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SME DIGITALIZATION: 2023 SNAPSHOT

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EXECUTIVE SUMMARY¹

In recent years digitalization has continued to reshape global contexts, impacting all aspects of life and business. The pandemic accelerated digital adoption, making it a critical factor for business resilience.

In Georgia's private sector, digital adoption saw slight improvement as measured at the beginning of 2023, with the most significant changes observed in the usage of cloud services among large firms. However, SMEs' digital performance only showed marginal improvement, maintaining a substantial gap between SMEs and large enterprises.

When comparing the digital maturity of Georgian SMEs to their EU counterparts, there were slight advancements in basic digital intensity, including the utilization of sophisticated website functionalities and access to fast broadband connections. Integration of digital technologies showed limited progress, with notable improvement seen in the adoption of Enterprise Resource Planning (ERP) systems. In terms of e-commerce, only 3% of Georgian firms, including both large businesses and SMEs, are selling their products online, indicating room for growth in this area.

Most recent efforts to support the private sector and bridge the gap in its digitalization include enhancing digital skills through initiatives and awareness programs. The government is also working on digital infrastructure development and tailored support for SMEs. While Georgia has made progress, major collaborative efforts are still required to empower SMEs for a more digitally inclusive future.

INTERNATIONAL CONTEXT

Digitalization can be defined as the process of change that digital technology causes or influences in all aspects of life.² For businesses, it implies digital improvements which alter business models, alongside the way in which products or services are manufactured and delivered. Therefore, it should hardly come as a surprise that digitalization has become increasingly important in the modern world and is firmly entwined in the fundamental aspects of competition.

According to Ernst and Young (2018),³ the digitalization of businesses is closely linked to their performance. More digitally mature companies exhibit higher productivity and growth rates

¹ This policy brief is an update of the similar document published in May 2023, incorporating the most recent data for Georgian enterprises and highlighting the latest developments in SME digitalization.

² Stolterman, E. & Fors, A. (2004). Information Technology and the Good Life. International Federation for Information Processing Digital Library; Information Systems Research.

³ Baldwin, A. & Bax, H.J. (2018). How to unlock Europe's digital growth potential.

combined with lower rates of staff turnover. Moreover, an OECD (2015)⁴ study revealed that acceleration of the productivity growth in the range of 5 to 10 percent is expected for the companies that invest in digital solutions, such as data-driven analytics.

Remarkably, the implementation of digital solutions has proven to be a significant coping strategy for businesses in times of economic downturn, as exemplified by the recent pandemic. Indeed, the World Bank's Business Pulse Survey (BPS) identified that controlling for size, Malaysian enterprises investing in new digital solutions during the crisis experienced a 12-percentage point lower decline in sales compared to those without such investment.

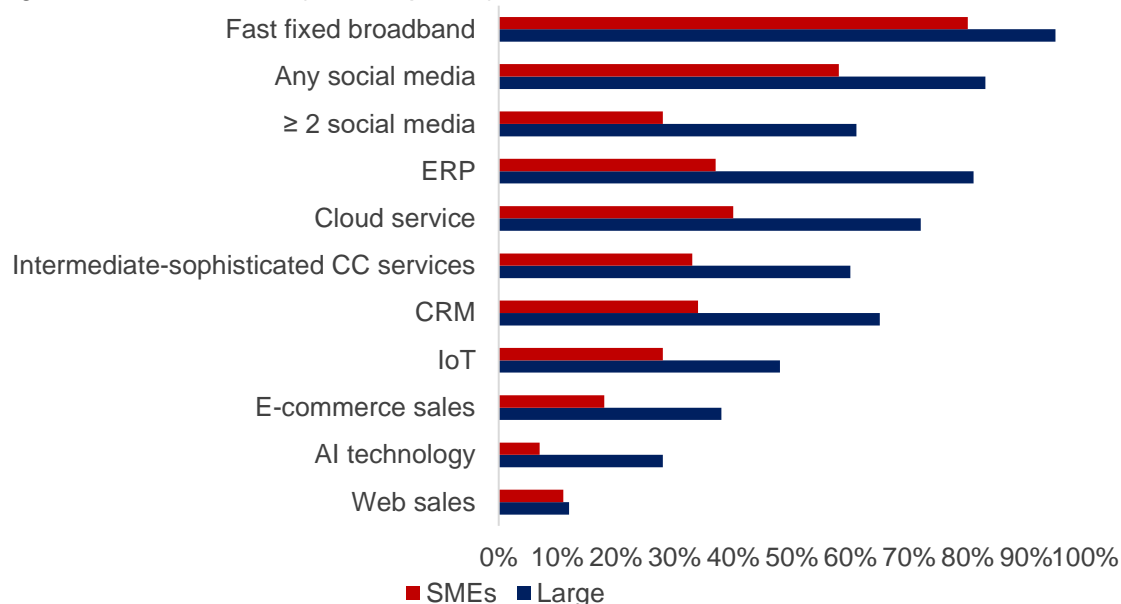
The recent pandemic highlighted the importance of digitalization for enhancing business resilience while also exposing a notable gap in digital adoption between SMEs and large enterprises. As Figure 1 identifies, there are sizable differences between SMEs and large enterprises in the EU across all areas of digitalization – from basic digital solutions (i.e., enterprise resource planning) to the use of advanced technologies (e.g., AI).

Remarkably, because of the low base effect, the implementation of digital solutions into the operations of SMEs is associated with higher productivity gains. According to one OECD (2020)⁵ study of ten member states, the increased use of online platforms translated into a significant rise in multi-factor productivity in sectors where SMEs are predominantly concentrated (e.g., hospitality and retail trade).

⁴ OECD. (2015). Data-driven innovation: big data for growth and well-being.

⁵ Costa et al. (2020) as cited in [World Bank \(2022\). Digitalizing SMEs to Boost Competitiveness.](#)

Figure 1. Digitalization indicators (% enterprises), 2021⁶



Source: Eurostat, European Union survey on ICT usage and e-commerce in enterprises.

Note: SMEs are defined as those employing 10-249 persons.

Considering these aspects, it is only natural that the digitalization of SMEs is on the European Commission's agenda. One major strategic document, the Path to the Digital Decade, sets ambitious targets, under which at least 90% of SMEs in the EU should attain the basic level of digital intensity⁷ by 2030. This target seems especially ambitious considering that only 69% of SMEs meet this criterion as of 2022⁸.

THE CASE OF GEORGIA

Digitalization plays an increasingly important role in the Georgian economy. Its significance was especially boosted during the pandemic when many businesses, faced with social-distancing measures, started incorporating digital solutions into their day-to-day operations. This is predominantly related to the front-end business functions such as digital sales, marketing, and so

⁶ AI – Artificial Intelligence; IoT – Internet of Things; ERP – Enterprise Resource Planning; CRM – Customer Relation Management used for accumulating and storing customer information, enabling various business functions. Moreover, fast fixed broadband is defined as a maximum contracted download speed of at least 30 Mb/s, and indicator web sales is defined as the share of enterprises where web sales are more than 1% of the total turnover and B2C web sales more than 10% of the web sales.

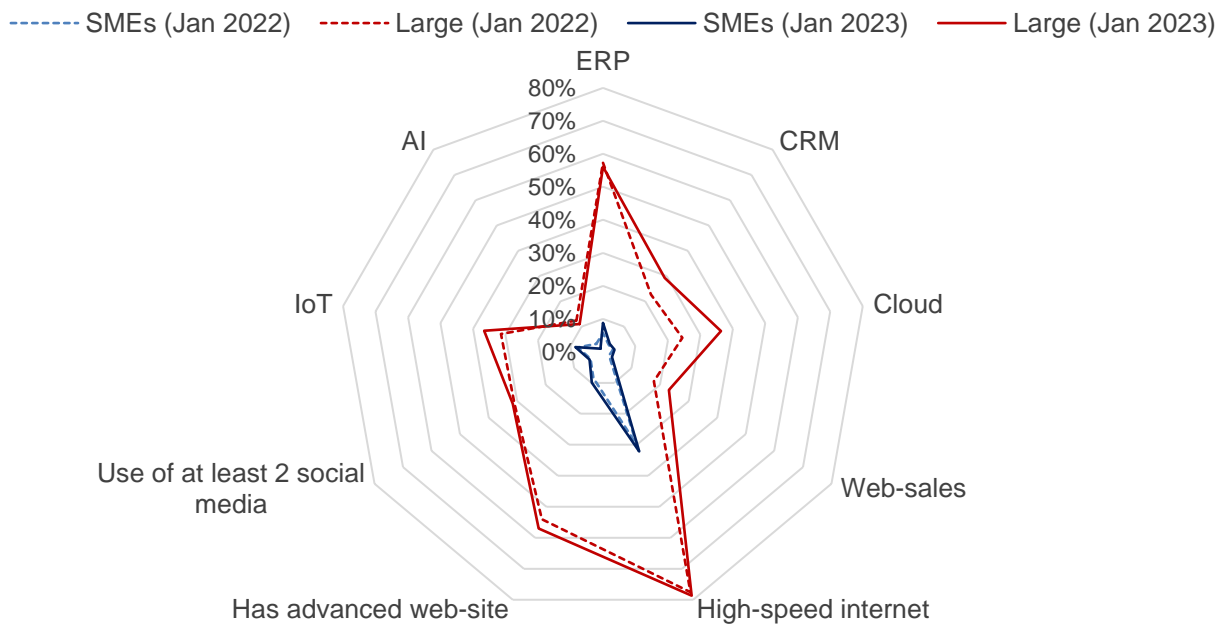
⁷ The digital intensity score is based on how many of the 12 selected technologies are used by enterprises. A basic level requires the usage of at least four of such technologies.

⁸ European Commission (2023). Digital Economy and Society Index 2023.

on. Nevertheless, digital solutions are also progressively incorporated into the back-end processes to make business operations smoother and more efficient.

Unfortunately, Georgian small and medium enterprises have not been able to capitalize on the benefits offered by modern technologies. The digital divide between large and smaller enterprises, as depicted in Figure 2, is particularly concerning, given that SMEs make up 99.7% of the businesses operating in Georgia and generate 60.1% of private sector employment and 51.4% of the economic output, as of 2022. In a dynamic context, it's noteworthy that indicators as of January 2023 show some improvement compared to January 2022 for both small and medium-sized enterprises and large businesses. However, the divide persists across all dimensions.

Figure 2. Digital uptake by SMEs and large enterprises



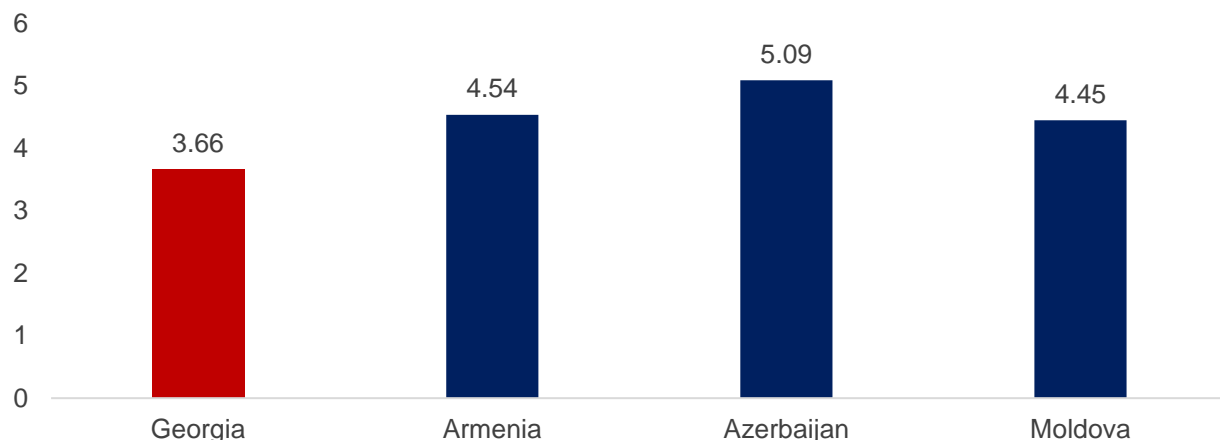
Source: Geostat.

Note: SMEs are defined as those employing 1-249 persons.

DIGITAL SKILLS

One important precondition for SMEs to adopt digital solutions is the prevalence of digital skills in the economy. A closer look at the extent of digital skills development among the Georgian population reveals that the general picture is not particularly favourable, as per the ITU⁹, in 2021, a mere 36% of Georgians possessed basic digital skills, while 12% held standard skills, with only 1% of the population demonstrating advanced ICT proficiency. In contrast, according to DESI 2022, 54% of the EU's population had acquired at least basic digital skills by 2021. Interestingly, Georgia not only lags behind the EU but also its neighboring countries. As Figure 3 illustrates, digital skills among the Georgian population were evaluated by business leaders at 3.66 points on a scale from 1 (little/no skills) to 7 (excellent skills) in 2019. In this respect, Georgia lags behind several of its peers, such as Armenia and Moldova. Despite the unfavorable general picture, some positive tendencies are also observed. More precisely, the 2020 Survey on Business Demand on Skills¹⁰ revealed that the responding enterprises evaluated ICT skills with an average score of 3.9 points (on a scale from 1 – significantly incompetent to 5 – competent), whereas in 2017, the equivalent figure stood at 2.9 points (the lowest score among all other skills).

Figure 3. Digital skills among the population as assessed by business leaders, on a scale of 1 (little/no skills) to 7 (excellent skills), 2019



Source: World Bank.

To improve the current situation and further develop ICT skills among the population, several initiatives have been undertaken both by the public and private sectors. For instance, GITA's

⁹ Digital Development Dashboard, ITU as cited in [Georgia Digital Ecosystem Country Assessment \(DECA\)](#), PMCG (2023).

¹⁰ [Survey of Business Demand on Skills](#), Ministry of Economy and Sustainable Development (2020)

Digital Economy Skills Development Program has successfully trained and certified over 3,000 Georgian citizens (notably, 31% among those were women) in the most demanded digital skills by March 2023. In ongoing efforts, GITA aims to increase the number of individuals undergone retraining to 15,000 over the next five years. Furthermore, the ICT Cluster, in collaboration with its member companies, is formulating a model designed to assist educational institutions in creating practical strategies tailored to the current needs of the private sector.¹¹ It is also notable that mandatory ICT modules are already an integral part of the curricula of VET programs. Finally, the recent inflow of skilled ICT workers from Russia, Ukraine, and Belarus may have a positive external effect on ICT skills development in the country.

To summarize, despite positive developments and efforts aimed at resolving this problem, at this point the low prevalence of ICT skills among the Georgian population remains a significant issue. Therefore, major collaborative efforts are still required in this direction.

BASIC DIGITAL INTENSITY

The assessment of SMEs' digital maturity can be divided into several core aspects: basic digital intensity, integration of digital technologies, and e-commerce. This approach mirrors the methodology employed in the European Commission's Digital Economy and Society Index. Based on Georgia's declared and unanimous objectives towards EU integration, EU figures have been taken as a benchmark in the subsequent analysis.¹² Notably, for the majority of indicators, the most recent available data for the EU pertains to the year 2021.¹³ The Georgian data labeled as 2021 reflects the situation as of January 1, 2022, while figures marked as 2022 correspond to January 1, 2023.

Initially, we considered basic digital intensity, which is evaluated with two indicators (depending on the availability of data for Georgia): the share of SMEs with a website using some sophisticated functionalities¹⁴ and the share of SMEs with a fast fixed broadband connection.

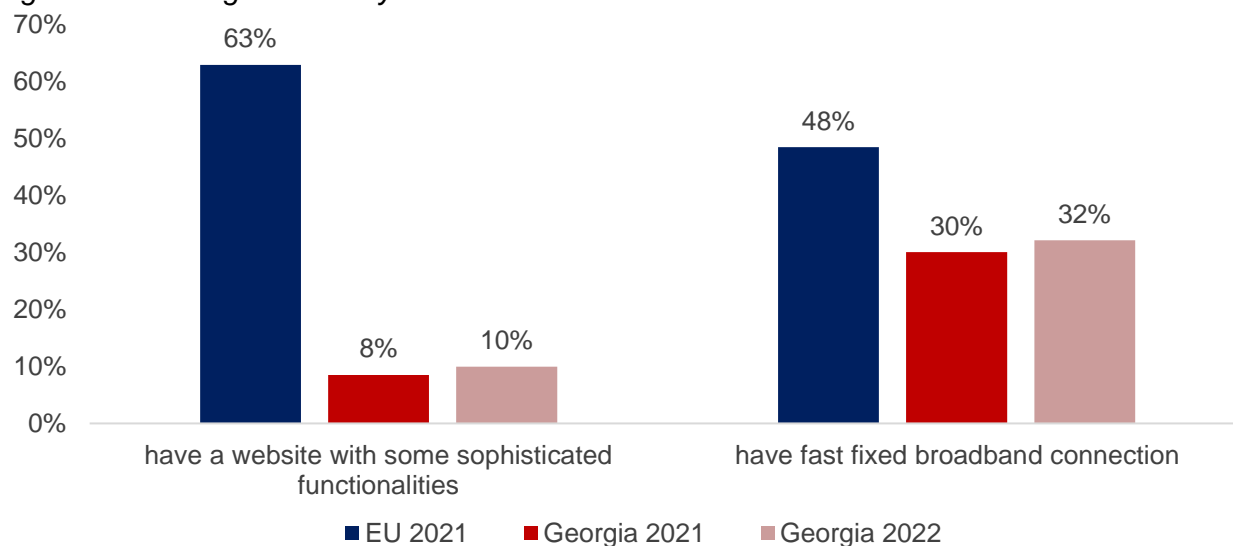
¹¹ PMC Research & ISET-PI (2023). Sector and Value Chain Analytics. The Second Analytical Report.

¹² It's important to note that the analysis that follows should be viewed in light of the fact that, for EU data, SMEs are defined as enterprises with 10-249 employees, while in Georgian data, SMEs are classified as enterprises with 1-249 employees. This difference in classification could introduce some downward bias for the Georgian private sector as compared to the EU's.

¹³ <https://digital-decade-desi.digital-strategy.ec.europa.eu/datasets/desi/indicators#desi2023-3>

¹⁴ Such sophisticated functionalities include a description of goods or services; price lists; the possibility for visitors to customize or design online goods or services; tracking or status of orders; and personalized website content for recurrent visitors.

Figure 4. Basic digital intensity



Source: Eurostat; Geostat.

As Figure 4 demonstrates, Georgian SMEs often lack basic digital intensity. For example, in 2021, a mere 8% of SMEs in Georgia possessed websites with advanced functionalities, while the EU reported a substantially higher rate of 63% during the same period. Nonetheless, the disparity is somewhat narrower when it comes to accessing fast fixed broadband connections, with 30% of Georgian SMEs compared to 48% in the EU, in 2021. The data for 2022 in Georgia reveals a positive trend in both of mentioned metrics, with each showing a 2 percentage point increase.

Critically, the governmental effort required to develop digital infrastructure and eliminate the digital divide between urban and rural areas remains sizable. To this end, the National Broadband Development Strategy of Georgia and its Action Plan for 2020-2025 aim to achieve: 1) 4G coverage across 99% of Georgian territory; 2) 1 Gbps connectivity for all institutional entities; and 3) access to high-speed broadband for all households.¹⁵

Therefore, while the availability of adequate infrastructure is still considered a hindrance to Georgian SME digitalization, it can be classified as a relatively minor problem. Affordability of this infrastructure however is another potential issue. According to PMCG¹⁶, on a national scale, the average cost of internet access is reasonably priced, however, focus group interviews revealed that SMEs find corporate tariff packages to be expensive and not tailored to the size of the businesses.

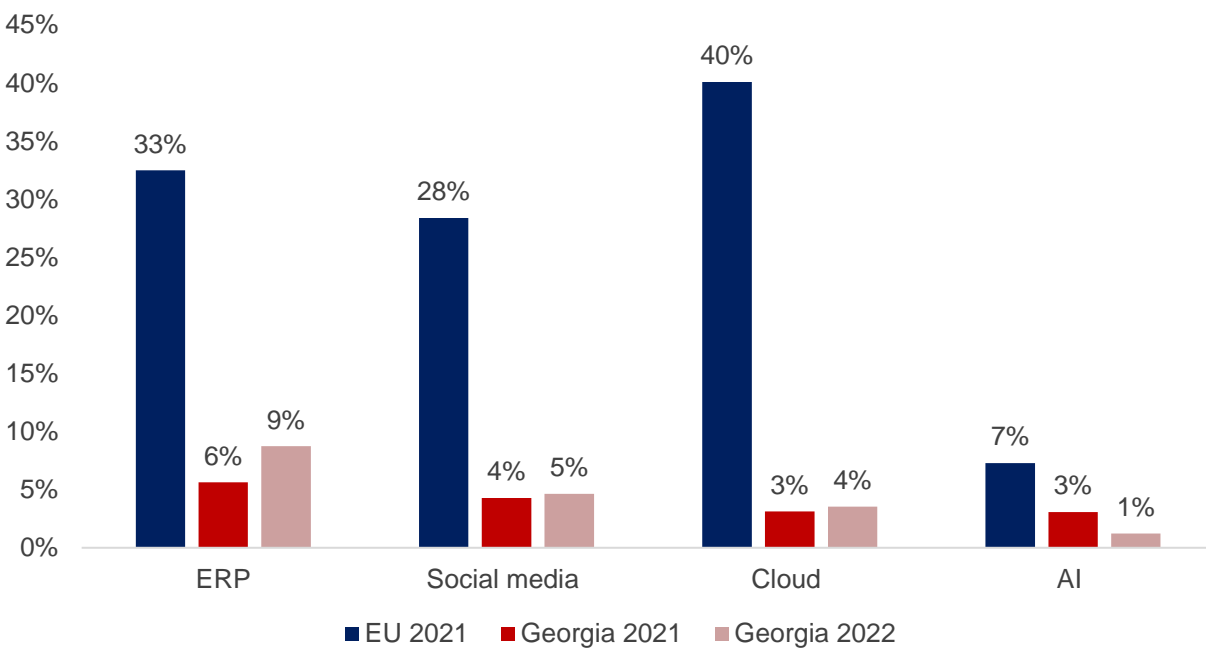
¹⁵ The National Broadband Development Strategy of Georgia and its Action Plan for 2020-2025.

¹⁶ [Georgia Digital Ecosystem Country Assessment \(DECA\)](#), PMCG (2023).

INTEGRATION OF DIGITAL TECHNOLOGIES

Another aspect of the evaluation concerns the integration of front-end (e.g., social media) and back-end (e.g., ERP) technologies in day-to-day business operations. As such, we have examined the adoption rate of four technologies: ERP, social media, Cloud, and AI.

Figure 5. Integration of digital technologies



Source: Eurostat; Geostat.

Figure 5 illustrates that Georgia significantly lags behind EU averages in all key aspects of digital integration. Notably, merely 3% of Georgian SMEs utilized cloud computing systems in 2021, a stark contrast to the EU's 40%. A dynamic perspective on these metrics for 2022 compared to 2021 reveals an upward trajectory, with all indicators showing improvement, except for the adoption of AI. More precisely, cloud computing adoption as well as the share of businesses using two or more social media channels displayed a one-percentage point increase in 2022. Meanwhile, the increase in ERP adoption was relatively more pronounced and amounted to 3 percentage points.

The fact that Georgian SMEs are so far behind the benchmark might be explained by a lack of awareness about the potential benefits these technologies offer. Moreover, financial barriers, limited in-house skills, and imperfect infrastructure might each pose additional impediments to integrating advanced technological solutions. The government thus has some gaps to fill, both

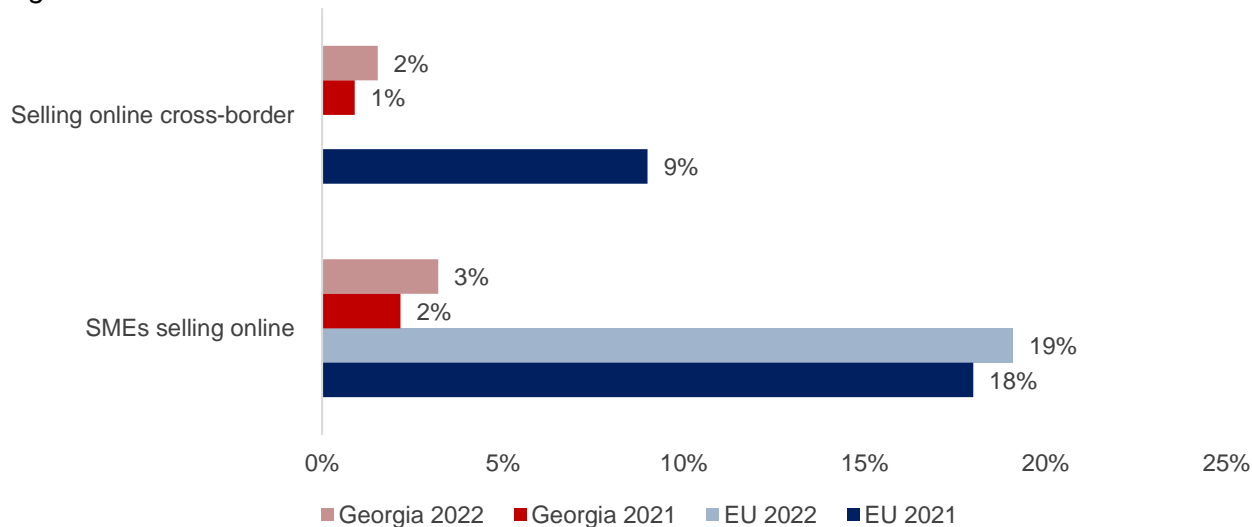
directly and indirectly. The establishment of Growth Hubs (regional consulting centers) that will serve as one part of this endeavor has been facilitated by Enterprise Georgia. To accomplish the objectives of this program, Enterprise Georgia has appointed Digital Transformation Experts who will craft customized and comprehensive digital transformation plans for SMEs. These plans encompass recommendations for necessary digital skills training, as well as advice on the digital tools and solutions that can streamline internal processes.

E-COMMERCE

Finally, we have attempted to assess Georgia’s standing in terms of utilizing the e-commerce opportunities. Online sales in Georgia increased more than threefold in 2020 and was projected to increase by a further 52% CAGR during 2021-2025¹⁷.

However, at this stage, Georgia’s performance in e-commerce still appears particularly weak. As Figure 6 highlights, the indicators for Georgia markedly trail those of the EU. Specifically, a mere 2% of Georgian SMEs engaged in online sales, in stark contrast to the 18% of EU SMEs in 2021. While the figure for Georgia showed a slight improvement in 2022, the major gap still remains. In terms of cross-border sales, Georgia again falls behind the EU by a substantial margin.

Figure 6. E-commerce



Source: Eurostat; Geostat.

The underperformance of Georgian e-commerce in comparison to EU benchmarks might be attributed to a range of factors. These include institutional, policy, and financial obstacles that

¹⁷ Galt and Taggart (2021). E-commerce in Georgia.

Georgian SMEs encounter when venturing into online sales. Additionally, it could be influenced by Georgian consumers' hesitation to participate in online shopping, especially on local e-commerce platforms. Some key challenges include personal data protection risks, the lack of secure payment facilities, the lack of local fin-tech service providers, and high costs for retailers developing e-commerce platforms.¹⁸

Significant efforts are currently being directed to address these challenges. For instance, there are several ongoing targeted programs administered by Enterprise Georgia and GITA to increase SME readiness to use e-commerce as a sales channel. Moreover, the ongoing e-commerce reform, supported by international donor organizations, aims to harmonize the Georgian institutional and legislative framework with the EU regulatory framework. These projected and undertaken developments variously encompass consumer rights, personal data protection, payment services, etc. In line with these efforts, the Law on E-commerce, which was adopted on June 13, 2023, is set to play a pivotal role in ensuring the proper functioning of the domestic e-commerce market, regulating the rights and obligations of intermediary service providers, and protecting the rights of consumers within online trade.

ADDRESSING CHALLENGES AND THE WAY FORWARD

While the COVID-19 crisis incentivized firms to accelerate their digital transformation, Georgia has to facilitate this transition through complementary policy interventions. Building a truly digital economy and society will require a comprehensive cross-governmental approach that ensures access to high-quality and affordable broadband connections; creates an enabling regulatory environment for the development of digital practices, while also ensuring users' security and trust; and develops high levels of digital literacy. These efforts moreover need to be complemented by tools supporting SME digitalization.¹⁹

Despite the growing attention directed toward SME digitalization, Georgian SME performance in terms of digital adoption remains quite limited. The potential causes therefore need to be addressed by proper policy interventions.

The lack of ICT skills – several initiatives are currently underway that will hopefully succeed in addressing the problem. The Log-In Georgia Project has a component on regional training and capacity-building programs to foster the uptake of e-services, from e-commerce to e-learning and e-government. It has already been initiated in four municipalities, delivering a total of 180 training sessions on digital literacy and promoting safe internet usage. The Unified Strategy of Education and Science 2022-2032 and the VET Strategy 2021-2025 each support further the development

¹⁸ PMC Research & ISET-PI (2021). Sector and Value Chain Analytics. The First Analytical Report.

¹⁹ OECD (2022). Fostering Business Development and Digitalization in Georgia.

of digital competencies among students and within remote learning. Collaborative efforts are still needed to develop educational programs tailored toward the private sector's ICT needs.

Restricted access to finance is often considered an impediment to Georgian businesses' ability to achieve basic digital intensity, integrate digital solutions, and engage in e-commerce. Moreover, the Sector and Value Chain Analytics research report²⁰ concludes that there is a lack of programs to finance the digitalization of Georgian enterprises. EU4Digital (2020)²¹ proposes an empowered environment for alternative finance, such as crowdfunding and business angels, as a key recommendation for supporting the incorporation of digital innovations in the business model of Georgian SMEs. Alternative and digital finance solutions could be further developed through the enhancement of the legal environment (e.g., regulatory sandboxes, the legal definition of a business angel, harmonization with advanced EU Venture Capital (VC) regulations, etc.).

A lack of private sector awareness – a lack of knowledge regarding available digital technologies and their benefits is a key factor widening the gap between SMEs and large firms.²² Small businesses often see digitalization as a cost rather than an opportunity. Tailored government programs, such as Enterprise Georgia's Growth Hubs mentioned above, consequently may play critical role in this regard. The Long-term National Strategy for the Development of Digital Economy (currently developed by the MoESD) could incorporate other relevant initiatives. Moreover, academia and civil society groups could engage further in raising awareness of Georgian SMEs about the benefits offered by digitalization. One such initiative is currently being undertaken by the Small and Medium Enterprise Development Association (SMEDA) and ISET Policy Institute, which are collaborating to develop the SME Digitalization Index.

Finally, as international best practice shows, programs aimed at incentivizing and supporting the digitalization of SMEs should be focused on four main areas (as defined by Interreg Europe. (2022). *Fostering the digital transformation of SMEs*): 1) Awareness raising; 2) Providing digital maturity assessments for SMEs; 3) Providing one-stop shops; and 4) Employing integrated approaches.

²⁰ PMC Research & ISET-PI (2021). Sector and Value Chain Analytics. The Second Analytical Report.

²¹ EU4Digital (2020). Digital innovation SMEs' access to finance: an action plan for policy recommendations: Georgia. EU4Digital: supporting. digital economy and society in the Eastern Partnership.

²² PMC Research & ISET-PI (2021). Sector and Value Chain Analytics. The Second Analytical Report.

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