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The challenges and opportunities of E-commerce in Somalia: A review

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Abstract

The information communication technology (ICT) sector is rapidly growing and significantly influences the global economy. Most activities in the financial sector are now performed through ICT. The advent of the Internet has become an indispensable aspect of modern commercial transactions. E-commerce involves conducting business activities through the Internet, fully or partially. This paper explores the opportunities and challenges of e-commerce in Somalia.

Review Findings: This review study found three major opportunities of e-commerce in Somalia: human capacity development, policy and legal framework initiatives of the government, and telecommunication infrastructure expansion in the country. Five major challenges that highly hinder e-commerce adoption in Somalia include low customer awareness in e-commerce, lack of skilled workers, fear of risk security and privacy, lack of e-commerce infrastructure, and lack of legal and regulatory framework.

Keywords: E-commerce, E-Business, M-Commerce, Somalia

Introduction

The Information and Communication Technology (ICT) sector is rapidly growing and significantly influencing the global economy. Today, most activities in the financial sector are carried out through ICT. The advent of the Internet has become an indispensable part of modern commercial transactions. A key reason for this is the emergence of e-commerce, which refers to conducting business activities fully or partially over the Internet.

Definition of E-Commerce

The concept of E-Commerce has various definitions depending on the perspective of the observer or commentator. Some scholars differentiate E-Commerce from E-Business, while others use the terms interchangeably.

When distinguishing the two, E-Commerce is typically viewed from a commercial perspective, where transactions involve value exchange and payments. In this sense, E-Commerce refers to financial transactions conducted electronically between businesses, consumers, and other stakeholders.

However, a broader definition of E-Commerce includes different types of business interactions that may not always involve payments. Some scholars argue that this broader perspective aligns more with E-Business, making E-Commerce a subset of E-Business. Others, however, view E-Commerce as encompassing all electronically mediated transactions, whether commercial or not, between organizations, individuals, and third parties.

For the purpose of this discussion, here are a few notable definitions of E-Commerce from different authors:

- **Vladimir Zwass (1996)** ^[8]: “Electronic commerce is the sharing of business information, maintaining business relationships, and conducting business transactions by means of telecommunication networks.”
- **Jelassi and Enders (2005)** ^[12]: “Electronic commerce deals with the facilitation of transactions and the selling of products and services online, either via the Internet or any other telecommunications network.”

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According to Turban *et al.* (2008) [7], E-Commerce can be understood from multiple perspectives:

1. **Communication Perspective:** The delivery of information, products, services, and payments over communication networks such as telephone lines, computer networks, and other electronic channels.
2. **Business Perspective:** The use of technology to automate business transactions and improve workflow efficiency.
3. **Service Perspective:** A tool that helps businesses reduce costs, enhance service quality, and speed up service delivery.
4. **Online Perspective:** An enabling environment for online transactions, including the exchange of goods, services, and information through the Internet.

Classification of E-Commerce

E-Commerce operations can be classified in different ways, depending on the parameters used by authors and analysts. Below are some of the common classification methods:

- **By Seller/Buyer:** Based on the type of parties involved (Government, Consumer, Business, etc.).
- **By Product or Activity:** Categorized by the nature of the transaction (Search engines, Online retail, etc.).
- **By Revenue Source:** Defined by how income is generated (Advertising revenue, Subscription fees, etc.).
- **By Task:** Based on the purpose of the transaction (Shopping, Investment, Banking, etc.).
- **By Technology:** Focused on the technological framework used (Internet infrastructure, Application frameworks, etc.).

Among these, the buyer/seller classification is the most widely used, as it clearly identifies the parties involved in a transaction and their roles. Below are the major types of E-Commerce transactions as outlined by Turban *et al.* (2008) [7].

1. Consumer-to-Consumer (C2C)

C2C E-Commerce involves transactions between individuals without the need for a human intermediary. Instead, digital platforms serve as intermediaries, enabling individuals to sell, auction, or advertise products and services. Popular examples include platforms like eBay, Facebook Marketplace, and classified ad websites.

2. Business-to-Consumer (B2C)

B2C E-Commerce involves businesses selling directly to consumers. These platforms focus on either direct transactions or brand-building to enhance consumer trust and increase sales. Consumers can compare prices and purchase products without intermediaries. Well-known global examples include Amazon, Alibaba, and eBay, while in Somalia, platforms like Somali Mall and Dahabshiil Online Market are gaining popularity.

3. Consumer-to-Business (C2B)

C2B transactions allow consumers to sell products or services to businesses. This model includes platforms where individuals set their prices, and businesses bid for the opportunity to fulfill the request. Freelance marketplaces such as Upwork, Fiverr, and Freelancer are examples of C2B E-Commerce.

4. Business-to-Business (B2B)

B2B E-Commerce involves transactions between businesses, often in large volumes. These transactions may include wholesalers, manufacturers, and service providers. This is one of the largest forms of E-Commerce in terms of value. Examples include Alibaba's wholesale platform and corporate procurement portals. In Somalia, B2B E-Commerce is growing, particularly in the import/export sector and logistics services.

5. Business-to-Business-to-Consumer (B2B2C)

In B2B2C, businesses act as intermediaries, reselling products or services obtained from another business to consumers without adding extra value. Marketplaces like Amazon, Jumia, and Shopify stores operate under this model, allowing third-party sellers to list their products for consumers.

6. Business-to-Employee (B2E)

B2E E-Commerce is used by organizations to provide employees with information, products, and services. It is particularly useful for companies with remote or mobile employees. This includes HR portals, company intranets, and employee benefit platforms.

E-Commerce Platforms

E-Commerce relies entirely on digital technology for its operations and transactions, making electronic communication a fundamental component (Turban *et al.*, 2008) [7]. The key technologies used in E-Commerce include:

- **Internet communications** through websites and emails (intranet and extranet).
- **Digital media** such as mobile and wireless networks, including cable television and satellite services.
- **Mobile phones and devices**, which facilitate mobile banking, digital payments, and online shopping.
- **Fixed telephone lines**, often used for telephone banking and customer service.

While all these platforms contribute to E-Commerce operations, the web remains the core foundation of online transactions. The web enables businesses to transcend geographical barriers, allowing transactions to take place at any time, across different time zones. It has become an essential tool for businesses aiming to remain competitive, with many companies investing in well-designed, fully functional websites to facilitate E-Commerce activities.

However, E-Commerce platforms vary in capabilities depending on their purpose, features, and design. Some platforms focus on retail transactions, while others support business-to-business (B2B) trade, online auctions, or service-based transactions.

E-Commerce in Somalia: Opportunities and Challenges

Although research on E-Commerce in Somalia remains limited, digital trade is gaining momentum. The increasing number of mobile Internet users, the widespread adoption of mobile money services (Such as Zaad and EVC Plus), and the rise of online marketplaces present significant opportunities for the country's digital economy.

Somalia has a strong trading tradition, with exports including livestock, fish, sesame seeds, bananas, frankincense, and myrrh. E-Commerce offers a gateway for

Somali businesses to access international markets and expand their customer base without the need for physical storefronts.

However, like every sector, E-Commerce in Somalia faces both opportunities and challenges. This study explores the following key questions: 1. What are the opportunities of E-Commerce for Somalia? 2. What are the challenges facing E-Commerce adoption in Somalia?

By addressing these questions, this research aims to provide insights into how Somalia can leverage E-Commerce for economic growth while overcoming barriers such as infrastructure limitations, digital literacy gaps, and cybersecurity concerns.

Materials and Methods

This paper is based on secondary data collected from various sources, including published books, academic journals, research papers, magazines, newspapers, online resources, and official statistical reports.

Results

The main platforms for online shopping in Somalia include Somali Mall, Somali Bazar, Qoraas, and Jumia (which is the leading online marketplace in the country). However, E-Commerce in Somalia is still in its early stages and is not yet widely adopted.

The government of Somalia is working on developing policies and regulations to support the growth of E-Commerce, but these efforts are still in the draft stages.

Somali banks have made progress with digital banking services, primarily through mobile money platforms such as Zaad and EVC Plus, which are widely used for transactions. While debit cards and ATMs are operational in some areas, credit cards are not yet commonly issued by Somali banks. The country's banking system is working to enhance connectivity, but interbank integrations and cross-border payment solutions remain limited.

Somali financial institutions have started implementing mobile banking, internet banking, and card-based transactions. However, there is still significant room for improvement in terms of digital financial services and infrastructure development. International companies are currently engaged in providing technology services and financial inclusion projects in collaboration with Somali banks and the government.

Presently, Somalia has yet to establish a comprehensive legal framework to regulate and monitor E-Commerce operations. Efforts are ongoing to draft national policies to create a secure and structured environment for digital commerce, fostering growth in both local and international transactions.

Opportunities of E-commerce in Somalia

Human Capacity Development

Somalia has made notable strides in the education sector, especially in terms of enrollment and access to education. Over the past decade, the number of learners has significantly increased, with many institutions expanding their capacity to meet the growing demand for education. Efforts to improve learning outcomes in key subjects have also been observed, although challenges remain in terms of quality and infrastructure. For instance, Somali institutions have worked to improve digital literacy and ICT training at both the primary and secondary education levels.

The number of students pursuing ICT-related degrees (such as Computer Science, Information Systems, and Electrical Engineering) has seen an upward trend in both public and private institutions in recent years. As the country continues to modernize, there is a growing emphasis on providing educational pathways that meet the demand for skilled professionals in the digital economy.

Policy and Legal Framework Initiatives

Historically, Somalia's telecommunications and internet services were limited by infrastructure challenges. The market was largely monopolized by government-run entities. However, recent shifts toward liberalizing the telecommunications sector are evident. In recent years, the Somali government has been working on legislation to encourage market competition and attract foreign investment in telecommunications and E-Commerce.

While telecom infrastructure remains a work in progress, Somali regulators are drafting a national law to regulate E-Commerce. This law is expected to lay the groundwork for creating a stable and secure environment for online transactions and digital market growth, addressing challenges such as fraud prevention and cross-border trade.

Telecommunications Infrastructure Expansion

Somalia has seen increasing investments in telecommunications infrastructure, especially with the expansion of mobile internet services. The country's mobile network operators have made substantial strides in improving their coverage and service offerings. Somtel, Hormuud Telecom, and Telesom have been key players in this area, providing mobile money services and facilitating internet access to a broader population.

As Somalia works towards enhancing its telecom infrastructure, there have been initiatives to improve 5G technology and expand LTE services, crucial for mobile banking, e-commerce, and online education. While these developments are still in their infancy, partnerships with international telecom companies are expected to drive future growth, bringing more services and technologies to the market.

Challenges in E-commerce in Somalia

Low Customer Awareness

In Somalia, customer awareness of online shopping remains relatively low, compounded by a high rate of illiteracy and a language barrier, especially in terms of the English language, which is often used in e-commerce platforms. Additionally, consumer behavior and the lack of understanding regarding Information and Communication Technology (ICT) adoption are major challenges for expanding the use of e-commerce. This reflects a lack of familiarity with digital shopping options, hindering the growth of the online market (Singh *et al.*, 2016; Shaikh, J. *et al.*, 2021) ^[14, 3].

Lack of Skilled Human Resources

The lack of skilled human resources is a critical barrier to the success of e-commerce in Somalia. For businesses to thrive in an e-commerce environment, they need access to skilled professionals who can manage digital platforms and handle technological advancements. Limited skilled labor has been identified as a major challenge for organizations starting e-commerce operations in Somalia (Lemma Y,

2017; Mishra M and Tiruneh T, 2020) ^[13, 14]. This shortage of expertise continues to hinder the adoption and sustainability of digital commerce in the country.

Fear of Risk and Security

Somali consumers often express concerns over security when shopping online. This includes cybersecurity risks, the reliability of e-commerce websites, and privacy issues, with the fear that their financial data may be exposed in the event of a security breach. A lack of robust online security measures has made some wary of engaging in digital transactions (Lemma Y, 2017) ^[13]. As online shopping continues to grow, addressing security concerns and building trust will be essential for the success of e-commerce in Somalia (Singh *et al.*, 2016) ^[16].

Lack of E-Commerce Infrastructure

E-commerce in Somalia is still in its early stages, and the lack of infrastructure remains one of the biggest challenges. The necessary hardware, software, network facilities, and other technological support systems required to run e-commerce businesses are often inadequate. While the demand for online services is increasing, the absence of a strong digital infrastructure hampers the ability of businesses to scale effectively. Without proper infrastructure, e-commerce will continue to face significant challenges (Shaikh, J. *et al.*, 2021; Asrie B, 2012) ^[3, 10].

Lack of Legal and Regulatory Framework

In Somalia, the legal and regulatory framework for e-commerce is underdeveloped. The absence of comprehensive e-commerce laws, including provisions for consumer protection, data protection, and cybercrime, creates uncertainty for both consumers and businesses. Without legal assurances, trust in e-commerce remains low. The Somali government has begun drafting policies and regulations that would govern digital transactions and e-commerce practices. However, these laws are still in the early stages, and once implemented, they are expected to significantly enhance the growth and security of Somalia's online market (Ashenafi T, 2017; Shaikh, J. *et al.*, 2021).

Conclusion

This systematic review study found that three major opportunities for e-commerce in Somalia are: human capacity development, policy and legal framework initiatives by the government, and telecommunication infrastructure expansion. These opportunities provide a foundation for the growth of e-commerce in the country. However, there are five significant challenges that hinder the adoption of e-commerce in Somalia: low customer awareness, lack of skilled workers, fear of security and privacy risks, lack of e-commerce infrastructure, and lack of a legal and regulatory framework.

To address these challenges, the Somali government should prioritize the formulation of strategies that enhance the e-commerce infrastructure and develop an enabling legal and regulatory framework. This should include the active participation of all relevant stakeholders, alongside the implementation of awareness-raising campaigns to improve customer understanding and trust in online platforms.

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