

**press release**

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## **new study from the OECD & Randstad shows focusing on obtaining digital skills will unlock opportunities for all in the world of work**

- Study of over 417 million online job postings shows demand for digital jobs continues to grow. In the US, they have grown 24% in the last four years alone.
- Software developers, programmers and engineers are in particular demand. In Canada, Singapore, and Spain software developers and engineers account for close to 50% of the postings for digital professionals.
- Demand for digital skills has outpaced demand for other skills over the past decade and demand for advanced data analytics has spread across jobs 15.5x more quickly than the average for all skills.
- Randstad & the OECD are suggesting four priority areas for policymakers and businesses to help employees embrace digital transformation.

A new [report](#) launched today by the Organization for Economic Co-operation and Development (OECD), in partnership with Randstad, the global leader in the HR services industry, looks at 417 million online job postings in 10 countries over the last decade to illustrate how the digital transition is affecting the labor market.

### **demand for digital roles has risen significantly**

Digital jobs make up a significant share of all vacancies posted online and account for the following percentage of all job postings:

- Spain - 12%
- Italy - 12%
- Netherlands - 11%
- Singapore - 11%
- UK - 11%
- Germany - 10%

- Belgium - 9%
- US - 7%
- France - 7%
- Canada - 6%

In the US, online job postings for digital jobs have grown 24% in the last four years, led by a 116% surge in adverts seeking data engineers.

Software developers, programmers and engineers are in particular demand. In the UK approximately two in every three online job postings for digital professionals are seeking software developers and programmers. In Canada, Singapore, and Spain, software developers and engineers account for close to 50% of the postings for digital professionals. In Germany and France, the share of job postings for software developers and programmers is slightly lower, but still considerable, at 37% and 36% respectively.

Computer and data analysts or administrators represent approximately one in five of the selected digital occupations across the 10 countries analyzed. Jobs such as ICT technicians and data entry clerks represent a smaller fraction of overall online job postings in all countries. These are below 20% for all countries, and as low as 7% in Germany and 9% in Belgium.

### most in-demand digital skills

The pace of digital transformation is driving more than just demand for professionals in digital occupations. It is more importantly changing the skill sets that workers will need to thrive in these jobs. Demand for typical digital skills has spread across different occupations and sectors faster than for other skills over the past decade, analysis of online job postings shows. This means occupations that only a few years ago were not using digital tools or requiring digital skills, are now becoming increasingly digitized.

The report looks at the speed at which five digital skills categories have filtered into the jobs market:

- **Advanced data analytics:** Demand for data analytics has spread across jobs 15.5x more quickly than the demand for the average skill. In the US, the pace is 15x faster than for average skills and 5x faster in Singapore.
- **Cybersecurity:** Growing risk of cyberattacks has sparked increasing investment in security and risk management, leading to an increase in the hiring of workers with cybersecurity skills. Demand in the US is diffusing across job roles more than 10x faster than the demand for the average skill, while in the UK the pace is 6.6x faster.
- **Programming:** Programming skills are also in high demand because they play a key role in a variety of fast-growing job categories. In the US and UK, the demand has been diffusing between 6-9x faster than for the average skill, while it's slower in Canada and Singapore.
- **Automation and the Internet of Things (IoT):** Skills related to automation and the IoT are diffusing as much as 6x quicker on average than demand for other skills, fueled by the growing popularity of products for smart homes, and of smart wearables such as watches. The pace has been especially quick in the UK and US, happening 6-7x faster than the average skill, respectively.

- **Digital skills related to business and sales:** With digital technologies in use in nearly all productive sectors of the economy, there are rising needs for a range of related skills. The demand for digital skills connected to business and sales spread across different jobs 8.5x faster than the average, with the strongest growth in social media skills. The diffusion of programming skills demands was up 8x faster than the average, while that for IT automation skills increased 6x faster.

**Sander van 't Noordende, CEO of Randstad, said:** *"We are in the middle of a profound shift in how we all work and that brings challenges and opportunities. We all must focus on how we can adapt, reskill and embrace technology to find opportunities in this new world of work. However there is a risk that people are left behind. I believe business leaders and policymakers need to step up to make sure the digital revolution is an equal one for all workers."*

**Stefano Scarpetta, Director for Employment, Labour and Social Affairs at the OECD, commented:** *"New challenges require new data and tools. As labor markets evolve rapidly, the OECD is supporting countries by analyzing the demand for skills, extracting information from millions of job postings published online. With these 'big data' tools we are able to take the pulse of today's labor markets and help policy makers to design effective labor market and training policies that open opportunities to all."*

The data demonstrates the urgent need for a coordinated effort between businesses and policymakers to ensure workers can succeed in a digital driven labor market. Randstad is calling for the following priority actions:

- **Learning at all career stages needs to be prioritized:** Employers lacking a reskilling and upskilling strategy for in-demand and emerging skills are at a significant competitive disadvantage. Through a more targeted learning and development strategy that can repurpose people with adjacent skills, companies can help their employees stay marketable and relevant to a highly dynamic labor market.
- **Policy should be shaped to encourage studies in future skills:** STEM skills will become even more important as digitalization accelerates in the global economy. Engineers, mathematicians and data scientists will be the backbone of a tech-driven society, so giving people guidance and incentives will help develop a relevant workforce.
- **Renewed engagement with employees is needed:** To ensure business has access to hard-to-find skills, it's important to prioritize the talent experience. The pandemic has changed the social contract workers have with employers, and expectations are for companies to provide more than a job and a paycheck. Recent research from Randstad shows that talent want empathetic employers to focus on workplace wellness, provide a pleasant work environment, and offer career mobility and meaningful work.
- **Employers need to double down on flexibility:** The global labor market will adapt to a more flexible way of working. Remote work and flexible schedules have become the norm during the pandemic, and the trend is expected to persist. Governments and companies will need to refine their policies and practices to empower digital natives and nomads to work in new and alternative ways.

## about the report

The new report from the OECD, in partnership with Randstad, aims to provide business leaders with essential information. The report is sponsored by Randstad and uses big data to identify the occupations and skills most in demand in today's workplace. It also shows how to identify effective reskilling pathways to help people transition into the careers of tomorrow.

It is based on analysis of 417 million online job postings over a period of 10 years in 10 countries: Belgium, Canada, France, Italy, Germany, the Netherlands, Singapore, Spain, the United Kingdom and the United States. It looks at four broad categories of digital occupations: computer and data analysts and administrators; software developers, programmers and engineers; ICT technicians and data-entry clerks; and ICT and HR managers and marketing specialists (see Chapter Four of the report for a full list of digital roles considered in the analysis).

## about Randstad

Randstad is the world's largest HR services provider and is driven to become the world's most valued 'working life partner', supporting as many people as possible in realizing their true potential throughout their working life. We provide companies with the high quality, diverse, and agile workforces they need while helping people get rewarding jobs and stay relevant in the ever-changing world of work. In 2021, we helped more than two million people find a job that is right for them, advised 235,000 clients on their HR needs, from talent acquisition to total workforce management, and delivered training to over 450,000 people. We use data and technology to provide the right advice at the right moment at scale, while our consultants across almost 5,000 locations in 38 markets give talent and clients personal, dedicated human attention. It is this combination of Tech and Touch that makes our offer unique.

Randstad was founded in 1960 and is headquartered in Diemen, the Netherlands. In 2021, Randstad had on average 39,530 corporate employees and generated revenue of € 24.6 billion. Randstad N.V. is listed on the Euronext Amsterdam. For more information, see [www.randstad.com](http://www.randstad.com)

## about OECD

The Organisation for Economic Co-operation and Development (OECD) is an international organisation that works to build better policies for better lives. Our goal is to shape policies that foster prosperity, equality, opportunity and well-being for all. We draw on 60 years of experience and insights to better prepare the world of tomorrow.

Together with governments, policy makers and citizens, we work on establishing evidence-based international standards and finding solutions to a range of social, economic and environmental challenges. From improving economic performance and creating jobs to fostering strong education and fighting international tax evasion, we provide a unique forum and knowledge hub for data and analysis, exchange of experiences, best-practice sharing, and advice on public policies and international standard-setting.