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# Managers and machines, unite!

Three things managers must do to make the most of cognitive computing

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Intelligent machines are poised to dramatically shift management roles as we know them. But many organizations aren't prepared to take full advantage of the change that lies ahead.

# The rise of intelligent machines

Organizations are just starting to use intelligent machines information systems that sense, comprehend, act and learn to automate some of the more routine, rules-based tasks that take up so much of managers' time.

Coordinating processes, monitoring performance, and scheduling resources and activities are prime candidates for automation. With such applications, companies will save money. But intelligent machines will also free managers to focus on more strategic issues and activities. That's the game-changing opportunity.

Intelligent machines inform better, faster decisions. They enable managers to shift their focus to activities that call for decidedly human traits such as complex thinking and higher-order reasoning. Providing guidance and recommendations, machines complement managers' expertise, experience and ethics, as well as their ability to experiment and innovate. In all these ways, intelligent machines open the door to "judgment work," which values intuition as much as, if not more than, know-how. Our discussions with industry leaders on the topic of intelligent machines revealed they are particularly excited by the possibility for machines to augment managers' decision-making capabilities.<sup>1</sup> For them, the real potential lies in helping managers unleash an organization's creative potential, capture new growth opportunities, and lead a more empowered workforce of the future.

# Three issues not covered in the owner's manual

CEOs and their leadership teams are understandably excited by the prospects of a more dynamic managerial workforce. But what do managers think? How do they feel about the incursion of intelligent machines in their work? Are they really prepared for the shift that is under way?

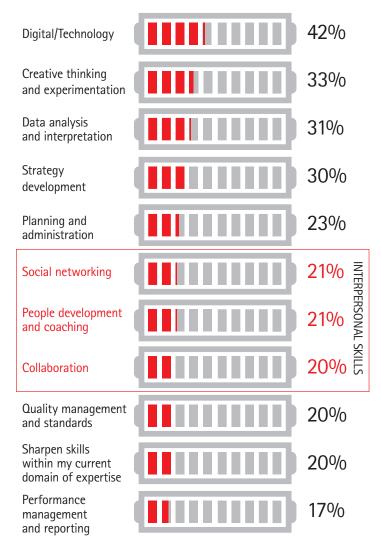
The overwhelming majority of managers believe machines will make them more effective and their work more interesting. That's one of the findings of a firstof-its-kind study of the impact of cognitive computing in management by the Accenture Institute for High Performance and Accenture Strategy (see Methodology for more detail). However, the survey also revealed three issues that might affect an organization's ability to make the most of a manager-machine union.

#### Managers underrate human skills

Managers aren't convinced they're ready to thrive in a workplace with more intelligent machines. Over half (57 percent) responded that their current skills are lacking. More troubling is the fact that managers have an incomplete understanding of what they will need to thrive in a partnership with intelligent machines. A number of them recognize the need for digital skills, creative thinking and strategy development. And that's important, because those are, in fact, skills they'll need to manage business complexity and growth. What they overlook, however, is the importance of the interpersonal skills they will need to manage their people. They ranked social networking, people development and collaboration 6th, 7th and 8th in importance. Only about a fifth of those we surveyed thought these skills would be important to their roles in the future.

That's a potential problem because managers will need to inspire their teams and enable them to succeed. They will need to learn how to interpret the analyses and recommendations those machines provide to ask the right questions and improve decision making. And they will need to develop, coach and collaborate with others to drive experimentation and innovation across the organization.

## Managers believe their roles will need the following skills in 5 years (top 3 skills selected)



Source: Accenture Institute for High Performance and Accenture Strategy, "The Impact of Cognitive Computing in Management", 2015.

#### Resistance is stronger than leaders think

Our findings suggest a paradox among respondents. On the one hand, managers at all levels (84 percent) believe machines will make them more effective and their work more interesting. Yet only 14 percent of first-line managers and 24 percent of middle managers would readily trust the advice of intelligent systems in making business decisions in the future. By contrast, nearly half of senior executives (46 percent) would readily trust the advice of intelligent systems.

How can leaders close the trust gap? When asked what would allow them to trust a system's advice, first-line and middle managers selected: providing a solid understanding of how the system works and generates advice (60 percent); choosing a system with a proven track record (55 percent); and ensuring that the system explains its logic (49 percent). By satisfying these three conditions, leaders will be better positioned to capture the synergies that are possible when machines augment managers' performance. Without trust, it's unlikely an organization will be able to do more than automate a few routine managerial tasks.

# 84 percent of

managers at all levels believe machines will make them more effective and their work more interesting.

#### The path to value is unclear

Managers believe the greatest value of intelligent machines lies in machines' abilities to augment, not automate, their work. Of 11 core management tasks, they deem only one—monitoring and reporting performance—to be a serious candidate for automation.

The good news for leaders is that opportunities abound. Augmentation can take many forms. Some managers will use intelligent machines to work smarter and faster. Sales managers, for example, might access machines' near real-time analyses to adjust promotional campaigns or pricing in direct response to demand fluctuations. Intelligent machines could help department heads by taking over routine and time-consuming tasks such as management and financial reporting, allowing managers to spend more time on strategic planning or the development of new products and services. And for others, intelligent machines will open doors to new opportunities, responsibilities and ways of working. For example, machines can now analyze the characteristics of job applicants, predict which ones will leave, and recommend strategies to get them to stay. HR managers can use those insights to deliver on the promise of customized HR-developing personalized coaching programs and targeted interventions in a scalable way.

The potential for machines to elevate managerial performance is exciting—but relatively unknown. Given how recently intelligent machines have entered the scene, there is no well-worn path to follow. But that should not stop a cognitive computing rollout in its tracks. Leaders should seize the opportunity to use their human skills of experimentation to unearth innovative ways to tap this new potential.

# Intelligent leadership in the age of intelligent machines

CEOs and their leadership teams have a responsibility to ensure their managers are prepared to take full advantage of the change that lies ahead. Here are three things they can do to facilitate the shift:

#### Sharpen the human edge

To thrive, managers must have skills and behaviors that will drive organizational performance. These include analytical reasoning, digital know-how and business acumen. But they also need interpersonal skills to build teams, foster innovation and encourage new ways of working.

To achieve the right skill levels and blend of capabilities, leaders will likely need to revise their organizations' existing training and coaching programs, as well as individual performance criteria. The reality is that some existing managers won't be able to make the shift required. For that reason, leaders will need to look outside their organizations for managers who excel in judgment work and are comfortable working with machines. This means revisiting and realigning talent sourcing, development and reward strategies.

#### Rally the troops

More than simply identifying the right smart technologies for their business, leaders must inspire their managers to embrace new ways of working. They need to tap their own interpersonal skills to create excitement about how intelligent machines will shape the future of work. As part of this, they will need to convince their first-line and middle managers of the value of intelligent machines. And they will need to educate their managers (and themselves) about how machines do what they do.

In addition to promoting intelligent machines as trustworthy advisors, leaders must present themselves as trustworthy advocates of change. Accenture Strategy's analysis of 250 major change initiatives at more than 150 organizations<sup>2</sup> has confirmed that organizations with trusted leaders can implement and accelerate change without first having to educate employees about the specific details. This suggests that managers will be more likely to commit emotionally to the introduction of cognitive computing if they trust the leaders at the helm. Building trust will require clear and honest communications from day one. It also calls for leaders to involve managers in the change. They should encourage managers to share their insights, suggestions, opinions—and even their fears—at every step of the journey.

#### Chart a course of discovery

Businesses are just starting to scratch the surface of what is possible when intelligent machines take over certain tasks and complement others. There are a lot of unknowns, which means leaders and their managers must be willing to experiment to identify machine uses that make the most sense for their organizations and their teams. Launching targeted experiments and learning from them in a structured way will help them zero in on higher-value opportunities.

Ideally, CEOs should strive to create a union of managers and machines that does more than automate tasks or augment managers' performance. The most successful long-term unions will multiply the value that managers or machines are able to deliver on their own. Leaders can't rely on intelligent machines to show them the way forward. For that, they will need to rely on experimentation, past experiences and their intuition. They will, in effect, need to engage in judgment work of the highest order.

## Toward a more perfect union

There is significant potential for intelligent machines to improve enterprise performance at the management level. But to take full advantage of what the cognitive computing revolution has to offer, leaders must ensure that their organizations have the capacity to change. Those that get it right will create a culture of experimentation and trust among leaders at all levels. They will be the ones to unlock the potential of the workforce of the future.

### Join the conversation

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### Endnotes

I From April 2014 through October 2015, the Accenture Institute for High Performance conducted 37 executive interviews that incorporated insights from seven distinct industries and nine countries on the topic of leading the digital enterprise. In doing so, clients shared their experiences on their company's digital transformation efforts, industry developments, the evolution of their roles in relation to digital disruption, and how to keep up with increasingly tech-savvy employees and customers.

2 These initiatives included restructurings, acquisitions, technology implementations, cost reductions, downsizings, and new product entries. The organizations studied were across a wide range, spanning 50 industries and 25 countries.

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## Methodology

In August/September 2015 the Accenture Institute for High Performance surveyed 1,770 first-line, middle-level and executivelevel managers from 14 countries, representing 17 distinct industries. The goal of this survey was to assess the potential impact of cognitive computing on these managers' jobs, and also understand their perceptions of their current tasks and skills, as well as the future of their positions. We defined intelligent machines as computers and applications that collect and analyze data, make informed decisions or recommendations for action, and learn from experience.