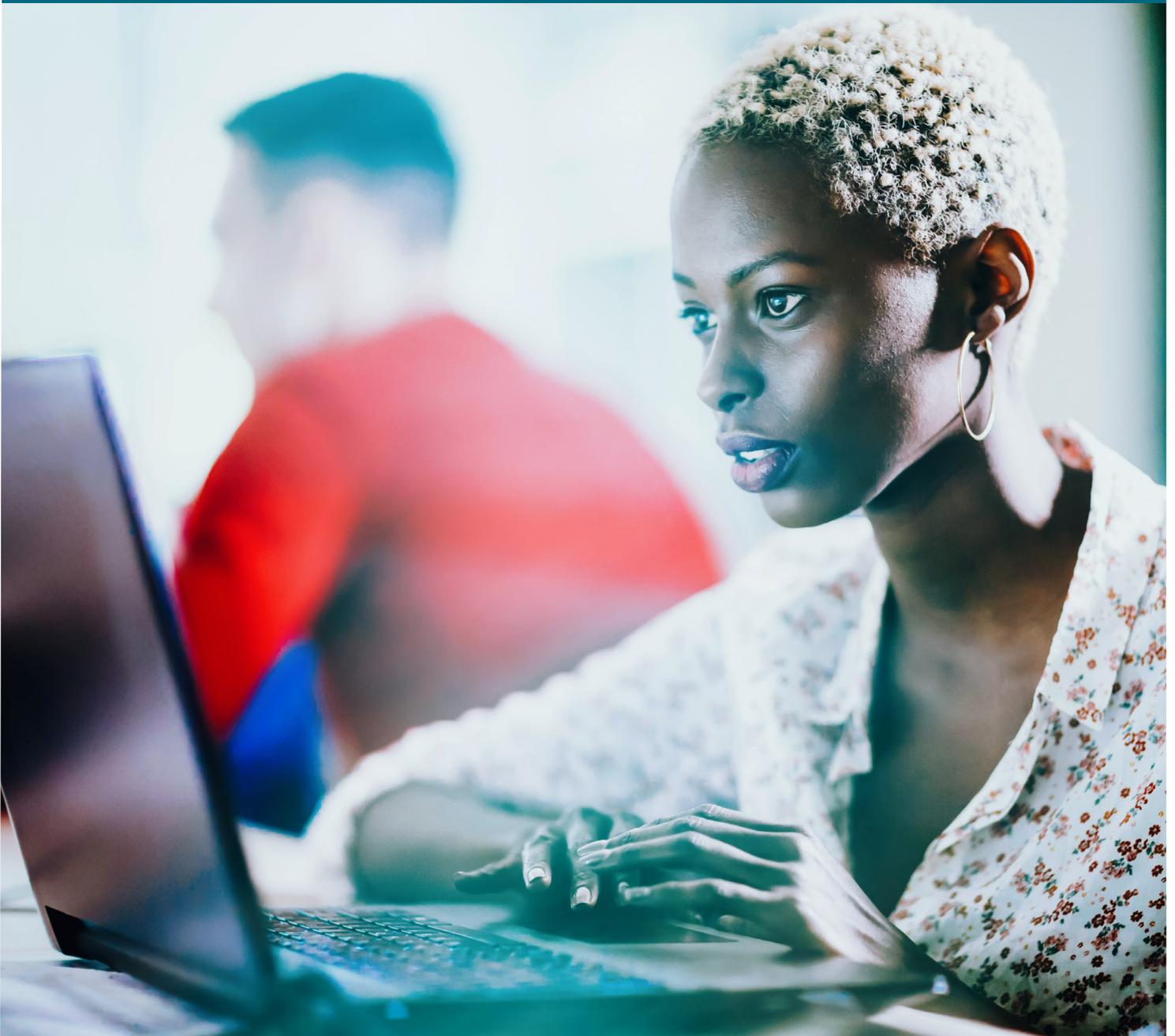


# The fight for power in the Fourth Industrial Revolution

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As the World Economic Forum takes place, topics such as the impact of artificial intelligence (AI) on jobs, Globalization 4.0 and how to solve the climate change crisis will be top of the agenda for global leaders.

But there is another topic that should be added to this year's program: the new power balance between nations in the Fourth Industrial Revolution.

## Shift from industrial heritage

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The current economic dominance of many nations can, in part, be tracked back to the industrial revolution. Industrialization accelerated **productivity, innovation, urbanization and new economic thinking** across large swaths of Western Europe and the U.S., establishing a foundation for prosperity reaped over the past century.

However, the Fourth Industrial Revolution is creating a shift in this legacy balance of power. Catalyzed by the speed of breakthroughs in the velocity, scope and systems used for the analysis and application of data, all industries are now facing significant disruption from the accelerated adoption of AI, the IoT, 3D printing and quantum computing.

## The new battle for power

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The winners of the new industrial generation will be those with data skills. Not solely the data analysts and data scientists, whose expertise have become a 21st century goldrush, but those countries – and on a smaller scale, organizations – where all individuals have a foundational skillset that will enable them to question and derive insights from data and machines.

Indeed, the **WEF Future of Jobs report** indicates that, in addition to more specialized data analysis and technical roles, technology-augmented work will increase significantly in the coming years. From ecommerce and digital marketing, to organizational development specialists, these roles will capitalize on data and automation to augment our creative and analytical thinking and decision-making skills.

Yet, the skills to process, analyze, interpret, and act upon the data amongst the general population are not increasing at the rate of this workforce transition. This skillset, which is commonly referred to as data literacy, empowers individuals to use data-driven insights to make better decisions.

Those cities, countries, and regions that best produce those skills will be the global leaders in the digital economy. Those companies that have a higher corporate data literacy have been associated with an increase in enterprise value of 3-5%. For the average organization that contributed to the research commissioned by Qlik and conducted by Wharton University (\$10.7b enterprise value), the **Data Literacy Index** identified an increase in enterprise value of between \$320-\$534 million.

However, currently **less than a quarter of global employees** are fully confident in their ability to read, work with, analyze, and argue with data. This significantly levels the playing field between many legacy global players and emerging nations.

**Asia appears to be particularly well-positioned to take advantage of this power shift.** Indian decision

makers already report the highest level of confidence in their data skills globally (46%), a significant lead on the second-most confident country, the U.S. with just 33% of data-savvy business leaders. In addition, the India, China and Singapore report among the highest percentage of workers that would be willing to invest more time and energy into improving their data skills (95%, 93% and 82% respectively). This significantly surpasses the willingness of legacy global players, including the UK and France, where just 65% and 63% would invest in their data skills if given the chance.

## Retaining global relevance

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For both global leaders and emerging countries alike, the key to thriving in the Fourth Industrial Revolution will be lowering the barriers to using data and technologies to augment the way we work.

There are three areas that should be considered to improve success in the Fourth Industrial Revolution:

**1. Upskill individuals** – Investing in the skills of the existing and future workforces so they are comfortable working with data will be critical to their individual and employer's success, as well as that of the nation's wider economy.

However, with the WEF Future of Jobs report revealing that current upskilling efforts are largely focused on already highly-valued and highly-skilled employees, it is clear that a greater commitment and collaborative effort is required from governments, education institutions and organizations to support the wider population.

For example, just **21 percent of 16-24 year-olds globally are data literate**, suggesting that education institutions are failing to ensure students have the skills they need to enter the working world. Re-establishing the curriculum to ensure that all future workers leave with a base level of data skills will be important to succeed in the future of work.

**2. Understand the business case and make better use of data** – Whether a public or private organization, it's important that leaders understand the opportunities for using data in the Fourth Industrial Revolution – and make the necessary changes to empower their employees to use it. Despite the boom in data over the past decade and nearly all business leaders acknowledging that data is important to how their company currently makes decisions, worryingly **just eight percent of firms have made major changes in the way the data is used over the past five years.**

**3. Make it accessible** – Whether in an enterprise or empowering citizen developers, improved data skills are completely redundant without the access to relevant data and tools that enable decisions based on its insights. The local government for the London Borough of Camden has exemplified the opportunity of opening up data sets. From creating a citizen Index across its different services to help identify and reduce fraud, to running Open Data Challenges workshops with local application developers to create apps using their data sets to help people consumer information about local services.

Whether or not it makes the Davos headlines this year, there is no question that the shift in global powers that the Fourth Industrial Revolution is catalyzing should be at the forefront of both national and industry leaders this coming year. The rapid evolution and adoption of technologies and agile working processes, which have defined an economic generation, shows there is no time to waste in adapting and pursuing the new opportunities it presents.