Digitalisation of small and medium enterprises (SMEs) in the Mediterranean
This report was written by Katarzyna W. Sidło, Kateryna Karunska, Claudio Salmeri, Stanislav Bieliei (CASE) and Roger Albinyana (IEMed)

It does not represent the official views of the European Committee of the Regions.
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1. Main blocking points</td>
<td>3</td>
</tr>
<tr>
<td>1.1. Institutional and regulatory</td>
<td>3</td>
</tr>
<tr>
<td>1.2 Human capital formation</td>
<td>7</td>
</tr>
<tr>
<td>1.3 Infrastructure and use of digital innovation</td>
<td>7</td>
</tr>
<tr>
<td>2. Solutions and policy recommendations</td>
<td>11</td>
</tr>
<tr>
<td>3. Funding possibilities available to LRAs</td>
<td>19</td>
</tr>
<tr>
<td>4. Annotated and commented bibliography</td>
<td>23</td>
</tr>
<tr>
<td>Annex 1 References</td>
<td>29</td>
</tr>
<tr>
<td>Annex 2 Funding possibilities available to SMEs and relevant ongoing projects</td>
<td>39</td>
</tr>
<tr>
<td>Annex 3 Data matrix</td>
<td>51</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>AFD</td>
<td>Agence Francaise de Developpement</td>
</tr>
<tr>
<td>ARLEM</td>
<td>Euro-Mediterranean Regional and Local Assembly</td>
</tr>
<tr>
<td>BAE</td>
<td>Bank Al Etihad</td>
</tr>
<tr>
<td>BMZ</td>
<td>German Federal Ministry for Economic Cooperation and Development</td>
</tr>
<tr>
<td>CASE</td>
<td>Center for Social and Economic Research</td>
</tr>
<tr>
<td>CBC MED</td>
<td>Cross-Border Cooperation in the Mediterranean</td>
</tr>
<tr>
<td>CBSM</td>
<td>Caixa Bank Succursale au Maroc</td>
</tr>
<tr>
<td>CFLI</td>
<td>Canada Fund for Local Initiatives</td>
</tr>
<tr>
<td>CL</td>
<td>Credit Libanais</td>
</tr>
<tr>
<td>CNEA</td>
<td>National Committee for the Business Environment</td>
</tr>
<tr>
<td>CRM</td>
<td>Customer Relationship Management</td>
</tr>
<tr>
<td>DDM</td>
<td>Digitalization Transformation Center</td>
</tr>
<tr>
<td>DPF</td>
<td>Development Policy Financing</td>
</tr>
<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>EgyptYiB</td>
<td>Egypt Youth in Business</td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
</tr>
<tr>
<td>EMNES</td>
<td>Euro-Mediterranean Network for Economic Studies</td>
</tr>
<tr>
<td>ENI</td>
<td>European Neighbourhood Instrument</td>
</tr>
<tr>
<td>ENP</td>
<td>European Neighbourhood Policy</td>
</tr>
<tr>
<td>ERI</td>
<td>Economic Resilience Initiative</td>
</tr>
<tr>
<td>ERP</td>
<td>Enterprise Resource Planning</td>
</tr>
<tr>
<td>ETF</td>
<td>European Training Foundation</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUR</td>
<td>Euro</td>
</tr>
<tr>
<td>FATEN</td>
<td>Palestine for Credit and Development</td>
</tr>
<tr>
<td>FEMIP</td>
<td>Facility for Euro-Mediterranean Investment and Partnership</td>
</tr>
<tr>
<td>GEFF</td>
<td>Green Economy Financing Facility</td>
</tr>
<tr>
<td>GPG</td>
<td>Global Partners Governance</td>
</tr>
<tr>
<td>ICANN</td>
<td>Internet Corporation for Assigned Names and Numbers</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
</tr>
<tr>
<td>IEMed</td>
<td>European Institute of the Mediterranean</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IMD</td>
<td>International Institute for Management Development</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>INTERA</td>
<td><em>Zaklada za INovacijski i TEnhološki RAzvitak</em> (Foundation for Innovation and Technological Development)</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>ITU</td>
<td>International Telecommunication Union</td>
</tr>
<tr>
<td>JNCW</td>
<td>Jordanian National Commission for Women</td>
</tr>
<tr>
<td>JOD</td>
<td>Jordanian Dinar</td>
</tr>
<tr>
<td>JoPACC</td>
<td>Jordan Payments &amp; Clearing Company</td>
</tr>
<tr>
<td>LENS</td>
<td>Local Enterprise Support Project</td>
</tr>
<tr>
<td>LRA</td>
<td>Local and Regional Authority</td>
</tr>
<tr>
<td>MarocPME</td>
<td>Moroccan National Agency for the Promotion of Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>MCIT</td>
<td>Egyptian Ministry of Communications and Information Technology</td>
</tr>
<tr>
<td>MEF</td>
<td>Ministry of Economy and Finance</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>MEPI</td>
<td>Middle East Partnership Initiative</td>
</tr>
<tr>
<td>MICEVN</td>
<td>Moroccan Ministry of Industry, Trade and the Green and Digital Economy</td>
</tr>
<tr>
<td>MSE</td>
<td>Micro and Small Enterprise</td>
</tr>
<tr>
<td>NBE</td>
<td>National Bank of Egypt</td>
</tr>
<tr>
<td>NBFI</td>
<td>Non-Bank Financial Institution</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>NRI</td>
<td>Network Readiness Index</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PEDEL</td>
<td>Promotion of Economic Growth and Local Development in Remote Regions of Morocco</td>
</tr>
<tr>
<td>PFI</td>
<td>Participating Financial Institution</td>
</tr>
<tr>
<td>SEFF</td>
<td>Egypt Sustainable Energy Financing Facility</td>
</tr>
<tr>
<td>SEMED</td>
<td>Southern and Eastern Mediterranean</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprise</td>
</tr>
<tr>
<td>STEM</td>
<td>Science, Technology, Engineering and Mathematics</td>
</tr>
<tr>
<td>TFP</td>
<td>Trade Facilitation Programme</td>
</tr>
<tr>
<td>TRY</td>
<td>Turkish Lira</td>
</tr>
<tr>
<td>TÜRKONFED</td>
<td>Turkish Enterprise and Business Confederation</td>
</tr>
<tr>
<td>UfM</td>
<td>Union for the Mediterranean</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UNESCWA</td>
<td>United Nations Economic and Social Commission for West Asia</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>VCIP</td>
<td>Venture Capital Investment Programme</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>VMP</td>
<td>Virtual Marketplaces</td>
</tr>
<tr>
<td>WB</td>
<td>Western Balkans</td>
</tr>
<tr>
<td>WBIF</td>
<td>Western Balkans Investment Framework</td>
</tr>
<tr>
<td>WITSA</td>
<td>World Information Technology and Services Alliance</td>
</tr>
</tbody>
</table>
Introduction

Micro, Small and Medium-Sized Enterprises (henceforth: SMEs)¹ are the spine of Euro-Mediterranean economies. In the Southern and Eastern Mediterranean (SEMED) countries, they account for over 90-95% of all firms in absolute figures (OECD, 2018; IMF, 2019), of which the majority are micro enterprises (e.g. in Tunisia, micro enterprises represent 98% of all firms [World Bank, 2014]). Notwithstanding their contribution to private sector development, their role in job creation and upward mobility is much more limited (Ibidem).

Indeed, the growing polarisation of enterprise ecosystems between the very few large enterprises that dominate the market and the majority of weak micro firms that struggle to survive, with a noticeable missing middle, is a factor of utmost concern in the development of vibrant and job-conducive private sectors. Whereas access to adequate funding remains the major impediment for SMEs to take off and grow, SMEs tend to be less productive and innovative than larger firms. Innovative firms are more likely to grow and thus generate long-term employment.

Hence, through thriving innovation, digitalisation and automation, SMEs can reduce production costs and make productivity gains, adapt their business models to a growing globalised competitive environment and increase access to funding. In this context, a number of blocking points for local and regional authorities (LRAs) in the field of SME digitalisation have been identified; they are divided into four areas: institutional and regulatory, human capital formation, use of digital innovation and infrastructure.

---

¹ As explained later in the report, no universally agreed on definition of an SME exists in the region. For the purpose of this study, we utilise a definition applied by the European Commission, under which a micro enterprise is one that employs fewer than 10 persons, a small one – fewer than 50, and a medium-sized one – fewer than 250 (see more: https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en).
1. Main blocking points

1.1. Institutional and regulatory

The overall level of the digital readiness of both the public and private sectors, as well as the societies in the analysed countries\(^2\), is relatively low. Indeed, the World Economic Forum’s 2019 Network Readiness Index (NRI), which consists of indicators such as speed of internet bandwidth, firm-level technology absorption, the government online services index, the e-government readiness index and the extent of business internet use, ranks almost all non-European Union (EU) Euro-Mediterranean Regional and Local Assembly (ARLEM) members in the bottom half of the ranking, with Israel (ranked 22\(^{nd}\)) and Turkey (ranked 51\(^{st}\)) being the only exceptions (see Table 1 below as well as the annexes for selected indicator-level data). In comparison, all EU ARLEM member countries rank in the top 50. Another source, the 2019 International Institute for Management Development (IMD) World Digital Competitiveness Ranking, covers only two countries from among those of interest to the study – Israel, which scored ninth among 40 countries in Europe, Middle East and North Africa (MENA) and Africa and Jordan, ranked 35\(^{th}\) (for more on measuring digitalisation in the region see, e.g. Mostafa, 2019).

Table 1. Network Readiness Index 2019

<table>
<thead>
<tr>
<th>Country</th>
<th>Score (out of 100)</th>
<th>Rank (out of 121)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>46.57</td>
<td>75</td>
</tr>
<tr>
<td>Algeria</td>
<td>35.30</td>
<td>98</td>
</tr>
<tr>
<td>BiH</td>
<td>42.72</td>
<td>81</td>
</tr>
<tr>
<td>Egypt</td>
<td>38.58</td>
<td>92</td>
</tr>
<tr>
<td>Israel</td>
<td>70.86</td>
<td>22</td>
</tr>
<tr>
<td>Jordan</td>
<td>46.97</td>
<td>73</td>
</tr>
<tr>
<td>Lebanon</td>
<td>41.44</td>
<td>86</td>
</tr>
<tr>
<td>Mauritania</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Montenegro</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Morocco</td>
<td>41.38</td>
<td>87</td>
</tr>
<tr>
<td>Palestine</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Tunisia</td>
<td>42.04</td>
<td>84</td>
</tr>
<tr>
<td>Turkey</td>
<td>53.75</td>
<td>51</td>
</tr>
</tbody>
</table>

Source: Portulans Institute and World Information Technology and Services

\(^2\) Albania, Algeria, Bosnia and Herzegovina, Egypt, Israel, Jordan, Lebanon, Mauritania, Montenegro, Morocco, Palestine (this designation should not be understood as the recognition of a State of Palestine by the European Union or any of its Member States), Tunisia, and Turkey.
The majority of governments in the region lack coherent and clear digitalisation strategies (or, in fact, entrepreneurship development and promotion strategies) and those that do (such as Jordan, where it is realised under the auspices of the Ministry of Digital Economy and Entrepreneurship or Morocco with its Digital Development Agency) struggle to implement them efficiently. A minority have functional e-government platforms, although the situation varies considerably from country to country; while Israel scored 80.77 out of 100 points under the NRI’s Government Online Service Index, Algeria received only 13.08 and BiH – 36.93 (see more in Annex 3) (see solution 1).

As pointed out by all interviewees, LRAs are not included in the planning or implementation of digitalisation activities. Indeed, as some of the non-EU ARLEM members are highly centralised or are going through a decentralisation transition, digitalisation efforts fall outside of sub-national governments’ competencies (Bergh, 2012; CoR, 2016). In the West Bank, the situation is additionally complicated by the fact that Area C (over 60% of its territory) is administered by Israel. In Libya, where the military conflict is ongoing at the time of writing of this report, the officially recognised government controls only a part of the country’s territory (see solution 3).

LRAs lack not only the prerogatives but also the budgets and capacities to participate in digitalisation efforts. Indeed, many of them are not particularly digitalised themselves. Many representatives of LRAs have low digital literacy skills and suffer from a slow internet connection and outdated computer equipment (see, e.g. Network Readiness Index Annex Table 1, 2, 3; NRI, 2019) (although, as noted by some of the interviewees, the COVID-19 crisis has shown that, when forced, LRAs are capable of holding meetings and arranging things online, which while reassuring, raises the question of the lack of willingness to progress with digitalisation under regular circumstances). In this context, Tunisia can serve an instructive example. Despite the recent government initiatives seeking to promote digitalisation in the private sector, cumbersome administrative requirements, ‘high costs of doing business (...) and rigid labour laws’ still contribute to hobbling SMEs’ development and innovation (World Bank, 2019, p. 87). On top of that, political instability and frequent changes in legislation contribute to an unfavourable business environment, inhibiting SMEs’ ability to develop long-term strategies and effective digitalisation plans (see solutions 2,11 & 16).
Correspondingly, in many countries, there is a lack of an adequate legislative framework protecting the rights of entrepreneurs and supporting their business development. Burdensome regulations, untransparent and time-consuming procedures, red tape and high tax burdens hinder the capacity of SMEs to flourish, grow, access funding and digitalise (see, e.g. Doing Business Report by the World Bank, 2020 or The Economist’s Intelligence Unit Business Environment Ranking, 2019) (see solutions 11 & 16).

At the same time, however, a sub-index of the NRI measuring the legal framework’s adaptability to digital business models confirms the observation of the stakeholders contacted that the governments are slow in adapting legislation for digitalisation processes in the private sector (while Israel, as an outlier was ninth among the 114 countries ranked, next in line Jordan was 41\textsuperscript{st} – see more in Annex 3), which suggests that the changes introduced are implemented without consultation with those to whom they will apply (i.e. entrepreneurs) and, as such, do not address their needs (see solution 1).

Another obstacle, hindering the effective and efficient legislative capacities of national and sub-national authorities alike (as well as international donors), is the lack of publicly available and reliable data on digitalisation in the majority of the countries under study, starting with the lack a definition of an SME. In Algeria and Mauritania, this is part of the broader issue of missing economic data of all kinds, but even in countries that have an efficient national agency responsible for data collection, the information available is oftentimes fragmented and outdated (and hardly ever disaggregated by gender). Without this data, government agencies, LRAs and international donors are unable to properly assess the situation on the ground and plan and implement effective digitalisation strategies (see solution 5).

As pointed out by some of the interviewees, opaque and outdated public procurement procedures in a number of countries in the region are another obstacle hindering the growth of SMEs, as access to public procurement by national and sub-national authorities may be limited either to an unofficial list of preferred entrepreneurs (due to corruption) or only to larger companies capable of delivering large quantities of goods under short notice (as opposed to regular deliveries of smaller quantities over longer periods of time, a scheme much better suited for the capacities of SMEs) (see solution 16).

Moreover, in most of the studied countries, the size of the shadow economy is an important factor inhibiting digitalisation efforts. As pointed out by some interviewees, numerous SMEs, not trusting their state authorities (be it the central or sub-national ones), prefer to remain in the informal sphere so that they do not have to pay taxes and deal with the state bureaucracy (see also, e.g. Benjamin et
al., 2014, p.15-19; Gatti et al., 2014). As a consequence, they do not want to go online in any way in order to remain outside of the state’s supervision (see solution 4).

Those SMEs that might wish to digitalise, oftentimes face difficulties accessing funds (outlined as the main obstacle for entrepreneurs by 42% of those interviewed in the Arab world [WEF, 2018]) due to unfavourable terms of bank credit for SMEs, the rigidity of the banking sector, a lack of diversified financial instruments, high loan collaterals and the risk averisons of investors unwilling to invest money in countries perceived as politically unstable, having a bad business climate and lacking a stable legal environment (UNESCWA, 2017; IMF, 2019). In Israel, in turn, funding is concentrated in high-technology sectors only, and banks offer unfavourable credit terms to SMEs (OECD, 2016) (see solutions 12, 13 & 14).

While international donors, including the EU, contribute to the development and digitalisation of local SMEs, it is essential that foreign support is well structured to contribute to the long-term resilience of firms. Otherwise, as a Tunisian source argued, young enterprises risk becoming too reliant on external economic assistance. At the same time, an interviewee from Jordan confirms that current foreign support, also from the EU, often lacks a long-term strategy, replicating other initiatives and failing to address specific local needs over the short term (see solutions 9 & 10).

Furthermore, whereas the European Commission has been adapting the European SME Index to Mediterranean MENA countries based on the European Small Business Act (see OECD/EU/ETF, 2014 and 2018), there is a need to update the policy framework on SMEs at the level of the Union for the Mediterranean (UfM) so that SME digitalisation in the Maghreb and Mashreq countries becomes a clear priority for EU institutions. In this regard, the last UfM Ministerial Conferences addressing the digital economy and industrial cooperation were held in 2014\(^3\), six years ago, showing the absence of action at the policy making level in a landscape that is extremely dynamic and evolutive. Updating the policy umbrella should help revamp cooperation between the EU and Maghreb and Mashreq countries to involve more stakeholders from the countries in the region (e.g. through digital innovation hubs) in Euro-Mediterranean initiatives and programmes.

---

1.2 Human capital formation

Despite the recent progress made by the LRAs and national institutions in the educational and vocational training sectors, the region still experiences a high level of unemployment among young skilled graduates. In Tunisia, for instance, out of the growing number of Information and Communications Technology (ICT) female and male graduates, many are forced to look for jobs abroad in light of the competitive job market and still slow-growing domestic private sector, leading to brain drain (World Bank, 2019, pg. 30; Sold, 2018). At the same time, the quality of education remains low throughout the region and the skillsets that graduates are equipped with are not applicable in the private sector (de Lima et al., 2016) (see solutions 6 & 18).

This mismatch between the demand and supply of the local skilled workforce could also be at least partly attributed to a lack of partnerships between universities, research centres and the private sector. As interviewees from Mauritania and Tunisia pointed out, few universities enable their students to conduct internships within start-ups or SMEs. Furthermore, the entrepreneurial potential of women is underutilised throughout the region (in the Arab world, for instance, only 14% of SMEs are owned by females, compared to one in three in the world on average [IMF, 2019] ) (see solutions 7, 8 & 18).

Outside of the ICT sector, the owners and staff of more traditional SMEs often do not understand the importance of digitalisation, failing to capitalise on the opportunities it offers. According to a number of interviewees, it is not uncommon for local SMEs to lack a digital strategy, a vision of how to profit from digitalisation. In other words, new firms are often created without a well-thought-through digital business plan that could easily allow them to increase profit by asserting their presence and visibility in the web and open new market opportunities (see solution 7 & 17).

1.3 Infrastructure and use of digital innovation

Although the situation on the ground is improving, internet connection in the Mediterranean countries studied remains relatively expensive, slow and/or not always readily available (ITU, 2019). The situation is slightly different in the Balkan countries, where providers can offer affordable and stable Internet, and connection speeds – with the exception of Albania – are decent, with capacity within the range of 10-30 mBit/s (see solution 19).

Spatial inequalities are marked in ICT connectivity with direct effects on territorial innovation, growth and job creation. Divergences in inter-urban
connectivity contribute to the concentration and centralisation of growth poles that do not favour harmonious economic development. The measures show that major cities benefit from a better quality of service than secondary ones. This is the case of Morocco, where cities like Rabat and Tangier enjoy better connectivity than others like Meknes or Oujda (World Bank, 2018), even if the population size is similar.

Issues like **digital divide and divergences in inter-urban connectivity** are equally relevant also for smaller countries like Tunisia or Lebanon, where more evenly distributed populations would benefit from further investments in nationwide connectivity projects.

Access to digital services also impact popular access to financial services. This is particularly true for the Arab world, where, as of 2017, only 37% of those aged 15+ possessed bank accounts (compared to 93% in Israel, 68% in Montenegro or 95% in OECD countries on average). As a result, SME owners in Maghreb and Mashreq **do not always feel the need to offer digital payments** (World Bank, 2017 and interviews). With the exception of Israel, cash is still a preferred mode of payment throughout the region (also due to the abovementioned prevalence of the informal economy; a similar situation can be found in BiH and Albania).

Related to that are the relatively low numbers of SMEs, especially of a more traditional type, which possess websites or Facebook pages – although this has reportedly significantly changed since the outbreak of the COVID-19 pandemic (see more in Box 3) (see solutions 4, 15 & 17).

Moreover, there are a **lack of digital platforms connecting potential entrepreneurs both with potential customers and investors**: foreign buyers lack information about SMEs’ trustworthiness, while SMEs have very little information about foreign buyer expectations (see, e.g. Robinson et al., 2019; UNCTAD, 2019; World Bank, 2019b)⁴ (NB in an attempt to fight the consequences of the lockdown caused by the COVID-19 pandemic, Jordan attempted to create an online platform of local SMEs in order to match them with clients – see more in Box 3) (see solution 17).

Additionally, most of the countries under study face the problem of the **scarce adoption of digital applications** related to core business management functions: the share of firms using (functionally important) enterprise resource planning (ERP) and customer relationship management (CRM) software is lower than in several comparable countries (see, e.g. UNESCO, 2017 or Cilasun et al., 2019 for more on Turkey) (see solutions 8 & 18).

---

⁴ For examples from the EU, see e.g. https://startupeuropeclub.eu or https://eustartupservices.eu.
Finally, in many countries across the region, the research and innovation ecosystems struggle to fuel the entrepreneurship and SME sector with new ideas and opportunities. As argued by some interviewees, academia is poorly linked with the private sector in Mauritania, Algeria and Tunisia. The latter also suffers from low private sector funding for research and development (R&D), little public incentive to invest in R&D and unfavourable intellectual property policies (World Bank, 2019, pg.12) (see solutions 1, 6, 7 & 18).
2. Solutions and policy recommendations

1. Countries that do not possess digitalisation plans or relevant central-level agencies responsible for the enhancement of digitalisation should develop them, with special units dedicated to SMEs. LRAs should be included in both the creation and implementation of digitalisation strategies to the extent possible in each individual country (see, e.g. European Commission, 2016).

2. Authorities should progress with the introduction of e-government and e-administration services and the digitalisation of public administration, which would help to simplify and increase the transparency of administrative procedures and facilitate access for the populations residing in remote areas or having mobility problems (see, e.g. Augier & Francois, 2019). Those that do not have prior experience with digitalisation processes could seek guidance from authorities that have already been through the process (e.g. via Twinning programmes5) or from international institutions.

3. LRAs should be empowered by central governments in their own digitalisation processes, including by providing functional computers and access to the internet as well as by fostering the improvement of the legal ICT environment with regard to e-signatures, privacy and digital security regulations. Representatives of LRAs should be required to attend tailored trainings and pass tests/exams at their end in order to ensure maximum retention. It is important to showcase LRAs the benefits of digitalisation, e.g. how online procedures can ease their work burden while mitigating fears of job loss due to automation or increased labour productivity.

4. Create incentives for SMEs to digitalise, e.g. by moving their invoicing online. This could be done by virtue of the creation of tax incentives (lower tax rates for SMEs going digital) or offering grace periods for previously unregistered SMEs that choose to exit the grey economy and go digital. It is also important to ensure that e-services are easy to use and do not require the purchase of expensive equipment or software.

5. LRAs should be included, alongside central governments and their relevant national agencies, in the creation of more efficient data collection on the SME landscape, monitoring also for new digitalisation opportunities or local necessities. This should encompass the development of detailed digital economy statistics, upon which policy priorities and targets will be based, with a particular focus on the collection of gender-disaggregated data that could later enable the

---

design of female economic empowerment strategies. This could be done, e.g. by virtue of commissioning business surveys among local SMEs.

6. **Cooperation over digitalisation should be extended beyond national and sub-national authorities** and include other stakeholders such as civil society, private sector representatives, academia and international institutions. Particular attention should be given to the inclusion of representatives of lagging and underserved regions and the population sections particularly excluded from digitalisation processes in order to battle digital divide.

7. **LRAs and central governments in the countries under research should cooperate with LRAs, SME associations, innovation hubs and NGOs in the EU ARLEM states** which have successfully implemented or are currently implementing strategies in support of the digitalisation of SMEs in their constituencies. One outcome of such cooperation could be, e.g. a database of good examples and testimonies from companies that benefited from digitalisation of their activities. An example of such work is the EU-funded project DigitaliseSMEs\(^6\) which, among others, prepared a series of videos on the benefits of creating a digital database of clients for company growth and of examples of digital optimisation in manufacturing and services. Tailored training, mentoring and coaching could be provided within such cooperation schemes as well.

8. **Pan-ARLEM database of good practices and lessons learnt could be created under the auspices of the CoR.** A number of interviewees pointed out the force of a good example; both national-level and LRA representatives who were initially reluctant to have sub-national authorities involved in digitalisation (or other) projects were more open upon learning about successful activities involving other LRAs. Related to that is a need to give examples of processes within which LRAs can be involved within existing legislation (see two examples of case studies in Box 1 and Box 2).

9. **International donors** (including the EU) should carefully tailor the assistance they provide to SMEs and national and sub-national governments to country and region-specific needs, conducting due diligence in terms of what has already been done by others and promoting and providing training on the methodology of impact assessments of all actions.

---

\(^6\) [https://digitalisesme.eu/resources-digitalisesme/](https://digitalisesme.eu/resources-digitalisesme/)
Box 1. Case study: Digitalization Transformation Center (DDM) for SMEs (Turkey)\(^7\)

The DDM Project, launched in February 2019, was developed by the Turkish Enterprise and Business Confederation (TÜRKONFED) in cooperation with the Governorship of Istanbul, BANDWITT (‘All-in-One Platform for Digital Transformation’), Turkish Isbank (Turkiyes IS Bankasi) and the Istanbul Development Agency.

Since the inception of the DDM, 120 SMEs have been provided with assistance for their digitalisation efforts. The main topics of focus included business processes, computer technologies, processes related to human resources, sales and marketing, production and logistics storage processes. The project has led to the establishment of roadmaps aligned with the SMEs’ needs in the above categories. Moreover, the DDM organised twinning activities to remove the gap between technology supply and demand and to promote innovation.

After the eruption of the COVID-19 pandemic, the Digital Transformation Center launched a new initiative, aimed at assisting SMEs throughout Turkey to better manage the crisis with the assistance of various digitalisation tools and techniques. Under the first stage of the project, which commenced in mid-May 2020, SMEs can complete an online evaluation in order to receive a digitalisation scoreboard and generic roadmap. They also obtain free online mentoring and guidance according to their unique needs. The functioning of the project was adjusted for it to serve as an emergency line for SMEs during the COVID-19 and post-crisis periods, and it will be continued on a commercial basis in the following months.

The role of the Governorship of Istanbul in the project has been to provide support in terms of programme design, as well as outreach and communication activities.

10. While working with central governments on digitalisation-related projects, **international donors should promote the inclusion of LRAs**, e.g. by virtue of conducting pilots on governatorate or municipality levels in coordination with relevant sub-national authorities. All activities should be first consulted and agreed on with the LRAs in order to create a sense of local ownership and agency. As pointed out by the interviewees, LRAs are more likely to know better than the central governments what the needs of their constituencies are. An example of a project implemented in such a way was within a framework of cooperation

\(^7\) http://ddm.org.tr/.
between Governorate Councils in Jordan and GPG Associates\(^8\) whereby LRA representatives were assisted in selecting their own perceived comparative advantages and subsequently in developing reports on best strategies for development within the selected fields in an exercise in evidence-based policy making. Another example is the project ‘Innovation and digitalization in small and medium enterprises in BiH’ implemented by GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH) between 2019-2021 in cooperation with the Chamber of Commerce of the Federation of BiH, as well as other local partner institutions.

11. Governments should **facilitate the process of establishing new SMEs**, as well as creating or strengthening adequate **social and regulatory protections for workers engaged in non-standard work practices based on digital technologies**. An example of legislation being formed in the right direction (albeit still in need of improvement to better address the needs of entrepreneurs) are efforts in Jordan, where in 2016 the Ministry of Industry, Trade and Supply, the Companies Control Department and the USAID Jordan Local Enterprise Support Project (LENS) produced guides\(^9\) to registering and licensing small businesses (including one-person businesses) in the country. The beneficiaries of the new legislation include micro-entrepreneurs such as women selling their home-made meals via online platforms (such as Bilforon) or maintenance service providers advertising to clients on dedicated online platforms (such as Aoun Services).

12. Governments should help to **improve access to credit** for young and innovative entrepreneurs (not forgetting about female ones). As an example, central governments could incentivise and/or assist local financial intermediaries to enter Credit Guarantee Schemes or to enhance their credit reporting activities, increasing the risk tolerance of local creditors (see, e.g. Fouejieu & Sydorenko, 2020; Saleem, 2018). Public authorities should particularly encourage the development of the new fintech industry, which is estimated to be ‘the biggest growth avenue for SMEs in SEMED countries’ (World Bank, 2019, pg.15).

13. **Create digital solutions and matchmaking platforms** to track new ideas and connect entrepreneurs with available financial opportunities (investors or loan providers), business development services (provided by the government, private sector or development partners), mentors and coaches, and other entrepreneurs for peer learning and tracking job opportunities. Digital platforms can provide a gateway not only to financial services but also links to other actors in the ecosystem that provide support to entrepreneurs.


Box 2. Case study: INTERA Technology Park (BiH)

INTERA Technology Park is a non-profit and non-governmental organisation founded in Mostar in 2011 with the aim of promoting economic development in the region of Herzegovina. The abbreviated name originated from the official name Zaklada za INovacijski i TEhnološki RAzvitak (Foundation for Innovation and Technological Development). The idea to establish the foundation came from the entrepreneurial community of the city of Mostar. The bottom-up initiative arose as a result of the need to enhance technological and innovative projects in the region and improve the quality of workforce in order to make it competitive on the domestic and foreign markets.

Through its activities, INTERA Technology Park seeks to improve the economic situation in the region by assisting SMEs in the realisation of their entrepreneurial potential through the application/integration of ICT knowledge, skills and resources. The park offers office space, equipment, infrastructure, access to finance and investors. Moreover, young and unemployed people are supported by the numerous educational initiatives and extracurricular activities offered by INTERA.

By implementing more than 20 different projects funded by domestic and foreign donors, INTERA Technology Park has gained experience in creating a better business environment for all citizens of Bosnia and Herzegovina. The park is considered as a meeting point for foreign and local companies, an incubator of start-up companies and a booster for local development.

The City of Mostar itself, while a host to a Business Support Service (Business Service Center), currently does not perform the tasks for which it was established. Due to the reduced workload, employees of this service are currently engaged in other jobs. At the same time, however, in 2019, the city participated (as one of the sponsors) for the first time in the organisation of an Innovation Festival, which was a novelty in the region. It was a five-day event consisting of four main components, both competitive and educational: Next Innovation Hackathon, SMART Culture Workshop, Next Thing Conference and Next Startup x BETAPITCH Competition. The organiser of the event was SPARK Business Park, with the support of sponsors including the City of Mostar, the European Fund for Southeast Europe (EFSE), NSoft and Sportradar. Over 250 participants took part in the event. The City of Mostar sponsored awards for the three teams that developed the best software solutions for smart cities.

---

14. LRAs can support the digitalisation of SMEs in their constituencies by providing information on funding schemes from the EU or other donors via their local platforms. Dedicated counselling hours could be assigned during which a trained LRA representative could advise entrepreneurs and help them to prepare funding applications. A selection of funding opportunities available to SMEs to assist their digitalisation is provided in Annex 2.

15. **Contribute to/incentivise the development of e-commerce and virtual marketplaces** (VMPs) to open local businesses to wider global markets and reduce transaction and search costs. The emergence of e-commerce platforms has helped SMEs in developing countries to expand their customer base with no need for a storefront presence (Robinson et al., 2019).

16. **Bolster patent protection and effective competition law**, which are needed to protect and reward inventors and to avoid abuse of monopoly situations (see, e.g. Faghih & Zali, 2018). Ensure the transparency and pertinence of the public procurement laws.

17. Push for the **digitalisation of the banking sector** and work towards a more widespread **financial inclusion of the population**, including the sectors residing outside urban areas.

18. Intervene in the **local educational system**: update educational programmes or provide specific training on subjects like communication, critical thinking, customer service, STEM (Science, Technology, Engineering and Mathematics) and coding.

19. **Improve connectivity and access to fast, reliable and affordable broadband** in the country, including in rural areas and other regions and municipalities with a non-existent or slow broadband connection. Moreover, the processes of obtaining licences by new broadband operators should be made less complicated and more transparent; investment in digital infrastructure should also be encouraged (Arabnet, 2019; Augier & Francois, 2019).
The COVID-19 pandemic has forced much of private and public life online (although this was by no means possible for all social strata). While lockdowns imposed around the world and throughout the region of relevance to the study have been temporary, they clearly showcased the advantages of and need for digitalisation. LRAs and SMEs have not been excluded from this realisation. As underlined by the vast majority of the interviewees, the silver lining of the pandemic has been its push towards digital solutions.

Throughout the region, SMEs – including traditional companies like bakeries or corner shops – have begun to en masse create Facebook pages (or, less often, simple websites – as a stakeholder from BiH pointed out, this led to increased demand for software and web page developers) to keep their customers informed on opening times, services still offered and takeaway/delivery options. While not every type of business was in a position to carry on their activities, this trend was observed in most of the countries under research.

Both national and sub-national authorities were reportedly able to at least to some extent successfully move their activities online, participating in e-meetings with stakeholders and offering e-government services (although it is important to note that the situation varied from country to country). In Tunisia and Morocco, public banks have boosted digital services with the aim to reach the most vulnerable target groups, some micro-enterprises among them. They have also used technology to allocate state subsidies, and thus sustain the productivity (as indicated above, impact assessments of these actions should be conducted in due time in order to check whether the digitalisation of this process has not contributed to selection and exclusion problems).

In Jordan, the government created a system of e-wallets to facilitate online payments (financial accounts that do not require possession of a bank account) – and in order to encourage broader participation during the pandemic, it conditioned receipt of governmental relief to joining the scheme. The latest data show that between March and April 2020, 139,644 new e-wallets were registered, and the value of transactions increased by JOD 45.2 million (JoPACC, 2020). Unfortunately, according to a recent poll by the International Labour Organization and the Jordanian National Commission for Women, over half of Jordanians (58% of males and 57% of females) interviewed had difficulties in creating e-wallet accounts (ILO & JNCW, 2020) (data for individuals, no survey among SMEs owners has been conducted thus far), which highlights the dangers of rapid and enforced (in this case by a pandemic) digitalisation.
The Jordanian government was also behind the creation of online platforms matching local SMEs with clients, as well as an online platform for deliveries, which initially included only drivers already registered with car-hailing companies like Careem, but – as stressed by one interviewee – following protests among traditional yellow taxi drivers included them into the scheme as well.

In Palestine, e-wallets (‘Cash-Cabs’) were introduced prior to the pandemic by the Palestine Investment Bank (a member of the SME Finance Forum); however, expansion of the scheme has been adversely affected by the pandemic-related lockdowns, as local regulations require that a client visit a bank branch in person. The Palestine Monetary Authority is currently working with the bank on solutions that would allow for the creation of the e-wallet online (although this process ‘is likely to be lengthy’; SME Finance Forum, 2020), highlighting the importance of legislation that does not impede digitalisation processes.

In Lebanon, as explained by two interviewees, due to the fact that the pandemic exacerbated the effects of the pre-existing economic crisis, less support was available to SMEs as institutions behind the support schemes were suffering themselves financially.
3. Funding possibilities available to LRAs

Name of the funding scheme: **The FEMIP Trust Fund**

Funding body: European Investment Bank (EIB)
Geographical scope: Mediterranean Region

Description and other relevant info: The Facility for Euro-Mediterranean Investment and Partnership (FEMIP) brings together under one roof the whole range of instruments implemented by the European Investment Bank in support of economic development in the Mediterranean partner countries. Whether for public or private project promoters, the FEMIP can co-finance up to 50% of the total cost via individual loans. Priority is given to projects aiming at expanding the private sector and creating a business-friendly environment. Project promoters can apply for both financial and technical assistance. Specific instructions on the application procedure are available on the dedicated page (link provided below).

Links: [Application procedure and informative brochure](#)

Name of the funding scheme: **Neighbourhood Investment Facility**

Funding body: European Commission
Geographical scope: Mediterranean Region

Description and other relevant info: Officially launched in May 2008, the Neighbourhood Investment Facility is an innovative financial instrument of the European Neighbourhood Policy (ENP), whose primary objective is to finance with a mix of grants and loans key infrastructure projects in the transport, energy, social and environment sectors, as well as to support private sector development (in particular SMEs) in the Neighbourhood Region. Grants and loans are available to both private and public actors, provided that it is financed by an eligible European Finance Institution.

Name of the funding scheme: **ENI CBC MED**

Funding body: European Union Investment Instrument
Geographical scope: The Programme area comprises 14 countries which includes 112 territories

Description and other relevant info: The programme engages in multiple activities aimed at fostering more inclusive cooperation in the Mediterranean. ‘SMEs and business development’ is one of the main thematic areas. Calls for both private

---

11 Funding schemes’ descriptions are directly quoted from the original sources indicated in the links.
and public organisations are posted periodically and are of three main types: Strategic, Standard and Capitalisation. The Programme contributes up to a maximum of 90% of the total eligible budget costs of the projects, while a co-financing of a minimum of 10% must be provided at the project level. The Programme does not foresee any pre-allocation of funds by country, meaning that projects are selected only on the basis of their quality.

Name of the funding scheme: MENA-OECD Initiative on Governance and Competitiveness for Development

Funding body: OECD
Geographical scope: Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestinian Authority, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates and Yemen

Description and other relevant info: This initiative provides a know-how exchange platform between the Organisation for Economic Co-operation and Development (OECD) and the Middle East and North Africa (MENA) countries to stimulate sustainable and inclusive growth across the region. The MENA-OECD Governance Programme component offers support to LRAs in becoming ‘transparent, accountable, and accessible’ and empowering them for the benefit of their local communities. The programme currently manages the Middle East and North Africa Transition Fund, which directs funding to designated national ministries.
Link: Middle East and North Africa Transition Fund.

Name of the funding scheme: Canada Fund for Local Initiatives (CFLI)

Funding body: Government of Canada
Geographical scope: Algeria, Jordan, Lebanon, Morocco, Mauritania, Palestine, Turkey and Bosnia and Herzegovina

Description and other relevant info: The fund provides small-scale funding (about USD 25,000 on average) to support local initiatives and innovative projects focused on, inter alia, economic growth and women’s empowerment. While the majority of the projects are attributed to local civil society organisations, LRAs are eligible to apply for funding if they cooperate with local civil society organisations in the implementation of the projects.

Name of the funding scheme: Municipal Development and Lending Fund

Funding body: Palestinian Government
Geographical scope: Palestine
Description and other relevant info: The fund aims to promote empowerment of the Palestinian LRAs via grants and loans dedicated to, among others, the implementation of the LRAs projects, local services and infrastructure improvement, local and regional cooperation, innovation, and local economic development.

Name of the funding scheme: Municipal Performance Program

Funding body: The World Bank
Geographical scope: Morocco

Description and other relevant info: The project is aligned with the dedicated Government programme and provides support to the municipalities in the selected regions (i.e. Tanger-Tétouan-Al Hoceima, l’Oriental, Fès-Meknès, Rabat-Salé-Kénitra, Béni-Mellal-Khénifra, Casablanca-Settat, Marrakech-Safi, Draâ-Tafilalet and Souss-Massa). Target areas include improvement of the institutional performance, business environment and investment capacities of LRAs, local infrastructure development and capacity building of LRAs, and improvement of local services and strengthening of inter-municipal cooperation. The programme is implemented via technical assistance to LRAs as well as targeted investments and grant-based transfers to selected municipalities. Therefore, while LRAs could not apply for the fund from the World Bank directly, they could benefit from grants and financial assistance provided nationally throughout the project’s implementation period from 2019 to 2023.

Name of the funding scheme: National Multi-City Regional and Local Development Programme

Funding body: Urban Projects Finance Initiative
Geographical scope: Jordan

Description and other relevant info: The project aims to strengthen the technical and financial capacities of Jordanian municipalities. The main pillars include improvement of local infrastructure, services, implementation and management of local investment programmes and local economic development projects, in particular those aimed at women. While the list of the targeted municipalities has already been identified at the first stage of the project (Jerash, Ajloun, Madaba, Salt, Kerak, Irbid, Zarqa and Um-Rassas), the financing and implementation of the dedicated local projects will occur over the next few years.
Name of the funding scheme: **Upper Egypt Local Development Program-for-Results Project**

Funding body: The World Bank (International Bank for Reconstruction and Development)
Geographical scope: Egypt

Description and other relevant info: The project is aligned with the relevant government programme and is to be implemented in two governorates (Qena and Sohag). It aims to strengthen local infrastructure and improve local service provision and the business environment. The focus areas, therefore, include the improved competitiveness of economic sectors and subnational capacity-building reforms, which would support local digitalisation and the development of ICT platforms for business. The project is set to run until the end of 2021 and LRAs are expected to benefit from 30% of the total funding within the project (USD 500 million). Hence, while there is no possibility to apply for funding from the World Bank directly, LRAs could benefit from the ongoing project to finance local initiatives.

Name of the funding scheme: **Economic Governance for Growth**

Funding body: Government of Norway, Government of Bosnia and Herzegovina, United Nations Children’s Fund
Geographical scope: Bosnia and Herzegovina

Description and other relevant info: The project covers LRAs and educational and private institutions in three cantons (Posavina, Zenica-Doboj and Tuzla or Sarajevo) and 10 local government units (Banja Luka, Doboj, Gradačac, Gradiška, Mostar, Modriča, Orašje, Prijedor, Sarajevo and Tuzla). The priority areas of action include enhancing SME competitiveness and the business environment throughout digitalisation and entrepreneurship support schemes; establishing and expanding entrepreneurship, innovation and LRA networks; identifying and addressing institutional blocking points to entrepreneurship; and developing digital and entrepreneurial skills among youth. In addition, one action pillar includes incentive grants to the top three performing LRAs to co-fund local economic infrastructure projects. Thus, as the project is at the implementation stage, LRAs could not apply to join. The selected LRAs, however, could benefit from financial and technical assistance to improve the local business environment and support SMEs and entrepreneurship throughout the project lifeline – until the end of 2021.
4. Annotated and commented bibliography


The study focuses on business investment as one of the main factors underlying capital formations and contributing to social well-being. The report attempts to analyse the entire spectrum of the private sector, providing data for large formal corporations, skilled start-ups, medium-sized family businesses and small firms with high levels of informality. Relevant recommendations are also discussed ranging from best management practices, building up of equity capital, wider access to alternative and innovative forms of long-term financing, and more inclusive transition towards a digital economy.

Geographic Scope: Turkey


The report assesses the current degree of and future opportunities for digitalisation in the Middle East and North Africa region and Turkey. While arguing for a palpable increase in the use of digital technologies within the region, the study identifies multiple obstacles to the ongoing process of digital transformation. Recommendations for local authorities concern investments for more affordable and wide-spread connectivity, the creation of Digital Government services to increase transparency, and the improvement of the current business environment by reshaping regulations and providing training for digital skills.

Geographic Scope: Algeria, Egypt, Jordan, Lebanon, Morocco, Palestine, Tunisia, Turkey


The blueprint discusses the avenues for LRAs to support and drive digital transformation. Building on the context-specific local case studies and best practices from EU LRAs, the paper identifies key dimensions for LRA actions to boost the digitalisation of cities and businesses, in particular SMEs. These include, *inter alia*, local investments in digital infrastructure, skills formation and
attraction, development of the local digital strategy and ecosystem, improvement of local access to digital technologies and open data platforms. Along these dimensions, the blueprint offers practical guidance and recommendations to both public and private local stakeholders and aims to enable LRAs to design tailored digital transformation roadmaps.

Geographic Scope: Morocco, Algeria, Tunisia, Mauritania, Turkey, Egypt, Israel, Jordan, Lebanon, Palestine, Albania, Bosnia and Herzegovina, Montenegro


This report is a continuation of the Dijital Anadolu. Dönüşüm için Yeni Dünya Kuralları ve Çözümler (2018) publication prepared jointly by TÜRKONFED and SEDEFED as part of the Digital Anadolu project. Its main aim is to unleash the digital transformation potential of Turkey by, among others, developing policy recommendations for LRAs and national authorities. In line with this, the report benefits from surveys and workshops with local stakeholders to evaluate and compare the state of digitalisation throughout selected sectors and regions (e.g. Bursa, İzmir, Antalya). The indicators and indices developed within the project are used in the report to discuss relevant digitalisation gaps and blocking points as well as to feed into policy recommendations.

Geographic Scope: Turkey


The report focuses on the recent technological innovations that have dramatically changed the way SMEs operate. New technologies such as machine learning, 3D printers and wireless Internet broaden horizons for SMEs and provide access to global markets even for local companies. The publication analyses changes that have an impact on the modern business ecosystem and shows how IT tools can be tailored to the needs of SMEs.

Geographic Scope: Bosnia and Herzegovina, Montenegro, Morocco

The report provides a thorough analysis of the Israeli SME sector and evaluates the performance of national and local authorities in stimulating its innovation and digitalisation. According to the report, the main weaknesses of the Israeli SME digitalisation supporting framework include lack of skills supply, less favourable terms of bank credit for SMEs, high concentration of funding availability in high-technology sectors only, and ‘spatially blind’ SME and digitalisation support policies which further deepen the core-periphery divide. At the same time, many bottlenecks are exacerbated when Arab-led SMEs are considered. The recommendations with regard to local authorities include the creation of local clusters, LRA partnerships and best practices sharing, and the greater involvement of LRAs into national SME digitalisation strategies to reduce the spatial divide.

Geographic Scope: Israel


The report (1) presents a comprehensive evaluation of the SMEs’ environment and challenges in the selected countries; (2) provides an assessment of the policies, reforms and achievements in the development of SMEs along five pillars, including business environment, access to finance and human capital development; (3) discusses avenues and recommendations for further policy action at the national and LRA levels. While not targeting digitalisation in particular, the report provides substantial insights on the bottlenecks faced by the SMEs, which, *inter alia*, undermine their digital transformation potential and efforts. In addition, the evaluation of the successes and failures of previous reforms could feed into the insightful and efficient conceptualisation of further local policy actions.

Geographic Scope: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine, Tunisia
The document is built as a Knowledge Brief for the World Bank’s project ‘E-Commerce for Women-Led SMEs’. It provides useful insights into the constraints faced by several women-managed and/or -owned medium-sized firms in different countries of the region. The report highlights the importance of e-commerce platforms to increase the business volume of local SMEs, providing access to wider markets. In addition, it discusses useful strategies to boost access to financial resources and develop digital capacities and skills.

Geographic Scope: Algeria, Egypt, Jordan, Lebanon, Morocco, Tunisia


The report focuses on the opportunities and challenges brought about by digital transformation in the developing countries context. With regard to the digitalisation of companies and SMEs, in particular, it argues that policies should target local and regional digital goods and markets. The greatest potential for LRAs and national authorities, therefore, lies in the development of locally tailored ecosystems and products which are difficult to be replicated, yet carry significant interest for local value chains. In addition, the report underlines the importance of investments in tacit entrepreneurship and digital skills formation throughout mentorship and networking, especially with regard to women-led companies.

Geographic Scope: Egypt, Israel, Morocco, Turkey, Bosnia and Herzegovina, Montenegro


The paper describes the structure and objectives of a World Bank Group project supporting entrepreneurship, the private sector and job creation. From the project’s areas of intervention, it is possible to discern some key obstacles faced by innovative start-ups like lack of risk capital and human resources with appropriate skills and technical expertise. The paper concludes with multiple recommendations around digitalisation strategies and ideas for robust monitoring frameworks.

Geographic Scope: Egypt
The report assesses the structure and objectives of a World Bank Group loan to the Government of Morocco aimed at fostering financial inclusion and digital economy policy financing. The loan targets some priority areas, shedding light on the current obstacles faced by the central government in the promotion of the digital transformation. Despite the recent progress and national initiatives undertaken, the Moroccan growth model is fiscally dangerous and has yet to prove concrete productivity growth. The report identifies three main areas of action: increasing access to credit by diversifying financial instruments and sources; supporting the development of digital platforms and infrastructure; and enhancing support for digital entrepreneurs.

Geographic Scope: Morocco

**Databases**


The index summarises main institutional and behavioural factors which define countries’ ability to fully benefit from ICT and is structured around six dimensions (i.e. infrastructure, households’ and enterprises’ adoption, costs, regulation and contents).

*Euler Hermes.* *Enabling Digitalization Index (EDI)*, 2018.

The EDI measures counties’ potential and ability to support the digitalisation of businesses. Specifically, the index focuses on the conditions for digitalisation, rather than current state of technology adoption of companies per se. The countries, therefore, are scored along five dimensions: regulation, knowledge, connectivity, infrastructure, and size.

*Euro-Mediterranean Network for Economic Studies (EMNES).* *Survey on SMEs Digital Engagement in the MENA Region (upcoming).*

The survey aims to evaluate the level of digitalisation and digital engagement of SMEs in the North and South Mediterranean. In addition, it aims to discuss key barriers and potential avenues to greater SME digitalisation. The survey will remain open until 30 June 2020.
IMD World Competitiveness Center. *World Digital Competitiveness Ranking.*

The ranking is based on both national and international statistics as well as survey data from targeted countries. It provides an assessment of countries’ digital competitiveness along three pillars: (1) knowledge; (2) technology; and (3) future readiness. The technology pillar, in particular, evaluates national regulatory, financial and technological frameworks with regard to digitalisation.

Geographic Scope: Israel, Jordan.

Portulans Institute and WITSA. *Networked Readiness Index,* 2019.

The Index provides a country-level comprehensive benchmark on the availability and use of ICT by key stakeholders (i.e. individuals, businesses and governments). One of the four pillars is dedicated to technology and evaluates, among others, the availability and quality of ICT infrastructure. In addition, a sub-section of the ‘People’ pillar provides data on technology use by businesses (no data available for Palestine).

FEMISE. *The Next Society. MED Innovation Scoreboard.*

The scoreboard consists of 78 indicators which provide information on different aspects of innovativeness of the Mediterranean countries, e.g. the percent of firms having their own website, the percent of firms using e-mail to interact with clients/suppliers and the number of internet users.


The survey provides data on companies’ performance along 12 pillars, including infrastructure, finance and main obstacles, which can be disaggregated by company size, location and sector. The individual country profiles also provide data on the use of technology for business activities (no data available for Algeria or Palestine).
Annex 1 References


DigitaliseSME. Available at: https://digitalisesme.eu/resources-digitalisesme/.

Digitalization Transformation Center (DDM). Available at: http://ddm.org.tr.


EU Startup Services. Available at: https://eustartupservices.eu.


International Monetary Fund (IMF). Enhancing the Role of SMEs in the Arab World—Some Key Considerations, 2019. Available at: https://www.imf.org/~/media/Files/Publications/PP/2019/PPEA2019040.ashx.

INTERA Technology Park. Available at: https://www.intera.ba/en


Portulans Institute and WITSA. Network Readiness Index (NRI), Washington D.C., USA, 2019. Available at: https://networkreadinessindex.org.


Startup Europe Club. Available at: https://startupeuropeclub.eu.

Startup Guide. Available at: https://www.startupguidejo.com/en.


FEMISE. The Next Society. MED innovation scoreboard. Available at: https://www.thenextsociety.co/i-data.


 Annex 2 Funding possibilities available to SMEs and relevant ongoing projects

Name of the funding scheme: ERI SME Guarantee Facility

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Mediterranean Region – Lebanon and Jordan, in particular
Description and other relevant info: The project consists of a global authorisation to provide SME loan guarantees to local banks and other financial intermediaries under the Economic Resilience Initiative (ERI) – Impact Finance window.

Name of the funding scheme: ERI Microfinance Facility

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: EU Southern Neighbourhood and Western Balkans
Description and other relevant info: The project consists of a framework envelope under the Economic Resilience Initiative (ERI) Building Block 3b for microfinance of up to EUR 70 million (100% donor funded) to provide medium-term funding in the form of senior debt in local currency to micro, small and medium-sized enterprises (SMEs) through selected intermediaries in the Southern Neighbourhood and the Western Balkans.

Name of the funding scheme: COOPMED II

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: EU Southern Neighbourhood
Description and other relevant info: The project consists of an increase in participation in a debt fund aiming at supporting responsible and environmental investments and financial inclusion in the Mediterranean region through microfinance to be realised under the Risk Capital Facility for Southern Neighbourhood. This project will improve competitiveness and access to finance at favourable conditions for small and medium-sized enterprises (SMEs).

12 Funding schemes’ descriptions are directly quoted from the original sources indicated in the links.
Name of the funding scheme: Al Amana Microfinance

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Morocco
Description and other relevant info: The EUR 3 million loan operation will finance the portfolio of Al Amana Microcredit, the largest microfinance institution in Morocco, which provides economic and social development solutions focusing on financial inclusion for micro-entrepreneurs.

Name of the funding scheme: MBIL FINEA

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Morocco
Description and other relevant info: The project is implemented via an intermediated loan to FINEA with the aim to improve accessibility of funding for Moroccan SMEs. As a result, the latter would benefit from the EIB credit line via Moroccan Financial Intermediaries to be selected by FINEA.

Name of the funding scheme: MFI Lebanon - VITAS SAL

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Lebanon
Description and other relevant info: The operation will support the microfinance portfolio of a Lebanese microfinance institution. The aim is to enhance access to finance to final beneficiaries for their micro/small projects.

Name of the funding scheme: Lebanon Private Sector Resiliency Facility II

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Lebanon
Description and other relevant info: This third Facility is expected to be part of the EIB’s Economic Resilience Initiative (ERI). The aim is to mobilise financing for the banking sector in support of sustainable economic growth and social cohesion in the context of the refugee crisis. The facility proposed will provide funding to small and medium-sized enterprises (SMEs) and mid-caps through credit lines to local financial intermediaries.
Name of the funding scheme: Banque Misr Loan for SMEs and MIDCAPS II

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Egypt
Description and other relevant info: The project will enhance access to finance to small and medium-sized enterprises (SMEs) and mid-caps across Egypt. The operation will further stimulate the inclusive development of the local private sector by improving access to long-term financial resources, with the aim of supporting private sector development through eligible sectors of the Egyptian economy.

Name of the funding scheme: NBE Loan for SMEs and MIDCAPS

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Egypt
Description and other relevant info: The project consists of loans for small and medium-sized enterprises (SMEs) and mid-caps to support small and medium scale projects.

Name of the funding scheme: FATEN Palestine Microfinance Loan

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Palestine
Description and other relevant info: The operation consists of a senior loan of up to USD 10 million to fund the microfinance activities of the Palestinian Company for Credit and Development (FATEN) in Palestine.

Name of the funding scheme: FINCA Microfinance Co.

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Jordan
Description and other relevant info: The facility will improve access to finance for Jordanian micro and small enterprises (MSEs) with a special focus on female
entrepreneurs in rural and urban areas as well as young entrepreneurs (under the age of 30). MSEs are defined as businesses with fewer than 10 employees in both urban and rural areas, including self-employed individuals, sole proprietors and micro entrepreneur groups.


**Name of the funding scheme: Enda Tamweel S.A.**

Funding body: European Investment Bank (EIB)
Theme: Increasing access to credit for SMEs
Geographical scope: Tunisia
Description and other relevant info: The project provides up to EUR 9 million (equivalent in Tunisian Dinars) of financing to Enda Tamweel – a Tunisian microfinance company. The main objective is to facilitate access to finance for local MSEMs, targeting, in particular, vulnerable groups and rural areas.


**Name of the funding scheme: Badia Impact Squared**

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Equity investment for venture capital
Geographical scope: SEMED Countries
Description and other relevant info: An equity investment of up to USD 10 million in favour of the venture capital fund Badia Impact Squared targeting early stage technology companies in the SEMED region. The project will form part of the Bank’s Early-Stage Innovation Facility, a EUR 100 million facility through which the EBRD selectively invests in commercially oriented early-stage venture capital funds.


**Name of the funding scheme: VCIP II Second Envelope**

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Investment for early and growth stage technology companies
Geographical scope: Mediterranean and Balkans Countries
Description and other relevant info: The EBRD, through its Venture Capital Investment Programme II (VCIP II, which is a continuation of the EBRD’s existing programme, VCIP, and is a dedicated framework facility of EUR 100 million), invests in early and growth stage technology companies via equity and equity-linked instruments (investment size up to EUR 15 million) in the Bank’s countries of operation alongside experienced venture capital co-investors. Investments target innovative and high growth small and medium-sized companies largely under-serviced by the limited venture capital community.
to help fill the venture capital equity ‘gap’ in the market. In order to continue to maintain the investment rate and meet the demand in the ongoing pipeline conversion, additional funds are sought to be allocated over the remainder of the VCIP II investment period.


**Name of the funding scheme: Earlybird Digital East Fund II**

Funding body: European Bank for Reconstruction and Development (ERBD)
Theme: Investments in technology-based early and growth stage micro, small and medium-sized enterprises
Geographical scope: Central and South Eastern Europe, Turkey and Jordan
Description and other relevant info: The Fund will make equity and equity-related investments in technology-based early and growth stage micro, small and medium-sized enterprises in Central and South Eastern Europe, Turkey and Jordan, with the objective of achieving long-term capital appreciation.

**Name of the funding scheme: GCF GEFF Regional – Extension**

Funding body: European Bank for Reconstruction and Development (ERBD)
Theme: Green economy financing facility for the private sector
Geographical scope: Multiple countries including several from the Mediterranean
Description and other relevant info: Provision of up to USD 400 million for an extension of the GCF-GEFF Regional Framework (Project number 50223). The Extension will consist of a further allocation of USD 300 million of the Bank’s ordinary resources and up to USD 100 million provided by the Green Climate Fund, to be deployed via the Bank’s Green Economy Financing Facilities in Armenia, Egypt, Georgia, Jordan, Moldova, Mongolia, Morocco, Serbia, Tajikistan and Tunisia.

**Name of the funding scheme: FIF - National Bank of Egypt - Youth in Business Pilot**

Funding body: European Bank for Reconstruction and Development (ERBD)
Theme: Access to finance for start-ups
Geographical scope: Egypt
Description and other relevant info: Provision of a senior unsecured loan to the National Bank of Egypt of up to USD 30 million, under the Egypt Youth in Business programme. The proceeds of the loan will be on-lent to local private enterprises that are led or owned by youth.
Name of the funding scheme: Egypt SEFF

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Private sector investment for the sustainable energy sector
Geographical scope: Egypt
Description and other relevant info: The EBRD is considering establishing the Egypt Sustainable Energy Financing Facility Framework in the amount of up to EUR 140 million (including co-financing by the European Investment Bank or the Agence Francaise de Developpement). The funds will be made available to participating financial institutions in Egypt for on-lending to eligible private sector sub-borrowers for sustainable energy investments.

Name of the funding scheme: Bank Al Etihad Subordinated Loan

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Access to finance for SMEs
Geographical scope: Jordan
Description and other relevant info: The EBRD has provided a subordinated loan of JOD 21.3 million to Bank Al Etihad to support the bank’s growth plans and on-lending to private local SMEs.

Name of the funding scheme: Green Economy Financing Facility (GEFF)

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Finance for green economy projects
Geographical scope: Lebanon
Description and other relevant info: The Green Economy Financing Facility Lebanon will provide financing of up to USD 190 million for on-lending to local commercial banks. The framework will finance energy efficiency, renewable energy and resource efficiency projects in Lebanon.

Name of the funding scheme: Credit Libanais - Regional TFP and SME loan

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Access to finance for SMEs
Geographical scope: Lebanon
Description and other relevant info: Provision of (i) a TFP limit of USD 50 million to Credit Libanais SAL and (ii) a loan of up to USD 50 million to Credit Libanais SAL to on-lend to micro, small and medium-sized enterprises in Lebanon.
Name of the funding scheme: CaixaBank Morocco II

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Access to finance for SMEs
Geographical scope: Morocco
Description and other relevant info: Provision of up to MAD 428 million (EUR 40 million equivalent) long-term debt financing to Caixa Bank Succursale au Maroc for on-lending to small and medium-sized enterprises.

Name of the funding scheme: GCF GEFF Regional - Morocco Value Chain – BCP

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Private sector / SME financing for green investment
Geographical scope: Morocco
Description and other relevant info: EBRD loans will enable BCP and its leasing subsidiary Maroc Leasing to on-lend to eligible private sub-borrowers (i) to implement green investments in energy efficiency, renewable energy, and climate resilience measures and (ii) to boost the competitiveness of SMEs component of a value chain.

Name of the funding scheme: Garanti Leasing - TurSEFF III

Funding body: European Bank for Reconstruction and Development (EBRD)
Theme: Private sector / SME financing for green investment
Geographical scope: Turkey
Description and other relevant info: The provision of a senior loan of up to EUR 50 million (or its USD or TRY equivalent) financing to Turkish Leasing Finance Company Garanti Finansal Kiralama A.S. (Garanti Leasing), a subsidiary of Garanti Bank, the second largest privately owned bank in Turkey, under the Turkey Sustainable Energy Financing Facility III, to finance resource efficiency and small-scale renewable energy investments in Turkey. The proposed transaction is the second transaction with Garanti Leasing and builds on the positive experience of working with Garanti Leasing.
**Name of the funding scheme: EU4Business. For Competitive and Innovative Local Economy**

Funding body: EU and German Federal Ministry for Economic Cooperation and Development (BMZ)  
Theme: SME development and digital transformation  
Geographical scope: Bosnia and Herzegovina  
Description and other relevant info: The project aims to support the competitiveness, innovation and digital transformation of companies, and SMEs in particular, within three priority areas (agri-food and rural development, tourism and export-oriented sectors). To this end, it provides funding (approximately EUR 17.1 million between 2018 and 2022) and technical assistance to individual enterprises, farmers, start-ups and entrepreneurs. In addition, the project promotes improvement of the business environment in cooperation with BiH institutions.  

**Name of the funding scheme: Palestinian Businesswomen’s Association – Asala**

Funding body: Sharakat Investment Fund  
Theme: SME access to finance, women’s empowerment  
Geographical scope: Palestine  
Description and other relevant info: The initiative provides financial assistance (mainly via loans) to women-led SMEs and women entrepreneurs, in particular those from poor communities.  

**Name of the funding scheme: Middle East Partnership Initiative (MEPI) Local Grants Program**

Funding body: U.S. Department of State  
Theme: Local development and SME support  
Geographical scope: Algeria, Israel, Jordan, Lebanon, Morocco, Tunisia  
Description and other relevant info: The programme is announced on a yearly basis and targets local civil society organisations, NGOs and community groups, as well as private, professional and educational organisations. Eligible topics include economic and infrastructure development, improvement of regulatory and administrative environment, support to SMEs, skills development and women’s empowerment. While LRAs are not eligible to apply for funds directly, public-private partnerships are encouraged in the implementation of the selected projects.  
Name of the funding scheme: Promotion of Economic Growth and Local Development in Remote Regions of Morocco (PEDEL)

Funding body: German Federal Ministry for Economic Cooperation and Development (BMZ)
Theme: SME development
Geographical scope: Morocco
Description and other relevant info: The project is jointly implemented by the Ministry of the Interior of the Kingdom of Morocco and local partners throughout eight provinces in the South-East of Morocco (i.e. Al Haouz, Azilal, Errachidia, Midelt, Ouarzazate, Tata, Tinghir, Zagora). It targets local SMEs in particular and aims to support the economic development of 9,450 companies by 2022. Local multi-stakeholders platforms including the public and private sectors and civil society representatives support local value chains, organise networking and marketing events, and provide training and advisory services to the SMEs. By 2020, the project has already improved performance of 4,380 enterprises.

Name of the funding scheme: Promotion of Micro, Small and Medium-Sized Enterprises

Funding body: German Federal Ministry for Economic Cooperation and Development (BMZ)
Theme: SME development, SME access to finance
Geographical scope: Morocco
Description and other relevant info: The project is implemented in coordination with the Moroccan Ministry of Industry, Trade and the Green and Digital Economy (MICEVN), the National Agency for the Promotion of Small and Medium-sized Enterprises (MarocPME), the Ministry of Economy and Finance (MEF) and the National Committee for the Business Environment (CNEA). It aims to improve the regulatory and business environment, including access to funding, for SMEs. The project has already helped to digitise administrative procedures in eight regions and expand support, advisory and training (e.g. ‘Virtual Academy’) services for SMEs. In addition, the project aims to facilitate access to suitable financial products for SMEs via Business Angel networks and a draft law on crowdfunding, among others. Since 2017, about 6,500 Moroccan SMEs, including 43% of women-led companies, have benefited from support and training services.
**Name of the funding scheme: Promotion of Access to Financial Services for Small and Medium Enterprises**

Funding body: German Federal Ministry for Economic Cooperation and Development (BMZ)
Theme: SME access to finance
Geographical scope: Egypt
Description and other relevant info: In cooperation with the Egyptian Financial Supervisory Authority (EFSA), the project aims to improve the availability of non-bank financial services to SMEs. The main pillars include (1) enhancing the regulatory and supervisory framework for non-bank financial institutions (NBFIs); (2) raising incentives for NBFIs to finance SMEs by improving guarantee models in cooperation with the Credit Guarantee Company (CGC); and (3) improving financial market infrastructure via training services for NBFIs. In addition, the project helps establish local investor networks and organise networking and pitching events for SMEs and start-ups.

**Name of the funding scheme: Innovation, Employment and Regional Economic Development**

Funding body: German Federal Ministry for Economic Cooperation and Development (BMZ)
Theme: SME digitalisation, skills formation, regional development
Geographical scope: Tunisia
Description and other relevant info: The project focuses on Industry 4.0 and aims to (1) improve the economic performance and growth potential of Tunisian SMEs from both the supply and demand sides and (2) raise awareness on the benefits of digitalisation for Tunisian SMEs. Specifically, it targets jobseekers and youth, in particular, to improve their qualifications and skills via tailored training (e.g. via e-learning platform – ‘Tunicod’). The project also provides needs-based consulting and the development services to SMEs in, among others, digital transformation, marketing and human resources. One of the outcomes of the project includes the creation of a digitalisation action plan with the Ministry of Industry and the establishment of the regional economic promotion agency in the region of Sfax, which brings together public and private stakeholders, universities and civil society organisations to promote the region’s innovation potential and investment attractiveness.
**Name of the funding scheme: Financing Innovative Startups and Small and Medium Enterprises Project**

Funding body: The World Bank (International Bank for Reconstruction and Development)
Theme: SME access to finance
Geographical scope: Morocco
Description and other relevant info: The project aims to improve the entrepreneurship ecosystem, promote innovation among SMEs and to provide them with accessible and early stage financing (e.g. angel/seed, microcredit, and others).

**Name of the funding scheme: Financial Inclusion and Digital Economy DPF**

Funding body: The World Bank (International Bank for Reconstruction and Development)
Theme: SME access to finance, digital transformation
Geographical scope: Morocco
Description and other relevant info: The funding scheme amounts to EUR 434.9 million and supports the Government of Morocco’s Digital 2020 Strategy and National Financial Inclusion Strategy. It carries an all-embracing objective to improve SMEs’ access to finance and competitiveness, as well as to strengthen the digital transformation of public services and business activities. To this end, the target pillars of action include the development of angel/seed and venture-capital financing and affordable credit solutions for SMEs; consulting and support services in the financial and telecommunications sectors; and the improvement of digital and financial infrastructure.

**Name of the funding scheme: Innovation and Digitalisation in SMEs in Bosnia and Herzegovina**

Funding body: German Federal Ministry for Economic Cooperation and Development (BMZ)
Theme: SME digitalisation
Geographical scope: Bosnia and Herzegovina
Description and other relevant info: The project targets SMEs in traditional sectors (e.g. trade, tourism, agriculture, wood and metal processing, among others) and aims to raise awareness on and support the digitalisation of the BiH’s SMEs. In cooperation with public actors at different administrative levels, who
benefit from consulting services on digital frameworks, the project helps to develop digitalisation strategies for SMEs. The main tools include long- and short-term experts and local subsidies. 

Name of the funding scheme: Tunisia Innovative Startups and SMEs Project

Funding body: The World Bank (International Bank for Reconstruction and Development) 
Geographical scope: Tunisia
Description and other relevant info: The funding scheme supports the facilitation and availability of finances for SMEs and start-ups. In addition, it promotes the development of entrepreneurship and innovation ecosystems in Tunisia and supports the digitalisation of SMEs.
## Annex 3 Data matrix

<table>
<thead>
<tr>
<th></th>
<th>Albania</th>
<th>Algeria</th>
<th>Bosnia and Herzegovina</th>
<th>Egypt</th>
<th>Israel</th>
<th>Jordan</th>
<th>Lebanon</th>
<th>Mauritania</th>
<th>Montenegro</th>
<th>Morocco</th>
<th>Palestine</th>
<th>Tunisia</th>
<th>Turkey</th>
<th>EU</th>
<th>MENA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digitalization Index</td>
<td>0.26</td>
<td>0</td>
<td>n/a</td>
<td>0.34</td>
<td>0.68</td>
<td>0.49</td>
<td>0.18</td>
<td>n/a</td>
<td>0.42</td>
<td>0.38</td>
<td>n/a</td>
<td>0.33</td>
<td>0.5</td>
<td>0.6</td>
<td>0.46</td>
</tr>
<tr>
<td><strong>Institutional and regulatory</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Online Service Index</td>
<td>70.77</td>
<td>13.08</td>
<td>36.93</td>
<td>48.46</td>
<td>80.77</td>
<td>43.85</td>
<td>41.54</td>
<td>n/a</td>
<td>63.08</td>
<td>n/a</td>
<td>78.47</td>
<td>87.69</td>
<td>82.66</td>
<td>62.36</td>
<td></td>
</tr>
<tr>
<td>Legal framework’s adaptability to digital business models</td>
<td>45.05</td>
<td>32.07</td>
<td>18.8</td>
<td>38.16</td>
<td>83.93</td>
<td>53.03</td>
<td>27.14</td>
<td>n/a</td>
<td>43.51</td>
<td>n/a</td>
<td>33</td>
<td>n/a</td>
<td>54.38</td>
<td>55.34</td>
<td></td>
</tr>
<tr>
<td>ICT regulatory environment</td>
<td>83.4</td>
<td>58.5</td>
<td>94.98</td>
<td>80.89</td>
<td>70.08</td>
<td>85.14</td>
<td>23.94</td>
<td>n/a</td>
<td>89.77</td>
<td>n/a</td>
<td>73.75</td>
<td>96.72</td>
<td>93.15</td>
<td>72.55</td>
<td></td>
</tr>
<tr>
<td>E-commerce legislation</td>
<td>100</td>
<td>50</td>
<td>100</td>
<td>50</td>
<td>100</td>
<td>50</td>
<td>0</td>
<td>n/a</td>
<td>100</td>
<td>n/a</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>71.88</td>
<td></td>
</tr>
<tr>
<td>Ease of doing business index</td>
<td>67.7</td>
<td>48.6</td>
<td>65.4</td>
<td>60.1</td>
<td>76.7</td>
<td>69</td>
<td>54.3</td>
<td>51.1</td>
<td>73.8</td>
<td>73.4</td>
<td>60</td>
<td>68.7</td>
<td>76.8</td>
<td>76.2</td>
<td>61.6</td>
</tr>
<tr>
<td><strong>Human capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enabling Digitalization - Knowledge pillar</td>
<td>n/a</td>
<td>38.3</td>
<td>n/a</td>
<td>55.9</td>
<td>91.8</td>
<td>46.2</td>
<td>36.1</td>
<td>0</td>
<td>21.8</td>
<td>33.9</td>
<td>n/a</td>
<td>26.7</td>
<td>47.9</td>
<td>65.5</td>
<td>51.7</td>
</tr>
<tr>
<td>Firms (both large and SMEs) with website</td>
<td>53.48</td>
<td>n/a</td>
<td>58.51</td>
<td>42.97</td>
<td>63.09</td>
<td>34.53</td>
<td>58.93</td>
<td>n/a</td>
<td>65.94</td>
<td>n/a</td>
<td>61.92</td>
<td>61.63</td>
<td>76.12</td>
<td>48.86</td>
<td></td>
</tr>
<tr>
<td>Share of Internet users in total population (%)</td>
<td>73.5</td>
<td>58</td>
<td>80</td>
<td>48.1</td>
<td>80.9</td>
<td>85.3</td>
<td>81.3</td>
<td>20.9</td>
<td>71.5</td>
<td>64.3</td>
<td>66.3</td>
<td>66.8</td>
<td>83.3</td>
<td>88.22</td>
<td>70.93</td>
</tr>
<tr>
<td>E-Participation Index</td>
<td>72.61</td>
<td>9.55</td>
<td>35.67</td>
<td>47.77</td>
<td>80.9</td>
<td>41.39</td>
<td>36.94</td>
<td>n/a</td>
<td>74.52</td>
<td>n/a</td>
<td>77.07</td>
<td>84.08</td>
<td>84.22</td>
<td>60.17</td>
<td></td>
</tr>
<tr>
<td>Socioeconomic gap in use of digital payments</td>
<td>22.8</td>
<td>60.38</td>
<td>62.05</td>
<td>37.66</td>
<td>81.31</td>
<td>54.62</td>
<td>30.08</td>
<td>n/a</td>
<td>30.05</td>
<td>n/a</td>
<td>35.33</td>
<td>68.25</td>
<td>87.03</td>
<td>58.17</td>
<td></td>
</tr>
</tbody>
</table>

51
<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>n/a</th>
<th>28.4</th>
<th>n/a</th>
<th>45.5</th>
<th>56.7</th>
<th>53.4</th>
<th>42.7</th>
<th>35.9</th>
<th>76</th>
<th>66.5</th>
<th>n/a</th>
<th>58.7</th>
<th>33</th>
<th>61.9</th>
<th>50.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling Digitalization -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connectivity pillar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enabling Digitalization -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure pillar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of local online</td>
<td>40.33</td>
<td>39.43</td>
<td>56.21</td>
<td>57.52</td>
<td>98.05</td>
<td>67.34</td>
<td>31.68</td>
<td>n/a</td>
<td>n/a</td>
<td>51.41</td>
<td>n/a</td>
<td>39.46</td>
<td>n/a</td>
<td>72.65</td>
<td>57.29</td>
</tr>
<tr>
<td>content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural gap in use of digital</td>
<td>24.03</td>
<td>89.99</td>
<td>75.01</td>
<td>53.11</td>
<td>65.55</td>
<td>100</td>
<td>71.37</td>
<td>n/a</td>
<td>n/a</td>
<td>0</td>
<td>n/a</td>
<td>27.44</td>
<td>59.78</td>
<td>72.9</td>
<td>51.63</td>
</tr>
<tr>
<td>payments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The Digitalization Index is provided on a scale from 0 (worst performance) to 1 (best performance). The rest of the scores are provided on a scale from 0 (worst performance) to 100 (best performance).
Sources: Camara and Tuesta, 2017; Euler Hermes, 2018; Portulans Institute and WITSA, 2019; and World Internet Usage Statistics, 2020.
Created in 1994 following the signing of the Maastricht Treaty, the European Committee of the Regions is the EU’s assembly of 350 regional and local representatives from all 28 Member States, representing over 507 million Europeans.