SME digitalisation for more resilient economies

Digitalisation of small and medium-sized enterprises (SMEs) is crucial in building inclusive and resilient economies and societies. Across the OECD, SMEs account for 99% of all businesses and between 50% and 60% of value added. Digitalisation offers a range of opportunities to improve SME performance, spur innovation, enhance productivity, as well as allow them to compete on a more even footing with larger firms – be it through lower operation and transaction costs; reduced information asymmetries; greater capacity for product differentiation, improved business intelligence; or increased customer and market outreach, to name just a few. However, SMEs face a number of barriers in this area and continue to lag in their adoption of digital technologies compared to large firms (OECD, 2021a).

The COVID-19 crisis has accelerated SME digitalisation. Digital tools were instrumental to weather the storm during the crisis. Many firms, for example, moved operations online to remain in business during lockdowns and overcome disruption in supply chains. Early evidence from business surveys collected in 2020 across the world suggest that up to 70% of SMEs intensified their use of digital technologies. At the same time, SMEs are a very heterogeneous bunch: a recent round of the Facebook/OECD/World Bank “Future of Business Survey” shows that the increase in the use of digital technologies was strongly size-dependent, with more than 50% of self-entrepreneurs (0 employees) and 45% of micro-businesses (1-9 employees) not increasing their use, against almost 65% of medium firms that did increase their use (Panel A, Figure 1). Nonetheless, around 50 to 60% of firms indicate that the pandemic has changed their use of digital technologies permanently (Panel B, Figure 1, (OECD, 2021b)).

Figure 1. The crisis accelerated the uptake of digital technologies and changes seem poised to last

Percentage of businesses reporting (Panel A) or foreseeing (Panel B) changes in the use of digital technologies, by number of employees

Note: Panel A: Share of respondents answering the question: “How has this businesses’ use of digital technologies or platforms changed since the start of the COVID-19 pandemic?”. Panel B: “Do you think the COVID-19 crisis is going to change the use of digital technologies permanently for this business?”. The sample includes weighted data for OECD countries, with up to 250 employees. Only answers from respondents who were either owners or managers were taken into account. Respondents who skipped the questions (not applicable) were dropped. Source: (OECD, 2021b)
Levels of SME digitalisation vary greatly across industries, as well as across technologies and services. Differences in adoption tend to reflect the diversity in value creation processes across sectors – even if across the wide spectrum of digital tools available, SMEs consistently lag behind larger firms (OECD, 2021b). But the gap differs across technologies and services. It is relatively small in the case of online interaction with governments (that looks to be almost size-independent), as well as for the use of Social Media and electronic invoicing. Unsurprisingly, the largest gaps are observed in the use of more advanced digital technologies, including e.g. software whose utility is strongly size-dependent (e.g. Enterprise Resource Planning). Across countries, sizable gaps between SMEs and large firms are also observed in the use of Business Data Analytics, although the decrease in the cost of storing and processing data as well as the easier, cheaper access to software and analytical tools has made this practice more accessible for SMEs (OECD, 2020). Cloud computing services in particular are especially relevant for SMEs to use Big Data and harness the potential of data analytics, since, by providing supercomputing resources in a flexible manner, they allow companies to overcome barriers related to the high costs of building the necessary ICT infrastructure (Bianchini and Michalkova, 2019). More broadly, SMEs also face greater challenges in reaping the benefits of increasingly data-driven economies, often struggling to turn data into economic value and capitalise on internal and external data to grow their business (OECD, 2021c).

For example, many SMEs rely on online platforms to digitalise business functions and improve productivity. SMEs can lower operation costs, access business intelligence services, generate economies of scale (capitalising on network effects) and economies of scope as online platforms allow them to reduce information asymmetry, increase client/supplier base, unlock greater market outreach, outsource logistics, as well as many other factors (OECD, 2021a). Recent studies show that online platforms increase multi-factor productivity in hotels, restaurant, taxis and retail trade sectors, where the presence of SMEs is overwhelming (Bailin Rivares, Gal, Millot, & Sorbe, 2019). In addition, the impact on firms’ productivity appears to be larger for smaller-size businesses: in OECD countries, a one-standard deviation increase in traffic on platforms is associated with a boost of 10% in labour productivity growth for micro firms (less than 10 employees), while the boost is 7% for small (10-49 employees) and 6% for medium (50-100 employees) firms (Costa, Nicoletti, Pisu, & Von Rueden, 2021). As an example of the increasing role of platforms, e-commerce uptake by SMEs has continued to grow in the past decade (Figure 2).
Figure 2. The share of firms using e-commerce has increased in the past decade, across all sizes

Percentage as a share of firms, by size. Average of 32 OECD countries

Note: OECD member countries included: Australia, Austria, Belgium, Canada, Colombia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Turkey, United Kingdom. Data for Turkey are from 2010 instead of 2012. Data for Australia, Canada and Korea are from 2019 instead of 2020, and using a different methodology. Data for UK are from 2019 instead of 2020. Data for Colombia are from 2018 instead of 2020. Data for Japan are from 2018 instead of 2020, and using a different methodology. Data for small business in Greece and for medium businesses in Portugal are from 2019 instead of 2020.

Source: (OECD, 2021d); OECD calculations based on OECD ICT Access and Usage by business database (Accessed September 2021)

Competitive digital markets are key to ensure the digital transformation of SMEs. Considering the importance of these platforms for the digital transformation of SME, a level playing field to access, develop and uptake digital services is necessary to ensure optimal market conditions. Such a business environment spurs innovation, new business models, business dynamism and productivity (OECD, 2020).

Governments have invested heavily in SME digitalisation in “rescue” (short term) and “recovery” (medium-long term) packages. A recent mapping of more than 5,500 rescue and recovery packages across 89 countries showed that governments have invested or pledged to invest a relatively large share of their budget dedicated to digitalisation specifically on policies for SMEs (~14% in rescue and ~9% in recovery packages). This shows that after the immediate response, governments are now looking to tackle more long-term barriers to SME digitalisation, including their lack of digital skills and digital security practices (OECD, 2021d).

Looking ahead, the pandemic has also revealed vulnerabilities in supply chains and prompted multinationals and governments to rethink their optimisation and specialisation strategies. A reconfiguration is under way, whose scope and depth are still uncertain. Trends related to the rise of circular economy models, for instance, but also new technologies such as
3D printing could transform GVCs, as we know them today – either because they provide a cost rationale for offshoring, a need to shorten value chains to increase resilience, or simply due to growing expectations for a (digital) traceability of products. This implies the appearance of new actors, suppliers and clients, some redundancy in suppliers and buyers, a diversification of sourcing and production locations, as well as divestments from some locations and expansions in others (OECD, 2021b).
References


Bianchini, M., & Michalkova, V. (2019). Data analytics in SMEs: Trends and Policies. doi:https://doi.org/10.1787/1de6c6a7-en


