Consumers' View of E-commerce During the Covid-19 Pandemic

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ABSTRACT

As technology continues to advance, e-commerce's growth continues to increase with each passing year. The Covid-19 pandemic has affected the world and has compelled many individuals to adjust their lifestyles accordingly as to avoid contamination. Because of the covid-19 prevention protocols implemented globally and advised by World Health Organisation, consumers have found themselves in need of contactless methods of purchasing goods and services like e-commerce. In this context, the coronavirus pandemic has had positive effects on the growth of the e-commerce sector. Consumers' views of e-commerce during the Covid-19 pandemic are investigated in this study. A survey was created for this study and a questionnaire was distributed online to participants of all nationalities. The study included 419 respondents and used descriptive statistics to analyse collected data. The results showed that the participants found e-commerce beneficial and satisfactory during the Covid-19 pandemic and have a high intention to continue using e-commerce. Results also showed a low sense of security in participants when it comes to providing sensitive information and trusting e-commerce sites to protect their privacy. This research proposes the investigation on comparison of the results of this study with the effects of the Covid-19 epidemic on the e-commerce sector and consumers after the epidemic.

Keywords: E-commerce, covid-19, pandemic, consumers' behaviour, perceived security.

E-Ticaret Tüketicilerinin Covid-19 Pandemisi Sırasında E-Ticarete Yönelik Görüşleri

ÖZ

Teknoloji gelişimi devam ederken e-ticaretin büyümesi de doğru orantılı olarak her geçen yıl artmaya devam etmektedir. Covid-19 salgını Dünya'yı etkilemiş, ve kontaminasyondan kaçınmak için bireyleri yaşam tarzlarını değiştirmeye zorlamıştır. Dünya Sağlık Örgütü tarafından önerilen covid-19 önleme protokolleri Dünya çapında uygulamaya konulmuş ve tüketiciler ürün ve hizmet satın almak için e-ticaret gibi temassız yöntemlere ihtiyaç duymuşlardır. Bu bağlamda, coronavirüs pandemisinin e-ticaret sektörünün büyümesine olumlu etkileri olmuştur. Bu çalışmada tüketicilerin Covid-19 pandemisi döneminde e-ticarete yönelik görüşleri araştırılmaktadır. Araştırma kapsamında bir anket oluşturulmuş ve katılımcılara çevrimiçi olarak dağıtılmıştır. Çalışma örneklemi 419 katılımcıların oluşurken, toplanan verileri analiz etmek için tanımlayıcı istatistikler kullanılmıştır. Sonuçlar, katılımcıların Covid-19 salgını sırasında e-ticareti faydalı ve tatmin edici bulduğunu ve e-ticareti kullanmaya devam etme niyetlerinin yüksek olduğunu göstermiştir. Sonuçlar ayrıca, hassas bilgi gizliliğini koruma konusunda e-ticaret sitelerine duyulan güvenin düşük bir düzeyde olduğunu göstermiştir. Bu araştırma, Covid-19 salgınının e-ticaret sektörüne ve tüketicilere etkisinin salgın sonrası da araştırılıp bulguların karşılaştırılmasını önermektedir.

Anahtar Kelimeler: E-ticaret, covid-19, pandemi, tüketici davranışı, algılanan güvenlik.

Introduction

Technology has advanced through the years, changing the way in which people communicate, work, shop and carry out monetary transactions. The advancement of technology has also given us the internet which is a global computer network widely accessed by many users globally. The internet gained its popularity in 1960 when the World Wide Web was launched, allowing users' access to online products, boosting the growth of e-commerce (Tian and Stewart, 2006). This has allowed businesses to connect with consumers and for consumers to purchase goods and services via the internet from anywhere, at any time. The internet has been most beneficial to the retail business among others, as it

has given retailers the opportunity to provide goods and services to a wider spectrum of consumers via websites and applications which are commercial (Fan, Yin and Liu, 2020). In addition, electronic commerce is selling and purchasing services and goods through computer networks. (e-commerce) (Tolstoy, Nordman, Hånell and Özbek, 2021).

Through e-commerce, consumers have access to a wider variety of products and services from different merchants, local and international, increasing the use of e-commerce each year. Existing literature and analytical reports have predicted the growth of e-commerce over the years, however an unprecedented increase in e-commerce was seen due to the Covid-19 pandemic. The sales of e-commerce in worldwide predicted at \$4.248 trillion in 2020 and \$4.938 trillion in 2021, with expectations of sales reaching more than \$5.000 trillion in the year of 2022 and surpassing \$7 trillion by the year of 2025 (Ethan, 2022).

Wuhan City of China is the place where the first coronavirus cases arised in December 2019 and the pacdemic is proclaimed in March 2020 (World Health Organization, 2020). Governments globally implemented protocols like lockdown, curfews and social distancing in attempt to take control of the spread of the virus. Temporary closure of non-essential businesses and travel restrictions were seen throughout the world (Guthrie, Fosso-Wamba and Arnaud, 2021). This impacted the economy of various countries with The United States being one of the countries affected by the outbreak in its' early days as three of its major stock markets crashed in March 2020 and as a result, trillions of dollars were lost affecting its GDP (Tran, 2021).

Many studies have been conducted on e-commerce regarding the coronavirus pandemic and some of the important findings are as follows. Buldeo Rai, Touami and Dablanc (2022) and Guthrie et al. (2021) study showed that the temporary closure of businesses and lockdown in France caused partial unemployment and less B2B activity whilst there was an increase in the B2C e-commerce segment. Beckers (2021) study highlighted the closure of non-food businesses in Belgium at the beginning of the pandemic except supermarkets and pharmacies. Changes in consumer behavior were also reported at the start of the epidemic, as consumers panicked into buying and hoarding valued products for them. (Guthrie et al., 2021). Prentice et al. (2021) suggests that this erratic change in behaviour was due to governments' revelation of the methods they were to take to manage and limit the spread of the virus. Naeem (2021) found that the panic buying experienced during the pandemic was partially due to social media, as users globally exchanged information, increasing social influence which in turn accelerated panic buying. The food delivery business had an increase in sales during the pandemic as physical movement was limited resulting in consumers ordering food online and having it delivered to their homes whilst maintaining minimal contact (Zanetta et al., 2021).

In order to cope with the pandemic and abide by the implemented protocols, consumers have had to use online channels to make purchases and transactions that require little to no physical contact like e-commerce (Cruz-Cárdenas, Zabelina, Guadalupe-Lanas, Palacio-Fierro and Ramos-Galarza, 2021; Guthrie et al., 2021). Because of the shift that Covid-19 has created in consumers' daily lives, it is important to assess how these events have affected consumers' behaviour and the e-commerce industry. Therefore the purpose of this study is to investigate the consumers' view on e-commerce during the Covid-19 pandemic. The study assesses how useful consumers find e-commerce to be, if they are satisfied with and their intention on continuing to use it. The study also assesses if consumers' feel secure providing sensitive information on e-commerce sites and if they trust e-commerce sites. It is believed that the results of this study will help reveal whether consumers' e-commerce use has changed with Covid-19. In addition, it can be a guide for other researchers who will want to investigate the effects of Covid-19 on the e-commerce sector and the effects of natural events or epidemics on consumer behaviour in the future.

Theoretical Framework

E-commerce

With the internet rapidly growing, e-commerce's popularity continues to spread among consumers and businesses. Electronic commerce has been defined as the exchange of products and services over computer networks like the internet (Nisar and Prabhakar, 2017). It does not only involve purchasing online but also includes e-banking, e-payments, internet auctions and EDI (Rico, Sayni and Field, 2008). E-commerce has existed for decades now its history dating back to the 1960s when electronic data interchange originated, allowing computers to share documents (Zheng et al., 2009). In 1989, the World Wide Web was invented making it easier for individuals to access the internet and online retailers thus increasing the growth of e-commerce.

E-commerce allows consumers to browse and perform transactions from their homes or any location provided they have internet access. This not only saves them time but also money as different platforms have promotions and consumer discounts (Tran, 2021). When using e-commerce, consumers are able to search a variety of e-retails with information on products provided and prices which they can compare. Consumers also have the added benefit of consumer reviews which they can read before making a purchase and that can aid them in their decision-making. The direct interaction between the retailer and the consumer allows for the additional costs that would have been incurred by the retailer to be reduced, which in turn lowers the prices for the consumers (Nisar and Prabhakar, 2017).

As e-commerce activity takes place on the internet, it is not without risk for the consumer. Consumers risk fraud, identity theft and other malicious activity when they browse and provide personal and financial information on e-commerce platforms (Rejikumar, Gopikumar, Dinesh, Asokan-Ajitha and Jose, 2021). For this reason, consumers are most concerned about the security of their information and their privacy and an evident lack of the two can result in consumers not trusting e-commerce or not wanting to use it together (Dijesh, Babu and Vijayalakshmi, 2020). More risks consumers face when purchasing online include receiving inadequate service, substandard or even damaged products as they are not able to physically assess the products before purchase and late to cancelled deliveries (Peštek et al., 2011). All these factors are crucial when it comes to the success of e-commerce as they have an effect on the consumer's trust which in turn can influence the consumer's intention to use e-commerce (Fernández-Bonilla et al., 2021).

The most common type of e-commerce is the business to consumer (B2C) e-commerce, which involves a business selling directly to consumers and the transaction is carried out via the internet. He, Zhang and He (2019) study shows that in 2017, in China, B2C e-retail sales occupied 60% of the total e-retail sales. Another type of e-commerce is business to business (B2B) which is when businesses like wholesalers sell to other businesses like wholesalers or retailers on e-commerce platforms. During Covid-19, most B2B companies found shopping on e-commerce to be convenient, cost-effective and infomation-rich (Brohan, 2021). When a consumer sells to another consumer via an online platform, like Etsy, this is known as consumer to consumer (C2C), which is also another type of e-commerce. According to Pasquali (2021), in 2020, consumers frequented platforms that focused on fashion such as Poshmark. Consumer to Business (C2B) e-commerce involves a consumer offering their services or selling their products to a business and naming their price (Zhang, Ming, Liu, Qu and Yin, 2019).

Covid-19

Covid-19 is a coronavirus caused by SARS-CoV-2, that was declared a pandemic by the World Health Organization in March, 2020. Countries throughout the world went on lockdown, flights were grounded and individuals were encouraged to stay indoors and social distance in the efforts of containing the virus. Non-essential businesses, restaurants and retail stores were also temporarily closed leaving people to turn to online resources like e-commerce to carry out daily tasks and make purchases from

their homes (Guthrie, Fosso-Wamba and Arnaud, 2021). Reports showed an increase in global ecommerce sales from \$3.36 trillion in 2019 to \$4.29 trillion in 2020, a 24.1% growth (Young, 2021).

In order to keep their businesses afloat during the pandemic, many restaurants changed their business model from online to offline, implementing a delivery system which would allow them to personally deliver food to consumers' homes while respecting the social distance protocol. This delivery system not only benefited restaurants but also consumers as they were able to go on food delivery applications where they could choose a restaurant of their liking from a list of restaurants registered to the application. Consumers could pay for their orders online and have the food delivered to their doorstep without having to be in close contact with any personnel (Zanetta, et al., 2021).

Method

In this section, the information regarding the methodology of the study such as the research model, study group, data collection tools etc. are explained.

Research Model

Quantitative research method is used in this study. The survey method is used to collect data from participants. Figure 1 shows the research model for the study which comprises 5 dimensions to understand consumers' views regarding e-commerce during the coronavirus pandemic. The proposed model includes "perceived security", "trust", "satisfaction", "usefulness" and "intention to continue using".

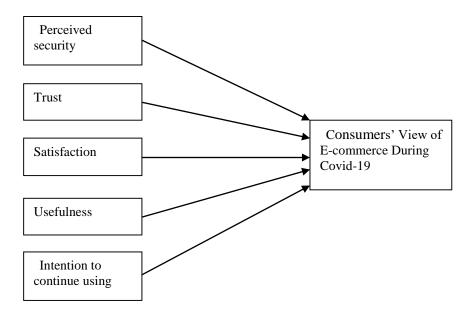


Figure 1. Research Model

Study Group

The study consisted of participants of all nationalities. It included both males (53%) and females (47%) of ages 16 and above. The majority of participants were in the 16 to 26 age group (50%), and the majority of the participants were students (48%). The total number of participants used for the study amounted to 419 after eliminating faulty responses. Figure 2. shows the participants' gender distribution, Figure 3. shows the participants' occupation distribution and Table 1 shows the nationalities of the participants.

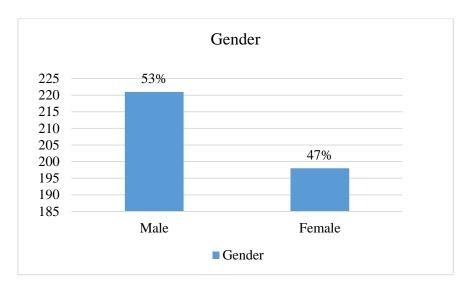


Figure 2. Participants' Gender Distribution (N=419)

Figure 2. shows that the study consisted of 221 male and 198 female participants, making a total of 419 participants.

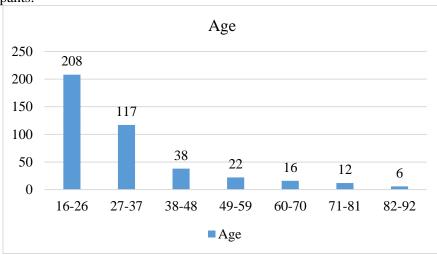


Figure 3. Participants' Age Distribution (N=419)

Figure 3. shows that the study considered participants aged 16 and above. Majority of the participants were age between 16 and 26, these were 208 participants. 117 participants were aged between 27 to 37, 38 participants were between ages 38 to 48. In the 49 to 59 age group, they were 22 participants and in the 60 to 70 age group there were 16 participants. 12 participants were between ages 71 to 81 and 6 participants were between ages 82 to 92.

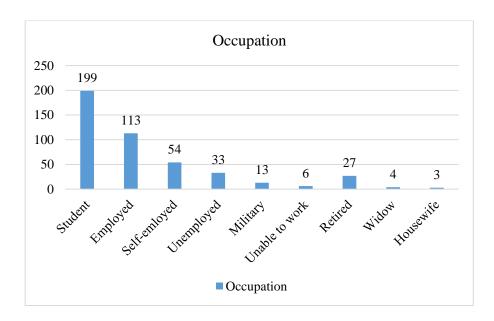


Figure 4. Participants' Occupation Distribution (N=419)

Figure 4. shows the participants occupations which included one or more occupations. 199 of the participants choose student as one of their professions. 113 participants said they were employed, 54 participants said they were self-employed and 33 participants said they were unemployed. 13 participants choose military as their occupation, 6 participants indicated they were unable to work and 27 participants said they were retired. 4 of the participants listed as widowed and 3 participants listed as housewives.

Table 1
Participants' Nationalities

Nationality	Frequency	Percentage	
Zimbabwean	180	43%	
Nigerian	67	16%	
Kenyan	19	5%	
American	15	4%	
Egyptian	14	3%	
Namibian	12	3%	
South African	11	3%	
Iraqi	10	2%	
Others	91	22%	

Table 1. shows that 180 participants were of Zimbabwean nationality, 67 of the participants were Nigerian and 19 were Kenyan. 15 of the participants were American, 14 were Egyptian, 12 partcipants were Namibian, 11 were South African, 10 were Iraqi and 91 were from other countries.

Data Collection Tools

Participants' data was collected using questionnaire for the study. Researchers created the study's questionnaire using Google Forms tools and modified regarding views of three experts on IT. Then the ethics committee approval was sought. Upon approval, the questionnaire was then distributed online to participants. The questionnaire was separated into two sections, section one included demographic questions used to obtain information about the participants which included their age, their gender, nationality and their occupation. Section two included the questions to assess participants' view regarding e-commerce during pandemic, which consisted of 23 items from 5 dimensions (perceived security, trust, satisfaction, usefulness and intention to continue using e-commerce). A 5 Likert scale of "always, often, sometimes, rarely and never" was used to evaluate participants' responses to the

questions, with 5 being "always" and 1 being "never". The Cronbach's alpha value was calculated using SPSS as shown in Table 2 in order to assess the questionnaire's reliability. The overall Cronbach's alpha result for the questionnaire was .721. This was above the acceptable Cronbach's alpha of >0.7 (Gliem and Gliem, 2003).

Table 2
Reliability Test of the Questionnaire

Dimensions	N of Items	Cronbach's Alpha
Perceived Security	5	.566
Trust	5	.534
Satisfaction	5	.614
Usefulness	4	.653
Intention to Continue Using	4	.489
Overall Cronbach's Alpha	23	.721

Data Collection and Analysis

Questionnaires were distributed using an online distribution which included sharing the link of the questionnaire on social media (Whatsapp, Facebook, Instagram, Reddit and Twitter) and sending it via e-mail. The survey was conducted over a period of three months and the data collected from the participants was secured in the researchers' Google cloud and password protected. After data collection, data was exported to excel and imported to IBM SPSS Statistics version 28.0.1.0 (142) which was used to statistically analyse the data. Negatively worded items were recoded before any statistical analysis was done using the SPSS recode tool. The data was analysed using the descriptive analysis, specifically the descriptive statistics tool in order to calculate the frequencies and descriptives (mean and standard deviation). Results were interpreted and tables and figures were used to present the findings.

Research Ethics

An ethical permission with the application number YDÜ/FB/2020/107 was obtained from the ethics committee of researchers' university to conduct survey and collect data for this study from participants.

Results

Data obtained from the respondents was analysed using descriptive statistics. Table 3 shows the overall mean and standard deviation of study's each dimensions.

Table 3 Statistics on Dimensions

Dimensions	Mean	Standard Deviation
Perceived Security	2.91	.752
Trust	3.12	.675
Satisfaction	3.28	.713
Usefulness	3.44	.827
Intention to Continue Using	3.38	.738

Results from Table 3. show that the usefulness dimension had the highest mean of 3.44 (SD=.827). The item of this dimension which had the uppermost mean of 3.60 (SD=1.19) is "using ecommerce saves me time". Another item of usefulness which had the second highest mean of 3.51

(SD=1.12) is about obtaining feedback on finding e-commerce useful for shopping in general. Results show that the views of the participants are that e-commerce is beneficial, efficient and using e-commerce saves time. This result can be explained by e-commerce being the safer option to shop and carry out transactions as less or no physical contact is required, decreasing the chances of getting infected. The result is consistent with Kawasaki, Wakashima and Shibasaki, (2022) study which also found that after the Covid-19 outbreak, consumers viewed e-commerce to be vital and useful.

The second highest mean of 3.38 (SD=.738) belongs to the intention to continue using dimension. The item of this dimension which is about planning the purchase of interesting products from e-commerce sites had the study's third highest mean of 3.49 (SD=1.08) and another item of intention to continue using dimension is about the definitive use of e-commerce in the future had the fourth highest mean of 3.48 (SD=1.20). Results show when it comes to using e-commerce in the future, participants intend on continuing to use e-commerce for their purchasing needs. This result is supported by Kawasaki et al. (2022) study which showed a high intention in participants to continue using e-commerce, even more so in participants who viewed it to be useful.

The perceived security dimension had the lowest mean of 2.91 (SD=.752) and the item which is about not being sure that e-commerce platforms will protect the consumer against possible risks in case of problems with online purchases had the mean of 2.66 (SD=1.23). Results show that when it comes to security, participants are not confident in the security of e-commerce platforms and the security of the sensitive information they provide during transactions. Results show that the item on the trust dimension, "I can count on e-commerce sites to protect my privacy" had a low mean of 2.77 (SD=1.15), further showing participants' low confidence in the protection of their privacy when they are browsing e-commerce sites. The satisfaction dimension had the third highest mean of 3.28 (.713) which is showing that participants have found the use of e-commerce to be satisfactory.

In overall, respondents have found e-commerce useful and are satisfied with the e-commerce shopping experience and intend on continuing to use e-commerce for their products and services purchases. Kumar and Ayodeji (2021) study highlighted the importance of consumer satisfaction as consumer satisfaction has an influence on the consumers' intention to purchase. The higher the level of satisfaction, the more the consumer is likely to purchase or repurchase from e-commerce sites. Consumer satisfaction also has a positive influence on consumers' loyalty which in turn prompts the consumers' online spending (Nisar and Prabhakar, 2017). However, despite its' usefulness and intent to continue using e-commerce, results showed that participants are concerned about the security of their information and privacy when using e-commerce. Ong and Teh's (2016) study stresses the importance of retailers addressing the consumers' concerns and offering compensation when they face troubles as this will help to gain the consumers' trust, increase their satisfaction and reduce their concerns about using e-commerce.

Conclusion and Recommendations

As technology continues to advance, access to the internet has been made easier as many users can now access it from laptops, tablets and mobile phones, which in turn has increased the use and growth of e-commerce. Due to covid-19, the growth of e-commerce has gone beyond projected levels as individuals have found themselves self-isolating and social distancing prompting them to find alternative means of purchasing products and services that require less to no physical contact. This study used the survey method to explore consumers' views of e-commerce during the pandemic.

Results show that respondents have found e-commerce to be useful during Covid-19 which could be because with e-commerce the risk of being in contact with infected people is greatly reduced and e-commerce allowed users to purchase products and services while respecting travel and social distance protocols. According to the results, the intention to continue using e-commerce was high, which shows that the use of e-commerce and its growth might continue to increase even post Covid-19 pandemic. Results also show that participants were satisfied with the experience of using e-commerce and found it to be reliable during Covid-19. However, results show a low sense of security among

participants when it comes to providing sensitive information on e-commerce sites and trusting e-commerce sites to protect their privacy when they are using e-commerce.

This study is limited to online distribution only due to the Covid-19 pandemic and also the study covers e-commerce only and does not include social commerce which is a subset of e-commerce. The study's findings are subject to change as the Covid-19 outbreak is still ongoing, as a result, the study recommends future researchers carry out more research after the pandemic to obtain a clearer understanding of the impact Covid-19 has had on consumers' behaviour. The correlation method can also be implemented by researchers in order to establish relationships between dimensions to better understand which factors affect consumers' perception of e-commerce. More external variables can be adapted to the model like loyalty to assess if they affect the consumers' perceptions of e-commerce. Future researchers can also explore differences between consumers' views of e-commerce based on their age, gender, occupation and other demographics.

Authors Contribution Rate

The authors contributed 100% of this article.

Conflict of Interest

There is no conflict of interest in this study.

References

- Beckers, J., Weekx, S., Beutels, P. and Verhetsel, A. (2021). COVID-19 and retail: The catalyst for e-commerce in Belgium? *Journal of Retailing and Consumer Services*, 62(September 2021), 102645. doi:https://doi.org/10.1016/j.jretconser.2021.102645
- Brohan, M. (2021, May 4). Covid-19's effect on B2B buyers. Retrieved from Digitalcommerce 360: https://www.digitalcommerce360.com/2021/05/04/covid-19s-effect-on-b2b-buyers/
- Buldeo Rai, H., Touami, S. and Dablanc, L. (2022)(in press). Autonomous e-commerce delivery in ordinary and exceptional circumstances. The French case. *Research in Transportation Business & Management*, 100774. doi:https://doi.org/10.1016/j.rtbm.2021.100774
- Cruz-Cárdenas, J., Zabelina, E., Guadalupe-Lanas, J., Palacio-Fierro, A. and Ramos-Galarza, C. (2021). COVID-19, consumer behavior, technology, and society: A literature review and bibliometric analysis. *Technological Forecasting and Social Change*, 173(December 2021), 121179. doi:https://doi.org/10.1016/j.techfore.2021.121179
- Dijesh, P., Babu, SuvanamSasidhar. and Vijayalakshmi, Yellepeddi. (2020). Enhancement of ecommerce security through asymmetric key algorithm. *Computer Communications*, 153, 125-134. doi:https://doi.org/10.1016/j.comcom.2020.01.033
- Ethan, C. F. (2022). *Global Ecommerce Forecast* 2022. Retrieved from eMarketer: https://www.emarketer.com/content/global-ecommerce-forecast-2022
- Fan, X., Yin, Z. and Liu, Y. (2020). The value of horizontal cooperation in online retail channels. *Electronic Commerce Research and Applications*, 39(October 2019), 100897. doi:https://doi.org/10.1016/j.elerap.2019.100897
- Gliem, J. and Gliem, R. (2003). Calculating, Interpreting, And Reporting Cronbach's Alpha Reliability Coefficient For Likert-Type Scales. 2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education, (pp. 82-88). Retrieved from

- https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem%20%26%20Gliem.pdf?sequence=1.
- Guthrie, C., Fosso-Wamba, S. and Arnaud, J. B. (2021). Online consumer resilience during a pandemic: An exploratory study of e-commerce behavior before, during and after a COVID-19 lockdown. *Journal of Retailing and Consumer Services*, 61(July 2021), 102570. doi:https://doi.org/10.1016/j.jretconser.2021.102570
- He, P., Zhang, S., and He, C. (2019). Impacts of logistics resource sharing on B2C E-commerce companies and customers. *Electronic Commerce Research and Applications*, *34*, 100820. doi:https://doi.org/10.1016/j.elerap.2018.100820
- Kawasaki, T., Wakashima, H. and Shibasaki, R. (2022). The use of e-commerce and the COVID-19 outbreak: A panel data analysis in Japan. *Transport Policy*, 115(January 2022), 88-100. doi:https://doi.org/10.1016/j.tranpol.2021.10.023
- Kumar, V. and Ayodeji, O. G. (2021). E-retail factors for customer activation and retention: An empirical study from Indian e-commerce customers. *Journal of Retailing and Consumer Services*, 59(March 2021), 102399. doi:https://doi.org/10.1016/j.jretconser.2020.102399
- Naeem, M. (2021). Do social media platforms develop consumer panic buying during the fear of Covid-19 pandemic. *Journal of Retailing and Consumer Services*, 58(January 2021), 102226. doi:https://doi.org/10.1016/j.jretconser.2020.102226
- Nisar, T. M. and Prabhakar, G. (2017). What factors determine e-satisfaction and consumer spending in e-commerce retailing? *Journal of Retailing and Consumer Services*, *39*(November 2017), 135-144. doi:https://doi.org/10.1016/j.jretconser.2017.07.010
- Ong, C. E. and Teh, D. (2016). Redress procedures expected by consumers during a business-to-consumer e-commerce dispute. *Electronic Commerce Research and Applications*, 17(C), 150-160. doi:https://doi.org/10.1016/j.elerap.2016.04.006
- Pasquali, M. (2021, July 7). *Unique global visitors to leading C2C fashion platforms 2020*. Retrieved from Statista: https://www.statista.com/statistics/712248/c2c-fashion-unique-visitors/
- Peštek, A., Resić, E. and Nožica, M. (2011). Model of Trust in E-Transactions. Economic Research-Ekonomska Istraživanja, 24(3), 131-146. doi:10.1080/1331677X.2011.11517472
- Prentice, C., Nguyen, M., Nandy, P., Aswin Winardi, M., Chen, Y., Le Monkhouse, L., . . . Stantic, B. (2021). Relevant, or irrelevant, external factors in panic buying. *Journal of Retailing and Consumer Services*, 61(July 2021), 102587. doi:https://doi.org/10.1016/j.jretconser.2021.102587
- Rejikumar, G., Gopikumar, V., Dinesh, K. G. Sofi., Asokan-Ajitha, Aswathy. and JoseAjay. (2021). Privacy breach perceptions and litigation intentions: Evidence from e-commerce customers. *IIMB Management Review*, *33*(4), 322-336. doi:https://doi.org/10.1016/j.iimb.2021.11.001
- Rico, D. F., Sayani, H. H. and Field, R. F. (2008). History of Computers, Electronic Commerce and Agile Methods. In M. V. Zelkowitz, *Advances in Computers* (Vol. 73, pp. 1-55). Elsevier. doi:https://doi.org/10.1016/S0065-2458(08)00401-4
- Tian, Y. and Stewart, C. (2006). History of E-Commerce. In D. Khosrow-Pour, Encyclopedia of E-Commerce, E-Government, and Mobile Commerce (pp. 559-564). London: IGI Global.

- Tolstoy, D., Nordman, E. R., Hånell, S. M. and Özbek, N. (2021). The development of international ecommerce in retail SMEs: An effectuation perspective. *Journal of World Business*, 56(3), 101165. doi:https://doi.org/10.1016/j.jwb.2020.101165
- Tran, L. T. (2021). Managing the effectiveness of e-commerce platforms in a pandemic. *Journal of Retailing and Consumer Services*, 58(January 2021), 102287. doi:https://doi.org/10.1016/j.jretconser.2020.102287
- World Health Organization. (2020). *Timeline: WHO's COVID-19 response*. Retrieved from WHO: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline#!
- Young, J. (2021). *Global online sales reach nearly \$4.29 trillion in 2020*. Retrieved from Bigcommerce 360: https://www.digitalcommerce360.com/article/global-ecommerce-sales/
- Zanetta, L. D., Hakim, M. P., Gastaldi, G. B., Seabra, L. M., Rolim, P. M., Nascimento, L. G., . . . da Cunha, D. T. (2021). The use of food delivery apps during the COVID-19 pandemic in Brazil: The role of solidarity, perceived risk, and regional aspects. *Food Research International*, 149(November 2021), 110671. doi:https://doi.org/10.1016/j.foodres.2021.110671
- Zhang, X., Ming, X., Liu, Z., Qu, Y. and Yin, D. (2019). State-of-the-art review of customer to business (C2B) model. *Computers & Industrial Engineering*, 207-222. doi:https://doi.org/10.1016/j.cie.2019.04.039
- Zheng, Q., Li, S., Han, Y., Dong, J., Yan, L. and Qin, J. (2009). Fundamentals of E-commerce. In Q. Zheng, and Q. Zheng (Ed.), *Introduction to E-commerce* (Vol. 2009, pp. 3-76). Berlin, Heidelberg, Germany: Springer, Berlin, Heidelberg. doi:10.1007/978-3-540-49645-8_1

Genişletilmiş Özet

Giriş

Teknolojideki gelişmelere ve mobil cihazların yaygın olarak kullanılmasına paralel olarak internet daha erişilebilir hale gelmiştir. İnternete erişimi olan kullanıcı sayısı da dünya çapında yıllar içinde artmaktadır. Bu artışın e-ticaretin büyümesine olumlu etkileri olmuştur. E-ticaret platformları daha geniş müşteri yelpazesine ulaşırken müşteriler de herhangi bir konumdan cihaz bağımsız olarak satın alabilecekleri çeşitli ürün ve hizmetlere daha kolay erişim sağlamaktadır. E-ticaret, ürün ve hizmetlerin internet gibi bir bilgisayar ağı aracılığıyla elektronik olarak alınıp satılmasıdır (Tolstoy, Nordman, Hånell and Özbek, 2021).

Araştırmacılar e-ticaretin yıllar içinde büyüyeceğini öngörmüştür ve yapılan çalışmalara göre e-ticaret satışlarında her yıl artış olduğu görülmüştür. Özellikle Covid-19 salgını itibarı ile e-ticaret satışları Covid-19 salgını öncesi tahminlerinin de ötesine geçerek artmıştır (Ethan, 2022). Covid-19 salgını nedeniyle bireylerin evde kalma zorunlulukları, seyahat ve sokağa çıkma yasakları/kısıtlamaları, sosyal mesafe zorunluluğu, eczane ve süpermarketler hariç zorunlu olmayan iş yerlerinin geçici olarak kapatılmasını içeren, virüsün yayılmasını kontrol etmek için dünya çapında protokoller uygulanmıştır (Beckers, 2021). Bu protokoller ve virüsle temasa geçme endişeleri nedeniyle, insanlar evlerine kapanmış ve minimum veya hiç fiziksel temas içermeyen alternatif ürün ve hizmet satın alma yöntemlerine daha fazla güven duymaya başlamıştır (Guthrie, Fosso-Wamba and Arnaud, 2021). Eticaret, müşterilerin satın alma ihtiyaçları için başvurdukları başlıca alternatif yöntemlerden biri haline gelmiştir (Cruz-Cárdenas, Zabelina, Guadalupe-Lanas, Palacio-Fierro and Ramos-Galarza, 2021).

Covid-19'un bireylerin günlük yaşamlarında yarattığı değişim nedeniyle Covid-19 pandemisinin e-ticaret tüketicilerinin davranışlarına ve e-ticaret endüstrisine etkisini değerlendirmek önemlidir. Bu nedenle bu çalışma, e-ticaret tüketicilerinin Covid-19 pandemisi sırasında e-ticarete yönelik görüşlerini araştırmayı amaçlamaktadır. Çalışma, tüketicilerin e-ticareti ne kadar yararlı bulduklarını, memnun olup olmadıklarını ve kullanmaya devam etme niyetlerini değerlendirmektedir. Çalışma ayrıca tüketicilerin e-ticaret sitelerinde hassas bilgiler sağlama konusunda kendilerini güvende hissedip hissetmediklerini ve e-ticaret sitelerine güvenip güvenmediklerini de araştırmaktadır.

Yöntem

Bu çalışma nicel bir araştırma olup, katılımcılardan veri toplamak amacıyla anket yöntemi kullanılmıştır. Bu çalışma için 16 ve üzeri yaştaki 419 katılımcıdan veri toplanmıştır. Katılımcılar 53% oranında erkek olup 16-26 yaş grubu katılımcılar en fazla katılım sağlayan yaş grubu olmuştur. Çalışmada,16-26 yaş grubu 208 katılımcı yer alırken, yaşları 27 ile 37 arasında değişen 117 kişi, 38 ile 48 yaşları arasında 38 kişi, 49 ile 59 yaşları arasında 22 kişi katılım sağlamıştır. 60 ile 70 yaşları arasında 16 kişi katılım sağlarken, 71 ile 81 yaşları arasında 12 katılımcı, 82 ile 92 yaşları arasında ise 6 katılımcı olmuştur.

Katılımcıların 199'u öğrenci, 33'ü işsiz, 27'si emekli ve diğerleri ise en az bir meslek sahibi olduğunu belirtmiştir. Araştırmada 180 katılımcı Zimbabwe uyruklu, 67 katılımcı Nijerya'lı ve 19 katılımcı Kenya'lı olmuştur. Katılımcıların 15'i Amerikalı, 14'ü Mısırlı, 12'si Namibyalı, 11'i Güney Afrikalı, 10'u Iraklı ve 91'i diğer ülkelerdendir.

Araştırma için geliştirilen anket iki bölümden oluşmaktadır. Birinci bölüm demografik sorulardan oluşurken ikinci bölüm ise e-ticaret tüketicilerinin e-ticarete yönelik görüşlerini belirlemek amacıyla hazırlanmış 23 sorudan oluşmaktadır. Anketin ilk bölümünde katılımcılar hakkında yaş, cinsiyet, uyruk ve meslek bilgilerini içeren demografik sorular yer almaktadır.

İkinci bölümde ise sorular 5 boyut (algılanan güvenlik, güven, memnuniyet, kullanışlılık ve eticareti kullanmaya devam etme niyeti) kapsamında oluşturulmuştur. Sorularda 5'li likert ölçeği kullanılmış olup, seçenekler "her zaman" ve "hiçbir zaman" arasında değişmektedir.

Anket, Google Formlar aracı kullanılarak hazırlanmış ve sosyal medya platformları (WhatsApp, Facebook, Instagram ve Reddit) ve e-posta yoluyla çevrimiçi olarak katılımcılara ulaştırılmıştır. Araştırma verileri üç aylık bir süre içinde toplanmıştır. Toplanan veriler IBM SPSS programı kullanılarak istatistiksel olarak analiz edilmiştir. Verilerin analizinde betimsel analiz yöntemleri kullanılmış ve bulgular tablo ve şekiller halinde sunulmuştur. Anketin güvenilirliğini değerlendirmek için Cronbach's alpha değeri hesaplanmış ve .721 olarak elde edilmiştir. Bu değer 0.7 üzerinde olup kabul edilebilir bir değerdir (Gliem and Gliem, 2003).

Bulgular

Araştırmanın en yüksek ortalama (3,44) ve standart sapma (0,827) değerlerine sahip "kullanışlılık" boyutu tüketicilerin covid-19 salgını sırasında e-ticareti yararlı bulduğunu göstermektedir. Anketin 18. maddesi olan "e-ticaret kullanmak bana zaman kazandırır" 3.60 (SD=1.19) değeri ile en yüksek ortalamaya sahipken, Ankette 19. madde olan "genel olarak e-ticareti alışveriş deneyimlerimde faydalı buluyorum" 3.51 değeri ile ikinci en yüksek ortalamaya (SS=1,12) sahiptir. Araştırma bulguları tüketicilerin e-ticareti kendilerine zaman kazandırdığı ve ürünler hakkında bilgi sağlama konularında etkili bulduğunu göstermektedir. Ayrıca sonuçlar, katılımcıların e-ticareti yararlı ve verimli bulduklarını da göstermektedir. Bu bulgular, e-ticaretin daha az fiziksel temas gerektirmesi veya hiç temas gerektirmemesi ve virüs bulaşma olasılığını azaltması nedeniyle alışveriş yapmak ve işlem yapmak için daha güvenli bir seçenek olmasıyla açıklanabilir. Bu bulgu Kawasaki ve arkadaşları'nın (2022), Covid-19 salgınından sonra müşterilerin e-ticareti hayati ve faydalı olarak gördüğünü ortaya koyan çalışmalarıyla uyumludur.

Araştırmada elde edilen diğer bulgular ise tüketicilerin e-ticaret sitelerini kullanırken düşük seviyede güvenlik duygusuna sahip olduklarını, işlemler sırasında hassas bilgilerini verirken kendilerini güvensiz hissettiklerini ve e-ticaret platformlarının kendilerini işlem sonucunda karşılaşabilecekleri güvenlik risklerinden koruyabileceğinden emin olmadıklarını göstermektedir. Araştırmadaki "algılanan güvenlik" boyutu hassas bilgilerin güvenliği ve müşteri mahremiyeti noktalarında tüketicilerin endişesini gösteren en düşük ortalama ve standart sapmaya sahiptir. Örneğin, araştırmanın güven boyutundaki 9. maddesi olan "Gizliliğimi korumak için e-ticaret sitelerine güvenebilirim" 2.77 (SD=1.15) ortalama değeriyle diğer maddelere göre düşük bir ortalamaya sahip olduğu elde edilirken, katılımcıların internette gezinirken gizliliklerinin korunmasına yönelik güvenlerinin düşük olduğunu göstermektedir.

Sonuç, Tartışma ve Öneriler

Çalışmadan elde edilen sonuçlar Covid-19 salgını sırasında tüketicilerin e-ticareti ürün bilgilerini görüntülemelerine, satın alma kararlarını daha etkin bir şekilde vermelerine ve zamandan tasarruf sağlamalarına olanak sağladığı için yararlı bulduklarını göstermiştir. Bu sonuç Kawasaki ve arkadaşlarının (2022) araştırmalarında elde ettikleri Covid-19 salgınından sonra tüketicilerin e-ticareti hayati ve yararlı olarak gördüğü sonucu ile paraleldir.

Çalışma sonuçları tüketicilerin alışverişleri için gelecekte de e-ticareti kullanmaya devam etme niyetinde olduklarını göstermektedir. Kawasaki ve arkadaşları (2022) çalışmalarında benzer şekilde e-ticareti Covid-19 sırasında faydalı bulan tüketicilerin gelecekte e-ticareti kullanmaya devam etme olasılıklarının daha yüksek olduğunu bulmuşlardır.

Sonuçlar, tüketicilerin e-ticaret sitelerinin sunduğu hizmetlerden ve e-ticaret alışveriş deneyiminden memnun olduklarını göstermiştir. Müşteri memnuniyeti, müşterilerin gelecekteki aynı e-ticaret platformu üzerinden tekrar alışveriş yapma olasılıklarını olumlu etkilediğinden önemlidir (Kumar ve Ayodeji, 2021).

Güvenlik konusundaki sonuçlar ise tüketicilerin e-ticaretin güvenli bir ortam sağlaması konusunda endişeleri bulunduğunu, e-ticaret sitelerinde kişisel bilgilerini ve kredi kartı bilgilerini verirken kendilerini güvende hissetmediklerini göstermektedir. Bu noktada, e-ticaret hizmeti sunan işletmelerin işlemler sırasında müşterilerin herhangi bir sorunla karşılaşma ihtimalinde zararın tazmin edileceği güvenini sağlamaları önemlidir (Ong ve Teh, 2016).

Bu araştırma, Covid-19 salgınının e-ticarete ve tüketicilere etkisinin salgın sonrası da araştırılıp bulguların karşılaştırılmasını önermektedir. Bunun yanında, tüketicilerin e-ticarete yönelik görüşlerinin farklı boyutlar açısından incelenmesi de konunun değerlendirilmesinde daha geniş bir bakış açısı sağlayacağına inanılmaktadır. "Müşteri sadakati" gelecekteki çalışmalarda araştırılması önerilen diğer bir konu olup tüketicilerin e-ticarete yönelik görüşleri üzerindeki etkisinin araştırılması önerilmektedir.