In OECD countries, few businesses operate without using some form of ICTs. Nevertheless, the extent to which ICT tools are integrated into business processes varies across countries, with key explanatory factors including differences in firm and industry composition.

In 2018, Finland had the largest proportion of enterprises using cloud computing (65%). Meanwhile, use of cloud services in Germany (22%) was lower than the OECD average (30%), but German businesses had the highest uptake of customer relationship management software (CRM), alongside the Netherlands (both 47%). Korea had the highest proportion of enterprises using radio frequency identification (RFID, 42%), but the lowest uptake of Big data analytics by businesses (3%).

On average, 23% of OECD enterprises made sales via e-commerce in 2017 - an increase of only 4 percentage points since 2009. Large differences among countries remain, however. In New Zealand, half of enterprises sell online, while fewer than one-in-ten do so in Mexico. Differences in the definition of e-sales used may explain some of the variation between countries but in many cases a key cause is likely to be differences in the prevalence of large firms relative to smaller firms in some economies (OECD, 2017a). On average, 43% of larger firms engaged in e-sales in 2018, compared to only 21% of small enterprises.

Enterprises can use various tools and technologies to support their e-commerce activities. *Ad hoc* tabulations from the 2018 European Community Survey of ICT Usage in Enterprises were used on a pilot basis to investigate aspects of digital maturity in firms. This included a number of relatively advanced website features – the possibility for visitors to customise or design online goods or services, the ability to track the status of orders placed, or offering personalised content on the website for recurrent visitors – as well as businesses' use of online advertising services. In all countries except Denmark, the majority of businesses do not use any of these functions. While, on average, 32% of businesses make some use of them, only 6% of firms pursue relatively more sophisticated online sales strategies combining one or more of these website features with online advertising. In countries with especially high Internet uptake, the share is much higher - 12% of firms in the Netherlands and 11% in Denmark and Sweden.

The usefulness of such features and services varies with business size and the geography of the market they serve (as well as other factors such as the nature of products offered). In particular, small businesses, focussed on serving local markets may see little need to sell or actively market online even if they have an online presence. By contrast, on average 14% of large firms offer one or more such website features and use online advertising services, with over 25% of large firms in Denmark, Sweden and Belgium doing so.

DID YOU KNOW?

In 2017, out of all firms in reporting OECD countries, 95% had a broadband connection, but only 23% made sales via e-commerce.

Definitions

Enterprise resource planning (ERP) systems are software-based tools for managing internal information flows. *Customer relationship management (CRM)* software is a program for managing a company's interactions with customers, employees and suppliers.

Cloud computing refers to ICT services accessed over the Internet including servers, storage, network components and software applications.

Big data analytics refers to the analysis of vast amounts of data generated by activities carried out electronically and through machine-to-machine communications.

An *e-commerce* transaction describes the sale or purchase of goods or services conducted over computer networks by methods designed specifically for the purpose of receiving or placing orders (OECD, 2011).

Recurrent visitor features refers to the provision of personalised content on the website for regular/recurrent visitors.

Firm size classes are defined as small (10 to 49 persons employed), medium (50 to 249) and large (above 250).

Measurability

These data are generally collected through direct surveys of ICT usage by businesses, though not all OECD countries undertake specific surveys on this subject. Aside from differences in the survey, the majority of indicators correspond to generic definitions that proxy the functionalities and potential uses of ICT tools. For example, various software with different functionalities are found within ERP systems, and there are substantial differences in the sophistication of these systems and their degree of implementation. Cloud computing services and Big data raise similar issues (OECD, 2017a).

Measurement of e-commerce presents several methodological challenges that can affect international comparability. These include the adoption of different practices for data collection and estimation, as well as the treatment of outliers and the extent of e-commerce carried out by multinationals. Other issues include differences in sectoral coverage of surveys and lack of measures concerning the actors involved (B2B, B2C, etc.). Convergence of technologies brings additional challenges for the treatment (and surveying) of emerging transactions, notably over mobile phones, via SMS or through the use of devices that enable near-field communication.

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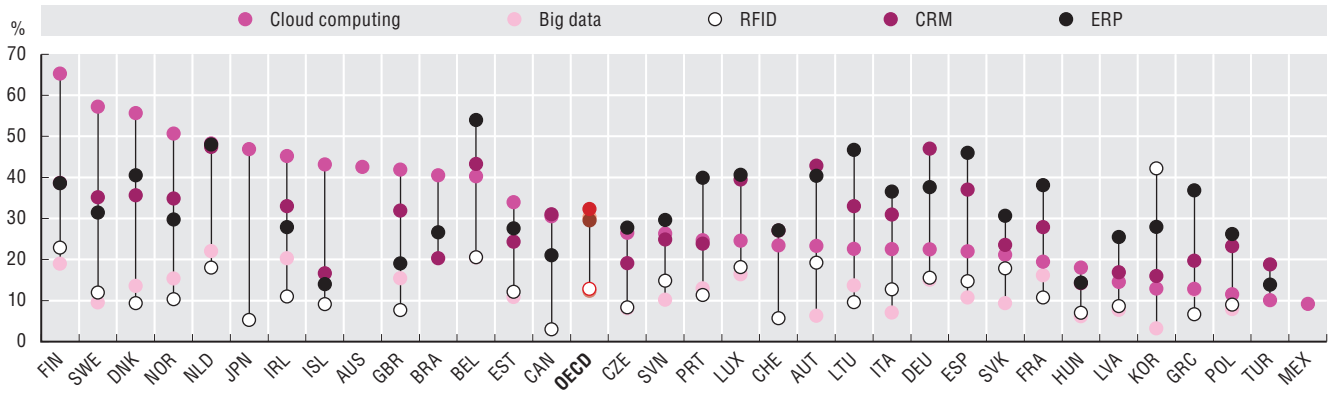
Diffusion of selected ICT tools and activities in enterprises, by technology, 2018

As a percentage of enterprises with ten or more persons employed

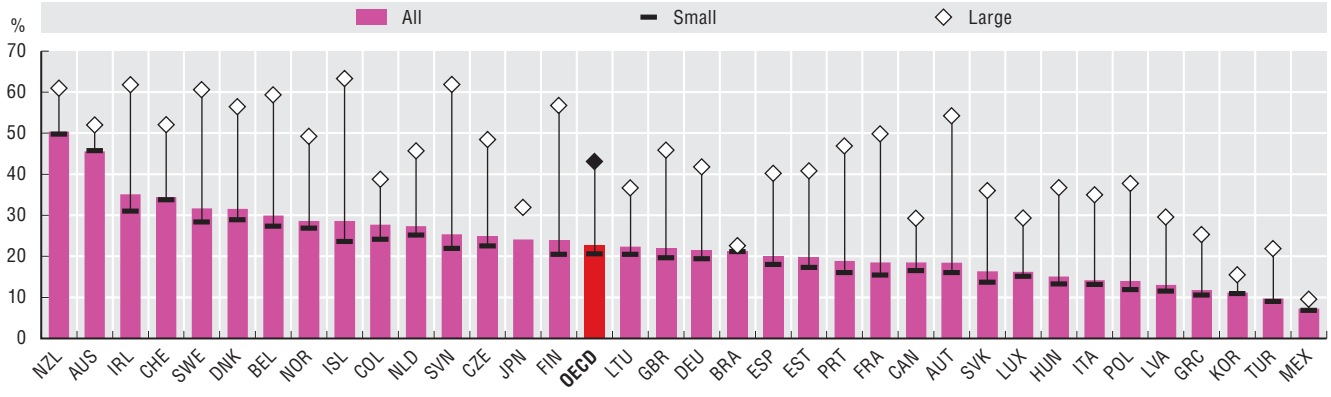


Source: OECD, ICT Access and Usage by Businesses Database, http://oe.cd/bus, December 2018. See chapter notes.

StatLink https://doi.org/10.1787/888933929832

Enterprises engaged in sales via e-commerce, by firm size, 2017

As a percentage of enterprises in each employment size-class

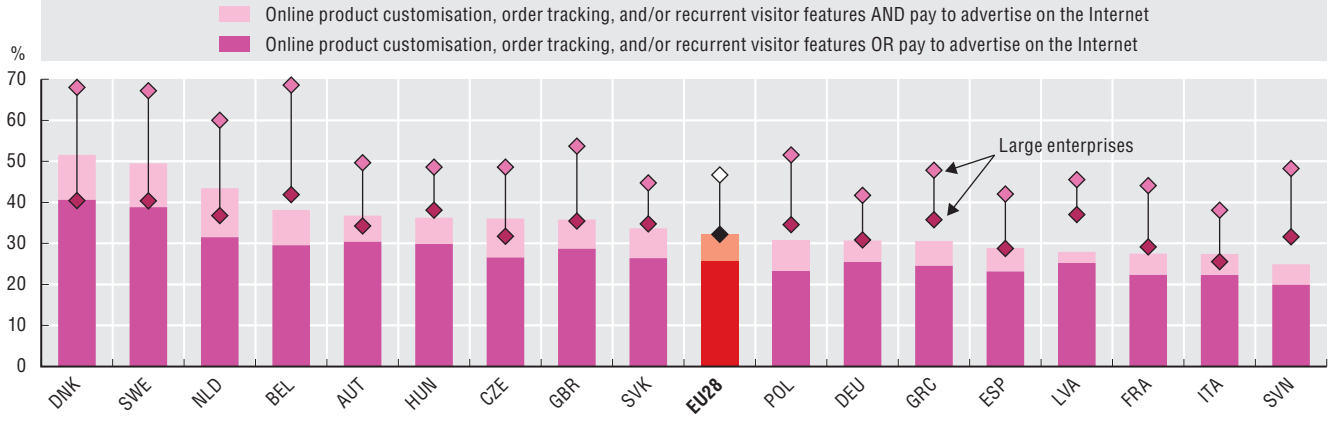


Source: OECD, ICT Access and Usage by Businesses Database, http://oe.cd/bus, December 2018. See chapter notes. StatLink contains more data.

StatLink https://doi.org/10.1787/888933929851

Enterprises' advanced web sales functionalities and online advertising, by size, 2018

As a percentage of enterprises with ten or more persons employed



Source: OECD, based on Eurostat, Digital Economy and Society Statistics, December 2018. See chapter notes. StatLink contains more data.

StatLink https://doi.org/10.1787/888933929870

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