Software is so much more than your desktop at work. Software is apps. Software is data. Software is cloud computing. It creates breakthroughs and drives growth in nearly every industry. Software empowers countless people and American businesses, and improves our lives each day in ways big and small. Along with all this progress comes the dramatic, positive impact software is making on our national economy each year. The Economic Impact of Software, a first-of-its-kind study from BSA | The Software Alliance conducted in 2016 by The Economist Intelligence Unit (EIU), captures the breadth of the software industry in the US and the sweeping economic impact it is making at state and national levels.

### United States

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#### Total Value-Added GDP:
$1.07 trillion
(includes indirect and induced impacts)

#### Direct Value-Added GDP:
$475.3 billion

### Employment

**Direct:**
2.5 million jobs

**Total:**
9.8 million jobs
(includes indirect and induced impacts)

From software developers and web designers to futurists, project coordinators, administrative assistants, and accountants, software creates jobs for a wide variety of professionals in today’s workplaces. These numbers capture jobs created directly by the software industry, as well as jobs the software industry supports through indirect and induced impacts.

### Wages

**Average Annual Wage for Software Developers:**
$108,760

A software developer’s wage is more than twice the average annual wage for all US occupations, which was $48,320 in 2015.

### Research & Development

**R&D Investment by Software Companies:**
$52 billion

17.2% of All Domestic Business R&D in the US

From developing new data analytics to driving breakthrough technologies like cognitive computing, the software industry’s commitment to R&D continues to spur innovation at unprecedented rates.

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1 All data is from 2014 unless otherwise indicated.
2 For definitions of “indirect” and “induced,” see Methodology section on the other side of this document.
4 Ibid.
5 National Science Foundation/National Center for Science and Engineering Statistics and US Census Bureau, Business R&D and Innovation Survey. 2012 Industry breakdown. Where data is not available for 2012, the most recent year is used.
6 National Science Foundation/National Center for Science and Engineering Statistics.
THE ECONOMIC IMPACT OF SOFTWARE

PENNSYLVANIA

Total Value-Added GDP:
$17 billion
(includes indirect and induced impacts)

Direct Value-Added GDP:
$13.3 billion

EMPLOYMENT

Direct: 81,603 jobs
Total: 229,603 jobs
(includes indirect and induced impacts)

From software developers and web designers to futurists, project coordinators, administrative assistants, and accountants, software creates jobs for a wide variety of professionals in today’s workplaces. These numbers capture jobs created directly by the software industry, as well as jobs the software industry supports through indirect and induced impacts.

RESEARCH & DEVELOPMENT

$992 million\(^7\)
R&D Investment by Software Companies

10.7% of All Domestic Business R&D in Pennsylvania\(^8\)

Pennsylvania’s economy and workforce benefit from software’s broad investment in new technology. From developing new data analytics to driving breakthrough technologies like cognitive computing, the software industry’s commitment to R&D continues to spur innovation at unprecedented rates.

METHODOLOGY

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

(1) Direct contributions: the levels of output or employment 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.


www.bsa.org/softwareimpact

The EIU compiled these data and economic impact assessments using publicly available government data, maintaining full editorial control of the process and using industry standard approaches. Any views or opinions expressed in this document are not necessarily those of The Economist Intelligence Unit.