Judgment calls
Preparing leaders to thrive in the age of intelligent machines
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When intelligent machines enter business en masse over the next few years, organizations will have an unprecedented opportunity to unleash the true potential, and the true value, of their workforce of the future.

That’s because artificial intelligence (AI) will enable managers to make faster, more thoughtful, collaborative decisions. As machines take on routine tasks like planning, scheduling and optimization, managers will be freed to focus on strategic and more creative work, applying intuition and ethical reasoning to make the judgment calls that even the most advanced machines can’t.

Unfortunately, many managers simply aren’t prepared to make the transition. And that’s a problem.

In a world that increasingly rewards speed, innovation and agility, the quality of “judgment work” will quickly become a key business differentiator in the years ahead. Organizations might opt to postpone action until the need for judgment workers is more obvious. But as we’ve learned from organizations that have experienced a shortfall of analytical talent in recent years, a “wait and see” approach can have a detrimental effect on growth and competitive advantage.

Now is the time for organizations to put programs and practices in place that will enable a new breed of judgment workers to flourish.
You be the judge

Managers currently spend a great deal of time scheduling resources, managing routine activities, planning work, and monitoring and reporting performance.

As described in *Managers and Machines, Unite!,* these are the same tasks that managers expect to be most impacted by intelligent machines in the future. When machines assume these "coordination and control" activities, some management roles will inevitably go away. Others will expand. And that’s the golden opportunity.

When managers are no longer chained to routine and lower-value activities, they will have the opportunity to manage ideas, innovations and relationships and make better decisions that will grow the company. They will be free to take on more of what we consider “judgment work.”

Many managers, of course, already do a lot of judgment work. But the truth is that mundane responsibilities often prevent managers from tapping into their intellectual curiosity and giving more strategic judgment work the attention it deserves. Intelligent machines are poised to change this.

In the future, leaders are accelerating into judgment work

| 34% | Experiment, analyze, and learn: Gain more business insights, focus on innovation activities, adopt new responsibilities and skill sets. |
| 25% | Coordinate and control: Improve performance management and reporting, enforce standards and improve routine tasks. |
| 41% | People and relationships: More time with customers and suppliers, more collaboration, more coaching/feedback. |

Judgment work defined

Simply stated, judgment work is human work. It is about applying intellectual curiosity, experience and expertise to critical business decisions and practices when the information available is insufficient to suggest a successful course of action. Accenture interviews with industry leaders\(^1\) revealed three broad categories of judgment work:

**Discernment**
While intelligent machines are useful in revealing patterns and correlations, they are unable to interpret the true meaning of numbers, statistics or even words. Marketing organizations have been among the first to recognize the distinction. They can use algorithms, for example, to calculate the economic impact of a marketing campaign on sales growth. But it takes human wisdom and experience to assess the relative importance of promotions that generate near-term sales and investments that build long-term brand equity.\(^2\)

**Abstract thinking**
When human beings provide rules and descriptions, intelligent machines are remarkably good at identifying classes of objects (e.g., different kinds of animals in the massive volume of photographs on the Internet). But without human guidance, computers are incapable of the "outside the box" thinking that, say, led Uber’s founders to see the potential of on-demand transportation services delivered by everyday people using their own cars.

**Contextual reasoning**
When managers don’t have all the answers or information they need to make a fully informed decision, they fill in the “gray areas” with historical, cultural and interpersonal context. Successful venture capitalists, for example, use contextual understanding to underpin their investment strategies.\(^3\)
What’s clouding your judgment?

The rise of intelligent machines holds particular promise for organizations that know their future success will be driven primarily by a workforce of the future where managers stop managing and start leading. Unlocking innovation and capturing new forms of value not only requires better and faster decisions. It requires the ability to inspire and show the way. But transitioning to judgment work will only happen if managers are enthused, encouraged and equipped to make the shift. Our research suggests that two main obstacles could stand in their way.

Managers don’t consider judgment a “team sport”

The best judgment is “collective” judgment that harnesses diverse perspectives, insights and experiences—even from external stakeholders. Yet, managers often ignore the interpersonal and social activities or time investments that underpin collective judgment. One in three managers recognize the need to boost their abilities in judgment-related areas such as creative thinking and experimentation, but only one in five rank networking, coaching and collaboration among the skills they will need in the future. And without those skills, it will be exceedingly difficult for them to tap into the knowledge and judgment of colleagues, customers, other stakeholders, and even role models in other industries.

Equally troubling, more than half of managers believe that the importance of tasks associated with hiring workers, developing talent and building community will go down or remain the same. That suggests they are likely to rely on their old talent practices in the years ahead.

Managers don’t appreciate all that intelligent machines can do for them

Intelligent machines can accelerate decision-making and learning and make human judgment better. They can, for example, improve managers’ relationships with peers and fellow decision-makers. As described in IQ plus EQ: How technology will unlock the emotional intelligence of the workforce of the future, analytics and artificial intelligence can help improve managers’ abilities to read the emotions of others and their social skills. For example, intelligent machines can analyze positive and negative language during interactions with customers and employees and provide that feedback to managers. These interpersonal skills will be critical to enabling a collaborative mindset around judgment.

Only 1 in 5 managers selected networking, coaching or collaboration among the top new skills they will need in the future.
Intelligent machines also make it easier—and less risky and costly—for managers to test hypotheses or conduct search and discovery exercises. R&D managers can use machines to produce data models that will help them place the right bets on new products or services. Marketing managers can use the analyses generated by intelligent machines to design data-driven customer experiences. And investment managers can use intelligent machines to recap quarterly earnings of thousands of companies and pinpoint key stocks worthy of more in-depth analysis.

Unfortunately, many managers are blind to the fact that intelligent machines can help them be more effective in applying judgment to drive organizational performance, growth, agility and innovation. Millennials are more accepting of intelligent machines. Eighty-three percent of them trust advice from machines (compared to 66 percent of baby boomers). Also, millennials have embraced the need to learn more creative-thinking and analytical and interpretative skills. In contrast, baby boomers tend to focus on sharpening current skills.

These findings suggest that as millennials advance in their careers, their appreciation of intelligent machines will continue to push the boundaries of machine-assisted judgment work. They also suggest that millennials can offer unique and valuable perspectives to today’s more experienced executives through mechanisms such as shadow advisory boards.

83%
of millennials trust advice from intelligent machines.
Making judgment the business differentiator of the future

We believe there are three fundamental things organizations can do to create a workforce that is differentiated by its ability and desire to place judgment work at the center of all they do.

Build judgment muscle | Executives need to understand not only the importance of judgment work to organizational success, but also the role that intelligent machines can play in making judgment better. At the same time, they need to recognize the characteristics of successful judgment workers. These workers possess intellectual curiosity, a talent for discernment, a passion for learning, and an openness to feedback—even when it hurts.

Once they've identified their judgment champions and set their judgment goals, organizations are ready to build their judgment muscle. They can do this by presenting opportunities for managers to make choices, experiment, practice applying judgment (and learn from mistakes), and rapidly incorporate lessons learned.

Reward new sources of value | Spotting, developing and rewarding judgment will require new metrics, talent selection and development programs, and incentives. In the age of intelligent machines, it will make little sense to compensate managers based on their numbers of direct reports or their control and coordination activities. Managers will need to be rewarded for the ability to develop and lead their teams effectively and uncover new sources of value. Executives also will need to continually encourage curiosity—not only by providing opportunities for managers to hone their judgment skills, but also by implementing programs that encourage managers and employees to apply those skills to grow the business.

Build a network that boosts judgment | To make the most of available information, managers will need to become adept at working across boundaries. Cross-functional teams and ecosystem networks that include internal and external stakeholders will become the norm. To support this collaborative environment, organizations will need to establish talent practices that encourage collective judgment. Performance reviews will be based not only on decision outcomes, but also on managers' attempts to expand their thinking, skills and relationships. Managers might be rewarded, for example, for tapping a new source of guidance such as a shadow advisory board, creating innovative alliances to access new ideas, or seeking the advice of an expert from another domain.
Trust your judgment

As intelligent machines become ubiquitous over the next five years, organizations will face a stark choice. They can either wait to see if they will have the judgment workers they need. Or they can take steps now to ensure their future leaders will be able to focus on more strategic, more thoughtful, more creative work. We believe the decision is clear. Organizations cannot develop judgment skills and talent overnight.

The time to act is now.
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Notes

1 From April 2014 through October 2015, the Accenture Institute for High Performance conducted 37 executive interviews 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.

