

ERF Policy Brief

Adoption of E-commerce Activities by Moroccan Firms: What Should Be Done?

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About the authors

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In a nutshell

- Moroccan firms' adoption of e-commerce activities is at low levels, and research on this topic is limited.
- Newer firms that are more open to market changes and innovations are more likely to adopt e-commerce activities.
- Firms are more likely to adopt e-commerce activities when they have higher proportions of workers with higher education.
- Listing on a digital platform increases the probability of adopting e-commerce activities.
- Engaging in innovation-driven activities has a positive effect on the adoption of e-commerce by Moroccan firms.

Introduction

The rapid spread of digital technologies has been disrupting societies since the 1990s. However, despite the waves of new digital technologies, their use for productive purposes and role in enabling economic transactions remain low in African countries, which is one reason why digitalization is not translating into the creation of economic value and growth. Studying the level of diffusion of e-commerce in firms is fundamental for a better understanding of how digitalization affects economic performance.

An important business strategy and a powerful catalyst of economic development, the role of e-commerce as a driver of economic growth seems to have increased. However, most research on the adoption of e-commerce activities focuses on developed countries and larger firms, and it mostly overlooks small and medium-sized enterprises and developing countries. In developing countries, the take-up of e-commerce is lagging due to a lack of infrastructure, poor socioeconomic conditions, and the absence of national strategies (Goyal et al., 2022). This deprives developing economies of the benefits and contributions provided by e-commerce.

Most developing countries lack information and guidance on the digitalization of services, particularly e-commerce. In theory, digital transformation should allow developing countries to achieve technological and development leapfrogging; in practice, however, the conditions in these countries are a barrier to these benefits. The different economic outlook and different access to technology seem to imply that developing countries experience a different 4th Industrial Revolution to that experienced in the developed countries. These differences are related to industry/sector maturity, use of technology, skills, availability of human resources, and political governance. The dominant belief tends to be that digital transformation will have an overall positive effect, and in the case of African countries, the World Bank (2022) refers to an acceleration resulting in an additional growth of around two percent.

Compared to China and India, the growth of e-commerce activities in African countries started later and has been less consistent due to high transaction costs and limited demand. In Morocco, as in most African countries, e-commerce remains at low levels and below potential. The UNCTAD (2020) index, which highlights the relative strengths and weaknesses of the different elements in the e-commerce process, ranks Morocco 81st in a sample of 151 countries. ANRT (2020)

shows that around 8.4 percent of Moroccan company purchases are electronic and, in 95 percent of cases, represent only four percent of their total purchases. This poor performance could be due to a lack of trust in legal guarantees and the low use of online payment solutions.

This policy brief, which is based on the results of the ERF survey of Moroccan firms and research on this topic, discusses the adoption of e-commerce activities by Moroccan firms and provides some policy recommendations related to increasing e-commerce adoption in Morocco.¹

Adoption of e-commerce in Morocco: Main Trends

Although the adoption of e-commerce in Morocco has been slow, it is growing. The total revenue from e-commerce in Morocco in 2021 was USD 300 million – representing a 40 percent growth compared to the previous year. The reason for this increased uptake of e-commerce in Morocco is the increase in the Internet penetration rate (currently 69 percent), which has increased online shopping and the use of online payments in the country.

July 2022 data collected by the Economic Research Forum (ERF) from 807 firms in Morocco indicate that less than a third of the firms surveyed (31.23 percent) had adopted e-commerce, which is measured by the proportion of firms involved in online buying and/or selling. The survey data show also that 79.80 percent of the firms have fewer than 15 employees, and that 25.99 percent of the sample are young firms (less than five years old), with only 36.58 percent aged between six to 10 years. Firms between 11 and 15 years of age represent 20.06 percent of the sample, and those older than 15 years of age account for only 17.37 percent.

Firms' Age and Location As An Indicator of E-commerce Adoption

Firm age seems to be an important predictor of adopting e-commerce activities; the younger the firm, the more likely the adoption of e-commerce. Firms aged between 11 and 15 years of age and those aged over 15 years

¹ Ben Youssef, A. (2023) Determinants of adoption of online commercial activities by Moroccan firms. ERF Working Paper (Forthcoming).



Figure 1. Adoption of E-commerce Activities

are less likely to adopt e-commerce than younger firms. This is due to the fact that younger firms are more likely to cope with technological change and adopt technological innovations compared to older traditional firms. It seems that older firms face bigger barriers to the adoption of e-commerce due to their inherently lower ability to adopt new technologies. Since they do not require familiarity with new technology, older firms prefer in-store (offline) sales to online ones.

Older firms can also find it difficult to adapt their existing infrastructure to e-commerce. They are more likely to have legacy systems that are incompatible with e-commerce platforms and require significant investment to upgrade. They may also find it difficult to integrate their existing business processes – such as inventory management, order fulfillment, and customer service – with e-commerce. In contrast, younger firms tend to be more agile and more adaptable to changes. They tend to have a better understanding of digital technologies and e-commerce strategies because they were established in the digital age. Younger firms are also able to build their technology infrastructure from scratch and utilize e-commerce possibilities and the latest technology advancements, which allows them to be more efficient and cost-effective.

The survey findings on firm location show that firms located in the Oriental, Casablanca-Settat, and Souss-Massa regions are less likely to adopt e-commerce than those located in the Tangier-Tetouan-Al Hoceima region. The level of competition in the firm's location might also affect e-commerce adoption; firms located in areas with high levels of competition may be more likely to adopt e-commerce to achieve a competitive advantage. The use of e-commerce gives access to a wider customer base and enables the firm to offer its products and services at lower prices than possible in

traditional physical stores. Firms in areas where there is less fierce competition may be less motivated to adopt e-commerce activities due to their captive market and lesser need to invest in an e-commerce infrastructure to expand their customer base. Many firms find it difficult to build the logistics infrastructure required to support e-commerce operations, such as delivery and warehousing facilities.

The Influence of Employee Characteristics and Skills on E-commerce Adoption

The success of an e-commerce business largely depends on the abilities and characteristics of its employees. Firms that adopt e-commerce need to hire employees with appropriate skills and provide continuous training and development to keep abreast of the changing demands of the industry.

Firms with a significant proportion of employees who are higher education graduates have a higher probability of adopting e-commerce in Morocco. In other words, firms in which workers with higher education represent between 51 percent and 75 percent of the workforce are more likely to adopt e-commerce activities. The use of technologies related to e-commerce requires a minimum level of cognitive and technological abilities.

The level of digital skills demanded from new recruits is important for e-commerce adoption, which seems to depend on the digital literacy level of workers. A lack of digital cognitive resources constrains the use of information and communication technology required to develop e-commerce activities. However, Moroccan firms do not devote a lot of importance to digital skills and their impact on the adoption of e-commerce. Firms with a high proportion of employees with digital skills will be more likely to use e-commerce, develop and implement e-commerce strategies, design and manage websites, and use social media effectively to promote products and services. Firms lacking such employees will find it almost impossible to develop and implement e-commerce strategies.

A good level of digital skills enables the use of data analytics to obtain insights into customers' behaviors and preferences. It allows targeted marketing campaigns and better customer engagement. Firms with poor digital skills will miss out on these opportunities and are likely to find it challenging to compete with firms that have a better understanding of their customers' needs and preferences.

Digital Platforms Facilitating the Adoption of E-commerce

One of the main advantages of participating in a digital platform is the ability to reach a wide audience. Digital platforms such as Amazon, eBay, and Alibaba have millions of active users, making it easier for firms to market and sell their products globally. It enables small and medium-sized firms to compete with large firms by breaking down the traditional barriers to entry into the e-commerce industry.

Listing on an app, website, or digital platform such as Amazon or Jumia increases the probability of e-commerce adoption by Moroccan firms. Digital platforms offer a wealth of resources, including detailed guides and tutorials that allow users to get the most out of their experience. Their large user base makes such platforms the ideal choice for firms planning to engage with e-commerce.

Digital platforms provide access to valuable customer data, including purchase histories, preferences, and demographics. This information can be used to develop targeted marketing campaigns and personalized customer experiences in addition to improving customer engagement and loyalty. Firms can also use these data to optimize their supply chain and logistics operations by improving their efficiency and reducing their costs. Digital platforms offer a range of tools and features that allow firms to manage their e-commerce operations more effectively. These tools include inventory management systems, order processing systems, and payment gateways, which allow for easier e-commerce operations management and improve customer satisfaction.

Impact of Consumer Behavior on the Adoption of E-commerce Activities

The decision to adopt e-commerce activities is heavily influenced by consumer behavior, and convenience is one of the main reasons why consumers are attracted to e-commerce. It provides them with the ability to shop from home and avoid travel to a physical store, thereby leading to a shift in consumer behavior. It seems that businesses that offer e-commerce operations are more likely to attract and retain customers.

The COVID-19 pandemic had a major effect on consumer behavior in relation to online shopping. As

a result of lockdowns and social distancing measures, many Moroccans began using e-commerce platforms to purchase essential goods and services for the first time, and online shopping became the preferred shopping method for many Moroccans. According to a report by the Moroccan Ministry of Industry, Trade, and Green and Digital Economy, e-commerce transactions in Morocco increased by 45 percent in 2020 compared to the previous year.

When shopping online, consumers need to feel confident that their personal and financial information is safe and that the products they buy will meet their expectations. E-commerce businesses need to establish trust by implementing security measures, providing accurate product descriptions, and offering reliable customer support. When consumers feel safe and secure, they are more likely to make purchases and return to the same e-commerce platform in the future.

Moreover, consumers expect a personalized experience when shopping online. E-commerce businesses need to collect and use data to provide personalized recommendations and offers that align with their preferences. This personalization leads to a better customer experience and makes it more likely that consumers will return to the same e-commerce platform.

Conclusions and Recommendations

This policy brief analyzes the adoption of e-commerce activities by firms in Morocco. While digitalization in Morocco is increasing, the adoption of e-commerce remains low, and firms are not prioritizing the development of e-commerce. They also lack the skills required for e-commerce adoption.

In that context, we would highlight the following issues:

- First, firm age is an important indicator of the adoption of e-commerce activities: younger firms that are more open to innovation and change are more likely to adopt e-commerce.
- Second, education level matters; firms with more workers with higher education are more likely to adopt e-commerce activities. However, Moroccan firms ascribe low importance to digital skills when recruiting and do not consider digital literacy as a prerequisite for recruitment.
- Third, listing on a digital platform increases the probability of adopting e-commerce. Fifth, consumer behavior matters in the adoption of e-commerce.



Based on these findings, we propose the following recommendations for the adoption of e-commerce by firms in Morocco.

1. Moroccan firms should change their business strategy to exploit the potential of new technologies and shift to online. E-commerce requires a certain level of digitization, which makes the Internet and digital technologies crucial for effective e-commerce adoption.
2. Firms should have an online consumer retention strategy. Many consumers prefer to buy online because e-commerce helps them save time, in addition to several other benefits. The adoption of e-commerce could increase customer and sales volumes.
3. It is important to train employees and teach them the skills required to use e-commerce. Equipping employees with digital skills is crucial for the good functioning of e-commerce.
4. Firms should seek a digital platform listing and explore new ways to leverage the online market. Digital platforms are affecting daily life and listing on an e-commerce digital platform provides many benefits, including reaching more consumers and increasing visibility.
5. Firms should offer more innovative products and services online to increase the market and use of e-commerce.



