

Has E-Commerce been more accessible and manageable in the retail sector in Dublin, Ireland since the covid-19 regime?

**“Has E-commerce been more accessible and manageable
in the retail sector in Dublin, Ireland since the Covid-19
regime?”**



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Abstract

In 2021, Covid-19 raised the need for online shopping because people had no choice but to remain at their residences and minimize crowded shops due to the pandemic surge. This resulted in a shift in consumer behaviour, companies started relying on online sales to maintain themselves stable. The main goal of this research is to find out has E-commerce has been accessible and manageable since the pandemic. The purchasing habits of consumers, online shopping, retail sales, and demographic information about consumers are the main factors influencing E-commerce in this research.

The study's goal is to discover if E-commerce in the retail industry was more accessible and manageable in Dublin, Ireland since the Covid-19 epidemic. The most important reason scholars ought to select the one that follows as their study topic is to obtain a thorough awareness of the present market tendencies and architecture and how E-commerce has been manageable in the retail sector in Dublin, Ireland.

Survey-based research has been carried out in this study to understand the impact of E-commerce during the post-pandemic times. An online survey was carried out to gather the data. Consumers who are currently living in Ireland were the target demographic chosen for this research. A total of 41 participants completed the survey. The positivist paradigm was selected for the study research because it enables the independent evaluation of information. This project has employed the deductive research technique. The researcher has utilized survey techniques to collect quantitative data using the mono-method strategy, and the results have been reviewed.

From the survey results, it has been observed that with the rising demand for online shopping, dependable delivery services, methods of digital payment, and user-friendly E-commerce platforms since the Covid-19 epidemic, E-commerce in Dublin, Ireland became more accessible and manageable. Customer satisfaction was maintained by E-commerce businesses through effective delivery, an enhanced supply chain, data security measures, and quick customer service assistance.

Keywords- online shopping, consumer behaviour, retail sales

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Submission of Thesis and Dissertation

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Chapter 1: Introduction

Research background

During the Covid-19 epidemic, various variables led to improved awareness and recognition of businesses to perform online and the potential to carry out tasks reliably on E-commerce in the commercial industry in Dublin, Ireland. Consumers increased acceptance of internet purchasing is a key element (Deng, et al., 2021). During Covid-19, conventional establishments have closed or operated at a reduced capacity, more consumers have switched to E-commerce to buy products and services (OECD, 2020). Another consideration is the evolution of more user-friendly E-commerce platforms and technology. Companies have spent on online storefronts, smartphone applications, and various digital technologies to enable web shopping more convenient for customers. Furthermore, the Irish administration has put in place policies to encourage the development of E-commerce during the pandemic 2019 (OECD, 2020). During the epidemic, several companies have understood the necessity of developing their digital visibility to stay strong and assist their clients. This has led to enhanced accessibility and manageability of E-commerce in Dublin, Ireland's retail industry. It may be linked to a mix of customer habit shifts, technical developments, state backing, and commercial invention during the Covid-19 epidemic (KPMG, 2022).

The government has brought a major change in retail organizations to transfer from brick-and-mortar stores to E-commerce (OECD, 2020). The pandemic has accelerated the spreading of E-commerce in the retail industries in Ireland (Gleeson, 2021). E-commerce platforms have been used to provide customers with the necessary products and services they require. Customers received the products for their convenience to maintain safety and health during the pandemic (Guthrie, et al., 2021). The E-commerce platforms were widely used by retail companies to deliver basic products to customers using the online delivery system. With the advent of these channels, retail companies need not stop their business operations even during the pandemic situation. They could also continue their operations despite confinement restrictions, and contact restrictions provided by the government to maintain the safety and security of their citizens. Customers also required the basic products which they could even buy from E-commerce platforms without commuting to the retail stores outside (Guthrie, et al., 2021). The scope of these platforms has increased during the pandemic because of the persistent cross-country border restrictions.

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This research work helps to understand the effects of various variables like preferences of the customer, online marketing strategy, promotional activities, and purchasing methods of the customer at the time of Covid-19 regime. The Irish government has also implemented some policies to encourage the E-commerce sector which helps it grows rapidly in the Covid-19 regime (OECD, 2020). During the lockdown period, the availability of daily essentials has been perfectly maintained in the retail sector without compromising the pandemic guideline. People of Dublin purchased the products of their need in a more organized way observing health issues correctly (OECD, 2020). This research work shows that the consumers of Ireland are eager to maintain all the prescribed health-related precautions to get rid of Covid-19 pandemic and E-commerce is the place where they can meet with their desired answer. New and innovative technological solutions as well as promotional events intrigued the purchasing medium of the consumers effectively (Dwivedi, et al., 2021). E-commerce in the retail sector has also come up with technological support to build the trust of the customer. The companies have been able to build trust-worthy nature in connection with the proper return policy and customer-care support system (Guthrie, et al., 2021). Efforts such as designing proper websites and managing and updating them properly with required information are something that retail sector E-commerce has done very well. Running a strategically designed website can also effectively attract people. E-commerce sites also launched customer-centric AI to generate more traffic to their website which reflects an increasing number of consumers (MaxinAI, 2021). Also, they are promoting special day offers mega sale discount offers, bulk purchase discount offers, and last but not least big offers which attract a greater number of consumers and increase accessibility to a great extent (MaxinAI, 2021). The background of this research helps to understand all these underlying measures of the E-commerce sector in Ireland since the Covid-19 regime.

Research aims and objectives:

The research aims to determine has E-commerce in the retail sector has been more accessible and manageable in Dublin, Ireland since the Covid-19 pandemic. The following objectives are addressed through the study:

Research aims 1: To recognize the impact of E-commerce marketing on customer engagement in the retail sector during the Covid-19 pandemic.

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Research aims 2: To determine has E-commerce in the retail sector been more accessible and manageable in Dublin, Ireland since the Covid-19 pandemic.

Research aims 3: To determine has E-commerce in the retail sector been more accessible and manageable in Dublin, Ireland during the Covid-19 pandemic.

Research aims 4: To recommend ways of managing E-commerce in the retail sector to make it more accessible for the customers and provide a high level of service during a crisis period.

Research Questions:

Research Question 1: What impact E-commerce marketing has on customer engagement in the retail sector?

*Research Question 2: Has E-commerce in the retail sector been more accessible and manageable in Dublin, Ireland **during** the Covid-19 pandemic?*

*Research Question 3: Has E-commerce in the retail sector been more accessible and manageable in Dublin, Ireland **since** the Covid-19 pandemic?*

Research Question 4: What are the ways of managing E-commerce in the retail sector to make it more accessible for customers and provide a high level of service since the pandemic?

Research Hypotheses:

These hypotheses will be tested through the research:

H1: Innovative E-commerce marketing helped in engaging more customers in the retail sector of Dublin, Ireland

H2: E-commerce business in the retail sector during Covid-19 has flourished in Dublin, Ireland market.

H3: E-commerce services have been more accessible for customers since the pandemic in Dublin, Ireland.

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Research Rationale and Significance:

The most significant reason why academics should choose the following issue as their research topic is to gain a detailed understanding of the current market trends and structures that will help Dublin, Ireland's E-commerce in the retail sector progress since the Covid-19. The professional's primary areas of interest include consumer priorities for products and aspirations, which together shape buying behaviour based on a person's demographic profile. Sales are being made by the growing proportion of time Irish people have been spending surfing on their mobile platforms. Cross-border spending or purchasing is considered one of the important components of the Irish E-commerce experience as it registers to have a high proportion of cross-border customers in Western Europe (JP Morgan, 2019). The major factors for E-commerce are possibly better pricing and a greater product selection. The E-commerce behemoths Tesco, Amazon, and Currys managed their businesses skillfully throughout the Covid-19 outbreak and provided products for customers in Dublin, Ireland (EcommerceDB, 2022).

The researcher has produced a detailed analysis of the current scenario of the E-commerce sector in the retail industry of Dublin, Ireland showing its increasing accessibility and preferred preferences. The main significance of this work is to understand the boom of the E-commerce sector since the Covid-19 pandemic regime in a methodological way. The research showed all the necessary data put together to form the scientific result of improvement behind online purchasing. The study shows in the time of Covid-19 regime, the choice of purchasing medium has changed totally (Bhatti, et al., 2020). People tend to shop online as it consumes less time but produces the same or in some cases more results. Different aged consumers find their preferred products easily at a time without compromising the health factor at a touch of a click.

This scientific way of research work has been able to produce proper information as well as illustrated the methods of different people's different buying habits more purposefully. Detailed explanations are being taken into action to state the distinctive nature of the consumers of Dublin, Ireland. This detailed research work can put numerous variables under one roof to summarize as well as signify the buying pattern of the customer scientifically and suggest necessary steps to this work which describes the reason why the E-commerce sector has been more accessible since the pandemic regime in Dublin, Ireland.

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The rationale for this research is to determine the reasons why E-commerce in the retail sector has been more accessible and manageable in Dublin, Ireland since the Covid-19. The outcome of the research can be valuable in providing crucial insights to the industry stakeholders and it can also aid in commercial decision-making. Further studies can also be conducted regarding the outcome of this research.

The rationale of this extensive research work helps us to conclude a logical explanation of how the E-commerce sector started to grow rapidly during the Covid-19 pandemic regime (Yasin Ar, 2020). This research work states the reason why the above-mentioned sector has experienced a rapid increase in its business during the Covid-19 regime. The researcher has chosen this topic as their interest because of its vast effect on the economy as well as the mind of many consumers.

All the high-end existing stores and supermarket businesses have experienced a severe decline in their sales figure and market presence as well (McKinsey, 2020). Besides all of these, the price that the E-commerce sector has to offer is something that physical stores cannot even imagine. Online businesses just changed the middle-man commission theory and thus made more profit than offline businesses without compromising their brand value while giving the product at a much-decreased price. The E-commerce sector has also been able to produce a safe and easy-to-use application that safeguards the data and utilizes it with the help of customer-centric artificial intelligence (Yasin Ar, 2020). The product return policy and customer care system also played a massive role in building the trust of the organization more efficiently. The results of this scientific research help us to get the exact reasons has E-commerce been more accessible and manageable in the retail sector in Dublin, Ireland since Covid-19 pandemic regime. This research work also gives us the much-needed input of the Irish people utilizing those in the improvements of this growing industry and can take part in the economic development of Ireland.

Summary

This research work helps us to get the answer to why E-commerce businesses have grown rapidly in the retail sector of Dublin, Ireland during the Covid-19 pandemic. The research job concentrated on the methods of why this business grew during the period of the pandemic and how this happened. A detailed analysis has shown the effects on sales figures before and after

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the Covid-19 pandemic in Ireland. Various scientific methods have been strategically utilized to get the required answer in detail. Through the research paper, it has been clearly understood the purpose of this research and how the E-commerce sector has experienced a boom in the retail sector since the Covid-19 pandemic regime.

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Chapter 2: Literature review

Importance of E-commerce

In today's economy, E-commerce is becoming increasingly significant. It has altered the way organizations operate and connect with their consumers, giving new chances for development and innovation. In a variety of ways, E-commerce has had a significant influence on the global economy. E-commerce has enabled enterprises of all sizes to reach audiences outside their immediate or regional location. Small and medium-sized enterprises may now provide their goods and services to clients in other countries, increasing their customer base and earnings. Contemporary globalized viewpoint, E-commerce has grown in popularity because the pandemic ravaged the world. Ireland approved an E-commerce Bill (The Electronic Commerce Act) 2000, making Ireland a dynamic marketplace for E-commerce activity (O'Rourke, 2000). E-commerce has disrupted conventional brick-and-mortar retail by offering customers a more convenient and efficient method to purchase. As a result, traditional merchants have been obliged to adapt to shifting consumer demands and engage in their E-commerce networks.

The primary benefits of E-commerce are that it allows firms to access a broader audience independent of their physical location. This implies that businesses may increase their consumer base and sell products and services to people throughout the world. Furthermore, E-commerce allows firms to be more flexible and efficient by automating many of their procedures and lowering overhead expenses. Consumers are demonstrating an enormous passion for E-commerce as internet retail grows, and the country intends to obtain a competitive edge in the globalization period (Salem & Nor, 2020). There has been a substantial growth in internet penetration per user which has resulted in clients acquiring things mainly from online sources. As a response, customer options have improved, resulting in increased consumer welfare. Creating an appealing E-commerce channel or website is now critical for retailers seeking a competitive edge.

Consumer demographics and E-commerce in Ireland

Customer demographics refers to some statistical data that provide complete information about the customers. Consumer demographic is used to divide the customer base for market analysis and strategize marketing procedures or to bring change in product design. Consumer

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demographic and demographic segmentation are used for customer segmentation. Consumer demographic use innumerable parameters to categorize consumers. Some of the commonly known variables used in this segmentation process are age, gender, geographic location, the purchasing capacity of the customers, and education (Sundararaj & M R, 2021). The innovation of internet tools made a new market in the virtual world. The Covid-19 pandemic accelerated the growth of online businesses all over the world. E-commerce sites become popular in Ireland. Consumer demographic helped in analyzing and categorizing the need of the customers. Consumer segmentation helps in the growth of E-commerce business in Ireland.

The statistical data include basic information about the customers, such as their age group, gender, and location of their residence. These data are crucial for the marketing departments of any company because it is beneficial for them to understand the needs of the customers. They become aware of which age group or gender they need to identify as target customers. The intention of purchasing of the customers, their buying nature, the thinking process before making purchases, and lifestyle attitude are included in the customer demographic data. During the situation of the pandemic, in Dublin, Ireland, the expenditure of the residents increased in many ways. Most people cancelled many tickets and flights, and many people cancelled their scheduled purchases during this situation (Hyland, et al., 2020). People became much more conscious about their health and safety. Fear grabbed them from buying products randomly and going outside for shopping.

The demographics of the customers played a vital role in the marketers' move towards online business. Customers' need for their daily commodities pointed to fresh and safe organic products. E-commerce helped marketers to grab the customer base online. Online marketing strategies reduced capital costs effectively. Using E-commerce strategies to promote newly invented products became easier (Scutariu, et al., 2022). People were able to know the details of products online. It helped in maintaining social distancing which became very essential in that scenario. The customer demographics helped build E-commerce platforms. E-commerce helped in building effective marketing plans and having a larger customer base. The residents could check for the availability of products online and make purchases by analyzing the details and reviews of other customers. Business owners could check the feedback of the customers based on real-time data. This made the customer demographics clear to the marketers.

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E-commerce in Ireland during the Covid-19 crisis

During the Covid-19 crisis, E-commerce has grown in importance in Ireland. The epidemic has produced significant upheaval in the traditional retail industry, prompting many firms to investigate other methods of selling their goods and services. With the implementation of lockdowns and social distancing measures, many consumers have moved to internet shopping as a more secure and convenient manner of acquiring items. As per Paraschiv study on retail sector in Ireland, to gain a better understanding of the shifts in E-commerce in the framework of the Covid-19 pandemic, retail business in Ireland selected to concentrate our efforts on European Union member states. Paraschiv used the list of indicators for this analysis.

Table 1: List of indicators used for the analysis.

No	List of indicators	Units of measure	Explanation
1	Frequently using the internet	percentage of individuals	Frequency of internet access: daily
2	Selling goods or services	percentage of individuals	Internet use: selling goods or services
3	Ordering goods or services over the internet for private use	percentage of individuals	Last online purchase: in the last 12 months
4	Finding information about goods and services	percentage of individuals	Internet use: finding information about goods and services
5	Internet banking	percentage of individuals	Internet use: Internet banking
6	Share of enterprises' turnover on E-commerce (%)	percentage of turnover	All enterprises excluding the financial sector (10 persons employed or more)

Source: Data from the Eurostat database

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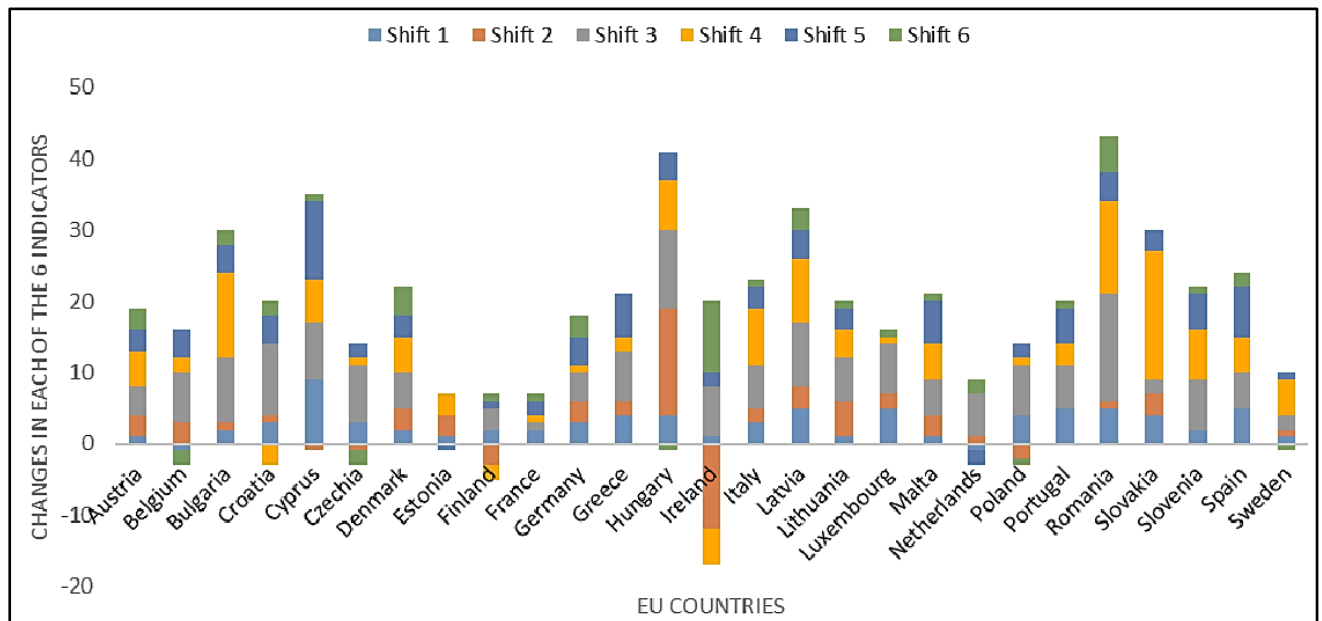


Figure 1: Shift in E-commerce during Covid-19 (2019 vs 2020) (Paraschiv, et al., 2022)

Source: Data from the Eurostat database

The figure describes the shifts as the gap or the difference between the values of 2020 and 2019, where shift no. 1 corresponds to indicator no. 1, and shift no. 6 corresponds to indicator no. 6. All six shift averages relating to the six indicators remained favorable indicating that these indicators increased overall at the EU level in 2020 compared to 2019. As per Paraschiv, Ireland was the only EU country with a negative average shift (-1.4), indicating significant drops in indicators 2 (Selling products or services) and 4. (Finding information about goods and services). Ireland has the most considerable percentage of firms' revenue on E-commerce, with 34% (Paraschiv, et al., 2022). This has led to a boom in demand for E-commerce services, with firms across Ireland reporting a considerable increase in their online sales. Many firms have shifted their operations to concentrate on E-commerce in response to this demand, with some creating new online storefronts or extending their current E-commerce offers.

The Covid-19 problem has had a huge influence on Irish E-commerce. As traditional businesses shuttered and mobility limitations were implemented, many people switched to internet shopping to obtain vital products and services. This increased the need for E-commerce services, notably for food, gadgets, and personal entertainment. Firms and enterprises who had not before spent on their internet profile were forced to change fast to fulfill shifting customer demands. As a result, the number of firms providing internet offerings has increased, as has the

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volume of customers placing digital transactions. However, there were certain obstacles, such as supply network interruptions, which impacted certain firms' capability to satisfy client demand. Additionally, some firms had to struggle with greater competitiveness in the internet sector. Overall, E-commerce in Ireland grew significantly throughout the Covid-19 crisis, but it also emphasized the necessity of firms having a robust digital profile to react to altering conditions (Scutariu, et al., 2022).

The impact of E-commerce marketing on customer engagement in the retail sector during the Covid-19 pandemic

The Covid-19 epidemic has had a huge impact on Dublin's retail industry, with several firms needing to close physical storefronts or curtail capacity owing to public health regulations. As a result, merchants are increasingly relying on E-commerce marketing to engage customers and boost sales, and this shows how E-commerce marketing affected customer involvement in the retail sector during the Covid-19 epidemic (Szasz, et al., 2022).

E-commerce marketing has been critical in assisting shops in maintaining client involvement during the epidemic. With many consumers spending more time at home and purchasing online, merchants' marketing methods have had to evolve to reach their target demographic. To advertise their products and services, they have invested in digital marketing tools like social media, email marketing, and pay-per-click advertising. One of the most significant advantages of E-commerce marketing throughout the epidemic has been its capacity to give customers a customized and seamless buying experience. Retailers may analyze consumer behaviour and preferences using data analytics and machine intelligence, allowing them to adapt marketing efforts to specific customers. This has contributed to increased client loyalty and repeat business.

E-commerce marketing has also assisted companies in engaging with customers through targeted offers and price reductions, in addition to personalization. To entice people to buy on their websites, several Dublin shops have introduced unique online-only bargains and promotions. This has aided in driving sales and instilling a feeling of urgency in customers (DublinTown, 2021).

During the epidemic, social media also played an important role in E-commerce promotion (Trivedi & Sama, 2020). With many consumers spending more time on social media platforms,

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merchants must generate interesting content that is relevant to their target demographic. This has included producing movies, pictures, and blog articles that authentically and compellingly display their products and services. Social media influencers have also played an important role in product promotion and sales (Trivedi & Sama, 2020).

Notwithstanding the benefits of E-commerce marketing during the epidemic, merchants faced significant hurdles. One of the most difficult issues has been competing with other businesses that have increased their E-commerce marketing efforts. With so many businesses competing for consumers' attention online, it has become increasingly challenging to stand out and build a distinct brand identity.

Another issue has been the high expense of E-commerce marketing. While many shops have achieved a strong return on investment from their marketing efforts, others, particularly smaller firms with limited budgets, have struggled to justify the expense.

Finally, during the Covid-19 outbreak in Dublin, Ireland, E-commerce marketing had a big influence on customer involvement in the retail sector. Retailers have been able to sustain consumer engagement and grow sales by delivering a personalized and smooth shopping experience, giving targeted promotions and discounts, and harnessing social media. Yet, as the rivalry for online attention heats up and the expense of E-commerce marketing rises, businesses will need to be smart and imaginative to stay relevant in the digital marketplace (Central Statistics Office, 2020).

As per (Bhatti, et al., 2020), the Covid-19 pandemic tied up the world with many limitations. During the Covid-19 pandemic situation, all the people in the world have to sit back in their homes to reduce the infection. During Covid-19 in 2021 E-commerce sector took a great advantage and evolved a lot by recognizing the customer's needs. The E-commerce sector presented its marketing advertisements through the social media platform (Bhatti, et al., 2020). Attractive advertisements on the sites helped in attracting customers to E-commerce sites. People were isolated in their homes during the pandemic which leads them to spend more time on social media platforms to connect with the outer world. E-commerce sites effectively use that advantage to engage customers in their promotions.

As per (Beckers, et al., 2021), most of the retailers also kept their faith in the online business platform as many of the local and international shops and services remained closed at that time.

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The merchants also used social media platforms, initiates email promotions, and creating digital content to engage the customers in online buying of their products. Keeping proper health measures like using masks and sanitizers with social distancing during the Covid-19 outbreak was the major challenge. Buying the products of daily need from E-commerce sites helped in keeping these health measures properly.

Challenges faced by E-commerce businesses during Covid-19 in Ireland

The Covid-19 epidemic has presented a variety of difficulties for Irish E-commerce companies. Due to the pandemic's unusual character, there has been market disruption and uncertainty, which has decreased consumer confidence and expenditure. The first difficulty E-commerce companies have is the decline in consumer demand for their goods. Due to the necessity of staying at home, less money was being spent on non-essential products during the Covid-19 period. Due to customers spending less on discretionary things, E-commerce enterprises have seen a decline in income (Riadi, et al., 2022). The second challenge is the rise in economic competition. The epidemic has increased internet buying, which has prompted more E-commerce companies to enter the market. Existing E-commerce companies now find it increasingly difficult to remain competitive and differentiate themselves from the competition. The third difficulty is the rise in corporate expenses. Costs for E-commerce companies have increased as a result of the pandemic because they have had to spend more on technology and safety measures to protect the security and safety of their operations.

To continue offering a safe and dependable service, businesses have had to invest in additional resources, which has put pressure on their budgets. The rise in fraudulent activities is the fourth difficulty (HLB, 2022).

As more people shop online, it's been simpler for scammers to take advantage of unwary customers. Due to this, there have been more fraudulent transactions and chargebacks, which can be expensive for E-commerce companies. Supply chain disruption is the fifth and final challenge. Order delays and disruptions have resulted from the pandemic's impact on the world's supply chain. Delivery times have been delayed as a result, and dissatisfied customers have followed, which can be bad for the company. Overall, the Covid-19 epidemic has posed a lot of difficulties for Irish E-commerce companies (Paraschiv, et al., 2022). Even though the

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situation is challenging, companies must maintain their resilience and keep adapting to the shifting market conditions to survive.

The Covid-19 outbreak affected the business world and decrease the growth rate. But E-commerce business increased their growth in this pandemic situation and evolved in this period. Though the pandemic situation helped E-commerce to grow its business by attracting a new customer base in new regions, the E-commerce business also had to face its challenges during the pandemic situation. Due to the Irish government's rules and regulations, the E-commerce market of Ireland had to face a great challenge in giving the order supply within time (Grant Thornton, 2020). The international borders were closed during the Covid-19 customers.

The online sellers were unable to supply the products within time due to the restrictions. During the time of Covid-19, most customers became addicted to mobile phones (Han, et al., 2022). Consumers prefer mobile apps over laptops or computers which lead to enhancing the mobile application software of the E-commerce sites to ease customer experiences. This was another challenge of the E-commerce business (Han, et al., 2022). The E-commerce business was expanded globally during the pandemic which helps in the growth of the business as well as left a challenge to localize the E-commerce sites to improve customer experiences by demographically categorizing them.

As per (Ahuja, et al., 2020), languages and taxes vary in the countries. Online sites had to enhance their app and shopping experiences accordingly. Delivery of the items was restricted in many areas of Ireland for which E-commerce sites also must stop or delay their deliveries in those zones of pandemic.

Delivery persons are the heart of online business. Taking necessary health measures for the delivery persons and their families was the major challenge for online business sites. Proper sanitization in the factories and taking proper health measures in the shipping and delivery process were also great challenges for E-commerce businesses (Orji, et al., 2022). Covid-19 restrictions the government leads to reduce the number of workers which affected the production, shipping, and delivery process badly.

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As per (Maseeh, et al., 2021), data safety and data security can become another challenge for E-commerce platforms. E-commerce organizations should strengthen the security system and confidentiality of the customer's data. Customers need to provide their confidential information like address and payment methods while ordering any product or service. Without having a strong data security system this platform can misuse the confidential data of the customers which can create a huge impact on the customer's security. It can result in increasing the satisfaction level of customers. Therefore, the sales of online businesses can decrease. In this situation, the online business should maintain the security and safety of customers by protecting their confidential data.

Causes of increased access to E-commerce services in Dublin, Ireland during the Covid-19 pandemic

The Covid-19 epidemic has had a huge influence on how individuals in Dublin, Ireland buys and obtain products and services. The rising usage of E-commerce services was a prominent trend that occurred throughout the epidemic. There are various reasons why the demand for E-commerce increased during the epidemic.

Initially, the government established strict limits on travel and social gatherings, which restricted individuals to their houses and prevented them from visiting real businesses. As a result, many customers have resorted to Internet buying as a more convenient and secure alternative to traditional retail (Irish Examiner, 2021).

Second, the closure of non-essential retail outlets shifted customer behaviour toward internet buying. This was especially noticeable in industries such as clothes and homeware, where consumers often like to view and touch things before purchasing. With real establishments closing, customers had no alternative but to shop online (Irish Examiner, 2021).

Thirdly, the pandemic increased the number of individuals working from home, giving many customers more leisure time to explore and purchase online. This was especially true for people who had to commute great distances to work and so had less time for leisure activities (Williamson, 2022).

Fourth, the pandemic increased consumer worry and uncertainty, which in turn increased demand for internet buying. Several customers regarded internet shopping as a means to lower

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their risk of virus infection while also avoiding the stress and worry that comes with visiting physical establishments (Shaw, et al., 2022).

During the Covid-19 epidemic, increasing access to E-commerce services in Dublin, Ireland was driven by a mix of factors such as government limitations, the closure of non-essential retail shops, a surge in remote working, and customer worry and uncertainty. Consumers have grown accustomed to the ease and flexibility of internet buying, so these tendencies are likely to persist even after the epidemic.

Ways of managing increased access to E-commerce services in Dublin, Ireland during the Covid-19 pandemic

Multiple ways can be used to increase access to E-commerce services. Organization that embraces E-commerce should enhance its strategy to collect feedback from customers. Getting feedback from customers can help them get an idea about their shortfalls or issues in the E-commerce platforms (Ungerer & Portugal, 2020). It can also help in enhancing the experience of customers so the organizations can increase sales from E-commerce platforms.

Tracking the performance of the brand and customer services can be helpful to improve the ability of the E-commerce platforms. By checking the performance of the online platforms, the leaders of the organization can identify which areas then need to improve to provide better customer service. Key performance indicators can help in identifying the pin points and where resources need to be allocated for better improvements in the online platforms.

Legal frameworks grounded by the government could help in promoting the E-commerce organization. Digital platforms can help in sharing information about E-commerce platforms to reach accessibility among people from different areas (Ungerer & Portugal, 2020). The internal service providers can offer internet services to people and households to access E-commerce platforms to purchase the product. Increasing awareness and education among people about the digital economy and E-commerce platforms can also increase accessibility and manageability of the E-commerce platforms among people (Zou & Cheshmehzangi, 2022). The little sectors can also increase awareness among people through marketing so people can enhance their knowledge of operating this platform.

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Consumer protection agencies should ensure that quality standards and safety are maintained in the E-commerce spaces. Government can also help people educate about maintaining their safety while using online shopping platforms through different marketing tactics (Bandara, et al., 2020).

Another important thing that is used to increase access to E-commerce platforms is to increase awareness about online payment systems. Increasing awareness about the contactless payment system among people can support E-commerce organizations to increase the business growth rate (McKinsey & Company, 2022). It can help in maintaining safe payment and transactions which can increase the satisfaction level of customers.

Theories of consumer behaviour

This section presents some theories of consumer behaviour which are relevant to online shopping during Covid-19.

Customer satisfaction is an important notion in marketing that relates to a customer's level of happiness with a product, service, or overall experience. To explain consumer satisfaction, several theories have been established, including the expectancy-disconfirmation theory, the equity theory, and the confirmation/disconfirmation theory (Yuksel, 2008).

According to the expectancy-disconfirmation hypothesis, contentment results from the gap between customers' expectations and their views of the actual product or service. Customers are likely to be content if the product or service meets or exceeds their expectations, but they are likely to be disappointed if it falls short (Zhang, et al., 2022).

According to the equity theory, customers judge happiness based on the fairness of their interactions with a firm. Customers are more likely to be happy if they believe they are being treated fairly in their contacts with the firm. According to the equity theory, consumers evaluate their satisfaction based on the fairness of their interactions with a firm; if they believe they are being treated fairly, they are likely to be content; if they believe they are being treated unfairly, they are likely to be unsatisfied (Zhang, et al., 2022).

According to the confirmation/disconfirmation hypothesis, customers judge satisfaction depending on whether the actual product or service fits their expectations. They are likely to be satisfied if the goods or service match their expectations, but unsatisfied if it falls short.

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Several industries, including healthcare, manufacturing, and construction, place a premium on health and safety. Many theories, including the health belief model, the social cognitive theory, and the theory of planned behaviour, have been created to explain health and safety behaviours and results.

People's health behaviours are influenced by their beliefs about their vulnerability to sickness, the severity of the illness, the advantages of taking preventative steps, and the barriers to taking such actions, according to the health belief model.

According to the social cognitive theory, people learn healthy habits through observation, modelling, and reinforcement. Individuals are more inclined to adopt healthy activities if they see others doing so and receive positive feedback for doing so. People's intentions to engage in health activities, according to the idea of planned behaviour, are impacted by their attitudes toward the habit, their views of social norms, and their perceived behavioural control. Individuals are more likely to engage in health activities if they have good attitudes about the conduct, believe that others expect them to engage in the behaviour, and believe that they can engage in the behaviour (Bandura, 1999). Finally, customer satisfaction, as well as health and safety, are key concepts in many businesses, and numerous theories have been established to describe them. Understanding these ideas can assist businesses in developing methods to increase customer satisfaction and promote workplace health and safety.

E-commerce and retail sector overview of Dublin, Ireland since Covid-19

Dublin, Ireland's capital, has a booming E-commerce and retail industry that is continually expanding to match consumer expectations. From high-end boutiques to huge department shops and internet marketplaces, the city offers a varied spectrum of shopping experiences. The burgeoning E-commerce and retail sector in Dublin provides a varied range of shopping experiences, including high-end shops, online marketplaces, and big retail projects.

Amazon, which has a strong presence in Dublin, is one of the most important firms in the E-commerce business. The city is home to the company's fulfillment facility, which acts as a hub for its online retail activities. Besides Amazon, numerous other online marketplaces and businesses are active in Dublin, including Etsy, ASOS, and Zalando. In terms of physical retail, Dublin has a wide range of options. A variety of high-end shops, as well as prominent

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department stores such as Brown Thomas and Arnotts, can be found in the city centre (Lisney, 2022)

Dublin has also seen the creation of numerous significant retail projects in recent years. The Dundrum Town Centre, which opened in 2005, is one of the city's major retail malls, with over 100 businesses, restaurants, and cafés. Another significant development is the Blanchardstown Centre, which is located on the city's outskirts and has over 180 stores, a cinema, and a variety of food options (Blanchardstown Centre, 2021). Like in many other parts of the world, the Covid-19 pandemic has had a huge influence on the E-commerce and retail sectors in Dublin. With physical shopping constraints, several shops have turned their attention to online sales, while others have reacted by providing click-and-collect options. Notwithstanding the hurdles, Dublin's E-commerce and retail sector is thriving, with many companies continuing to develop and adapt to the changing retail scene (Irish Times, 2021). The clerys building, formerly home to the clerys department store, has reopened in Dublin following a major renovation. The development presently comprises retail, office, hotel, and rooftop hospitality areas, boosting the city's main boulevard. The historic clerys clock is also being restored as part of the revitalization of this cultural landmark (Dublin Labour Market, 2023).

Irish Retail Sector since the pandemic in the year 2021

Before the pandemic, Ireland was one of the greatest employers of retail contributing an estimated €7 billion to the Irish national treasury. The retail sector has been one of the most important employment sectors in Ireland (KPMG, 2022). As per (Lisney, 2022), several physical shops were closed in the year 2021 for more than three months. Many retail industries such as textiles, clothes, and footwear were particularly heavily hit but had an instantaneous and significant comeback after stores resumed. As they remained open, the supermarket and convenience industries had a stable year. Numerous substantial merchandise businesses were permitted to become operational, although there were certain constraints on the products that are sold. According to (Lisney, 2022) consumer morale fell in January 2021, aligning with a curfew and the post-christmas period. Nevertheless, it rallied promptly and maintained reasonably solid and sturdy over the course of the year, even with the danger of omicron exerting considerable consequence at the end.

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Irish Retail Sector from the year 2022 and onwards

As per (Lisney, 2022), the retail sector is an important part of the Irish economy, generating employment for more than 300,000 people across the country. The retail sector contributes around €30 billion in annual sales, which is roughly 12% of Ireland's GDP, and generates €7 billion in tax revenue for the government. The Irish retail sector has transformed dramatically since the pandemic. Consumer purchasing patterns have evolved, and they are now being affected further by rising price inflation. Retailers are still dealing with workforce shortages and increased operational expenses, and while certain supply chain concerns stabilized, on the other hand, they remained uncertain because of the situation in Ukraine for the remainder of 2022.

Seasonally Adjusted Retail Sales Index - All Businesses		
(Base Year 2015 = 100)		
	Volume Index	Value Index
February 2020	121.5	112.3
June 2021	133.3	124.0
May 2022	126.0	123.2
June 2022	124.4	122.9
<i>% change</i>		
<i>Monthly</i>	-1.3%	-0.3%
<i>Annual</i>	-6.6%	-0.9%
<i>February 2020 - June 2022</i>	2.4%	9.4%

Table 2: Retail Sales Index - June 2022 (Central Statistics Office, 2022)

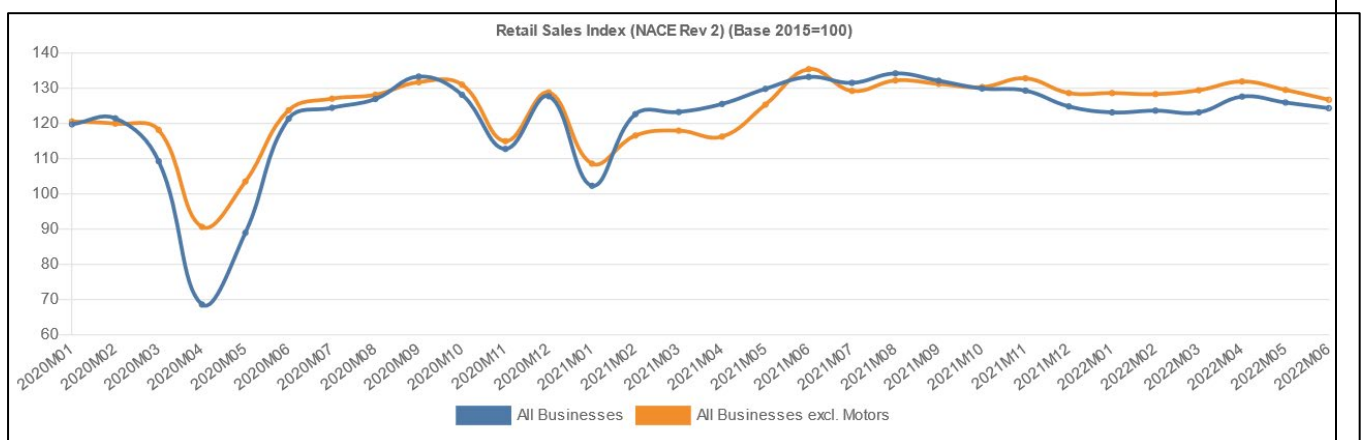


Figure 2: Retail Sales Index - Seasonally Adjusted Volume January 2020 - June 2022 (Central Statistics Office, 2022)

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As per (Central Statistics Office, 2022), the data is provided with the information between all businesses and all businesses excluding motors between the years 2020 and 2022. The graphs show significant changes between the two entities. Commenting on the retail sales index, Stephanie Kelleher, Statistician in the Business Statistics Division mentioned that the retail sales decreased by 1.3% in the month of June 2022 as compared to the month of May 2022 which can be seen mentioned in Table 2, the retails volumes were decreased or lowered by 6.6% in June 2022 as compared to the previous year of June 2021.

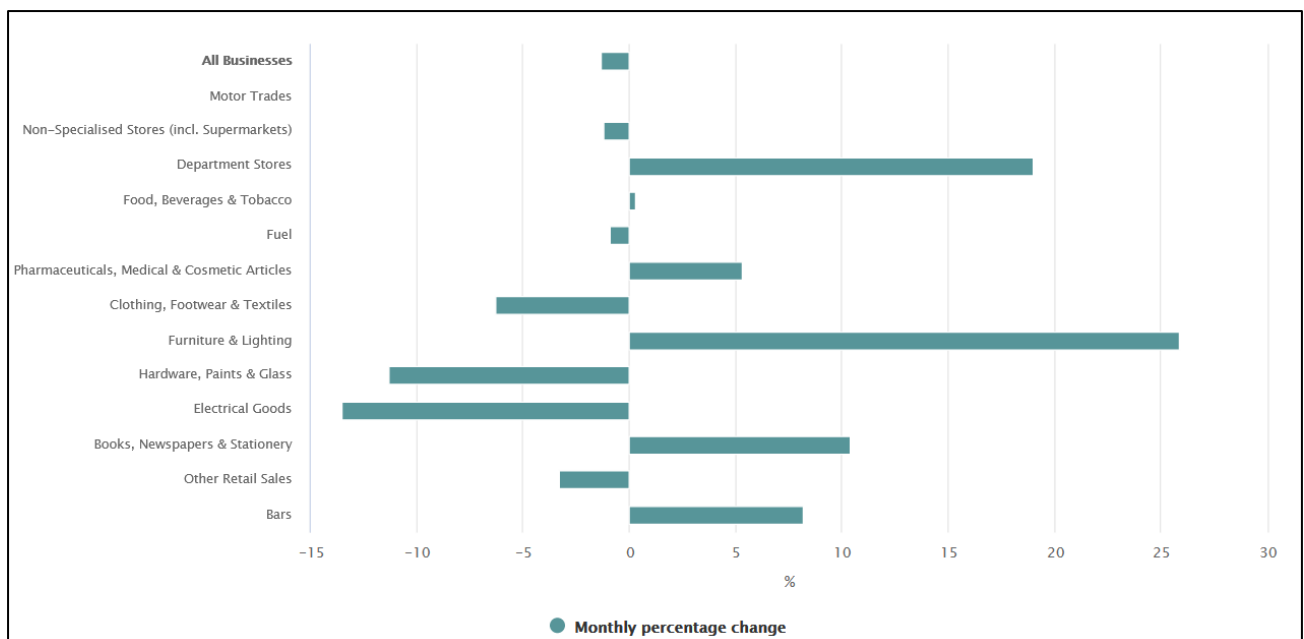


Figure 3: Monthly percentage changes for 13 Retail Business- June 2022 (Central Statistics Office, 2022)

As per (Central Statistics Office, 2022), in the month of June 2022, the graph states that the highest monthly volume growth was recorded in five retail businesses. Furniture and lighting saw a tremendous increase at a range of (+25.9%). Secondly, department stores reached (+19%). Furthermore, books, newspapers, and stationery also added at about (+10.4%). Finally, bars along with pharmaceuticals, medical, and cosmetic articles contributed at around (+8.4%) and (+5.1%) each. On the other hand, in the same month, the retail business also experienced their lowest reduction in the volume of sales in electrical goods with (-13.5%), hardware, paints & glass (-11.3%), and clothing & footwear (-6.3%).

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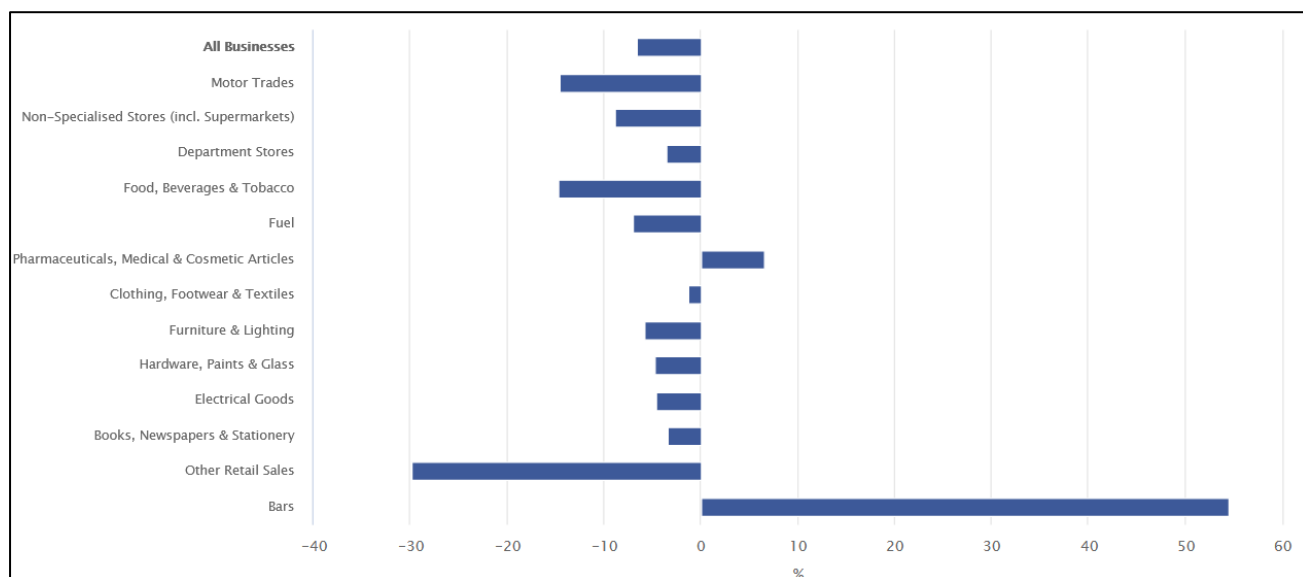


Figure 4: Annual seasonally adjusted volume percentage changes for 13 Retail Business- June 2022 (Central Statistics Office, 2022)

As per (Central Statistics Office, 2022), two sectors in the retail business have shown an increase in sales volume year on year when compared to June 2021. Bar sales increased by 54.5% compared to June 2021, although despite this significant increase over the preceding year, bar sales were 24.0% below their pre-Covid-19 level in February 2020 (Details of bar sales in February 2020 can be seen in Figure 6). Pharmaceutical, medical, and cosmetic articles also increased (+6.6%) year on year. But on the other hand, other sectors in the retail business have shown the highest reductions or decreases in sales volume when compared to June 2021. But retail sales saw the highest annual volume decreases at about (-29.8%). Followed by food, beverages & tobacco, and motor trades have shown yearly volume sales decrease at about (-14.6%) and (-14.5%) respectively.

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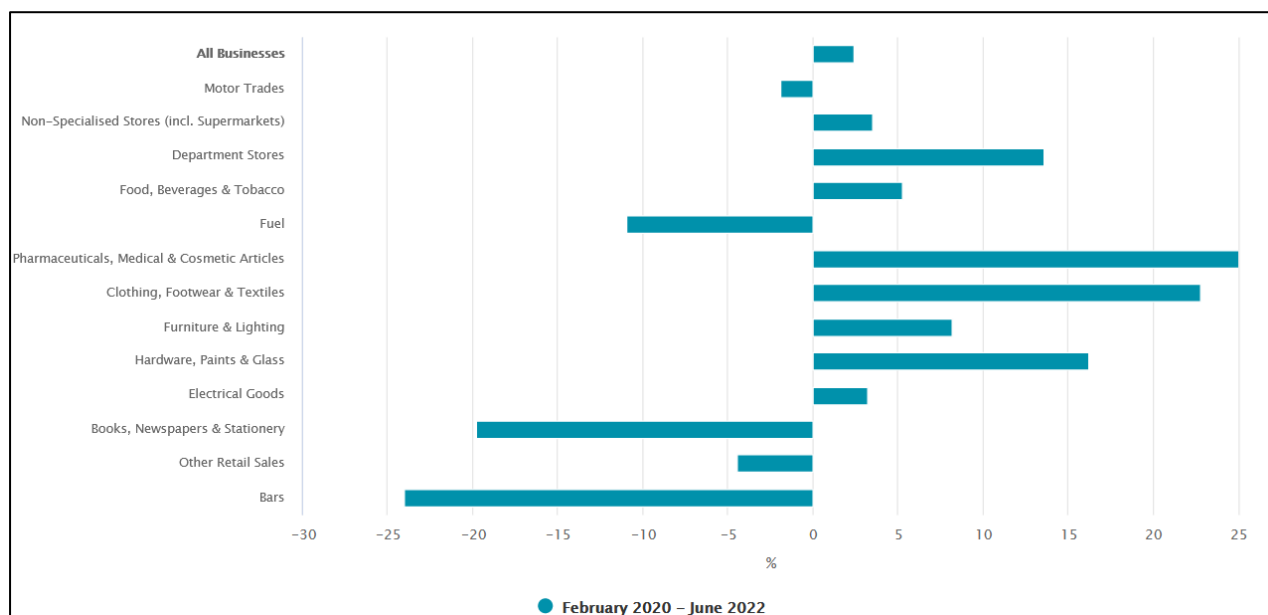


Figure 5: Seasonally adjusted volume percentage in the 13 retail businesses- Pre and post covid (February 2020- June 2022) (Central Statistics Office, 2022)

As per (Central Statistics Office, 2022), there are several sectors in the retail business which has shown an increase and decrease in the volume sales in June 2022 when compared to February 2020 (pre-Covid 19 seasons). From the graph, In June 2022, pharmaceuticals, medical, and cosmetic articles have shown the greatest growth in volume sales with around (+25.4%). Additionally, clothing, footwear & textiles (+22.8%), hardware, paints & glass (+16.2%), and department stores (+13.6%) saw the greatest growth.

On the other hand, bars (-24.0%), books, newspapers & stationery (-19.8%), and fuel (-10.9%) saw the greatest losses in sales volume in June 2022 when compared to February 2020 levels. The loss of sales volume in the first quarter of 2022 was mostly due to the Russia- Ukraine war which has led to a rising inflation level.

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The most recent date for Retail sales was published on 28th April 2023:

Seasonally Adjusted Retail Sales Index - All Businesses		
	Base Year 2015 = 100	
	Volume Index	Value Index
March 2022	119.7	119.0
February 2023	127.4	134.3
March 2023	130.0	136.7
<i>% change</i>		
<i>Monthly</i>	2.0%	1.8%
<i>Annual</i>	8.6%	14.9%

Table 3: Retail Sales Index - March 2023 (Central Statistics Office, 2023)

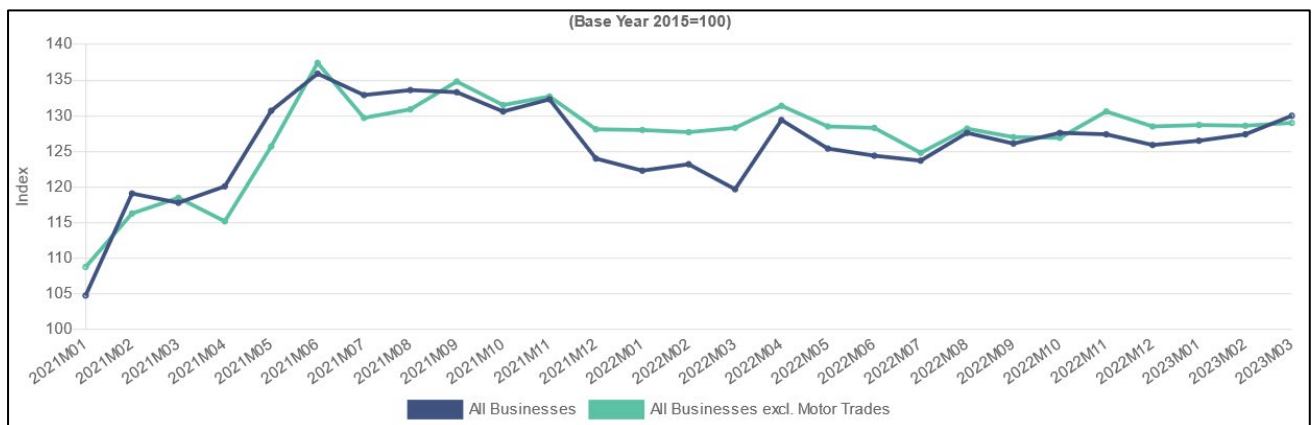
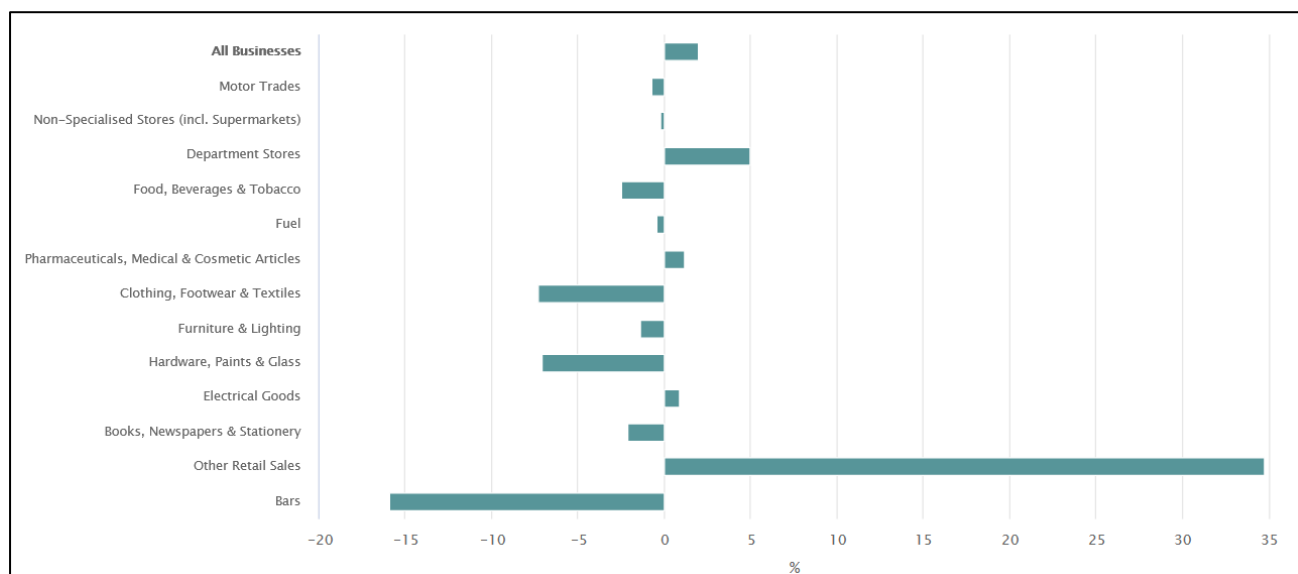


Figure 6: Retail Sales Index - Seasonally Adjusted Volume January 2021 - March 2023

As per (Central Statistics Office, 2023), the data is provided with the information between All businesses and All businesses excluding Motors between the years 2021 and 2023. The graphs show significant changes between the two entities. Commenting on the retail sales index, Stephanie Kelleher, Statistician in the Business Statistics Division mentioned that the retail sales increased in the month of March 2023 by 2% as compared to the month of February 2023. which can be seen mentioned in Table 3, the retails volumes on the annual basis were increased by 8.6% in March 2023 as compared to the previous year of March 2022. On the other hand, motor trades increased by 0.3% as compared to the previous month of February 2023. Furthermore, on the annual basis the motor trades were higher by 0.6% in March 2023 as compared to the last year of March 2022.

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Monthly percentage change

Figure 7: Monthly percentage changes for 13 Retail Business- March 2023 (Central Statistics Office, 2023)

As per (Central Statistics Office, 2023), In the month of March 2023, the graph states that the highest monthly volume growth was recorded in other retail sales that saw a tremendous increase at a range of (+34.8%). Secondly, department stores showed a slight increase of about (+5%). Finally, electrical goods along with pharmaceuticals, medical, and cosmetic articles contributed at around less than 5 percent each. On the other hand, in the same month, the retail business also experienced their lowest reduction in the volume of sales in bars with (-15.9%), hardware, paints & glass (-7.1%), and clothing & footwear (-7.3%).

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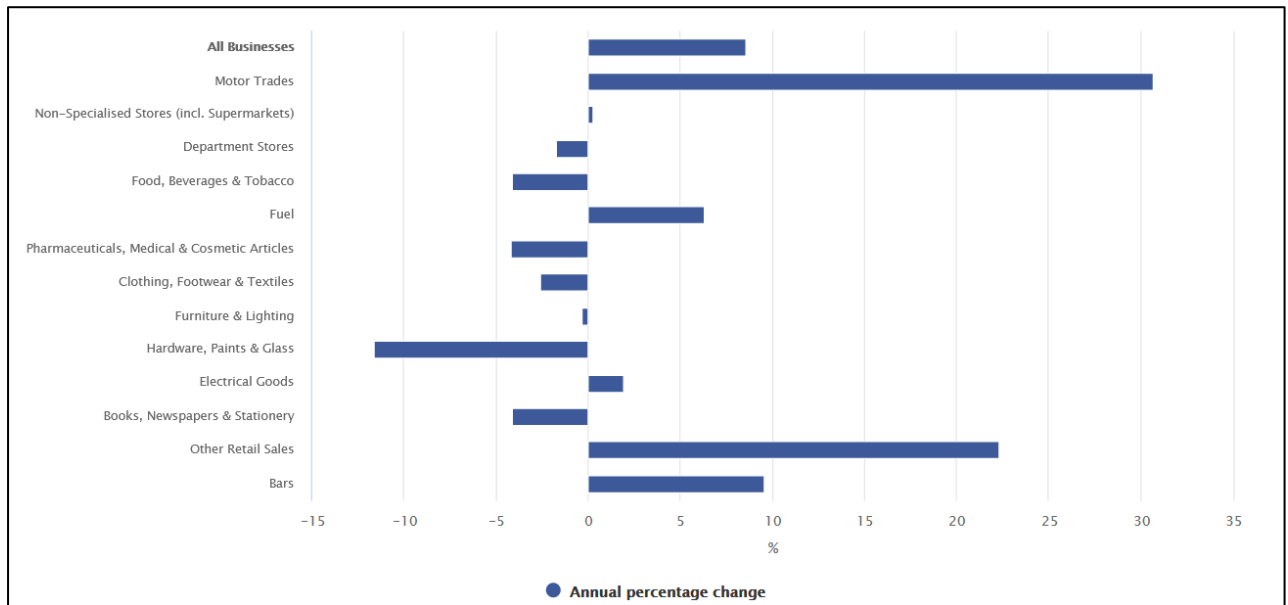


Figure 8: Annual seasonally adjusted volume percentage changes for 13 retail business-March 2023 (Central Statistics Office, 2023)

As per (Central Statistics Office, 2023), five sectors in the 13 retail business have shown an increase in the annual sales in volume as compared to March 2022. Motor trades has shown a significant increase in the annual sales with over (+30.7%). Followed by other retail sales with a positive increase of (+22.3%). Furthermore, bar and fuels sales increased by +9.6% and +6.3% respectively. But on the other hand, other sectors in the retail business have shown the highest reductions or decreases in annual sales volume when compared to March 2022. Hardware, paints, and glass saw the highest annual volume decreases at about (-11.6%). Followed by food, beverages & tobacco, and books, newspapers and stationery have shown similar yearly volume sales decrease at about (-4.1%) respectively. By looking at the latest stats from (Central Statistics Office, 2023), it can be said that the inflation rate has eased in 2023 as compared to 2022.

Ukraine-Russia war impacts on the E-commerce of Ireland

In 2021, the Ireland economy recovered strongly, thanks in large part to the lifting of public health boundaries, an improvement in demand from consumers, and significant export activity. However, an array of issues has led to a negative effect on projected development in the year 2022. The most notable example is Russia's invasion of Ukraine, which has had a big influence not only on the Irish markets but also on the global economy. Prices for all commodities

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increased because of the disruption in the energy markets (ESRI, 2022). As per (Maria, 2022), the ongoing war between Russia and Ukraine has impacted the E-commerce sector of Ireland very brutally. This war creates severe consequences in the retail sector of Ireland. The pseudo-defensive war has introduced tremendous shockwaves through the Irish economy especially the E-commerce sector of the retail industry. The natural gas crisis is the biggest issue of all. Ireland imports most of its natural gas requirements from Russia but as an after-effect of war, these imports are banned by the European Union which leads to a severe energy crisis for every industry in Ireland. All this course of events would lead Ireland to a major economic disruption. As a result of this Ireland suffered from grain availability and was forced to buy grain at a much higher price from different countries. These effects of war gave rise to the supply chain crisis in Ireland severely. On top of this situation, as a member of the European Union, Ireland is bound to follow the sanctions on Russia and this only leads to accelerating the worst scenario in the economy of Ireland (Estrada & Koutronas, 2022). The multifaceted impact of this war continuously challenged the Irish economy in different ways. Housing the refugees is one of them.

As of 2022, there has been almost 44,000 refugees have arrived to take shelter in Ireland as the Department of Justice, Ireland mentioned. The Irish government has also sanctioned a monthly €400 payment to the household that gives shelter to the refugees (Mattacheo, 2022). All these burden results in more consumption of natural resources, increasing the level of energy crisis and deaccelerate the economic growth of Ireland drastically.

E-commerce in the retail sector is an example of an affected industry. This industry is now experiencing a crunch situation after covid-19 pandemic and the war. The more the war deepens the more difficult it gets. This industry has been suffering from acute loss of investments and frequent price hikes of a product which is opposite to the idea of E-commerce business. Basic customer support systems and delivery charges went sky-high after the war (Estrada & Koutronas, 2022). Unlike the growth at the time of the pandemic regime, the E-commerce sector is now anticipating a drastic decline in its business due to various uncontrolled variables and uncertainty of the market in Dublin, Ireland.

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Conclusion

The following section of the Literature review has helped to analyse the key findings in a detailed manner to present a better future scope for the topic's evaluation:

1. Emergence of E-commerce in 2020: When it comes to shifting customer perceptions on retail behavior, the worldwide epidemic has been a major motivating factor. Due to prohibitions and other restrictions on social interaction, many businesses have been forced to shift their focus to online sales to survive. At the same time, consumers turned to online purchasing.
2. E-commerce on consumer behaviour: The literature review also highlights consumer purchasing behaviour and patterns. E-commerce has made it more convenient for the customers to buy products through several websites to compare and assess prices and choose the finest offers based on their needs.
3. Decline of E-commerce retail sales in 2022: As per (Central Statistics Office, 2022), E-commerce had a major setback because of the Russian-Ukraine war. The inflation rates increased to 9.1%, highest in nearly 38 years in Ireland as cost of living and prices for all basic commodities increased. The retail sales saw a major reduction in 2022 compared to 2020.
4. Future of E-commerce in 2023: As per (Central Statistics Office, 2023), inflation rate has eased in 2023 as compared to 2022. Retail sales have increased as compared to 2022. But has E-commerce been accessible and manageable in Ireland?

The survey-based research draws on the main topics of the literature review to determine whether the objective has been completely achieved to understand and analyse has E-commerce been accessible and manageable in Ireland based on the survey reports.

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Chapter 3: Methodology

Introduction

Since it employs specific techniques and methodologies to create a comprehensive understanding of the selected issue, the methodology is an essential part of the research endeavour. The methodology chapter thoroughly describes the contributions of the methods to the project, evaluates them, and justifies the selection of approaches for the study effort. The researcher has decided to use the primary data gathering approach in the next section to provide a full grasp of the selected issue without the influence of a third party. The researcher decision to use quantitative methodologies has also defined a deeper understanding of the selected problem.

Research Onion

The Research Onion outlines a number of strategies and methods for attaining the aims and purposes of research. The Research Onion is of developing the strategies and tactics necessary to attain the objectives while adhering to the proper methods for data collection and analysis.

1. Research Philosophy
2. Research Approach
3. Research Strategy
4. Choices
5. Time Horizon
6. Techniques & Procedures

For instance, the research philosophy will specify how an observable understanding of the topic might be obtained (Silva, 2017). The strategies used to choose the data analysis methodology will be defined by the research design. On the other side, the method used to obtain the data will be determining how similar data might be gathered. While the sampling approach talks about the researcher chosen participants. Following that, the methodology used to analyze the data obtained is evaluated, and the project's ethical requirements are thoroughly stated in the ethical concerns section.

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Justification

According to (Saunders, et al., 2019), the selection of the research onion as the methodology step is responsible for defining the methods and techniques by which attaining the long-term value of the data can be managed. The consideration of the research onion determines the factors of the data collection method along with the analysis aspect that has the credibility of creating a long-term impact on the topic. Furthermore, the research onion included specific steps for meeting long-term research result value.

Research Philosophy

There are primarily two sorts of paradigms that may be found, such as positivism and interpretivism, which define the procedures and processes in which evaluation of the data and research project is carried out to offer a detailed idea of the chosen issue (Silva, 2017). The study project is capable of identifying information based on the notion of categorization and explanation of diverse entities with the aid of the ontology philosophy, and results are offered based on the information's inquiry. Research papers can employ the theory of how knowledge and information about a subject are gathered and defined using the epistemology philosophy, which also helps to explain the method used to manage the information that has been gathered.

The positivist paradigm was chosen for the research project because it allows information to be evaluated independently of outside influences. The approach has credibility since it presents an observational perspective on the chosen subject.

Justification

As stated by (Pandey & Pandey, 2015), positivism as a research philosophy has the credibility of providing a detailed understanding of the topic from objective ideas. The consideration of the positivism philosophy in the project has helped to use the observational ideas of the research topic that, in the long term, presents a better idea about the collected data. Furthermore, the primary data are well evaluated in the project by using the assumptions related to the topic.

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Research Approach

The deductive research approach has been used in this project because it enables the project to precisely identify the selected issue using statistical concepts and methodologies. The research strategy must outline the steps and standards that will be utilised to analyse the data collected. This assignment will employ the deductive research methodology (Gupta & Gupta, 2022). One of the key justifications for using the deductive approach for the research project is the fact that it has the credibility of analysing the acquired data from the standpoint of statistics. The statistical description of the information is responsible for presenting a detailed and evaluated idea of the research topic that, in the long term, helps the project attain a better and evaluated research value too. Therefore, the researcher has decided to select the deductive approach here in the project.

Justification

According to (Mishra & Alok, 2017), the deductive method was chosen for this project by considering statistical methodologies. The research has enhanced knowledge of the subject based on the statistical analysis and the information gathered. The fact that the researcher has chosen to employ both qualitative and quantitative method, as well as the fact that the selection of the deductive methods gives a better concept of the issue, are further reasons for considering the deductive approach in the project.

Research Strategy

The experimental approach has been connected to the research methodology used in this work. The project was able to accurately analyse the variables it had acquired by selecting the technique, and it was also able to provide a full understanding of the subject by applying the evaluation (Gupta & Gupta, 2022). The project used the evaluation of the exploratory strategy to carry out an analysis based on the hypothesis. The study project has benefited from the real-world data collected to gain a complete comprehension of the selected topic while keeping in mind both theoretical and statistical ideas.

By using a quantitative research approach, it will be possible to examine how E-commerce has been accessible and manageable in the retail sector since the pandemic. The quantitative method's statistical analysis will shed light on the matter.

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Justification

As described by (Sahay, 2016), the experimental research technique is responsible for helping the project consider the primary data and information, which has the credibility of helping the project define the selected research topic. Moreover, the project has used the experimental research technique to collect information from primary and secondary resources. As defined by (Saunders & Tosey, 2007), the experimental research strategy has helped the project evaluate the specific methods by which primary sources of data collection can be considered. Furthermore, the user of the method has used the scientific method of hypothesis analysis to determine a long-term research result with accuracy as well. Moreover, the experimental method helps to rest the themes and presents a long-term result value based on the assumptions of the external data and knowledge regarding the selected research topic.

Choices

The two primary categories of research methods are a quantitative method and qualitative method, according to (Devi, 2017). The theoretical approach used by the qualitative research method in data evaluation and analysis aids in providing a clearer knowledge of the chosen issue from secondary data sources without taking a prejudicial stance. Based on data gathered from direct sources and statistical analysis of the research information, the quantitative research approach uses numbers and statistical descriptions to decide the findings (Kumar, 2018).

The research allowed for the presentation of a thorough statistical analysis of the data, which effectively raised the worth of the study findings. This made the primary quantitative approach the way that was chosen (Mishra & Alok, 2017). The information gathered from direct sources is also evaluated when the method is considered.

The project has used the survey method to gather data quantitatively with the aid of the mono-method approach, and the outcome has evaluated in the subsequent section with the aid of the quantitative method. According to the mono-method, choosing a specific style of approach for the project has the potential to provide a focused and analytical thought about it without any outside influence that can prejudice the results. Given how the procedure is used, it might be able to produce an exhaustive and analytical result.

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Justification

Research choices are equally essential for the overall outcome relevance of the research. The choices are very much important as these can effectively raise the worth of the study findings. The entire mono-method has selected a certain type of approach for the project has the credibility of developing a specific research outcome (Mishra & Alok, 2017). It shows how the Covid-19 pandemic has developed internet buying, which has prompted more E-commerce companies to enter the market.

Time Horizon

The time horizon selected for this research has a connection to the cross-sectional methodology. The choice of time horizon allows the project to collect data from one time zone and efficiently handle a larger sample size, which may be used to explain why this technique was chosen (Saunders & Tosey, 2007). Additionally, by selecting a time horizon, quantitative data collecting for the project becomes accurate and meaningful and delivers a clear understanding of the specified subject without any biased influences.

Justification

The time horizon is effective because it is focused on the cross-sectional study of the research. That develops the relativity of the research. That strengthens the view on the research by increasing the understanding of the upsurging usage of E-commerce services was a prominent trend that occurred throughout the pandemic. The time horizon helps to highlight the growth as well as breakage and decay of the research effectively. Time distribution is the most dynamic factor of the research. It also affects the major evaluation of the outcomes of the proposed action that improves the research's relevance and impacts.

Techniques & Procedures

By choosing precise methods for data gathering and analysis, the project will likely benefit from choosing accurate approaches and procedures. The process, such as data collecting, data analysis, and sampling, is taken into consideration to give a better and more complete understanding of how the information will be managed (Kothari, 2015). To accurately achieve the study goal and objectives, good management of the chosen techniques and resources is required.

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The resources utilized in this project are connected to the survey questions that were developed by the researcher to get a thorough understanding of the chosen topic.

The primary data collection approach was employed to complete this study on the elements that how E-commerce has been approachable in the retail sector in Dublin, Ireland since Covid-19.

The data collection is based primarily on direct data sources; it is also linked to an online poll that aims to cover the first-hand experiences of E-commerce customers based in Dublin, Ireland. These people have experienced the time when the regulations led to challenging circumstances for the customers to purchase essential products. The different factors that made the E-commerce services manageable and accessible can be understood by taking responses from the customers in Dublin, Ireland. Certain criteria have been used to select respondents for the online survey. The respondents must be aged above 18 to be eligible to take part in the survey as is the minimum age to be able to provide consent for taking part in academic research. Moreover, to take part in the survey the respondents must be a resident of Dublin Ireland during the Covid-19 pandemic. It is to make sure that they have adequate experience of using E-commerce services from the city during the pandemic.

The study has used the data gathered from the survey using Microsoft Excel to address the research questions (Dhall, 2019). The results of the analysis have been presented in the form of bar graph to illustrate the responses of the survey participants. The responses have been interpreted to generate findings.

Justification

Adaptation of techniques and major procedures helps the research to uplift its overall efficiency. In addition, it also focused on major internal and external parts of the research to upsurge its effectiveness and relevance (Zawacki-Richter, et al., 2020). The techniques and methods have involved both quantitative and a descriptive approach which is linked with several techniques. The development of the research's philosophical stance is supported using quantitative data analysis techniques. By selecting each of the techniques and measures, the project needs to upsurge the relevance of information evaluation and outcome representation in an effective way.

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Research Sampling Techniques

To increase the research's worth and validity, the random sampling approach also provides an objective process for choosing participants (Lavrakas, 2011). The use of random sampling ensures that the major findings of the study should be close to those obtained if the population had been restrained.

Justification

The adaptation of the random sampling method helps to develop the data collection process. That upsurge in the usage of E-commerce services was a prominent trend that occurred throughout the epidemic. It also helps to improve the unbiased data analysis process to increase the understanding on Covid-19 epidemic has had a huge influence on how individuals in Dublin, Ireland buys and obtain products and services. The sample of the research involves a total of 41 customers of E-commerce industry based in Dublin, Ireland. These people have been selected as the research is focused on accessibility of E-commerce services since the Covid-19 pandemic in Dublin, Ireland. The chosen sample has first-hand experience of the situation and can provide genuine responses.

Ethical Consideration

Ethical consideration is one of the most important sections as it supports the overall understanding of the research by maintaining its ethical boundaries. It also improves the entire expansion of informational relevancy effectively. For this research, ethical consideration is maintained by implementing BPS (British Psychological Society) codes of ethics and conduct and student ethics (Mohd Arifin, 2018). It also includes the participant's consent form most significantly, the entire participant's consent forms help to gather major consent from a total of 41 customers based in Dublin, Ireland. It will also help to develop the ethical structure of the research.

Limitations

There are several limitations associated with this project. Amongst them, limited time is effective. Because of the limited time, it is not possible to cover the major information sections.

The most crucial part of the research is the ethical consideration section since it upholds the research's ethical boundaries and helps us understand it. Also, it effectively expands the

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relevance of information overall. By using BPS (British Psychological Society) and student ethics in this research, ethical consideration is kept in mind (Mohd Arifin, 2018). The participant's consent form is also included. The respondents have provided consent to take part in the survey.

The author acknowledges that the survey results may not be fully representative of the populations, as the responses was primarily third level graduates and people under the age of 35. Future research on this area could gather information on wider, more representative sample.

Summary

To give an accurate study result at the project's conclusion, accurate methodology procedures and methods were used. Also, considering ethical issues has aided the project in making choices that have contributed favourably to it. Also, the rationale for choosing specific data gathering and analysis techniques has been discussed here. The use of quantitative research methods, specifically the experimental approach, has been justified based on the need to gather primary data and analyze it using statistical techniques to gain insight into the research. The deductive research technique was chosen for its capacity to effectively identify the selected issue utilizing statistical ideas and procedures. This method provides for an organized and systematic data analysis, which is consistent with the overall research goals. Similarly, the use of positivism as the research philosophy has been justified based on its ability to provide an objective perspective on the chosen topic, independent of external influences. The implementation of these methods helps to accomplishes the entire contextual framework of the research.

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Profile of respondents

The distribution of frequencies method was used to illustrate the demographic data in this report. Data are categorized into classes that are mutually exclusive using the frequency distribution. The amount of data in every category is then displayed (Manikandan, 2011). This helps to simplify the data.

Table 4: Breakdown of Demographic characteristics

Category	Sub-category	Frequency	Percentage
Gender	Male	24	60
	Female	16	40
	Missing	1	0
Total		41	100

Age	18-24	10	24.4
	25-34	26	63.4
	45-54	4	9.8
	above 55	1	2.4
Total		41	100

Education	Primary level education	0	
	Secondary school junior certificate	0	
	Secondary school leaving certificate	5	12.2
	Bachelor's degree	14	34.1
	Master's degree	20	48.8
	Doctorate	2	4.9
	No formal education		
Total		41	100

The above table represents the total number of participants that have participated in the survey. Out of 41 participants maximum number of participants were male contributing to 60%. Respondent were mostly below the age group of under 35 years. The majority of respondent were third-level graduates, and the survey results may not be completely representative of the population. The responses for the various questions are shown in Chapter 4: Data Analysis.

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Chapter 4: Data Analysis

Introduction

This chapter provides an analysis of online shopping as published by the CSO before providing the survey results.

In this part the data collected from the primary data collection process is analysed to get the most relevant information to help the researcher in drawing an effective conclusion. Data analysis is an important part of the research because it helps in analysing the information about the importance of e-commerce platforms for the retail sector in Ireland. With the help of this part, the researcher can find the necessary information that can address the research problems.

Analysis of online shopping data from 2019 to 2021

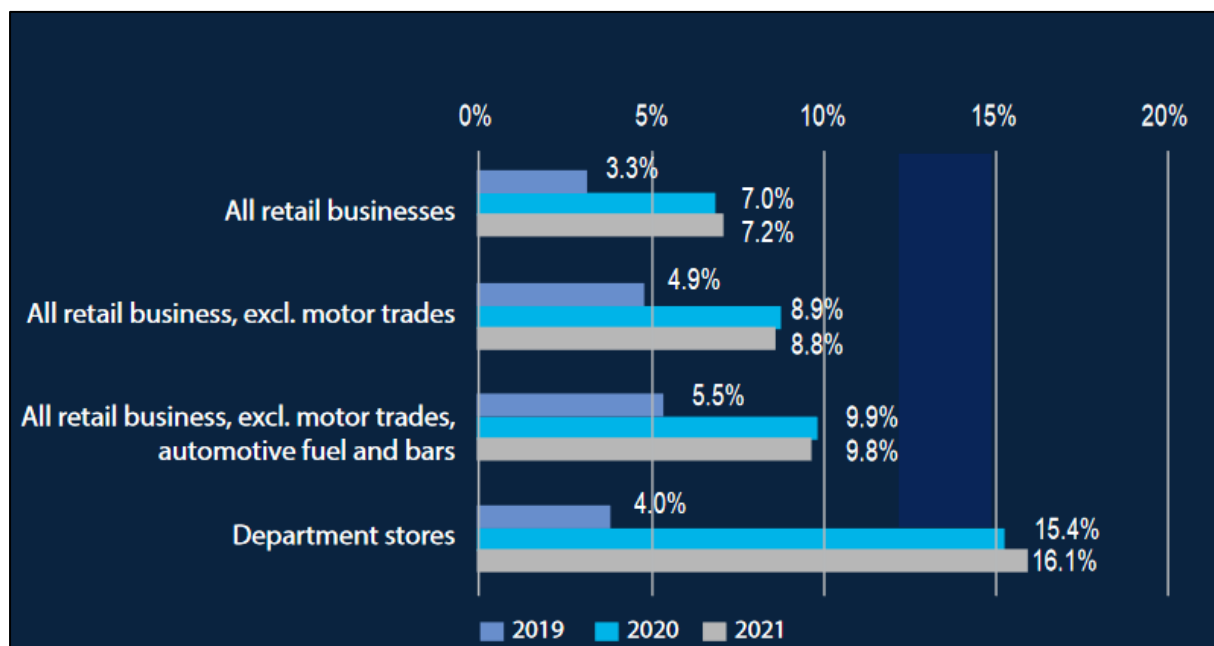


Figure 9: Percentage of Turnover from Online Sales, 2019 2021 (Central Statistics Office, 2022)

According to Central Statistics Office data, there has been significant growth in the amount of revenue produced by internet/online sales since 2019. The proportion of turnover generated in

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2021 was significantly higher in all the fields as compared to 2019. The percentage of revenue generated in all retail businesses increased from 3.3% in 2019 to 7.2% in 2021.

Data Analysis

The following section provides an analysis of the survey results.

1. What is the highest degree or level of education you have completed?

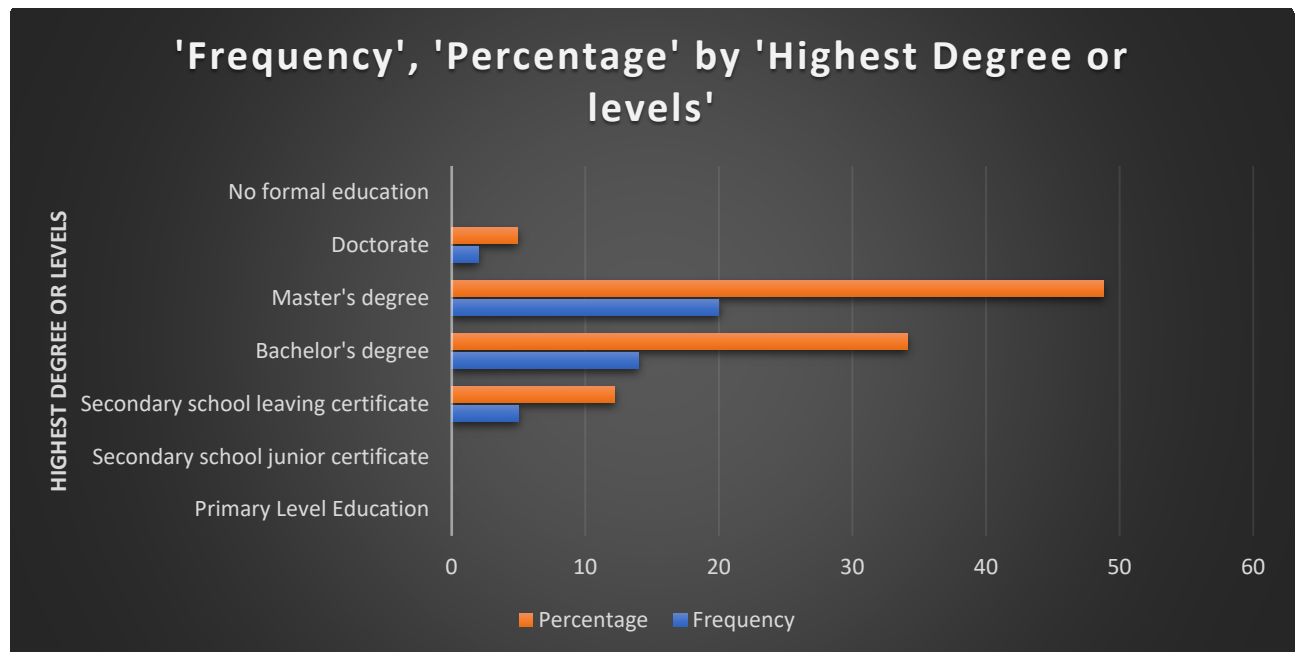


Figure 10: highest degree or level of education

The first question of the survey was about knowing the highest degree or level of the school of the participants that have participated in the survey. A total of 41 candidates participated in this survey to provide information and opinion about The E-commerce platforms and their impacts on the pandemic situation.

In response to the question, it has been found that participants have secondary school leaving certificates, and they constitute about 12.2% of the total participants. 14 participants belonging to 34.1% of the total participant group have a bachelor's degree. 20 participants who constitute 48.8% of the total participants have a master's degree. Doctorate degree is occupied by 2 participants, and they are about 4.9% of the total participants in this survey. Therefore, it has

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been highlighted from the question that closed to majority of the participants have a master's degree.

2. For how long you have been shopping in the retail sector in Dublin, Ireland?

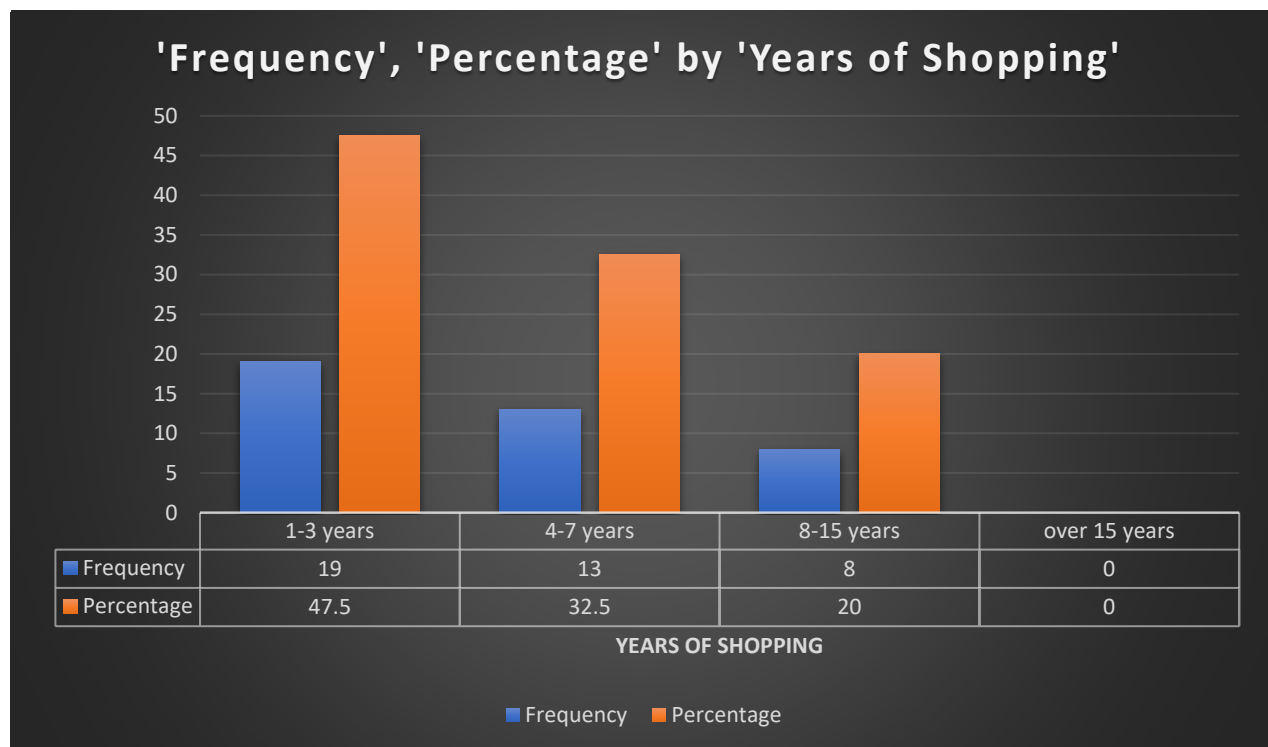


Figure 11: Years of Shopping

The question was about how long the customers have been shopping in the retail sector in Ireland. The main purpose of the question was to understand how long the customers connected with the online shopping platforms. A total of 40 valid responses have been received to this question and only one response was missing. The question has importance in the survey because it provides necessary information about the customers purchasing intention and the connection of customers with the E-commerce platforms. From the question it has been found that 19 participants constituting 47.5% of the total participants have been shopping in the retail sector for 1 to 3 years. 13 participants constituting 32.5% of the total participants have been using for 4 to 7 years. 8 participants who are around 20% of the total participants have been shopping for 8 to 15 years.

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3. Which of the following has been used mostly by you online during the Covid-19 pandemic in Dublin, Ireland?

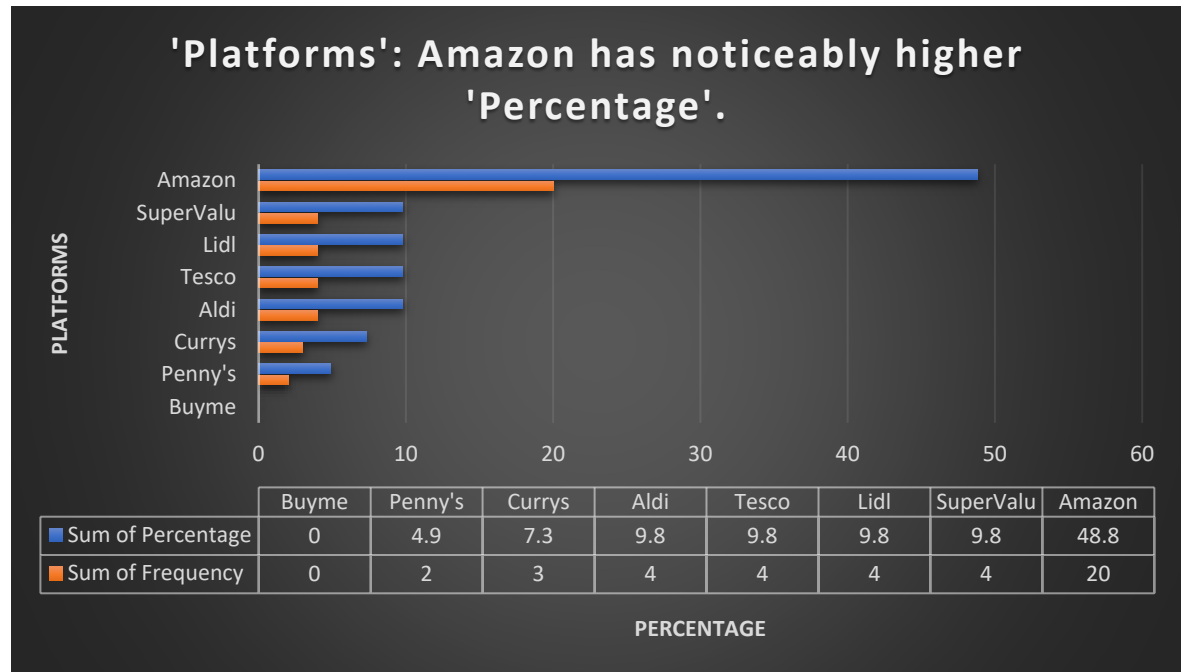


Figure 12: Online Platforms

The third question of the survey was about which E-commerce platforms the participants used during the pandemic in Dublin, Ireland. The question is important because it helps in understanding the usage of E-commerce platforms by the customers during the pandemic. During the pandemic E-commerce platforms started to progress because of the closure of physical stores and lockdown. During this pandemic several stores started using online platforms to take benefit of increased online retail needs by expanding commerce services, allowing consumers from participating online stores to explore and buy products without ever departing the website. In response to the question, it has been found that the participants use Amazon, Tesco, Aldi, SuperValu, Currys, Lidl, and Penny's for purchasing products. 20 candidates who constitute 48.8% of the total participants use Amazon for purchasing their necessary products. Tesco, Lidl, Aldi, and SuperValu are used by four participants which constitute 9.8% of the total participants who participated in the survey. Three participants constituting 7.3% of the total participants use Currys. 2 participants constituting 5% of the total participants use Penny's. Therefore, closed to majority of the participants use Amazon as the E-commerce platform for purchasing different products.

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4. Which types of products did you purchase the most from online retailers during the pandemic?

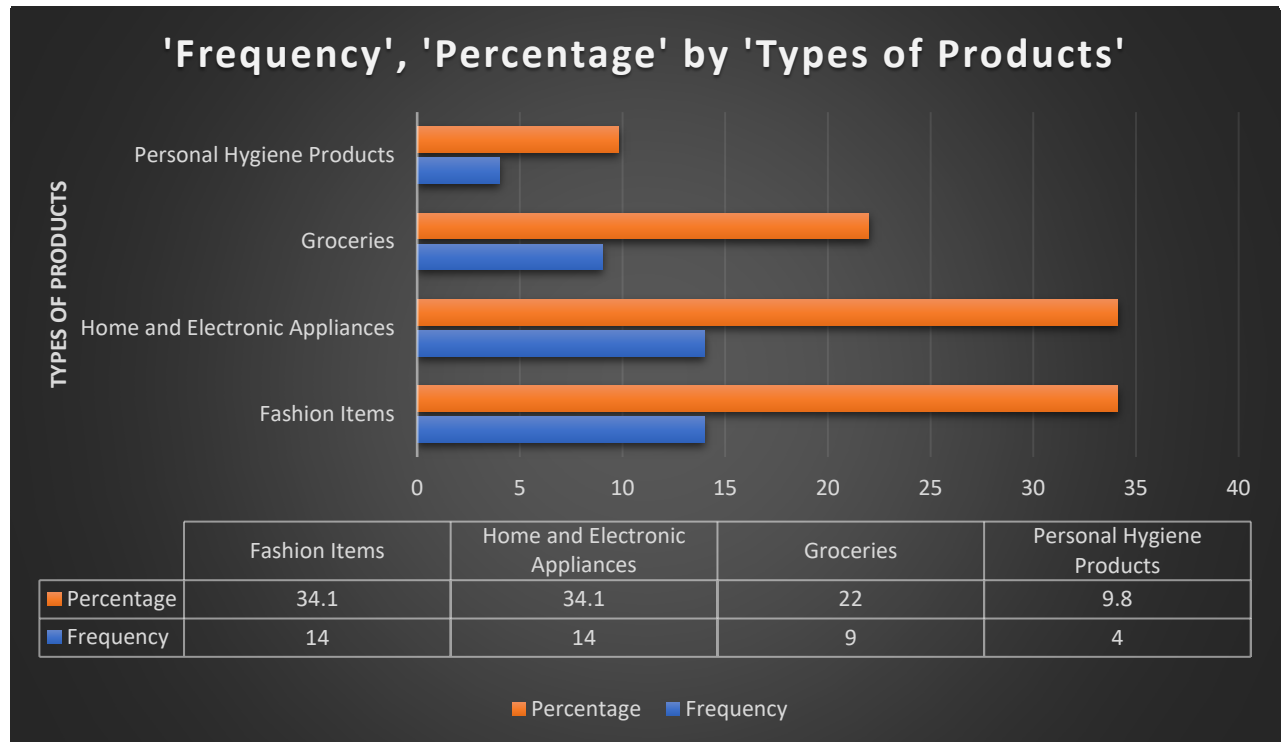


Figure 13: Types of Products

The question was about which products customers purchase from online retailers during the pandemic. It was found that 9 candidates constituting 22% of the total participants purchased grocery products. Fashion items were purchased by 14 candidates, and they constitute 34.1% of the total participants. Home electronic appliances were purchased by 14 candidates. 34.1% of candidates purchased a home and electronic product. Four participants constituting 9.8% of the total participants purchase hygiene products. It has been found that many of the participants purchase fashion items or home electronic appliances.

The main opportunity delivered by the E-commerce platform is that the customers can get every type of product starting from the grocery to the home and electronic appliances. It helps customers in getting the products as per their requirements. In this way, it can maintain the satisfaction level of customers.

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5. Please indicate your level of agreement with the following statement.

The improved hygiene/safety standards followed by the retailers made the E-Commerce services more accessible during the pandemic.

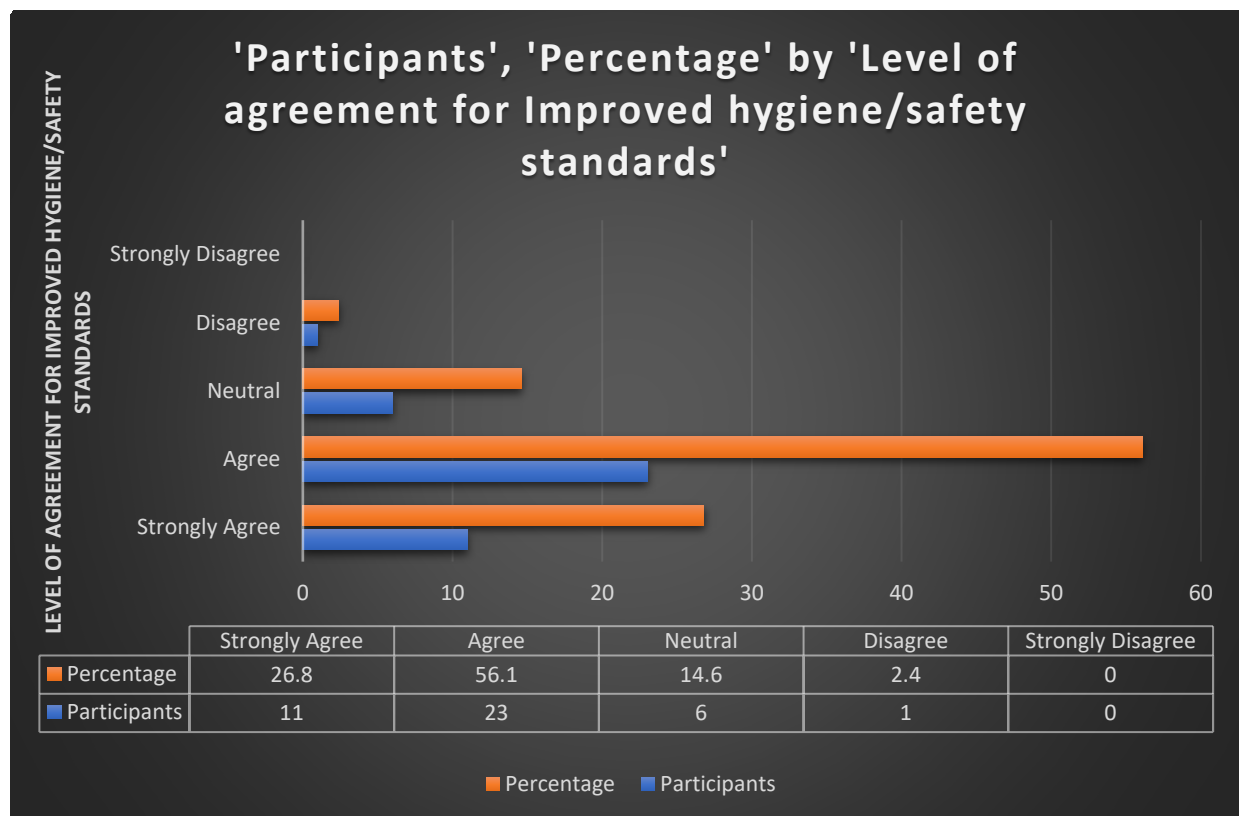


Figure 14: Level of agreement for Improved hygiene/safety standards

The main purpose of the question was to understand whether the improved safety standards followed by the retailers in the E-commerce service can make the services accessible during the pandemic. 11 candidates constituting 26.8% of the total participants strongly agree that and make the E-commerce service accessible to customers during the pandemic. 23 candidates who are about 56.1% of the total participants agreed with this concept. 6 participants constituting 14.6% of the total participants remained neutral. Only one participant constituting 2.4% of the total participants disagreed. Therefore, it can be stated that the majority of the participants agreed/strongly agreed that E-commerce services can increase accessibility while maintaining hygiene and safety protocols.

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During the pandemic, it was mandatory to maintain safety and hygiene to constrain virus spreading. The hygiene and safety protocols in the E-commerce platforms maintained the satisfaction of customers and their safety. In this way, it can increase the accessibility of the E-commerce platform for customers.

6. Please indicate your level of agreement with the following statement.

The convenient customer support provided by the retailers made the E-Commerce services more accessible during the pandemic.

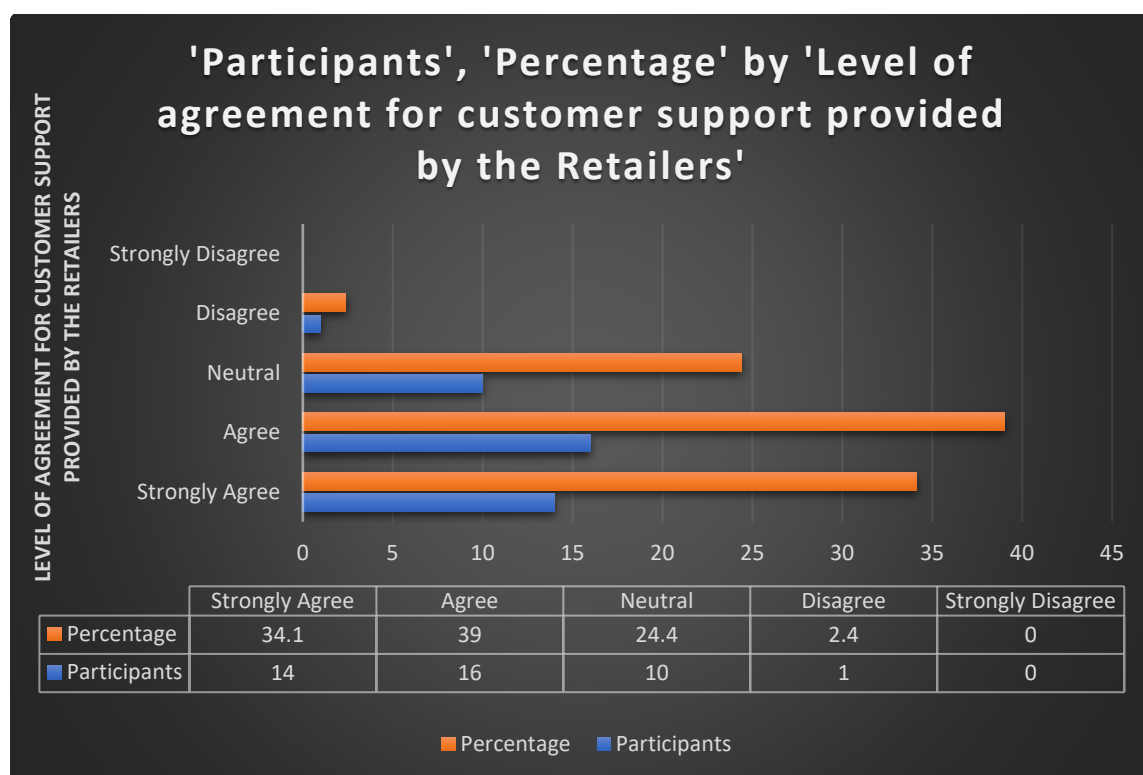


Figure 15: Level of agreement for customer support provided by the retailers

The primary focus was to understand the views and opinions of the participants regarding the customer support provided by the E-commerce platforms. Researcher wanted to know whether the convenient customer support provided by retailers can help E-commerce services become more accessible during the pandemic. In response to the question, it has been found that 14 participants constituting 34.1% of the total participants strongly agreed with this view. 16 participants who are about 39% of the total participants agreed. 24.4% of the total participants

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who are about 10 in number remained neutral. One candidate disagreed with the question, and they constituted 2.4% of the total participants. Therefore, the majority of the participants think that the customer service provided by E-commerce services is more accessible during the pandemic.

The E-commerce services provide customer-friendly products. The E-commerce services also deliver the products at long distance places and any region therefore customers from any area of the country can get the product delivered to their desired place. It maintains the satisfaction level of customers. The products become more accessible to customers.

7. Please indicate your level of agreement with the following statement.

The delivery services from E-commerce retailers were satisfactory during the Covid-19 pandemic.

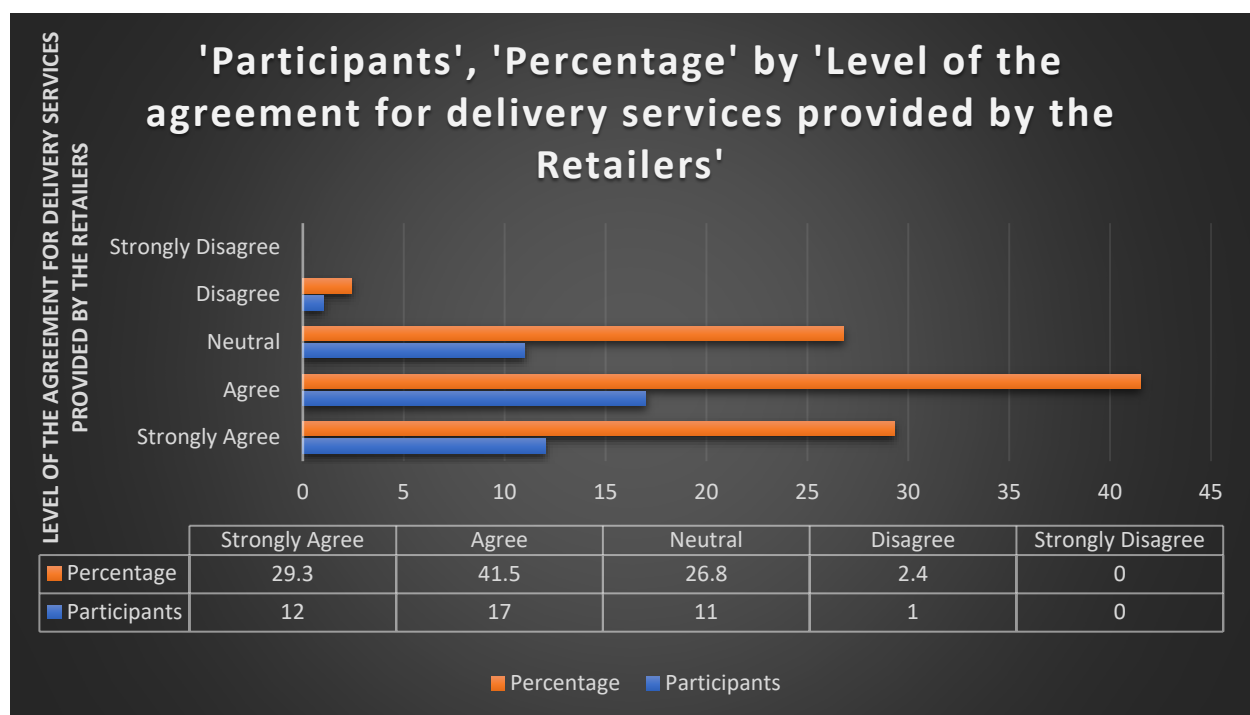


Figure 16: Level of the agreement for delivery services provided by the retailers

The purpose of the question was to identify the views of the participants about the fact that the delivery services from E-commerce retailers are satisfactory during the pandemic. In response to this question, it has been identified that 12 candidates who constitute 29.3% of the total participants strongly agreed with the view. 17 participants who constituted about 41.5% of the total participants agreed that the delivery services were satisfactory during the pandemic. Only

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11 participants remained neutral, and they constituted 26.8% of the total participants. One candidate constituting 2.4% of the total candidate strongly disagreed with this concept. Therefore, it can be stated that the majority of the participants think that the retailer services became satisfactory for customers during the pandemic.

During the pandemic situation, it became difficult for customers to visit the physical stores because almost all the stores were closed. In this situation, the E-commerce platforms tried to deliver the products to the customers at their doorstep. It not only helps customers in getting basic products at their homes but also has helped them in maintaining physical safety and security from the virus spreading (Inoue & Hashimoto, 2022). The E-commerce platforms also maintain low-cost services in the product delivery process which also attracted many customers. Maintaining the quality of the products the retailers also enhanced the satisfaction level of customers through the E-commerce platform. In this way, the service becomes more satisfactory for customers during the pandemic (Galhotra & Dewan, 2020).

8. Please indicate your level of agreement with the following statement.

The attractive discounts provided by the retailers made the E-commerce services more desirable during the pandemic.

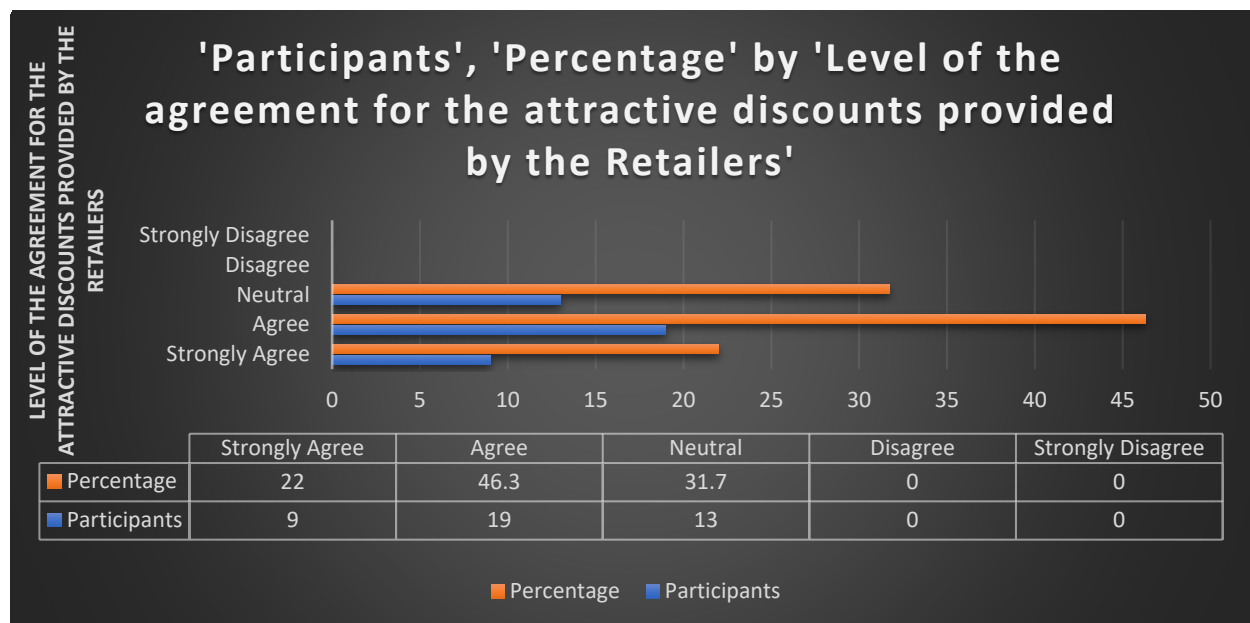


Figure 17: Level of the agreement for the attractive discounts provided by the retailers

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With the help of this question the main purpose of the researcher was to understand whether the discounts provided by the detailers have made E-commerce services more desirable to customers during the pandemic. In response to question 19 candidates who are constituting 22% of the total participants strongly agreed with this question. 9 participants who constitute approximately 46.3% of the total participants in the survey agreed with this question. 31.7% of the total participants remain neutral and their number is 13. A total of 41 participants responded to this question and it can be stated that the majority of the participants agreed/strongly agreed that the service session discounts provided by the E-commerce services are more desirable to customers during the pandemic.

E-commerce companies employ discount pricing to increase sales. Customers are more inclined to make purchases when prices are reduced, or special discounts are offered. The discounts and offers provided by the E-commerce platforms can attract many customers to purchase from these platforms. The discounts and offers also help in getting the customers products at an affordable price that helps customers get attracted to the services The delivery time also was maintained by the retailers while delivering through E-commerce platforms (Duan, et al., 2022). This is how E-commerce services can increase desirability among customers. In this way, services have become more desirable during the pandemic.

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9. Please indicate your level of agreement with the following statement.

The customised product suggestions provided by the retailers make the E-commerce services more accessible now as compared to pandemic situations.

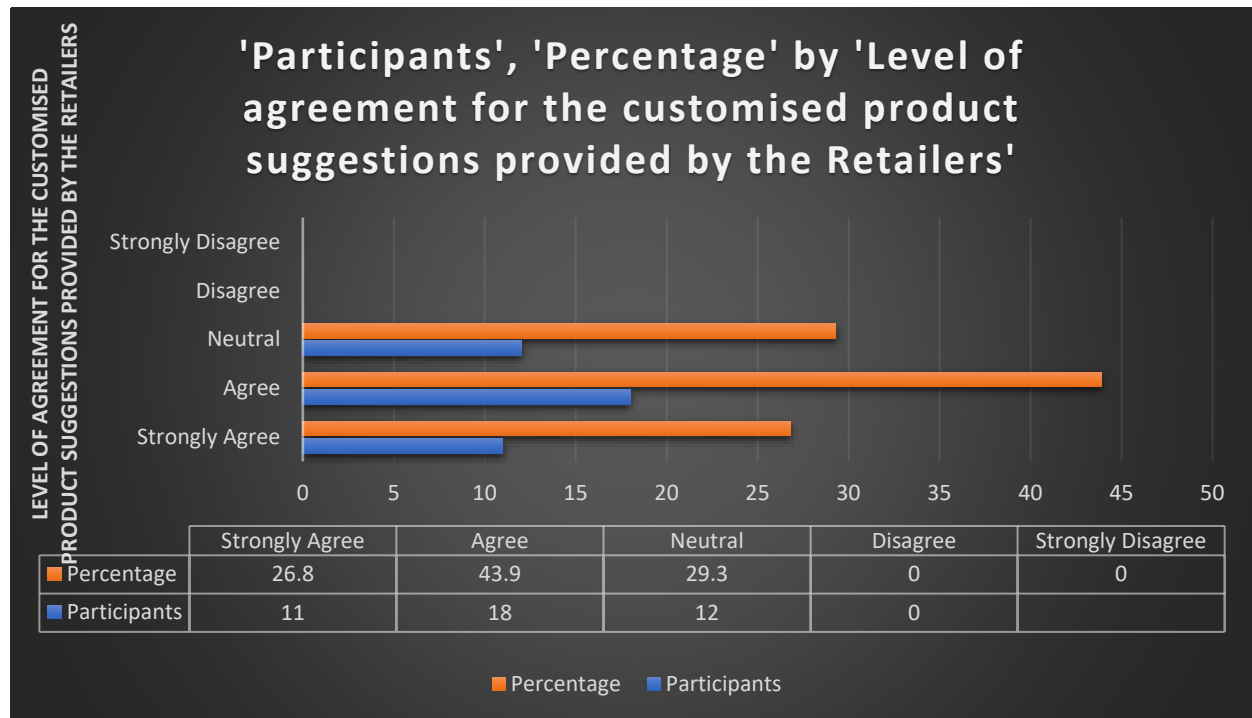


Figure 18: Level of agreement for the customised product suggestions provided by the retailers.

The question was whether the customized product suggestion provided by the retailers help the E-commerce services become more accessible now than in the pre-pandemic period. In response to this question, it has been found that 11 candidates constituting 26.8% of the total participants strongly agreed with this question. 18 participants who are about 43.9% of the total participants agreed. 12 candidates, 29.3% of the total participants remained neutral. Therefore, it can be stated that the majority of the participants agreed/strongly agreed that E-commerce services have helped customers in getting retail products and customized products more easily. The E-commerce platforms have made customized products more accessible to customers now as compared to the previous situation.

With the development of The E-commerce platform, it has become easy for customers to order a product anytime. Expectation, perceptions of consumers and how firms handle customer service, personalize messages, and offer them options have altered as a result of the expansion

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of E-commerce. Online shops might not have salespeople or restrooms for changing, but they can use data to make product recommendations based on the interests, choices, and fashion choices of their customers. Recognizing patterns of consumer behavior is essential for the growth of online buying. This enables an entity to develop smart pricing, promotion, and collaborations based both on specific customer needs and broad market trends (Maryville University, 2022). The products at the doorstep have also provided an opportunity for customers to save time. They can also pay for projects using their smartphone. Customers from their homes can access any products from any place in the world through the E-commerce website (Tran, 2021). This is how E-commerce platforms have made it easy and convenient for customers to get products to their doorstep.

10. Please indicate your level of agreement with the following statement.

I purchase products from E-commerce retailers more frequently now as compared to during the pandemic.

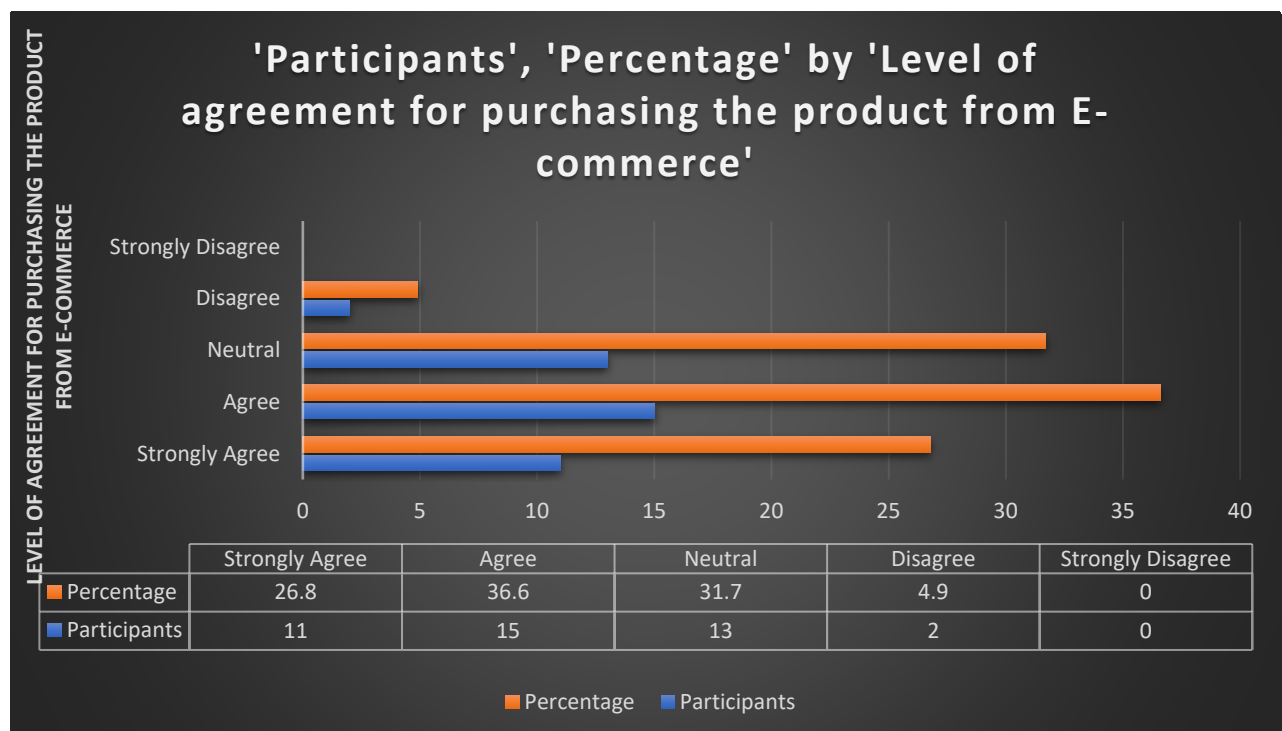


Figure 19: Level of agreement for purchasing the product from E-commerce

With the help of this question the researchers wanted to know how frequently the participants purchase products from E-commerce retailers now as compared to during the pandemic. In response to the question, it has been found that 11 participants constituting 26.8% of the total

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participants strongly agreed. 15 participants who are 36.6% of the total candidates agreed with this statement. 13 participants who are about 31.7% of the total participants remain neutral. Only two candidates constituting 4.9% of the total participants disagreed. Therefore, the majority of the participants purchased more frequently from E-commerce retailers now during the pandemic. During the pandemic situation, E-commerce platforms helped customers in getting products at their doorstep for their convenience and online purchases have increased significantly as a result of the Covid-19 pandemic, with the percentage of people who make regular or more often purchases online having risen (Gleeson, 2021).

During the pandemic, maintaining physical distance was mandatory and therefore it became difficult for customers to visit retail shops for getting their products (Othman, et al., 2020). The supply chain was affected mainly because of the pandemic. The ability to offer goods and services to anybody, from any location, is among the biggest advantages of E-commerce. Customers can make purchases from E-commerce website from anywhere in the world if they have access to it (Baluch, 2023).

11. Please indicate your level of agreement with the following statement.

Covid-19 has introduced a variety of difficulties for Irish E-commerce companies.

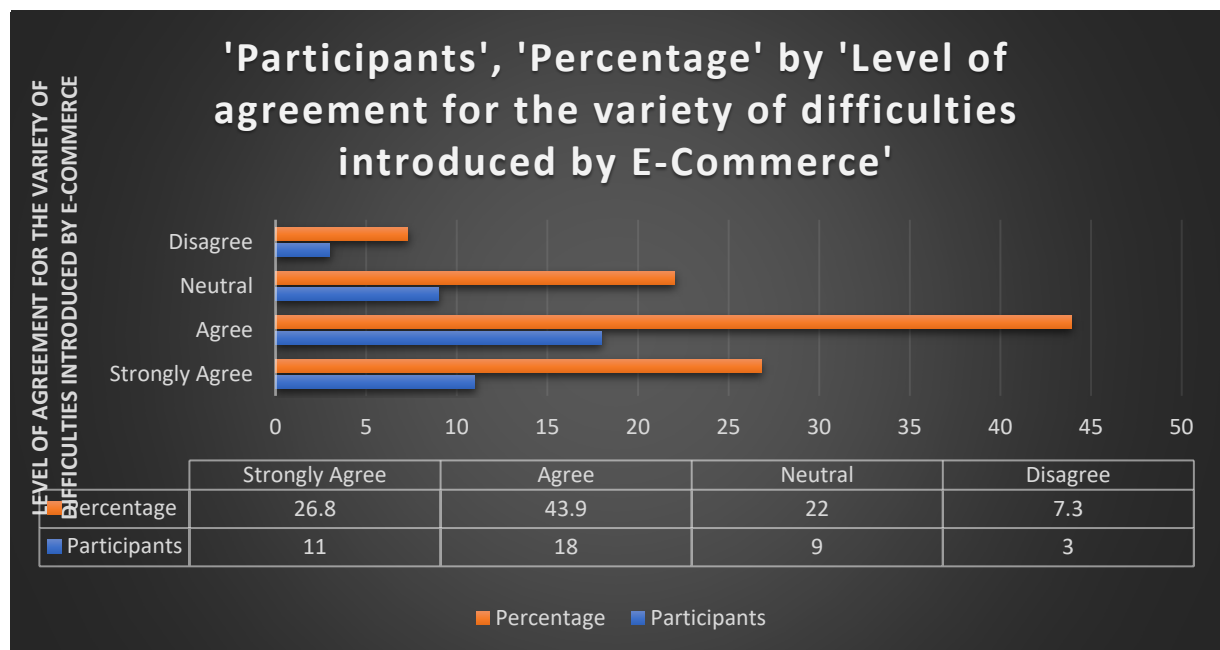


Figure 20: Level of agreement for the variety of difficulties introduced by E-commerce.

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In this question the researcher wanted to know the opinions and agreements of the participants about Covid-19 causing different challenges for the E-commerce company in Ireland. In the response to the special, it has been found that 11 candidates belonging to 26.8% of the total participants strongly agreed. 43.9% of the total participants who are about 18 in number agreed with the statement. 9 candidates with 22% of the total participants remained neutral and only three candidates who were about 7.3% of the total participants disagreed. Therefore, it can be stated that the majority of the participants think that Covid-19 causes various challenges for the commerce industries in Ireland. During the first half of the pandemic in 2019, lockdown was implemented in Ireland which affected the consumers as all the physical stores were closed temporarily, supply chain was completely affected because of this the consumers find it difficult to receive their delivery on time. Consumers' urgent urge to hoard boosted demand in the short term for products like toilet paper, hand sanitizer, soaps, and dry goods like flour and pasta (Murray, 2020). Businesses were able to react, however there were occasionally brief shortages of supplies as orders for replacement caught up with the increasing consumer demand. Supply chains required to alter their procedures to safeguard their workers' health and reduce the risk of infection (Murray, 2020).

12. What is your age group?

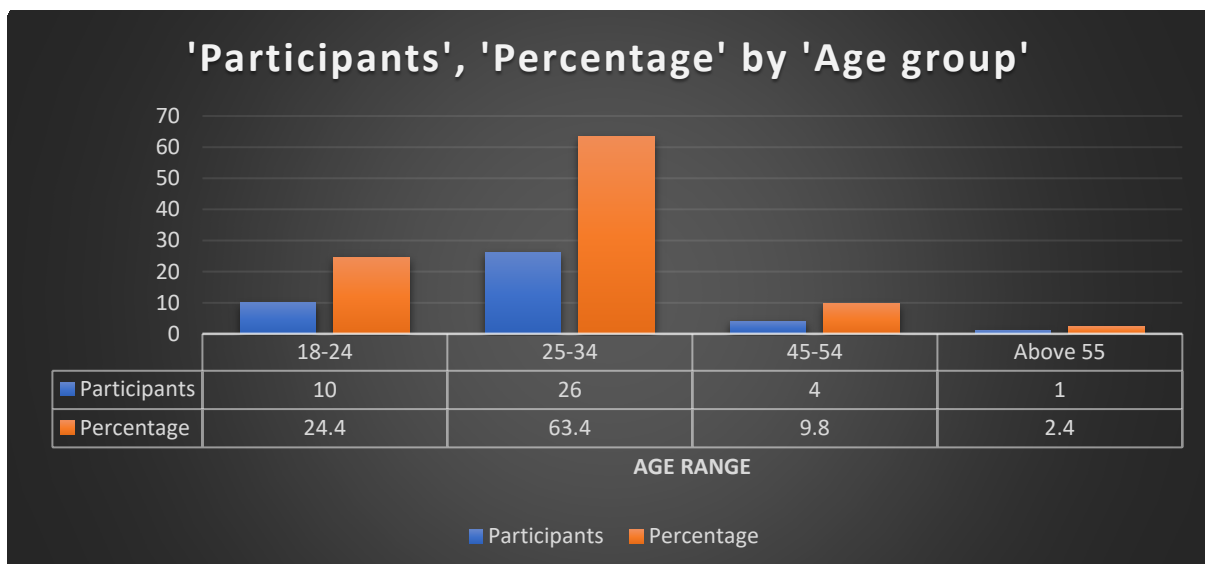


Figure 21: Age group

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One of the important reasons for choosing these questions is the perspective. Every age group see the way for choosing online E-commerce platforms from a different lens. In response to this question, it has been found that 10 candidates belong to the 18 and 24 years of age group. There are 26 candidates constituting 63.4 percent of the total participants belonging to the 25 and 34 years of age group. Four candidates which are 9.8% of the total participants belong to are 45 and 54 years old. Only one candidate has more than 55 years of age. Therefore, it can be stated that the maximum number of candidates who participated in the survey are from 25 to 34 years.

13. Gender: How do you identify?

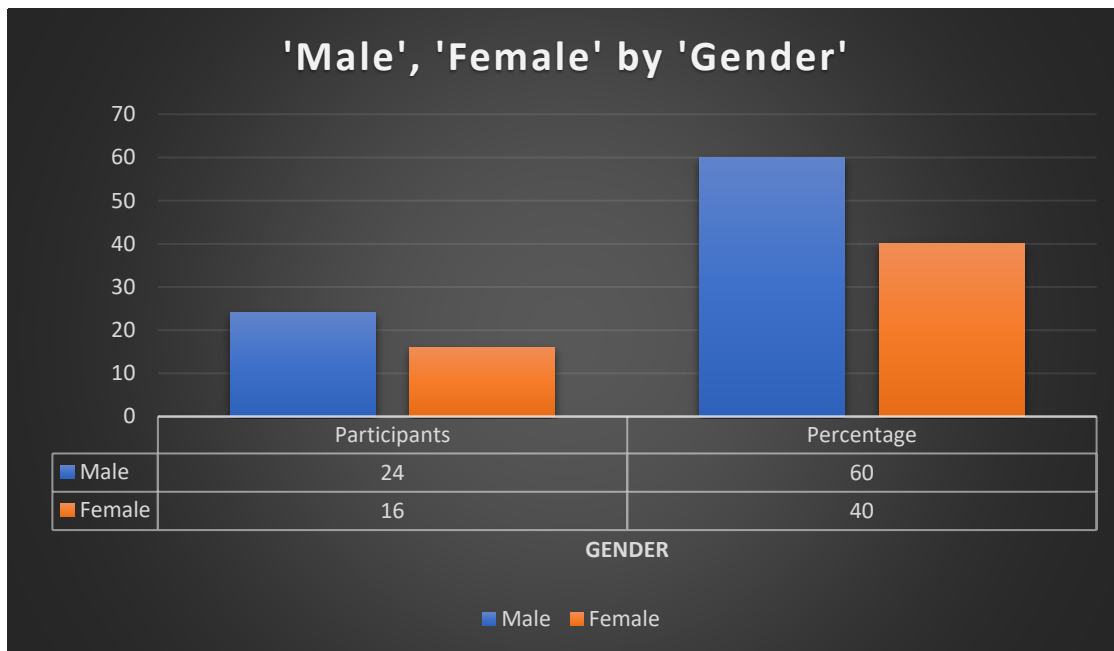


Figure 22: Gender

In response to this demographic question, it has been found that only 24 candidates were male and they are about 60% of the total participants. 16 candidates who are developed 40% of the total participants are female.

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Findings

The entire data analysis is based on an online survey that formed by involving 41 people. It has helped to understand the E-commerce platforms and their impacts on the pandemic situation and post-pandemic situation. In addition, it also offers important information about the customers purchasing intention and the connection of customers with the E-commerce platforms.

The survey helps to develop the overall concept on the use of E-commerce platforms (Acheampong, 2021). It shows how the developing usage of E-commerce platforms has resulted in a shift in shopping behaviour, with many now preferring to shop online. This has led to increased concerns over data privacy and security, as well as a loss of in-person shopping experiences.

On the other hand, it reflects the key opportunity delivered by the E-commerce platform is that the customers can get every type of product starting from the grocery to the home and electronic appliances. For businesses, the use of E-commerce platforms has allowed them to maintain operations and generate revenue during a time of economic uncertainty.

In addition, it shows that, the modern safety standards that includes in the E-commerce services make it more accessible during the pandemic and will produce more enlightening shopping encounters (Paraschiv, et al., 2022). The Covid-19 pandemic has significantly impacted the global economy, with businesses facing unprecedented challenges in maintaining operations and sales. In response to this, the use of E-commerce platforms has seen a significant increase as businesses seek to maintain their customer base and continue to generate revenue since the pandemic.

It also helps to understand the further development on the topic. In the case of that, it is important to note that, there are some key safety statuses that need to be followed by retailers in the E-commerce service. That will help them to make the services more accessible in future (Dai, 2020). As the Covid-19 pandemic already has its negative impacts over the entire world, many general people have shifted towards the online shopping process by decreasing the major threat of exposure to the virus. Retailers that have implemented improved safety protocols like contactless distribution and improved sanitation measures, are likely to be more appealing to customers who are worried about contracting the virus.

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It also develops the overall convenient customer support which is offered by the retailers to produce the E-commerce facilities more accessible while the pandemic (Acheampong, 2021). So, it can be stated that convenient customer support has also helped to build trust and loyalty among consumers, which is crucial for retailers looking to maintain a strong customer base in the long term. By providing prompt and helpful customer support, retailers can help ensure that consumers continue to use their services even after the pandemic subsides.

Another important aspect that comes from the overall analysis is based the delivery services from E-commerce retailers were satisfactory during the Covid-19 pandemic. Some retailers implemented contactless delivery options to minimize the risk of exposure to the virus, while others increased their delivery capacity and reduced shipping times to ensure that customers received their orders as quickly as possible (Paraschiv, et al., 2022). Some retailers also partnered with third-party delivery services to expand their delivery capabilities and reach more customers.

It also develops the overall understanding on the delivery services provided by E-commerce retailers were generally satisfactory during the pandemic, there were still areas for improvement. As the pandemic continues to evolve and new challenges emerge, E-commerce retailers must continue to adapt and improve their delivery services to meet the changing needs of customers.

Covid has aided in the acceleration of the digitalization process because businesses required to do so in order to stay up with consumer demand and the industry's expanding revenue. With the introduction of internet technology and the growth of E-commerce, businesses have been able to discover a more honest and efficient way to conduct business online (BDO_IE, 2022). It has forced companies to do their operations online and encouraged customers to shop online.

Global sales from online retailers would have climbed by nearly two times as much in 2022 as they did in 2019, according to (Statista, 2022) projection. However, the horrifying conflict in Ukraine has now significantly increased inflation, which has driven up prices not only in Ireland but across Europe (Tradedoubler, 2022). Retail sales on the internet are suffering as a result. The impact of inflation has been felt most keenly by consumers. As per (Central Statistics Office, 2022), E-commerce retail sales show an impressive growth on the consumer basic needs (Departmental stores, fashion & medical) and loss of sales was mostly on the field

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of bar and fuel. But nearly more than 50% of the consumers now shop more frequently online in 2023. Since internet shopping has more benefits than drawbacks, this shouldn't alter in the future (Tradedoubler, 2022).

The general findings of the research also show that, Covid-19 has introduced a variety of difficulties for Irish E-commerce companies (Costa & Paiva, 2021). The pandemic has disrupted supply chains around the world, making it difficult for E-commerce companies to source products and materials. This has led to delays in delivery times and increased costs for Irish E-commerce companies.

Summary

E-commerce services also need to maintain the safety and security of customers because the customers need to share their confidential data while purchasing from online portals. Maintaining the data safety of customers in the E-commerce business can enhance the satisfaction level of customers. Customer loyalty and trust can also be generated by maintaining data safety in E-commerce platforms. The services can be improved by generating convenient customer service support. The customer support system also built the loyalty of customers which is essential for retail business organizations to improve their business.

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Chapter 5: Discussion

Introduction

During the Covid-19 period, people had to follow many restrictions about going out as the Government of Ireland implemented a lockdown to control the pandemic situation. The retail sector of Ireland used E-commerce to continue their business and deliver products to the customers very wisely. The popularity and the need for the E-commerce sector increased at this time which changed the whole E-commerce Industry to the next level by satisfying the customers. This chapter shed light on the whole situation of the E-commerce and Retail Industry of Ireland during and since the Covid-19 pandemic situation.

Discussion

E-commerce platforms have changed the purchasing behaviour of customers. Many people have shifted to online shopping after the development of the E-commerce business. In the pandemic situation, E-commerce services have become more accessible to people because retail organizations provided door-to-door services to customers during the pandemic. It provided a huge opportunity for customers to get the delivery of their products at the right time. To provide the right time delivery and quick services to the customers the E-commerce platforms have become able to meet the satisfaction level of customers. Customers' purchasing behaviour has also changed because in online shopping cases, customers can purchase products as per their requirements and they can also select the right products among a vast number of products. It helps customers to get a product as per their expectations (Gajewska, et al., 2021). Starting from grocery products to electronics in home appliances everything can be expressed in the E-commerce platforms. In this way, customers can get a better shopping experience through online shopping portals. At the same time, customers could also maintain physical distance and restrictions for going outside during the pandemic while purchasing from the E-commerce platforms. The retailers can enhance revenue and sale through E-commerce platforms (Miao, et al., 2022). During the pandemic, retail business organizations using E-commerce platforms delivered the products to customers which increased sales in the business.

This research deals with reasons which are making the E-commerce sector more accessible and manageable in the retail sector of Dublin, Ireland since the Covid-19 pandemic regime. The

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study showed the effects of some intriguing factors like ease of accessibility, technological advancement and buying pattern behaviour of the consumer impacted E-commerce in the retail sector. This study also reveals that after the pandemic outbreak, the people of Dublin, Ireland tend to shop online to monitor all the health-related protocols and to save time for going out to a physical store to get the product they need as well (Usas, et al., 2021). This study exhibits that technological improvement regarding mobile applications and able to establish a secure environment for the payment process leads to the fulfillment of the customer expectation and develop a more accessible E-commerce platform for the retail sector in Dublin during the pandemic regime. The buying pattern of the consumer has changed throughout Covid-19 pandemic outbreak which accelerates by the advancement of technology in the form of secure payment methods and mobile application usability. The activities of online E-commerce in the retail sector of Dublin, Ireland during the Covid-19 pandemic outbreak attract a large number of potential customers to shop online.

E-commerce retailers also maintain the satisfaction of customers by providing effective delivery of services. In pandemic situation, the retailers of the E-commerce businesses also faced some challenges to maintain the supply chain. Due to various restrictions from the government during the pandemic, the business organizations faced problems in supplying necessary products which impact the delivery system in the E-commerce platforms (Chowdhury, et al., 2021). To maintain the supply chain of the products the retailers can develop a strong supply chain system in which they can also include local suppliers. Improving the supply chain of the retail business can meet customer satisfaction which is necessary for the growth and development of the company.

The research highlights that during the pandemic E-commerce businesses became an important service for the people of Dublin, Ireland. Several E-commerce firms operate in the market and Amazon, Tesco and Aldi are some of the leading service providers in the city.

Fashion, Home and electronics appliances were the most purchased product category from online retailers during the Covid-19 pandemic. Moreover, groceries were also purchased by many customers as per the data collected from the survey.

The outcome of this research indicates that the improved hygiene/safety standards followed by the retailers made E-commerce services more accessible during the pandemic. During the

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pandemic, health and safety protocols were a major priority for people and online shopping made it easier to maintain social distancing regulations. Customers of Dublin, Ireland also considered hygiene standards seriously while making purchases from E-commerce and online retailers.

The study also revealed that the convenient customer support provided by the retailers made the E-commerce services more accessible during the pandemic. The high level of customer support made it convenient for the people of Dublin, Ireland to purchase products and meet their consumption needs during the Covid-19 pandemic. A good level of customer support can also improve the shopping experience and increase satisfaction among buyers.

The delivery services from E-commerce firms and online retailers were also fast and efficient during the Covid-19 pandemic. The removal of a shopping cart can occur for several reasons. Some customers opt against making a purchase because shipping is too expensive, while others complain that an E-commerce service provider does not provide adequate delivery options. The buyer will not consider twice shopping at another online company if the shipping alternatives given don't suit their preferences. Customers may become apprehensive about delivery times. Buyers will abandon their shopping carts less frequently and return more frequently the quicker it is (ShippyPro, 2023). Fast shipping choices allow for increased competition for E-commerce companies in Dublin, Ireland.

As per the findings of this research, the attractive discounts provided by the retailers made the E-commerce services more desirable during the pandemic. People were looking to make savings during the harsh economic conditions during the pandemic and the offers and discounts from the E-commerce firms made it more appealing for the people of Dublin, Ireland.

According to the research, the customised product suggestions provided by the retailers make the E-commerce services more accessible. It helps to identify the requirements of customers based on their past shopping data. Retailers can analyse consumer behaviour with the use of E-commerce analytics to decide how the page can be organised considering consumer tastes, as well as which product homepage is most likely to captivate visitors and transform them into paying customers. All these analyses are helpful in figuring out the product plan and any reorganisations required achieving revenue and commercial objectives. To maximise the sales

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of website users, such information can also assist Irish E-commerce companies in selecting what specials to roll out as mentioned by (Gogineni, 2022).

Summary

The Covid-19 pandemic situation affected the business world of Ireland very badly. But the E-commerce industry had found a great advantage in growing their business in this situation because the physical stores were closed at that time of the rules and regulations implemented by the government. The retail industry of Ireland tried to continue their business jointly using E-commerce to avoid the loss. This chapter discusses the changes that came in the purchasing behavior of the people briefly. The E-commerce business started getting popularity in Ireland by fulfilling the need of the customers. As discussed in the literature review chapter, although not discussed in this chapter, the war has impacted the retail sector in Ireland with the increasing inflation rate which has caused a decline in the retail sector.

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Chapter 6: Conclusion

Introduction

The discussion and analysis of the entire data can help the researcher in making an effective conclusion. The E-commerce platforms have become accessible for retail organizations in Irish industries during the pandemic. The retail sector utilizing E-commerce platforms provided necessary products to customers during the pandemic situation.

Summary of the Findings

Findings are an important part of the research because it helps the researcher find the most relevant information for the research topic. The purchasing behaviour of customers is greatly impacted by the development of E-commerce platforms. E-commerce platforms help the retail sectors in getting a new dimension of selling products and services. At the same time, the customers can also get an amazing experience during their shopping. These platforms can meet the satisfaction of customers by providing the right time and quick delivery of the products. Retail businesses can maintain the loyalty and trust of customers by maintaining data safety and security. At the same time, E-commerce platforms can also contribute to a great extent to business growth. Since the pandemic situation, the E-commerce platform-maintained customers' requirements by providing them with online delivery of the products they required. It enhanced their satisfaction level. Retailers can also provide customer support during their purchasing through E-commerce platforms. In this way, E-commerce services have helped in improving business operations and meeting customer satisfaction.

From the entire part, it has been found that E-commerce platforms have acquired a significant position in the retail sector. E-commerce services provided enormous support and opportunities to customers to get the product and services from their homes. E-commerce platforms can help customers in getting delivery at the right time which can make the customers satisfied (Miao, et al., 2022). To improve E-commerce retail businesses organizations should maintain data safety and security for customer satisfaction.

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Objectives Realization

The following section of the research project has helped to meet the research objectives with accuracy, and the evaluation of the set research objectives has defined the selected research topic in a detailed manner to present a better future scope for the topic's evaluation.

Research Objective 1: To recognize the impact of E-commerce marketing on customer engagement in the retail sector during the Covid-19 pandemic.

The first objective of the research was to determine the impact of E-commerce on customer engagement in the retail sector during the Covid-19 pandemic and the objective has been partially achieved from 11th survey question in the data analysis chapter. Covid-19 caused various difficulties in the E-commerce during the first quarter in 2019 which had a great impact on consumer as lock down was implemented and supply chain was affected. This objective has helped the project define the impact of E-commerce such as better customer engagement and improve time and cost management within the retail sectors during the pandemic (Bhatti, et al., 2020).

Research Objective 2: To determine has E-commerce in the retail sector been more accessible and manageable in Dublin, Ireland since the Covid-19 pandemic.

The second objective of the research was to determine that has E-commerce in the retail sector been more accessible and manageable in Ireland since the Covid-19 pandemic and the objective has been successfully achieved from 9th and 10th survey question in the data analysis chapter. Firstly, customers can purchase from the convenience of their own residence using any kind of technology, like a notebook computer or even a smartphone, without having to leave. Secondly, customers can browse many websites to contrast and evaluate costs and get the best deals based on their requirements (KPMG, 2022).

Research Objective 3: To determine has E-commerce in the retail sector been more accessible and manageable in Dublin, Ireland during the Covid-19 pandemic.

The third objective of the research was to determine that has E-commerce in the retail sector been more accessible and manageable in Ireland during the Covid-19 pandemic and the objective has been successfully achieved from 6th survey question in the data analysis chapter where majority of the participants have strongly agreed/agreed that the services provided by E-

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commerce was more accessible during Covid-19. Dublin, Ireland, has started to use e-commerce services during the pandemic by providing on time and budget efficient services, which has made the retail business more accessible to customers in an efficient manner.

Research Objective 4: To recommend ways of managing E-commerce in the retail sector to make it more accessible for the customers and provide a high level of service during a crisis period.

The fourth objective of the research was to determine that has E-commerce in the retail sector provided a high level of service in Ireland during the Covid-19 pandemic and the objective has been successfully achieved from 7th survey question in the data analysis chapter where majority of the participants have strongly agreed/agreed that a high level of services was provided by E-commerce during Covid-19. This objective was defined that by connecting customer needs and market trends, E-commerce in the retail sector can make related services more accessible to customers (Sundararaj & M R, 2021).

Future Scope

The future scope of the research topic can be associated with two factors such as academic and practical. The academic scope of the research topic will help the project deal with similar research analyses in the futures. Moreover, the practical concept of the topic evaluates the ways managers can make business decisions while keeping the result in mind to attain long term valuable results (Sundararaj & M R, 2021).

Summary

Based on the evaluation of the research topic, it can be mentioned that the result has defined E-commerce has been more accessible and manageable in the retail sector in Dublin, Ireland, since the Covid-19 regime. In recent years, the importance of E-commerce businesses has increased a lot, especially due to the severe impact of the pandemic. The organizations operating in Dublin dealt with the accessibility of consumer requirements even during the pandemic. The project has used six specific chapters for providing the result that included the introduction, literature review, methodology, data analysis, findings, discussion, and conclusion. For example, the introduction defined the topic with the reason behind selecting it, while the literature review in-depth analyzed the topic, the methodology guided the data

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collection and analysis method, data analyses and discussions evaluated the relevant results, and the conclusion presented the final outcome of the research.

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