Chasing the frontier: Digitalisation for stronger productivity in the Netherlands

By Martin Borowiecki, Jon Pareliussen and Daniela Glocker, OECD Economics Department

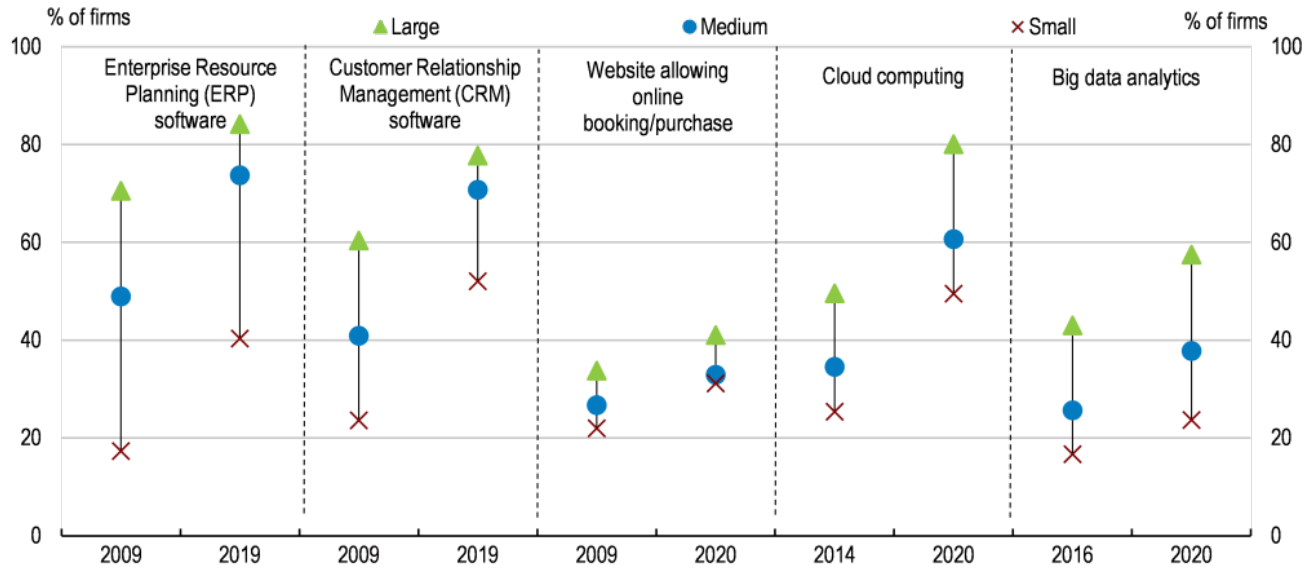
The COVID-19 crisis has accelerated the digital transformation of the Dutch economy. E-commerce and teleworking helped cushioning the immediate economic shock as many firms rapidly stepped up their digital capacities and adopted digital technologies to stay in business. What's more, the digitalisation of products and services offered new opportunities to expand into new markets such e-health. Looking ahead, digitalisation has the potential to boost long-term productivity growth, which has been disappointing in the last decade leading up to the COVID-19 crisis. The 2021 OECD Economic Survey of the Netherlands puts the spotlight on digitalisation and productivity. It highlights that policy can support the digitalisation of the economy by boosting skills and removing barriers to the reallocation of talent and capital to most productive firms (OECD, 2021).

Supporting an inclusive and efficient digital transformation

Digitalisation is in general high in the Netherlands. A high share of households have a broadband connection, use e-government services and telework regularly. The country's digital infrastructure is well developed, allowing most businesses to have fast broadband connections and purchase cloud services. The government is investing considerable resources in frontier digital technologies, notably quantum computing and artificial intelligence, through its new

National Growth Fund. However, the uptake of digital technologies has so far been concentrated among the largest firms with slow diffusion to the rest of the economy (Figure 1). Smaller firms lack the awareness, finance and skills to get the most out of the digital transformation.

Figure 1. Small firms lag behind in adopting digital technologies



Note: Firms with at least 10 employees. Small firms are those having 10-49 employees, medium-sized firms 50-249 employees, and large firms 250 employees or more.
Source: OECD (2021), ICT Access and Usage by Business (database).

New OECD research conducted for the Survey shows that stepping up the adoption of digital technologies and digital skills among laggard firms could translate into significant productivity gains in the Netherlands (Borowiecki et. al, 2021). In this regard, increasing support to small- and medium-sized enterprises, through targeted public-private programmes to facilitate the adoption of digital tools and to provide business advisory services, could raise awareness and help small firms overcome barriers to digital adoption. Furthermore, easing the strict employment regulations for the regular employed and improving access to capital for young innovative firms, including credit and collateral registries and stronger competition in the FinTech sector, would support

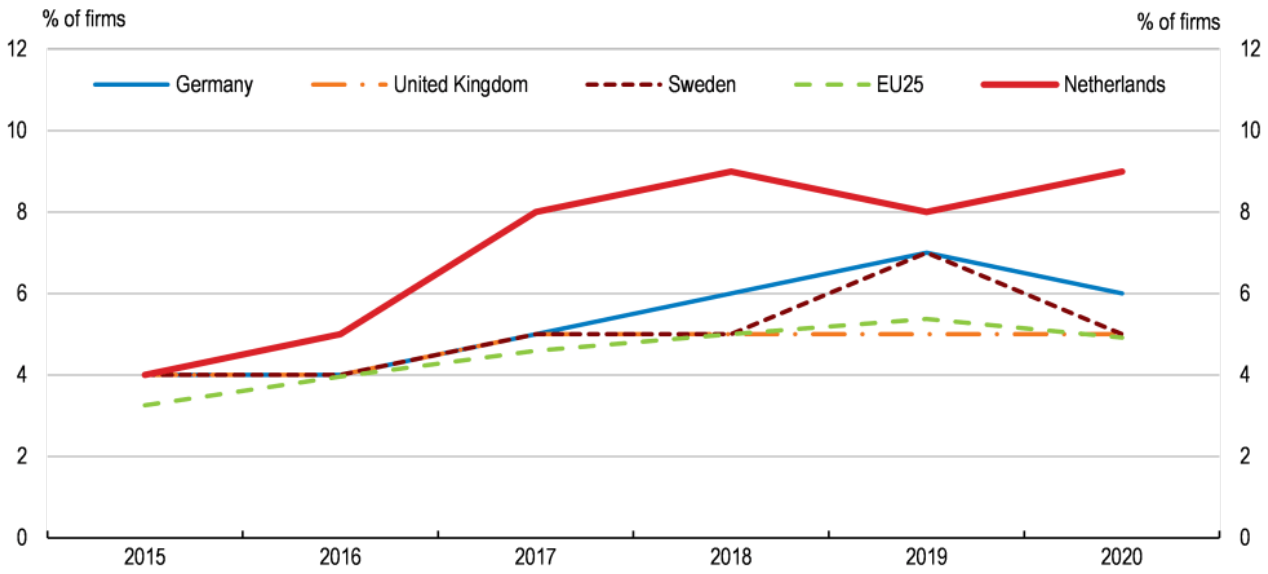
a more efficient reallocation of labour and capital to most productive firms.

Boosting digital skills

Shortages of ICT professionals constrain firms' ability to increase productivity (Figure 2). Despite a well-developed vocational training system and high tertiary education attainment, educational outcomes could be better matched to labour market needs. The share of ICT graduates is low and a considerable share of students, especially those in vocational training, lack essential digital skills. The education system will need to ensure that all students are equipped with the right skills to prosper in the digital age. This entails giving digital skills more prominence in the national curriculum, raising funding for teachers' digital training, and an expansion of part-time higher education pathways for ICT professionals. A stronger involvement of the private sector in the design of curricula for ICT programmes can help aligning curricula with labour market needs.

Figure 2. Shortages of ICT specialists are pressing

Share of enterprises with hard-to-fill vacancies for jobs requiring ICT skills



Note: Firms with at least 10 employees, excluding the

financial sector. 2015 data for Germany refers to 2014. The EU25 aggregate includes 25 European OECD Member countries.
Source: Eurostat (2021), Digital Economy and Society (database)

The COVID-19 crisis has created additional challenges for productivity. School closures reduced skill accumulation. Parts of the job losses may become permanent in some sectors due to accelerated automation, and skill mismatches are likely to increase going forward. A high share of own-account workers with lower skills and less access to training may be an additional drag on productivity. Hence, training efforts should be ramped up. To reduce the social costs of the digital transformation, a stronger focus on training jobseekers and workers with high up-skilling and re-skilling needs is necessary.

References

Borowiecki, M., et al. (2021), "The impact of digitalisation on productivity: Firm-level evidence from the Netherlands", *OECD Economics Department Working Papers*, No. 1680, OECD Publishing, Paris, https://doi.org/10.1787/e800ee1d-en.

OECD (2021), *OECD Economic Surveys: Netherlands 2021*, OECD Publishing, Paris, https://doi.org/10.1787/dd476bd3-en.