POLICY BRIEF

EUROPE'S POLITICAL ECONOMY PROGRAMME

14 JULY 2021

How to get European businesses to digitalise

Frederico Mollet
Policy Analyst
European Policy Centre

The digital transition is a guiding priority for European policymakers, twinned with the existential threat of climate change. This Policy Brief addresses one specific aspect: business digitalisation, defined as the integration of digital technologies into firms' business models and operations. Europe's underperforming tech sector and reliance on foreign technologies has long alarmed its policymakers. But just as critical is the prosaic challenge of adoption of existing technology by the bulk of regular companies that make up the economy, especially small and medium-sized enterprises (SMEs). It is a significant factor in the EU's economic underperformance over the last two decades.

In the new Multiannual Financial Framework and Recovery and Resilience Facility (RRF), a range of new EU funding streams and programmes are being introduced to tackle this challenge. They are a promising advance, but several areas where the EU's policy response could be improved remain, primarily by increasing the allocation from cohesion funding, improving access to finance, leveraging private sector partners, and optimising the design and governance of its main policy programmes.

This Policy Brief draws on the insights of a series of EPC roundtables that drew together public, private and regional representatives. The focus is on the challenge of digitalising existing firms, not the related issue of fostering digital start-ups. Due to the paper's scope, horizontal enablers like regulation and digital infrastructure will not be covered. While important, the former was not flagged by stakeholders as a major barrier, and the latter is a well-known policy challenge that has already received significant attention.

BACKGROUND

The EU is a digital laggard

Digitalisation is critical for economic growth and productivity.[1] Yet, in aggregate, European firms have long underinvested in digital assets and other associated intangibles (e.g. skills, management training, organisational change).[2]

This digital gap is one of the key factors behind Europe's lagging productivity and is driven largely by the lack of digitalisation amongst the regular firms that make up the bulk of the economy, not by the failure to produce digital giants.[3]

The severity of the problem varies between member states. In 2019, 53% of companies in Denmark had high digital intensity compared to 10% in Romania. But this is not a simple story of 'East versus West' or 'North versus South'. In Germany, the figure is 28%, and 24% in France.[4] This is not restricted to SMEs, although they are by far the worst performers. Across all firm sizes, EU firms are less digital than their US counterparts, and around 25% of large firms in the European Investment Bank's (EIB) annual survey have not digitalised.[5] Furthermore, US multinationals appear to reap greater productivity benefits from a given level of digitalisation than their European counterparts, thanks to better management practices.[6]

With rapid advances in artificial intelligence (AI) and other technologies, we are now on the cusp of the second wave of digital productivity enhancements. Europe can ill afford to fall behind once more.[7]

Reasons for the gap

Several factors are driving European industry's digital underperformance.

Finance: Banks typically require collateral to secure loans, but the intangible nature of digital investments means that there is no associated collateral and identifying the return on specific investments is challenging. Poor digital knowledge amongst bank staff exacerbates this issue. Stakeholders have indicated that the metrics used to assess loans banks are often poorly suited for digital investment. Therefore, in the EU's bank-centred financial system, many firms struggle to secure

the necessary financing, which stakeholders highlight as one of the most critical barriers.[8]

Skills, management, business model adaption: Adopting digital technologies requires skilled workers, and the management awareness and know-how to recognise the value of digitalisation and implement it effectively. SMEs tend to struggle with both, and the latter is particularly important because business models often have to change to incorporate digital technologies.[9]

Scale: Complex digital technologies may require sufficient scale to justify the effort and cost of implementation, which is a particular barrier for SMEs.[10] This partly explains the gap between the EU and US since SMEs make up a higher proportion of the former's economy. But this barrier may be falling as the rise in cloud computing reduces scale requirements.

Regulation: Regulation can also hamper digitalisation. For example, land-use regulation slowed the adoption of digital technologies in retail requiring large warehouses, and regulatory barriers can prevent the exchange and aggregation of data. Although not a primary factor, this may change as AI and other data-heavy technologies grow in importance. The European Commission addresses barriers through initiatives like its Data Strategy, but regulation will not be the focus of this paper.[11]

Infrastructure: Extensive and high-quality digital infrastructure is a prerequisite for digitalisation. The EU is still missing key broadband targets and is drastically behind on 5G coverage (24% coverage compared to 76% in America and 93% in South Korea).[12] This is a well-known barrier already deliberated in policy discussions, so is also not the focus of this paper.

STATE OF PLAY

EU policy (2016-20)

Governments worldwide deploy a similar set of digitalisation policy tools, providing firms with expert advice, support, training and financial guarantees. As with the European Green Deal and industrial strategy, EU policy can play a valuable role by setting strategic direction, coordinating stakeholders, designing innovative cross-border solutions and providing funding.

The Commission's previous flagship programme was the Digitising European Industry (DEI) initiative. It supported hundreds of Digital Innovation Hubs (DIHs) – existing organisations that provide expert support to SMEs, identified through a bottom-up process – and various research projects. €5 billion was allocated; €500 million for the DIHs and the remaining for research projects. In reality, much of the latter activity predated the DEI and were primarily dedicated to research and development (R&D) rather than digital adoption.

The DIHs supported SME digitalisation effectively, but the DEI only reached around 0.01% of European SMEs. 57% of SMEs surveyed were not aware of its existence or any other digitalisation programmes. There was also substantial fragmentation and disparity between the services and capabilities of different DIHs, and limited monitoring. The European Court of Auditors found the DEI to be poorly integrated into national strategies and with the smallest presence in lagging regions.[13]

Furthermore, member states were not encouraged to allocate European Structural and Investment Funds to the initiative. Only 6% of the European Regional Development Fund was used for digital projects, of which 10% went to business digitalisation. In contrast, the funds allocated to general SME support were six-fold.[14] Looking at other EU funding streams, only 9% of the financial guarantees under the European Fund for Strategic Investments (EFSI) were used for digital projects.[15] And it was only in 2019 that the EIB launched a pilot of finance guarantees supporting SME digitalisation.[16]

Data limitations mean that these figures likely undercount the support given since programmes with digitalisation elements could have been labelled as R&D or more general SME support. Nevertheless, they make clear that the level of resources dedicated was by no means sufficient, given the magnitude of Europe's underperformance.

EU policy going forward (2021-27)

Going forward, EU policy will be guided by the targets in its 2030 Digital Compass:

Tech up-take: 75% of EU companies to adopt cloud technology, AI and big data. The current levels are 36%, 7% and 13%, respectively.[17]

Late adopters: More than 90% of SMEs to reach at least a 'basic level' of digital intensity. The current level is 60%.[18]

The Commission has a number of programmes to implement these goals.

Digital Europe Programme (DIGITAL): €580 million of this €7.5 billion programme is reserved for digital skills, and €750 million for 200 European DIHs (EDIHs). National funds will match the latter to total €1.5 billion. In contrast to the DIHs under the DEI, EDIHs will undergo a rigorous selection process, be required to provide a common set of minimum services to support businesses digitalisation (e.g. skills training) and be subject to systematic monitoring and evaluation. This network will be the keystone of EU business digitalisation policy and diffuse advanced technologies.[19]

Transition pathways: The Commission will co-create digital 'transition pathways' for different industrial ecosystems. Details are scant, but they could be a promising approach for diffusing industry-specific digital technologies and practices since digitalisation requirements and technologies can vary across industries.[20]

InvestEU: The successor to the EFSI will include a combined allocation of €13.5 billion for SMEs, research, innovation and digitisation. As a financial guarantee instrument, it can mobilise multiples of additional

investment – but will also have to cover a range of policy priorities.[21]

Recovery and Resilience Facility: Early assessments of 12 national plans indicate that around €39 billion will be allocated to SME digitalisation, which is approximately 10% of SME's existing digitalisation spend. Although substantial, the level of basic SME digitalisation hovers around 60% since 2015. Given the expected fall in private investment from the COVID-19 debt overhang, reaching the 90% target appears unlikely. Furthermore, the 2030 targets for AI, cloud tech and big data are of an order of magnitude that is more ambitious. The RRF will also provide significant support for digital infrastructure and skills, the critical enablers for businesses. But indications show that it is still short of covering Europe's investment gap.[22]

Impact of COVID-19

COVID-19 has accelerated many businesses' digitalisation. But the impact has been concentrated on those functions directly disrupted by the pandemic, such as online payments, e-commerce and remote working. While this will have a positive impact on productivity, many business areas remain unaffected. Furthermore, accelerating digitalisation raises concerns for those firms and regions that continue to lag, as they will fall even further behind economically.[23]

PROSPECTS

The new set of programmes mark an important advance, building on the lessons from the DEI and committing significant resources to digitalisation. However, there are several areas where this new policy framework can be optimised, and new initiatives would be worthwhile.

Resources

The private sector's long-standing underinvestment (expected to be exacerbated by the post-COVID-19 debt overhang) and several serious market failures call for substantial public support for business digitalisation. The resources under DIGITAL are not of the order of magnitude required by Europe's digital gap. Based on the 2016-20 figures, the EDIH funding available until 2027 would support the digitalisation of just 0.03% of EU businesses. The same cannot be said for RRF funds, but as outlined above, they are still likely to fall short of the ambitious Digital Compass targets.

Additional funding should be mobilised from Cohesion Policy (CP) funds. Business digitalisation is a critical factor in regional convergence, and so an increased funding share would be in line with CP's main objectives. Negotiations are still ongoing, but the Commission should push for a significant increase, in the order of 10% of the total funds given the scale of the challenge. Allocating funding to existing programmes like EDIHs could also improve the absorption of cohesion funds, a particular challenge in lagging regions.

Access to finance

Finance guarantees: Via EIB guarantees, the EU provides significant access-to-finance support to SMEs. However, given the additional barriers to financing digitalisation, more targeted financial guarantees are warranted. This recommendation is subject to the final results of the EIB's pilot. The InvestEU envelope faces several competing priorities, but digitalisation should make up at least a quarter of the allocation.

'Financing Digitalisation Alliance': The common recommendation to fix bank financing flaws is to complete the Capital Markets Union. While critical, it is a long-term project. In the meantime, there is scope for incentivising banks to improve their treatment of digitalisation loans. The Commission should use its coordinating and convening powers to get banks to commit to a best practice code, to assess digitalisation loans and improve their staff's digital knowledge. Lessons can be gleaned from the green taxonomy process. The Commission should include digital businesses in this process to receive their expert knowledge and potentially encourage partnerships between traditional finance providers and business-to-business (B2B) digital firms.

Leveraging private partners

Many firms lack the awareness and information necessary to digitalise, but a number of 'access points' and private sector networks can reach them. Private partners could voluntarily provide information about digitalisation and link such firms with public programmes. They could 'upsell' firms to pursue deeper digitalisation in areas not impacted by the pandemic. Where private partners have digital expertise to share, they could even complement public support programmes. The design of such public-private partnerships would have to avoid promoting the products and services of participating firms over those of their competitors. Potential private partners include:

- **finance providers**, particularly those that already administer EIB financial guarantees for SMEs;
- **B2B businesses**, particularly digital service providers that firms have been forced to use due to the pandemic (other service providers like accountants could also be viable partners);
- **business networks**, such as national and regional chambers of commerce or industry associations; and
- **supply chain networks**, a particularly promising avenue to explore when designing industrial pathways, given their industry-specific focus and the close links between firms and their suppliers.

European Digital Innovation Hubs and transition pathways

EDIHs and transition pathways will be the EU's main programmes for supporting business digitalisation directly. In addition to past lessons that have already been incorporated explicitly, their design and implementation should also include the components outlined below.

Peer-to-peer networks: A takeaway from the EPC's stakeholder engagement is that peer-to-peer learning and networks can be more effective than public advisory services. Policy institutions should foster and support such networks proactively. This could be a fruitful technique within the framework of transition pathways for encouraging larger firms that are less likely to use EDIHs to digitalise.

National and regional programmes: The DEI was criticised for its lack of integration into national programmes. Policymakers must ensure that national regional and EU programmes are aligned and exploiting potential synergies, particularly now that national initiatives will be supported with considerably more funding via the RRF. The RRF monitoring process should be leveraged to encourage integration.

Basic service provision: Access to finance support, a key demand by users of the original DIHs, is one of the minimum services EDIHs must provide. Management training should also be prioritised alongside skills, as it is clearly critical for implementing new technologies.

Measuring impact: The Commission has already committed to improved input data collection and the use of key performance indicators to measure programme outputs. In addition to this, efforts should be made to assess the direct impact of programmes, using best practice counterfactual evaluation techniques like randomised controlled trials to gauge the effectiveness of different programme components and adjust implementation accordingly.

Governance: 3 governance points should be adopted.

1. EDIHs and transition pathways must be aligned operationally once the latter are established.

2. A full range of stakeholders (e.g. SMEs, regional representatives, smaller B2B firms) must be involved, and larger organisations should not dominate public-private partnerships. The Commission must take care not to give undue advantage to the latter by, for example, enabling them to promote their products over competitors.

3. Resources should be distributed equitably between lagging and advanced regions to enable the former to catch up.

Points 2 and 3 should be of particular concern for the transition pathways project, as there is a danger that the most engaged companies with access to EU policymakers are large-scale firms in advanced regions.

With its 2030 targets and new policy framework, the EU aims to catch up with the previous generation of digital technologies and ensure that it does not miss out on the next wave of transformational change. Otherwise, Europe will fall behind its economic competitors even further. Taken together, these recommendations will bolster the funding available for business digitalisation, tackle some of the critical barriers to finance, and optimise the delivery of the Commission's programmes.

This Policy Brief was developed for the EPC research project, "EU Business Digitalisation", which was supported by Amazon. It builds on EPC roundtables organised in May and June 2021. The support the European Policy Centre receives for its ongoing operations, or specifically for its publications, does not constitute an endorsement of their contents, which reflect the views of the authors only. Supporters and partners cannot be held responsible for any use that may be made of the information contained therein.

1 Claeys, Grégory and Maria Demertzis (2021), "The productivity paradox: policy lessons from MICROPOD", Brussels: Bruegel.

2 Thum-Thysen, Anna; Peter Voigt; Benat Bilbao-Osorio; Christoph Maier; and Diana Ognyanova (2017), Unlocking Investment in Intangible Assets, Discussion Paper 047, European Commission.

3 Gordon, Robert J. and Hassan Sayed, "Transatlantic technologies: Why did the ICT revolution fail to boost European productivity growth?", *Vox*, 21 August 2020; Claeys and Demertzis (2021), *op.cit.*

4 European Commission (2020a), Digital Economy and Society Index (DESI) 2020: Thematic chapters.

5 European Investment Bank (2021), *op.cit.*

6 Bloom, Nicholas; Raffaella Sadun; and John Van Reenen (2012), "Americans Do IT Better: US Multinationals and the Productivity Miracle", *American Economic Review,* Volume 102, Number 1, pp.167-201.

7 Brynjolfsson, Erik and Georgios Petropoulos, "The coming productivity boom", Bruegel, 10 June 2021.

8 Claeys and Demertzis (2021), *op.cit.*; European Investment Bank (2019), Financing the digitalisation of small and medium-sized enterprises: The enabling role of digital innovation hubs – Executive summary, Luxembourg.

9 Organisation for Economic Co-operation and Development (2021), "The Digital Transformation of SMEs", Paris.

10 *Ibid*.

11 European Investment Bank (2021), *op.cit.*; European Commission (2020b), A European strategy for data, COM(2020) 66 final, Brussels.

12 European Court of Auditors (2020), Digitising European Industry: an ambitious initiative whose success depends on the continued commitment of the EU, governments and businesses, Special Report 19/2020, Luxembourg; Fildes, Nic, "Europe falls further behind US and Asia in 5G rollout", *Financial Times*, 29 January 2021.

13 Organisation for Economic Co-operation and Development (2021), *op.cit.*

14 *European Commission*, "Cohesion policy: helping Europe get fit for the digital age" (accessed 29 June 2021).

15 *European Commission*, "Investment Plan results" (accessed 29 June 2021).

16 European Investment Fund, EIF and the EC launch a Digitalisation Pilot for SMEs under the COSME Loan Guarantee Facility, 24 October 2019.

17 Author's calculations based on *Eurostat*, "Digital economy and society > ICT usage in enterprises > E-business [isoc_EB]" (accessed 29 June 2021).

18 Author's calculations based on *European Commission*, "Key Indicators > Analyse One Indicator And Compare Breakdowns" (accessed 29 June 2021).

19 Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240.

20 European Commission (2021), Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery, COM(2021) 350 final, Brussels.

21 European Commission, Commission welcomes political agreement on InvestEU, 08 December 2020c.

22 Bertuzzi, Luca, "Recovery plan analysis says EU will fall short of meeting 2030 digital targets", *EURACTIV*, 09 June 2021.

23 Brynjolfsson and Petropoulos (2021), *op.cit.*

With the strategic support of King Baudouin Foundation
Working together for a better society

With the support of Europe for Citizens Programme of the European Union