Women stands next to a small shop advertising "Fawri" the popular cash app in Egypt. (Jon Chica / Shutterstock)

Assessing the Status of Digital Integration of Small and Medium Sized Enterprises in the Middle East and North Africa

By Alexander Farley and Manuel Langendorf

Introduction

Small and medium-sized enterprises (SMEs) represent around 80-90% of private sector businesses in the MENA region,[1] and they employ over 50% of the formal workforce in some countries.[2] Of that, new digital startups are only a small part.

Despite SMEs' limited share in national output in MENA compared to other regions, digital transformation (DT) is a crucial opportunity for these businesses to benefit from the growing digital economy and provide a remedy to severe youth unemployment and slow economic growth.[3] As the source of the most employment, this sector should be targeted for greater integration of information and communication technologies (ICT), but businesses often lack the means of both financial support and know-how to increase their use of technology.

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Internet usage in Arab states has increased significantly in the past two decades, rising from 8.6% of individuals using the Internet in 2005 to 69% in 2023, according to the International Telecommunications Union (ITU, 2023).[4] Exogenous shocks such as the COVID-19 pandemic led to changes that caused parts of the population to use digital tools for the first time, and in new ways, widening the pool of Internet users. However, these overall positive developments mask some of the prevailing inequalities that persist regarding Internet access and usage, including gender and an urban-rural divide.

This brief will give an overview of the state of digital transformation in the MENA region, pointing out the key barriers to universal access while also providing an overview of the key trends in the region's digital economy, with a focus on SMEs and their significance for the region's overall economy. The subsequent section will present key numbers on the digital presence of MENA-based businesses and review existing literature on the impact of digitalization on SMEs, including the importance of digital payments. The subsequent section will provide an original analysis of survey data on the digitization of enterprises based in Egypt, Jordan, and Morocco collected by the Economic Research Forum and link the findings to the state of digital skills provision in the region. The chapter will conclude with an analysis of the public policy implications of the findings.

The State of Digital Transformation in MENA

Internet usage in Arab states has increased significantly in the past two decades, rising from 8.6% of individuals using the Internet in 2005 to 69% in 2023, according to the ITU (2023).[5] The Arab States region is ahead of the world average of 67% of individuals using the Internet in 2023, though there is a wide variance between countries.[6] In several Gulf Cooperation Council (GCC) countries, 100% of individuals used the Internet. In several Arab states, more women than men use the Internet. This increase in Internet usage has been accompanied by the emergence of a digital economy, as highlighted by the billion-dollar purchases of online marketplace Souq.com by Amazon and ride-hailing application Careem by Uber. Interest and investment in e-commerce have grown as part of this trend in the past few years.

The COVID-19 pandemic forced governments and the private sector to introduce digital solutions in education, remote work, and the delivery of services. These changes led to parts of the population using digital tools for the first time, widening the pool of Internet users. While fluctuating over the past decade, prices for mobile Internet have overall fallen across the Arab States region.[7]

However, these overall positive developments mask some of the prevailing inequalities that persist regarding internet access and usage. While large parts of the region are covered by at least a 3G mobile network, the industry association Global System for Mobile Communications (GMSA) estimated that 44% of the MENA region's population in 2022 did not use mobile internet despite being covered by a mobile network.[8] Various factors cause this gap, including a lack of affordability (also of Internet-enabled devices), digital skills, online safety (particularly for women), relevant content, and other enablers such as electricity and a formal identification card, according to GSMA.

With particularly non-energy exporting economies struggling to recover from the pandemic, falling household incomes in many parts of the region have meant that affording internet access became increasingly difficult. With regard to data-only mobile broadband baskets among the countries covered in this brief, Egypt and Morocco met the UN Broadband Commission's affordability target

Sharjah, United Arab Emirates, April 9, 2020: A supermarket stipulates social distancing for customers during COVID-19. (Arnold O. A. Pinto / Shutterstock)

for entry-level mobile broadband services at 2% of monthly Gross National Income (GNI) per capita. Jordan did not meet the target. None of the three countries met the affordability target for fixed broadband in 2022. These factors indicate that the state of digital infrastructure is not the only reason people remain offline.

Relatedly, several digital divides regarding internet access prevail in the region regarding gender and location. The gender divide in internet usage has decreased in the past few years, from 14% in 2019 to 10% in 2023, with 64% of women vs. 74% of men using the Internet in 2023. A large urban-rural divide persists as 82% of the population in urban areas in Arab states used the internet in 2023, while only 51% in rural areas did so.[9] These divides risk exacerbating existing socio-economic inequalities in the region.

Despite these persistent divides, the digital economy in the MENA region has grown. MENA startups raised 3.94 billion USD in 2022 and the following year continued the trend, with 2023 closing at $4 billion.[10] However, the first half of 2024 is off to a slower start, with startups only raising $881 million so far.[11] This appears to align with the modest increase in growth predicted by the IMF to 2.8% in 2024, up from 2% in 2023.[12]

The fintech sector continued to dominate startup fundraising with the highest investment value, followed by super apps and e-commerce.[13] Forecasting digital economy growth remains difficult, but one estimate by RedSeer Strategy Consultants predicted that the digital economy in the region would grow to 500 billion USD by 2030, enabled by hypergrowth of close to 40% in non-GCC countries.[14] A recent World Bank study concluded that fully digitalizing the economy could lead to GDP per capita rising at least 40%.[15]

Whereas startups have been at the forefront of building a digital economy in the region, their share

of employment at this stage is limited, despite positive spillover effects, for example, through the generation of freelance opportunities. SMEs represent 80-90% of private sector businesses in the MENA region—in some countries like Jordan, the rate is, according to some estimates, as high as 98% of private sector entities. These businesses are heavily present in retail and manufacturing sectors, but the extent of their digitalization remains low.[16]

The increasing internet usage in the MENA region provides substantial opportunities for SMEs to embrace the productivity enhancements of digital transformation, including e-commerce, big data analytics, and supply chain enhancements. However, as previously mentioned, persistent digital divides (gender, location, age) present major challenges for this continued growth, while the skills gap has implications for both the expansion of the digital consumer base as well as SMEs' access to much-needed talent to expand their digital footprint. A COVID-19-induced push to support digitalization efforts by governments and the private sector could carve a path for SMEs to expand employment and contribute more to national output and exports. It is to the international literature linking the impact of digitalization on firm productivity that we now turn to.

The Impact of Digital Transformation on Productivity

Many studies have shown linkages between digital transformation, innovation, and productivity. Given that many studies of SMEs measure firm size by number of employees, positive effects on productivity also have direct implications for job creation.[17] The OECD (2017) has espoused the benefits of digital transformation for SMEs, noting their key role in economic growth and job creation and their direct and indirect roles in facilitating exports.[18] With these benefits in mind, the digital transformation of SMEs should be a major component of any national development plan.

Although studies of SMEs have traditionally focused on developed economies, an emerging body of literature is focused on SMEs in emerging markets and middle-income countries. Studying the impact of ICT on firm growth in South Africa, Masenyetse et al. (2023) found a positive and statistically significant impact of email use on growth.[19] Having a website was not found to be significant, though this is possibly limited by the digital maturity of the surrounding market. In a similar fashion, Gaglio et al. (2022) found positive impacts of digitalization on firm innovation and growth.[20] Focusing on a survey of 711 micro and small enterprises in South Africa, the authors found that social media use had a positive and statistically significant effect on process innovation. Further, the intensity of ICT investment and use had a positive impact on productivity. Mobile phone communication with customers was not found to have a significant impact on productivity but likely has an indirect impact through its effect on innovation.

The above studies examined firm productivity through the influence of specific technologies, such as email and social media, though others have found wide-ranging impacts on economic performance through the development of internet connectivity. Sung (2021) found evidence that internet development increased SME share of total exports, primarily by lowering the cost of indirect exporting through e-commerce platforms—noting that many smaller firms prefer exporting through intermediaries to avoid the high-cost barriers of direct exporting. He further demonstrated the robustness of the results by showing that greater infrastructure for subsea internet cables was also associated with higher SME exports.[21]

Hjort and Poulsen (2019) also found evidence of undersea cables' impact on productivity.[22] Examining growth in employment after the introduction of fast internet through undersea cables in African countries, the authors found

Al Ahsa Saudi Arabia, October 15, 2022. A worker on duty at the gas refilling shop. (Wiropidah Dahlan / Shutterstock)

that increased employment was partly influenced by higher firm entry in South Africa, higher firm productivity in Ethiopia (notably measured in medium-sized manufacturing firms), and increased exports in other World Bank-surveyed countries.

Within this body of literature, the introduction of various specific technologies and digital tools are shown to have positive and statistically significant impacts on productivity and firm growth. Furthermore, increases in internet connectivity also have broad implications for firms, increasing employment and even increasing SME share of exports by lowering transaction costs through intermediaries. However, despite potential benefits, SMEs also face particular challenges to digital transformation. While growing awareness of digital transformation provides an opportunity for SMEs, they face many challenges to adopting these technologies.

Digitalization of Businesses in MENA

With this review in mind, we may turn to the MENA-focused literature. The literature and empirical data on SMEs in the MENA region highlight the pivotal role SMEs play in the region's economy. As noted, the IMF finds that SMEs "are a cornerstone of Arab economies, accounting for over 90% of all businesses and providing a major source of new job creation."[23] They contribute as much as 50% of employment and 70% of GDP in some countries.[24] In Jordan, SMEs are estimated to make up 98% of private sector entities.[25]

The literature on SMEs in the MENA region, though currently limited, also highlights important challenges, including access to credit. Research on this topic highlights that SMEs' access to finance in the Middle East and Central Asia "is low compared to other countries with similar

levels of economic development."[26] In the same paper, the authors offered empirical evidence that greater financial inclusion of SMEs leads to gains in economic growth and new employment opportunities. In the MENA region, 88% of SMEs have an unmet financing gap, which amounts to 195 billion USD.[27] This lack of access to finance could also impact SMEs' ability to obtain the capital necessary to increase their use of ICT.

With regard to the impact of digital transformation, a regional study by the World Bank highlights the benefits of digitalizing the economies of the MENA region, stating that GDP per capita "could rise by more than 40%, manufacturing revenues per unit of factors of production could rise by 37%, employment in manufacturing could rise by 7%." The authors argue that expanding digital payments is key to the digital transformation of MENA economies.[28]

The digitalization of business operations became an increasingly urgent topic for MENA firms during the COVID-19 pandemic. A review of companies' reactions to the pandemic in Jordan, Morocco, Tunisia, and Egypt showed that around 49% of total firms adopted digital technology to deal with the troubles caused by the pandemic.[29] Accordingly, a "sizable segment" of the sampled firms invested in digital equipment, which led the authors to conclude: "This proportion may indicate that the COVID-19 pandemic pushed a considerable portion of the firms in the MENA region to adopt and invest in digitization as a survival business strategy during the lockdown period."

Relatedly, the authors posit that the pandemic increased the pace of digitalization in MENA. The study found that "…firms with more employees are more likely to adopt and invest in digital technologies." In addition to size, ones "owned by foreigners, encountering business challenges due to the pandemic, receiving support from the government are more likely to adopt digital solutions." Regarding the sector, the study finds that firms operating in the services sector are more likely to adopt and invest in digital solutions than firms in other sectors. The next section assesses these findings by drawing on more recent empirical firm-level data from Egypt, Jordan, and Morocco.

Dubai, United Arab Emirates, May 31, 2022: Business people attending 'Seamless Middle East 2022' trade show for the payments, fintech, retail, and e-commerce industries. (Arnold O. A. Pinto / Shutterstock)

Surveys indicate that the use of digital payments and companies' presence online is limited in the MENA region.[30] According to the Mastercard MEA SME Confidence Index 2021, which covers both the Middle East and Africa, around half of companies in the surveyed countries had a social media presence and around half had a company website.[31] Only 15% said they have a webshop, and 11% said they have an app, with 17% stating that they sell via online channels. Furthermore, 29% said they don't have any digital presence. Around 54% of the MENA countries surveyed believe that e-commerce will have a positive impact. Belief in the positive impact of e-commerce was higher at close to 77% in the sub-Saharan African countries surveyed.[32]

Data suggests that firms in the MENA region lag behind their counterparts in other regions when it comes to the adoption of email and websites, with 65.3% and 44.9% of firms in MENA adopting email and websites, respectively. This puts the region ahead of sub-Saharan Africa and East Asia and Pacific but behind South Asia, Europe and Central Asia, and Latin America and the Caribbean in both categories, according to joint research by the European Investment Bank, European Bank for Reconstruction and Development, and World Bank Group.[33] The study concludes that "productivity gains from digitization are higher than the expected productivity premiums associated with exporting and managerial experience. On average, changes in digital technology adoption augment labor and capital."

The data presented in the study indicated positive aggregate employment gains from universal digitization from the adoption of email and websites. According to the Network Readiness Index 2023, Egypt, Jordan, and Morocco fare differently when businesses adopt digital solutions. Whereas Jordan ranks in the top 25 countries worldwide with many firms with websites, Egypt (78 out of 134 economies) and Morocco (59) lag further behind. However, despite its lower prevalence of firm websites, Egypt ranks ahead of both Jordan and Morocco in annual investment in telecommunication services, while Jordan received the lowest score out of the three countries.[34]

Another study on the impact of digitalizing MENA economies estimated that a 10% increase in telecoms subscriptions in the MENA region and sub-Saharan Africa "is associated with a 4% direct increase in GVC [Global Value Chain] participation and a 2% indirect increase via lower trade costs."[35]

A key consideration when studying the digitalization of SMEs is their readiness to adopt and ultimately benefit from digital technologies. Their readiness level can depend, for example, on the staff's digital skills, the company's digital infrastructure setup, willingness to embrace digital solutions, and disposable capital to spend on digital equipment. A 2022 study by Shqair and Altarazi analyzed whether SMEs in Jordan are ready to apply Industry 4.0. Based on a survey of SME respondents and local industry experts, the authors conclude that "Jordanian SMEs are not mature enough nor ready for Industry 4.0 implementation."

Out of the surveyed SMEs, around 44% did not have a specific Industry 4.0 implementation strategy. The authors note that SMEs generally do not tend to focus on long-term strategies but are operations oriented. In Jordan, they also note that SMEs' preference for the human workforce over smart equipment could be linked to the fact that labor costs are relatively low and customer quality requirements are not excessive.[36] Industry 4.0 technology is an advanced subset of digitalization, but the findings of this study indicate that public policymakers would need to invest in measures that bolster SMEs' readiness to adopt digital technologies.

Given that female labor participation in the MENA region was at 19% in 2023, the lowest participation rate among all world regions, efforts to digitalize SMEs also need to consider the gender perspective.[37] Digitalization allows for

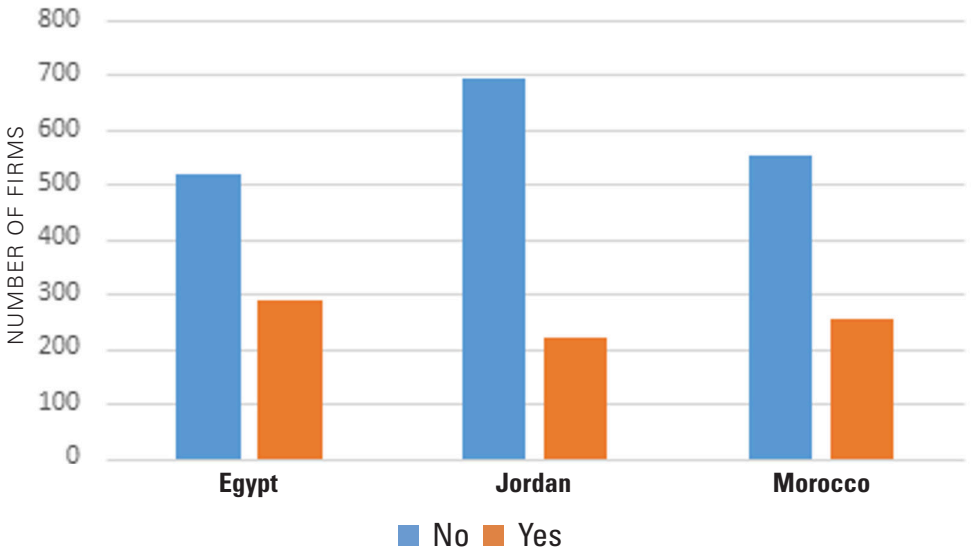
entrepreneurial projects to be conducted from home, and tech companies are often less capital and labor-intensive, which are key advantages for MENA women. However, women face several constraints in their digital entrepreneurial efforts, particularly affecting rural and low-skilled women in the male-dominated digital economy. The region's digital divides, as well as traditional barriers to women's entrepreneurial success, are key to mention in this context. The conclusions of an OECD Women's Economic Empowerment Forum stated that "while two-thirds of MENA women entrepreneurs were willing to receive training on ICT devices and software, only one-fourth actually received such training."[38]

Analysis of Firm-Level Data in Egypt, Jordan, Morocco

The following analysis is based on a survey conducted by the Economic Research Forum (ERF) entitled "The Survey of Enterprises' Digitization in the three MENA Countries 2022 (Egypt, Morocco, Jordan)."[39] The survey interviewed 2,529 businesses in two phases. All the businesses interviewed started their operations before 2022. The survey includes responses from 806 businesses in Egypt, 916 from Jordan, and 807 from Morocco. The samples for each country were designed to include e-firms and non-e-firms. Firms interviewed for the survey were predominantly small and medium size, with over 55% stating that they had less than six workers, followed by firms employing 6 to 49 workers; only 1.23% of respondents represented a firm with 200 or more workers. This means that the findings represented below are particularly relevant for SMEs.

Questions on participation in the digital economy included whether firms have their own website, sell services or goods online, and use social media for business purposes. They also contain information about the importance of digital skills for hiring decisions. The high number of businesses interviewed, the focus on digital issues, and the timeliness of the survey data have made this dataset useful for analyzing the state of digitalization of MENA enterprises. The following sections will present key findings from the survey data and interpret them in the context of wider digitalization in the MENA region.

Figure 1: Firms with their own website



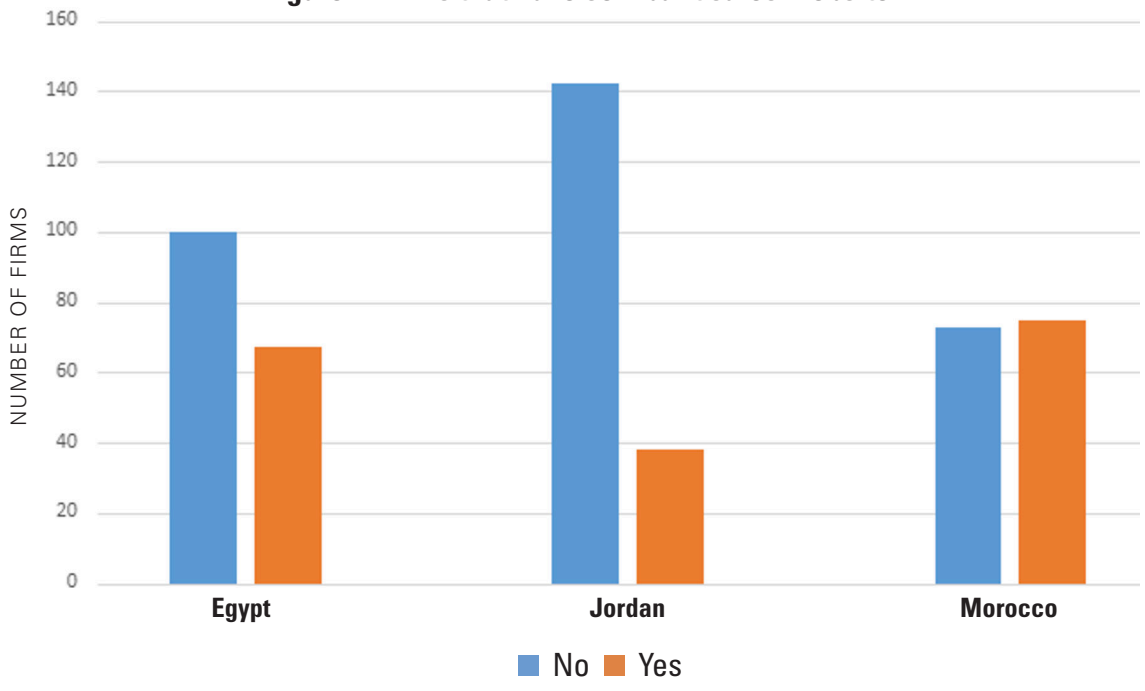
While the data presented previously in this chapter showed that businesses across the region have increasingly adopted digital tools in reaction to the COVID-19 pandemic, responses show that still, only 30% of companies in total have their own website, with the highest number found in Egypt at 36%.

Relatedly, online sales across all three countries were low, and only 8% of companies said they were listed on any app or website, with the highest number found in Jordan at 9%. However, almost two-thirds of companies in all three countries use social media for business purposes, with the highest number in Egypt at 71%. This shows there are still incentives to use the internet for business purposes and supports the theory that firms often communicate with customers indirectly through intermediaries, such as social media sites (Gaglio et al., 2022).

Research referenced here shows that digital payments are a key component to unlocking the economic benefits of digital transformation in the MENA region. The survey serves as a poignant reminder that each country's digitalization journey differs and requires tailor-made interventions. For example, while 51% of businesses in Morocco said they had a self-built sales website, only 21% in Jordan said the same. This is all the more surprising considering the small number of firms (30%) that reported having their own website.

In terms of number of online sales, results by firm and by country tend to vary. In general, firms tend to be clustered on the lower and upper end of the scale, from little more than 1% online sales to 100%. Further, theory suggests that the percentage of online sales should decrease with increasing costs of high-speed internet, indicating the higher transaction cost of maintaining sales when internet subscription costs are high. This does not seem to be the case, perhaps because of the increasing number of firms that are online "native" and, therefore, have little other fixed capital costs to consider besides their online or even fully digital products.

Figure 2: Firms that have self-built sales website



Another key area for digital transformation to reap economic benefits is digital skills. In the case of Morocco, research by Izabela Marcinkowska showed that people living in rural areas had fewer digital skills in all areas than their urban counterparts, highlighting an urban-rural skills divide.[40] According to the ERF survey, across the three surveyed countries, the highest likelihood is that a company has 25% or less highly educated workers, which, however, is followed by the second-greatest likelihood being that a business has more than 75% highly educated workers. Owners of businesses tend to be highly educated, with 38% having a university degree and almost one-fifth having above university-level education. Business owners in Egypt are the most likely to have a university degree, followed by Jordan and Morocco. Morocco, however, has the highest number of owners with above university-level education.

According to the survey, digital skills are important for hiring decisions, particularly for appointing managerial staff, with 71% of all countries saying they play a role. In recruiting workers, digital skills are seen as less important, with 42% of companies saying that they play a role.

The availability of digital skills in the workplace can determine to what extent a business can participate in the digital economy. The survey revealed that only 7% of companies across the three countries have an IT department, and about half do not have an IT person. About 32% of businesses have one person. Factoring in the percentage within each firm size category, a clear picture emerges with the businesses in the sample with 200 or more workers being the most likely to have an IT department, followed by those with 50 to 199 workers and six to 49 workers. Firms with less than six workers were the least likely to have an entire IT department.

Figure 3: Percent online sales by price of fast internet—Egypt

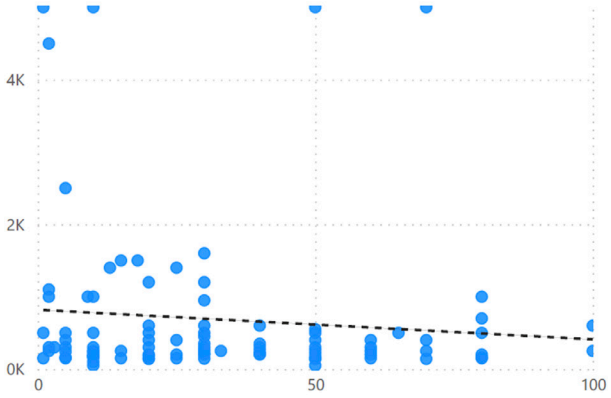


Figure 4: Percent online sales by price of fast internet—Morocco

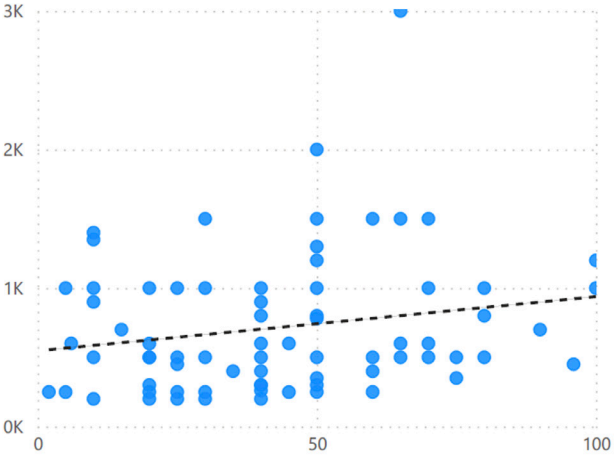


Figure 5: Percent online sales by price of fast internet—Jordan

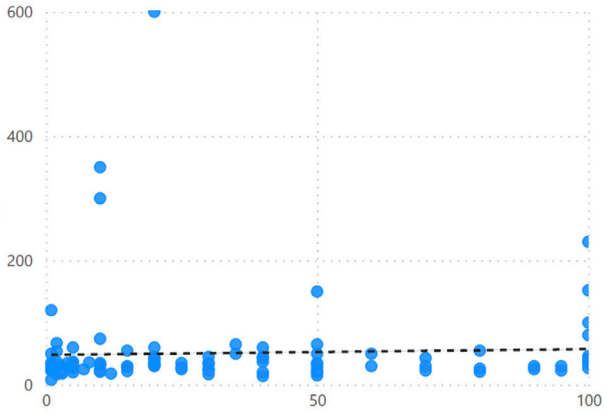


Figure 6. Percentage of firms by size that have an IT department

Firm size + IT department
(all countries, percentage within each size category)

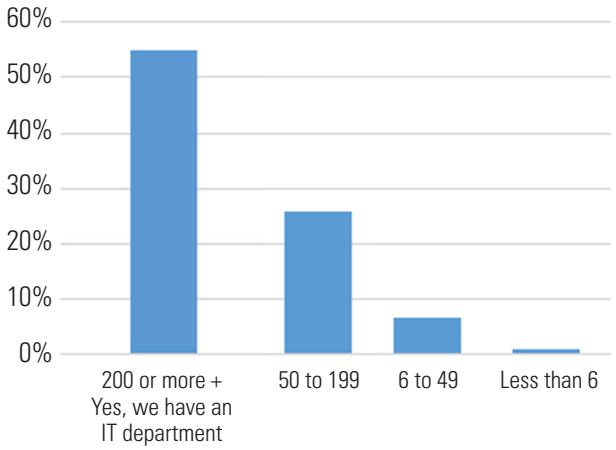
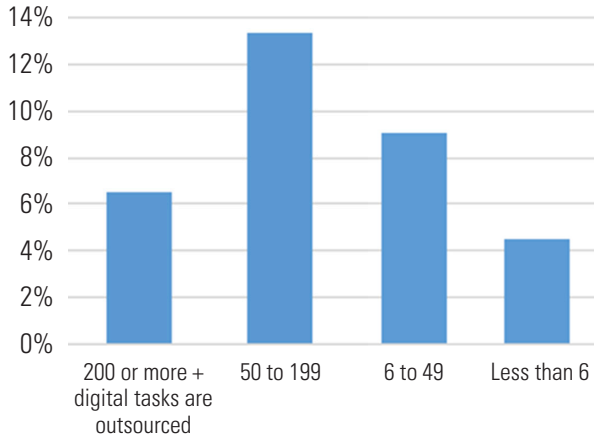


Figure 7. Percentage of firms by size that outsource digital tasks

Firm size + digital tasks are outsourced
(all countries, percentage within each size)



Percentage within each category

A more mixed picture emerges when it comes to outsourcing digital tasks as firms with 50 to 199 workers—factoring in the percentage within each size category—are the most likely to outsource digital tasks, followed by smaller firms with 6 to 49 workers. The smallest firms were the least likely to resort to this option. Similarly, firms with 50 to 199 workers are the most likely to have one IT person, followed by the biggest firms. Firms with less than six workers were the least likely to have one IT person.

Several conclusions can be drawn from the data. While a majority of businesses value digital skills, the smallest firms struggle the most in accessing regular IT support as they are the most likely to have no IT person and no IT department, nor appear to be able to resort to outsourcing digital tasks. This supports the assertion that larger firms have greater advantages in technology acquisition and developing comprehensive ICT strategies.[41] This could be in part due to barriers to accessing finance, according to the conclusions of Petellier (2019) in the Canadian context, digital transformation is often a daunting task for smaller firms, and building relations with IT professionals is key to enabling SMEs to pursue greater ICT integration.[42] It is evident that firms in the countries surveyed appear to struggle with this task, which aligns with expectations.

The lack of steady IT support is likely detrimental to SMEs' efforts to participate in the digital economy. Nevertheless, having an IT department does not automatically mean a firm engages in online sales, as more than 50% of firms with an IT department do not have online sales. In turn, there are firms with no IT department that still engage in online sales, meaning that the presence of an IT department in a firm is not a clear indicator of whether a business is participating in the digital economy and engaging customers online.

The importance placed on digital skills in hiring decisions, particularly for managerial staff, indicates that most businesses view digitalization as a pivotal area for investment.

Implications for Public Policy

The findings of the survey and the wider literature have several implications for public policy in the MENA region. The declared importance of digital skills among firms in this sample indicates a need for continued and improved support by regional governments and their local and international partners to provide digital skills. As research cited above has shown, there is a digital skills gap between rural and urban residents in Morocco. Moreover, as the digital gender divide in Internet usage persists across the region, more programs need to be tailored toward teaching digital skills to girls and women in a way that allows them to participate in the nascent digital economy. As the OECD stated, female entrepreneurs are eager to receive training, but too few can access it.

Boosting the digital economy also requires more efforts to close the digital skills gap between the training that university graduates obtain and the skills needed in the job market. Local workshops organized in partnership with the private sector, like the ones organized by the Jordanian ICT association Int@j, could be part of the solution.[43] However, wider efforts are needed to integrate the provision of digital skills into public education curricula to enable students to practice their skills. Teaching digital skills, however, is not just a responsibility of the public education system but also of private sector entities. Private sector companies have long relied on the state to provide the talent they need without investing enough in the up-and-re-skilling of their employees. Skilling initiatives provide a good opportunity for multiple stakeholders, including the government, private sector, and civil society, to cooperate to identify and serve vulnerable populations and expand overall employment.

A key issue remains unequal Internet access due to an urban-rural divide. In this context, regional governments and their partners need to support investments in digital infrastructure that expands reliable internet coverage to all rural areas. This could have economic benefits as it would allow rural residents to participate in the digital economy if the expansion of network coverage is coupled with efforts to improve digital and financial literacy in remote areas.

Additionally, governments can enable the growth of the digital economy by improving the infrastructure for e-commerce, for example, by enabling digital payment options by granting licenses to non-banks to operate mobile wallets. As cash remains the preferred payment method across the region despite an increase in financial account ownership,[44] both the government and private sector financial institutions would need to increase their efforts to establish trust in digital financial solutions. This can (and has in several cases) be done by creating use cases by having the government adopt digital payments or relief organizations using mobile wallets to transfer aid money to recipients.

Given that the survey sample overwhelmingly covers firms that fall under the OECD's SME definition, the findings indicate that SMEs need greater support to establish an online presence to expand their customer base. This support could come in the form of training programs or workshops designed to improve the digital skills of SME owners and staff, but also through increased availability of loans designed to allow SMEs to invest in digital equipment. SMEs would also benefit if traditional banks adapted their definitions for collateral and provided small loans mainly to digital businesses that may possess little physical capital.

Public policy to support digital transformation in the region, including the digitalization of SMEs, stands a greater chance of success if a multi-stakeholder approach is adopted, with governments, international development organizations, private sector companies, and civil society working together.

Recommendations

Expand digital skills in the education system, especially for women

Education systems in the region should invest fully in providing youth with basic digital skills throughout the curriculum, especially girls, who stand to benefit the most from closing the digital skills gap. These skills should extend from basic computer applications and communications tools to elementary coding and application development. Skills training should, whenever possible, focus on the practical application of ICT skills. Beyond digital skills training in schools, governments and their partners should ensure that additional digital skills initiatives reach rural and disadvantaged areas.

Target SMEs with skills training and information

There is a rapidly growing marketplace for digital payment, point of sale, and productivity tools specifically for small businesses. Though this market may be in earlier stages in the MENA region, the biggest challenge for SMEs anywhere is accessing information about the technologies and tools available and how to use them. The state should act as a digital advocate to encourage SMEs to create an internet presence, display inventory or fulfill sales online, and keep track of their digital customer acquisition.

Subsidize financing for SMEs to upgrade ICT

In addition to non-financial support for SMEs to integrate digital tools into their operations, the state should provide financial support for SMEs to make significant digital acquisitions or upgrades. For example, the state or international partners like development banks could guarantee loans provided by the private sector, thereby assuming the risk. This money could be used to hire IT professionals or contract external IT services to integrate digital tools for the business, having the additional benefit of supporting other business to business enterprises focused on digital solutions.

Expand internet users and efficient ICT infrastructure

As the government drives assistance to SMEs to increase their reliance on digital tools, it should also continue to support the underlying internet services by providing broadband internet access to more people and promoting the development of data centers and internet exchange points in the country to lower overall IP costs and make the internet faster, more efficient, and reliable for users. This requires both a commitment to seeking investment in infrastructure but also international cooperation to connect to undersea cables and link to fiberoptic networks of neighboring countries. The state should engage with local communities to ensure improvements to internet accessibility benefit local residents, particularly in areas with poor internet coverage.

Alexander Farley is a program associate for the Middle East Program at the Wilson Center and serves as Editor-in-Chief of the program's publications. His research focuses on entrepreneurship, labor markets, education, and digital transformation in the region. He holds a Master of Public Administration and Master of Arts in International Studies from the University of Washington, with a focus in international development policy and management. He has lived in Jordan, and Morocco and is professionally proficient in Arabic.

Manuel Langendorf is an independent researcher and consultant on digital transformation in the MENA region. He recently worked with the European Institute of the Mediterranean, where he coordinated the EuroMeSCo Joint Study Group 2022-23: "The Digital Transition in EU's Southern Neighbourhood: Progress, Obstacles, and Opportunities." Additionally, Langendorf is a researcher for Apollo Strategic Communications.

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Woodrow Wilson International Center for Scholars
One Woodrow Wilson Plaza
1300 Pennsylvania Avenue NW
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