

# How to build AI with (and for) everyone in your organization

Becoming an AI-driven business requires contributions from your entire workforce. While the transformation takes time, several tactics can begin democratizing AI now.

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**It has often been said** that crisis reveals character, a truism for organizations as well as individuals. Crises compel organizations to rethink how they work, and often become the source of lasting change and growth.

After the 2000–01 recession, for example, 15 percent of companies that had not previously been leaders in their industries emerged as stalwarts in their sectors and moved into the top quartile. Likewise, while most retailers did poorly after the Great Recession of 2007–09, a handful showed their mettle and delivered more than five times the average total returns to shareholders.

Few would argue that the COVID-19 pandemic is more devastating than these events. It is a humanitarian crisis of the likes we have not experienced in recent times. The work organizations face to safeguard their employees' lives and livelihoods is formidable. As companies work to regain their footing from the vast human and economic toll, artificial intelligence (AI) is poised to play a pivotal role. The pressure for organizations to adopt AI was already mounting before the crisis as the technology delivered returns to early adopters. The COVID-19 crisis has only elevated the technology's prominence, with many companies using AI to quickly triage the vast challenges they face and set a new course for their employees, customers, and investors in an uncertain, rapidly evolving landscape.

While it's always been important to involve the entire organization in building AI, now more than ever leaders need to empower employees to actively shape their AI journeys. Importantly, engaging all employees—not just technical talent—in AI development ensures that AI solutions truly augment employees in their roles so they can do their jobs better and more efficiently, and it stimulates employee ingenuity, confidence, and flexibility to continually adapt as the next normal begins to reveal itself.

Additionally, enlisting the workforce in these efforts enables them to begin to develop some of

the skills needed as AI ultimately reshapes the future of work. While it's expected that less than 5 percent of jobs can be automated completely,<sup>1</sup> AI and related technologies will change the nature of many current roles, placing greater emphasis on tasks requiring technological, creative, and critical thinking skills (among others), which get flexed in the build-out of AI tools.

Such engagement doesn't happen easily in most cases. For traditional companies, transforming into an AI-powered organization involves substantial work. They must, for example, fundamentally change their cultures into ones that embrace data, experimentation, and agile principles—all traits that the digital natives heavily and successfully using AI today (for example, Amazon and Google) are typically born with. They'll also need to develop tailored analytics-education programs for all levels of employees, redesign processes, source new technical talent, and revamp their technology architecture (for instance, by embracing the cloud to ensure that they have the capabilities to support resource- and data-hungry AI systems).

However, we find that while these transformational steps are under way, there are some relatively simple ways executives can help their employees understand where they fit in and become active participants in charting an organization's path toward AI. In this article, we share how leading organizations are getting the ball rolling.

## **1. Demystify artificial intelligence**

With press articles often homing in on the spectacular (and sometimes unrealistic) uses and effects of AI, it's understandable that many people have reservations about adoption of the technology in the workplace. One of the easiest steps for facilitating a practical understanding of AI is simply to demystify it by explaining how employees can use the technology to amplify their day-to-day efficiency and effectiveness (exhibit).

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<sup>1</sup> "Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages," McKinsey Global Institute, November 2017, on McKinsey.com.

In general, we find that AI can offer five broad benefits to employees:

- **Foresight.** AI's predictive capabilities allow employees to predict more accurately everything from potential equipment failures on the manufacturing floor to the next-best product a customer is likely to buy.
- **Assistance.** AI can save staff time by providing ready access to the data needed to answer questions and by automating time-consuming activities, such as claims processing, basic customer-service interaction, and inventory tracking.
- **Expertise.** The expertise that AI provides to employees is especially helpful when such expertise is scarce and difficult to source. For instance, a sales leader can use AI to surface and replicate the knowledge of the top sales reps, including how they choose which clients to visit, when to visit, and what to say, across a global sales team. In manufacturing, factory personnel can use AI to identify the root cause of machine failure and mitigate critical operational bottlenecks when specially trained teams of engineers are not available on site.
- **Explanation.** AI can help staff understand not just what customers prefer but why they prefer it. For instance, a regional director can use AI to understand how weather, route changes, and competitor price changes affect sales.
- **Simulation.** AI enables simulations that allow testing of nearly all potential scenarios before making a decision—a capability inherently beyond the purview of human cognition. For example, by using AI to simulate an event, a pricing analyst can understand the impact that price reductions might have on profitability in dozens of markets with varying degrees of competitiveness.

Companies can share these different opportunities with their employees as stand-alone activities or use the categories as a framework within the context of other activities designed to educate and engage staff. For example, one North American

airline conducted an ideation session with its key stakeholders responsible for demand forecasting, fleet-profitability analysis, and route scheduling to discuss how they could use AI to solve critical business challenges. Session leaders shared with more than 15 participants, including directors and midlevel managers, the different uses of AI we have described. Participants then used the framework to create a list of how they might use AI within their workflows and what value it might provide. One participant noted that she spent a great deal of time managing long-term flight schedules by hand for reporting, a process that took her away from higher-value activities. Another employee highlighted how improving forecasting could help better identify which routes to add.

Once each participant created a list of challenges, they worked together to consolidate similar ideas and then pick five use cases for the analytics center of excellence (COE) to evaluate. In voting on which to prioritize, participants were asked to consider both the potential impact the use case could deliver and the feasibility (given the data and five broad categories of benefits the AI team provided). The analytics COE then used the participants' list as a starting point, assessing potential use-case value, data requirements, feasibility, and technology needs for each and creating a plan of attack for two important use cases.

## 2. Develop trusted artificial-intelligence advocates

In our experience, leaders at every level (from the C-suite to functional managers) must have the knowledge to instill widespread understanding of AI among their employees. While there's no substitute for formal training through an analytics academy (which provides tailored learning journeys to help executives effectively identify AI opportunities and manage change), less formal educational activities (such as half-day education sessions, monthly seminars, and small-group discussions) can be effective to begin building knowledge and support.

The analytics COE at one automotive distributor uses monthly "lunch and learn" sessions to educate functional leaders and business managers on how AI capabilities, such as image recognition,

**Artificial intelligence offers five broad benefits to employees.**

How AI can help		Who might benefit? (selected examples)		
<b>Foresight</b>	Shines a light on the future; helps employees more accurately predict what's next	<b>Engineers</b> can predict catastrophic failures on jet engines and schedule appropriate preventive maintenance	<b>Inventory managers</b> can use data from radio-frequency identification tags to respond more quickly to changing stock levels	<b>Airline pricing analysts</b> can forecast how many people visiting their websites will book tickets, and then accurately price fares in more than a dozen markets
<b>Assistance</b>	Saves staff time by providing ready access to data needed to answer questions and by automating time-consuming activities, allowing staff to focus on higher-value activities	<b>Loan processors</b> can focus on process optimization when AI automates back-office tasks	<b>Customer-service representatives</b> can spend time solving complex customer requests when AI chatbots serve as first line of service for online inquiries	<b>Manufacturing-floor staff</b> can use their time to solve production and distribution challenges when AI tools flag faulty parts on production lines
<b>Expertise</b>	Captures and proliferates human expertise by analyzing what the experts do and then distributing resulting information to others in a digestible format	<b>Sales directors</b> can surface and replicate top sales reps' intuition across global sales teams	<b>Factory personnel</b> can identify root causes of machine failures when specially trained engineers are not on site	<b>Caregivers</b> can access volumes of knowledge buried in scientific research and clinical data to develop personalized treatment recommendations for patients
<b>Explanation</b>	Surfaces not only what customers prefer but also why they prefer it	<b>Regional retail directors</b> can understand how weather, route changes, competitor price changes, promotions, assortment adjustments, and customer-service ratings affect sales	<b>Product developers</b> can use AI to optimize product designs, uncovering exactly what customers want, even when customers cannot articulate it	<b>Fleet managers</b> can understand why fuel-consumption increases are happening faster than rate-of-mileage increases, despite more fuel-efficient vehicles and use of route-optimization software
<b>Simulation</b>	Rapidly analyzes millions of combinations to help employees test efficacy of different decisions under different conditions	<b>Executive teams</b> can understand likely ranges of outcomes resulting from acquisitions of suppliers	<b>Clinical-trial coordinators</b> can simulate drug delivery to identify lowest-risk candidates for clinical trials	<b>Event coordinators</b> can analyze millions of scheduling permutations to identify best choices to maximize participation

can help them solve problems similar to the ones they face. Following the center's presentation on a particular technology, participants then discuss over lunch how they might apply it to their respective business functions. While there's always participation from a plurality of functional teams and their leadership, the analytics COE works to ensure that there's strong representation in each session from those groups that would especially benefit from the presented material (for example, targeting invitations to key supply-chain staff when the presentation will be on anything related to operations research).

These lunch-and-learn sessions, along with more formal translator and executive training, have helped bring business staff into the AI fold, leading to an active use-case pipeline, with nearly 20 of 25 current AI initiatives coming directly from AI advocates in the business. For example, it was inventory leaders who introduced to their analytics COE the concept for a new AI-powered inventory-management system that tracks warehouse inventory using drones and analyzes the images to help staff identify products that aren't selling. Following this brainstorming session, the analytics COE moved quickly to run up a small-scale pilot in one warehouse to test the idea with business sponsors and learn what was possible with this technology.

### **3. Bolster existing business-intelligence efforts**

In addition to developing AI champions, we also find that encouraging employees to use their companies' existing business-intelligence tools, from dashboards to visualization software, on data they already have can set in motion a culture of exploration vital to an AI-driven organization. As employees become more accustomed to using self-service analytics tools, they become more comfortable digging into the data to test hypotheses. In time, they begin to trust the data more, and they become more data driven. Ultimately, such mindsets can help better prepare employees for using new AI systems and inspire them to brainstorm proactively how AI could help them tackle business challenges they face.

One consumer-packaged-goods company launched a global ambassador program, along with community events and email campaigns, to spread the word about available data-visualization tools. Within 15 months, 20 ambassadors, representing different markets and functions, received training on how to educate and encourage employees to use these business-intelligence tools, helping scale their self-service analytics capabilities beyond North America to 40 percent of their markets globally.

### **4. Highlight common ground**

Many companies have launched efforts to provide transparency into AI-based decisions both to meet regulatory requirements and to facilitate trust in AI insights, especially when they contradict long-held beliefs. However, beyond addressing the broad technical and governance work necessary to explain AI outputs, one North American organization found that simply sharing instances in which AI validates employee knowledge and expertise can foster greater trust in the technology—an important first step toward bringing all employees into shaping how AI is used in their organization. Facing continued budget constraints, the organization's leaders wanted to empower their employees with greater insight into supply-chain and procurement decisions so they could better time their decisions and achieve the greatest impact within existing budgets. Traditionally, managers worked in silos, making the best decisions possible for each of their functional areas. But because no one had a holistic view, they were unable to evaluate and determine the potential impact of any given decision on the entire supply chain.

Managers were conceptually on board with using AI to forecast the downstream effects their decisions might have, recognizing that the lack of end-to-end visibility made their jobs more difficult and could ultimately result in less than optimal decisions. Nevertheless, it wasn't until the managers saw that the tool validated several of the underlying trends that they long believed to be true (but couldn't prove) that they truly became engaged. They began asking more questions to

understand better how the technology worked and how they might use it to address other potential challenges they faced. This led to requests for additional AI education, which, in turn, energized managers to voice ideas for new use cases.

## 5. Personalize the benefits

While businesses often recognize the need to have processes in place that assess the potential value of AI to the organization, they should also ensure that AI provides direct value to employees. Communicating that value can help transform AI from something “they” (technical experts) do to something “we” (for example, line leaders, knowledge workers, and frontline staff) do. After rolling out a new, AI-driven sales-optimization system to increase customer retention, the analytics COE at a chemical company quantified each action’s expected impact on the take-home pay for those sales reps who used it. When sharing feedback, regional sales vice presidents overwhelmingly cited that communicating this played a significant role in increasing end-user adoption across the company’s global sales organization, as their reps could see exactly how using the technology would benefit them.

The automotive distributor previously mentioned used a monthly newsletter about how analytics were being used in the company (sent to all business leaders participating in the company’s AI transformation, regional sales managers, and organizational leaders) to share results from a new customer-retention tool its team was piloting that predicted when a customer would stop ordering products at the same level he or she had historically. Each week, the newsletter highlighted the level of risk each sales rep participating in the pilot faced, enabling the sales reps to take action early and monitor their progress. Upon deployment of the tool, the company’s customer-relationship-management system integrated these risk levels so sales reps could easily incorporate them into their

daily activities. The work drove not only excitement for the new AI system but also demand for an AI-driven product-substitution tool that has helped these reps successfully transition their clients to new products when legacy products were no longer available.

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Getting employees on board and excited about AI is important to help them become a part of the work and prepare them for the changes ahead as the aftershocks from the COVID-19 crisis continue to rattle business models that were already facing significant disruption.

Doing so can also lead to a virtuous cycle that can help smooth the way for accomplishing the broader, transformational change that will be necessary to become a thriving AI-enabled organization. As employees see how they can use AI to solve their day-to-day challenges, demand for AI use cases will increase and successes will spread excitement among all. This excitement can encourage further investment in AI talent and data, which, in turn, begets more successes and exuberance among employees. Ultimately, the cycle will reach a tipping point where there’s a natural “pull” for AI and the entire organization is engaged and involved.

However, as this cycle gains momentum, companies will likely begin to see their proverbial suggestion boxes overflow with use-case ideas and demand quickly outpace resource availability. It’s easy to lose momentum and extinguish employee enthusiasm when AI ideas begin collecting on the shelf. Consequently, as organizations democratize AI, it is critical that, behind the scenes, they simultaneously address the cultural, organizational, and technological changes necessary to scale AI. Leaders who actively work both to build demand and to fulfill that demand can better position their organizations to realize AI’s full potential—and better position their employees to reach theirs.

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