

The Economic Impact of Software

EUROPEAN UNION¹

Software changes lives. The way we work, play, and move is being transformed by new software — not just on your computer, but by apps, big data, and access to the cloud. From optimizing plane routes to improving life for people with Parkinson's disease, innovation is happening at every level. To understand the impact of this, Software.org: the BSA Foundation commissioned the experts at The Economist Intelligence Unit (EIU) to examine the software industry's economic role. They studied the European Union (EU) and seven member states: France, Germany, Italy, the Netherlands, Poland, Sweden, and the United Kingdom. The research shows which countries are seeing the biggest benefits from software's growth — and how others can share in that success.

The stakes are high: All in, software was responsible for €1 trillion of total EU value-added GDP in 2016.² That's an increase of 9.9 percent from 2014, compared to overall GDP growth of 6.0 percent over the same period. And software supports other sectors, too — think of it as double-clicking on growth.

Total³ Value-Added GDP:

€1 trillion

Up from €910 billion in 2014, a 9.9% increase

Direct Value-Added GDP:

€304 billion

Up from €249 billion in 2014, a **22.4% increase**

EMPLOYMENT

Direct:

3.6 million jobs

Up from 3.1 million in 2014, a 16.5% increase

Total⁴:

12.7 million jobs

It's not just about coders. The software industry provides jobs in every field, from disaster recovery services to data processing and accounting. As Europe closes the digital skills gap,⁵ companies are hiring for jobs that simply didn't exist a decade ago — roles like strategic cloud data engineer, big data product specialist, and futurist. Across the EU, work supported by the software industry through direct, indirect, and induced contributions represents 12.7 million jobs.

- $^{\rm 1}$ $\,$ All data is from 2016 and was provided by The EIU unless stated otherwise.
- Includes indirect and induced effects. Indirect effects stem from purchases of inputs by the software industry, whereas induced effects stem from the spending of income by employees affected by those direct and indirect effects.



WAGES

Average Annual Salary for Software Industry:

€45,307

Total Annual Salaries Paid by Software Industry:

€162.1 billion

The total direct wages paid by the software industry for all 28 EU member states grew to €162.1 billion from €139.2 billion in 2014, an increase of 16.4 percent. Wage growth in smaller countries is particularly impressive: total salaries paid by the sector in Sweden grew 31.4 percent over the two years to 2016, and by 30.4 percent over the same period in Poland.

- ^{3, 4} Direct, indirect, and induced.
- "The Digital Skills Gap in Europe," EU Commission Factsheet, October 19, 2017, available at https://ec.europa.eu/digital-single-market/en/news/digital-skills-gap-europe.

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INTELLIGENCE