



# Highlights from the OECD Science, Technology and Industry Scoreboard 2017 - The Digital Transformation: Denmark

## Science, innovation and the digital revolution

- **Denmark** has particularly high mobile broadband penetration more than 1.2 subscriptions per inhabitant in 2016 [Scoreboard fig. 1.2 see below].
- With 15 researchers per thousand in employment, **Denmark** and Finland had the second highest shares, behind Israel (17), but ahead of Korea and Sweden (both 14) [fig. 1.10 see below].
- The 50 largest R&D performers accounted for around 70% of BERD in **Denmark** in 2014 [fig. 1.17].

# Growth, jobs and the digital transformation

- Manufacturing jobs in **Denmark** are among the most ICT-intensive in OECD countries [fig. 1.29]
- The financial rewards for roles with higher ICT task intensity are markedly lower in **Denmark** than in all other countries except Israel [fig. 1.42 see below].
- With around 9 robots per thousand workers in 2012, the "robot intensity" of the manufacturing sector in **Denmark** is above the OECD average (6.2) and in Europe only Germany and Sweden are higher [fig. 1.29].
- **Denmark** has very high levels of firm-based training; 76% of workers received some training from their employers in 2012 [fig. 1.40].
- The gender wage gap is comparatively very low in **Denmark**, though men still earned 6.6% more than women in 2012 [fig. 1.41].
- ICT equipment and knowledge-based capital are estimated to have contributed 11% of labour productivity growth in **Denmark** from 2000-2014 [fig. 1.50].
- **Denmark** saw the greatest increase of any OECD country in the influence ("centrality") of the ICT Services sector in domestic production networks over the period 1995-2011 [fig. 1.55].

# **Innovation today: Taking action**

- Internet usage is very high in **Denmark**; 97% of people aged 16-74 were internet users in 2016 [fig. 1.57 <u>see below</u>]. The gap between use rates for those aged 55-74 (92%) and those aged 16-24 (100%) is small by international standards only Iceland, Luxembourg, and Sweden have a smaller gap [fig. 1.58].
- Over 2012-15, 7.6% of patents with inventors resident in **Denmark** listed women inventors resident in **Denmark -** compared to 10% listing women in the United States and 7.1% in the EU [fig. 1.61].
- Over half (55%) of venture capital investment in **Denmark** in 2016 flowed to the ICT sector [fig. 1.73], while equity funding focussed on "data & analytics" as well as "apps" [fig. 1.76].





#### Figure 1.2 Mobile broadband penetration, OECD, G20 and BRIICS, 2016

Total subscriptions and per 100 inhabitants

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/sti\_scoreboard-2017-en">http://dx.doi.org/10.1787/sti\_scoreboard-2017-en</a>.



Figure 1.10 R&D in OECD and key partner countries, 2015

StatLink ms= : http://dx.doi.org/10.1787/888933617035

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, <u>http://dx.doi.org/10.1787/sti\_scoreboard-2017-en</u>.

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StatLink ms=: http://dx.doi.org/10.1787/888933616883



#### Figure 1.42 Labour market returns to ICT tasks by gender, 2012 or 2015

Percentage change in hourly wages for 10% increase in ICT task intensity (at the country mean, by gender)

StatLink ms=: <u>http://dx.doi.org/10.1787/888933617643</u>

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/sti\_scoreboard-2017-en">http://dx.doi.org/10.1787/sti\_scoreboard-2017-en</a>.



### Figure 1.57 Internet users, percentage of individuals aged 16-74, 2006 and 2016

StatLink ans : http://dx.doi.org/10.1787/888933617928

Source: OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation, OECD Publishing, Paris; <a href="http://dx.doi.org/10.1787/sti\_scoreboard-2017-en">http://dx.doi.org/10.1787/sti\_scoreboard-2017-en</a>.

## The OECD Science, Technology and Industry Scoreboard 2017: The Digital Transformation



The 2017 edition of the Scoreboard contains over 200 indicators showing how the digital transformation affects science, innovation, the economy, and the way people work and live.

The aim of the STI Scoreboard is not to "rank" countries or develop composite indicators. Instead, its objective is to provide policy makers and analysts with the means to compare economies with others of a similar size or with a similar structure, and monitor progress towards desired national or supranational policy goals.

It draws on OECD efforts to build data infrastructure to link actors, outcomes and impacts, and highlights the potential and limits of certain metrics, as well as indicating directions for further work.

The charts and underlying data in the STI Scoreboard 2017 are available for download and selected indicators contain additional data expanding the time and country coverage of the print edition. For more resources, including online tools to visualise indicators, see the OECD STI Scoreboard webpage (http://www.oecd.org/sti/scoreboard.htm).

### The OECD Directorate for Science, Technology and Innovation

It is part of the DNA of the Directorate for Science, Technology and Innovation (DSTI) to constantly look for ways of better understanding where our economies and societies are today, and where they are going tomorrow. We pride ourselves on tackling topics at the boundaries of our scientific and technological understanding, such as using biotechnology and nanotechnology to alter modes of production, and how digital shifts like "big data," earth observation and digital platforms are changing our world.

Discover DSTI at <u>www.oecd.org/sti</u> and the OECD's Going Digital project at <u>www.oecd.org/going-digital</u>.



### **Further reading**

OECD (2017), OECD Digital Economy Outlook 2017, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264276284-en

OECD (2016), OECD Science, Technology and Innovation Outlook 2016, OECD Publishing, Paris. http://dx.doi.org/10.1787/sti in outlook-2016-en

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