

# THE ECONOMIC IMPACT OF SOFTWARE

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## US HIGHLIGHTS

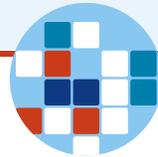
### WHAT IS SOFTWARE?

When people think of software, they often picture their desktop at work. But software is so much broader than many people realize. Its benefits range from everyday conveniences to expanding the boundaries of human possibilities.



#### The apps we use every day are software.

When you use apps today to quickly check the weather, the best route to work, or to book a flight for your family — you're using software.



#### Data is powered by software.

Data is delivering everything from life-saving health breakthroughs and more profitable agricultural yields, to better predictions of natural disasters, safer transportation, and smarter urban planning.



#### Cloud computing is run by software.

The cloud enables companies of all sizes to access and share computing resources in real time, anywhere in the world from any device at any time — with greater flexibility and reduced costs.



#### Services for industries nationwide.

Software helps optimize everything from aerodynamics to the fastest delivery routes. It connects American classrooms with classes around the globe and helps manufacturing businesses grow and better reach their customers.

These are just a few real-world examples of how software is helping to improve our lives every day and empowering countless people and businesses. In so doing, software is making a dramatic, positive impact on our national economy.

<sup>1</sup> Value includes indirect and induced impacts. For definitions of "indirect" and "induced", see Methodology section on the other page.



## KEY FINDINGS



The products and services of software companies are making an enormous, positive impact on our national economy, GDP, and employment across all 50 states.

As part of *The Economic Impact of Software*, a first-of-its-kind global study from BSA | The Software Alliance conducted by The Economist Intelligence Unit (EIU), researchers aimed to capture:

- The breadth of the software industry in the US; and
- The sweeping economic impact it is making at state and national levels.

The study's results illustrate the importance of software as a major, much-needed factor in America's economic health:

- The software industry was responsible for a total **\$1.07 trillion of all US value-added GDP in 2014**, and directly drove \$475.3 billion of that amount.
- The software industry directly **employed 2.5 million people in the US in 2014**. When including indirect and induced impacts, research shows that the software industry supports a **total of 9.8 million jobs**.
- **Software developers' average annual wage in 2014 was \$108,760** — more than twice as much as the \$48,320 average annual wage for all US occupations.<sup>2</sup>
- **R&D expenditures** in support of software development **accounted for more than \$52 billion in 2012**.<sup>3</sup> Domestic R&D paid for and performed by software companies accounts for 17.2% of all domestic business R&D.<sup>4</sup>

The promise of software is as limitless as the human mind. The next era of human achievement will be made possible through a combination of talented minds, software, and the industries that create using these powerful tools. Software will unlock infinite potential and in the process continue to grow and strengthen our national economy as a whole.

## METHODOLOGY

In 2016, BSA | The Software Alliance and the EIU collected and analyzed the most recent data available from several recognized and reputable sources. They include The EIU itself, IMPLAN, the National Science Foundation, the US Bureau of Economic Analysis, the US Bureau of Labor Statistics, and the US Census Bureau.

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.

## ABOUT BSA | THE SOFTWARE ALLIANCE

BSA | The Software Alliance ([www.bsa.org](http://www.bsa.org)) is the leading advocate for the global software industry before governments and in the international marketplace. Its members are among the world's most innovative companies, creating software solutions that spark the economy and improve modern life.

With headquarters in Washington, DC, and operations in more than 60 countries around the world, BSA pioneers compliance programs that promote legal software use and advocates for public policies that foster technology innovation and drive growth in the digital economy.

<sup>2</sup> US Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics. Data from May 2015.

<sup>3</sup> 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.

<sup>4</sup> National Science Foundation/National Center for Science and Engineering Statistics.