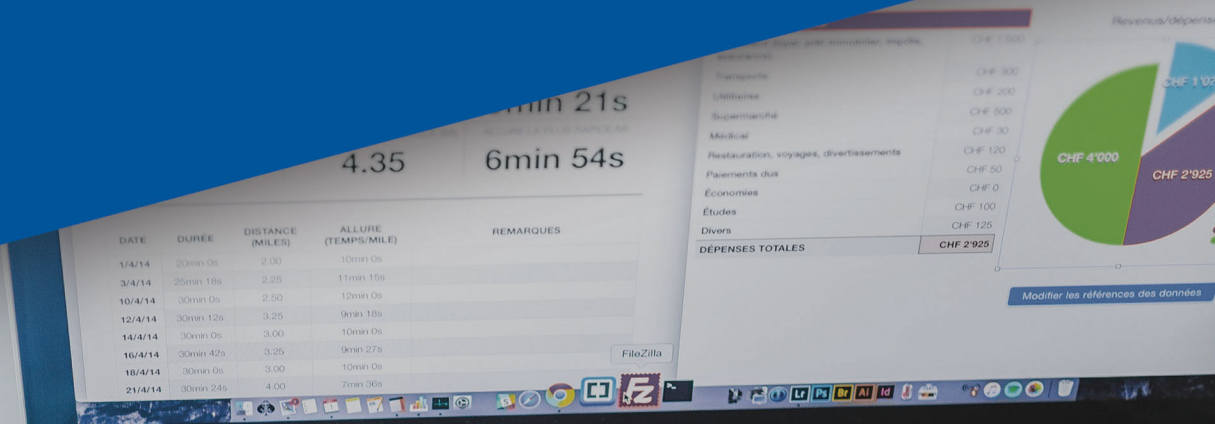




REPUBLICAN
UNION OF
EMPLOYERS
OF ARMENIA

DIGITALISATION IN ARMENIA

POLICY PAPER



February 2022



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Introduction

Armenia exhibits an attractive Information and Communications Technology (ICT) sector, but the general level of digitisation across the economy remains uninspiring. Economic output in the ICT sector (excluding the IT sub-sector) grew to AMD 237.6 billion in 2020 from AMD 146 billion in 2012, a compound annual growth rate of 6.3% greater than the 4.7% annual growth rate registered at the general level. Average ICT salaries are the highest in the country, influenced by the local presence of large international firms. Yet, outside the ICT bubble, Armenian businesses are lagging in the digital transition. A skills challenge remains centrefold, as almost half of the population does not have basic computer knowledge. ICT access is also seemingly suboptimal, owing to low competition in the domain of digital infrastructures.

ICT regulation is underdeveloped in Armenia. A regulatory review of barriers to entry is thus warranted. As it stands, there is currently no unbundled access to the ‘local loop’ – the ‘local loop’ is the physical twisted metallic pair circuit in the fixed public telephone network connecting the network termination point at the subscriber’s premises to the main distribution frame –, and consumers are also not allowed number portability when changing between providers. E-government services have been in operation since 2008, but interoperability amongst different services remains poor. E-government does not provide either for the entirety of licenses that businesses and citizens require on a regular basis. A Digitalisation Strategy was adopted in 2021. However, the legal framework for e-commerce is still in its infancy.

Tax and customs authorities have modernised procedures making inroads into digital-based services. In Armenia, the State Revenue Committee supervises taxes and customs. In tax matters digital access has existed since 2010, enhanced during Covid-19. As regards customs payments and procedures, complaints about administrative inefficiency affecting export-import activities have been common in the past, and the transition to digital means has lagged. That should now change thanks to an upgraded National Trade Window Portal, which is supposed to aggregate online otherwise offline services. However, a similar impetus is seemingly not occurring in other parts of public administration, where digital platforms remain unavailable or underperforming.

There are two tiers of digitalisation in Armenia’s private sector. Banking institutions, for instance, are in the top tier level having created a shared credit bureau service as early as 2004. The banking sector also benefits from the existence of a public registry for moveable assets. And most banks have their own mobile applications as well, playing to different customer genres. Credit risk management and the enforcement of rights are thus facilitated by integrating both private and public digital infrastructures. Yet there are other segments of the general economy which are low tier in their own digital adoption. Retail trade is an example, a sector which has remained too friendly to cash transactions, although point-of-sale terminals are now mandatory.

Public policy is doing little for training and lifelong learning at the business level. The economic landscape in Armenia is dominated by businesses in the trade sector, which are generally very small-sized enterprises, or in other words proximity businesses. These are not the businesses from whom one should expect a structural approach towards employee training. Nonetheless, public policy in Armenia has not filled the gap either. The Government seemingly has no coordinated policy programme in place. And even if it had one, the challenge would not be circumscribed to mere training. Basic skills, such as ICT and language skills, are also in short supply. Moreover, the individual desire for lifelong learning cannot be regulated either.

Policy proposals

Public policy should keep ICT adoption at the forefront of the Covid-19 response. The pandemic has represented a momentous effort involving public and private sector collaboration on many fronts. Many micro, small, and medium-sized enterprises (MSMEs) were ill-equipped in dealing with a suddenly arranged shift into remote working and e-commerce. Many did not manage it at all. Others endured with sacrifice and with the support of stakeholders, not least of all the state in its efforts to avoid economic collapse and a surge in unemployment from already elevated levels of unemployed people. Digital inclusiveness will remain a challenge in years ahead. Thus, public policy should build fiscal space to remain supportive of digital vouchers for MSMEs as well as other digital tools such as customer relationship management applications.

Structure public support in digitalisation along distinct policy pillars and across different sectors of the economy. The Government should devise policy instruments tailored to SMEs in areas such as technology support, skills development, and financing resources. These aim at different, yet compounding, vulnerabilities typical of smaller businesses. Self-assessment tools, in as much as external counselling services, would also speed-up the process of defining the digital maturity of most businesses. Such self-assessment tools should be made sector-specific, delivering quick-fix proposals aimed at providing immediate improvements in productivity. Critically, there should be a strong emphasis on making businesses more customer-centric, and most active across the digital space including, but not limited to, e-commerce and e-marketing.

Eliminate the obstacles to competition holding back potential investments in digital infrastructure. Conflicting data point out to limited ICT access in Armenia. While 4G coverage is widely available across the country, access to networks by new industry players is arguably held back by anti-competitive forces. The Government should review existing barriers to entry with a view of making the regulatory landscape as competitive as possible. Securing high-quality infrastructure is critical in supporting the digital transition in as much as creating the enabling conditions towards the adoption of novel technologies, such as 5G (networks), artificial intelligence, or the Internet of Things, all of which will condition business competitiveness in years to come worldwide.

Make sure there is effective competition in ICT-related product markets. Many households remain without an internet connection at home, and perhaps unable to acquire proper hardware as well. Armenia is an importer of such equipment, which is to be used not only by households, but also by ICT professionals in a country where the ICT sector is deemed by policymakers as a strategic lever of growth. Background conditions should therefore not be impaired by contextual costs such as sticky prices for internet connections and related service, or onerous import barriers elevating the cost of hardware and other critical equipment. Yet, the Government should also be careful in avoiding inefficient administrative measures and counter-productive market interventions.

Introduce a legal framework for cybersecurity. Currently there is none, leaving Armenia disadvantaged in this regard. In today's environment, cybersecurity should be at the forefront of any risk management strategy in the private sector, as well as in the public. A legal framework against cyber risks, including data and privacy protection, should also be closely articulated with the Armenian Digital Strategy 2021-2024. In addition, business leaders, and in general all private sector organisations, should be lead advocates of international best practices in the field of

information security. Data are a 21st century factor of production, and information systems are the tracks on which they run. Not taking proper care of data is unthinkable of in today's world.

Simplify the digital identification framework. The existing e-signature system, based on ID card readers and carrying an annual fee, is out-dated and should be replaced with modern technology such as QR code scanning or biometrics. The e-signature should be made the prime legally accepted instrument for personal identification. Without a fully functional and free-of-charge e-signature system the take-up of digital products and services will be severely undermined, and the environment also burdened by an extra demand for paper products that could be avoided. Envisioning a paperless society, and a fully digitised public administration, should be a medium-term policy objective. The same could be said about a fully digitised business environment.

Create an online supporting tool for MSMEs. This tool should constitute a consolidated and dynamic repository of information on policy support for MSMEs that is frequently dispersed, and sometimes uncoordinated, across multiple ministries. Businesses could thus easily access, and understand, all sorts of available support – including, but not limited to, investment and financial support, mentorship, training, business plan reviews, or others – and figure out how to make the best use of them. A supporting tool for MSMEs could also function as a platform to gather information useful for policy assessment and stock-taking of policy instruments. These data would also prove useful in balancing the cost-benefit calculus of support programmes.

The creation of contents in business training, even if publicly subsidised, should be led by private sector organisations. Employer associations are indispensable partners towards that aim. In a knowledge economy, knowledge is a public good. Hence, there is a role, and a rationale, for public funding of employees' training, although the implementation of training should be left to market-oriented operators. By involving large-scale, private-sector institutional partners such as employer associations in the design of training curriculums, the economies of scale associated with the delivery and outcomes of training modules could perhaps be made larger as well. And equally important, training modules could also be made more pragmatic by addressing specific points of stress in labour and product markets, including ICT-related challenges.

Promote the democratisation of finance through fintech and financial literacy. Worldwide, finance is currently in a valley of change, not least in middle income countries where relatively large segments of the population remain unbanked and small businesses are unable to access finance on equal footing vis-à-vis large firms. Fintech is short for financial technology and at its core rests the idea of financial disintermediation, i.e., taking out the middleman between lenders and savers. Financially literate lenders and savers are a guarantee against irresponsible use of money. That is why financial literacy should be part of educational curriculums as early as primary school, to empower individuals at the onset in a digital world where impulse decisions and a tendency for immediate pleasure are all too much enticing.

Make the e-commerce framework more robust. Background analysis addresses e-commerce regulation in Armenia as both underdeveloped and ineffectual. Considering the exponential rise of online trade during Covid-19, and associated implications (in tax matters, for example) of a mass shift towards digital marketplaces, Armenian policymakers should take note. Policymakers, as well as practitioners, should thus build on the experience provided by an e-commerce pilot programme initiated in 2021 by the European Union involving a trio of EU Eastern Partnership countries (Georgia, Azerbaijan, and Armenia itself). This pilot programme, if later made effective into actual public policy and tax law, will bring to Armenia the intricacies of VAT on digital sales according to the methodology used in the European Union.

Fully adopt the 2021-2024 Digitalisation Strategy but implement it in partnership with non-governmental actors. The Government should not concentrate all tasks around itself, nor should it alienate private sector organisations. Yet the strategy's action plan currently does not make room for private-sector implementation partners. Moreover, not-for-profit organisations are also missing in action, and these should participate in that concerted effort as well. The Government should thus aggregate different actors around the digitalisation strategy, rather than monopolising it. In addition, policymakers should also make sure that online work platforms are part of an all embracing approach for nationwide digitalisation, by aligning the Armenian labour law with the central features of a digital, intangible, world economy.

Bullet line summary

- Public policy should keep ICT adoption at the forefront of the Covid-19 response.
- Structure public support in digitalisation along distinct policy pillars and across different sectors of the economy.
- Eliminate the obstacles to competition holding back potential investments in digital infrastructure.
- Make sure there is effective competition in ICT-related product markets.
- Introduce a legal framework for cybersecurity.
- Simplify the digital identification framework.
- Create an online supporting tool for MSMEs.
- The creation of contents in business training, even if publicly subsidised, should be led by private sector organisations.
- Promote the democratisation of finance through fintech and financial literacy.
- Make the e-commerce framework more robust.
- Fully adopt the 2021-2024 Digitalisation Strategy but implement it in partnership with non-governmental actors.