

## How mobile phone application enhance human interaction with e-retailers in the middle east

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### ABSTRACT

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The paper aims to provide a critical in-depth analysis of Mobile Phone Application's role in enhancing human interaction with E-Retailers, and more specifically, in the Middle East. First, the paper provides an outlook description of the definition and history of Mobile Phone Applications and human interaction and how the two complement each other. Next, the study outlines the various instances that human interaction with Mobile Phone Applications has led to E-retailer success and how it has come about. Then, the discourse provides an analytical look at the E-retailing Business in the Middle East while focusing on the history of E-retailing, business startups in the Middle East, and the revolution of E-retailing in the Middle East. Additionally, the research emphasizes the merits and demerits of using Mobile Phone Applications to promote and enhance E-commerce business in Middle East countries. Using relevant sources and credible references, the analysis will highlight the numerous instances Mobile Phone applications have been used by clients to connect with businesses that maintain an online presence. Using anthological, historical, and descriptive research methods, the arguments portrayed in this paper will heavily reflect on various case studies provided in the article. The case studies feature data representation from research conducted in the Middle East concerning Mobile Phone applications and E-commerce. Through focused approaches, this paper discerns, comprehend, and establishes the framework of the Middle East E-Commerce scene over the years, and outlines how far the industry has made progress through online platforms. Furthermore, emphasis will be laid on the market gaps left to fill in the E-commerce sector in the Middle East and the several approaches to better the industry. Lastly, this paper will conclude by providing my recommendations on the betterment of Mobile Phone Applications and how E-retailing can improve in the Middle East.

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**Keywords:** E-Commerce, E-retailing, Mobile Phone Application, Online service, Middle East

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### 1. Introduction

People may now order whatever they want, whenever they want, from any location. By employing diverse instruments to complete the work, such as computers, laptops, and mobile phones, the internet saves time and effort when buying goods and provides unique services. These tools can fulfill consumer wants and expectations, and it just takes a click to acquire items wherever customers desire. Customers are increasingly more reliant on mobile devices as technology advances. Customers nowadays heavily use mobile phone applications on their smartphones and regard them as a current tool for meeting their demands and discovering new services accessible in the market (Abou 17-19). Retailers have found that they must use this modern tool to engage with their customers and meet their expectations to maintain their competitive positions. The competition to reach clients is changing. As a result, businesses must continually upgrade their communication tools to contact their customers better and communicate their messages. Retailers are competing to keep clients and keep them for a long time by providing exceptional services, which will help them maintain market share and grow.

Mobile Phone Applications in the Middle East have recorded a massive bump due to the numerous companies that have been readily adopting the technological dawn [1-3]. According to Bodhani [4], millennials are the main factor in the increasing technology industry. The large community of young app developers creates and develops new applications to suit new business models and attain their goals in the ever-changing market [5]. The young technological entrepreneurs are constantly coming up with new and advanced methods of creating mobile applications and creating employment opportunities for themselves and those that benefit from the businesses' success [4]. The Middle East has come up with apps that enhance healthcare, transport, and even entertainment. For instance, Health at Hand is a Middle East application that operates in the Gulf to provide twenty-four-hour healthcare assistance [6, 7]. This particular application encourages the transfer of medical records to online profiles to improve their medical history data. Pantano [6] posits that Health at Hand is just one of many medical apps developed by the young generation in the Gulf countries that cite a bright future in E-Commerce. It is essential to answer how Mobile Phone Application enhances human interaction with E-commerce in any state. Mobile Phone Applications are the backbone of E-commerce in any business that has an online presence. According to Pantano [6], due to the technological storm that has taken this century by surprise, people have adapted more and more to the use of Mobile Phone Applications in various situations, both personal and business-wise. Keeping up with this trend is how businesses can stay competitive and relevant, thus creating business apps that promote sales. There are various factors to consider when comprehending and analyzing the importance of Mobile Phone Applications in E-commerce in the Middle East. Due to the restlessness in some Middle Eastern countries, it is critical to understand that many factors play a role in establishing market dominance. The study aims to investigate how Mobile Phone Applications enhance human interactions with E-Retailers in the Middle East. Furthermore, the study's goal is to use the upcoming results to recommend that E-Retailers develop a mobile phone application that can keep their customers and affect the e-service quality of retail stores.

### **1.1. Statement of the problem**

It is essential to answer how Mobile Phone Application enhances human interaction with E-commerce in any state. Mobile Phone Applications are the backbone of E-commerce in any business that has an online presence. Due to the technological storm that has taken this century by surprise, people have adapted more and more to the use of Mobile Phone Applications in various situations, both personal and business-wise [8]. For example, it is common to see someone ordering goods from their preferred retailer online and delivering them to their doorstep [8]. Not only is this convenient, but it is fast and effective. Keeping up with this trend is how businesses can stay competitive and relevant, thus creating business apps that promote sales.

### **1.2. Research objectives**

The goal of this research is to evaluate how mobile app adoption affects e-customer service. The different components based on mobile app adoption, such as offline features, user friendly, and smartphone build, combine to produce e-customer service. As a result, the following objectives drive these investigations:

1. To see the impact of mobile apps in human interaction with E-Retailers.
2. Provide an outlook of the definition and history of Mobile Phone Applications and human interaction
3. Analyze how mobile applications acceptance are influencing e-customer service.

#### **1.2.1. Research questions**

The following are a number of the research questions:

Q1—What is the impact of mobile phone applications on human interaction with E-Retailers?

Q2—What are the definition and history of Mobile Phone Applications and human interaction?

Q3—What issues are preventing e-commerce companies and customers from accepting mobile apps?

## **2. Theory and calculation**

The use of mobile phone applications is considering among the foremost substantial developments in the electronic retail industry. According to available research, most shops use technology to boost consumer service provision through digital sites [8-10]. In essence, ref. [11] claims that technology improvements have resulted in a vast increase in human contact with mobile phone applications in recent years. Online retailing is fast evolving in the Middle East, contributing to an outstanding client experience [12]. The rise of online and

e-commerce diversified options for businesses and people worldwide [12]. The number of active shoppers worldwide is increasing as the importance and popularity of shopping grow [13]. As a result, an online business system allows both retailers and clienteles to simplify their interactions. Whereas most clienteles are swiftly adopting E-Retailing, however, there is remains a gap in knowledge in the Middle East regarding how mobile phone applications may boost human connection with e-retailers. With so much emphasis on online retailers' use of mobile apps, providers of technology tools are concentrating on ensuring that the services provided to their clients' suit their needs.

Human engagement with Mobile Applications has become the primary objective for businesses striving to boost their productivity in the Middle East. Despite these advancements, there is a gap in the research about the implementation of electronic apps and their impact on user experience. Unlike other e-commerce marketplaces, digital adoption has taken a unique path [14, 15]. Consumers go online, and businesses follow suit, resulting in the mobile revolution of e-commerce and entertainment becoming more widespread. Arab firms and customers are among the most connected and tech-savvy in the world, explaining how apps boost human connection with e-retailers in the region [16, 17]. E-quick commerce's growth has ushered in a global commercial revolution. The advancement of e-commerce is comparable to the paradigm shift that sped the introduction of the knowledge period globally [16].

The use of e-commerce enabled documentation that uses digital data has resulted in a shift in how commercial transactions are carried out. E-Retailing dates back to the early days of computers, however, it has increased in popularity as a result of rapid technological breakthroughs and general internet use [18, 19]. The quick growth of the Internet has accelerated an e-marketplace where business transactions can be conducted to facilitate domestic and international trade. The global expansion of e-rapid commerce indicates its significance and enticing its benefits in corporate settings [18, 20]. As long as the Internet technologies exist to provide consumers with possibilities to take advantage of [21], human engagement with E-Retailers will continue to evolve. The findings indicate that e-business has developed continuously across the Middle East since its start, owing to the ideological shift that aided their adoption due to the new market. Increased internet use, value perception, flexibility in business transactions, universal applicability, and the capacity to supply comprehensive product collections have all strengthened human engagement with E- Retailers [21]. The Middle East market is anticipated to grow, as evidenced by a massive surge in e-commerce over the original period [22]. The findings demonstrate how mobile phone applications in the Middle East improve human engagement with E-Retailers.

### **3. Materials and methods**

In this study, a mixed-methods approach was used to evaluate the role of mobile acceptability in influencing e-customer service. The research used qualitative and quantitative methods to guarantee that the basic approach's flaws were addressed in other ways [23]. Mixed methods can be defined by their interaction and independence, the relative significance of quantitative and qualitative data, and the combination of components that arise at any point throughout the research stages [23]. Even though [24] asserts that the mixed research technique is time-limited, the strategy was selected to supplement the quantitative method's inadequacies with qualitative data. The quantitative and qualitative data were combined to facilitate academic debate and triangulation. Quantitative statistics were collected to substantiate the qualitative data gathered.

As a consequence, qualitative data were included in the quantitative data. The study was founded on the concept of pragmatism. When mixed methods research is conducted, pragmatism is generally regarded as the optimal philosophical foundation for social inquiry [25]. When doing the mixed-methods study, the pragmatic philosophy allows the researcher to overcome obstacles such as personal bias and a lack of primary constructs when evaluating the connection between research variables [25]. Inductive and deductive reasoning were both utilized. The qualitative data were analyzed and interpreted inductively, while the numerical data were analyzed and interpreted deductively. Participants were selected for the qualitative method using both probability and nonprobability sampling techniques.

Five individuals were chosen for semi-structured interviews using the nonprobability sampling technique "purposeful." Five managers of e-commerce retailers were included in the study sample group. Five individuals were selected as their qualitative data were consistent with the qualitative data. Small sample size was set in this study to ensure that the study could be completed effectively and on schedule. The researchers chose people who had the required characteristics using the purposeful sampling technique [26, 27]. Individuals' availability, their understanding of the acceptability of mobile applications, their ability to

communicate ideas effectively, and their willingness to participate in the research are all among the first characteristics examined in this context [26]. Semi-structured interviews were performed to gather qualitative data. The interviews, which lasted about 20 minutes, were conducted through video conferencing applications such as Zoom and Google Meet, with each of the five individuals selected for the interview. The interview was chosen due to its high response rate and ability to obtain clarification from respondents on ambiguous material, ultimately resulting in only proper replies.

To recruit 130 individuals, a simple sampling technique was used to expedite the researchers' completion of this study. Because the target population was limited to 5000 people, a modest sample size was determined. Customers who made purchases through e-commerce platforms, users of mobile applications, and merchants from Middle Eastern nations were included in the sample group. To avoid bias, participants were chosen using a simple sampling technique [28, 29]. When the primary sampling method was used, each participant had a chance of being selected equally. Following their selection, participants were asked to give contact information that would be used to communicate with them about the survey. Through the questionnaire, quantitative data were collected. The study questionnaire, which contains closed-ended questions, was sent to 130 participants. The questionnaire was chosen to gather quantitative data [30] because it is easy to use, saves time, and improves response consistency. Within ten days after receipt of the surveys, they must be completed and reissued. Each participant received two text messages informing them of the questionnaire and, consequently, the critical nature of participation in the survey. Only 110 respondents completed and submitted the study correctly, on the other hand.

Thematic analysis was used to decipher the qualitative data. Initially, the interview transcripts revealed standard views. The theme approach is adaptable, enabling the researchers to draw conclusions based on personal experience, empirical data, and existing ideas [31]. The most frequent data analysis procedures include becoming acquainted with codes and themes, evaluating and identifying themes, and writing the final report [31]. After that, measurable data were analyzed using a statistical method. SPSS software was used to generate descriptive, inferential, and correlational tests from the data. An expert panel determined validity and reliability. Regularly, raters scrutinized each item for clarity, completeness, and readability. Finally, an identical questionnaire was administered to individuals under the same conditions and for the same duration to ensure trustworthy findings.

## 4. Results

### 4.1. Quantitative results

All of the survey questions were completed by respondents. The questionnaire has six structured questionnaires, each with a single response choice for each respondent. The first two questions collected demographic data, while the rest of the questions assisted in developing the study's themes and goals. As shown below, the results are presented in the form of graphs.

Males made up the lion's share of participation by 54.55 %, the females follow with 45.45 %. Despite the demographic differences, the results remained reliable because of the absence of gender-specific mobile acceptance applications E-commerce platforms are accessible to all customers for the purchase of products and services, irrespective of gender.

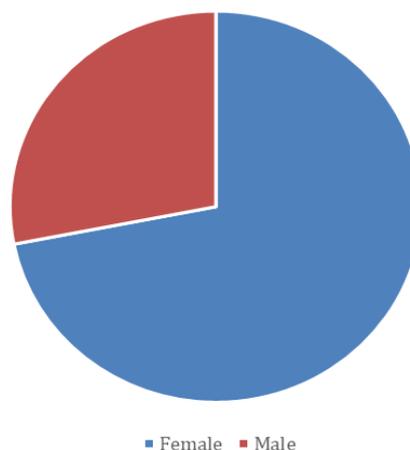


Figure 1. Participants' gender.

The majority of the study participants rely on e-commerce platforms to acquire items and services. For example, around 75% of individuals interviewed claimed they used e-commerce platforms to buy goods and services (Figure 2). As a result, collecting data from consumers who use e-commerce platforms to purchase goods and services ensures that the collected and used data were accurate and reliable data to construct the study conclusions.

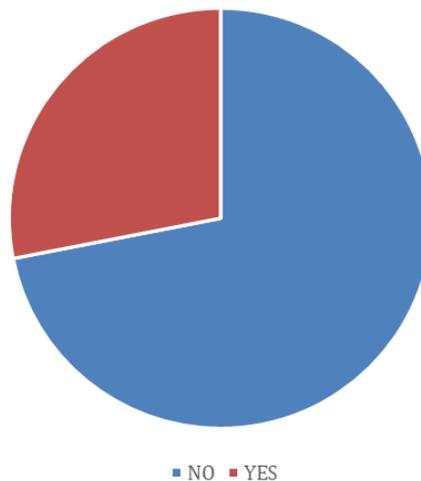


Figure 2. Percentage of the participants' who purchase products using e-commerce platforms

## 4.2. Qualitative Findings

The interview guide included semi-structured questions. After respondents gave answers to all of the questions, the material was transcribed and analyzed thematically. The findings shed light on a variety of critical issues, including the impact of the adoption of mobile apps on electronic customer service, mobile apps acceptance on customer both engagement and experience, along the obstacles to mobile app adoption.

### 4.2.1. The Impact of Mobile Apps Acceptance on the Delivery of E-Commerce Services

The growth in the use of mobile phones has led to an explosion in the number of business services transactions performed through e-commerce platforms during the past two decades. According to two participants (1 and 5), accepting mobile apps improves the user experience. "It's easier to embrace mobile apps," participant 5 says. "This helps ensure that customers have a pleasant experience while shopping on e-commerce platforms." The majority of consumers today consider ordering and purchasing services through e-commerce websites and mobile apps to be quick and straightforward, boosting the exposure of eCommerce service delivery both locally and globally. Additionally, adolescents, adults, and the elderly's extensive use of mobile business apps have improved the efficiency of e-commerce services. According to this study, the adoption of mobile applications benefits e-customer service. Chemical studies, both qualitative and quantitative, show that the adoption of mobile applications improves the e-customer experience.

### 4.2.2. E-Commerce Factors Contributing to Increased Mobile Apps Acceptance

Participants 2 and 3 indicated that one of the primary reasons for the increasing popularity of mobile apps among customers who buy goods and services from online retailers is its ease. Typically, customers get quick responses from merchants about the price and availability of certain goods on the market. "The majority of customers accept mobile application acceptance due to the convenience with which they may purchase goods and services from internet retailers," Participant 2 explains. One factor contributing to consumer adoption of mobile apps in e-commerce was their simplicity of use [32]. Unlike the conventional buying system, which requires consumers to visit companies to make purchases, mobile applications do not need users to be physically present to complete transactions. As a result, time and resources that could have been spent at service outlets are diverted to meet other critical requirements. In addition, the statistics show that ease of use of mobile apps is linked to geographic location and, as a result, the frequency with which users purchase a particular service. Consequently, mobile apps allow consumers to buy e-commerce services on an as-needed basis from anywhere on the globe without making several visits to service providers [33].

## 5. Discussions

Through modern technology, customers may alter their interactions with providers and keep track of their purchases. According to [1, 6], technological advancements such as incorporating mobile applications into e-commerce companies have improved customer satisfaction. Additionally, as technology advances, online merchants will be able to provide superior service. For example, e-commerce businesses integrate cutting-edge technology into their operations to increase the efficiency of service delivery and the overall consumer experience. As a result, companies are being pushed to adopt innovation and integrate technology into their operations to improve efficient service delivery in an ever-changing business environment.

In contrast to the current research, [8] claims that most mobile applications lack human and social aspects, resulting in decreased user acceptance. This is one of the factors impeding e-development. In contrast to the current research, [8] claims that most mobile applications lack human and social aspects, resulting in decreased user acceptance. This is one of the factors impeding e-development. The current analysis highlights the critical importance of mobile app adoption to improve customer experience. However, there is a lack of knowledge about potential obstacles to mobile apps adoption. Consequently, further study of the issues surrounding mobile apps adoption among users who make purchases via e-commerce platforms is required. User impressions of the human characteristics associated with online products and services significantly impact buying patterns. In this respect, customers prefer mobile apps that incorporate speech information in their online content, since this has a major impact on their total choice, judgment, and cognitive effort in virtual purchasing situations [1]. Customers' preferences for mobile apps were ignored since the research's primary goal was to evaluate the impact of mobile applications on user experience improvement. To bridge the gap, future research should investigate similar issues with mobile apps from the consumer's perspective. According to this study, mobile apps are linked with specific features that educate users in real-time about new deals, discounts, and a variety of other goods provided by businesses. According to data, customer engagement is inextricably linked to a high level of consumer acceptance. However, [6] discovered that the mobile app was highly received among technologically savvy users, which contradicts the results of this study. In this case, the findings cannot be generalized to other consumer segments. To bridge this gap, future research should focus on specific consumer groups to evaluate the effect of mobile apps uptake on the customers' experience, thus enabling broad applicability of the findings. According to the research, accepting mobile applications would increase consumer satisfaction by simplifying making and paying for goods. Businesses may offer services that meet or exceed consumer expectations by integrating technology via e-commerce platforms.

## 6. Conclusion

The purpose of this research was to ascertain the impact of mobile apps uptake on electronic customer service. The researchers investigated the impact of mobile app acceptance on e-commerce service delivery and its importance on customer service, to contribute to the process of digital trade prosperity. Due to the fast growth of advances in technology, consumers demand ease while buying goods and services through digital platforms. The growing popularity of mobile applications demonstrates their compelling benefits, including a wider variety of services, faster transactions, and more flexibility. To remain viable in the face of globalization and open markets, e-commerce companies must create a mobile application that offers personalized services. The capacity of retailers to embrace new business procedures and incorporate cutting-edge technological solutions into their operations will decide their future growth and profitability. The shifting demographics are one of the most compelling reasons for mobile apps to facilitate transactions. To stay up with the fast growth of the retail industry, businesses must adapt their business strategies to guarantee that customers get a more personalized experience. The findings corroborated the findings of a small sample group, particularly those interviewed. This had no impact on the findings' reliability, though. Future studies should include a larger sample size to improve the robustness of the results.

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