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A SNAPSHOT OF SME DIGITALIZATION IN GEORGIA

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INTERNATIONAL CONTEXT

Digitalization can be defined as the process of change that digital technology causes or influences in all aspects of life. 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, that is firmly rooted in the principles of competition.

According to Ernst and Young (2018),² the digitalization of businesses is closely linked with their performance. More precisely, a survey of 200 human resources professionals across Europe found that "digitally mature" companies exhibit higher productivity and growth rates combined with a lower staff turnover. Moreover, an OECD (2015)⁴ study revealed that productivity grows 5% to 10% faster in companies that invest in digital solutions, such as data-driven analytics.

Interestingly, it transpires that the introduction of digital solutions can be an important coping mechanism for firms during economic downturns, such as 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 therefore demonstrated the importance of digitalization as a precondition for increased business resilience. However, during times of crises the most vulnerable enterprises often have limited access to this coping mechanism. Large gaps consequently remain between the digital uptake of SMEs compared to large enterprises. As Figure 1 identifies, there are sizable differences among EU companies across all areas of digitalization – from basic digital solutions (i.e., enterprise resource planning) to the use of advanced technologies (e.g., Al). Remarkably, because of the low base effect, the introduction of digital solutions into 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).

¹ Stolterman, E. & Fors, A. (2004). Information Technology and the Good Life. International Federation for Information Processing Digital Library; Information Systems Research; 143.

² Baldwin, A. & Bax, H.J. (2018). How to Unlock Europe's digital growth potential.

³ Companies with board-level technology "champion" and people strategy, as a component of the digital transformation strategy.

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

⁵ Costa et al. (2020).

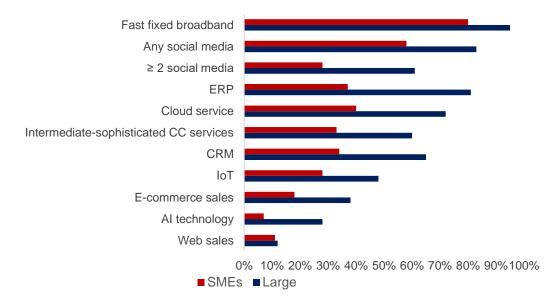


Figure 1. Digitalization indicators (% enterprises)⁶

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 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 a basic level of digital intensity by 2030.⁷

THE CASE OF GEORGIA

Digitalization plays an increasingly important role in the Georgian economy. Its significance was boosted during the pandemic when many businesses, faced with social-distancing measures, started incorporating digital solutions into their day-to-day operations. This predominantly related to "front end" business functions such as digital sales, marketing, and so on. Nevertheless, digital solutions are also progressively being incorporated into "back end" processes to make business operations smoother and more efficient.

⁶ AI – Artificial Intelligence; IoT – Internet of Things; ERP – Enterprise Resource Planning; CRM – Customer Relation Management. Moreover, fast fixed broadband is defined as maximum contracted download speed of at least 30 Mb/s and indicator webs sales is defined as 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 12 selected technologies are used by enterprises. A basic level requires the usage of at least four of such technologies.

Unfortunately, one vulnerable part of the Georgian private sector, comprised of small and medium enterprises, has limited access to the benefits offered by modern technologies. The digital divide, illustrated in Figure 2, is especially troubling as SMEs constituted 99.7% of all enterprises, 59.3% of total employment, and generated 58% of the economic output in 2020.8

Cloud

Web-sales

ERP 80%
AI 70%
AI 60%
50%
40%

Figure 2. Digital uptake by SMEs and large enterprises, January 2022

Has advanced web-site

Internet speed higher than
30Mb/s

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

IoT

Use of at least 2 social

media

Source: Geostat

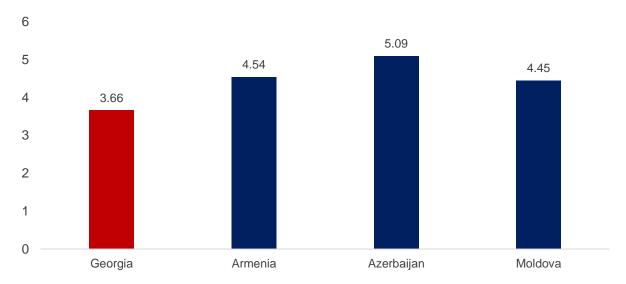
DIGITAL SKILLS

One important precondition for SMEs in the adoption of 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 favorable. As Figure 3 illustrates, digital skills among 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, progressive tendencies can however still be observed. More precisely, the 2020 Survey on

⁸ Small and Medium Entrepreneurship Development Strategy of Georgia 2021-2025.

Business Demand on Skills 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); which was the highest evaluation among all notable workplace skills, such as negotiation, leadership, etc. 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 in both the public and private sectors. For instance, GITA's Digital Economy Skills Development Program aimed to train and certify at least 3,000 Georgian citizens in the most demanded digital skills by March 2023. Moreover, the ICT Cluster, together with its member companies, is developing a model that will support educational organizations to devise practical approaches tailored to the current needs in the private sector. It is also notable that mandatory ICT modules are already an integral part in the curricula of VET programs. Finally, the recent inflow of skilled ICT workers from Russia, Ukraine, and Belarus is anticipated to 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, thus hindering the digitalization of SMEs. Therefore, additional collaborative efforts are still required in this direction.

⁹ PMC Research & ISET-PI. (2023). Sector and Value Chain Analytics. The Second Analytical Report.

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. Based on Georgia's declared and unanimous objectives towards EU integration, EU figures have been taken as a benchmark in the subsequent analysis.¹⁰

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 functionalities¹¹ and the share with a fast fixed broadband connection.

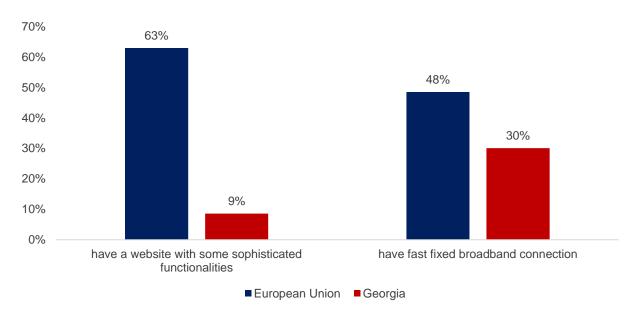


Figure 4. Basic digital intensity, January 2022

Source: Eurostat; Geostat

As Figure 4 demonstrates, Georgian SMEs often lack basic digital intensity. For instance, only 9% of SMEs in Georgia have a website with sophisticated functionalities, while the comparable

¹⁰ 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 Georgian private sector as compared to the EU's.

¹¹ 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 in the EU stands at 63%. While the difference is less significant, relatively, in maintaining fixed broadband connections (30% of Georgian SMEs as opposed to 48% of EU SMEs).

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.¹²

Therefore, while the availability of adequate infrastructure is still considered a hindrance for Georgian SME digitalization, it can be classified as a relatively minor problem. Affordability of this infrastructure however is another potential issue.

INTEGRATION OF DIGITAL TECHNOLOGIES

Another aspect of the evaluation concerns the integration of "front end" (e.g., social media) as well as "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.

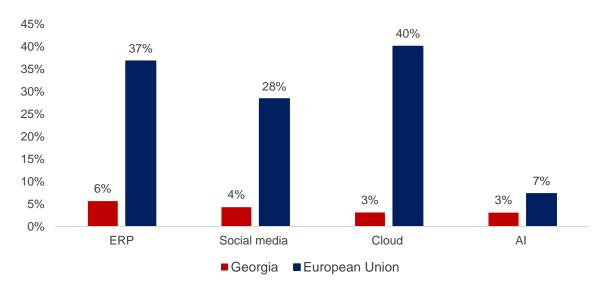


Figure 5. Integration of digital technologies, January 2022

Source: Eurostat; Geostat

Figure 5 illustrates that Georgia lags significantly behind EU averages across all key aspects of digital integration. For instance, only 4% of Georgian SMEs, as opposed to 28% in the EU, use

¹² The National Broadband Development Strategy of Georgia and its Action Plan for 2020-2025.

two or more of the following forms of social media: social networks, enterprise blogs or microblogs, multimedia content-sharing websites, and wiki-based knowledge-sharing tools.

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 in this direction.

E-COMMERCE

Finally, we have attempted to assess Georgia's standing in terms of utilizing e-commerce; which is still regarded as relatively novel economic activity that gained particular importance during the pandemic. As e-commerce sales in Georgia increased more than threefold YoY in 2020 and are projected to increase by a further 52% CAGR from 2021-2025¹³, it is naturally considered a promising direction for Georgia's economic development.

However, at this stage, Georgia's performance in e-commerce still appears particularly weak. As Figure 6 highlights, the indicators for Georgia are significantly behind the EU. More precisely, only 2% of Georgian SMEs sell online (as opposed to 19% of EU SMEs) and only 1% of Georgian enterprises (as opposed to 9% in the EU) sell online across borders.

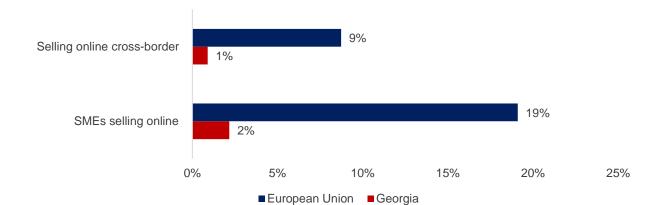


Figure 6. E-commerce, January 2022

Source: Eurostat; Geostat

Such poor e-commerce performance compared to the EU benchmarks could have been conditioned by the different institutional, policy, and financial challenges Georgian SMEs face

¹³ Galt and Taggart. (2021). E-commerce in Georgia.

when engaging in online sales, as well as by Georgian customers considering online shopping. These challenges include personal data protection risks, the lack of secure payment facilities, the lack of local fin-tech service providers, high costs for retailers developing e-commerce platforms, among other issues.¹⁴

Significant efforts are currently being directed to address these challenges. For instance, there are a number of 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 EU regulatory framework. These projected and undertaken developments variously encompass consumer rights, personal data protection, payment services, etc.

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 which support SME digitalization.¹⁵

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. The Unified Strategy of Education and Science 2022-2032 and the VET Strategy 2021-2025 are each expected to support further the development of digital competencies among students and within remote learning. Collaborative efforts are though still needed to develop educational programs tailored toward the private sector's ICT needs.

Restricted access to finance – often considered an impediment for Georgian businesses ability to achieve basic digital intensity, integrate digital solutions, and engage in e-commerce. Moreover,

¹⁴ PMC Research, ISET-PI, & USAID. (2021). Sector and Value Chain Analytics. The First Analytical Report.

¹⁵ OECD. (2022). Fostering Business Development and Digitalization in Georgia.

the Sector and Value Chain Analytics research report ¹⁶ concludes that there are a lack of programs to finance the digitalization of Georgian enterprises. EU4Digital (2020)¹⁷ 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 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. Small businesses often see digitalization as a cost factor rather than an opportunity. Tailored government programs consequently have room to fill in this regard; for instance, in the development of expert webinars, workshops, dedicated events featuring successful digital transformations in different sectors or focusing on one specific technology. The Long-term National Strategy for the Development of Digital Economy (currently developed by the MoESD) could incorporate such 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.

¹⁶ PMC Research & ISET-PI. (2021). Sector and Value Chain Analytics. The Second Analytical Report.

¹⁷ EU4Digital. (2020). Digital innovation SMEs' access to finance: action plan for policy recommendations: Georgia. EU4Digital: supporting. digital economy and society in the Eastern Partnership.

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

ISET

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