



# What's your superpower?

AI redefines what is possible

# From fiction to fact

Most people probably think of superheroes as fictional characters who can fly, become invisible or otherwise defy the laws of physics. Although superheroes remain hard to come by in real life, organizations are starting to enable some real types of “superpowers.” No longer relegated to pithy t-shirt text, as in “I’m a teacher — that’s my superpower,” artificial intelligence (AI) can help employees exceed their prior capabilities. Because AI can ingest and curate massive amounts of data to augment performance, and generate better insights and actions, it has the potential to change how people work and live. Superpowers may no longer be completely fictional, thanks to AI.

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## Superheroes among us

Innovative employees are integrating data scientist-like capabilities with their own skills in more professions and occupations than ever. In fact, over time, these capabilities will be increasingly available and may become key performance differentiators that drive the way companies and workers compete.

In that sense, AI can help employees become “superheroes.” Unlike humans who can easily become overwhelmed with complexity and data, AI does not. It helps people understand and analyze a combination of internal, external, structured and unstructured data.

Who are these new superheroes? They are doctors, financial advisors, supply chain managers, retailers, cybersecurity analysts and innumerable other professionals. They are using AI to make the impossible possible by augmenting and expanding human capabilities.

Consider doctors who, given many competing pressures, typically are only able to read medical journals a few hours each month. Some hospitals are now distributing AI-enabled capabilities through the cloud, so doctors can potentially access and apply new insights, validated procedures and medical innovations the moment they are shared.

Similarly, consider how a physician at a huge urban medical center currently has much more access to information than a small-town doctor, or a physician in a less-developed country. By synthesizing and distributing global insights, AI can help equalize information disparities among medical professionals around the globe.

This augmentation of capabilities can give such technology-enabled superpowers to employees, which allows them to reinvent themselves in a sense. Indeed, AI can increase the consistency and quality of information, which could change what was recently considered exceptional performance into expected, everyday performance.

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## Jobs, jobs, jobs

A 2017 survey of 1,850 business leaders on the state of work showed that by the year 2020, 86 percent of companies say they will require intelligent automation to keep up with the pace of work.<sup>1</sup> What impact is automation having on jobs — especially skilled jobs? Although jobs in some industries may change, history tells us that advances in technology are strongly associated with significant job gains.

In the United States, for example, between 2001 and 2015, despite the global financial crisis, a net growth of 11.5 million jobs was realized because of a strong shift toward knowledge-based industries.<sup>2</sup> If history is any guide, AI will likely change most jobs and have a powerful and growing positive effect on human performance.

Although it does not literally defy scientific principles, AI can indeed make the impossible possible. Opportunities are manifold to help employees perform like superheroes.

For a product manager, using AI to collect, analyze and act on massive amounts of data can result in forecasts that exceed 99 percent accuracy.<sup>3</sup> As recently as ten years ago, the marketing profession was often relegated to an “art,” but now with advancements in gleaning insights from big data, it is already deep into its transformation by embracing statistics and science.

Planners can forecast with much greater confidence and accuracy when they can use AI to foresee the impact of competition and access much more available behavioral and market data. For lawyers, judges, notaries, accountants and other similar professions, the work balance will dramatically shift from fact-finding to reasoning, deep learning and human interactions.

Today, cybersecurity analysts must cope with 400,000 new forms of malware and 200,000 security events every day.<sup>4</sup> With AI, security professionals can access countless conclusions from a multitude of security analyses in real time and identify relevant insights that might help.

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## Defying physics

### **Tough challenge, big rewards**

The first time comic book hero Superman learned to fly was probably a scary experience. In honing their own AI superpowers, employees will have to learn new skills and become comfortable with them over time. People will marry digital know-how and insights with analog human tacit knowledge, empathy and creativity. Integrating these abilities is essential to help employees realize new skills and higher caliber performance.

For organizations as a whole, “new learning” is the mantra. As people gain instant access to relevant expertise and experience, traditional knowledge barriers and hierarchies will diminish. Skills that were not previously relevant or discovered will become crucial to taking full advantage of AI capabilities. Organizations and processes will need to adapt as change accelerates.

Traditional spans of control may grow for many jobs, while self-sufficiency and self-direction can offer greatly expanded responsibilities and more job satisfaction. This change has vast consequences for what and how leaders lead and managers manage. In many cases, digital natives are likely to lead the way.

### **Managing the transition**

Taking advantage of technology-enabled superpowers will require organizations to change how they are structured and operate. Strategy, skills and habits will need to change, and the demand for data science expertise will increase to enable data sharing across ecosystems. The transition will be challenging for many employees.

Decades ago, driving a car was a highly specialized skill. But as cars became widespread and easier to operate, driving became less specialized. Each driver became responsible for learning new features, new rules and traffic regulations, and adapted as much as necessary to continue enjoying the benefits of cars. As we enter an era dominated by driverless cars, driving efficiency is expected to improve dramatically. Learning can be networked. For example, when there is a new road, detour or law, for example, an entire fleet can be upgraded at once, as opposed to individual drivers who must find out about such changes through their individual experiences or disparate information sources.

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## Getting started

Today, when a new skill is needed, each individual must invest the time required to develop expertise. In a world of AI, every person in an entire organization has the potential to excel in his or her profession because what is learned by one person remains continually available to all. And once learning has taken place and employees experience their own superpowers, ideally they will feel more confident each time they “fly.”

For businesses, becoming part of the “AI era” does not have to be daunting. Here are a few simple steps to help you begin.

- Start now. Use design thinking to select a starting point where AI can play a role. Define value by building a use case and identifying the desired business outcomes. Articulate external impacts to customers or user experiences.

- Change processes and train staff. Think through the direct impact of this first initiative and how it may relate to subsequent efforts. Create a center of competency to start building awareness and skills to support AI strategies and technologies.
- Measure outcomes. Create an objective milestone scorecard to measure success. Consider leveraging the experience of experts, especially those who have helped other industries and professions achieve success and understand AI measurements.<sup>5</sup>

New ideas and value are being created at an unprecedented rate. AI systems are best thought of as aids that strengthen human capabilities. Over time, AI systems can allow employees to do more of what they like to do, and become better at what they do continuously — at speeds and volumes previously inconceivable. How will you help your employees to unlock more value with AI? How will you help them become superheroes?

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## Notes and sources

- 1 “Today’s State of Work: At the Breaking Point.” ServiceNow. 2017 <https://www.servicenow.com/content/dam/servicenow/documents/whitepapers/sn-state-of-work-report-2017.pdf>
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- 3 IBM customer data from a major pharmaceutical company
- 4 Corbin, Jason. “Bringing the Power of Watson and Cognitive Computing to the Security Operations Center.” Security Intelligence. February 13, 2017. <https://securityintelligence.com/bringing-the-power-of-watson-and-cognitive-into-the-security-operations-center/>
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