

The Role of Mobile Commerce in Driving E-Commerce Growth in the Arab World

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Summary:

The e-commerce sector in the Arabic world has experienced significant growth, driven by increased internet penetration, mobile usage, and a young, tech-savvy population. This study examines the dynamics of e-commerce markets in the Arabic world, with a particular focus on eBay Marketplace as a case study. Through a combination of qualitative and quantitative research methods, the paper explores the challenges and opportunities faced by e-commerce platforms operating in the region. The findings highlight the importance of trust, payment systems, and logistical infrastructure in shaping the success of e-commerce ventures in the Arabic world..

Keywords: Electronic commerce; dynamic pricing; eBay; demand forecasting; case study

Jel Classification Codes : O33 ; L86 ; C67

Résumé:

Le secteur du e-commerce dans le monde arabe a connu une croissance significative, portée par une pénétration internet accrue, une utilisation mobile et une population jeune et férue en technologie. Cette étude examine la dynamique des marchés du e-commerce dans le monde arabe, avec un accent particulier sur eBay Marketplace comme étude de cas. Grâce à une combinaison de méthodes de recherche qualitative et quantitative, l'article explore les défis et opportunités auxquels sont confrontées les plateformes de commerce électronique opérant dans la région. Les résultats soulignent l'importance de la confiance, des systèmes de paiement et de l'infrastructure logistique dans la formation du succès des entreprises de commerce électronique dans le monde arabe.

Mots-clés : commerce électronique ; tarification dynamique ; eBay ; la prévision de la demande ; Étude de cas

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I- Introduction :

The rapid rise of mobile commerce (m-commerce) in the Arab world is part of a broader global trend where mobile technology has become an essential tool in transforming the retail landscape. The Arab region, particularly the MENA (Middle East and North Africa) countries, has seen substantial growth in mobile commerce in recent years, fueled by widespread smartphone adoption (Singh, 2022), increasing internet penetration, and the evolution of digital payment systems. According to recent reports, smartphone penetration in the GCC countries (Gulf Cooperation Council) has reached over 90%, making mobile devices an integral part of daily life for millions of consumers. This shift in consumer behavior, where individuals increasingly rely on their mobile devices for shopping, has directly impacted the growth of e-commerce and retail sectors.

Additionally, government initiatives in various MENA countries have played a pivotal role in accelerating the digital transformation of the economy. For example, Saudi Arabia's "Vision 2030" and the UAE's push for a digital economy have created an enabling environment for businesses to adopt mobile-first strategies. The region's mobile commerce growth is also supported by increasing mobile payment adoption (Alaskar T, 2023), with e-wallets, digital wallets, and mobile banking apps becoming more widespread. These innovations have made online shopping more accessible and convenient, further fueling the mobile commerce boom.

Despite the promising growth, the Arab world faces several challenges in expanding mobile commerce (B, 2025). Issues such as security concerns, a lack of standardized regulations, and digital infrastructure gaps, especially in rural areas, hinder the full potential of m-commerce. However, as the region continues to invest in improving its technological infrastructure and addressing consumer concerns, the future of mobile commerce in the Arab world looks increasingly bright.

In addition, digital infrastructure disparities between urban and rural areas present a barrier to equitable access to mobile commerce services. While cities in countries like the UAE and Saudi Arabia boast advanced digital infrastructures, many rural areas still struggle with limited internet connectivity and low smartphone adoption rates.

Moreover, the cultural and linguistic diversity of the Arab world poses another challenge. The region's varied consumer preferences and the need for mobile commerce platforms (C, 2015) to cater to different languages and cultural norms complicate the development of standardized solutions.

Thus, the central problem of this research lies in understanding how mobile commerce can continue to thrive in the Arab world while addressing these critical challenges. How can businesses and governments work together to foster a secure, inclusive, and regulated environment for mobile (GSMA, 2025) commerce? What strategies can be implemented to overcome the infrastructural, regulatory, and cultural barriers that currently limit the full potential of m-commerce in the region?

This study seeks to explore these questions and offer insights into the strategies that can drive the future growth of mobile commerce in the Arab world, ensuring that it remains a sustainable and inclusive pillar of the region's digital economy. This problem frames the research problem in terms of both the opportunities and challenges facing mobile commerce in the Arab world. It outlines the central issues that the study will aim to address and the objectives it will pursue.

II. Methods and Tools

This study employs approach of qualitative statistics with e-commerce experts and the growth in Arabic World. Also, this research aims to provide a holistic understanding of how mobile commerce influences e-commerce growth in the Arab world. The findings are expected to inform businesses, policymakers, and academics about the current landscape and future prospects of mobile commerce in the Arabic word

III. Literature Review

1- The Impact of Digital Transformation on E-Commerce Growth

The Digital transformation has become a pivotal force in reshaping the global e-commerce landscape. By integrating advanced technologies such as artificial intelligence (AI), cloud computing, and mobile platforms, businesses have enhanced operational efficiencies, improved customer experiences, and expanded market reach. This transformation is particularly evident in emerging markets, where digital adoption is accelerating.

The Key technological innovations have significantly influenced e-commerce growth:

- **Artificial Intelligence (AI):** AI-powered tools, including chatbots and personalized recommendation engines, have enhanced customer engagement. For instance, during the 2024 Black Friday shopping period, AI-driven chatbots contributed to an 1,800% increase in retail site traffic and a 9% rise in conversion rates for retailers utilizing these technologies .

- **Mobile Commerce:** The proliferation of smartphones has facilitated mobile-first shopping experiences. In 2024, mobile commerce accounted for 55% of online sales during Black Friday, underscoring the shift towards mobile platforms in consumer purchasing behavior .

- **Cloud Computing:** Cloud services have enabled scalable and flexible e-commerce operations. Businesses leveraging cloud infrastructure can efficiently manage fluctuating demands, ensuring consistent service delivery during peak shopping periods.

- **Market Growth and Consumer Behavior**

The global e-commerce market has experienced substantial growth, driven by digital transformation:

- **Global Market Size:** The global e-commerce market was valued at \$25.93 trillion in 2023 and is projected to reach \$83.26 trillion by 2030, growing at a compound annual growth rate (CAGR) of 18.9% from 2024 to 2030 ([grandviewresearch.com])
- **Regional Growth:** In emerging markets, digital transformation has been a catalyst for economic development. For example, India's digital economy is expected to surpass \$1 trillion by 2030, fueled by mobile-first consumer behavior, increased smartphone usage, and seamless digital payments ([The Times of India]).
- **Consumer Preferences:** The integration of digital technologies has led to more personalized shopping experiences. AI and machine learning algorithms analyze consumer data to offer tailored product recommendations, enhancing customer satisfaction and loyalty.

The advent of mobile technology has revolutionized the landscape of electronic commerce. Mobile Commerce (m-commerce) refers to the buying and selling of goods and services through wireless handheld devices such as smartphones and tablets. This paradigm shift has significantly influenced consumer behavior, business strategies, and technological advancements in the retail sector.

2- Impact on Mobile Commerce

- Increased Conversion Rates:** Mobile-optimized websites and applications have led to higher conversion rates by providing users with a more intuitive and efficient shopping experience (Kresin, 2023).
- **Broader Market Reach:** M-commerce enables businesses to reach a global audience, transcending geographical limitations and expanding market potential (Trivedi & Sanchiher, 2023).
- **Enhanced Customer Engagement:** The integration of features like push notifications, location-based services, and personalized recommendations has improved customer engagement and retention (Mollick, 2023).

IV- Discussion and results:

1-Challenges and Considerations of Mobile Commerce

- Security Challenges in Mobile Commerce

One of the primary concerns facing the mobile commerce industry today is the security of mobile transactions and the protection of user data. As mobile commerce continues to grow, the risks associated with fraud, data breaches, and unauthorized access to sensitive information have escalated. It is essential for businesses to invest in robust security measures, such as encryption, multi-factor authentication, and

secure payment gateways, to safeguard both customer data and transaction integrity. Addressing these concerns is not only vital to ensure compliance with data protection regulations but also to maintain consumer trust in mobile shopping platforms (Mollick, 2023).

- The Impact of Device Fragmentation

Another significant challenge is the fragmentation of mobile devices and operating systems. With numerous devices available across the market, each with its own set of specifications, screen sizes, and operating systems, creating universally compatible mobile applications becomes increasingly complex. This fragmentation can lead to performance inconsistencies and compatibility issues, making it difficult to provide a seamless user experience across all platforms. Developers must adopt cross-platform development tools, conduct extensive testing across different devices, and prioritize responsive design to mitigate these issues and ensure that applications function smoothly across various mobile environments (Kresin, 2023).

- User Experience (UX) Optimization

As mobile commerce evolves, so too do consumer expectations. In a highly competitive market, ensuring that users have a smooth, intuitive, and satisfying experience is crucial for sustaining success in mobile commerce. This necessitates a continuous focus on optimizing the user interface (UI) and overall user experience (UX). Companies must regularly update their mobile applications to incorporate the latest design trends, streamline navigation, and address user feedback to improve usability. Moreover, personalization features, such as tailored recommendations and adaptive interfaces, can further enhance the user experience, ensuring that customers remain engaged and satisfied with the mobile shopping journey (Kresin, 2023).

This version contextualizes the points within the framework of **business operations** and **strategies** for improving mobile commerce. It shifts the focus toward practical steps organizations must take to address security, device fragmentation, and user experience optimization in mobile commerce applications

2- Growth of Mobile Commerce (2017–2028)

The global surge in smart phone usage, alongside an increasing reliance on online shopping, has fostered significant growth in the mobile commerce sector. It is therefore unsurprising that mobile commerce has seen a marked rise in popularity. Recent mobile commerce statistics reveal a steady increase in annual revenues, as consumers increasingly turn to their smart phones for purchasing products.

Table 1: Global Mobile Commerce Revenues and Annual Growth

Year	Global mobile commerce revenues	Annual change	Share of total retail ecommerce
2017	\$500 billion	-	40%
2018	\$660 billion	+32.0%	43%
2019	\$810 billion	+22.7%	46%
2020	\$1.10 trillion	+35.8%	48%

2021	\$1.40 trillion	+27.3%	49%
2022	\$1.48 trillion	+5.7%	52%
2023	\$1.71 trillion	+15.5%	54%
2024	\$2.07 trillion	+21.1%	57%
2025	\$2.51 trillion	+21.3%	59%
2026	\$2.74 trillion	+9.2%	60%
2027	\$3.02 trillion	+10.2%	62%
2028	\$3.35 trillion	+10.9%	63%

Source: www.statista.com/topics/11883/mobile-commerce-worldwide visite 24/10/2025

The global mobile commerce sector is projected to experience substantial growth, with revenues expected to reach \$2.07 trillion by 2024, marking a 21.1% increase from \$1.71 trillion in 2023. This milestone represents the first time mobile commerce revenues will surpass the \$2 trillion mark, accounting for 57% of the total retail e-commerce market. Such growth signifies a notable acceleration when compared to previous years and is anticipated to exceed the expected average annual growth rate of 19.2% from 2017 to 2028. From 2017 to 2024, mobile commerce revenues will have more than quadrupled, highlighting the increasing role of mobile platforms in the global retail ecosystem. With 4.88 billion smartphone users worldwide, the expansion of mobile commerce is expected to continue, underpinned by the growing ubiquity of mobile devices. Analysts forecast that by 2028, mobile commerce will generate \$3.35 trillion in revenue, representing 63% of total e-commerce sales. This indicates that more than \$3 out of every \$5 spent on online shopping will be transacted via mobile devices.

The rapid growth of mobile commerce can be attributed to the convenience mobile devices offer consumers, especially in facilitating purchases on the go. The proliferation of mobile payment options has further enhanced the mobile shopping experience, with 75% of consumers indicating that they make purchases via mobile devices because it saves them time. Despite these advantages, there are still several challenges in the mobile shopping experience. According to surveys, 90% of consumers believe their mobile commerce experiences could be improved. Common difficulties include navigating small pages and links, as well as concerns about security. Additionally, half of consumers expressed a desire for more detailed product reviews and comprehensive information from retailers. These findings suggest that, while mobile commerce is growing rapidly, there are areas that need to be addressed to enhance user experience.

In the MENA region, mobile commerce is similarly experiencing significant growth, largely driven by increasing mobile internet connectivity, rising mobile data traffic, and the anticipated adoption of 5G technology. The region's mobile internet connectivity has expanded dramatically, with the percentage of the population having mobile internet access increasing from 4% in 2015 to 49% in 2023. This growth is attributed to the widespread availability of affordable data plans and the growing prevalence of internet-enabled mobile devices. Looking ahead, mobile data traffic per connection is expected to triple between 2023 and 2030, driven by the consumption of online content, including e-commerce, gaming, video streaming, and social networking, particularly among the region's large and youthful population.

The adoption of 5G technology in the MENA region is projected to further accelerate mobile commerce by 2025. By the end of the decade, it is expected that 50% of the region's population will have access to 5G networks, with the Gulf Cooperation Council (GCC) states leading the transition, reaching 95% coverage by 2030. This technological leap will enhance the overall mobile commerce experience through faster internet speeds and improved connectivity. The impact of mobile technologies on the global economy is considerable, with mobile services contributing approximately 5.8% to the global GDP in 2023, equivalent to \$6.5 trillion in economic value added.

In the Arabic-speaking market, the Middle East and North Africa (MENA) region has some of the highest rates of mobile phone penetration globally, with countries such as Saudi Arabia, the UAE, and Egypt reporting smartphone adoption rates above 70%. Given this widespread mobile usage, businesses in the region must prioritize mobile-first strategies to effectively engage consumers. Notably, 80% of online shoppers in the Middle East prefer using mobile applications rather than websites, and 90% of social media users in the region access platforms via mobile devices. These trends underscore the necessity for businesses to develop mobile applications that are optimized for Arabic-speaking users, especially considering that Arabic is the fourth most widely spoken language on the internet.

However, mobile app development for the Arabic market presents unique challenges, including localization issues, cultural sensitivity, and dialectical differences. Arabic is written from right to left, which necessitates careful attention to the user interface (UI) and user experience (UX) design to ensure proper formatting and alignment. Additionally, cultural sensitivity is crucial, as developers must ensure that app content, images, and symbols are appropriate for the region. Arabic dialects, such as Gulf Arabic, Egyptian Arabic, and Levantine Arabic, further complicate the process, as developers must often customize apps to cater to regional preferences and linguistic differences.

Moreover, many international payment systems are not fully optimized for local currencies or Islamic banking regulations, creating barriers to seamless mobile commerce transactions. To overcome these obstacles, businesses must integrate region-specific payment solutions, such as Mada in Saudi Arabia, Fawry in Egypt, and BenefitPay in Bahrain. Despite these challenges, the MENA region offers significant opportunities in sectors such as e-commerce, fintech, and online education. With the rapid rise of platforms like Noon, Namshi, and Souq, businesses investing in mobile commerce apps are well-positioned to capitalize on the growing trend of mobile shopping. Additionally, the demand for secure, Islamic-compliant financial services has given rise to innovative fintech solutions, including digital wallets, cryptocurrency trading apps, and mobile banking services.

The future of mobile app development in the MENA region will likely be shaped by emerging technologies such as artificial intelligence (AI), augmented reality (AR), and blockchain. The integration of AI can provide personalized user experiences, AR can enhance virtual shopping, and blockchain can facilitate secure and transparent transactions. By focusing on localization, cultural adaptation, and the integration of these emerging technologies, businesses can successfully navigate the Arabic mobile app market and meet the needs of its diverse consumer base.

V-Conclusion:

The growth of mobile commerce in the Arab world presents a transformative opportunity for both consumers and businesses. With the rising adoption of smartphones, the spread of digital payment systems, and the region's digitalization efforts, mobile commerce has become a significant component of the retail and e-commerce landscape in the MENA region. Governments have played a critical role in fostering an environment conducive to digital commerce through initiatives such as Saudi Arabia's Vision 2030 and the UAE's digital economy strategy. These policies have created a favorable climate for mobile commerce to thrive, attracting both regional and international businesses to invest in mobile-first strategies.

Despite the impressive growth trajectory, challenges such as cybersecurity concerns, fragmented regulations, and infrastructural limitations remain. For mobile commerce to reach its full potential in the Arab world, addressing these challenges will be crucial. Businesses must focus on enhancing the security of digital transactions, improving user experiences, and ensuring mobile commerce platforms are accessible to a broader demographic. Governments and regulatory bodies will need to work together to create standardized regulations that ensure consumer protection, enhance market transparency, and promote competition.

Looking to the future, mobile commerce is poised to continue its rapid growth in the Arab world, with projections indicating that by 2028, m-commerce will account for a significant portion of the region's overall e-commerce market. As consumer behavior evolves and mobile payment systems continue to gain acceptance, the role of mobile commerce in driving the region's digital economy will only become more pronounced. Thus, the Arab world's mobile commerce sector offers exciting prospects for businesses, consumers, and policymakers alike, fostering economic growth, innovation, and global competitiveness in the digital age.

VI-References

- Alaskar T, H. &. (2023). Drivers of mobile commerce adoptiuon intention by saudi during the covid -19 pandemic. *Springer* (12).
- B, A. H. (2025). Mobile commerce adoption A value perspective from a Tunisia context. *journal of telecommunications and Digital Economy* , pp. 5-20.
- C, M. E. (2015). Understanding the effects of social media and mobile usage on e- commerce An exploratory study in saudi Arabia. *International Management Review* , pp. 98-107.
- GSMA. (2025). *Mobile internet usage in the middle East statistics and trends*. Récupéré sur www.go-globe.com/mobile-internet: www.go-globe.com/mobile-internet
- Singh, W. M. (2022). Factors affecting adoption and use of M -commerce services among customers in Saudi Arabia. *Elsevier- Hellyon* , p. /.