

Article

The Role of Mobile Application Acceptance in Shaping E-Customer Service

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Abstract: Most retailers are integrating their practices with modern technologies to enhance the effectiveness of their operations. The adoption of technology aims to enable businesses to accurately meet customer needs and expectations. This study focused on examining the role of mobile application (app) acceptance in shaping customer electronic experience. A mixed method was adopted, in which qualitative data were collected using interviews, and quantitative data were gathered using the questionnaires. The results indicate that mobile app acceptance contributes to a positive customer experience while purchasing products and services from online retailers. Mobile apps are associated with benefits, such as convenience, ease of use, and the ability to access various products and services. With the rapid development in technology, e-commerce retailers should leverage such innovations to meet customer needs.

Keywords: e-commerce; mobile app; acceptance; e-customer service; experience and engagement

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1. Introduction

Customers require a convenient experience when buying products and services through e-commerce. Mobile applications (apps) offer customers convenient access to the products and services required by the clients [1]. Mobile apps are defined as a move away from the integrated software system found on personal computers that provide limited and isolated functionality [1]. In this regard, mobile apps acceptance entails the positive perceptions developed among users regarding the effectiveness of the software in meeting their expectations. The acceptance rate is measured based on the feedback provided by the users and the frequency of use when purchasing products and services. The main features associated with mobile app acceptance technology include providing detailed and continuously updated information concerning the products and services offered through e-commerce platforms [2]. The global use of new technologies has changed the interactions between customers and retailers and further requires new business models to enhance organizational success and improve the client's experience [3]. The study examined the effects of mobile app acceptance on e-commerce services. Therefore, the study contributes to the existing literature about factors contributing to the increase in mobile app acceptance and impact on e-customer service.

From the consumer's perspective, mobile app acceptance improves their experience while ordering and paying for products and services offered on online retailing platforms. Mobile applications are critical since they enhance business transactions to be completed in time, which leads to a positive customer shopping experience. The introduction of mobile applications makes the traditional shopping stores less congested and attractive, thus influencing the customers to adopt a positive behavior towards shopping in such entities.

Therefore, the study provides an insight concerning the effectiveness of mobile app acceptance in shaping e-commerce service, especially enhancing the shopping experience for online consumers.

The number of customers who purchase products and services through e-commerce platforms in the Middle-East has significantly increased. As e-commerce is evolving, retailers are compelled to tailor their strategies to suit the new patterns of customer demand. To handle the increased traffic and order placement, e-commerce retailers are leveraging mobile apps to create loyalty and improve customer experience [3]. E-commerce stores may become more convenient and appealing regarding time and purchasing modalities [4]. Despite the rapid innovation affecting service and product delivery across different sectors of the economy, there is a gap in knowledge concerning the role and effectiveness of mobile app acceptance in shaping e-commerce services. In this regard, there is a need to contribute to the existing studies about the importance of mobile app acceptance in enhancing convenience among customers who purchase e-commerce services.

E-customer service refers to the process of supporting shoppers through online platforms [4]. The support for online businesses accounts for challenges experienced by retailers when serving customers, such as a high volume of service and support requests. The main types of e-customer service include walk-in service departments, phone and email support, self-service content, and communities and forums. Customer experience refers to the behavioral responses during all the stages of consumption processes. Customer engagement refers to the interaction between the company and consumers through different channels.

This study aims to examine the role of mobile app acceptance in shaping e-customer service. The multiple features associated with mobile app acceptance, such as offline features, easy navigation, and build for the smartphone, shape e-customer service. Therefore, this study is guided by the following objectives:

1. To investigate the effects of mobile app acceptance on e-commerce service delivery;
2. To explore factors contributing to the increasing use of mobile app acceptance in e-commerce;
3. To investigate the way mobile app acceptance is shaping e-customer service.

The research questions include the following:

Q1—How is mobile app acceptance influencing e-customer service?

Q2—How is mobile app acceptance influencing customer experience and engagement?

Q3—What are the factors that deter the use of mobile app acceptance by e-commerce retailers and customers?

2. Literature Review

E-commerce is one of the most significant developments in the retail sector. The existing studies found that most retailers are embracing technology as a strategy to improve service delivery to customers through online platforms [5,6]. Essentially, ref. [7] suggest that the number of customers who purchase products and services using e-commerce platforms has increased significantly in recent days because of technological advancements. In the last decade, information technology infrastructure and Internet penetration were developing rapidly across the world, leading to the growth of e-commerce. Globally, the Internet and e-commerce are rapidly evolving, contributing to a positive customer experience [8]. The emergence of the Internet and e-commerce has brought about a wide range of opportunities to enterprises and customers worldwide [8]. With the rising importance and popularity, there is a growth in the number of active shoppers across the world [9]. Therefore, an e-commerce system enables retailers and customers to streamline their relations. While most customers are rapidly embracing e-commerce, there is still a gap in knowledge concerning mobile app acceptance and the ways it is shaping e-commerce service. With the much attention being drawn to the use of mobile apps by online retailers,

technology providers are focused on ensuring the services offered to the customers align with their expectations.

Across the world, e-commerce is becoming the primary target for retailers as a strategy for improving their performance. Despite these developments, there is a gap in the literature concerning mobile app acceptance and its impact on customer experience. Digital adoption has followed a unique path dissimilar to other e-commerce markets [10]. As customers move online, organizations typically follow suit, leading to a gradual growth of the digital ecosystem in e-commerce and media. Middle East customers and businesses are among the most connected and technology savvy globally, thereby explaining the reason why e-commerce activities are commonplace in the region [11]. The COVID-19 pandemic led to a change in consumer behavior and shopping habits. There is a change in consumer behavior whereby buyers avoid wasting time in queues, compare feedbacks from other users of the products, and evaluate a variety of products when making purchasing decisions.

The growth of e-commerce has rapidly created a revolution in business contexts globally. E-commerce development is similar to the industrial revolution that ushered the information age in the world at a faster rate [11]. The growth of e-commerce is characterized by a shift in completing commercial transactions based on paperwork to use electronic information. E-commerce can be traced back to the historical days of early computers and has gained popularity due to the rapid technological changes and use of the Internet [12]. The emergence of the Internet has accelerated creating an electronic marketplace, where commercial transactions are taking place to facilitate international and local trade. The rapid growth of e-commerce globally shows its importance and compelling benefits in business contexts [12]. E-commerce will continue to develop provided that Internet technologies continue to emerge to present opportunities for users to exploit [13]. Since their inception, the studies that e-commerce businesses have grown consistently across the world due to the technological revolution that facilitated its adoption as the new marketplace.

The growth of e-commerce has been boosted by increased internet use, price advantage, and convenience in business transactions, internationality, and its ability to offer large product assortments [13]. A significant rise in e-commerce over the previous period shows that the global market will increase increasing [14]. The existing studies show the foreseeable future of e-commerce will be determined by the sophistication of digital technology, big data, and artificial intelligence to facilitate e-business transactions across the world [14]. The findings show that e-commerce is overgrowing across the world and has become a stable and secure method to complete business transactions and supplement traditional marketplaces.

3. Materials and Methods

The mixed research method was used to investigate the role of mobile acceptance in shaping e-customer service. The study combined the qualitative method and quantitative to ensure the weaknesses associated with the particular approach were addressed with the other [15]. Mixed research methods are characterized by different attributes, such as interaction and independence, relative priority given to qualitative and quantitative data, and integration of the components that occur at any point along the research process [15]. Despite [16] stating that the mixed research method is affected by the time constraint, the approach was used to allow the qualitative data to address issues arising from the quantitative method. The qualitative and quantitative data were used to allow scholarly interaction and triangulation. The results collected qualitative data were verified using the quantitative data. Therefore, the qualitative findings were used to validate the quantitative results.

The study was based on pragmatism philosophy. Pragmatism is often considered the most appropriate philosophical paradigm that guides social inquiry when conducting mixed research [17]. Pragmatism philosophy enables the researcher to overcome some

limitations when conducting mixed research, such as the influence of the researcher's personal bias and omission of major constructs while measuring the relationship between variables [17]. Both the deductive and inductive approaches were used. The deductive approach was used for the quantitative, whereas the inductive was applied while analyzing and interpreting the qualitative data.

In the qualitative approach, the participants were selected based on both probability and nonprobability sampling methods. The nonprobability sampling method "purposeful" was used to select five individuals who were subjected to semi-structured interviews. The sample population involved five managers of e-commerce retailers. Five participants were chosen because the qualitative data were supplemented by the qualitative data. A small sample population was used to allow the researcher to conduct the study efficiently and timely. The purposeful sampling method was used because it enables the researcher to select individuals with the desired qualities [18]. In this context, the primary features considered from individuals before they were selected include availability, knowledge concerning mobile app acceptance, ability to effectively articulate ideas, and willingness to participate in the study [18]. The qualitative data were collected using semi-structured interviews. The interviews were conducted through the Zoom and Google Meet applications and took about 20 min. All the selected five individuals participated in the interviews. The interview was preferred because of the high response rate and ability to seek clarification from the interviewees on unclear information, leading to the formulation of the most accurate answers.

A simple random sampling method was used to select 130 individuals. This sample was selected to allow the researcher to conduct the study quickly and timely. The small sample was used because the target population was less than 5000. The sample population involved customers who purchase products and services from e-commerce platforms, mobile app users, and retailers from the Middle-East countries. A simple random sampling method was used to eliminate bias while selecting the participants [19]. While applying the simple random sampling method, every participant was given an equal chance of being selected. After selection, individuals were requested to share their contact, used for communication regarding the survey. The quantitative data were gathered using the questionnaire. The questionnaire was composed of closed-ended questions and was sent to 130 individuals through their email. The questionnaire was used for collecting quantitative data because it is simple to administer, saves time, and enhances the uniformity of the response [20]. Individuals were given ten days to fill and resend the questionnaires. Every participant was reminded twice through a small message notification regarding the questionnaire and the importance of taking part in the survey. However, only 110 individuals accurately filled and returned the questionnaire.

The qualitative data were analyzed using the thematic method. The common concepts were identified from the interview transcripts. The thematic method is flexible, allowing the researcher to leverage the personal knowledge and experience, collected data, and existing theories to develop results [21]. The main processes followed when analyzing the data include familiarization with the data, identification of codes and themes, reviewing and defining of themes, and writing the final report [21]. The statistical method was used to analyze quantitative data. The raw data were entered into the SPSS software, which helped to conduct descriptive, inferential, and correlational tests.

The panel of experts was used to test the validity and reliability of the questionnaire. Raters were used to review questionnaire items for clarity, comprehensiveness, and readability. The same questionnaire was administered to the participants under the same conditions and period of time to enhance the reliability of the results.

4. Results

4.1. Quantitative Result

The participants answered all the questions asked in the survey. The questionnaire consisted of six closed-ended questions, whereby the participants were requested to select one option. The first and second questions provided demographic information, whereas the third to the sixth questions were based on the research questions and objectives. The findings are presented in the form of graphs and tables, as shown below.

As shown in Figure 1, most of the participants were male (54.55%), followed by a female (45.45%). Despite the differences in the number of participants, the credibility of the findings was not affected because no specific mobile acceptance apps have been developed for females or males. The services are accessed by all customers irrespective of gender use access products and services from e-commerce platforms.

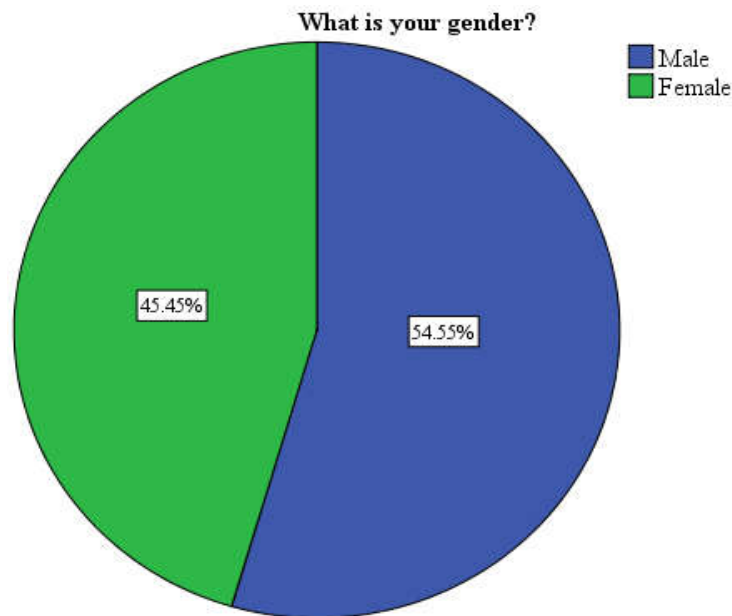


Figure 1. Gender of the respondents.

Most of the participants had used e-commerce platforms to purchase products and services. For instance, 75.45% of the participants stated that they had used e-commerce platforms ever to purchase products and services (Figure 2). Collecting data from individuals who use e-commerce platforms to purchase products and services ensures the most accurate and reliable data were used to develop the findings.

As shown in Figure 3, most of the participants would prefer buying products and services from e-commerce platforms using mobile applications because of the convenience. No participant was unsure about the convenience associated with mobile applications. However, 48.18% of the respondents strongly agreed, whereas 39.09% agreed that mobile applications are very convenient when used to purchase products and services. Therefore, the finding demonstrates that mobile app acceptance positively impacts customer experience while purchasing services and products from e-commerce platforms. From the analysis, mobile app acceptance is more convenient, which is contributing to the increasing use of technology by many customers.

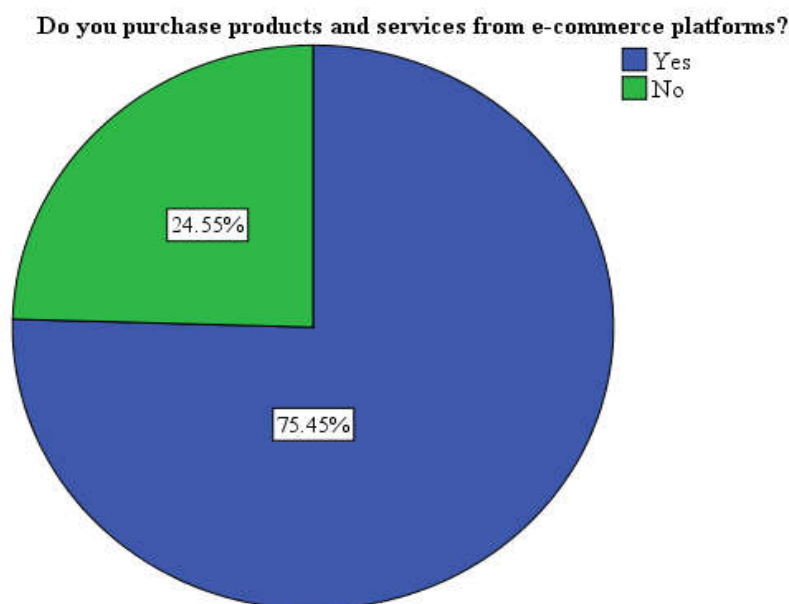


Figure 2. Participants purchase products from e-commerce platforms.

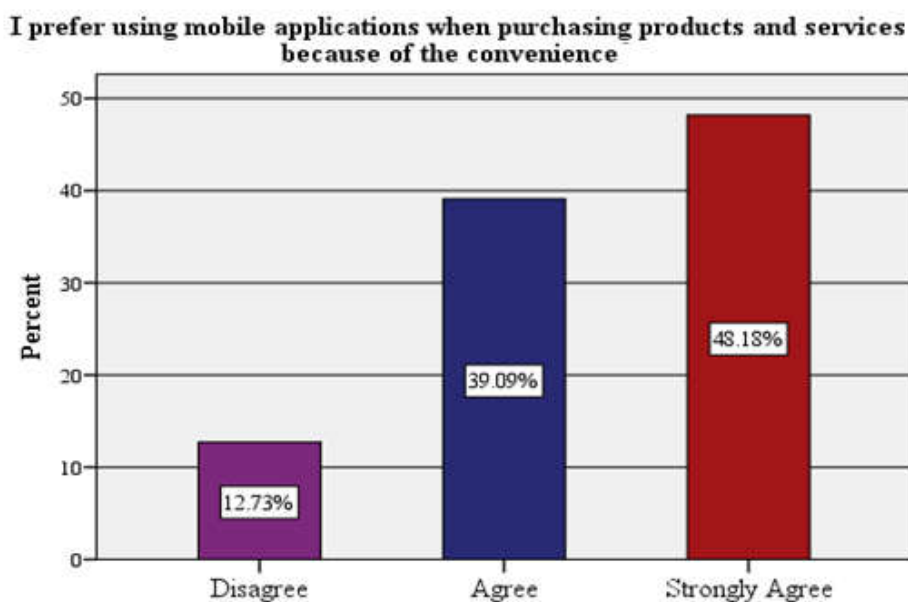


Figure 3. The convenience of mobile applications.

Most of the participants stated that they use the mobile application to access services from online platforms because of simplicity to use (40.91% agree, and 33.64% strongly agreed). In recent days, there has been the growing use of mobile apps in electronic commerce. This study demonstrates that the increasing use of mobile apps in e-commerce is attributed to simplicity (Figure 4). Some of the features of the mobile app, such as push notifications, notify customers about the sales and special offers offered by the retailer.

I prefer using mobile application when purchasing products and services because it is simple to use

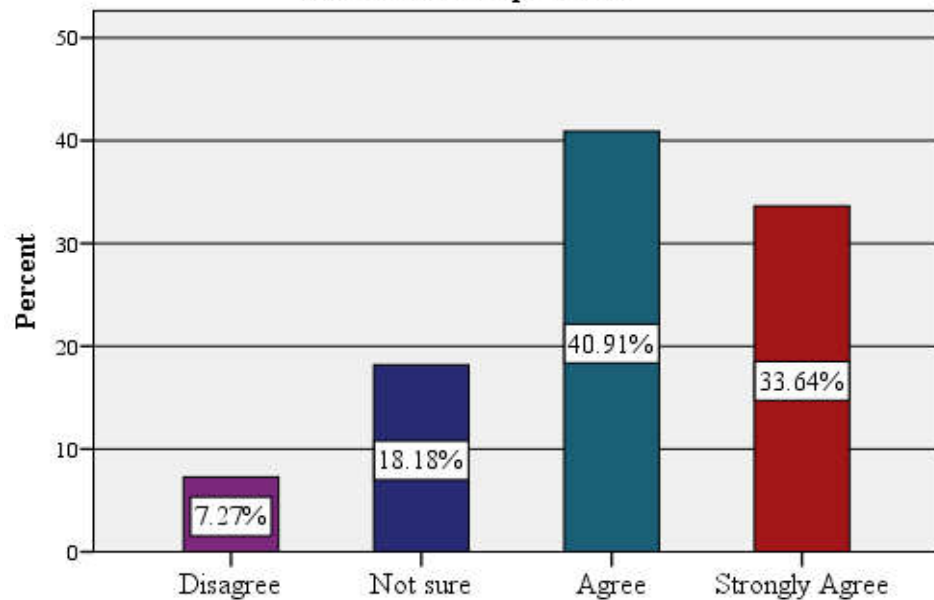


Figure 4. The simplicity of mobile apps for use.

As shown in Figure 5, the findings indicate that mobile app acceptance has a positive impact on e-customer service. For instance, 40.91% of the participants stated that mobile app acceptance positively affects e-customer service. The results demonstrate that the mobile app is associated with multiple benefits, such as convenience and ease of use, which positively impact e-customer service. Mobile app acceptance enables customers to make an online payment and complete the purchase of the services with one button.

Mobile app acceptance positively influence e-customer service

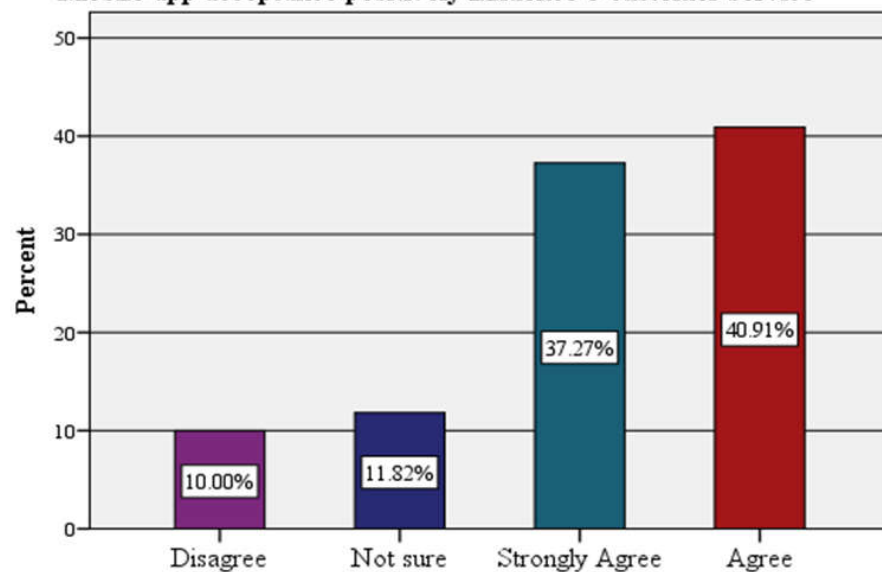


Figure 5. Impact of mobile app acceptance on e-customer service.

Most of the participants stated that mobile acceptance enhances customer experience and engagement (Figure 6). However, no respondent disagreed with the questions concerning mobile apps' effects on customer experience and engagement. The results imply

that most customers perceive that mobile acceptance is effective in enhancing customer experience. With the rapid technological development across the globe, customers are shifting to online retailers, who deliver quality products and services to individual places. Retailers are integrating their practices with modern technologies to enhance the convenience and further improve customer experience and engagement. In this study, 47.27% of the respondents stated that mobile app acceptance enhances customer experience and engagement. Although 13.64% were not certain about the impact of mobile app acceptance on e-customer experience, features, such as easy payment, accessibility to various products and services without visiting the retailer, one-click ordering, and push notifications to enhance customer experience and engagement.

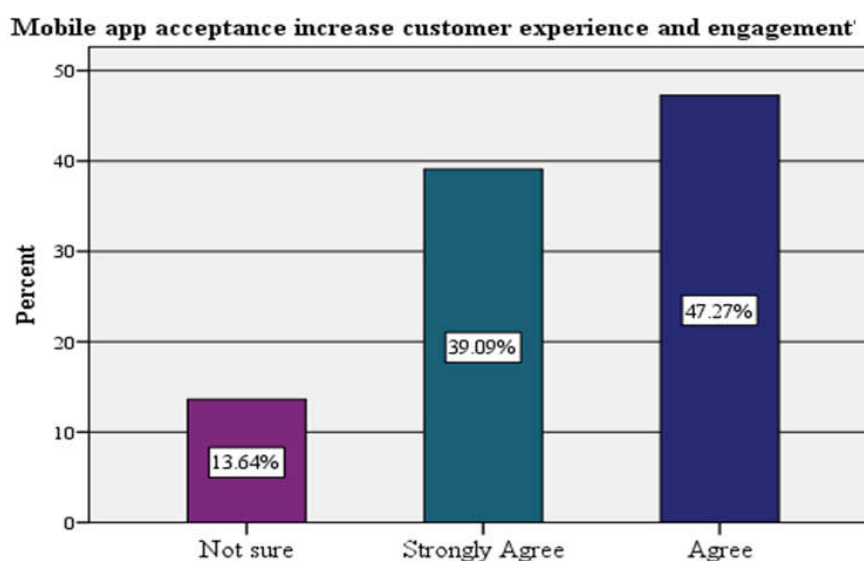


Figure 6. Effects of mobile app acceptance on customer experience and engagement.

ANOVA test was conducted to examine if mobile app acceptance shapes customer e-experience. The results are presented in Table 1, which shows that Sig. 0.000 implies that mobile app acceptance would positively impact customer e-experience. In this regard, the findings indicate that customers increasingly use mobile apps because of the convenience and high-the level of engagement. Customer engagement is increased as a result of inbuilt features integrated with the app, such as GPS and camera support, which enhance customer engagement.

Table 1. ANOVA test.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	10.936	4	2.734	30.419	0
Residual	9.437	105	0.09		
Total	20.373	109			

As shown in Table 2 below, Sig 0.000 implies that the sample mean was not equal to the hypothesized population mean. Based on the results, it is evident that there is a substantial difference in mean between the overall population and the mean. The results demonstrate that customers currently prefer purchasing products and services using a mobile app because they are convenient, simple, increase experience and engagement. Mobile app acceptance stimulates a suitable platform to engage with their sales represent-

atives; thus, allowing customers to share their views with the retailers. Mobile app acceptance influences consumer engagements that result in quality customers' service, improvement, and overall experience.

The research questions presented in the introduction were adequately solved using the analysis. The finding demonstrates that mobile app acceptance has positively contributed to improved service delivery. The mobile app is associated with multiple benefits, such as convenience and enables customers to access a variety of products and services. There is an increase in the use of mobile apps across the world because of their convenience, changing consumer behavior, and technological developments.

Table 2. One-Sample Test.

Model	t	df	Sig. (2-Tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
I prefer using mobile applications when purchasing products and services because of convenience?	45.539	109	0.000	4.227	4.04	4.41
I prefer using a mobile application when purchasing products and services because it is simple to use	46.535	109	0.000	4.009	3.84	4.18
Do mobile app acceptance positively influence e-customer service?	44.923	109	0.000	4.055	3.88	4.23
Do mobile app acceptance increase customer experience and engagement?	65.316	109	0.000	4.255	4.13	4.38

4.2. Qualitative Results

The interview guide consisted of four semi-structured questions. The interviews answered all questions whereby transcribed data were analyzed using the thematic method. The main themes that emerged from the data include the influence of mobile app acceptance on e-customer service, effects of the mobile app on customer engagement and experience, and factors that hinder the use of mobile app acceptance.

4.2.1. Effects of Mobile App Acceptance on E-Commerce Service Delivery

The use of mobile applications has increased in the last two decades due to the pervasiveness of mobile phones, thus increasing the number of business service transactions conducted through an e-commerce platform. According to participants 1 and 5, mobile app acceptance improves customer experience.

Participant 5: "Mobile app acceptance is more convenient which contribute to the outstanding customer experience when purchasing products on e-commerce platforms."

Today, the majority of customers find it easy and convenient to order and pay for services on e-commerce through mobile apps, thereby increasing the popularity of e-commerce service delivery, both locally and internationally. High acceptance of mobile business applications among youths, adults, and elderly consumers has increased the level of efficiency in e-commerce service delivery. The result is consistent with the quantitative data regarding the aspect of convenience associated with mobile app acceptance. In this case, increased efficiency is linked to the reduced time required for each customer to place, pay, and receive e-commerce services. In the process, organizations spend saved time to attend to an increasing number of consumers without unnecessary delays. Therefore, organizations are better placed to understand and effectively respond to complex, wide-ranging consumer needs in a cost-efficient manner.

Participants 2, 3, and 4 stated that mobile app acceptance has led to improved service delivery to customers. Increasing acceptance of mobile business applications has led to the development of positive consumer perceptions about the quality of services delivered by organizations through an e-commerce platform. Further, as organizations rely on modern technologies, such as mobile apps, to provide services, they elevate their levels of innovativeness, thereby encouraging the development of positive consumer mindsets towards the brand and service provided.

Participant 2: "There is improved service delivery from online retailers. The improved service delivery is attributed to the easiness to access quality products, high responsive rate, and convenience."

Mobile acceptance in the e-commerce service space also has increased consumers' subjective knowledge about service offerings and service delivery mechanisms of different organizations. Customers analyze and adapt appropriately to forecasted and unpredicted challenges that undermine e-commerce service delivery. Due to the increase in the number of mobile business applications being used as channels for serving customers, service firms have collected useful consumer data through customer-firm interactions, complaints, and suggestions. Information processes from these data are being utilized to inform the improvement of different aspects of e-commerce service delivery, such as communication and consumer relationship management. This study demonstrates that mobile app acceptance has a positive impact on e-customer service. The results of the qualitative and quantitative analysis indicate that mobile app acceptance enhances the e-customer experience.

4.2.2. Factors Contributing to Increased Mobile App Acceptance in E-Commerce

According to participants 2 and 3, the convenience associated with the mobile app is one of the primary factors contributing to its increasing use by customers who purchase products and services on online retailers. Customer usually receives the real-time response from the retailers regarding the price and availability of some brands in the market.

Participant 2: "Most customers are embracing mobile app acceptance because of the convenience in accessing the products and service offered by online retailers."

One of the drivers accelerating mobile applications' acceptance in e-commerce among customers is the convenience linked to such applications. Unlike the traditional purchase system, where customers physically visit stores to buy services, mobile applications do not require the physical presence of clients for transactions to be completed. As a result, time and resources that would have been used by consumers to travel to service stores are channeled to more pressing needs. The results demonstrate that the convenience of using mobile applications is also linked to the geographical location and the number of times consumers purchase a given service. Therefore, mobile applications enable customers to order e-commerce services from any country worldwide as frequently as they desire without making many unnecessary trips to service firms.

According to participants 1, 3, and 4, mobile apps are increasingly used by customers because of the perceived ease of use. Customers easily access information regarding the price and variety of retailers' products within a short period through mobile apps. If a service transaction takes longer than expected to complete, there is an increased likelihood of most customers opting out of the purchase process. However, the provision of e-commerce services through mobile applications is associated with speedy transactions that are likable among consumers, thereby increasing the acceptance of mobile apps.

Participant 3: *"The increasing adoption of the mobile app is associated with the perceived ease of use and faster execution of transactions."*

Customers prefer to use mobile applications for e-commerce dealings because of understandability, clarity, and reliability. Mobile applications are designed with objectivity in mind to ensure that every consumer can use them with the least possible assistance. Mobile applications are easy to understand and operate when making e-commerce transactions. As a result, customers accept the apps because they are dissociated with the need to seek guidance and directions from customer care assistants. Periodically, mobile application developers release updated versions of apps intended to make them more effective. Therefore, the findings imply that mobile applications are easily accepted by customers since they are reliable for ordering and paying services from e-commerce service firms.

4.2.3. Ways Mobile App Acceptance Is Shaping Customer Service

Participants 2, 3, and 5 stated that mobile app acceptance is increasing customer interactions with retailers. For instance, customers quickly access sales representatives using the mobile app, which addresses their issues within a short period. Customers' complaints are effectively addressed through mobile applications, which eventually contribute to improved customer experience.

Participant 5: *"Online retailers have improved service delivery to customers such as faster response to inquiries and quick order placement."*

The increased acceptance of mobile applications has been harnessed by online retailers to automate business operations, such as digital placement of product or service orders, customer inquiry, and customer check-ins. Quick service delivery has contributed to increased customer satisfaction and perceived improvement in the quality of services among consumers. More time spent interacting with customers improves consumer-employee relationships by training workers to align with unique behavioral attributes of customers and efficiently manage their weaknesses.

The increased mobile application acceptance has enhanced customer service delivery by empowering customers to solve service delivery challenges through self-service menus and help sections in mobile apps. Furthermore, organizations have linked their mobile business applications with contact or support centers for resolving issues that customers cannot resolve by themselves. In this manner, increased acceptance of mobile applications acts as a driving factor towards online-based resolution of consumers' problems, which is efficient, timely, and cost-effective to clients. Through increased acceptance of mobile apps, organizations have been able to provide round-the-clock customer services irrespective of the physical location of customers. As a result, the quality of delivered services has improved due to reduced lead times and service congestions. As new customers accept mobile applications to conduct business transactions, they share their experiences with family and peers, thereby increasing the awareness and popularity of digital consumer services.

5. Discussion

Modern technology is helping customers to alter the way they interact with sellers as well as keep track of their purchases. This study is consistent with [1,4], who established that technological innovations, such as integrating mobile apps with e-commerce retailers,

have improved customer satisfaction. The rapid evolution of technology has led to improved service delivery by online retailers. For instance, e-commerce retailers are integrating modern technologies with their processes to enhance the efficient delivery of services and further improve customer experience. With the ever-changing business environment, businesses are compelled to embrace innovation and integrate technology in the processes to enhance the efficient delivery of services. On the contrary to this finding, [5] stated that human and social elements are absent in most mobile apps affecting the acceptance levels among users. This aspect is considered one of the challenges, which have affected the continuous growth of e-commerce. Although this study emphasizes the importance of mobile app acceptance in improving customer experience, there is insufficient knowledge concerning potential challenges associated with mobile app acceptance. Therefore, there is a need for further investigation concerning the challenges associated with mobile app acceptance to customers who purchase products and services using e-commerce platforms.

The user perceptions towards human aspects of online products and services significantly influence their acceptance of mobile app and shopping practices. In this regard, consumers have a high preference to accept mobile apps that have verbal information on their online content because it shapes their overall choice, judgment, and cognitive effort in the virtual shopping environments [1]. However, this aspect has not been identified in the study since the focus was given on the role of the mobile app in shaping consumer experience. To bridge the gap, future scholars should examine the corresponding challenges associated with the mobile app from customers' perspectives. In this study, the findings revealed that mobile apps are integrated with specific features that provide customers with real-time information concerning new offers, discounts, and a variety of products offered by retailers. The analysis indicates that the high level of customer engagement would inherently contribute to the high acceptance rate by customers. However, the finding by [6] is inconsistent with this study as they stated that the high acceptance rate for the mobile app is experienced among tech-savvy individuals. In regard to this, the findings cannot be generalized across all customer groups. To bridge this gap, future scholars are required to target specific customer groups while examining the role of mobile app acceptance on customer experience to enhance the generalization of the results.

The results indicate that mobile app acceptance would contribute to improved customer experience because of convenience while placing orders and making payments. Integration of technology through e-commerce platforms ensures that companies deliver services that align with customer expectations. For instance, mobile apps enable customers to access products and services from their homes. This result is consistent with [2,7], who suggest that most people have access to mobile phones and the app acceptance increases consumer engagement with vendors through Internet connections. It allows users to connect with each other across the world by using the Internet and their mobile gadgets. Features, such as interactive capabilities, result in high consumer engagement that enhances the users' intention to use the mobile application in doing online business. Mobile app acceptance is an indicator of stable and positive customer experience and engagements. The ability to engage customers continuously is essential to survive the market competition, such as the mobile app market. The mobile applications are developed rapidly, and subsequent acceptance makes consumers actively share their views with other clients and vendors. Mobile app acceptance builds and sustains long-term relationships between customers and organizations, which improves customer experience when using the application for e-commerce functions. On the contrary, [8] argues that customer loyalty majorly depends on the quality of the products and services offered by an organization. In this regard, the concept of convenience alone cannot guarantee customer loyalty. Despite this finding, there is a gap in knowledge concerning the measures applied by retailers to enhance the effectiveness of mobile applications. Mobile acceptance allows con-

sumers to enhance their shopping experience by easily searching for vendors and products of choice while engaging with other users at any time while using the technology application. Therefore, future investigation is required to establish factors that could contribute to the low mobile app acceptance rate and strategies used by e-commerce retailers to enhance the effectiveness of this technology.

This study found that the growing use of the mobile app is attributed to the multiple benefits contributing to a positive customer experience. However, this result is inconsistent with [3,9], who states that the high-level of mobile app acceptance among e-commerce customers is associated with the availability and continued growth of Internet technologies. The rapid growth of the Internet has created the opportunity for e-commerce customers across the globe to benefit from Internet services in different ways. Due to the growing use of the mobile app, it is apparent that e-commerce would be one of the remarkable sources of competitive advantage to many retailers and new space for consumers. Customers are currently using the mobile app as the source of information regarding the products and services offered by the business, rather than visiting their websites. Major technical shifts in e-commerce aim to influence customer behavior in favor of some products and brands. In this study, the increasing use of mobile apps among customers who purchase products and services from e-commerce platforms is attributed to multiple benefits. This result is consistent with [8], who argue that mobile app presently serves as the tool for communication and relations for the online retailers and customers. The quality of the user interface associated with the mobile app enhances customer satisfaction due to the effortless use of the service.

6. Conclusions

This study examined the role of mobile app acceptance in shaping e-customer service. To address this aim, the study's objectives involved investigating the effects of mobile app acceptance on e-commerce service delivery, exploring the factors contributing to the increasing use of mobile app acceptance in e-commerce, and ways mobile acceptance is shaping e-customer service. With the growing advent of technological development, consumers prefer convenience while accessing products and services from digital platforms. The high-level of mobile app acceptance among customers across the world reflects its compelling benefits, such as the broader scale of services, greater flexibility, and faster transactions. E-commerce retailers are required to survive the consequences of globalization and open markets by developing a mobile app that provides personalized services. In the coming years, the growth and profitability of the retailers will depend on their ability to adopt new methods of business transactions and integrate the latest emerging technologies into their practices. The changing demographics are one of the compelling factors justifying the importance of using mobile apps to facilitate transactions. To keep up with the pace of change in the retail industry, companies are required to transform their business models to ensure customers are consistently offered a more personalized experience.

The results are based on a small sample population, particularly individuals, who participated in the interviews. However, this aspect did not affect the credibility of the findings. Future scholars should increase the sample population to enhance the robustness of the findings. Moreover, survey forms from Google or Microsoft could be used to save time during data collection. Responses from the questionnaire would also remain anonymous. There is also a need to investigate more additional factors affecting the use of mobile apps among customers when purchasing products and services from e-commerce platforms.

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References

1. Pantano, E.; Servidio, R. Modeling innovative points of sales through virtual and immersive technologies. *J. Retail. Consum. Serv.* **2012**, *19*, 279–286, doi:10.1016/j.jretconser.2012.02.002.
2. Bodhani, A. Shops offer e-tail experience. *Eng. Technol.* **2012**, *7*, 46–49.
3. Pantano, E.; Di Pietro, L. Understanding Consumer's Acceptance of Technology-Based Innovations in Retailing. *J. Technol. Manag. Innov.* **2012**, *7*, 1–19, doi:10.4067/s0718-27242012000400001.
4. Pantano, E.; Viassone, M. Demand-pull and technology push perspective in technology-based innovations for the points of sale: The retailer's evaluation. *J. Retail. Consum. Serv.* **2014**, *2*, 43–47.
5. Khan, A.G. Electronic commerce: A study on benefits and challenges in an emerging economy. *Glob. J. Manag. Bus. Res.* **2016**, *8*, 13–18.
6. Shahriari, S.; Shahriari, M.; Gheiji, S. E-commerce and its impacts on global trend and market. *Int. J. Res. Granthaalayah* **2015**, *3*, 49–55.
7. DeLima, R.; Budi, H.; Andriyanto, N.; Wibowo, A. Development of Purchasing Module for Agriculture E-Commerce using Dynamic System Development Model. *Int. J. Adv. Comput. Sci. Appl.* **2018**, *9*, 63–67, doi:10.14569/ijacsa.2018.091012.
8. Isoraité, M.; Miniotiené, N. Electronic Commerce: Theory and Practice. *Integr. J. Bus. Econ.* **2018**, *2*, 73–79, doi:10.33019/ijbe.v2i2.78.
9. Basarir-Ozel, B.; Mardikyan, S. Factors affecting E-commerce Adoption: A case of Turkey. *Int. J. Manag. Sci. Inf. Technol.* **2017**, *23*, 1–11.
10. Khrais, L.T. Role of Artificial Intelligence in Shaping Consumer Demand in E-Commerce. *Futur. Internet* **2020**, *12*, 226, doi:10.3390/fi12120226.
11. Algharabat, R.S.; Rana, N.P. Social Commerce in Emerging Markets and its Impact on Online Community Engagement. *Inf. Syst. Front.* **2020**, 1–22, doi:10.1007/s10796-020-10041-4.
12. Wang, Y.; Wang, J.; Yao, T.; Li, M.; Wang, X. How does social support promote consumers' engagement in the social commerce community? The mediating effect of consumer involvement. *Inf. Process. Manag.* **2020**, *57*, 102272, doi:10.1016/j.ipm.2020.102272.
13. Alalwan, A.A.; Algharabat, R.S.; Baabdullah, A.M.; Rana, N.P.; Qasem, Z.; Dwivedi, Y.K. Examining the impact of mobile interactivity on customer engagement in the context of mobile shopping. *J. Enterp. Inf. Manag.* **2020**, *33*, 627–653, doi:10.1108/jeim-07-2019-0194.
14. Al-Tit, A.A. E-commerce Drivers and Barriers and Their Impact on E-customer Loyalty in Small and Medium-Sized Enterprises (SMES). *Versl. Teor. Prakt.* **2020**, *21*, 146–157, doi:10.3846/btp.2020.11612.
15. Regnault, A.; On behalf of the International Society for Quality of Life Research (ISOQOL) Mixed Methods Special Interest Group (SIG); Willgoss, T.; Barbic, S. Towards the use of mixed methods inquiry as best practice in health outcomes research. *J. Patient Rep. Outcomes* **2018**, *2*, 1–4, doi:10.1186/s41687-018-0043-8.
16. Timans, R.; Wouters, P.; Heilbron, J. Mixed methods research: What it is and what it could be. *Theory Soc.* **2019**, *48*, 193–216, doi:10.1007/s11186-019-09345-5.
17. Brierley, J.A. The role of a pragmatist paradigm when adopting mixed methods in behavioral accounting research. *Int. J. Behav. Account. Financ.* **2017**, *6*, 140–154.
18. Ames, H.; Claire, G.; Simon, L. Purposive sampling in a qualitative evidence synthesis: A worked example from a synthesis on parental perceptions of vaccination communication. *BMC Med Res. Methodol.* **2019**, *19*, 26–30.
19. Turner, D.P. Sampling Methods in Research Design. *Headache: J. Head Face Pain* **2020**, *60*, 8–12, doi:10.1111/head.13707.
20. Eyisi, D. The Usefulness of Qualitative and Quantitative Approaches and Methods in Researching Problem-Solving Ability in Science Education Curriculum. *J. Educ. Pract.* **2016**, *7*, 91–100.
21. Nowell, L.S.; Norris, J.M.; White, D.E.; Moules, N.J. Thematic analysis: Striving to meet the trustworthiness criteria. *Int. J. Qual. Methods* **2017**, *16*, 98–107.