

GALLUP & AWS WORKFORCE STUDY ESTIMATES ADVANCED DIGITAL SKILLS GROW GLOBAL GDP BY \$6.3 TRILLION PER YEAR

Companies with high levels of digital skill utilization report annual revenues approximately 168% higher than companies that do not use digital skills.

WASHINGTON, D.C. — OCT. 12, 2022 — Gallup, in collaboration with Amazon Web Services (AWS), conducted one of the largest international surveys on digital skills to date to explore the value that digital skills provide to businesses and workers alike. The study found that advanced digital skills raise global GDP by an estimated \$6.3 trillion each year by boosting workers' income and productivity. When basic and intermediate digital skills are included, the total annual global value of digital skills is \$18.5 trillion — approximately 12% of global GDP.

To quantify how accelerating digitization will affect businesses and workers — and how they may not only contend with its future challenges but also benefit from it — Gallup gathered feedback from more than 30,000 working adults and 9,000 employers across 19 countries. Among the countries included are the United States, Canada, China, the United Kingdom, Germany, France, Italy, India, Indonesia and Brazil. Additionally, Gallup analyzed data on all advertised job vacancies across 33 countries — totaling more than 100 million openings — from June 2021 to May 2022 to further assess demand for digital skills and how much employers are willing to pay for them.

The study showed that workers gain progressive benefits as they gain more digital skills, with intermediate and digitally skilled workers commanding an income premium of 40% and 65%, respectively. Even workers who use basic digital skills — such as email or office productivity software — earn 25% more on average than workers who use no digital skills in high-income countries. For this study, advanced digital skills workers were defined as those who use programming languages or have skills in cloud architecture design and maintenance, software or application development, artificial intelligence, or machine learning. Examples of basic digital skills were limited to platforms such as email and word processing, while intermediate skills included drag-and-drop website design and data analysis. These individual income gains can be transformative for individuals and their families, but they also have a tremendous impact on national economies and global GDP. Workers with advanced digital skills generate an estimated \$4.2 trillion in annual GDP in the 19 countries included in this study and \$6.3 trillion globally due to these workers' income and productivity.

“The additions advanced digital skills workers add to global GDP through productivity is seismic,” said Gallup Principal Economist Dr. Jonathan Rothwell. “In addition to macro-economic benefits to businesses and governments, workers with advanced digital skills earn on average 50% more in high-income countries and 72% more in middle-income countries than workers with the same education and experience.”

The benefits go far beyond individuals, as organizations see significant benefits from employing a digitally savvy workforce. Gallup and AWS asked employers about how digitally skilled workers affect their business and found that organizations with high levels of digital skill utilization report annual

revenues approximately 168% higher than companies that do not use digital skills, after adjusting for factors such as company size and industry. When it came to company innovation, 72% of organizations that employ advanced digital workers reported introducing a new product in the past two years, compared with 47% of organizations that employ basic digital workers. Companies that run some or most of their business on the cloud were roughly five times more likely to have reported innovation in the past two years than companies that do not use cloud (66% and 13%, respectively).

Despite clear advantages for hiring digitally savvy workers, most organizations (70%) report hiring challenges when it comes to roles requiring digital skills. One factor for this hiring difficulty is that while only 31% of workers with advanced digital skills held a bachelor's degree or postsecondary equivalent, many employers said they maintain rigid bachelor's degree requirements — excluding over two-thirds of potentially qualified workers from the selection process.

Greater recognition of certifications can ease hiring challenges. Even with the strong preference for a bachelor's degree, nearly 75% of hiring managers agree or strongly agree that a certification or training is an acceptable substitute for an academic degree. Additionally, the study found that candidates who obtained a technology certification were more likely to get hired than individuals without one.

Note to media: If you wish to receive any additional information about the survey, including further demographic groups responses, please contact kristjan_archer@gallup.com.

About Gallup

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