



Empowering Frontline Work with Digital Transformation and AI



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Frontline workers represent the majority of the workforce and are the engine of our global economy. Yet despite their importance, these workers face steep challenges. They are faced with pressure to deliver consistent quality at an accelerated pace, all while encountering personal safety risks, labor shortages, and supply chain disruptions.

These challenges for the frontline are exacerbated by information locked up in legacy systems and paper-based processes that hinder these vital workers from their core work. In failing to address the challenges, organizations risk losing efficiency, quality of customer service, and higher burnout and turnover.

As technology rapidly reshapes the business landscape, the tools that frontline workers rely on have to evolve as well. Business leaders have a golden opportunity to equip this essential workforce with smart solutions that will unleash their full potential and transform the way they work.

This Harvard Business Review Analytic Services report underscores the imperative of adopting the latest digital solutions for frontline, and how this will result in a greater level of operational efficiency, informed decisions, and business impact.

Digital transformation is essential for businesses to stay competitive. At Microsoft, we recognize the power of AI to reshape the future of work—and we believe frontline work should not be left behind.

As organizations look toward a future in which agility and resilience are a competitive differentiator, investing in digital transformation for frontline workers is essential. When frontline workers are equipped with the power of AI, they can focus on the activities that drive the business outcomes. Business leaders who embrace this moment are set to gain a competitive edge and stay ahead of the curve.

We are all on this journey together: to empower your frontline workforce with purpose-built, smart technology. We remain committed and focused on delivering innovative solutions that help organizations seize new opportunities, overcome challenges, and find new ways to grow.



Nicole Herskowitz CVP, Microsoft Microsoft 365

Empowering Frontline Work with Digital Transformation and AI

Frontline workers are a core component of many organizations. As the employees who most often interact with customers and directly produce goods and services, they play a vital role in how companies create and sell their core offerings. Currently, however, in many industries, these employees often don't have the right tools to do their work quickly, easily, and securely. With digital transformation opening up new ways for organizations to compete with and find advantages over rivals, decision makers should consider how digital tools can improve operational efficiency and job satisfaction in frontline work.

Many executives see the benefits—and the business necessity—of embracing tools for these purposes. In a September 2024 survey by Harvard Business Review Analytic Services of 192 members of the *Harvard Business Review* audience who are familiar with their organization's approach to digitally transforming its frontline jobs, 90% of respondents agree that having a digitally empowered frontline workforce will become a competitive differentiator for their organization in the future. They also see the importance of artificial intelligence (AI), with 73% agreeing that their organization plans to increase its use of AI in frontline work in the future.

"Empowering frontline workers with transformative technology is essential to drive real impact," says Sheldon Monteiro, executive vice president and chief product officer at Publicis Sapient, a Boston-based digital transformation consultancy under France's Publicis Groupe SA. "You must create technology solutions that delight customers—not only through direct interactions but also by enhancing the effectiveness of your frontline workers, who are the face of your brand."

HIGHLIGHTS

90% of survey respondents agree that having a digitally empowered frontline workforce will become a competitive differentiator for their organization in their industry in the future.



89% of respondents agree that when new technologies and tools are deployed properly, they improve frontline workers' productivity.

73% agree that their organization plans to increase its use of artificial intelligence in frontline work in the future.

Due to rounding, some figures in this report may not add up to 100%.

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"Organizations will always have a need to test out a new technology and consider its applications, especially when they see their rivals exploring new methods and tools," says Ben Armstrong, executive director and research scientist at the Massachusetts Institute of Technology's Industrial Performance Center and colead of MIT's Work of the Future initiative.

To digitally transform frontline jobs, executives will need to address a number of areas. They'll have to decide on the extent and urgency of their transformations. They'll need to understand frontline workers' pain points and where digital technologies can have the greatest impact. They'll also have to create a long-term plan to support current and future digital transformation, including how AI will be woven into frontline jobs over time. They'll need to understand the challenges involved in these efforts, including best practices for overcoming them and the risks of moving too slowly or doing nothing. And they'll have to decide how to measure return on investment.

When a digital transformation successfully addresses these areas—which will be an ongoing initiative over time, not a one-and-done project—organizations can see benefits, including improvements to operational efficiency, productivity, security, and engagement. They'll also likely find it easier to retain and attract talented new frontline workers. In the survey, the majority of respondents agree that when new technologies are deployed properly, they improve frontline workers' productivity (89%) and increase their job satisfaction (86%).

This report will explore how organizations are digitally empowering their frontline employees. It will cover the business outcomes of using digital transformation to rethink frontline work, what kinds of tools organizations are investing in, how decision makers are planning for and implementing AI in these jobs, and how they can think about ROI.

The Digital Frontier of Frontline Jobs

For many companies, the urgency of digitally transforming frontline work is clear. In the survey, the majority of respondents (79%) agree that their organization has an urgent need to transform its frontline work, and the vast majority (92%) agree that to be successful in the future, their organization must connect and empower its frontline workers with technology and information.

The need to bring frontline jobs into the digital age sooner rather than later seems to be driving their efforts so far. In

fact, while these roles have typically been overlooked during digital transformations, that dynamic appears to be changing. Nearly three-quarters of respondents say their organization either is currently transforming its frontline work (52%) or has recently done so (21%).

There are a few big-picture factors behind these trends, including keeping up with competitors and averting risk, according to Ben Armstrong, executive director and research scientist at the Massachusetts Institute of Technology's Industrial Performance Center and colead of MIT's Work of the Future initiative. The possibilities of transforming frontline work have expanded greatly as technology's capabilities have evolved. Tools such as artificial intelligence, advanced analytics, and chatbots have opened up new ways for frontline workers to complete tasks and serve customers. In some cases, these technologies may automate a certain task entirely; in others, they may help people perform faster or more effectively. "Organizations will always have a need to test out a new technology and consider its applications, especially when they see their rivals exploring new methods and tools," Armstrong says.

To see these effects in action, Tom Davenport, President's Distinguished Professor of Information Technology and Management at Babson College and cofounder of the International Institute for Analytics, points to examples such as call center employees using generative AI (gen AI) to look up answers to customers' problems, or salespeople drawing on predictive models to get advice on which prospective buyers they should contact next. "The jobs are changing pretty dramatically," he says. "These kinds of tools can give you insights into how you can help a customer best."

Exactly what digitally empowered frontline work looks like will vary by role and industry and will continue evolving over time. But the survey shows many respondents agree that modern technologies are becoming a core part of these jobs: 78% expect that most (more than half) of their organization's frontline work will depend on digital information and technologies after their transformation is complete, up from the 33% who say most (more than half) of their frontline work did so before their transformation.

Benefits of Digital Frontline Work

Organizations seek a range of benefits from digitally transforming their frontline work, though a few stand out as especially common. The survey finds, for example, that the most-sought benefits are raising operational efficiency (mentioned by 46% of respondents), strengthening workers' ability to serve customers (44%), enhancing workers' productivity (40%), automating processes (39%), and reducing operational costs (29%). FIGURE 1

As for which benefits organizations have realized to date, the most-cited answers are similar. Respondents indicate that their organizations have raised operational efficiency (52%), automated processes (47%), enhanced workers' productivity (41%), strengthened workers' ability to serve customers (38%), and reduced operational costs (34%) due to their transformation efforts.

According to MIT's Armstrong, the outcomes that a digital transformation should aim to capture fall into three buckets. First is productivity—but specifically as measured in value added per worker hour. One mistake that executives make, he explains, is thinking about task-level productivity as an end in itself. But completing a task more quickly doesn't necessarily add more value to their company. For example, if someone uses digital tools to look up customer information in half the usual time, saving that time doesn't create value on its own; the key would be how it leads to more revenue or systematically reduces cost in the long term. In addition, some tasks are limited in how much business value they contribute, so giving people tools to do them faster may be less worthwhile than automating them and freeing up employees for highervalue work, such as helping customers.

Babson's Davenport echoes this point, arguing that executives should think strategically about how productivity intersects with job design. Frontline employees want to do work they find meaningful; what they don't want is to be saddled with what Davenport calls "boring, repetitive, crappy tasks"-things that would be better off automated. Here, too, freeing up frontline employees' time for more fulfilling and ultimately productive work can be a key goal of digital transformations. "Helping people achieve their highest and best capabilities is another good objective," he says.

The second bucket of outcomes that Armstrong mentions is quality, which can mean different things in different contexts. For banks, it might be improving customer experience; for manufacturers, reducing scrap or increasing production consistency; in construction, improving safety or reducing the risk related to hazardous materials. Sometimes, the returns of this bucket are difficult to measure at first, he says, but the long-term value of pursuing quality is usually apparent.

And the third bucket is the ability to develop a product or offer a service that wasn't possible without a new technology. Armstrong cites the manufacturing example of composites, or

FIGURE 1

The Benefits of Digital Frontline Work

Organizations seek many outcomes but haven't realized them all yet

What are the top benefits your organization seeks to achieve from digitally transforming its frontline work? Select up to 3.

Which of the following benefits has your organization realized to date from digitally transforming its frontline work? Select all that apply.

🖉 Benefits sought 📃 Benefits realized

46%		
52%		
р ·	 CC: 1	

Raise operational efficiency

44	
38	
Strengthen workers' ability to s	serve customers

40

41

Enhance workers' productivity

39 47

Automate processes

29 34

Reduce operational costs

23

Help workers organize/manage tasks in real time

18

Assist workers to find information quickly

18

Improve workers' decision making

/9//

Increase workers' job satisfaction

8/

Heighten cybersecurity

8

Increase talent retention

6//

Improve ability to attract new workers

Base: 192 respondents. Not shown: 2% other, 1%-2% don't know, 0%-2% none, varies by question.

combinations of materials where the result is stronger, lighter, or more durable than the source elements. New technologies are essential to creating composites, because companies need certain machines and production processes to work with them and certain tools to discover their structures. "You couldn't actually have these materials if you didn't have the digital technology surrounding them," he says.

When it comes to AI, one eventual benefit of organizations' investments will be helping frontline workers make more strategic decisions with less oversight. Even more important than efficiency boosts, according to Gerald C. Kane, the C. Herman and Mary Virginia Terry Chair in Business Administration in the Department of Management Information Systems at the University of Georgia's Terry College of Business, will be how the technology provides recommendations for actions employees can take in their work-from retail employees responding to complex customer queries to health care staffers diagnosing and treating patients. Once frontline workers have AI tools their organization trusts, managers will know that employees can access the knowledge they need to make better choices and avoid negative outcomes. Then they can allow those workers more autonomy to solve problems, which also gives managers more time for their own higher-value work. "The first thing executives want is always efficiency, but efficiency only goes so far," Kane says. "It's the strategic capabilities these technologies open up where the real opportunities lie."

AI will also help employees do what humans are uniquely skilled at: provide the human touch. While the technology can automate tasks, according to Publicis Sapient's Monteiro, the ultimate goal is to reduce cognitive overload for employees, allowing them to make creative, empathetic choices. In health care, for example, a nurse practitioner who uses an AI tool to capture patient information and document a consultation can be more fully engaged, truly listening to the patient's needs. "This allows employees to be more receptive to the customer's context and feed that nuanced insight back into the AI system," Monteiro says. "Simply automating tasks won't yield that kind of human-centered impact."

Executives who are digitally transforming their frontline work should keep all these benefits in mind and shape their plans to capture the ones most aligned with their goals.

Equipping Workers with the Right Digital Tools

Organizations have no shortage of options when considering new digital tools and technologies. To get the best returns on their investments and to achieve the business outcomes they want, it's essential for decision makers to understand frontline workers' pain points and where their current tools and processes are falling short. Those insights can direct them toward areas where new technologies can have the biggest impact.

Before their organizations' digital transformations, respondents say two key challenges their frontline workers experienced with tools were poorly integrated systems (mentioned by 67%) and tools being unable to provide real-time information and insights (56%). **FIGURE 2** Other problems include features not being tailored to specific tasks/jobs (42%), an inability for workers to understand customer needs or histories (39%), and being unreliable/slow to use (34%), as well as workers lacking training on how to use them (33%).

FIGURE 2

Common Issues with Frontline Tools

Workers lack key capabilities that digital transformation can help address

Before your organization's digital transformation, what challenges did your frontline workers experience with the tools they used? Select all that apply.

67%

Poorly integrated systems

56

Unable to provide real-time information and insights

42

Features were not tailored to specific tasks/jobs

39

Inability for workers to understand customer needs or histories

34

Unreliable/slow to use

33

Lack of training on how to use the tools

/32///

Complicated to use

22///

Lack of support to communicate with leaders

19

Lack of strong cybersecurity features

10

Difficult to physically use or wear

Base: 192 respondents. Not shown: 3% other, 3% don't know, 1% none.

"The first thing executives want is always efficiency, but efficiency only goes so far. It's the strategic capabilities these technologies open up where the real opportunities lie."

Gerald C. Kane, the C. Herman and Mary Virginia Terry Chair in Business Administration, University of Georgia's Terry College of Business As a general principle for which new technologies to invest in, executives can let their strategic goals guide them, according to Davenport. If a company is heavily dependent on sales and its salesforce's closing percentages are lower than those of its competitors, for example, investigating how new tools could help would be a good step. Or if its customer service metrics aren't where they should be, looking for ways to help employees better direct customers to the right products could be worth exploring. "It's a combination of looking at the status quo for your frontline areas and seeing how that relates to where you're trying to go as an organization," Davenport explains.

Another key principle is to find a balance between technology that increases operational efficiency and tools that increase employees' satisfaction with their jobs, says Armstrong. He points out that streamlining processes doesn't always take workers' needs into account. It may be, for example, that a new tool speeds up the flow of work but to the detriment of employees' physical comfort or their experience in how they complete tasks. "The question is how you can achieve improved productivity while also achieving good outcomes for workers," Armstrong asserts. In addition, people often enjoy learning new skills and the upward mobility that can come with it, which may be at odds with using tools solely focused on efficiency. Executives should keep these factors in mind and look for technology solutions that support them.

Organizations vary in the technologies they're using to digitally transform their frontline work. The most common tools respondents say their organizations have "recently invested in" are mobile devices (e.g., phones, tablets) (mentioned by 34%), virtual/remote workspaces (29%), and communication/collaboration tools (29%). **FIGURE 3** The mostmentioned tools organizations are "currently investing in" are cybersecurity tools (41%), communication/collaboration tools (40%), web apps (40%), and learning and performance management (40%). And the most noted tools they are

FIGURE 3

Tool Investments for Frontline Digital Transformation

Organizations vary in which capabilities they're pursuing

In which of the following tools is your organization investing, or planning to invest, to digitally transform its frontline work?

-

Recently invested Currently investing Plan	ling to invest		n to invest		10W			
Mobile devices (e.g., phones, tablets)		34%		32%		14%	14%	6%
Communication/collaboration tools	29		40			20	8	8 4
Virtual/remote workspaces	29		24		13	24		10
Cybersecurity tools	24		41			19	6	10
Web apps	24		40			19	7	10
Learning and performance management	22		40			22	8	7
Online service manuals and/or maintenance tutorials	21		31		24		11 1	12
Advanced analytics	19	34	ļ		30		7	11
Generative AI	16	30			31		17	5
Forms of AI (other than generative AI)	10	29		31		17	1:	3
Robots that perform physical tasks	7 10	14	Ę	55			15	
Augmented reality/virtual reality	6 11	18		47			18	
Wearable devices (e.g., smart glasses, smart watches)	4 7	13	58				19	

Base: 192 respondents.

"These early tests allow organizations to work through vital issues, from improving data quality and protecting intellectual property to retraining workers and measuring productivity gains," says Sheldon Monteiro, executive vice president and chief product officer at Publicis Sapient.

"planning to invest in" are generative AI (31%), forms of AI other than generative AI (31%), and advanced analytics (30%).

There are also some tools that many organizations do not plan to invest in, the most mentioned of which are wearable devices (e.g., smart glasses, smart watches) (58%), robots that perform physical tasks (55%), and augmented reality/ virtual reality (47%).

When equipping the front line with new technologies, executives would do well to think about them as stepping stones of complexity, adds Armstrong. The past decade or two has seen an emphasis on low-code/no-code tools that have a low barrier to entry, helping anyone easily use and even repair them. The flip side, though, is that such tools often have narrow applications and must be programmed to work in new contexts, meaning organizations and frontline workers may not be benefiting from their full value. Armstrong recommends a long-term strategy of upskilling employees along a spectrum of increasingly complex tools, which can build new capabilities for workers and help them get more use from the tools they use day-to-day.

And as AI becomes more central to frontline work, supporting more complex use cases over time, Armstrong says digital tools should improve workers' collaboration, not just tell them answers. Operational efficiency is crucial, of course, so there will always be situations where finding solutions quickly is key. That said, Armstrong points out that one of the joys of work, which has implications for retaining employees and attracting new ones, is collaborating with talented colleagues who have deep domain knowledge. If all that gen AI and other digital tools do is give people solutions, employees may eventually see their skills atrophy, and teams may have fewer experts in their core business areas. "I think we should alert organizations to how we can use these tools for continuous learning and improvement to avoid suffering some of these trade-offs," he says. Executives looking toward the future should consider how new technologies can improve frontline collaboration.

Bringing AI to Frontline Work

There's no question that AI will be an important part of frontline work at many organizations. While executives'

feelings about it range from excited to cautious, they're universally interested in what it can offer, according to the University of Georgia's Kane. "It doesn't matter who or what group I'm talking to—all they want to talk about is AI," he says.

The survey finds that just over half (51%) of respondents say their organization is currently using AI to augment frontline workers' abilities. Among them, 5% are using AI in "all" frontline work, 5% say they're using AI in "most" frontline work, and 41% say their organization is using AI in "some" frontline work. In addition, 35% say their organization doesn't use AI in these jobs now but plans to do so in the future. Looking forward, 73% of respondents agree that their organization plans to increase its use of AI in frontline work in the future.

Yet Kane cautions that many executives still don't have a sophisticated understanding of what AI actually is and can do. Influenced by breathless media coverage of its capabilities, they get caught up in the hype and don't firmly grasp how to use AI to produce business value or how it will impact their industry and company.

Part of the problem may be that current uses tend to be limited to narrow, focused tasks. Additionally, as Armstrong notes, these technologies are heavily reliant on people to check their work for errors and to understand the business significance of their results. "That level of human interpretation is still really key," he says.

To figure out how best to implement AI and how to scale its uses later on, organizations are doing what they do with any new tool: running experiments. With generative AI specifically, only a fraction of organizations are using it at scale, according to Monteiro, with most still in the pilot phase. "These early tests allow organizations to work through vital issues, from improving data quality and protecting intellectual property to retraining workers and measuring productivity gains," he explains.

Yet running rigorous, controlled experiments isn't a strength of most organizations, Davenport says. Often, their efforts take the form of telling employees to try out the technology on their own and report their results to decision makers. A better approach would be running department-level experiments. Managers can have a group of employees use AI for specific purposes, direct a control group to not use the technology, and compare their outcomes. The results can then help executives fine-tune their approach to future experiments.

Before implementing AI at scale, it's paramount that organizations implement good practices for AI governance, ethics, and responsible use, asserts Monteiro. He says it's nonnegotiable that executives should be extremely careful about exactly how their company deploys the technology, particularly in organizations where AI uses sensitive customer data, such as those in finance and health care. Once the policies are defined, executives should then put controls in place to enforce them, which may include setting up AI-focused helplines for employees to contact and restrictions around who can access what data. "The gap between what you can do with AI and what you should do with AI has never been greater," he says.

And as executives set policies and standards around AI, they will need to understand the long-term effects of weaving it into frontline work. One pressing issue organizations are still figuring out, Davenport says, is the tricky interplay between automation and entry-level employees. These workers are the most likely to see AI taking over their jobs, or at least some of their tasks, compared with highly experienced workers. And highly experienced workers are the ones who will be reviewing AI's outputs, such as its decisions about which messages to send to customers based on their relationship with the company. But if AI's growing powers lead organizations to hire fewer entry-level workers, Davenport asks, how will they maintain a pipeline of experienced workers in the future? "Nobody seems to have a good answer for that question," he says.

Overcoming Common Challenges

It will come as no surprise to executives that a digital transformation of frontline work faces a range of challenges. In the survey, respondents indicate that the top two challenges their organization has faced in its digital transformation are the need for worker reskilling/upskilling (mentioned by 52%) and the complexity of the transformation (50%). **FIGURE 4** Other common issues are resistance to change from workers (45%), lack of effective change management and adoption processes (42%), and the cost of enabling frontline workers with digital tools (40%).

One thread that ties some of these challenges together is helping frontline workers embrace new technology instead of fearing it. Executives shouldn't overlook the importance of addressing those fears since, after all, these workers are the ones who carry out their organization's digital strategy. Kane says a related anxiety is whether decision makers will reward employees who take risks and try to adapt to new tools or whether they'll punish them for making mistakes with AI or other digital technologies. As organizations move forward

FIGURE 4

The Difficulties of Digitally Transforming Frontline Work

The change efforts are complex and expensive, require upskilling, and often meet resistance

What challenges has your organization faced in digitally transforming its frontline work? Select all that apply.

52%

Need for worker reskilling/upskilling

50

Complexity of the transformation

45

Resistance to change from workers

42///

Lack of effective change management and adoption processes

40

Cost of enabling frontline workers with digital tools

37///

Difficulty measuring return on investment

36

Disruptions to operations during transformation

31

Knowing where to focus or start the transformation

26

Difficulty of ensuring the security of new tools/technologies

18

Limited potential for digital tools/technologies to improve frontline work

17///

Lack of middle management support

16

Lack of leadership buy-in

14

Difficulty finding a vendor/support services

Base: 192 respondents. Not shown: 2% other, 2% don't know, 1% none.

"The gap between what you can do with AI and what you should do with AI has never been greater."

Publicis Sapient's Monteiro



"There are metrics for lots of frontline areas that are important to your success; you just need to collect and monitor them over time," says Tom Davenport, President's Distinguished Professor of Information Technology and Management at Babson College.

with their transformation, responding to these feelings should be part of their agenda.

The list of potential hurdles includes technology-specific ones as well. Among them is integrating systems. It's crucial that the technologies frontline workers may use in their jobs, from customer management software to health care medical record systems, can interact and share information with one another smoothly and effectively. Yet many vendors of these technologies have been slow to add AI and even analytics, Davenport asserts, so companies may have to use even more systems to get the capabilities they need. And as the number of tools swells, an additional hurdle is data quality issues, which tend to be rampant in organizations—running the gamut from incomplete data to messy, biased, or duplicate information. Solving these problems will only become more important as AI takes a central role in frontline work.

Another key challenge that Kane mentions is cybersecurity risk. Many executives are familiar with the kinds of exposures that digital tools can open a company up to. They should also familiarize themselves with the new risks that AI systems can bring. Kane points out that these information-crunching tools will always be at the mercy of biased or manipulated data, for instance, and clever attackers will try to find ways to take advantage of that. "AI is biased. It is always going to be biased," he warns, noting that the systems often reflect the prejudices, even unconscious ones, of their inputs and creators. "It's not a bug of AI—it's a fundamental characteristic." Before integrating these systems into frontline work or any other area of the company, executives should take the time to thoroughly consider the cybersecurity implications. Notably, the survey finds that cybersecurity tools are the most-mentioned kind of tool that organizations are currently investing in.

Measuring ROI

Given the cost and scope of digitally transforming frontline work, executives will naturally wonder how to measure its return on investment.

The answer, according to Davenport, is complicated. Organizations tend to justify their digital investments before implementing them and then often don't measure the results well. So if executives really care about ROI, they have to be disciplined about what their investments are for and define relevant measures. "It all depends on what your objective is," he says. "There are metrics for lots of frontline areas that are important to your success; you just need to collect and monitor them over time." Taking this approach can ensure business leaders are measuring outputs that are aligned with their strategies.

And as executives plan and undertake these change efforts, they shouldn't lose sight of the full breadth of what they can accomplish, according to Kane. In his research, he takes the view that "digital transformation" isn't just about adding in new technology—it's also about adapting the company to an increasingly tech-driven world, which involves rethinking areas such as organizational structure, strategy, and culture. A key point that executives often forget, Kane explains, is that the full transformative power of technology—including AI—lies in its potential to reshape nearly everything a company does.

For comparison, he cites electricity. When factories started using electricity, real productivity gains didn't arrive right away because decision makers initially took their large, steam-powered turbines and simply electrified them. It was only when factories explored changes such as miniaturizing motors and putting them at individual workstations that they started to see substantial results. "Once electricity allowed you to redesign the manufacturing floor, that's what led to the productivity benefits," Kane says. "I think the same thing is true with frontline work. Just having access to new technologies isn't going to make a whole lot of difference unless it fundamentally changes how people work." Decision makers who are pursuing a digital transformation should keep this example in mind and carefully think through all the frontline improvements that new technology can unlock.

For AI specifically, decision makers may be tempted to treat it as an innovation their company has never seen before, but Armstrong asserts that classic measures of returns still apply. "You can calculate the ROI of these technologies similarly to how you would calculate the ROI of a robot or a computer," he says. He's seen organizations do it in two main ways. The first is the brownfield approach, in which a company augments an existing process with a technology and then looks for improved throughput or quality. The second is the greenfield approach, in which an organization builds a brand-new process or capability because of a technology and measures the results. Executives struggling to justify AI investments with the brownfield method should consider the greenfield method, Armstrong says.

At the same time, he adds, while there are some clear use cases for AI that companies are seeing, such as automating routine HR or customer service tasks, many of the highervalue possibilities are works in progress. Executives are realizing that moving more slowly to explore those possibilities may be the best way to ensure they lead to lasting gains in revenue or profitability. And that means they're pausing to understand where they can get ROI, doing build-versus-buy calculations to figure out whether to work with vendors or develop homegrown solutions, and looking into trade-offs around productivity and quality. Essentially, Armstrong explains, organizations are realizing that AI is going to be a long-term investment, not a quick fix.

Davenport agrees, saying that some executives are finding, contrary to their expectations, that the most valuable gains of AI can't be realized by just plugging it into an existing system. In particular, those gains can be hard to come by as long as humans have to review input prompts for AI systems and review the output. "I think there's a bit of a backlash to generative AI because companies are saying, 'This is harder to get value from than we thought,'" he says.

The best strategy for now, explains Monteiro, is to focus on "jobs to be done." In other words, what do employees need to accomplish to do their jobs better or serve customers more effectively? "You can't just start with, 'I want to deploy AI to take some cost out of my existing process," he cautions. That mindset might lead to some simple improvements, but it won't unlock the full potential of AI. In addition, it might lead decision makers to implement AI in areas that don't have a great need for it and overlook others that do. A "jobs to be done" mindset will keep executives pointed in more valuable directions. "You have to start with, 'What's the problem we're solving, and for whom?" Monteiro says.

Conclusion

Digitally transforming frontline work can bring organizations and employees a range of benefits, from greater operational efficiency to an improved ability to serve customers to greater job satisfaction. To see those gains, though, executives must address a range of areas. They need to understand workers' pain points and where current tools are falling short. They have to target their technology investments on the right problem areas to make the greatest difference. They should consider the range of possibilities that digital transformation offers for new approaches and processes. They should carefully think through how to get the most from AI, which starts with getting more familiar with the technology themselves. And they should tackle key challenges, such as those around reskilling, the complexity of change, and cybersecurity.



"Getting technology into your employees' hands is relatively easy. Helping people rethink their jobs accordingly is the harder and more critical part," says the University of Georgia's Kane.

In addition, executives shouldn't forget that digitally transforming frontline work will fundamentally change those roles. That's why any change effort must involve partnering with workers to demonstrate how the transformation will benefit them and support them in performing tasks more effectively. "Getting technology into your employees' hands is relatively easy," says Kane. "Helping people rethink their jobs accordingly is the harder and more critical part."

METHODOLOGY AND PARTICIPANT PROFILE

Harvard Business Review Analytic Services surveyed 192 members of the *Harvard Business Review* audience via an online survey fielded in September 2024. Respondents qualified to complete the survey if they are familiar with their organization's approach to digitally transforming its frontline jobs.

Size of Organization

38% 10,000 or more employees

34% 1,000-9,999 employees

8% 500-999 employees

16% 100-499 employees

4% 50-99 employees Seniority

25% Executive management/ board members

33% Senior management

25% Middle management

17% Other grades

Industry Sectors

14% Other industry sectors

13% Financial services

11% Technology

8% Health care

All other sectors less than 8% each

Job Functions

14% HR/training

11% General/executive management

10% IT

10% Other job functions

9% Operations/ production/ manufacturing

8% Consulting

8% Finance/risk

All other functions less than 8% each

Regions

43% North America

21% Asia Pacific

15% Europe

15% Middle East/Africa

6% Latin America

Figures may not add up to 100% due to rounding.



ABOUT US

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