 14 and 12 selections respectively. One respondents purchased Other categories aside the ones listed.
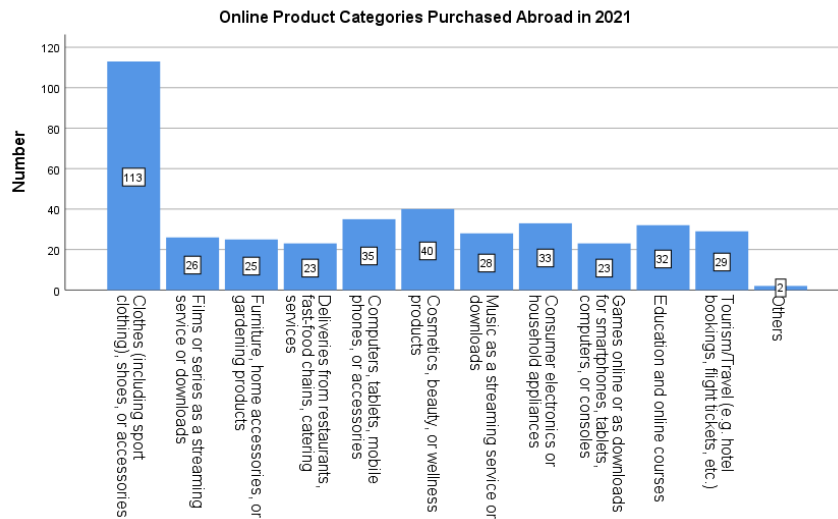

Figure 4.13 Online Product Categories Purchased Abroad in 2021

For online product categories purchased abroad in 2021, Clothes (including sport clothing), shoes, or accessories received 113 selections. 40, 35, 33 and 32 selections were dispersed by respondents to Cosmetics, beauty, or wellness products, Computers, tablets, mobile phones, or accessories, Consumer electronics or household appliances and Education and online courses respectively. Tourism/Travel (e.g. hotel bookings, flight tickets, etc.), Music as a streaming service or downloads, Films or series as a streaming service or downloads and Furniture, home accessories, or gardening products, had 29, 28, 26 and 25 selections respectively. Deliveries from restaurants, fast-food chains, catering services and Games online or as downloads for smartphones, tablets, computers, or consoles each had 23 selections.

4.2.3 E-Commerce Preferences

This part highlights the proclivity for one option or alternative over another when it comes to e-commerce for consumers. This section covers preferred device, purchasing channels, source of information, marketplace, payment method, delivery method and time and social media concerning online shopping in Ghana.
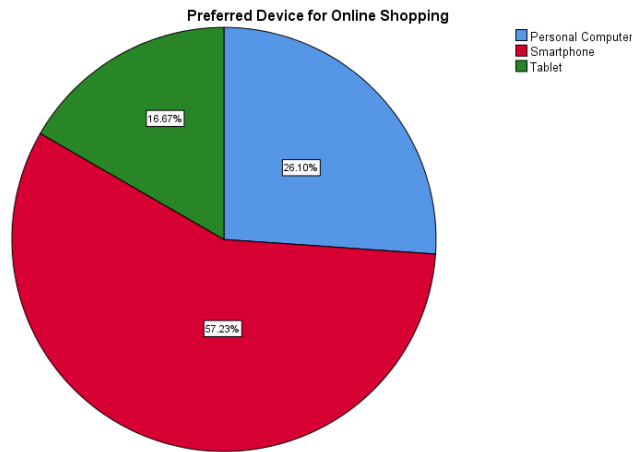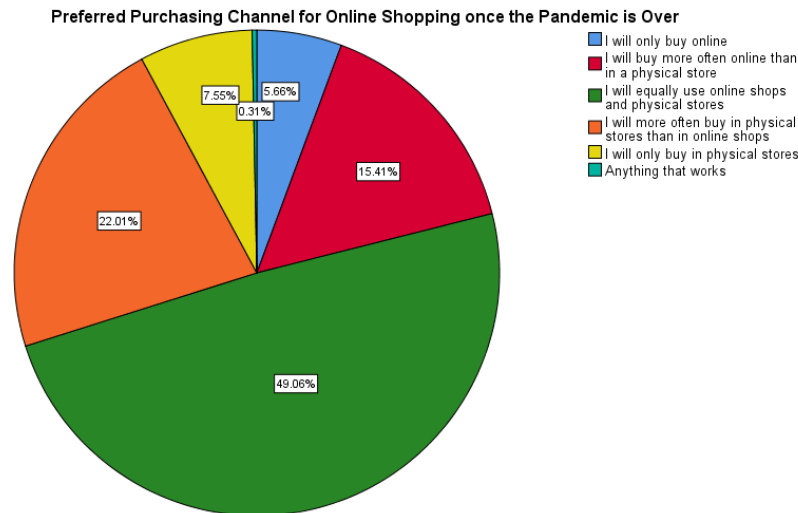
Figure 4.14 Preferred Device for Online Shopping

According to Figure 4.14, 57.23% which is equivalent to 182 respondents who have purchased anything online before chose Smartphone as their preferred device for online shopping. 26.10% equivalent to 83 respondents prefer a personal computer for online shopping while 16.67% equivalent to 53 respondents prefer a tablet.
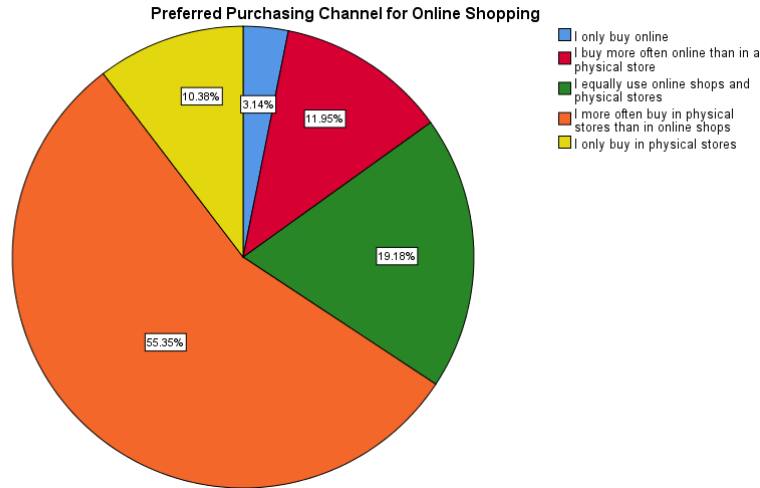
Figure 4.15 Preferred Purchasing Channel for Online Shopping

176 respondents (55.35%) of those who have purchased anything online before currently buy more often in physical stores than online stores while 61 respondents (19.8%) equally use online and physical stores. 38 respondents (11.95%) buy often online than in physical stores while 33 respondents (10.38%) only buy in physical stores. 10 respondents (3.14%) only buy online.

Figure 4.16 Preferred Purchasing Channel for Online Shopping once the Pandemic is Over

156 respondents (49.06%) of those who have purchased anything online before will equally use online and physical stores for online shopping once the pandemic is over. 70 respondents (22.01%) will buy more often in physical stores than online stores while 49 respondents (15.41%) will buy often online than in physical stores. 24 respondents (7.55%) will only buy in physical stores and 18 respondents (5.66%) will only buy online. One respondent (0.31%) opted for "Others" where they cited that they would go for anything that works.

Reliability Response for Agreement on Statements Concerning Preferences

The Cronbach's Alpha coefficient for Behavioural Frequency of e-commerce activities respondents participated in the past year is 0.724 with a 79.2% validity. Following the rules of thumb by George and Mallery (2003), if the $\alpha > 0.7$, it is acceptable. This test was carried out using Reliability Analysis of SPSS.

Table 4.8 Descriptive Statistics for Agreement on Statements concerning Preferences

	N	Minimum	Maximum	Mean	Std. Deviation
When shopping in a physical store, if I like a product but they don't have my size/color/material/etc., I will order the product online	318	1	5	3.09	1.113

61

|					
I often use only one device (computer/smartphone/tablet) for each online purchase	318	1	5	3.03	1.072
I usually search for products online but buy them in physical stores	318	1	5	3.01	1.049
I often use multiple devices for one online purchase (e.g. search for a product using smartphone but buying it using computer or vice versa)	318	1	5	2.79	1.064

Source: Field Data, 2022

Table 4.8 illustrates the agreement of respondents concerning certain e-commerce preferences. This question was presented in a 5-point Likert scale format where 1= Strongly disagree, 2 = Slightly disagree, 3 = Neutral, 4 = Slightly agree and 5 = Strongly agree. "When shopping in a physical store, if I like a product but they don't have my size/color/material/etc., I will order the product online' ranked first with a mean score of 3,09 and a standard deviation of 1.113. "I often use only one device (computer/smartphone/tablet) for each online purchase" ranked second with a mean score of 3.03 and a standard deviation of 1.072. "I usually search for products online but buy them in physical stores" was third with a mean of 3.01 and a standard deviation of 1.049. Lastly, "I often use multiple devices for one online purchase (e.g. search for a product using smartphone but buying it using computer or vice versa)" ranked fourth with a mean of 2.79 and a standard deviation of 1.064.

Most Used Tool to Search for Information about Brands and Products

- Traditional search engines
- Social media platforms
- Online retail websites
- Brand/Product websites
- Consumer review websites
- Price comparison websites
- None
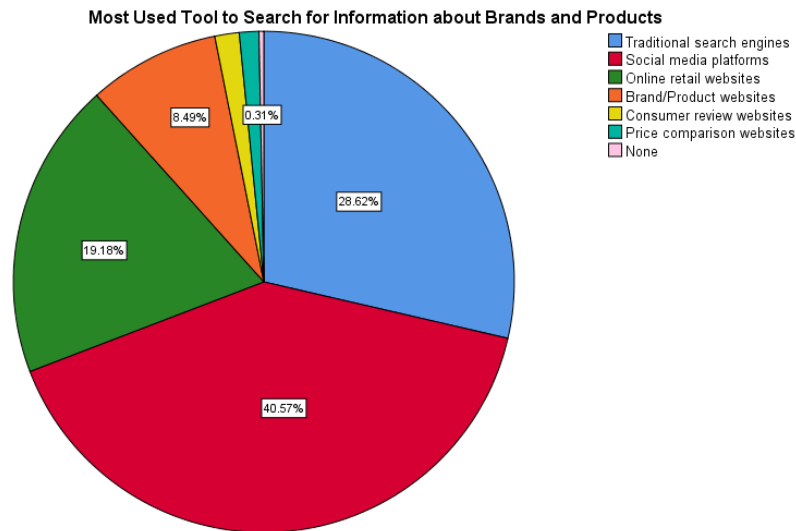
*Figure 4.17 Most Used Tool to Search for Information about Brands & Products Online*

40.57% of respondents who have shopped online before use social media platforms to search for information about brands and products. 28.62% and 19.18% of these respondents use traditional search engines and online retail websites to search for information on brands and products. 8.49% use brand and product websites. 1.6% and 1.3% use consumer review websites and price comparison websites respectively. 0.3% stated that they use none.
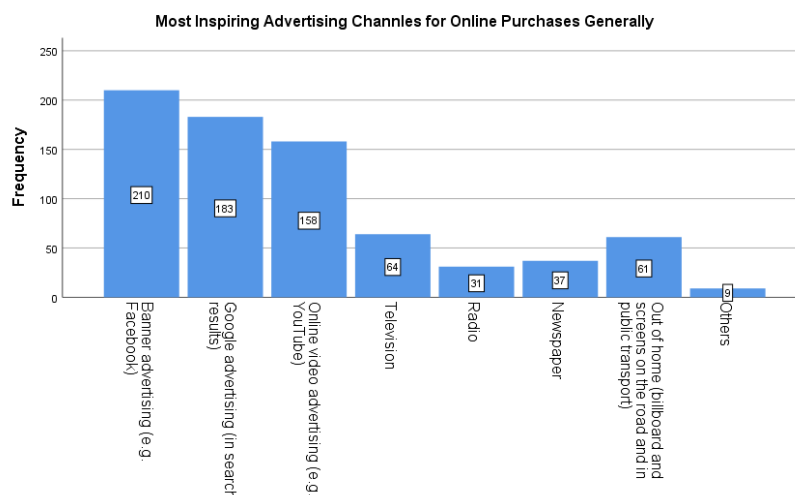
Figure 4.18 Most Inspiring Advertising Channels For Online Purchases

Figure 41.18 shows the advertising channels that mostly inspired respondents towards online purchases. Banner advertising (e.g. Facebook), Google advertising (in search results) and Online video advertising (e.g. YouTube) received 210, 183 and 158 selections respectively.

63

Television, Out of home (billboard and screens on the road and in public transport), Newspaper and Radio were selected 64,61, 37 and 31 times. "Others" received 9 selections with specifications on social media content from influencers and recommendations (word-of-mouth).
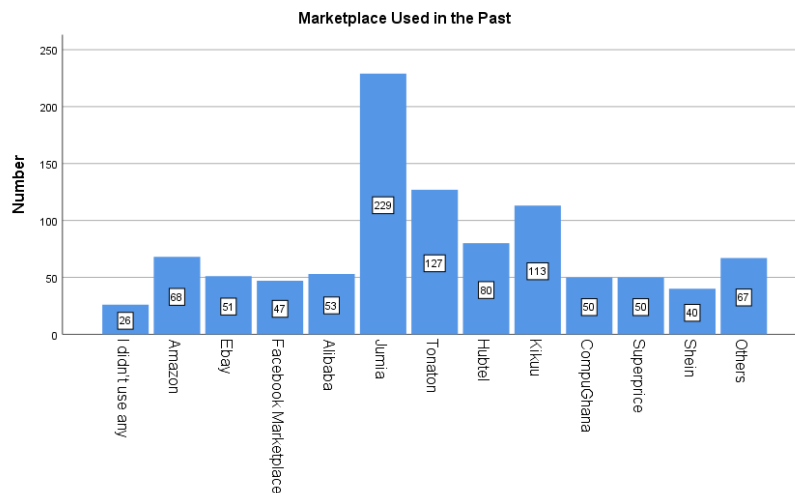

Figure 4.19 Marketplace Used in the Past

According to Figure 4.19, Jumia is the most online marketplace used in the past being selected 229 times. Tonaton, Kikuu and Hubtel respectively received 127, 113 and 80 selections. Amazon, Alibaba and eBay received 68, 53 and 51 selections respectively. CompuGhana and Superprice were selected 50 times each. Facebook Marketplace was selected 47 times and Shein was selected 40times. 26 respondents didn't use any marketplace in the past whereas 67 respondents had used other Marketplaces that were not listed.
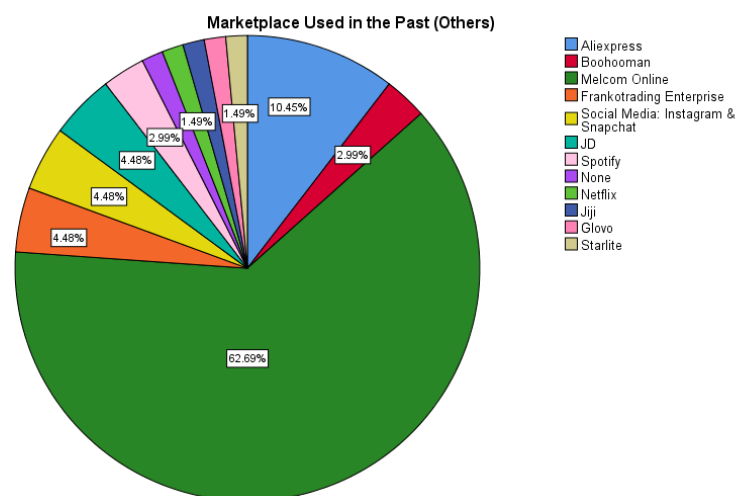

Figure 4.20 Marketplace Used in the Past (Others)

Out of the 67 respondents that had used other marketplaces apart from the ones listed in the survey, 62.69% had used Melcom Online while 10.45% used AliExpress. 4.48% used Franktrading Enterprise, social media: Instagram and Snapchat and JD for online shopping each. 2.995 had used BohooMan and Spotify each while 1.49% had used Netflix, Jiji, Glovo and Starlite each. One respondent had used none.
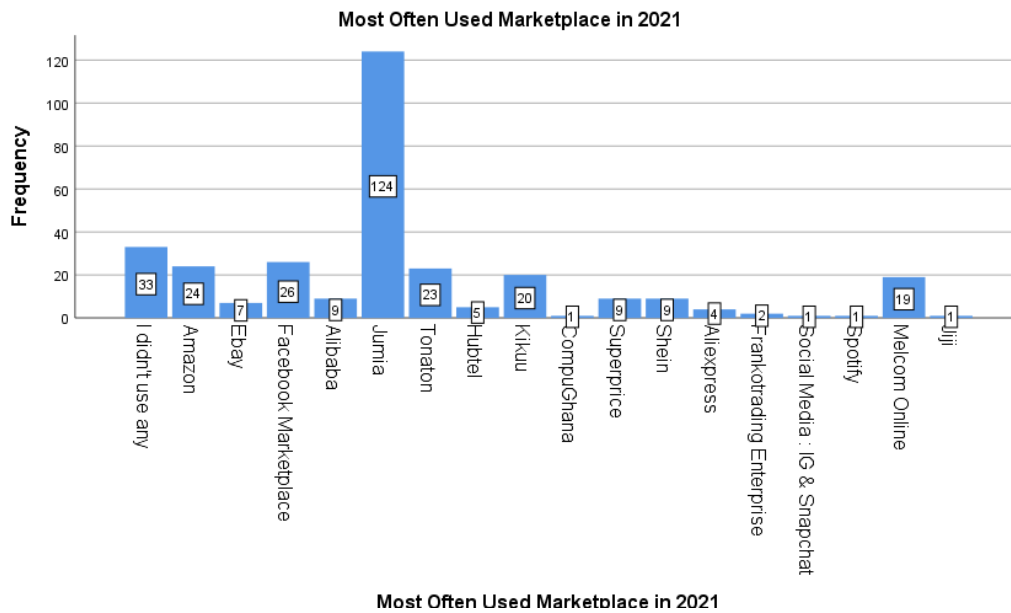

Figure 4.21 Most Often Used Marketplace in 2021

According to Figure 4.21, 124 (39.0%) respondents chose Jumia as their most used marketplace in 2021. Facebook Marketplace, Amazon, Tonaton, Kikuu and Melcom Online was chosen by 26 (8.2%), 24 (7.5%), 23 (7.2%), 20 (6.3%) and 19 (6.0%) respondents respectively. Alibaba, Superprice and Shein were chosen by 9 (2.8%) respondents each while eBay, Hubtel, AliExpress and Frankotrading Enterprise received 7 (2.2%), 5 (1.6%), 4 (1.3%) and 2 (0.6) selections respectively. CompuGhana, Spotify, Jiji and social media were chosen by 1(0.3%) respondent each. 33 (10.4%) respondents didn't use any.
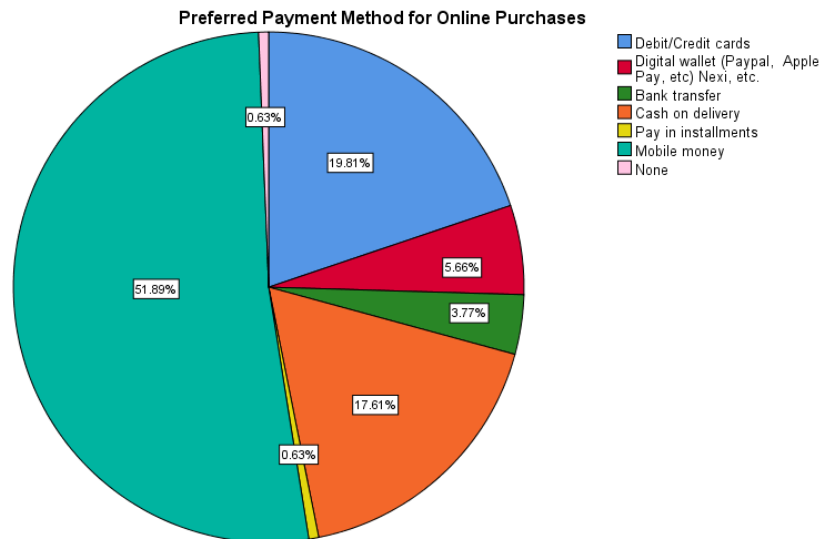
Figure 4.22 Preferred Payment Method for Online Purchases

Figure 4.22 illustrates that 51.89% (165) respondents who have purchased something online before prefer to pay for online purchases with mobile money while 19.81% (63) respondents prefer debit/credit cards. 17.61 % (56), 5.66% (18) and 3.77 (12) respondents prefer to pay cash on delivery, with a digital wallet (PayPal, Apple Pay etc) and bank transfer respectively. 0.63% (2) of respondents like to pay in instalments. 0.63% (2) also don't prefer any payment method.
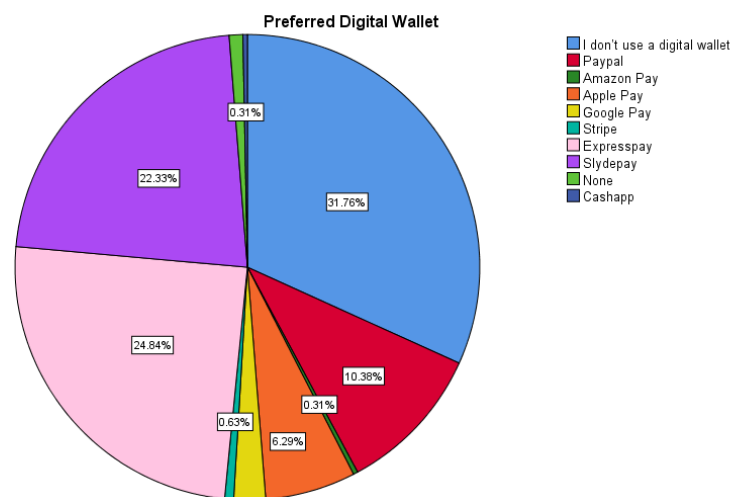

Figure 4.23 Preferred Digital Wallet

101 (31.78%) of respondents who have shopped online before do use a digital wallet. 79 (24.84%) and 71 (22.33%) use expressPay and SlydePay respectively. PayPal, Apple Pay and Google Pay are preferred by 33 (10.38%), 20 (6.29%) and 7 (2.2%) respectively. 2 (0.6%)

respondents prefer to use Stripe while Amazon Pay is preferred by 1 (0.3%) respondent. 4 respondents chose "Others" with 3 (0.9%) specifying none and 1 (0.3) specifying Cashapp.
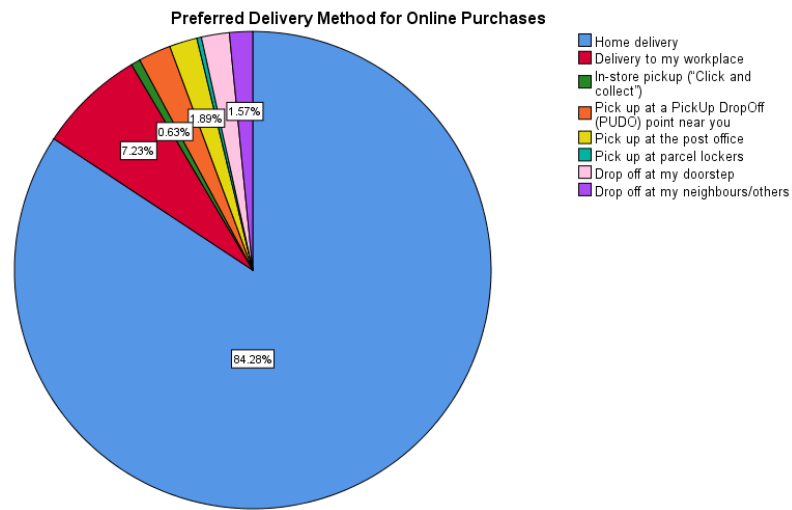

Figure 4.24 Preferred Delivery Method for Online Purchases

268 (84.28%) of respondents who have shopped online before prefer the home delivery method of their online purchases while 23 (7.23%) prefer delivery to their workplaces. Pick up at a PickUp DropOff (PUDO) point near you was chosen by 7 (2.2%) respondents, Pick up at the post office and Drop off at my doorstep were chosen by 6 (1.9%) respondents while Drop off at my neighbours/others was chosen by 5 (1.6%) respondents. In-store pickup ("Click and collect") and Pick up at parcel lockers were chosen by 2 (0.6%) and 1(0.3%) respondent respectively.
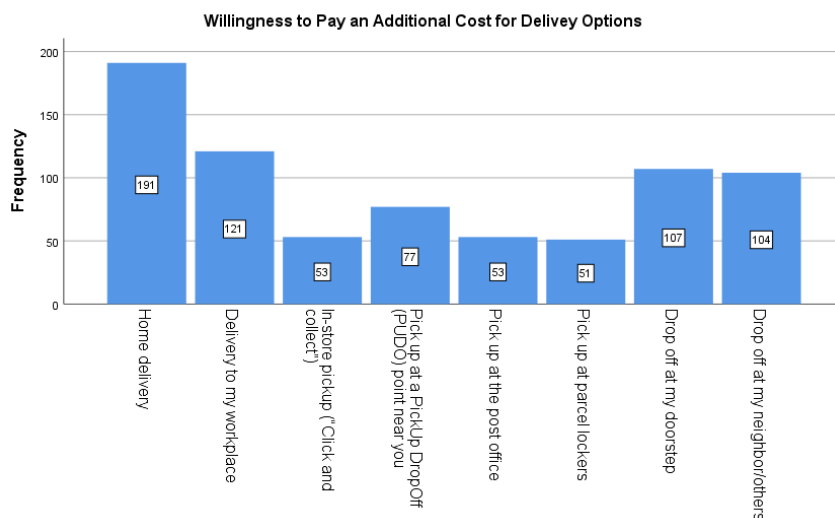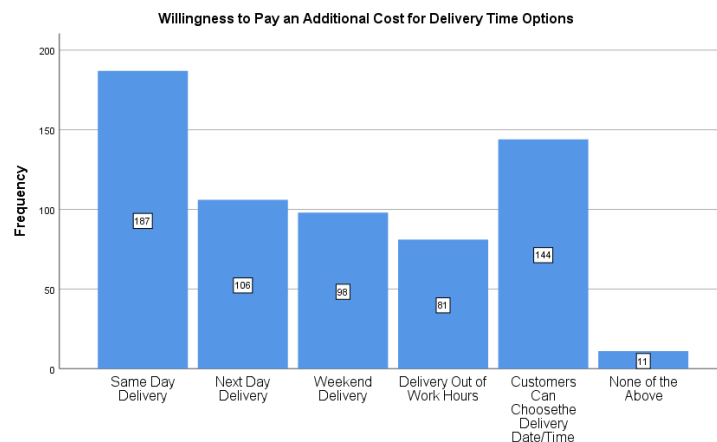

Figure 4.25 Willingness to Pay an Additional Cost for Delivery Options

191 respondents are willing to pay an additional cost for home delivery while 121 are willing to pay an additional cost for delivery to the workplace. 107, 104 and 77 respondents chose to be willing to pay an additional cost for dropping off their packages at their doorstep, neighbours and pick up at PickUp CropOff point near them respectively. In-store pickup ("Click and collect") and Pick up at the post offices were selected 53 times each while and Pick up at parcel lockers was selected 51 times.
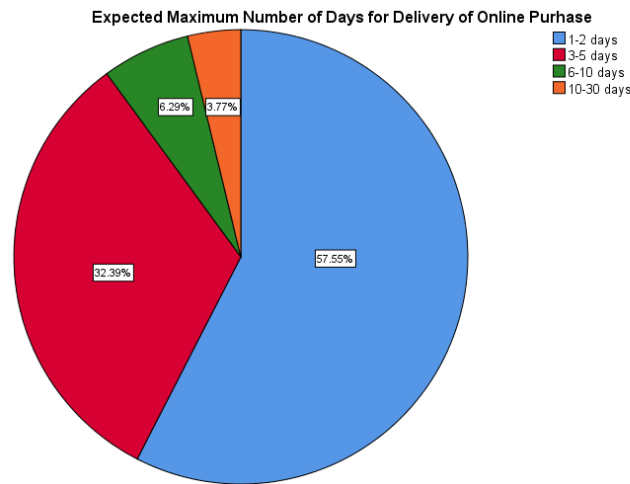

Figure 4.26 Expected Maximum Number of Days for to Wait for Delivery of Online Purchases

57.55% (183) respondents who have shopped online before expect to wait for 1-2 days for their online purchase to be delivered. 32.39% (103) respondents expect to wait for 3-5 days. 6.29% (20) respondents expect to wait for 6-10 days while 3.77% (12) expect to wait for 10-30 days.


Figure 4.27 Willingness to Pay an Additional Cost for Delivery Time Options

187 respondents are willing to pay an additional cost for same-day delivery while 144 selected "Customers can choose the delivery date/time" as one of the options they are willing to pay an extra cost for. Next day delivery, weekend delivery and delivery out of work hours received 106, 98 and 81 selections respectively. 11 respondents chose none of the above.
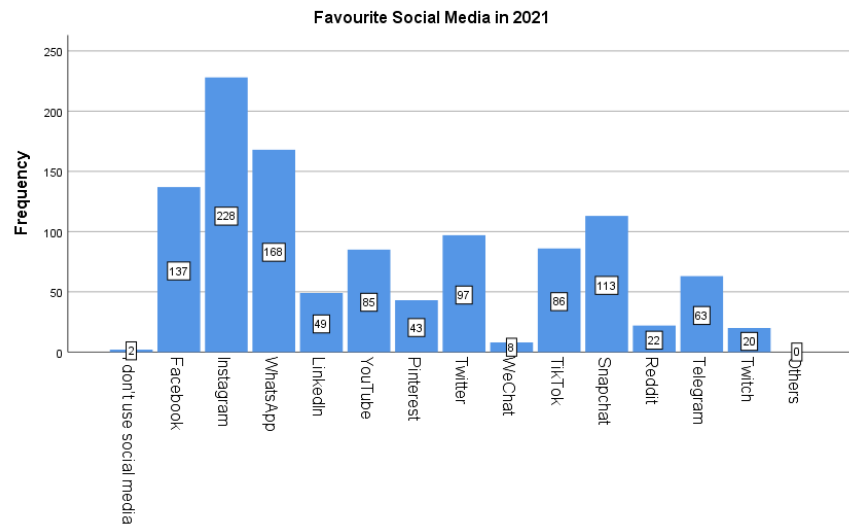
Figure 4.28 Favourite Social Media in 2021

Instagram, WhatsApp and Facebook were the top 3 favourite social media platforms in 2021 by respondents being selected 228, 168 and 137 times respectively. Snapchat, Twitter, TikTok and YouTube followed closely by being selected 113, 97, 86 and 85 times respectively. Telegram, LinkedIn and Pinterest received 93, 49 and 43 selections respectively while Reddit, Twitch and WeChat received 22, 20 and 8 selections respectively. No respondent chose "Others" while 2 respondents don't use social media.
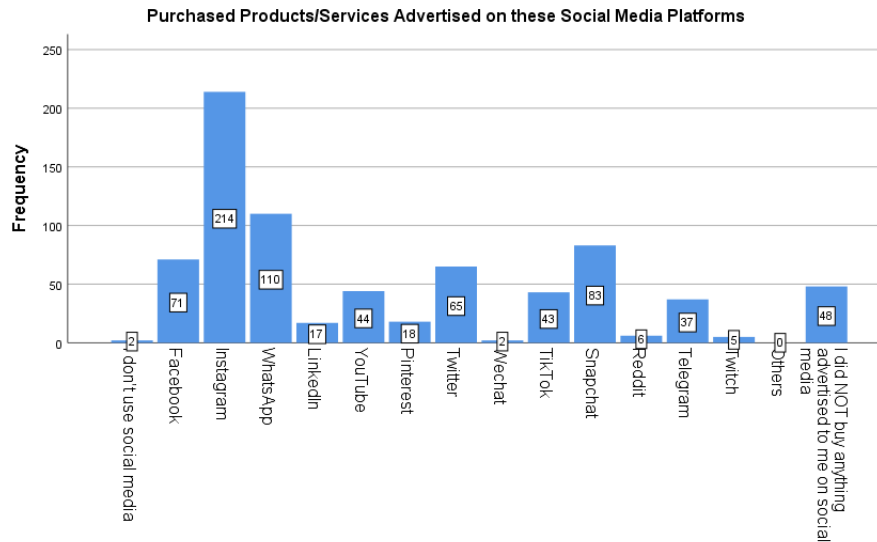
Figure 4.29 Purchased Products/Services Advertised on these Social Media Platforms

241 respondents had purchased a product or service advertised on Instagram while 110 respondents did so through WhatsApp. Snapchat, Facebook and Twitter had 83, 71 and 65 respondents purchasing an advertised product/service. YouTube, TikTok, Telegram, Pinterest and LinkedIn had 44, 43, 37, 18 and 17 selections respectively. 6 respondents have bought products/services advertised on Reddit, 5 on Twitch and 2 on WeChat. 48 respondents did not buy anything advertised to them on social media while 2 don't use social media.

Table 4.9 Descriptive Statistics on Number of Favourite Social Media Platforms Per Person

	N	Minimum	Maximum	Mean
Number of Favourite Social Media Platforms Per Person in 2021	389	0	13	2.88

Source: Field Data, 2022

Table 4.9 shows a mean of 2.88 for the number of favourite social media platforms used per person in 2021. Averagely, 3 social media platformswere used per person in 2021.

4.2.4 Importance of Different E-Commerce Criteria

The table below exhibits the rankings of various e-commerce criteria for consumers who have made an online purchase before. The survey question was provided in a 5-point Likert scale with responses ranging from 1 = Not at all important, 2 = Somewhat Important, 3 = Important, 4 = Quite Important, and 5 = Very Important.

Reliability Response for Importance of Different E-Commerce Criteria

The Cronbach's Alpha coefficient for importance of different e-commerce criteria of e-commerce activities respondents participated in the past year is 0.981with a 78.9% validity. Following the rules of thumb by George and Mallery (2003), if the α > 0.9, it is excellent. This test was carried out using Reliability Analysis of SPSS.

Table 4.10 Descriptive Statistics for Importance of Different E-Commerce Criteria for Consumers

	N	Minimum	Maximum	Mean	Std. Deviation
There are good, clear details about and photos of the product including total price and all fees	318	1	5	3.68	1.230
Fast delivery process with clearly stated delivery date and time on the day of order	318	1	5	3.64	1.147
The website is simple to navigate and available in my native language	318	1	5	3.63	1.241
Variety of payment options (e.g. Debit/Credit card, Digital wallet, Bank transfer, Cash on delivery, Pay in installments, Mobile/SMS payment)	318	1	5	3.61	1.191
Delivery price	318	1	5	3.61	1.148

Clear instructions on how to return the product	318	1	5	3.61	1.189
Free shipping	318	1	5	3.59	1.127
Lowest price	318	1	5	3.58	1.150
Variety of delivery location and time options (e.g. at home/ workplace, in a physical store, at the post office/ pickup points/parcel lockers, etc.)	318	1	5	3.58	1.170
I know the market participant / brand	318	1	5	3.50	1.199
Ability to communicate in real time with the sellers (e.g. via Chat/Instant messaging/VOIP, etc.)	318	1	5	3.45	1.200
The delivery should impact the environment as little as possible	318	1	5	3.39	1.253

Source: Field Data, 2022

The table above illustrates the importance of different e-commerce criteria for consumers. "There are good, clear details about and photos of the product including total price and all fees" ranked first with a mean score of 3.68 and a standard deviation of 1.230. "Fast delivery process with clearly stated delivery date and time on the day of order" and "The website is simple to navigate and available in my native language" followed closely with mean scores of 3.64 and 3.63 and standard deviations of 1.147 and 1.241 respectively. "Variety of payment options (e.g., Debit/Credit card, Digital wallet, Bank transfer, Cash on delivery, Pay in instalments, Mobile/SMS payment)", "Delivery price" and "Clear instructions on how to return the product" have a mean score of 3.61 each with standard deviations of 1.191, 1.148 and 1.189 respectively. "Free shipping" has a mean score of 3.59 and a standard deviation of 1.127 while "Lowest price" and "Variety of delivery location and time options (e.g., at home/ workplace, in a physical store, at the post office/ pickup points/parcel lockers, etc.)" both have a mean score of 3.58 and standard deviations of 1.150 and 1.170 respectively. "I know the

market participant/brand" has a mean score of 3.50 and a standard deviation of 1.199 whereas "Ability to communicate in real-time with the sellers (e.g., via Chat/Instant messaging/VOIP, etc.)" has a mean score of 3.45 and a standard deviation of 1.200. Lastly, "The delivery should impact the environment as little as possible" has a mean score of 3.39 and a standard deviation of 1.253.

4.2.5 Impacts of Covid-19 and Customers' Environmental Concerns

The table below demonstrates the rankings of impacts of the pandemic and environmental concerns for consumers regarding e-commerce. This question was presented in a 5-point Likert scale format where 1= Strongly disagree, 2 = Slightly disagree, 3 = Neutral, 4 = Slightly agree and 5 = Strongly agree.

Reliability Response for Impacts of Covid-19 and Customers' Environmental Concerns

The Cronbach's Alpha coefficient for impacts of covid-19 and customers' environmental concerns of e-commerce activities respondents participated in the past year is 0.923 with a 99.7% validity. Following the rules of thumb by George and Mallery (2003), if the $\alpha > 0.9$, it can be considered to be excellent. This test was carried out using Reliability Analysis of SPSS.

Table 4.11 Descriptive Statistics on the Impacts of Covid-19 And Customers' Environmental Concerns

|	N	Minimum	Maximum	Mean	Std. Deviation
Packaging material should be fully recyclable	389	1	5	3.28	1.193
I use social media platforms to find information about brands and products	389	1	5	3.10	1.194
behaviours	389	1	5	3.07	1.075
I prefer brands/companies that adopted green policies/initiatives	389	1	5	3.05	1.067

I am interested in more eco-friendly delivery options and willing to pay an extra cost for it	389	1	5	2.79	1.095
I use less cash-on-delivery payment method when shopping online because of the Covid-19 outbreak	389	1	5	2.71	1.014
I shop online more often because of the Covid-19 outbreak	389	1	5	2.70	.988
The changes in my online shopping behaviours caused by the Covid-19 pandemic is irreversible (even after the situation goes back to normal)	389	1	5	2.65	1.061
I would use my credit/debit/ATM card (instead of cash) to pay any amount, no matter how small	389	1	5	2.62	1.139
The increase in e-commerce sales volumes poses a threat to the environment	389	1	5	2.41	1.065

Source: Field Data, 2022

Table 4.11 shows the impact of the pandemic and environmental concerns of online consumers. "Packaging material should be fully recyclable" was ranked first with a mean score of 3.28 and a standard deviation of 1.193 while "I use social media platforms to find information about brands and products" came in second place with a mean of 3.10 and a standard deviation of 1.194. "Too much packaging material is used in e-commerce", "I prefer

brands/companies that adopted green policies/initiatives" and "I am interested in more eco-friendly delivery options and willing to pay an extra cost for it" have a mean of 3.07, 3.05 and 2.79 and standard deviations of 1.075, 1.067 and 1.095. "I use less cash-on-delivery payment method when shopping online because of the Covid-19 outbreak" recorded a mean of 2.71 and a standard deviation of 1.014. "I shop online more often because of the Covid-19 outbreak" recorded a mean of 2.70 and a standard deviation of 0.988 while "The changes in my online shopping behaviour caused by the Covid-19 pandemic is irreversible (even after the situation goes back to normal)" recorded a mean of 2.65 with a standard deviation of 1.061. "I would use my credit/debit/ATM card (instead of cash) to pay any amount, no matter how small" has a mean of 2.62 and a standard deviation of 1.139. "The increase in e-commerce sales volumes poses a threat to the environment" recorded a mean of 2.41 and a standard deviation of 1.065.
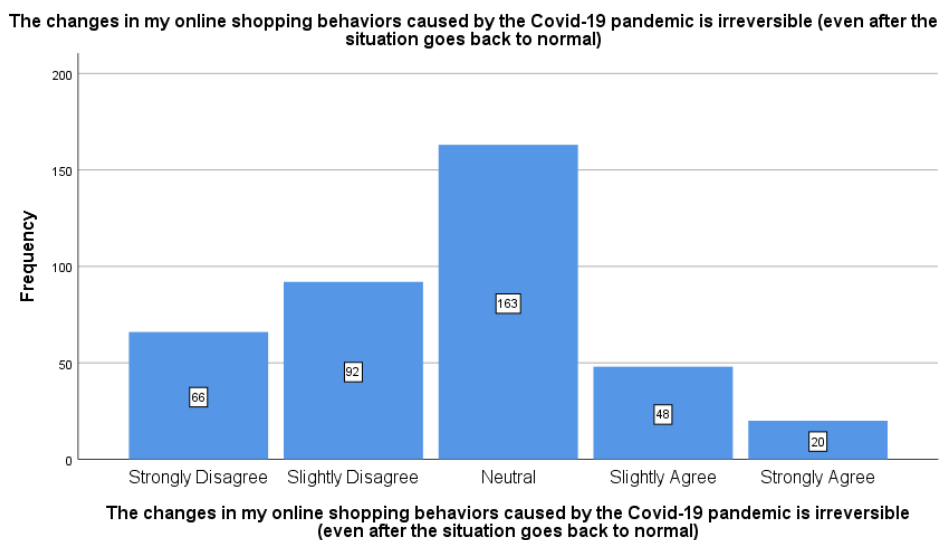
Figure 4.30 The Changes in Online Shopping Behaviours Caused by The Covid-19 Pandemic Is Irreversible

Figure 4.30 shows that when it comes to "The changes in my online shopping behaviours caused by the Covid-19 pandemic is irreversible (even after the situation goes back to normal)", 163 respondents are neutral, 92 slightly disagree, 66 strongly disagree, 48 slightly agree and 20 strongly agree.

4.2.6 Statistical Analysis

Table 4.12 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.230	.157		20.588	.000
	Threat of Increased E-Commerce Sales	.073	.050	.090	1.454	.147
	Excess Packaging	-.088	.077	-.109	-1.155	.249
	Recyclable Packaging	-.004	.080	-.005	-.044	.965
	Green Brands	-.004	.100	-.004	-.036	.972
	Eco-friendly Delivery	-.001	.074	-.001	-.015	.988

a. Dependent Variable: Preferred Purchasing Channel for Online Shopping Post Pandemic

Source: Field Data, 2022

As illustrated above, results show that the p values for all independent variables are **statistically insignificant** to the dependent variable, "*Preferred Purchasing Channel for Online Shopping Post Pandemic*" as they are all greater than the level of significance of 5% or 0.05. Therefore, threat of increased e-commerce sales, excess packaging, recyclable packaging, green brands and eco-friendly delivery characterizing environmental concerns may not be a factor in the choice of preferred purchasing channel for online consumers once the pandemic is over in Ghana.

Table 4.13 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.830	5	.966	1.283	.270[b]
	Residual	288.318	383	.753		
	Total	293.148	388			

a. Dependent Variable: Preferred Purchasing Channel for Online Shopping Post Pandemic

b. Predictors: (Constant), Eco-friendly Delivery, Threat of Increased E-Commerce Sales, Excess Packaging, Recyclable Packaging, Green Brands

Source: Field Data, 2022

The table above indicates that the overall regression model predicts the **statistical insignificance** of the independent variables *"Eco-friendly Delivery"*, *"Threat of Increased E-Commerce Sales"*, *"Excess Packaging"*, *"Recyclable Packaging"* and *"Green Brands"* on the dependent variable *"Preferred Purchasing Channel for Online Shopping Post Pandemic"* at 0.270 or 27% which is greater than the level of significance 5% or 0.05.

Table 4.14 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.128ᵃ	.016	.004	.868

a. Predictors: (Constant), Eco-friendly Delivery, Threat of Increased E-Commerce Sales, Excess Packaging, Recyclable Packaging, Green Brands

Source: Field Data, 2022

This table provides the R, R Square and Adjusted R Squared values. The Adjusted R Square value, 0.04, represents how much of the total variation in the dependent variable, *"Preferred Purchasing Channel for Online Shopping Post Pandemic"* can be explained by the independent variables, *"Eco-friendly Delivery"*, *"Threat of Increased E-Commerce Sales"*, *"Excess Packaging"*, *"Recyclable Packaging"* and *"Green Brands"* The adjusted R Squared value here is very low, hence, there is **no significant explanation** of the decision of consumers in choosing their preferred purchasing channel post pandemic as a result of environmental concerns.

4.3 Discussion

The general objective of this study was to discover the online shopping behaviour of Ghanaian residents with an emphasis on post-pandemic changes. The field data provided the researcher with results to provide empirical backing on this for tentative judgements from the Ghanaian viewpoint.

4.3.1 Impacts of COVID-19 And Environmental Concerns for Online Shoppers

Several authors in the wake of pandemic championed that e-commerce was massively impacted by COVID-19 (Abdelrhim & Elsayed, 2020; Jones, 2020; Nowakowski, 2021; Vanapalli et al., 2021) just like other sectors. This did not match the field data of the study as it showed that this might not the case for Ghanaian residents. However, it was consistent with Sheth (2020a) and Alfonso et al. (2021), who asserted that the pandemic won't have much effect on consumer behaviour as most habits would return back to normal after the pandemic. The results showed that online consumers in Ghana were generally impartial or did not agree that there was an impact from the pandemic on their online shopping activities. They were not in agreement on whether they shop online more because of the pandemic and if the changes that were made during the pandemic regarding online shopping are irreversible when the situation goes back to normal. This comes as a surprise to the researcher as there was an expectation that at least there would be a slight agreement by majority of the respondents that the pandemic had caused changes in their online shopping behaviour which would be irreversible.

However, they did confirm that they will shop more online than previously when the pandemic is over. This means that the E-Commerce industry will see more growth and boost in the nearest future in Ghana. Since, this is not as a result of the pandemic, other diverse reasons could factor for this. Salem and Nor (2020) in their study, suggested perceived usefulness, perceived behavioural control, risk-taking propensity, perceived lack of alternatives, and government support as a model to predict the intention to adopt e-commerce by consumers post pandemic. It would be interesting to test this model in further to delve deeper in this phenomenon in Ghana.

Consumers did admit that generally their use of social media in information search of online products or services had been impacted by the pandemic. That cannot be said about the use of payment with less cash. The pandemic did not influence consumers to use less cash in paying for goods and services no matter how small the amount is. This sheds some light that, that the pandemic is not the reason most consumers prefer mobile money payment on online shopping.

Concerning environmental awareness and stewardship, the results from the field data showed that most consumers agree that the increase in e-commerce volumes is not a threat to the environment and are interested in brands that take green and eco-friendly initiatives.

78

Despite that, paying an additional cost for eco-friendly initiatives is not a widely accepted option. There was largely a consensus that too much packaging material is used in e-commerce and that packaging should be made fully recyclable. Yet, the regression model from the field data indicates that decision by consumers to increase their online shopping is not as result of environmental concerns. This is consistent with findings from pre-pandemic research of Bempong (2017) and Braimah (2015) who imply that although there is a high level of knowledge and understanding of what green and eco-friendly products are, most consumers in Ghana are yet to adopt these products and harmonize their purchasing decisions with though they are occasional buyers. This research extends the conversation that this position or stance may not have changed even after the pandemic. They usually prioritize accessibility, convenience and affordability when it comes to purchasing products and services. Spence, Ben Boubaker Gherib and Ondoua Biwolé (2011) also imply that socio-cultural differences and institutional realities can more or less affect or cause the adoption of sustainable practises.

The field data also gave some insights to the behavioural frequency of e-commerce consumers post-pandemic. In the past year, consumers have engaged more in the searching of information of products and services online than any other e-commerce activity. E-commerce activities generally occur on a monthly basis for consumers in Ghana. This could be as result of factors such as average low income, trust, other infrastructural support etc. (Iddris, 2012). Also, online consumers hardly made returns on their purchases in the past year. This could be due to high satisfaction of products or services received or the willingness to forgo the hassle that comes with returning products in Ghana. Although online purchase product categories did not really change as a result of the pandemic for consumers in Ghana, food deliveries gained a lot of traction due to the pandemic.

4.3.2 Consumer Habits of Online Shoppers in Ghana

The second objective of this study was to identify key habits and patterns of residents in Ghana when shopping online generally and post-pandemic. With many of the respondents owning a technological device that supports access to the internet, it is no wonder to the researcher, as demonstrated by the results, that many consumers in Ghana have made an online purchase before. This shows that developments and infrastructure put in place by different governments over the years such as the National Information and Communication Technology for Accelerated Development policy in 2003 (ICT4AD) (Boateng, Heeks , Molla & Hinson, 2011), a digital property addressing system in 2017, a $212 million eTransform Ghana project

79

in 2021 supported by the World Bank, and most recently the Ghana COVID-19 Alleviation and Revitalization of Enterprises Support Program (CARES Program) seem to be working in progressing the advancement of e-commerce in the country. This does not excuse the major challenges concerning e-commerce in the country as there are still a lot of issues to resolve. However, the growing rate of internet penetration and accessibility, and the youthful population in the country gives more prospect to technological exposure to in the country, allowing consumers and businesses the platform to transact more electronically. Nonetheless, it is observed that most consumers who have made online purchases reside in urban and suburban areas which mostly have the necessary facilities or infrastructure necessary to support e-commerce operations unlike the rural areas in Ghana.

Although the survey revealed several information concerning consumers' habits toward online shopping in Ghana, they will be summarised into four (4) points as key areas for consideration vis-à-vis:

1. User Favourites
2. Social Media Influence
3. Payment Methods
4. Delivery Methods

User Favourites

Searching for information and visiting online stores are the frequent e-commerce activity engaged in through social media, traditional search engines and online retail websites. This is consistent with findings from Mittal (2013) who classifies information search as the most vital factor for online consumers. The most preferred device for shopping online for consumers in Ghana is the smartphone unlike other countries such as Italy where most online purchasing is made via desktop computer or tablet (Statista, 2020). With Ghana's low average income and the smartphone's easy mobility, it is more economical and easier to own one than personal computers. Even more so, as most consumers tend to use one device for each online purchase. Consumers seem to be unbiased when it comes to webrooming i.e., using digital channels to search for information related to products or services and then make the purchases at physical stores. However, they will definitely engage in showrooming if they see a product in a physical store but can't purchase due to certain factors like size, colour etc. The top 5 product categories purchased online in Ghana are clothing and accessories; computers, mobile

phones and accessories; food deliveries; cosmetics, beauty, or wellness products; and music as a streaming service or downloads.

Clothing and accessories, computers, mobile phones and accessories and cosmetics, beauty, or wellness products also remain the top product category purchased online from abroad. However, Education and online courses and tourism/travel (e.g., hotel bookings, flight tickets, etc.) have higher chances to be purchased online abroad by consumers in Ghana. When it comes to shopping abroad most consumers in Ghana tend to shop abroad from the United States of America (USA), the United Kingdom (UK) and China. For consumers in Ghana, the major reasons for shopping abroad were either looking for a wide range of products or looking for a specific brand. This according to Robert and Patrick (2009) could be due to assumptions of superior quality and taste and enhancement of social status.

Buying from a marketplace is not a very frequent activity by consumers but the most used marketplace in Ghana is Jumia.com.gh. Jumia is Africa's premier e-commerce platform, operating in over 30 countries and offering seamless online and mobile shopping, travel, classifieds, and services through the delivery of simple and smart solutions that link customers to companies throughout the continent (Antwi & Owusu-Agyeman, 2020). Jumia entered the Ghanaian market at a time when e-commerce was fairly new and has grown to have other subsidiaries such as Jumia Travel, Jumia Food, Jumia Deals, etc. The company had to devise some innovative strategies when it first entered the market, such as integrating mobile money payments and using landmarks and constant communication via phone call to trace homes for delivery due to the lack of poor physical-address systems and bad roads (Giachetti, Larsen & Rajwani, 2021). Other notable local e-commerce sites are Tonaton, Kikuu, Melcom Online and Superprice. The most foreign used marketplace is Amazon.com.

Social Media

Social media influence is a key area for consumer habits when it comes to online shopping in Ghana. The field data revealed that banner advertising, online video advertising as well as google advertising mostly inspire consumers online purchases. It is also the main source of information on brands for consumers in Ghana. This supports a study by Majeed, Asare, Fatawu and Abubakari (2021) and Majeed, Owusu-Ansah and Ashmond (2022) that there is a positive and significant impact of social media marketing strategies and online interaction on social media engagement of users in Ghana, and consumers who demonstrate a high level of brand activeness on social media are more likely to repurchase the brand. Banner advertising and notably, content creating by social media influencers have nowadays been the main channel of advertising for brands and companies to reach younger demographics.

With majority of respondents who shop online being either Millennials or Gen Z, it no surprise that Instagram is the most favourite social media platform for consumers in Ghana. Even so, other social media platforms like WhatsApp, Facbeook, Twitter, Snapchat, TikTok and YouTube have great influences toward online purchases. Instagram, WhatsApp and Snapchat have the most influence when it comes to consumers purchasing a product advertised on social media. Some consumers even tend to online purchases from pages and profiles on Instagram and Snapchat especially. Instagram is very popular social media platform that combines elements of other social media platforms into one application which makes very desirable to service diverse users. Averagely, consumers in Ghana have 3 favourite social media platforms. It is therefore prudent for firms to design and implement strategies that will cut across and be effective and on various social media platforms and not just focus on one or two.

Payment Methods

Payment options and methods are very important for online shopping in Ghana as the literature has espoused. Mobile money is the most preferred payment method for most Ghanaians who purchase products or services online. Mobile money which was launched for the first time in Ghana in 2009 by MTN (GSMA,2020) has been a gamechanger in the financial services industry in the country. Ghanaians can conduct financial transactions such as payment for goods and services, purchase insurance services, and access micro-loans using a mobile phone registered with mobile money services without needing a bank account to promote financial inclusion (Senyo & Osabutey, 2020). According to the Bank of Ghana, mobile money transactions amounted to US$2.82 billion for January 2021. Consumers have faster access to their money when it is stored on their phone rather than going through the tedious process of opening bank accounts and queuing at banks to conduct minor cash transactions (Narteh, Mahmoud, & Amoh et al., 2017). Thus, most businesses advocate for mobile money subscribers to pay for goods and services directly from their mobile money wallet rather than using physical cash.

Online consumers in Ghana also do like make payments via debit/credit cards as well as cash on delivery. Cash on delivery is a method of payment consumers in Ghana prefer to combat the issue of trust regarding e-commerce. Some consumers would prefer to feel the tangible product or service before paying for it even they purchase it online to ensure that they are not defrauded. The usage of digital wallets is not very prominent in Ghana although there are local apps such as expressPay and SlydePay that support consumers with payment of products and services. One very important feature of these digital wallets is the integration of

mobile money to take advantage of reasons explained above. It is important for e-commerce businesses to have a variety of payment options in order to build trust for consumers.

Home Delivery

Home delivery is massively the most preferred delivery method for online purchases in Ghana as it is the most convenient. This complements a research by Morganti et al. (2014) who affirm that are indeed the most preferred option by online consumers however, they contribute to the atomization of parcel flows which causes problems within urban areas. The logistical infrastructure in Ghana is not quite advanced as in other countries. For instance, bad roads and a lack of proper addressing system have been a challenge for online companies trying to deliver products and services to consumers in the country. However, in the past few years, the government has rolled out a digital address system to combat this problem which may boost delivery services of online businesses.

Edge by Ascential (2020) infer that during the lockdown in the first half of 2020, home deliveries increased rapidly which could also explain why it is the most preferred method of delivery. However, consumers are willing to pay an additional cost delivery to the workplace, dropping off their packages at their doorstep or with neighbours and picking up the packages at a PickUp DropOff (PUDO) point near them. Consumers in Ghana usually expect to wait for 1-2 or 3-5 days for their online purchase to be delivered i.e., averagely 3 days. Notwithstanding, they are willing to pay an additional cost for same day delivery or next day and the option to choose the delivery time/date.

4.3.3 Importance of E-Commerce Criteria for Online Shoppers in Ghana

The third objective of this study was to determine the importance of different e-commerce criteria for consumers residing in Ghana when shopping online post-pandemic. The survey showed that the top 3 criteria when it comes to shopping online for consumers residing in Ghana are good and clear details about the product or service being purchased including photos, total price and all fees, a fast delivery process with a clearly stated delivery date and time on the day of order or purchase and a website that is simple to navigate and available in the native language. This is consistent with a similar research conducted by Singh (2002) in Australia who suggests that customer-centricity is the heart of e-commerce and needs to be handled by systems that are easy and intuitive to use as online consumers demand prompt, friendly, and high-quality service with a personal touch.

These criteria provide elements that provide a personalized e-commerce experience to consumers. According to Salehi, Abdollahbeigi, Langroudi and Salehi (2012), e-commerce platforms that are personalized provide a lot of convenience for consumers to make informed decisions which also eliminates time wasting. Thus, it is no surprise that Ghanaian online shoppers will prioritize such elements when shopping online. However, the concept of a fast delivery process is one that e-commerce companies in Ghana majorly struggle to achieve. The supply chain and logistical networks in Ghana usually experience disruptions due to institutional constraints, underdeveloped market mechanisms, cultural differences, law enforcement, and legislation (Dey, 2016). This is a matter in question that must be addressed by the government of Ghana for the e-commerce industry in the country to develop.

A variety of payment options such as debit/credit card, mobile payment, digital wallet etc, and clear instructions on how to return the product both ranked fourth on the survey. A variety of payment options in E-commerce in sub-Saharan Africa especially Ghana is necessary for the purpose of security and trust as well as convenience which is in congruence with Cheung and Lee (2006) that the trustworthiness of internet and external environment have substantial influence on consumer trust in internet shopping. Electronic payment options in Ghana are not as pervasive as they are in other developed countries as postulated by Haruna (2012). However, the perception of poor security issues associated with payment methods has been a major factor affecting the development of e-commerce as Ghanaian consumers are still concerned about transmitting their card information over the internet, making security a unique problem in the country (Amofah & Chai, 2022; Antwi & Lulin, 2018). Therefore, it is prudent for companies to employ a various payment options and innovation to grow consumer trust and loyalty.

The issue of security against fraud is also highlighted in the reason for respondents choosing "clear instructions on how to return the product" in the top half criteria. According to report carried out by Sengretsi (2020), two of the top three problems faced by Ghanaian e-commerce consumers were product quality and issues with refunds or returns. Online shoppers in Ghana are often faced with the risk of receiving incorrectly or wrongly delivered things, broken items, low quality items, and outright phoney or fake products instead of the originals. Consumers who have faced this issue usually struggle with returning these products as some companies bluntly refuse to accept returns while those who did delaying in picking up products designated for returns. Some also refuse to reimburse cash for goods meanwhile those who did accept payment refunds took a lengthy time to do so.

Delivery price also ranked fourth while free shipping and lowest price ranked seventh and eighth. Ghanaian consumers are generally cost-sensitive due to low average income as shown in the survey and high cost of living in the country (Poku-Boansi, Amoako, Owusu-Ansah, & Cobbinah, 2020). Hawk (2004) observed that the low average income of the population in developing countries is an obvious barrier to the development of B2C e-commerce. People's ability to spend money on the internet is influenced by their income. It's no surprise that Ghanaian online shoppers look for cheaper options.

A variety of delivery location and time options ranked ninth. This could be attributed to convenience once more as consumers are also looking for options that best fit them. Knowledge of market participant or brand may not be so high on the ranking list of online shoppers in Ghana mainly due to the high cost of well-known brands. However, the ability to communicate in real-time with the sellers via chat/instant messaging ranking first to last by online shoppers in Ghana is unexpected this is a popular feature of personalization by most e-commerce platforms which is quite popular in other parts of the world. It would be interesting to do further research on personalization elements of e-commerce features for online shoppers in Ghana.

Ranking last was the criteria concerning the impact of the delivery on the environment. This is backed by the research by Braimah (2015) who found that, despite having a high level of knowledge and understanding of environmental issues, consumers in Ghana do not complement their purchasing decisions with rising environmental risks. However, further research could look into how to bridge the gap between knowledge of environmental risks and actual purchasing intent with that in consideration for consumers in Ghana.

CHAPTER 5: CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the conclusion, limitations and recommendations of the study. The recommendations extend to policymakers, businesses and the academic community for further studies based on the findings.

5.2 Conclusion

This study was carried out in response to a recommendation made by Zhang et al. (2021) that there is a need for additional research to focus on the exploration of online consumers through an intersectional and multidisciplinary approach in order to elevate the research jungle of online consumer behaviour especially in the wake of a gruelling occurrence of the pandemic. It focused on filling this gap through a Ghanaian viewpoint and uncovering the scarcity of information regarding online shopping behaviour of residents in Ghana. The study tackled specific concerns regarding the impact of the pandemic and environmental concerns, key online consumer habits and the importance of e-commerce criteria for consumers in Ghana. Detailed literature (theoretical and empirical) was used to extensively explain the concept of consumer behaviour and e-commerce generally and pandemic-wise covering sub areas of online and Ghanaian consumer behaviour as well as e-commerce in Ghana. 389 respondents provided data which were analysed and presented with descriptive and inferential statistics.

The results show that the pandemic did not have much impact on the decision of consumers residing in Ghana to shop more online. Consumers agreed that they will shop more online post-pandemic, but it may be due to other factors yet to be researched on. Consumers in Ghana do not harmonize their online purchasing decisions with environmental risks even though they are aware of such risks and prefer green brands. Nonetheless, the search for information on social media and deliveries of food as a product category gained more traction during the pandemic. Online shopping activities averagely occur on a monthly basis in Ghana.

The results also highlighted key online shopping habits of consumers in Ghana in 4 categories: user favourites, social media influence, payment methods and delivery methods. With respect to user favourites, it was revealed that searching for information and visiting e-commerce sites were the most engaged in activities with the smartphone being the most preferred device for online shopping. The top categories of products usually bought online locally did not really deviate from that bought abroad except education and tourism which were

part of the top of purchases made abroad. Jumia remains the most used marketplace for online purchases. Banner and Online video advertising influence online purchases of consumers in Ghana the most stressing the importance of social media influence. It is also the main source of information about brands and products. Instagram is the most favourite social media platform for consumers in Ghana with consumers using an average of 3 social media platforms per person.

Payment methods emphasizes that mobile money is the most preferred payment option for most consumers in Ghana due its ease in setting up and usage. Consumers in Ghana, however, do still prefer a variety of other payment options like debit/credit card or cash on delivery. Home delivery in averagely 3 days after purchase is the most preferred delivery method for consumers. Although, they are willing to pay an additional cost for the option to choose the time/date or same day/next day delivery to the workplace or dropping off their packages at their doorstep or with neighbours.

The results also rank the importance of different e-commerce criteria for consumers in Ghana. The order is: 1) Clear details of the product including photos, total price and all fees, 2) Fast delivery process with clearly stated delivery date and time, 3) Simple navigation of website in native language, 4) Variety of payment options, 5) Delivery price, 6) Clear instructions on how to return the product, 7) Free shipping, 8) Lowest price, 9)Variety of delivery location and time options 10) Knowledge of market participant/brand, 11) Ability to communicate in real-time with the sellers and lastly, 12)Eco-friendly delivery.

5.3 Limitations

Although this research provides some useful insights into online shopping behaviour for residents in Ghana, there were a few limitations to the study. Firstly, it is observed that the data though collected in several places was not adequately distributed to all areas of residence. The data was mostly dominated by people living in urban or suburban areas leaving little information from those in rural areas. This limits the research in making a generalization to other parts of the country. Future studies should factor this in their sampling choice to capture more accurate and reflective data.

Also, the nature of the study did not delve deep into the rationale behind certain key decisions and stance by consumers. For instance, why the pandemic or environmental issues does not impact their online shopping decisions. Further research can be undertaken to tackle such issues. Furthermore, because the respondents' data was self-reported, there were certain

biases in the flow of some information that were crucial to the accuracy of this study. Also, this affected the reliability of some of the data collected signalling redundancy in some responses.

5.4 Recommendations

5.4.1   Recommendations to Buinesses, Policymakers and Government

On the basis of the above conclusion, the researcher makes some recommendations. Businesses must get on with the times and incorporate e-commerce platforms into their businesses. Those with e-commerce platforms should be very intentional about their marketing strategies. To ensure customer attraction, patronage, retention and loyalty, businesses must lay down plans that capture the key habits that influence consumer's decision for online shopping. Benefits of using their e-commerce platforms must be matched and highlighted with the needs and wants of consumers.

Firms must embrace risk and find innovative ways of selling their brand for consumers. In terms of the various e-commerce criteria, businesses must improve user experience by increasing website promotion, delivering satisfactory information and ensuring accuracy, prioritising orders and enquiries through the site, providing incentives, tutorials and education, strengthen trust, and providing multiple payment options.

Policymakers must come up with policies, legislation and laws that will boost e-commerce in the country. One key area is beef up laws and legislation surrounding cybersecurity. Trust in the system must be strengthened so consumers will feel secured transacting over the internet. The Government of Ghana should continue and hold steadfast in supporting and promoting the digital economy by investing in programs and infrastructure that continue to provide consumers with the necessary skills and tools to continue to shop online.

5.4.2 Recommendations for Further Research

Further studies should employ a different kind of sampling technique like stratified random sampling to be able to capture data from the various different demographics in order to generalize results accurately. Also, future studies could be extended to other emerging sectors such as the food delivery sector.

Potential studies should try to ascertain the rationale behind why the pandemic or environmental issues does not impact the online shopping decisions of consumers in Ghana. Furthermore, another research can be done to substantiate the importance of different e-commerce criteria as the reliability analysis of this particular data accentuated that there might be redundancy in some responses.

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

E-Commerce   Electronic Commerce

OECD   Organisation for Economic Co-operation and Development

WHO   World Health Organization

IMF   International Monetary Fund

UNECE   United Nations Economic Commission for Europe

UNCTAD   United Nations Conference on Trade and Development

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Thank you for taking time off to fill in this survey. The purpose is to gather data on consumer behaviour towards e-commerce post-pandemic (i.e the past year, 2021).

PART 1 SOCIAL-DEMOGRAPHIC QUESTIONS

To seek basic information about respondents to allow researcher understand where respondents fit in the survey.

1. What is your age?

| Below 18 | 26-41 | 58-67 | Above 76 |
| 18-25 | 42-57 | 68-76 | |

2. What is your gender?

Male   Female   Prefer not to say

3. What is your highest level of education?

High school diploma or equivalent   Doctoral degree or equivalent

Bachelors' degree or equivalent   Others:

Master degree or equivalent

4. Nationality

5. Country of residence

6. In which area do you currently live?

Urban Area   Suburban Area   Rural Area

7.What is your current employment status?

Student	Unemployed
Employed	Retired/Stay-at-home mum or dad
Self-Employed/Freelancer	Others

8. What is your annual income after tax?

I do not have an income	Between 30,000 - 40,000 euro
Below 10,000 euro	Between 40,000 - 50,000 euro
Between 10,000 - 20,000 euro	Between 50,000 - 100,000 euro
Between 20,000 - 30,000 euro	Above 100,000 euro

9. Do you own a computer?

Yes

No

10. Do you own a smartphone/tablet?

Yes

No

11. Have you ever purchased anything online?

Yes

No

12. Do you research a product/service online before making a purchase?

Yes

No

PART 2 E-COMMERCE BEHAVIORS

To enable researcher understand the rate at which respondents exhibited patterns of purchase in e-commerce in the past year

<u>Behavioural Frequency Questions:</u>

13. In the past year (2021), how often did you …?

	Never	Once/ Twice a year	Once every few months	Once/ Few times a month	Once/ Few times a week	Once/ Few times a day
Search for a product/service online						
Visit online retail sites or e-stores						
Purchase a product/service online						
Use mobile phone or tablet to shop online						
Use a dedicated shopping app on a mobile phone or tablet						
Buy from a foreign site						
Buy from an online marketplace (e.g. Amazon, Ebay, Facebook Marketplace, Aliexpress, etc.)						
Return an online purchase						

Cross-border E-commerce Behaviour Questions

(Answer only if you have purchased a product/service online before)

14. Did you shop online from sellers outside of your home country Ghana before?

    Yes

    No

IF YES:

15. From which countries/regions have you made purchases online in the past year? (You can select multiple options)

UK	Australia	Rest of Asia
France	USA	South America
Germany	Canada	Nigeria
Netherlands	Rest of North & Central America	South Africa
Russia		Kenya
Nordic countries	China	Rest of Africa
Rest of Europe	India	Others
	Japan	

16. Why have you shopped online from the countries/regions you have chosen?

I'm looking for a wide range of products

I'm looking for a specific brand

The prices are generally lower

I can find products there that I don't find elsewhere

Other:

E-commerce Product Categories Questions

(Answer only if you have purchased a product/service online before)

17. What types of products/services did you purchase online in the past year? (You can select multiple options)

Clothes (including sport clothing), shoes, or accessories

Films or series as a streaming service or downloads

Furniture, home accessories, or gardening products

Deliveries from restaurants, fast-food chains, catering services

Computers, tablets, mobile phones, or accessories

Cosmetics, beauty, or wellness products

Music as a streaming service or downloads

Consumer electronics or household appliances

Games online or as downloads for smartphones, tablets, computers, or consoles

Education and online courses

Tourism/Travel (e.g. hotel bookings, flight tickets, etc.)

Others

18. What **NEW** types of products/services have you started to purchase online only after the coronavirus outbreak began (you did not buy these products/services online before the pandemic happened)? (You can select multiple options)

I have not changed my product types or bought new product types due to the pandemic

Clothes (including sport clothing), shoes, or accessories

Films or series as a streaming service or downloads

Furniture, home accessories, or gardening products

Deliveries from restaurants, fast-food chains, catering services

Computers, tablets, mobile phones, or accessories

Cosmetics, beauty, or wellness products

Music as a streaming service or downloads

Consumer electronics or household appliances

Games online or as downloads for smartphones, tablets, computers, or consoles

Education and online courses

Tourism/Travel (e.g. hotel bookings, flight tickets, etc.)

Others

Answer the next question only if you have shopped online from sellers outside of your country of residence in the past year (2021)

19. What types of products/services did you purchase online from abroad in the past year? (You can select multiple options)

    Clothes (including sport clothing), shoes, or accessories

    Films or series as a streaming service or downloads

    Furniture, home accessories, or gardening products

    Deliveries from restaurants, fast-food chains, catering services

    Computers, tablets, mobile phones, or accessories

    Cosmetics, beauty, or wellness products

    Music as a streaming service or downloads

    Consumer electronics or household appliances

    Games online or as downloads for smartphones, tablets, computers, or consoles

    Education and online courses

    Tourism/Travel (e.g. hotel bookings, flight tickets, etc.)

    Others

PART 3 E-COMMERCE PREFERENCES

To assess the choices consumers make over other options regarding e-commerce

(Answer only if you have purchased a product/service online before)

Preferred Device

20. Which is your preferred device for online shopping?

    Personal computer

    Smartphone

    Tablet

Preferred Purchasing Channel

21. Which purchasing channel do you currently prefer?

   I only buy online

   I buy more often online than in a physical store

   I equally use online shops and physical stores

   I more often buy in physical stores than in online shops

   I only buy in physical stores

22. Which purchasing channel do you think you will prefer once the COVID-19 pandemic will be over?

   I will only buy online

   I will buy more often online than in a physical store

   I will equally use online shops and physical stores

   I will more often buy in physical stores than in online shops

   I will only buy in physical stores

   Other:

23. Do you agree with the following statements?

	Strongly disagree	Slightly disagree	Neutral	Slightly agree	Strongly agree
I usually search for products online but buy them in physical stores					
When shopping in a physical store, if I like a product but they don't have my size/color/material/etc., I will					

order the product online					
I often use multiple devices for one online purchase (e.g. search for a product using smartphone but buying it using computer or vice versa)					
I often use only one device (computer/smartphone/tablet) for each online purchase					

Preferred Source of Information

24. What is your most used tool to search for information about brands and products?

    Traditional search engines   Consumer review websites

    Social media platforms   Price comparison websites

    Online retail websites   Others:

    Brand/Product websites

25. Which of the following advertising channels inspired you the most for your online purchases in general?

    Banner advertising (e.g. Facebook)   Radio

    Google advertising (in search results)   Newspaper

    Online video advertising (e.g. YouTube)   Out of home (billboard and screens on the road and in public transport)

    Television   Others (please specify): …

Preferred Marketplace

26. Which of the following marketplaces have you used in the past? (You can select multiple options)

I didn't use any	Jumia	Superprice
Amazon	Tonaton	Shein
Ebay	Hubtel	Other, please specify:
Facebook Marketplace	Kikuu	
Alibaba	CompuGhana	

27. Among these marketplaces, which one do you use most often in 2021?

I didn't use any	Jumia	Superprice
Amazon	Tonaton	Shein
Ebay	Hubtel	Other, please specify:
Facebook Marketplace	Kikuu	
Alibaba	CompuGhana	

Preferred Payment Method

28. Which is your preferred payment method while purchasing online?

Debit/Credit card	Cash on delivery
Digital wallet (Paypal, Amazon Pay, Apple Pay, Google Pay, Nexi, etc.)	Pay in installments
	Mobile money
Bank transfer	Others:

29. Which digital wallet do you use most often?

I don't use a digital wallet	Google Pay
Paypal	Nexi
Amazon pay	Stripe
Apple Pay	Expresspay

Slydepay   Others:

Preferred Delivery Method

30. If you can choose, which is your preferred method of receiving the products purchased online?

Home delivery   Pick up at the post office

Delivery to my workplace   Pick up at parcel lockers

In-store pickup ("Click and collect")   Drop off at my doorstep

Pick up at a PickUp DropOff (PUDO)   Drop off at my neighbor/others
point near you (e.g. Tabacchi, etc.)

31. Which of the following delivery options are you willing to pay an additional cost for? (you can select multiple options)

Home delivery   Pick up at the post office

Delivery to my workplace   Pick up at parcel lockers

In-store pickup ("Click and collect")   Drop off at my doorstep

Pick up at a PickUp DropOff (PUDO)   Drop off at my neighbor/others
point near you (e.g. Tabacchi, etc.)

Preferred Delivery Time

32. When you buy a product online, what is the maximum number of days you expect to wait for the product to be delivered?

1-2 days

3-5 days

6-10 days

10-30 days

33. Which of the following delivery time options are you willing to pay an additional cost for? (you can select multiple options)

Same day delivery

Customers can choose the delivery date/time

Next day delivery

Weekend delivery

None of the above

Delivery out of work hours

Preferred Social Media Platform

34. Among these social media platforms, which are your favorite in 2021? (you can select multiple options)

I don't use social media

Youtube

Snapchat

Facebook

Pinterest

Reddit

Instagram

Twitter

Telegram

Whatsapp

Wechat

Twitch

Linkedin

Tiktok

Others: …

35. In the past, I have bought something advertised to me on the following social media platforms: (you can select multiple options)

I don't use social media

Twitter

Others: …

Facebook

Wechat

I did NOT buy anything advertised to me on social media

Instagram

Tiktok

Whatsapp

Snapchat

Linkedin

Reddit

Youtube

Telegram

Pinterest

Twitch

PART 4 IMPORTANCE OF DIFFERENT E-COMMERCE CRITERIA

(Answer only if you have purchased a product/service online before)

36. How important are the following e-commerce criteria to your decision to shop online?

	Not at all important	Somewhat Important	Important	Quite Important	Very Important
There are good, clear details about and photos of the product including total price and all fees					
The website is simple to navigate and available in my native language					
Lowest price					
I know the market participant / brand					
Fast delivery process with clearly stated delivery date and time on the day of order					
Delivery price					
Free shipping					
Clear instructions on how to return the product					

Variety of delivery location and time options (e.g. at home/ workplace, in a physical store, at the post office/ pickup points/parcel lockers, etc.)					
Variety of payment options (e.g. Debit/Credit card, Digital wallet, Bank transfer, Cash on delivery, Pay in installments, Mobile/SMS payment)					
Ability to communicate in real time with the sellers (e.g. via Chat/Instant messaging/VOIP, etc.)					
The delivery should impact the environment as little as possible					

PART 5 IMPACTS OF COVID-19 AND CUSTOMERS' ENVIRONMENTAL CONCERNS

37. Please indicate how strongly you agree with the following statements:

	Strongly disagree	Slightly disagree	Neutral	Slightly agree	Strongly agree
Impacts of Covid-19					

I shop online more often because of the Covid-19 outbreak					
I use less cash-on-delivery payment method when shopping online because of the Covid-19 outbreak					
The changes in my online shopping behaviors caused by the Covid-19 pandemic is irreversible (even after the situation goes back to normal)					
Environmental concerns					
The increase in e-commerce sales volumes poses a threat to the environment					
Too much packaging material is use in e-commerce					
Packaging material should be fully recyclable					
I prefer brands/companies that adopted green policies/initiatives					
I am interested in more eco-friendly delivery options and willing to pay an extra cost for it					
General					

I would use my credit/debit/ATM card (instead of cash) to pay any amount, no matter how small					
I use social media platforms to find information about brands and products					