

## UK

The UK boasts Europe's leading software industry, with its vast financial sector and service industry using technology to improve productivity and drive innovation. Tech hubs in major cities, strong relationships with universities, and an open economy have helped companies grow. Big names include Sage, Sophos, Fidessa, and MicroFocus.

The software industry created direct value-added GDP of £70.3 billion in 2016 — up a remarkable 33.5 percent since 2014, and a much larger increase than the industry in Germany (7.6 percent) or France (8 percent). The UK spent just over £1.8 billion on R&D in 2015, the latest available figure.

The British software industry also contributed the largest share of direct value-added GDP as a share of the total economy across the countries surveyed. Indeed, 3.6 percent of the UK's whole value-added GDP came from software, edging out Sweden (3.4 percent) for the top spot. To put that in perspective, the financial and insurance activities sector in the UK represents 6.7 percent of value-added GDP and the real estate activities sector represents 13.9 percent.

Total<sup>6</sup> Value-Added GDP:  
**£139.2 billion**

Up 7.7% from 2014

Direct Value-Added GDP:  
**£70.3 billion**

Up 33.5% since 2014



### EMPLOYMENT

Direct:  
**697,960 jobs**

Up 7.2% from 2014 • 2.2% of total UK jobs

Total<sup>7</sup>:  
**2.7 million jobs**

Up 3.6% from 2014

The UK and Germany are in close contention for directly supporting the most software industry jobs in the EU, although the UK supports far more roles indirectly than Germany.



### WAGES

Total annual UK wages paid  
by the software industry:  
**£30.4 billion**

Up 20.8% from 2014

The UK software industry paid the second-highest total direct wages of the countries surveyed — after Germany.

<sup>6,7</sup> Direct, indirect, and induced.

### METHODOLOGY

To estimate the total contributions of the software industry to the EU economy, the EIU analyzed the direct contributions and estimated indirect and induced impacts using various economic multipliers:

(1) *Direct contributions*: the levels of output, employment, or wages of the industry in question;

(2) *Indirect impacts*: the inter-industry economic activity resulting from the direct contributions (e.g., purchases of inputs);

(3) *Induced impacts*: the additional economic activity supported by spending on goods and services by households whose income was affected by the direct contributions and indirect impacts.

Data sources include the EIU itself, Eurostat, the European Central Bank, OECD, and the World Input-Output Database.

## EUROPEAN UNION<sup>1</sup>

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 £818.4 billion of total EU value-added GDP in 2016.<sup>2</sup> That's an increase of 11.6 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.

Total<sup>3</sup> Value-Added GDP:  
**£818.4 billion**

Up from £733.5 billion in 2014, an **11.6% increase**

Direct Value-Added GDP:  
**£249 billion**

Up from £200.5 billion in 2014, a **24.2% increase**



### EMPLOYMENT

Direct:

**3.6 million jobs**

Up from 3.1 million in 2014, a **16.5% increase**

Total<sup>4</sup>:

**12.7 million jobs**

11.6 million in 2014

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,<sup>5</sup> 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.



### WAGES

Average Annual Salary for Software Industry:

**£37,099**

Total Annual Salaries Paid by Software Industry:

**£132.7 billion**

The total direct wages paid by the software industry for all 28 EU member states grew to £132.7 billion from £112.3 billion in 2014, an increase of 18.2 percent. Wage growth in smaller countries is particularly impressive: total salaries paid by the sector in Sweden grew 33.4 percent over the two years to 2016, and by 32.4 percent over the same period in Poland.

<sup>1</sup> All data is from 2016 and was provided by The EIU unless stated otherwise.

<sup>2</sup> 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.

<sup>3,4</sup> Direct, indirect, and induced.

<sup>5</sup> "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>.