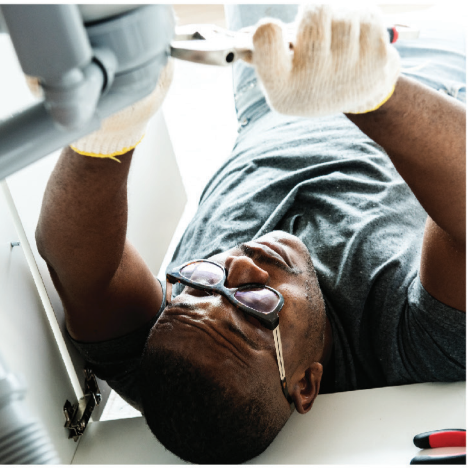



FUTURE POSITIVE

How Companies Can Tap Into Employee Optimism to Navigate Tomorrow's Workplace

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Managing the Future of Work

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Executive summary

Companies face significant uncertainty as they attempt to prepare for the workplace of the future. In the last two decades, companies across the world have experienced an unprecedented rate and extent of change. Innovation, globalization, outsourcing, and the growth of contingent labor and gig work have resulted in substantial changes in the composition of the workforce, the emergence of new business models, exploding demand for new competencies, and redefinition of existing jobs. The force that garners most of the media attention—technological change—is often associated with anxiety. Forecasts often portend that technology will obliterate much work as we know it and that new business models will continue to disrupt traditional industry. Combined, they suggest that workers and business leaders alike have much to fear about the future of work.

In order to understand the readiness of companies and workers to adapt to the broad array of forces affecting the workplace—beyond technology—Harvard Business School's Project on Managing the Future of Work and Boston Consulting Group's Henderson Institute conducted two global surveys. The first canvassed 11,000 middle-skills workers from 11 countries to learn how those with education levels less than a four-year bachelor's degree perceive the effect of 15 forces of change (see Table I) on their future prospects. The second polled 6,500 C-suite and senior business leaders in eight countries to understand how prepared companies and their workforces were to tackle the 17 tectonic shifts (see Table 2) underway.

Two messages emerged. One, business will have to do much more to prepare their companies and workforces for the turbulence that is already unfolding. As companies refine their strategies for managing—and shaping—the future of work, the findings suggested that employers will need to be more discerning and active in their choices, especially when it comes to preparing the workforce of the future. Two, the findings uncovered a significant, but overlooked, new force for change: the keen sense of optimism middle-skills workers exhibit about their ability and willingness to prepare for a better future. As companies navigate these unprecedented changes, they have an unexpected ally in that task—their employees. Consider the key findings from the two surveys:

Business leaders

- Across eight countries and companies of all sizes, few business leaders seem to have determined which forces are most relevant or most disruptive to their organizations future success. When asked to consider the significance of each of the 17 forces on their organizations, a majority of business leaders noted that all were either highly significant or somewhat significant. Only 12 percentage points separated the force business leaders selected most often as highly significant—an increase in the level of skills and education required—compared with the force least often cited as highly significant—digital freelancing as a source of talent.

- When asked whether a force was already having an impact on their organizations, for almost all the forces, a third of business leaders reported the forces as having significant impact currently; 45% to 50% of executives, across the various geographies, projected they would have a significant impact in the future.

- The three forces that business leaders most often expected to have a significant impact on their organizations in the next five years were: employee expectations to find balance between personal and work life through flexible work mechanisms (46%); the need to improve the level of skills in the workforce (44%); and the difficulty in finding workers for the newly evolving jobs (44%). Forces related to technology—such as technologies that supplement the labor force (34%) and substitute the labor force (29%)—dropped to the bottom as a priority for the next five years. Business leaders saw them becoming significant for their organization only over the next five to 10 years and beyond.

- What prevented their organization from preparing for the forces of change immediately? The top three responses business leaders chose were: "My organization has other strategic priorities at the moment" (50%); "The impact my organization expects is still too far in the future" (39%); and "My organization lacks visibility on future trends and their impact" (34%).

- Despite a lack of clarity on which forces were most critical for their organizations, a substantial majority of business leaders expressed confidence that their organizations were prepared to take on these complex challenges. Across the eight countries, as many as 79% to 90% of business leaders deemed their organizations either well prepared or somewhat prepared for all 17 forces of change.

Table 1: **15 forces for workers**

Changing technology

- New technologies introduced in the workplace (such as automation, robotics, machine learning, artificial intelligence)
- Sudden shifts in customer needs resulting in innovation, changing operations, and new services and products
- New technologies such as digital freelancing platforms that provide opportunities to earn additional income

Changing workforce structure

- Employer efforts to hire workers from under-represented groups (such as women, older workers, immigrants)
- Increase in the level of formal education (such as training, apprenticeships, or college degrees) required to find a job
- More ongoing training required while on the job to keep up with constant change (such as learning new technical skills)
- Companies are moving a broader range of jobs out of my country
- Companies are moving a broader range of jobs into my country

Changing forms of work

- Desire for work with purpose, flexibility, autonomy, and independence
- More tasks given to temporary workers, instead of full-time employees
- More tasks given to outsourcing providers instead of full-time employees
- More tasks given to freelancers (such as from UpWork) instead of full-time employees

Role of government

- Government protection of workers from new technologies (such as taxes on robots or limits on how artificial intelligence can be used)
- Governments offering new forms of benefits (such as general health insurance or universal basic income) to workers
- Governments raising barriers to trade of goods and services (such as by introducing tariffs)

Source: HBS' Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Table 2: **17 forces for business leaders**

Accelerating technology change

- New technologies that replace human labor, threatening employment (such as driverless trucks)
- New technologies that augment or supplement human labor (such as healthcare robots)
- Sudden technology-based shifts in customer needs that result in new business models, new ways of working, or faster product innovation
- Technology-enabled opportunities to monetize free services (such as Amazon web services) or underutilized assets (such as personal consumption data)

Growing demand for skills

- General increase in the skills, technical knowledge, and formal education required of the workforce
- Difficulty of finding and recruiting workers with the skills for rapidly evolving jobs

Shifting labor demographics

- Need to increase workforce participation of underrepresented populations (such as elderly workers, women, immigrants, rural workers)

Changing employee expectations

- Increased popularity of flexible, self-directed forms of work that allow better work-life balance
- More widespread desire for work with a purpose and opportunities to influence the way it is delivered (for example, greater team autonomy)

Transitioning work models

- Rise of remote work
- Growth of contingent forms of work (such as on-call workers, temp workers, and contractors)
- Freelancing and labor-sharing platforms that provide access to talent
- Delivery of work through complex partner ecosystems (involving multiple industries, geographies, and organizations of different sizes), rather than within a single organization

Evolving business environment

- New regulation aimed at controlling technology use (such as "robot taxes")
- Regulatory changes that affect wage levels, either directly (such as minimum wages or Social Security entitlements) or indirectly (such as more public income assistance or universal basic income)
- Regulatory shifts affecting cross-border flow of goods, services, and capital
- Greater economic and political volatility as members of society feel left behind

Source: HBS' Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

- When asked for the reasons that prevented their workers from preparing for the future, business leaders most frequently cited workers' fear of change.

Middle-skills workers

- Globally, 52% of workers indicated they were either somewhat or very happy with their current employment; only 20% said that they were unhappy. Across all 11 countries surveyed, 45% of workers believed that their prospects had improved in the past five years.
- Middle-skills workers across 11 countries showed a high level of awareness of the forces likely to affect their work lives and drew material distinctions between them.
- Workers perceived the need for more training and education, but also recognized that a key catalyst for their future would be the actions companies took to address evolving customer needs. Workers also identified the growing significance of and the opportunity associated with the gig economy on their futures by ranking digital freelancing as a source of income in the top three issues having a "large" impact on their future.
- Of the 15 forces, workers had low expectations of their governments playing a role in protecting them from technology (listed 15th). Instead, workers demonstrated a high sense of pragmatism, recognizing that their best defense against technological encroachment on their work lay in more training at work and more education.
- More than 50% of workers perceived 11 out of those 15 forces as positive for their prospects. Workers expected to advance their prospects by earning higher wages and doing more fulfilling work.
- Workers recognized that they needed to prepare themselves to meet the challenges posed by the changing nature of work. Worldwide, three out of four workers perceived the need to prepare for the future of work; two out of three expressed confidence in their ability to prepare for the change.
- Workers were more than twice (46%) as likely to hold themselves responsible for preparing for the future, rather than believing the responsibility lay with national governments (20%) or their employers (19%).

A call to action

Business leaders have a unique opportunity to shape how employees do the work that needs to be done in the future. They have the ability to improve their firm's productivity and competitiveness, serve customers better, and above all, provide individuals with living wages, advancement prospects, and the dignity of labor. Achieving those goals will require employers to set aside their preconceptions and to take the initiative to bridge the gulf in perceptions that separates managements and middle-skills workers.

Prioritize managing the future of work

The limited ability of management to draw distinctions between such widely different forces of change suggests that employers have yet to conclude which forces constitute the greatest threats and which offer the greatest opportunities. The most pressing task before top management and board members is to determine which of the forces are most directly relevant to their own organizations' long-term competitiveness. If everything is important, nothing is.

Monitor trends and generate foresight

Companies need to adapt their strategies to respond to those changes, especially those that will require substantial lead times to address. The survey shows that executives believe something of genuine importance is unfolding, but they do not quite know what to make of it. They would better serve their organizations and shareholders by investing in mechanisms to monitor those forces that pose the greatest risk or offer the greatest opportunity.

Improve preparedness by developing action plans for different scenarios

Companies seem blithely confident in their organizations' readiness to tackle the future of work, despite being unable to specify which forces are of the greatest importance to their firms. The sheer breadth of changes underway might be making managers and policymakers cautious about committing to a specific course of action. In the face of significant uncertainty along multiple dimensions, decision makers often place great value on preserving optionality and avoiding irretrievable mistakes. Yet, given the speed of change, even short periods of inaction can cause a company to lose ground to a more dexterous competitor or a more nimble start-up.

Invest in closing the middle-skills gap in the organization

Companies don't yet perceive middle-skills workers as strategic assets. As a result, they are not capitalizing on the widespread, latent optimism among their workers. Employees may be more willing to adopt new technologies and shift to agile work processes than employers imagine. The reality is that workers are ready to embrace change. Workers recognize that they need to prepare themselves to meet the challenges posed by the changing nature of work and feel confident that they have the ability to accomplish that goal. Decision makers should reflect on how to harness those sentiments as they consider how to position their companies and countries in the evolving world of work.

Partner with employees in the transformation process

Companies are leaving untapped their workers' desire to prepare for the future of work. Business leaders and policymakers need to consider how they can support workers in realizing their ambitions for the future. Companies have to gain clarity about their current skills base and the skills they will require in the future. They will need to expand their definition of "talent" beyond highly skilled workers with high educational attainment to encompass workers with the skills to do jobs that are chronically hard to fill. They will need to be more diligent in forecasting which middle-skills jobs will be integral to their future competitiveness and where they can source candidates with the right skills mix for those positions. Taking such measures will allow companies to develop plans for adapting to new technologies that change tasks, lead to new business models, or require enhanced skills.

Embed learning across the organization to help employees prepare better for the future

Companies need to do much more to provide the support that workers need to prepare for the future of work. The worker survey revealed that middle-skills employees lack the financial resources and time to enhance their skills and are uncertain about how they should prepare. Ironically, most business leaders do not recognize that their failure to support workers by providing the financial support, on-the-job training, and guidance needed constitutes a major threat to their enterprises' intermediate and long-term competitiveness. Companies will need to build the workforce they need in the future through various means. While in-house training is a time-honored concept, it needs to expand beyond formal classroom training to on-the-job learning, project-based staffing and learning, and incentives to encourage workers to learn on their personal time. Companies must realize that it is in their self-interest to establish systems and platforms that cultivate the skills of their incumbent employees through continuous learning. Employers and employees will need to enter into a learning contract that reflects a shared commitment to continuous learning and reskilling. Such a reciprocal arrangement will encourage employers to make the investment in training or tuition support needed to cultivate the latest skills for their organization—and it will help employees acquire the emerging skills and competencies they need for growth and prosperity.

Introduction

In 1917, AT&T, then the dominant US telephone services provider, decided to move its manual switchboard system to mechanical switchboards—a technology that was invented 25 years earlier. The number of telephones and the volume of calls were burgeoning so much that manual switchboards were becoming less efficient and more costly to operate. As the company rolled out the new mechanical technology, it anticipated laying off many of its 100,000 switchboard operators over time. By 1930, only 40% of AT&T customers had transitioned to the new dial phones. In the depths of the Great Depression, AT&T began attracting negative press for laying off switchboard operators, a majority of whom were single, young women who struggled to find other jobs. AT&T management pondered on whether it should slow the pace of roll out for its labor-saving technology. It ultimately took AT&T more than five decades to complete the transition from manual to mechanical switching of calls.[1]

Compare that with December 1, 2010, the date that Verizon—the largest US consumer wireless company and a direct descendant of AT&T—launched its nationwide 4G wireless mobile network. Within four days, the new higher-speed service was operating in 70% of an initial 38 national markets serving 110 million Verizon customers.[2] In 18 months, two-thirds of Verizon customers had access to 4G service, and by the end of 2013, it was available nationwide across the United States. As the company shifted its focus in just three years—embracing more mobility, broadband and video—the transition touched more than 190,000 employees.[3,4]

Technological change has always posed a challenge to those managing workforces. However, in the last two decades, the unprecedented rate and extent of those changes have raised the stakes for decision makers. As innovation creates altogether new competencies and redefines the requirements for existing jobs, executives face a high degree of uncertainty in making choices about whom to employ, where, and under what terms. That challenge is compounded by the growing segmentation in the composition of workforces and the evolving nature of working relationships. The recent growth of contingent and gig work, together with more mature trends such as globalization and outsourcing, has made managing the future of organizations' work all the more complex.

Faced with the scale and speed of such change, it is no wonder that the narrative around the future of work is most often associated with qualifiers like "fear," "uncertainty," and "anxiety." Often, in this context, technology is portrayed as an insidious culprit, not the source of new, better-compensated opportunities. Employers must balance the needs of their current operations, contractual and legal obligations to their workers, as well as the growing demand for workers equipped with the skills to exploit state-of-the-art technologies. Workers confront the prospect of being unqualified for the new opportunities created by innovation or even losing their current position as technology redefines the competencies required for those jobs. The questions underlying these issues are myriad and complex. Which technologies will replace human effort? Which new jobs will emerge? Will there be enough workers with the right skills? What will happen to the displaced workers? What will all this mean for communities, regions, and even nations?

Companies face substantial uncertainty as they plan and prepare for an undefined future workplace. And leaders must ensure their organizations remain flexible and able to adapt to a broad array of forces, not just disruptions driven by technological change.

In order to answer these questions and understand the readiness of companies and workers to adapt to the needs of the future, Harvard Business School's Project on Managing the Future of Work and Boston Consulting Group's Henderson Institute collaborated in a research partnership. Rather than view the changes shaping the future of work exclusively through the lens of technology, we sought to understand how business leaders and workers viewed the broad sweep of forces affecting the workplace. We wanted to gauge the importance executives and employees attached to those forces and the degree to which they felt prepared to meet the challenges associated with them.

A literature review revealed that, while academics, think tanks, and commentators have written extensively on how companies cope with the range of changes affecting the workplace, reporting in the press tends to focus on workers who have already been displaced by technology or are at immediate risk of being affected. However, there is very little data about how incumbent, middle-skills workers as a group think about the forces at work, how they asses the technology trends that are often featured in the media as the source of workplace disruption, and how they believe those changes will affect their prospects. Similarly, there is no definitive information on the beliefs employers hold on their employees' attitudes toward such trends.

A distinguishing design principle, therefore, was to capture the sentiments of both sides. At one end, we surveyed those who are best positioned to perceive the trends and take decisions that shape the future of companies: business leaders in the top echelons of their companies. At the other end, we surveyed those most vulnerable to the emerging forces—middle-skills workers (those with education levels less than a four-year bachelor's degree) around the world. The workers survey deliberately excluded higher-educated workers—those with graduate and post-graduate degrees.

Our first task was to compile and define a list of the fundamental forces shaping the future of work, recognizing that such a list would evolve over time. Using an initial framework of 15 forces, in May 2018, BCG's Henderson Institute surveyed 11,000 workers in 11 countries: Brazil, China, France, Germany, India, Indonesia, Japan, Spain, Sweden, the United Kingdom and the United States.

The partnership then adapted the framework for business leaders. That resulted in an expanded list of 17 forces of change affecting organizations, grouped in six broad categories. Most of the forces were similar; some were slightly adapted for each constituency.

HBS's Project on Managing the Future of Work and BCG's Henderson Institute then conducted a survey of 6,500 business leaders worldwide in August–September 2018. Just over 800 business leaders responded to the survey in each of the following eight countries: Brazil, China, France, Germany, India, Japan, the United Kingdom and the United States. In each country, more than 43% of the executives surveyed held C-suite positions—managing director or higher. They represented organizations of all sizes, across industries. Since large and medium-sized organizations will play a significant role in shaping the future of work, business leaders from those firms represented a majority of the survey respondents. Only 27% of the surveyed firms had revenues below $250 million. Both surveys will seek to inform further research and lead to further refinement in understanding the forces affecting the future of work.

The surveys yielded some intriguing findings—especially when the beliefs of business leaders were juxtaposed with those of workers. We then conducted interviews with business leaders in multiple industries and geographies to test the veracity of the findings. The conversations confirmed that the findings captured what companies and workers were experiencing in real life.

Two messages emerged. One, business will have to do much more to prepare their companies and workforces for the turbulence that is underway. As companies refine their strategies for managing—and shaping—the future of work, the findings suggested that employers will need to be more discerning and active in their choices, especially when it comes to preparing the workforce of the future. Two, the findings uncovered a very significant but often overlooked new force for change: a keen sense of willingness and optimism in middle-skills workers about their ability to prepare for a better future. As companies navigate these unprecedented changes, they have an unexpected ally in that task—their employees.

Country-level insights

Appendix I provides insights into the attitudes of business leaders and workers in each country surveyed and includes cross-country comparisons. While the country-specific data illustrate the unique challenges each nation faces, the findings also shed light on the priorities for business and policy leaders to shape a brighter future for citizens. For example:

- In Brazil, workers were far and away most likely to report immediate costs as a barrier to preparing for the future, compared with workers in 10 other countries.
- Workers in Japan and France were least likely to report improvements in their employment situation over the previous five years. In contrast, workers in the United States were relatively satisfied with their work situations over the previous five years. US workers were most likely to assign to themselves the responsibility for preparing, rather than to government or their companies.
- In India, business leaders were the most likely to report that they were experiencing the effects of automation, while workers were more likely to anticipate technology having an impact on them, but were relatively positive toward technology.
- Business leaders in the United Kingdom were more likely to be concerned about economic and political volatility and increased trade barriers than those in other advanced countries.

The six challenges companies face

All too often, around the world, pundits, policymakers, and the press stoke fear and uncertainty around the future of work. Their focus is invariably on technology. From job displacement due to automation and artificial intelligence (AI) to job dislocation with work being distributed through digital platforms, the disruptive force of technology dominates most debates on how, when, where, and by whom work will be done. Generally, technology is portrayed as the problem, not as a potential solution.

Ironically, our surveys show that neither business leaders nor workers attach nearly as much importance to the impact of technology in shaping the future of work as onlookers perceive.

When presented with a broad selection of forces affecting the future of work, business leaders rated new technologies as highly significant only the fifth most often out of 17 forces. The force they cited as highly significant most often was the increase in the level of skills and education required.

When asked which force would have a large impact on them, workers chose new technologies the ninth most often. They cited two forces—sudden shifts in customer needs and more, ongoing training required at work—as likely to have the largest impact on their prospects.

However, that's where the similarities between the two perspectives ended.

As we analyzed and compared the findings of our two surveys, it became clear that, across countries—advanced or developing—a vast gulf separated the perceptions of business leaders and those of middle-skills workers in each country. Independent of geography and barring limited exceptions, business leaders were remarkably disposed to think alike wherever they were, and workers worldwide tended to express the same concerns and nurture the same aspirations. (See Appendix I for country-specific survey results.)

Our research identified that there are at least six areas of concern. These provide a clear map for what business leaders can and must do proactively to shape the transition to the future of work—for their organizations as well as their workers.

I. Companies don't differentiate enough between the forces affecting the future of work

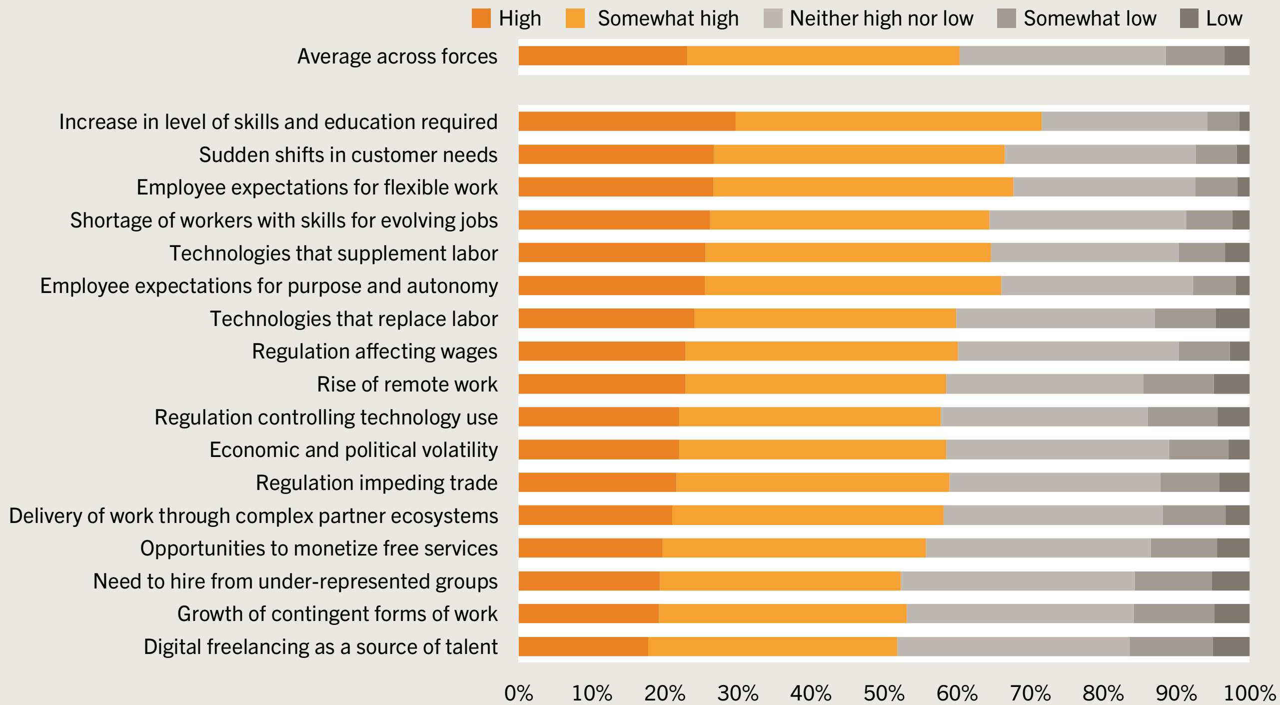
Business leaders are clearly aware that the tectonic plates underlying the nature of work are shifting. However, few seem to have determined which forces are most relevant or most disruptive to their organization's future success. That phenomenon is true across geographies for companies of all sizes. For all the time spent in board meetings and strategy sessions, business leaders seem not to have developed differentiated insights about which forces are most critical to the future of their own organizations, employees, and even customers. When asked to consider the significance of each of the 17 forces on their organizations, a majority of business leaders noted that all were either highly significant or somewhat significant. Only 12 percentage points separated the force business leaders selected most often as highly significant—an increase in the level of skills and education required—compared with the force least often cited as highly significant—digital freelancing as a source of talent. (See Figure 1.)

Furthermore, we analyzed the sense of urgency that those business leaders felt relative to those forces they rated as highly or somewhat significant. We asked them whether the force was *already* having an impact on their organization. Surprisingly, business leaders drew very little distinction between the relative imminence of even those forces they characterized as currently having an impact on their organizations. For almost all the forces, a third of business leaders reported the forces as having significant impact currently; and 45% to 50% of executives across the various geographies projected they would have a significant impact in the future. (See Figure 2.)

The remarkable lack of differentiation among such widely different forces suggests that employers simply do not know which forces constitute the greatest threats and which offer the greatest opportunities for their own companies. Given the importance business leaders, policymakers, labor union leaders, educators, and civic leaders attach to these changes, this lack of discernment is, at best, curious and, at worst, unsettling.

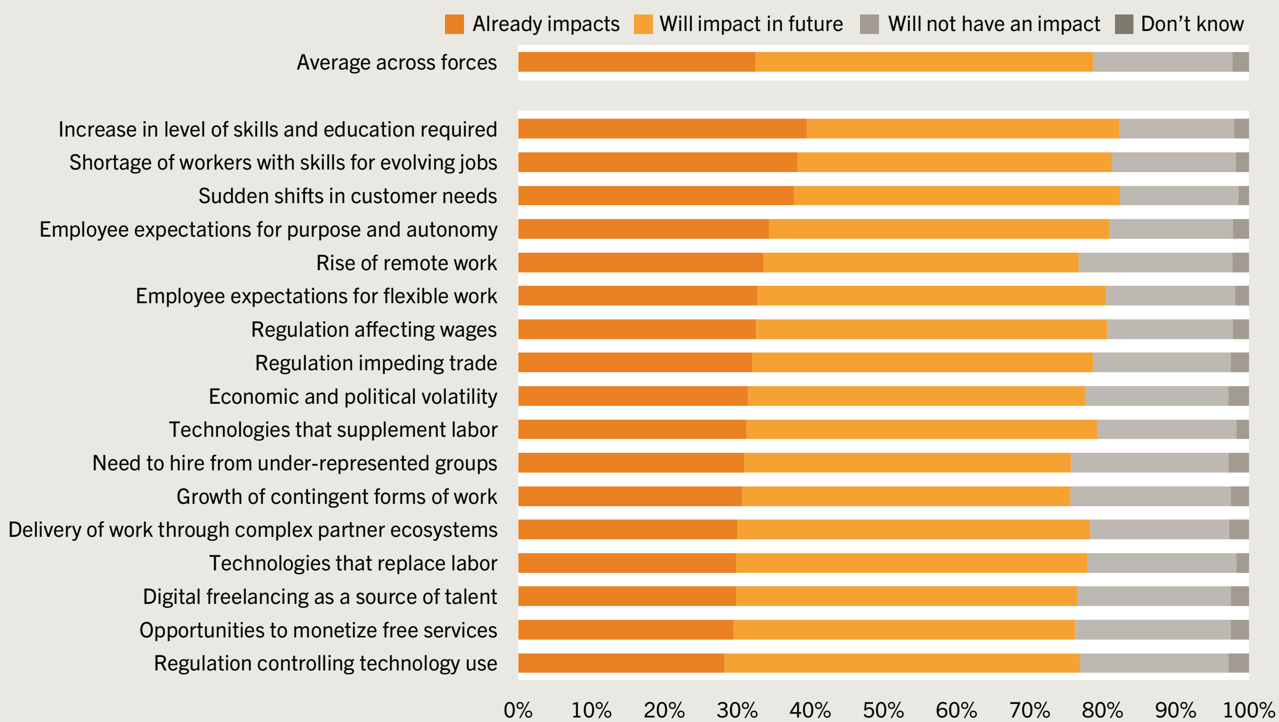
Middle-skills workers showed a high level of awareness of the forces likely to affect their work lives and perceived distinctions between them. (See Figure 3.) Workers perceived the need for more training and education, but also recognized that a key catalyst for their future would

Figure 1: **Business leaders' expectations of the level of significance of each force**



Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Figure 2: **Business leaders' expectations of when the forces they deemed significant would impact their organizations**



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance.
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

be the actions companies took to meet fast-evolving customer needs. Workers also identified the growing significance of and the opportunity associated with the gig economy on their futures by citing digital freelancing as a source of income in the top three issues having a "large" impact on their future. Ironically, business leaders perceived digital freelancing as the last of the 17 forces in terms of high significance. (See Figure 3.)

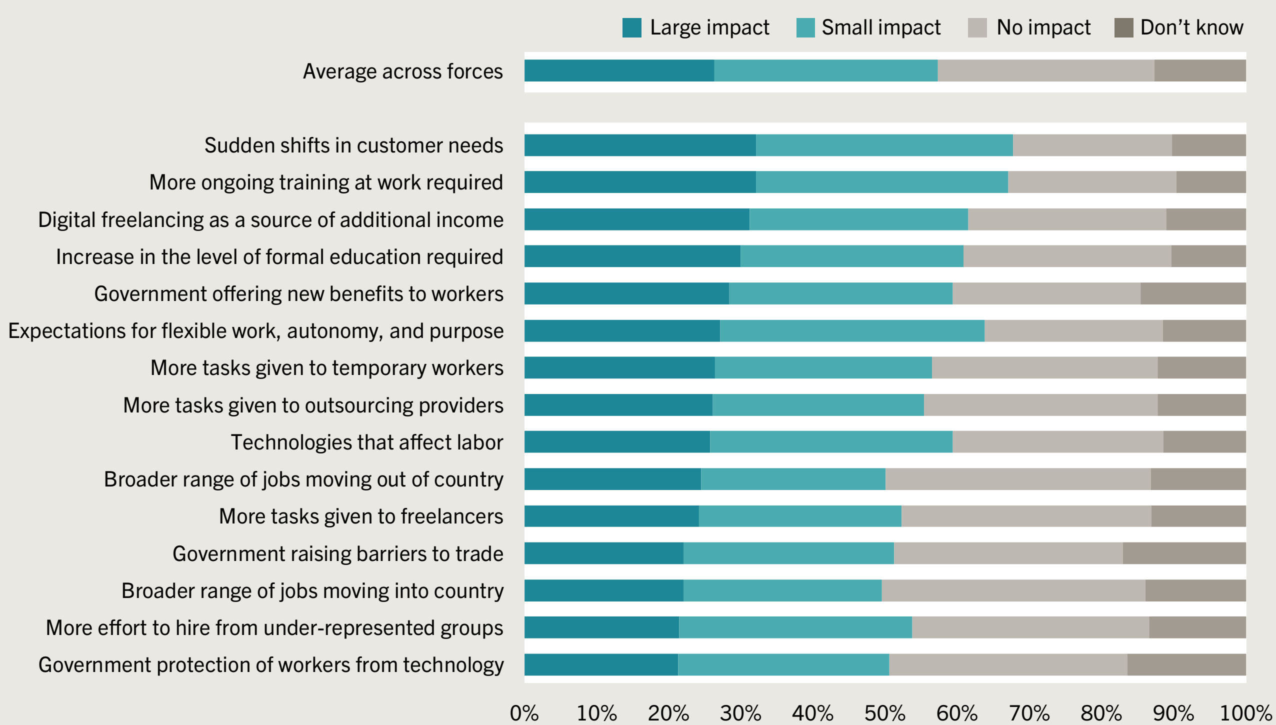
In general, workers saw action taken by companies having a higher impact on their lives than actions taken by government. Of all the 15 forces, workers had low expectations of government playing a role in protecting them from technology. Instead, workers demonstrated a high sense of pragmatism, recognizing that the best defense against technology lay in more training at work and more education. While a slim majority of workers across the 11 countries did draw distinctions between those forces likely to have a significant impact on their prospects and those that were less relevant, 49% indicated that these trends either would have no impact on them or did not know how to account for their impact. For business leaders, educators, and policymakers, it is a stark reminder that the most vulnerable populations in each country represent a talent pool that will require thoughtful action on how to prepare for the future.

II. Companies don't modify strategies to cope with the changes on the horizon

Similarly, business leaders appeared unwilling or unable to specify when various forces would have an impact on their organizations. Executives consistently reflected the sentiment that "the future will look like the past." Business leaders generally (30%-46%) expected forces they deemed as significant *and* likely to have an impact in the future, to affect their organizations in the near term—in the next one to five years. Similarly, business leaders believed those forces they evaluated as being less probable to affect their organizations as likely to emerge only in the intermediate term, five to 10 years in the future. (See Figure 4.)

The three forces that business leaders most often expected to have significant impact on their organizations in the next five years primarily related to the workforce. Those included: employee expectations to find balance between personal and work life through flexible work mechanisms (46%); the need to improve the level of skills in the workforce (44%); and the difficulty in finding workers for the newly evolving jobs (44%). (See Figure 4.) Though ranked within the top 10 issues in terms of significance in

Figure 3: **Workers' expectations of the impact of forces on them**



Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Figure 1, forces related to technology—such as technologies that supplement the labor force (34%) and substitute the labor force (29%)—dropped to the bottom as a priority for the next five years. Business leaders saw them becoming significant for their organization only over the next five to 10 years and beyond. (See Figure 4.)

The near universality of this pattern of responses raises interesting questions for decision makers across the world. Are there so many forces at work as to make it impossible for executives to identify those forces that constitute the greatest threats and the biggest opportunities? If executives assign relatively low importance to the near-term impact of technology on the workplace, are dire predictions overblown? Or, have executives lulled themselves into inaction in the belief they will be able to control the pace of technological change and contain its impact?

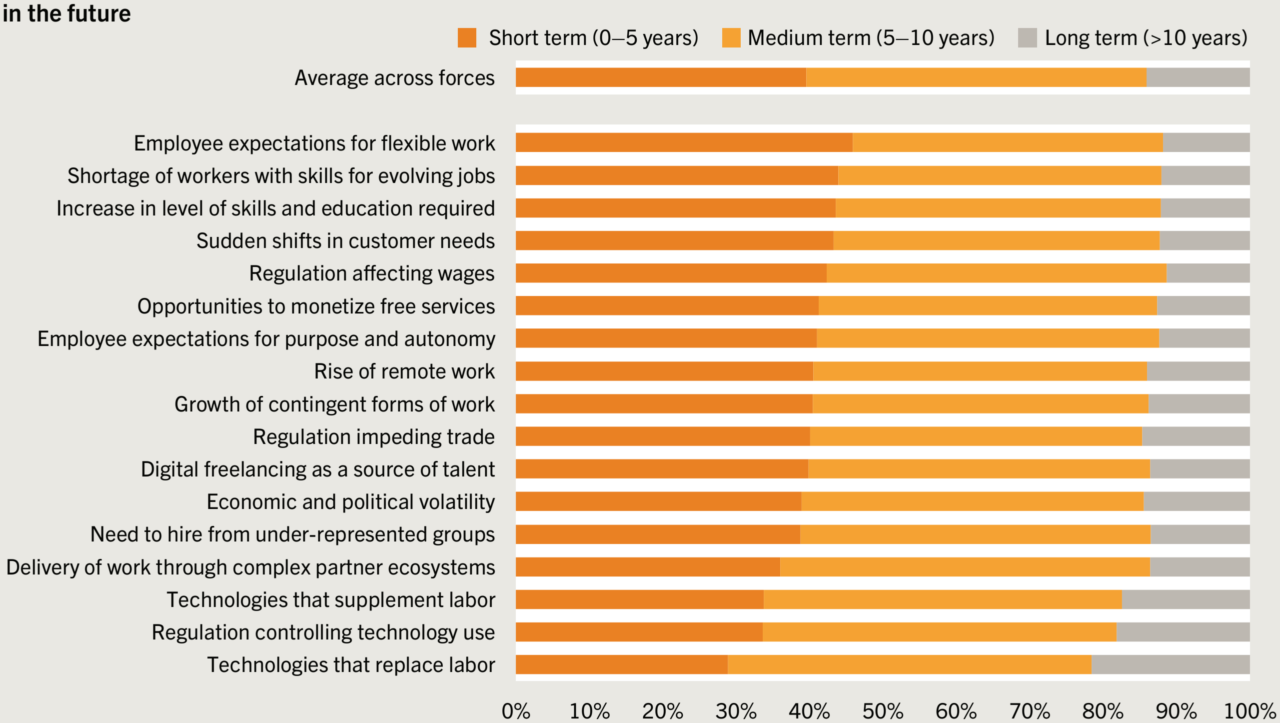
We sought to understand why companies were adopting a stance that could be described as cautious, if not lackadaisical. We asked what prevented organizations from preparing for any force of change *immediately*. The explanations cited by business leaders were telling. The top three responses were: "My organization has other strategic priorities at the moment" (50%); "The impact my organization expects is still too far in the future" (39%); and "My organization lacks visibility on future trends and their impact" (34%). The survey results indicate that, while executives believe something important is unfolding, they do not quite know what to make of it.

Irrespective of the explanation, executives would be well served to ask themselves if they have adequately considered how these forces might affect their strategies in the future. In interviews, executives bemoaned the lack of data and structured approaches for generating foresight in their organizations.

III. Companies overestimate their organizations' readiness to tackle the future of work

Despite a lack of clarity on which forces were most critical for their organization—and with no evidence that respondents have set priorities for addressing them—business leaders expressed confidence that their organizations are prepared to take on these complex challenges. A substantial majority, between 79% and 90%, deemed their organizations to be either well prepared or somewhat prepared for all 17 forces of change. Even with

Figure 4: **Business leaders' expectations of when forces they deemed significant would impact their organizations in the future**



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

a complex, evolving force, such as opportunities to monetize services that are currently offered for free, 35% of employers rated their company well prepared for business models that have yet to emerge. (See Figure 5.)

That confidence, however, may be limited to the C-suite. In advanced countries, with the exception of Japan, top executives rated their organization's level of preparedness distinctly higher than their operating managers did. For all the forces business leaders chose as having an impact on their organization in the future, the percentage of C-suite leaders who claimed their organizations were well prepared was higher than the percentage of senior managers who shared that opinion. (See Figure 6.)

Once again, the survey highlighted that C-suite management would be well served to reflect on what accounts for those differences. Do top executives responsible for setting strategy have a more integrated view of their organizations' overall preparedness for the forces or a better appreciation of how those forces will unfold over time? Or do executives that are closer to day-to-day operations have a more nuanced understanding of how significant those forces are and how prepared their organizations actually are?

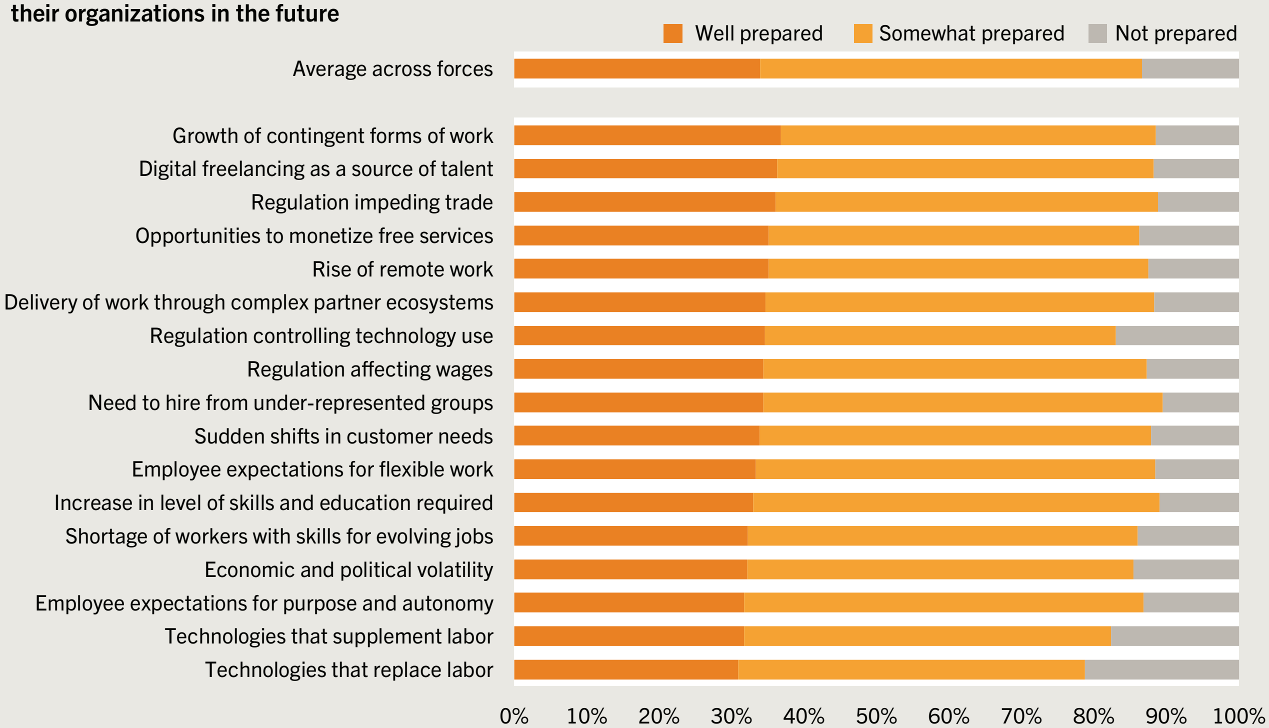
IV. Companies don't treat middle-skills workers as strategic assets

A popular narrative, common to many economies, portrays middle-skills workers as a dispirited lot, dissatisfied with their current employment situations and anxious about the future. The worker survey revealed a far different portrait. Globally, 52% of workers indicated they were either somewhat or very happy with their current employment; only 21% said that they were unhappy. (See Figure 7.)

In all advanced countries surveyed (excluding Japan), a majority of workers were somewhat happy or very happy with their current circumstances. The United States stood out among its peers; an outright majority of American workers perceived an improvement in their employment circumstances over the past five years and expressed happiness with their current employment situation.

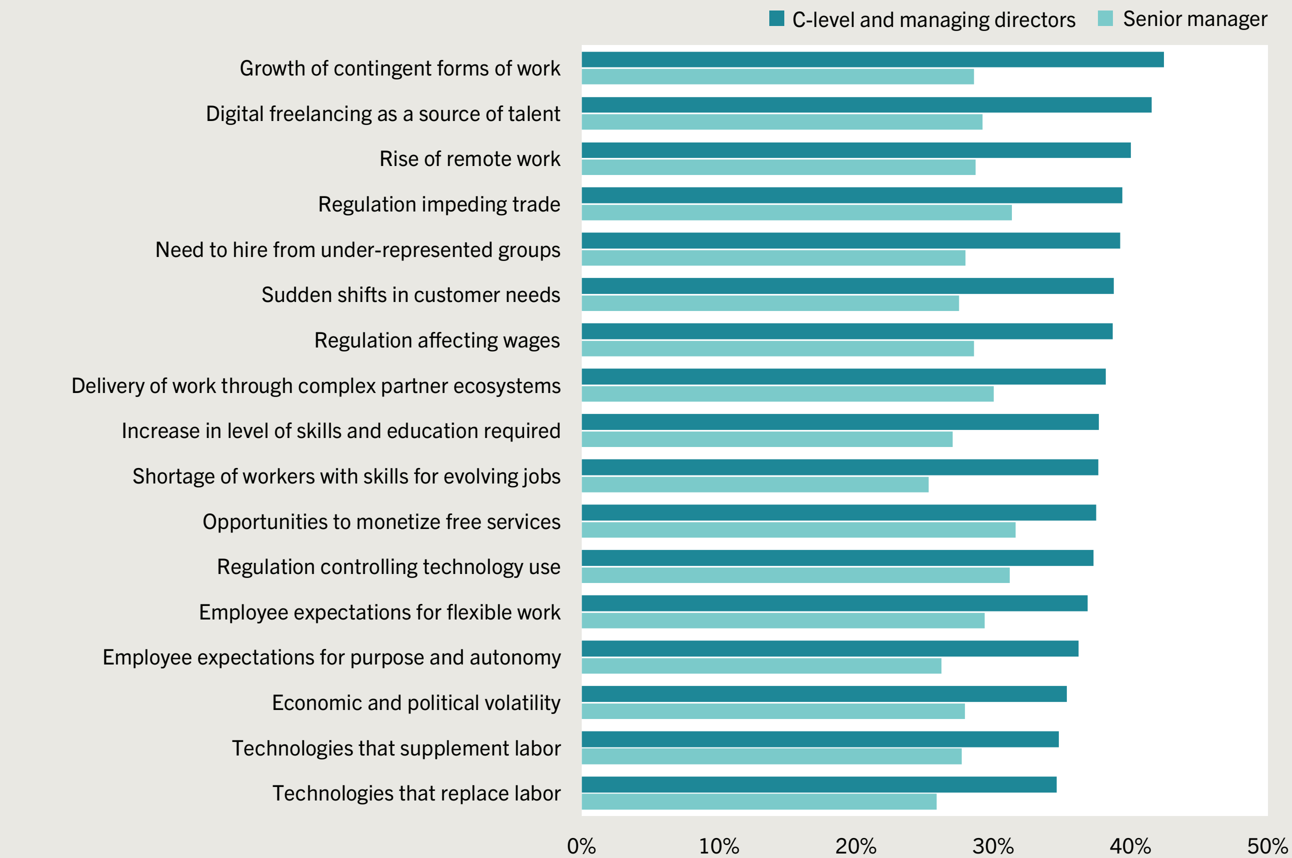
Emerging economies echoed that pattern. A majority of workers in all four developing countries believed their employment situation had improved over the past five years. Overall, across 11,000 workers worldwide,

Figure 5: **Business leaders' perceptions of their organizations' preparedness for forces that will impact their organizations in the future**



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

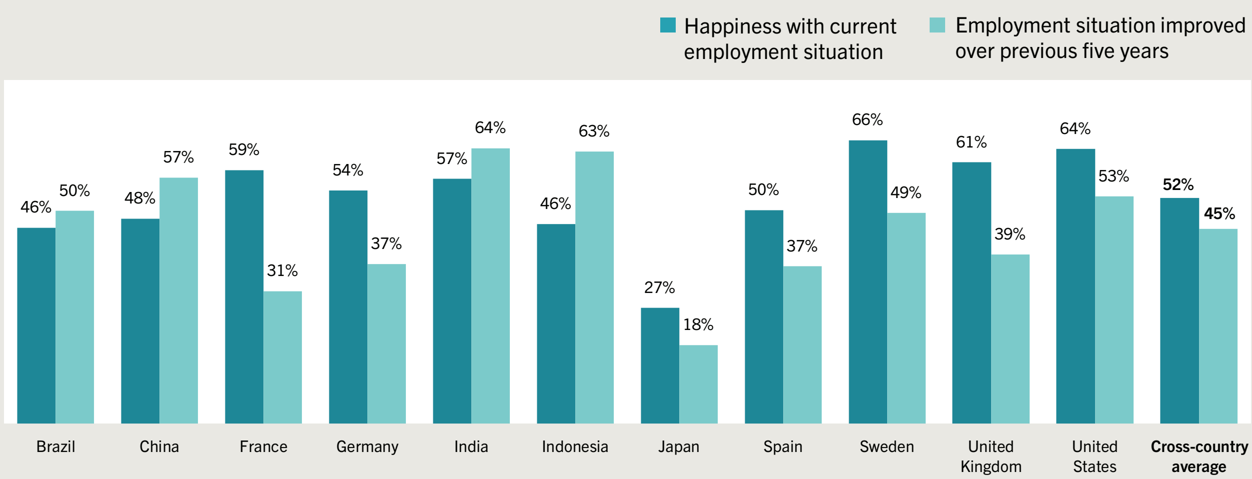
Figure 6: **Percent of business leaders who indicated their organization was "well prepared" for each force by position**



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance, selected "This force will impact my organization in the future," and indicated that their organization was "well prepared" for that force.

Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Figure 7: **Workers' perceptions on their current employment situation and over the previous five years**



Note: Respondents were given a 5-point scale to assess their current employment situation: "Very happy," "Somewhat happy," "Neutral," "Somewhat unhappy," and "Very unhappy." The figure shows the percent of respondents who selected "Very happy" or "Somewhat happy." Respondents were also asked to rate the change in their employment situation over the previous five years as "Better," "Worse," or "No Change."

Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

45% perceived their work situation had improved in the previous five years, while only 14% believed it had deteriorated.

While falling unemployment rates might have boosted the sense of optimism in workers in many countries, subsequent survey findings show that middle-skills workers have a more sophisticated understanding of the forces of change than many business and policy leaders realize.

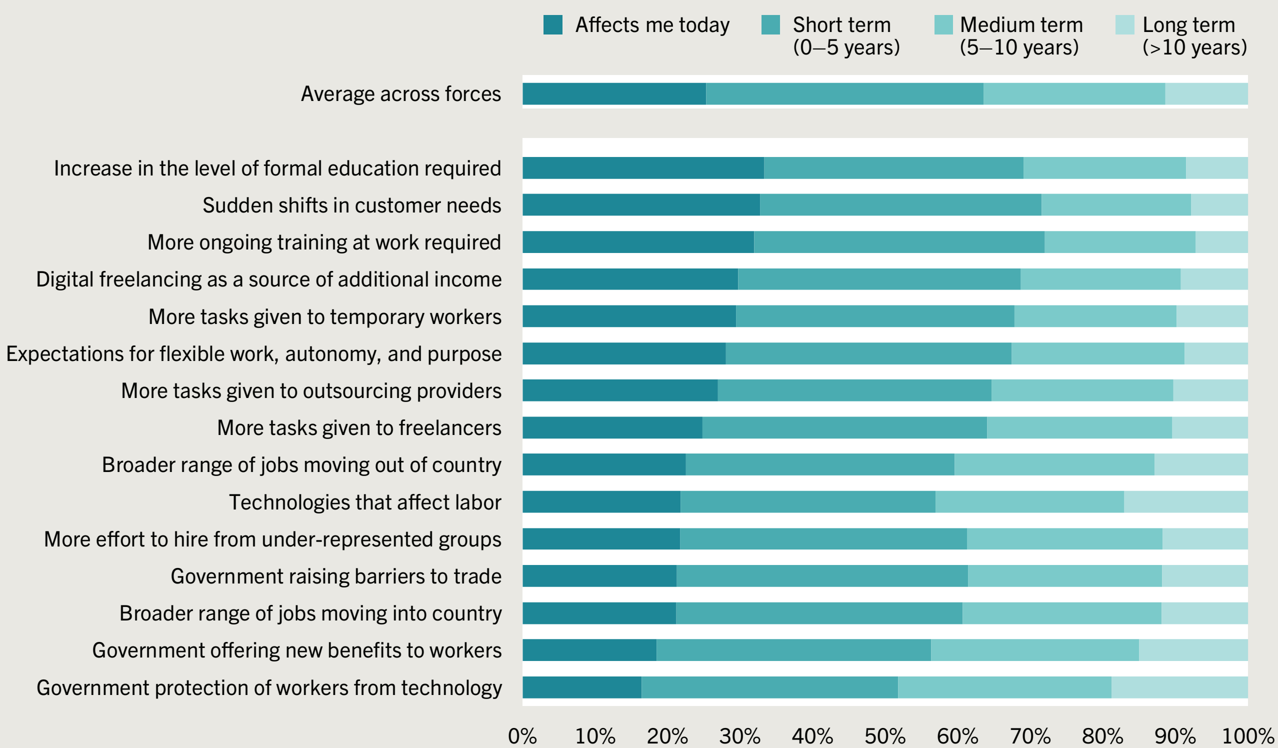
For example, the expectations of workers as to which forces will affect them significantly over the next five years mapped closely to the forces that business leaders considered significant. Those included the need to improve education, acquire skills, and upgrade the quality of talent. Pertinently, workers globally were much more concerned about the adequacy of their skills and competition from other workers than the rise of technologies that displace labor. (See Figure 8.)

Not only are workers relatively happy about their circumstances, they anticipate that the forces changing the nature of work will further improve their work lives. Trends that many commentators cite as looming threats to workers—automation, the rise of the gig economy, the need to retrain and upgrade skills—do not appear to intimidate workers as much as commonly believed. (See Figure 9.)

Instead, a surprisingly substantial majority of workers saw potential in change. More than 50% of workers perceived 11 out of those 15 forces of change as positive developments likely to advance their prospects. For example, workers recognized opportunities such as more-flexible self-directed forms of work and the ability to earn alternative forms of income. Workers perceived that, as "new freelancers"[5] (i.e., people who offer temporary freelance services on digital platforms, such as TaskRabbit and UpWork), they could have more autonomy, greater flexibility, as well as additional sources of income.

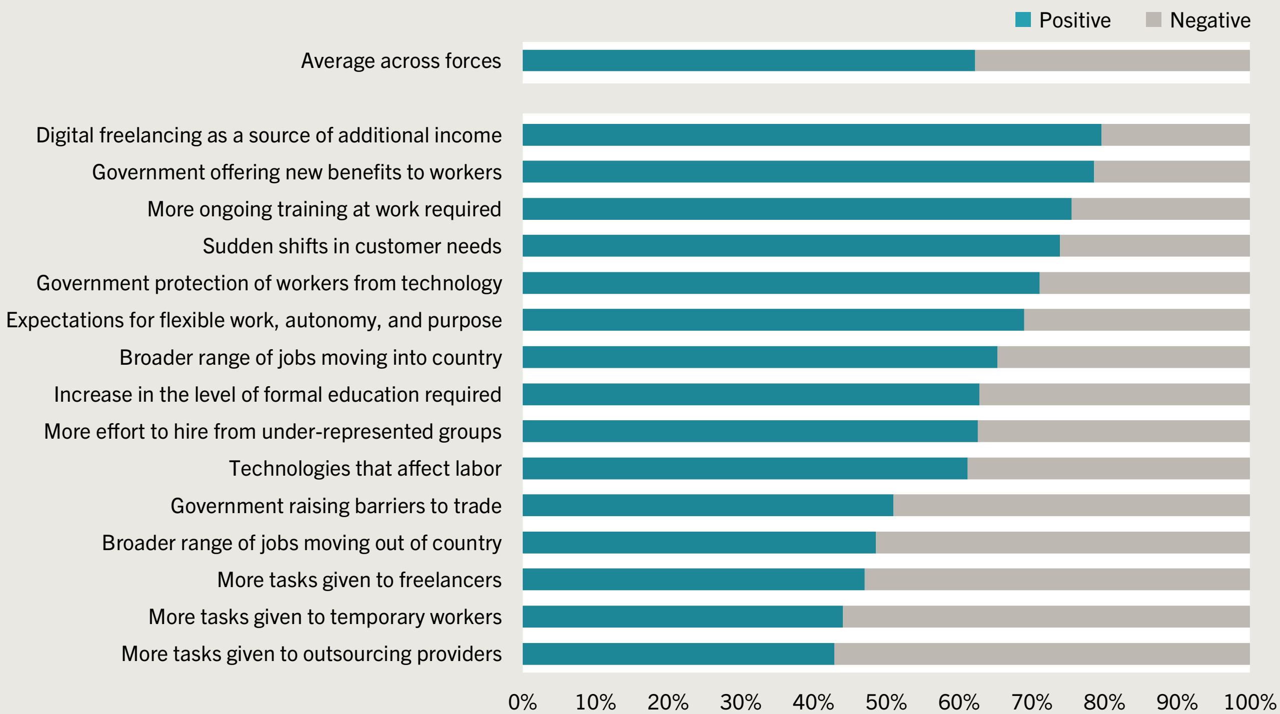
Workers did not see such changes as merely affecting atmospherics at their workplaces. They anticipated those changes would translate into tangible benefits, such as higher wages and more-fulfilling work. Those sentiments held true across all income levels of the workforce. (See Figure 10.)

Figure 8: **Workers' expectations of when the forces they deemed impactful would affect them**



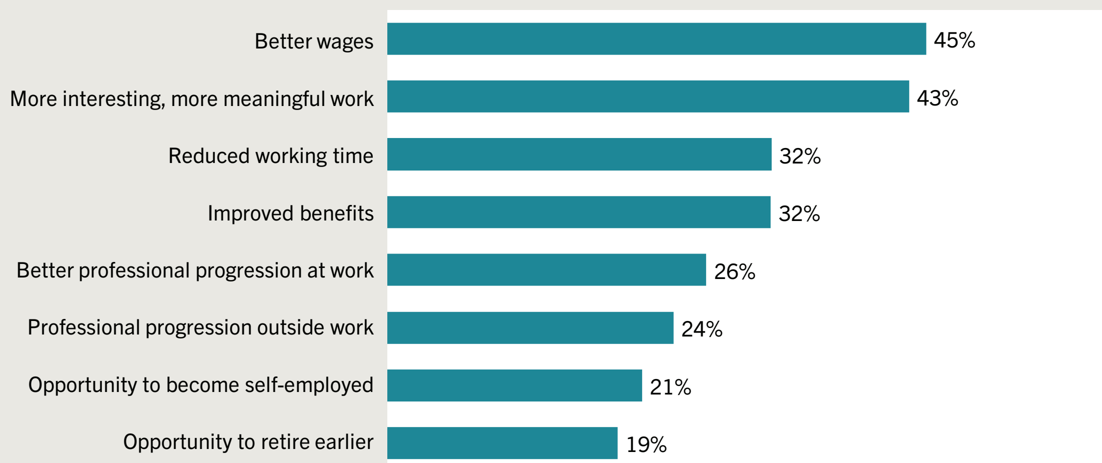
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Figure 9: **Workers' expectations of the nature of impact each force will have on their future**



Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Figure 10: **Workers' expectations of positive impacts from trends influencing the future of work**



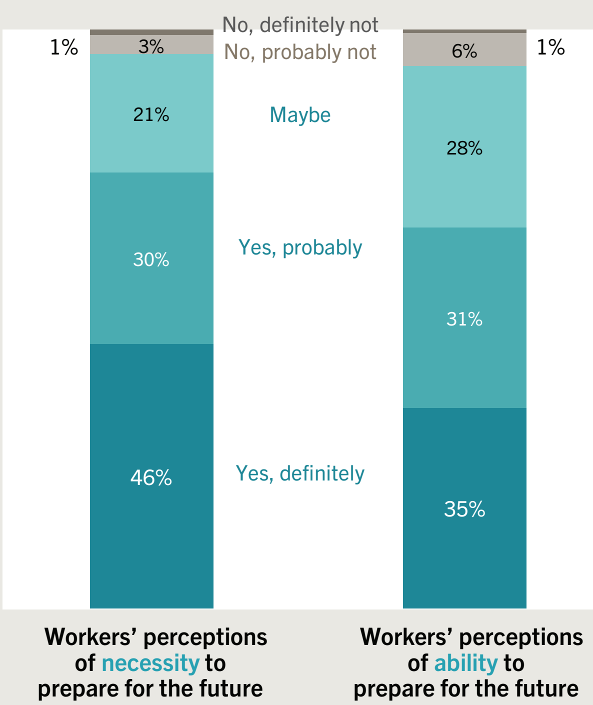
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

V. Companies overlook their workers' desire to prepare for their future of work

Another familiar trope is that workers are resistant to change. The reality is that workers are ready to embrace change. The worker survey revealed that workers recognize that they need to prepare themselves to meet the challenges posed by the changing nature of work. (See Figure 11.) Perhaps more important, workers expressed considerable confidence that they had the ability to accomplish that goal. Worldwide, three out of four workers perceived the need to prepare for the future of work and two out of three expressed confidence in their ability to prepare for the change. In emerging economies such as Brazil and India, an overwhelming 91% and 87%, respectively, of workers expressed the need to prepare, and more than 80% expressed confidence in the ability to prepare.

The survey unearthed another insight that diverged from widely embraced memes. Worldwide, workers were more than twice (46%) as likely to hold themselves responsible for preparing for the future, rather than believing the responsibility lay with national governments (20%) or their employers (19%). (See Figure 12.)

Figure 11: **Workers' perceptions about preparing for the future**



Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

In nine out of 11 countries surveyed, workers expressed a strong sense of agency in preparing for changes in the workplace by judging themselves as having the primary responsibility for preparing for the future. In emerging markets like Brazil and Indonesia, as well as in advanced countries like the United States and Germany, workers expressed an exceptionally high sense of ownership.

There were some notable exceptions. In France, a significant majority of workers placed responsibility on their government (31%) or their employers (27%) for preparing for the future. Pertinently, the survey was conducted in France just weeks before the *gilets jaunes* or "yellow vests" movement emerged in November 2018. In Japan, workers expressed a distressingly high level of confusion about who holds responsibility; 39% of respondents said they did not know who was responsible for preparing them for the future. They joined their French counterparts in expressing the lowest levels of personal responsibility—23% to 24%—for preparing for the future. In China, while a high percentage of workers displayed a strong sense of agency (44%), one in five were not able to choose who was responsible for preparing for the future.

Executives and policymakers should find these results encouraging. A significant number of workers in most of the countries surveyed are poised to embrace the future. They are eager to take advantage of any opportunities presented to prepare for that future. Most important, they express a strong sense of agency and optimism. Decision makers should reflect on how to harness those sentiments as they consider how to position their companies and countries in the evolving world of work.

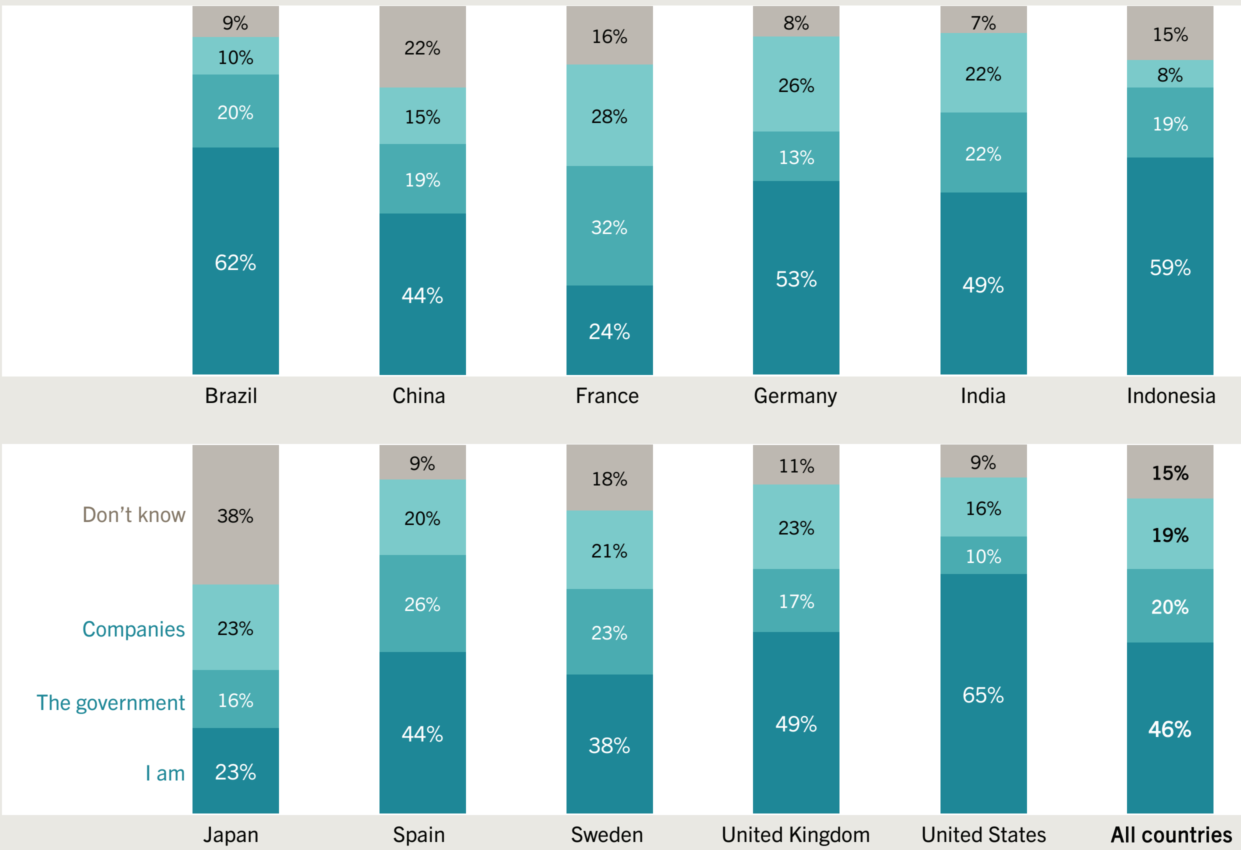
VI. Companies don't provide the support that workers need from the organization

The survey revealed glaring differences in the self-described attitude of workers about the future of work and the perception employers have of their workers.

When asked for the reasons that prevented their workers from preparing for the future, business leaders' most frequently cited workers' fear of change. (See Figure 13.) This pattern was pronounced in Western economies. Executives also held the belief that workers did not perceive such preparations as of immediate importance.

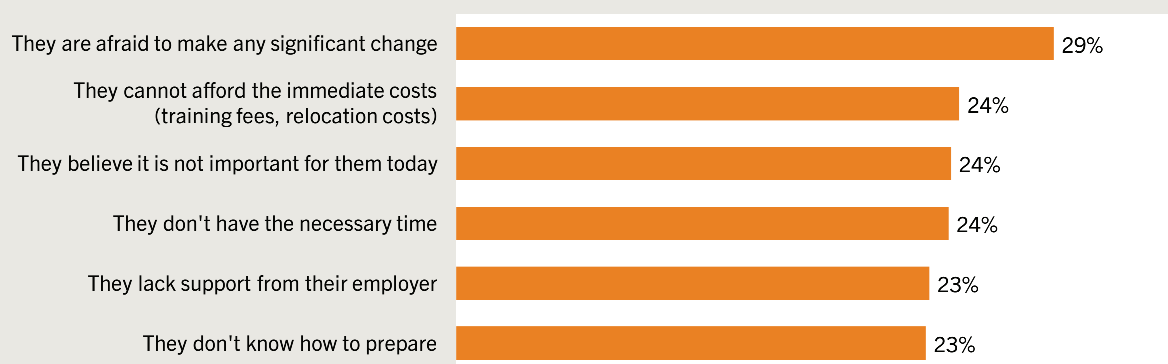
While employers were skeptical about their workers' willingness to embrace the future, they recognized that workers lacked the financial resources and time to enhance their skills, and that workers were uncertain about how they should prepare. Ironically, most companies are not taking direct actions to help their employees

Figure 12: **Workers' perceptions about who is responsible for preparing them for the future**



Note: Respondents were asked to rank a group as first by level of responsibility.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Figure 13: **Business leaders' perceptions about what prevents employees from preparing themselves for the future of work**



Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

overcome those barriers by providing financial support, on-the-job training, and guidance.

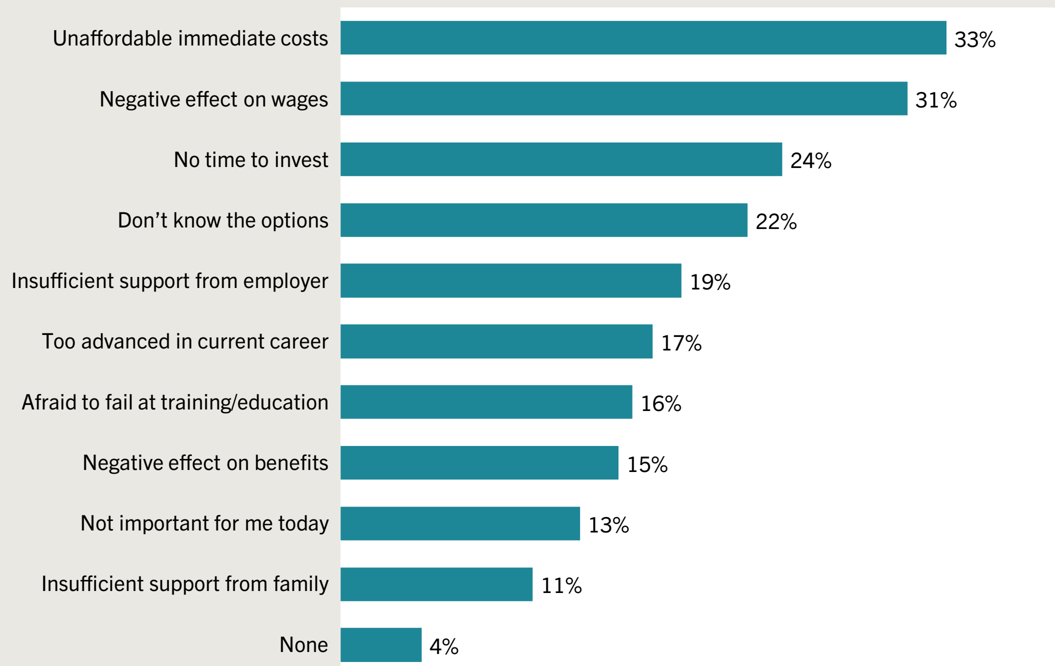
Business leaders in advanced countries were particularly insensitive to their failure to provide sufficient support to workers. Only in India did business leaders and workers agree that companies were not doing enough to prepare workers for the future.

While workers, in principle, held themselves responsible for their future, in practice they struggle to take the concrete actions required to upgrade existing skills or acquire new skills. Shackled by a lack of time and inhibited by the cost of training, the survey revealed that the factors holding them back are genuine constraints. Given the incomes and educational backgrounds surveyed, workers perceived that the resources that are accessible to them were insufficient for them to pursue their ambitions. (See Figure 14.)

They reported a lack of financial resources and time to seek training outside the workplace. Perhaps more important, they expressed a lack of confidence about the specific skills or competencies they should be seeking to develop. Thus, even though business leaders gave themselves high scores on preparedness to tackle the forces of change, the characterization provided by workers makes that judgment suspect.

The roadblocks middle-skills workers identify largely relate to the lack of urgency in employers and governments to make provisions for relieving those constraints. The fact that many workers see no clear avenues for developing skills they believe will be required in the future raises questions upon which executives and policymakers should reflect. What investments should employers make in on-the-job training, educational support, or flexible time off to enable and encourage their employees to improve their skills? What is the return-on-investment logic of investing in cultivating the skills of incumbent workers versus deferring such investments and relying on the "spot market" for labor to fill future needs? What role should government play in encouraging employers to provide such skill building? What is the role of the public sector in improving the productive capacity of incumbent workers, as well as youth soon to be entering the workforce? Perhaps most notably, who is responsible for identifying the most important skills for workers to develop in various industries and for communicating those insights to workers, aspiring workers, and educators alike?

Figure 14: **Obstacles preventing workers from preparing for the future of work**



Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Shared agenda: What companies can do to shape the workforce of the future

It's hard to prepare for the unknown. Consider the disruption caused by Uber's short journey from the first ride in San Francisco in July 2010 to establishing the service in 100 cities worldwide by April 2014.[6] The meteoric rise of the ride-share industry suddenly changed consumer habits, raised regulation issues, and challenged city governments. The shockwave reverberated across a slew of other industries: auto, smartphones, transportation, auto insurance, and even food delivery.

At the same time, it is possible to hedge against the unexpected. Most companies have in place a system for tracking the more obvious challenges they see looming. However, the survey findings suggest that companies need to widen their perspective as they scan the horizon. They must revisit their fundamental assumptions concerning the future of work. While business leaders readily acknowledged the importance of changes in the workplace, their inability or unwillingness to distinguish between an array of factors, or when these forces will affect them, is cause for concern. If everything is important, nothing is. Companies would do well to isolate those forces that are of most importance to their industry and most likely to affect their relative competitive position. They also need to project when these forces are most likely to impact the organization.

Companies must also question their level of readiness. Just as it is unlikely that all the forces identified are of equal importance, it is improbable that companies are uniformly and universally well prepared to meet them. For senior executives and boards of directors, it's time to ask the hard questions required to probe their organization's resilience as well as adaptability. A key step in the process: engaging with operations managers who are on the front lines of change.

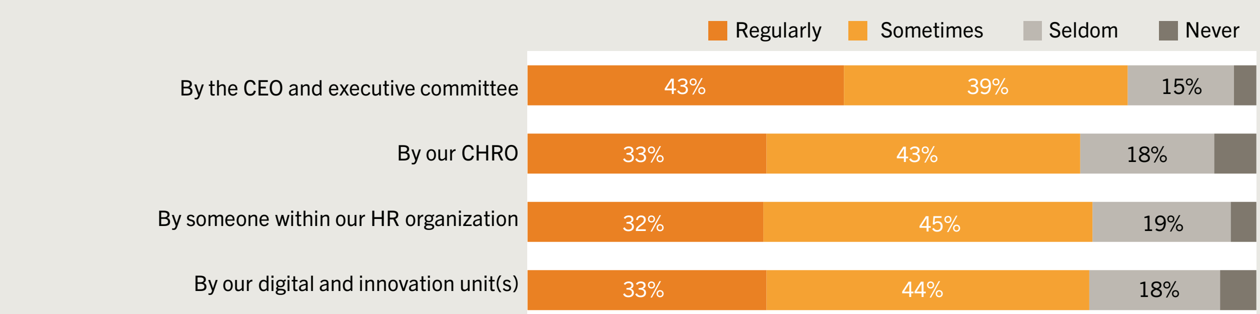
Finally, the surveys revealed that, in all this uncertainty, there is one certainty. Companies will have to rely on the talents and diligence of their workforce to face the changes ahead successfully. Harnessing the energies of workers will take more than cheerleading. It will require employers to incur costs that are both direct (e.g., training) and indirect (e.g., time diverted from work activities). Employers will have to provide guidance on the skills workers need to cultivate. They will also have to take responsibility for helping employees acquire new competencies. Governments will have to consider what they can do to support small- and medium-sized companies in their efforts to maintain competitiveness and encourage larger firms to invest in enhancing the skills of their workers. Only by doing so will a nation's companies and workers prosper in a balanced fashion—no matter the challenge from unknown forces.[7]

I. Prioritize managing the future of work

Many business leaders who took the survey sensed the enormity of the task ahead. Most perceived it as an issue that CEOs and executive committees needed to focus on regularly. (See Figure 15). Having said that, it is clear that top management teams and boards of directors have to do much more than just contemplate the issues.

Perhaps the most pressing task before managements is to short-list the limited set of forces that are most directly relevant to their organizations' long-term competitiveness. Completing this task has more urgency than many business leaders may assume, even those confident that the forces of greatest importance will only come to bear some years in the future. Given the nature of the forces anticipated, companies will need to invest in significant

Figure 15: **Business leaders' beliefs on who should discuss the future of work and how often**



Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

advanced planning, as well as an extended implementation period, to manage the transition.

Imagine a management team that identifies its needs to infuse critical new skills in its workforce. If the company is located in a country with a tight labor market caused by demographic changes, it might find it more economical to upgrade the skills of its veteran workers rather than constantly chasing expensive new hires. While in the long run the benefits of such a retention-led approach would pay off, building the infrastructure for retraining would require an upfront investment in time and effort. It would require considerable planning and take a number of quarters to devise, leave alone implement. Similarly, a company that expects to rely on gig workers heavily in the future would need to put in place new processes to source, onboard, and manage skilled temporary workers. Shifting to such a system would require significant changes in the current administrative processes, followed by experimentation and process refinements.

According to Colao, as he led the charge to transform Vodafone, the onus was on him to prepare the organization for a sustained period of change.

Pertinently, for most companies, mastering their most-significant forces will require looking beyond the four walls of their enterprise. In nearly all the forces we queried business leaders about, a common theme was that the changes would not stay contained within the confines of an organization. Instead, they will cascade through their markets, affecting customers, suppliers, and even the communities in which the company operates.

As Vodafone CEO, Vittorio Colao set out to create value for the Vodafone customer, he realized he had to move his global organization into the world of analytics (big data); automation (chat bots); and artificial intelligence. Vodafone began overhauling key aspects of its business strategy, but Colao knew that when the winds of change would blow across the multi-country organization, not everyone would benefit. Some parts of the organization would surge ahead, others would run into headwinds.

According to Colao, as he led the charge to transform Vodafone, the onus was on him to prepare the organization for a sustained period of change. In order to stay focused, he distilled his mandate to the three questions he was most concerned about: "How do I change the organization to incorporate the digital skills to improve the way the functions work? How do I incorporate machine learning and artificial intelligence that improve productivity and slash costs? What is my duty vis-à-vis the broader society: what can I do to give back to society to make sure that we all create new opportunities for the next generation?"[8]

II. Monitor workplace trends and generate foresight

In the last 20 years, the factors influencing the way we work have evolved at a dizzying pace. The most pertinent challenges to competitiveness an executive might have listed in the year 2000 most likely would have proven to be poor predictors even 10 years later, let alone today. The shortlist would omit many of the defining trends of the ensuing two decades.

Nonetheless, top management cannot absolve itself of the responsibility of guarding the organization from disruption. US office furniture and equipment manufacturer Steelcase rose to the challenge by establishing a dedicated function for tracking the forces of change. The management established a Foresight Practice that invests in academic partnerships as well as in conducting in-house research. It tracks workplace trends that might shape the future of work; Steelcase's various business units incorporate the findings in their activities and plans.[9]

The team is viewed as a core business activity of the company's highly reputed office furniture business. For example, when trends like "hyper-collaboration" emerge and redefine how teams and individuals work in an organization, Steelcase has early insight into how its products and services should evolve in response.[10]

However, the Foresight Practice does more than monitor trends or identify product opportunities emerging in the short term. It helps Steelcase detect elements of change, allowing the company to develop responses before they become disruptive. For example, examining the rise of the gig economy alerted Steelcase to its own potential vulnerabilities to that trend. The company's human resource function—the Strategic Workforce Architecture and Transformation (SWAT) team—experimented with its own internal gig platform "Loop," allowing the Foresight Practice to gather insights on the impact of the trend.[11]

Launched as a pilot project, Loop allows employees to volunteer to work on company projects outside their own function. These projects help employees gain exposure to new tasks and acquire new skills, without any formal classroom training. For the company, Loop helps ensure that business units or project teams can source scarce skills needed to complete important work. For employees, Loop offers a platform to demonstrate experience, build personal networks, and acquire new skills. In a remarkably short time, Loop has become a vibrant intra-company marketplace of skills at Steelcase.[12]

III. Improve preparedness by developing action plans for different scenarios

The sheer breadth of changes underway might make managers and policymakers cautious about committing to a specific course of action. In the face of significant uncertainty along multiple dimensions, decision makers often place great value on preserving optionality and avoiding irreversible mistakes. Yet, given the speed of change, even short periods of inaction can cause a company to lose ground to a more dexterous competitor or a more nimble start-up.

Faced with such uncertainty, Konecranes, the Finnish manufacturer of cranes and heavy-lifting equipment, decided it could not wait for the truth to unfold. Instead, the top leadership began considering the actions Konecranes could take in the present that would advance its position in the future, irrespective of how uncertainties resolved themselves.

To develop a strategy, the Konecranes management began tracking how trends were transforming other unrelated industries, such as banking, media, and travel.[13] That helped the company realize that technology was not the only relevant factor that might disrupt its business model. Instead, the leadership team gathered that multiple trends such as technology, globalization, and customer expectations would combine to redefine Konecranes' market. Responding would require both broadening the company's business model and renewing the workforce's skills base to sustain Konecranes' competitive advantage.

To separate the critical forces from the marginal, CEO Panu Routila adopted an innovative approach. He asked his management team to visualize at least three scenarios of how the world would change by 2035 and what that meant for Konecranes. The process served as a wake-up call. The top management team found that many of the changes were, in fact, both possible and likely to occur in the near term. Says Routila: "In the last couple of years there have been so many things happening in the world that you can't just try to predict one outcome. We create three different scenarios, and we want to make sure that our base strategy actually is a winning strategy in all the different scenarios."

Konecranes committed to digitizing its cranes while, in parallel, building a services business model. It developed a remote monitoring system called Truconnect that allows it to remain permanently connected to its customers' cranes. That enabled the company to offer new customer services like Lifecycle Care, where Konecranes tracks how a customer's crane is performing and shares preventive maintenance information with customers. Eventually, Konecranes plans to use Truconnect to offer Lifecycle Care services to any company with a crane—even those manufactured by its competitors.

To separate the critical forces from the marginal, CEO Panu Routila asked his management team to visualize at least three scenarios of how the world would change by 2035.

To prepare its workforce of more than 18,000 employees spread across 50 countries, Routila recognized that Konecranes would need to invest substantially in training and help employees acquire new competencies. Konecranes has set a goal of five days of training for each employee per year. The focus of the training is to equip employees to do old tasks in new ways with the help of technology. Service technicians, for example, are being trained using virtual reality so that they can practice fixing a problem before visiting a customer—and be far more efficient when fixing a maintenance issue at a customer site.

Routila readily admits that many other pilot ideas did not prove as successful as Truconnect. Expressing the sense of uncertainty a CEO or policymaker might have, Routila says: "I would love to know where the future is going, but I don't have a crystal ball. The early-on technology advancements—when the hype is starting, and everybody wants to start investing—you have to be a little bit cautious. But you still have to spearhead investments and trial projects. Then you start to see what really works for you in the industry."[14]

IV. Invest in closing the middle-skills gap in the organization

Almost universally, companies decry the shortage of skilled workers and fear that their workforce lacks the skills that will be required in the future. Despite those concerns, many companies have not taken the basic steps required to fix the skills gap.[15] Most do not collect data across all levels of the organization about their workers' existing skills. An HR executive at a leading European bank told us: "We need a map of skill sets and needs, a map of compatibility and transferability of those skill sets. Yet, we probably don't even have the CVs of all our employees."[16]

Companies also lack clarity about the skills they will need in the future. While some companies track the supply and demand projections for high-skilled workers like aeronautical engineers, data scientists, human-centric designers, or bio-pharma PhDs, few companies monitor the pipeline for critical middle-skills workers. Most organizations have yet to embark on the basics of closing the skills gap. This entails: expanding their notion of "talent" beyond the highly skilled; projecting which middle-skills jobs will be integral to their future competitiveness; understanding how the demand for skills compares with the supply of skills of their incumbent workers; and developing a plan for adapting to new technologies that change tasks, lead to new business models, or require enhanced skills.[17]

While companies are keen to prepare for the future of work, they remain mired in their historical approach to hiring, training, and talent management. Job descriptions continue to be static definitions of work requirements. Educational attainment remains a major and growing criterion for assessing candidates. For example, employers in the US continue to rely on "spot market" hiring to fill positions.[18]

ING Netherlands was able to come through a radical transformation by involving its workers and being transparent about the how, why, and when of change.

Companies routinely apply proven supply chain management principles to other mission-critical resources, but not to their talent pipeline.[19] The head of strategy of an Asia-Pacific telecommunications provider shared with us that, as the company was transforming from a hardware- to a software-based cloud paradigm, its biggest challenge ahead was to figure out how to ensure a steady stream of software-engineering talent into the company.[20]

Fortunately, the need to cultivate and support new models of recruiting, workforce development, and talent management is encouraging the creation of innovative new companies whose purpose is to help employers navigate reskilling challenges. Education technology company Degreed, for example, helps employers define the requirements for every job in the organization. It then creates a mechanism that allows employees to understand which skills they will require in the eyes of the employer to remain competitive in their role or to qualify for advancement.[21]

Catalyte, a provider of software developers and other technology workers, widens the access to talent for employers. It does not use school records and academic backgrounds as criteria for vetting candidates such as software developers.[22] Instead, the company deploys artificial intelligence tools to test if a candidate has the cognitive ability to be a high-performing technology worker. Faethm, a start-up, takes an organization's HR data, runs it through an artificial intelligence platform, and helps a company predict the future job pathways for key roles in the organization.[23] With many such innovative solutions providers emerging, companies will have new tools for planning their workforces of tomorrow.

V. Partner with employees in the transformation process

Most companies track employee satisfaction, but many seem oblivious to how workers perceive the future of work. Those companies that are able to engage the sense of optimism and opportunity their workers exhibit find that they can retain a committed and engaged workforce, even in the face of considerable turbulence.

ING Netherlands, for example, was able to come through a radical transformation by involving its workers and being transparent about the how, why, and when of change. The management realized that several forces would inevitably disrupt the very fundamentals of how the bank served its customers. Its banking products were doomed to become uncompetitive unless ING could provide its customers with a differentiated experience. The management team concluded that it would require overhauling the way the bank approached its work, with middle-skills workers such as call-center representatives and bank-branch personnel integral to the effort. They elected to transform the bank in its entirety—overnight—on June 15, 2015.

The management carefully laid the groundwork for the transformation, engaging the workforce at all stages. First, the company laid out the need to improve customer service, move faster, and acquire digital technologies. Next, the management team began communicating how those changes would alter the way work was done traditionally. Employees heard how the new culture at the bank would demand new behaviors from employees such as being collaborative, innovative, and more autonomous.

The ING Netherlands management was transparent that not all employees would fit into the future of the bank. At one point, all employees—including most members of the top leadership team—were asked to resign from their current positions. Each employee then had to go through a rehiring process. The hiring team did not consist of just the traditional HR managers; instead, it also included a team of peers for each position. Employees were rehired if their colleagues decided they had the right skills and were a good fit for ING's new approach to work.

At the end of the process, about 25% of ING Netherlands employees were not retained. Instead of the usual angst that comes with layoffs, many employees were happy to leave rather than force themselves to fit into the new culture. ING also put in place a program to help employees find jobs outside the company. On the actual day of transformation, the employees who remained in the company were excited to be part of the transformed bank and eager to help the company succeed. Reflecting on the agile transformation, Vincent van den Boogert, CEO of ING Netherlands, says: "My perspective is that it was a success because we explained to people the benefits of it, then we said that it also had a cost element, and ultimately this created the idea that either you are in or you are out. If you are in, there is no option other than to enjoy and be part of it."[24]

VI. Embed learning across the organization to prepare employees for the future

While in-house training is a time-honored concept, it has never been more relevant. The current complexity and rate of change in work requirements make it increasingly difficult for traditional workforce providers—primarily the secondary and post-secondary education sectors—to keep pace. Increasingly, companies are realizing that it is in their self-interest to establish systems and platforms to cultivate the skills of their incumbent employees through continuous learning. We believe that, in the future, this trend will only grow.

Employer and employee will need to enter into the equivalent of a social compact—a learning contract[25]—that allows both to thrive despite the pressures of non-stop, non-linear change. Such a contract will reflect a shared commitment to continuous learning and reskilling. Only such a reciprocal arrangement can serve both sides well. It will encourage employers to make the investment in training or tuition support to help workers to cultivate the skills companies need. It will help employees acquire the emerging skills and competencies they want to cultivate. As a senior executive at a leading retail company in Europe said bluntly: "Companies have to become campuses, where people learn something every day, on the job, from their colleagues, their managers, even their customers."[26]

Employer and employee will need to enter into the equivalent of a social compact—a learning contract—that allows both to thrive despite the pressures of non-stop, non-linear change.

A leading machinery and equipment manufacturer in India is leveraging the desire in middle-skills workers to learn new skills. The company believes workers are increasingly tech-savvy and fully capable of consuming "bite-size" digital learning modules on their own time and at their own pace. The company sees its role as that of an enabler. It provides its employees with the learning modules, encourages workers to be accountable for learning, and empowers them to acquire the skills they need for their current jobs as well as future growth. Says the CHRO: "Self-managed teams can play a big role in creating the right learning organization. We have strong evidence that such teams yield superior results both in work output and in learning success."[27]

Conclusion

There are many reasons to be optimistic about the future of work. However, ensuring that the future is bright for workers will require key stakeholders—business leaders, policy leaders, and educators—in each country to set aside traditional ideas and embrace change. Companies will need to discard conventional approaches for sourcing, cultivating, motivating, and retaining talent. For their part, workers will have to prepare for new tasks, acquire new competencies, and play new roles within organizations. Workplace practices of the past will be as ill-suited to the future of work as yesterday's technologies.

Our research indicates that employers and workers alike understand that change is inevitable, and if approached properly, disruption can improve the prospects for both. This will only happen when there is transparency about the nature and direction of change. Companies will need to earn the trust of their workforce through actions that address the specific concerns of their employees.

While workers are poised to make an effort to prepare for a brighter future, they require substantial assistance to achieve that goal. They also need reassurance that they will share in the benefits that stem from the resulting improvements in their productivity.[28] Warns Guillaume Alvarez, senior vice president, EMEA, at Steelcase's European Innovation Center: "What we see often is a lack of trust: Employees do not believe that the change is real and that it can be rewarding for them. This causes a large disconnect between a company's communicated aspirations and its employees' attitudes."[29]

In addition to building trust with workers, companies will also have to do more to trust each other. The era of competition for acquiring talent is going to be replaced by an era of "co-opetition," in which companies collaborate to ensure an adequate supply of skilled talent.[30] The pace of change and underlying demographic trends will make it increasingly implausible that any one company can remain competitive by simply outbidding its competitors to overcome a scarcity of workers. Industries that succumb to the temptation to engage in cutthroat competition over talent will trigger a "tragedy of the commons," in which all suffer through the misguided pursuit of a fleeting advantage.[31]

Instead, companies will need to work closely with other companies in the same industry, business ecosystem, or region to define current and future skills, to identify development opportunities for their employees, and to create upskilling opportunities across a partner network. They will benefit by partnering with educational institutions to ensure that aspiring workers have relevant competencies and not just credentials. They will find that collaborating with policymakers will reduce barriers to workforce participation and will increase access to new pools of talent. Such an ecosystem will foster the emergence of innovative entrepreneurial models for developing, managing, retraining, and strengthening talent pipelines.

Businesses, as the source of the most valuable "currency" in the system—jobs—will need to play an active role in shaping the ecosystem, assuming a leadership role. Says Vodafone's Colao, who embraced the need to expand the dialogue to different stakeholders outside his company: "I am a big fan of the golden triangle—policymakers, business leaders, and academics—because we have different angles and time frames, and we, therefore, need to look at solutions together."[32]

Workers can only benefit from the emergence of such an alignment. They can be relieved of the uncertainty they face and enhance their prospects. If companies willingly help workers prepare for the future and increase productivity, both employers and employees stand to benefit.

Whether in an advanced nation or in an emerging economy, business leaders have a unique opportunity to shape how humans do the work that needs to be done. In the process, they have the ability to improve productivity, help companies compete, serve customers better, and above all, provide individuals with wages and the dignity of labor.

Appendix 1: Country data

BRAZIL

Key points:

Brazilian workers strongly acknowledged the need to prepare for the future, claimed responsibility, and expressed confidence in their ability to do so. Business leaders viewed workers as being willing and able to prepare. Both identified cost as a barrier—workers more so than in any other country.

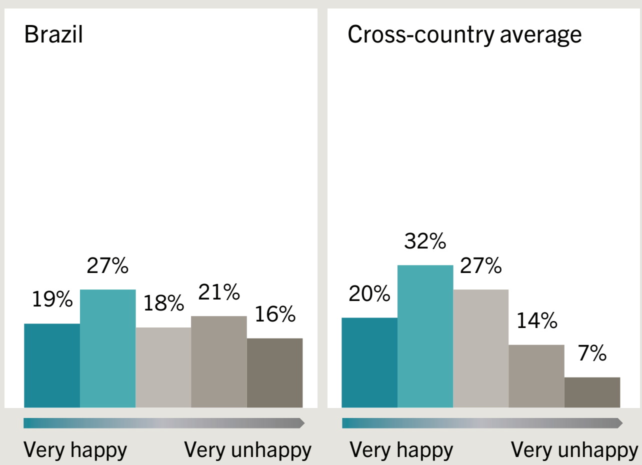
Workers in Brazil were most likely to expect a large impact, second only to those in Indonesia, of increasing education requirements on their future—but many were not optimistic that the force would have a positive impact.

Business leaders were the most concerned about economic and political volatility relative to leaders in the other seven countries. They were also most likely to report that their organizations are already experiencing volatility.

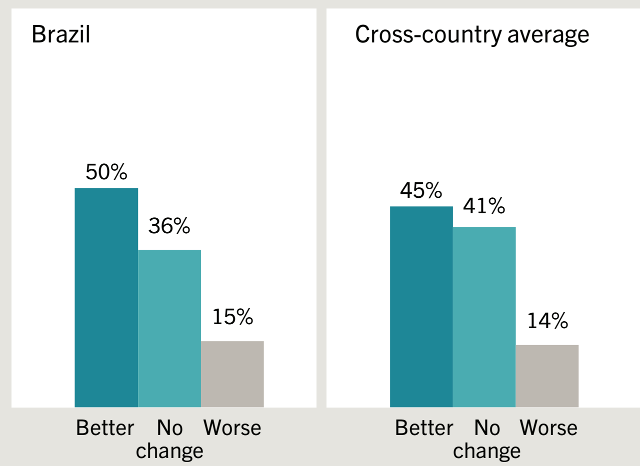
Leaders in Brazil assigned higher levels of significance cumulatively to all 17 forces than their international counterparts. They were also more confident than the average about contingent work.

WORKERS

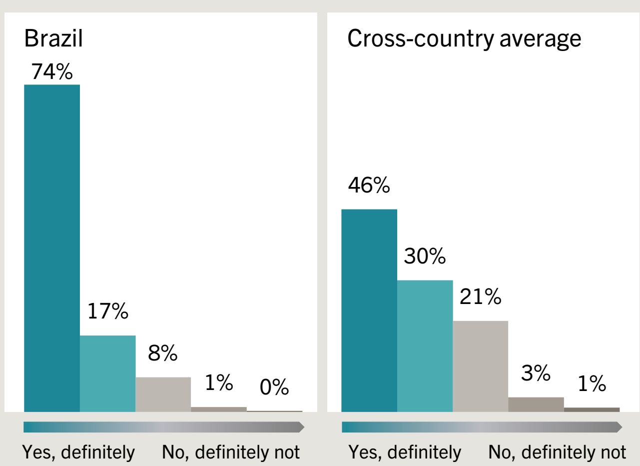
Happiness with current employment situation



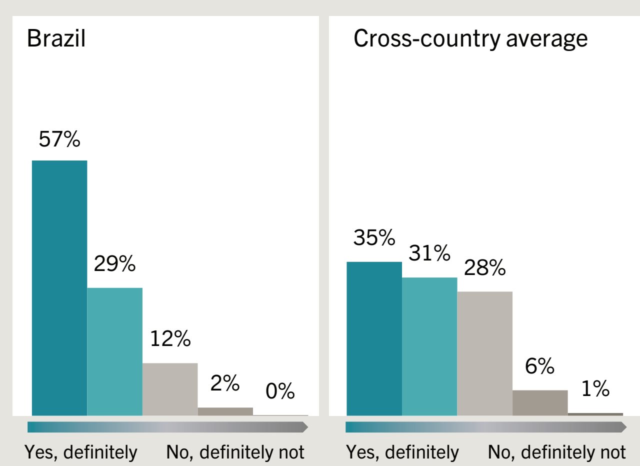
Employment situation over the previous five years



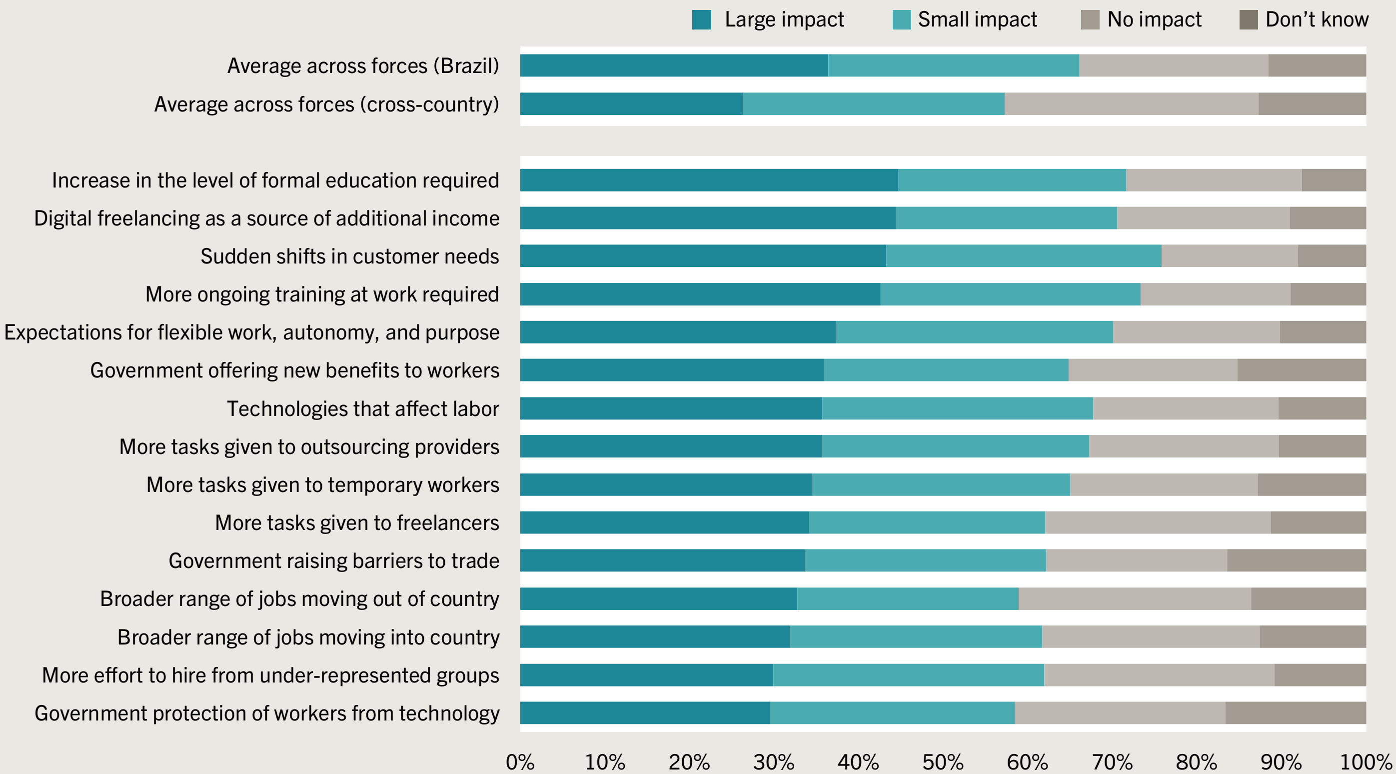
Workers' perceptions of necessity to prepare for the future



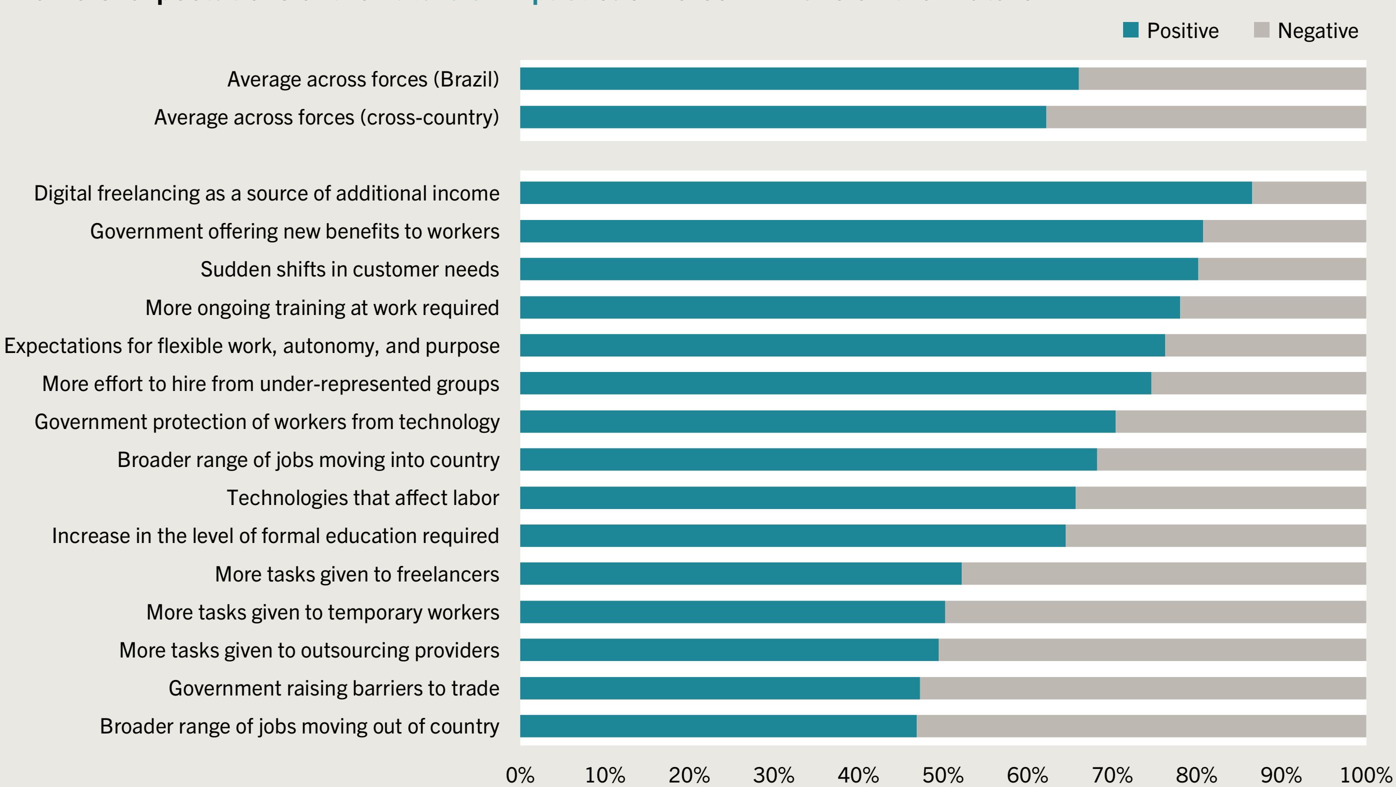
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

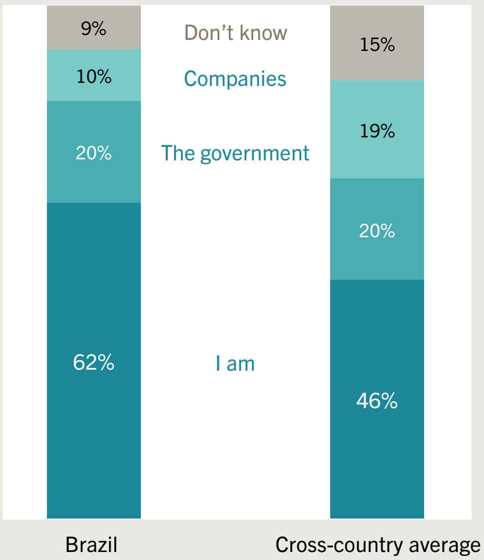


Workers' expectations of the nature of impact each force will have on their future



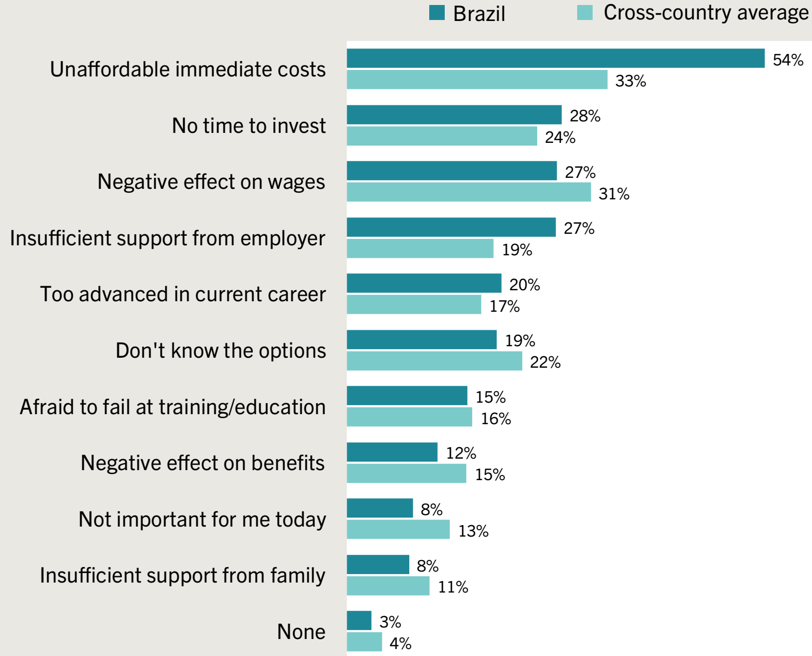
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

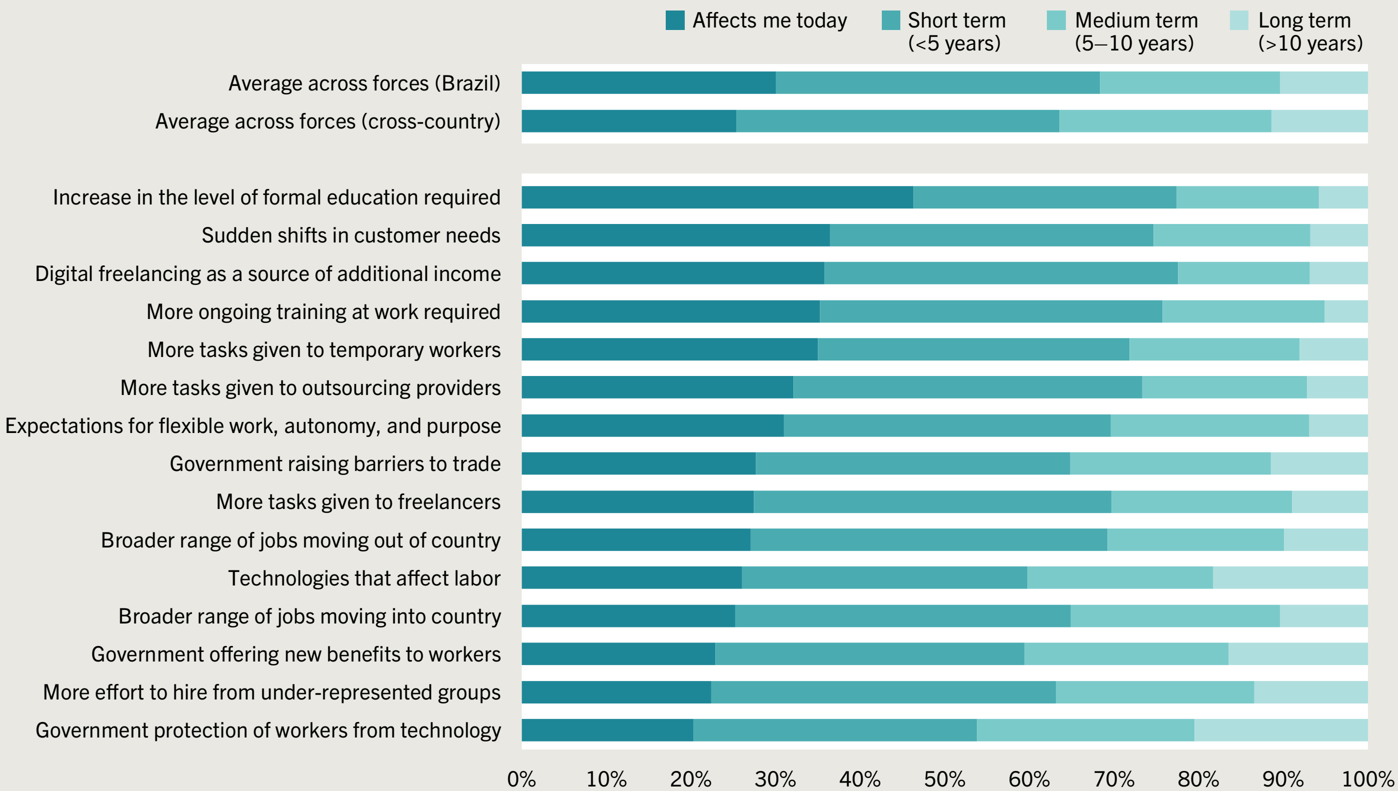


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



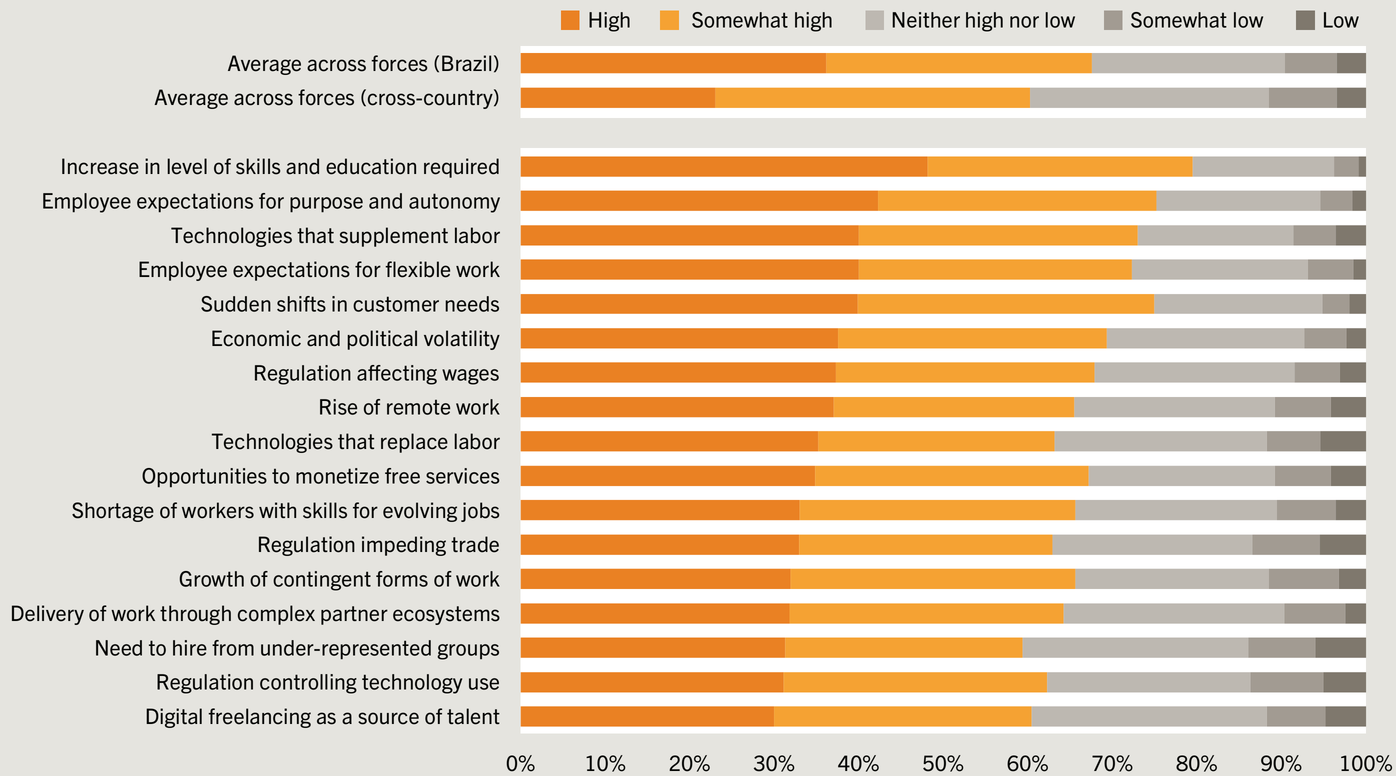
Workers' expectations of when the forces they deemed impactful would affect them



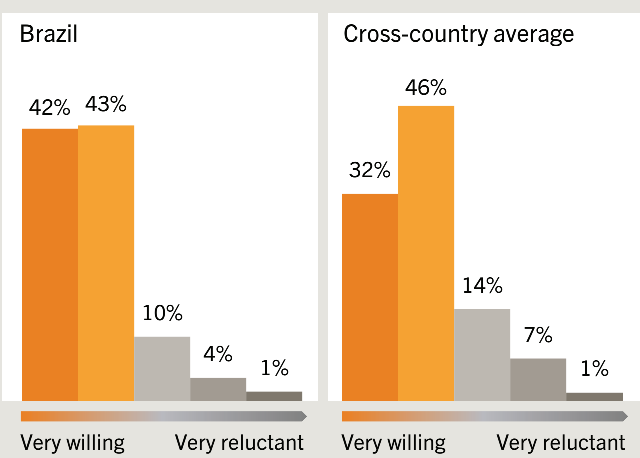
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

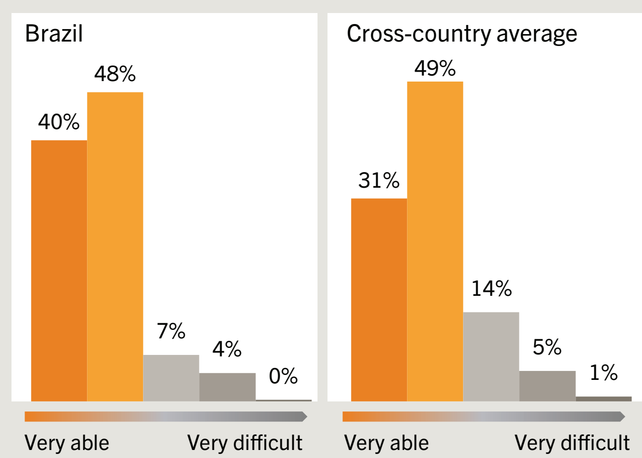
Business leaders’ expectations of the level of significance of each force



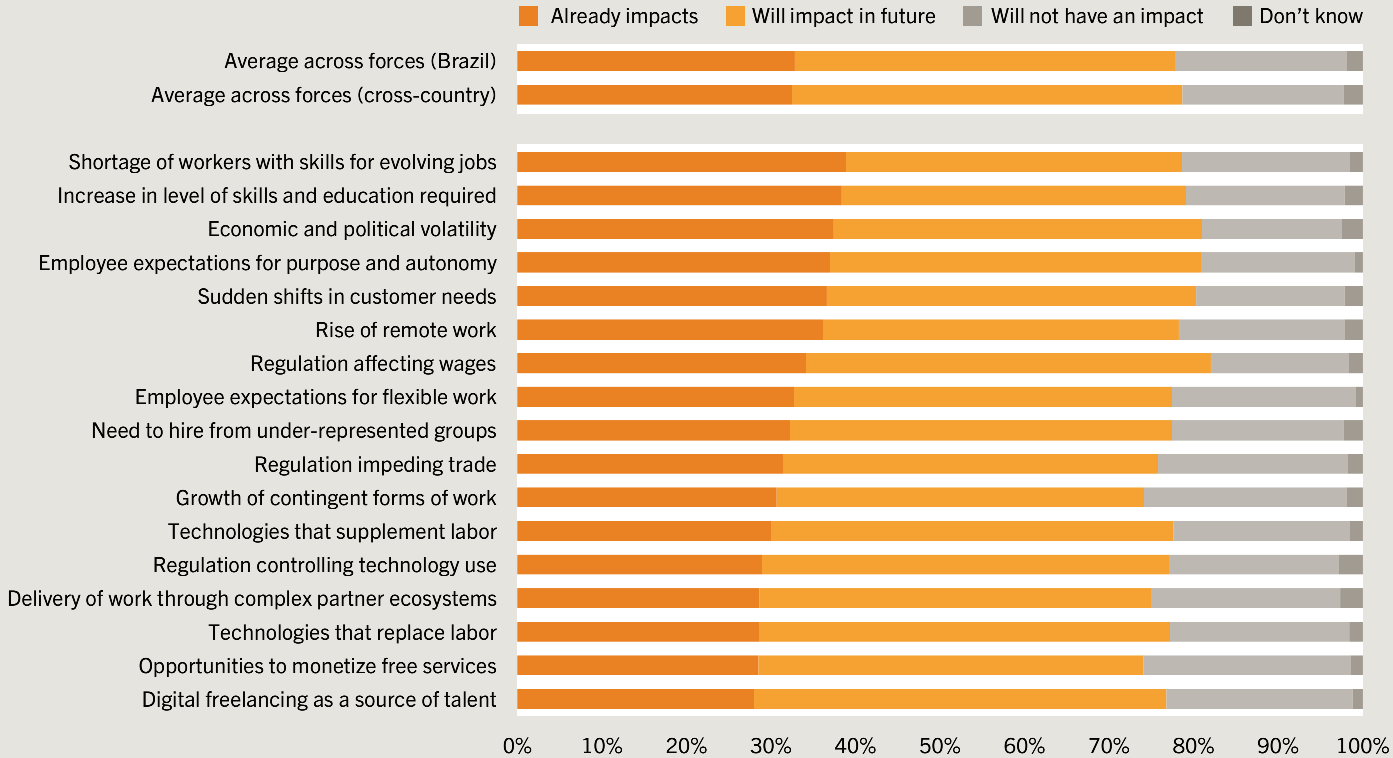
Business leaders’ perceptions about workers’ willingness to prepare



Business leaders’ perceptions about workers’ ability to prepare

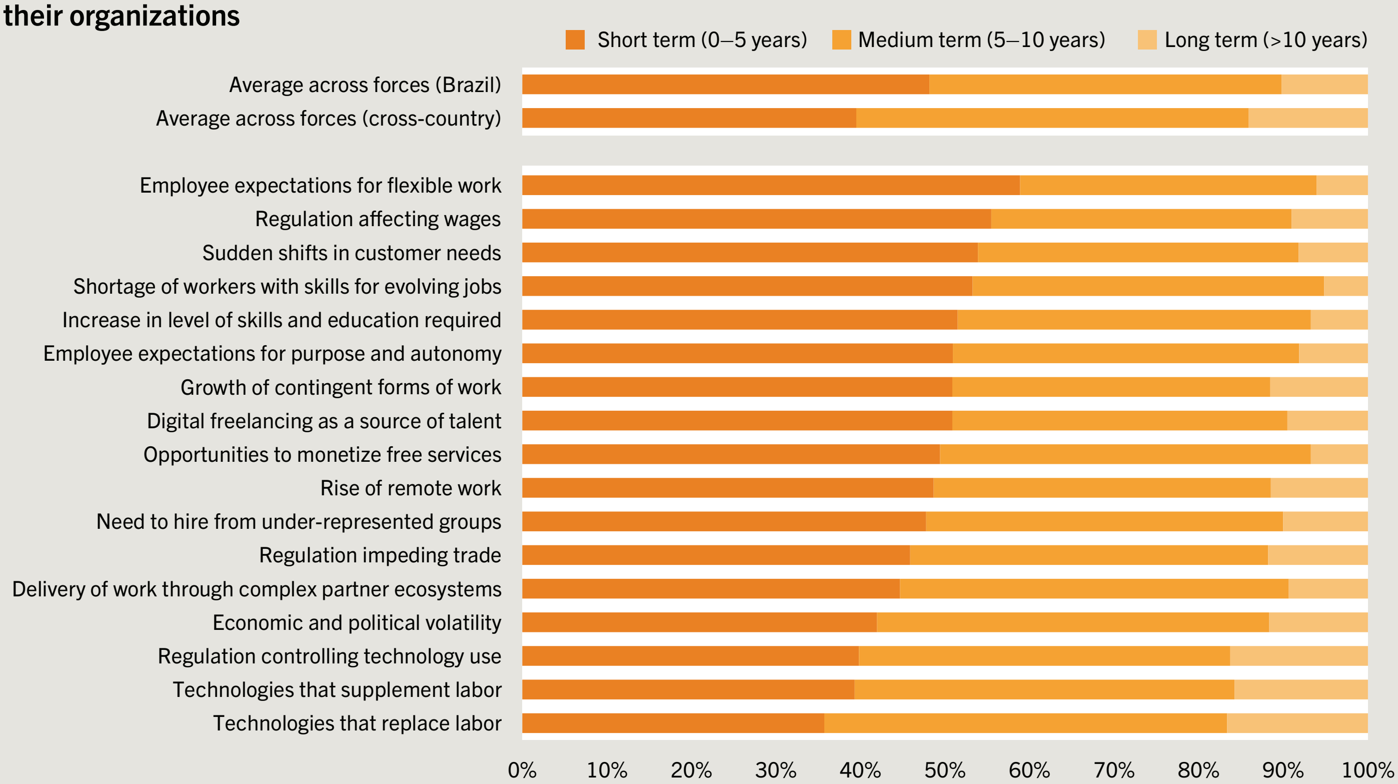


Business leaders' expectations of when the forces they deemed significant would impact their organizations



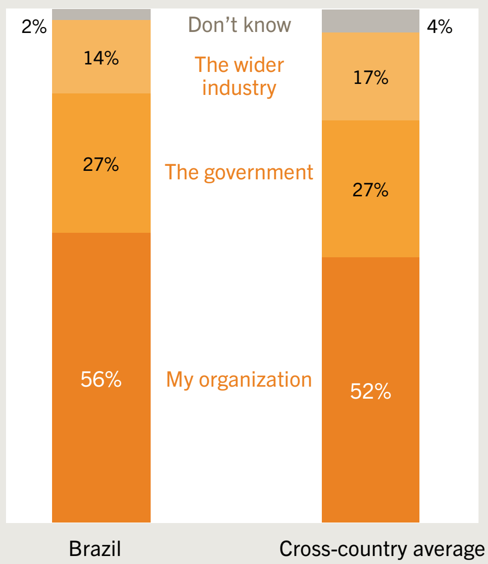
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance.

Business leaders' expectations of when in the future the forces they deemed significant would impact their organizations



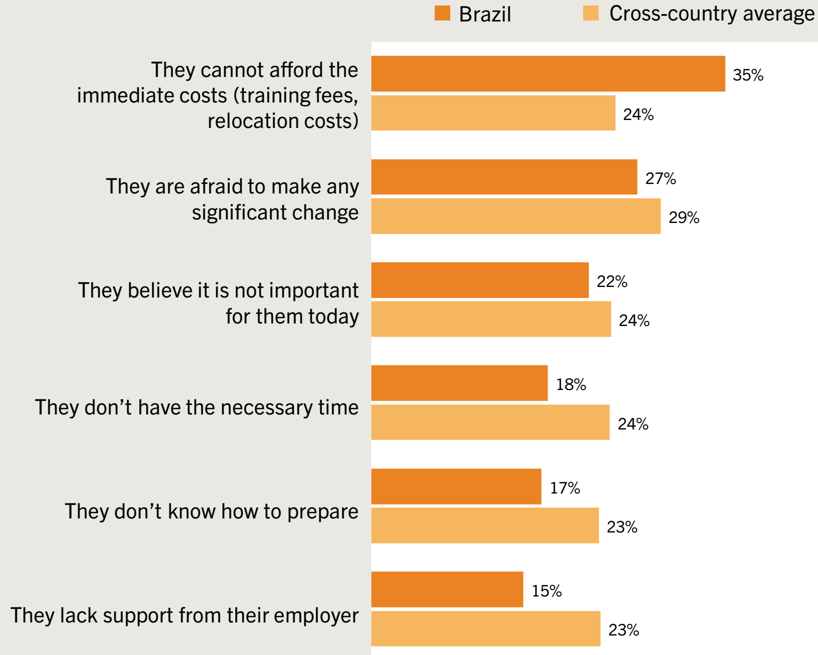
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Business leaders’ views on who is responsible for developing the solutions needed

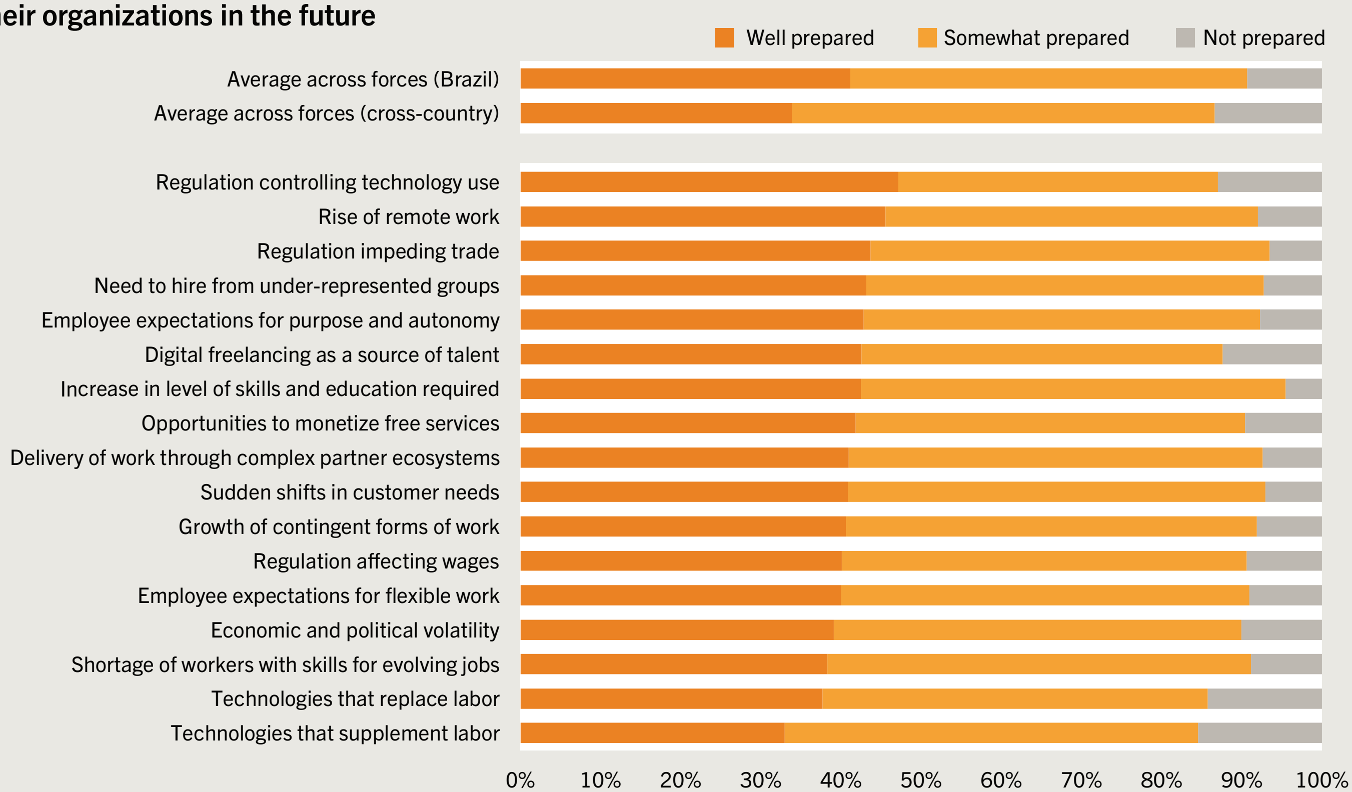


Note: Respondents were asked to rank a group as first by level of responsibility.

Business leaders’ views on what prevents employees from preparing



Business leaders’ perceptions of their organizations’ preparedness for forces that will impact their organizations in the future



Note: This question was shown to respondents who indicated a a force was of “high” or “somewhat high” significance and selected “This force will impact my organization in the future.”

Note: Percentages may not add to 100% due to rounding.
Source: “The Future of Human Work Business Leaders Survey.” Harvard Business School’s Project on Managing the Future of Work and BCG’s Henderson Institute, 2018.

Key points:

Compared with workers in other developing countries, Chinese workers were the least optimistic overall. They were also least likely to acknowledge that the forces would have a large impact on their future.

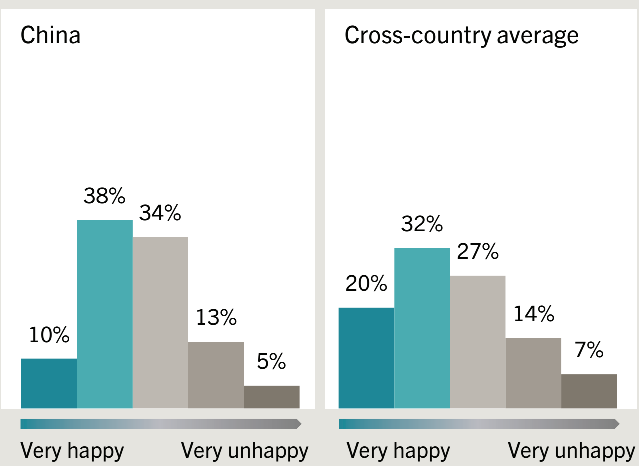
Chinese workers were the least likely to say technologies affecting labor would have a large impact on their future. However, they were positive about the effects of digital freelancing.

Workers were less certain than their international peers about preparing for the future. Business leaders were more likely than leaders in other developing countries to consider their organizations, rather than the government, to be responsible for preparing workers.

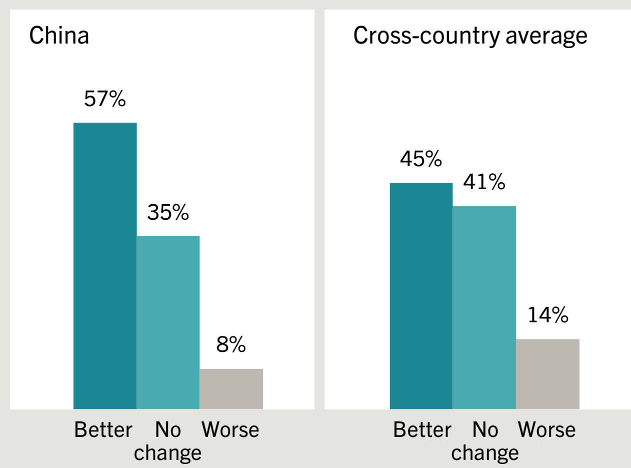
Business leaders were least likely to indicate being well prepared for new expectations from employees, such as flexibility, purpose, autonomy, and remote work. They signaled confidence about the delivery of work through complex partner ecosystems.

WORKERS

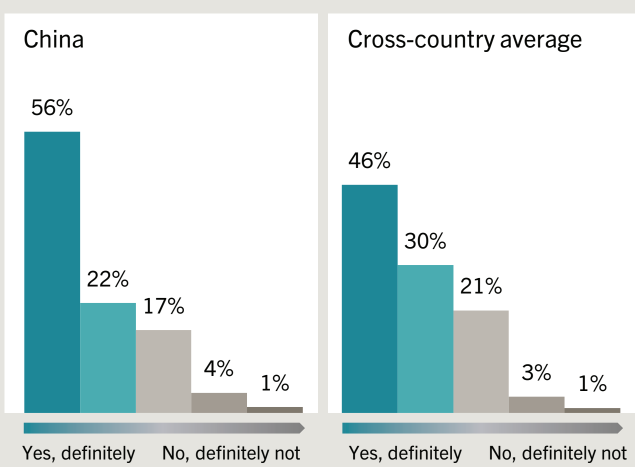
Happiness with current employment situation



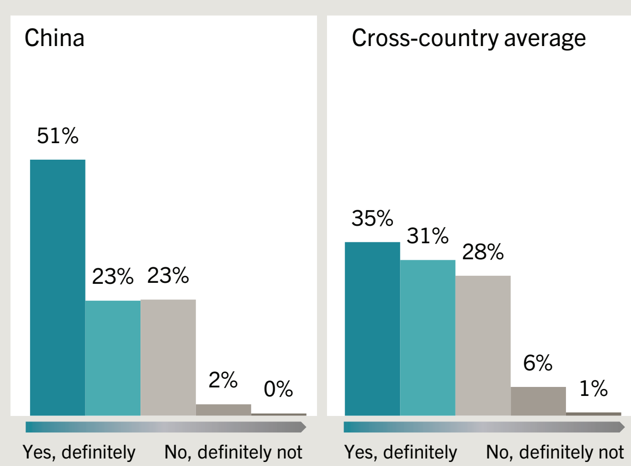
Employment situation over the previous five years



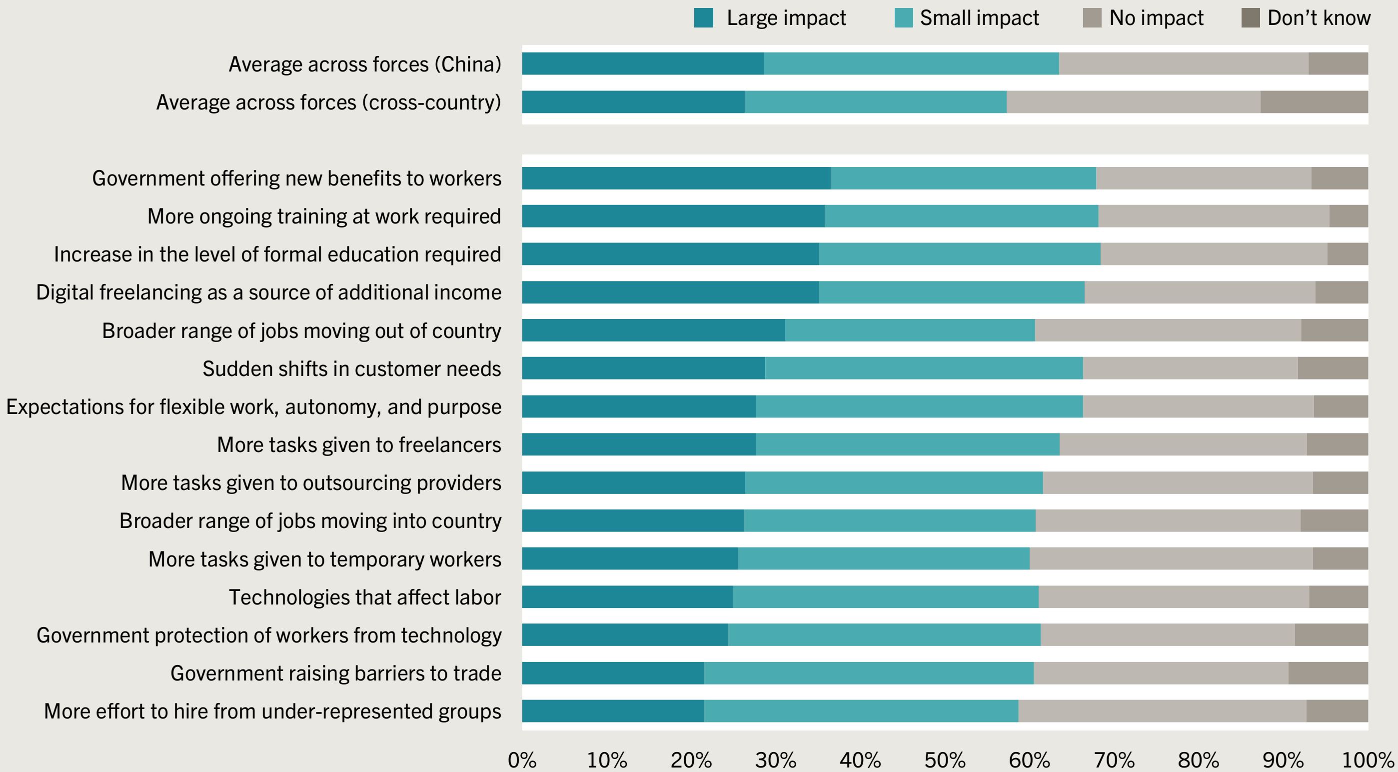
Workers' perceptions of necessity to prepare for the future



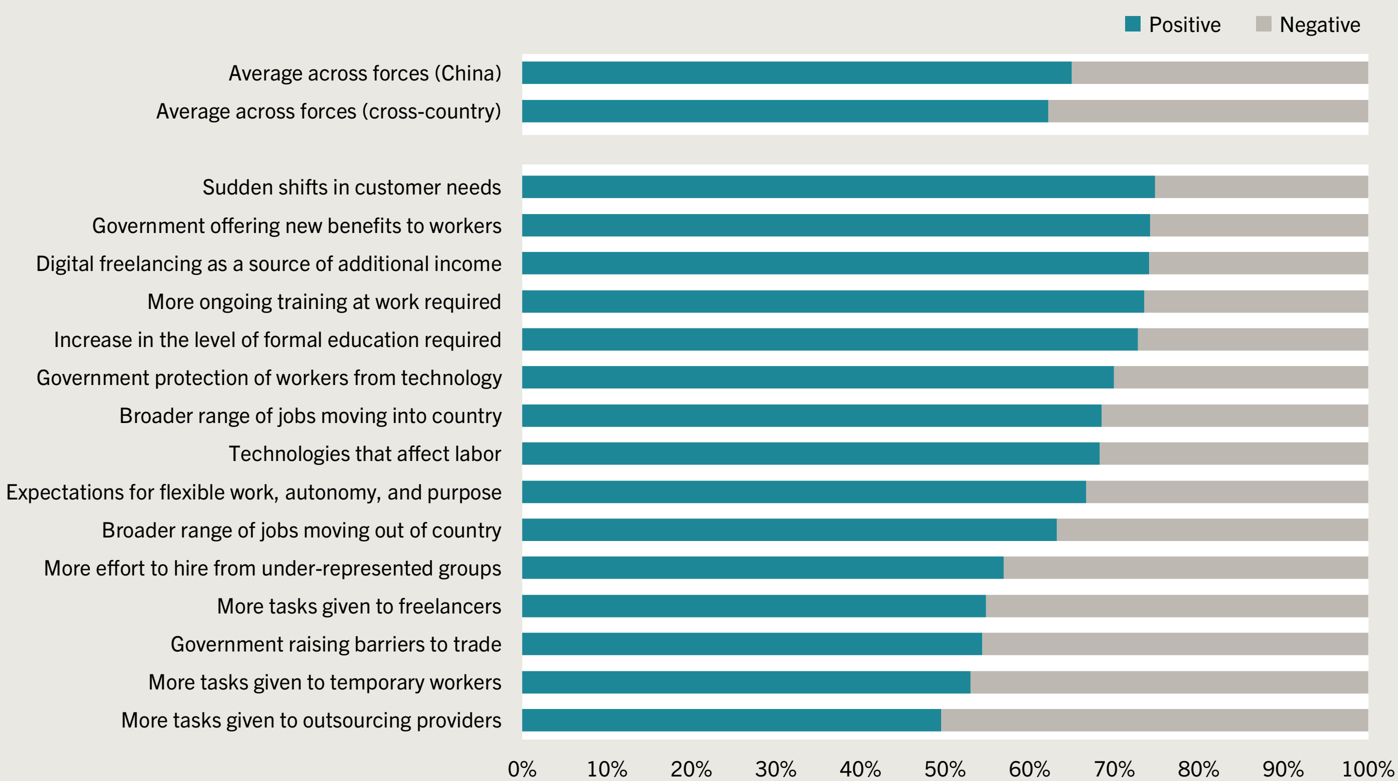
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

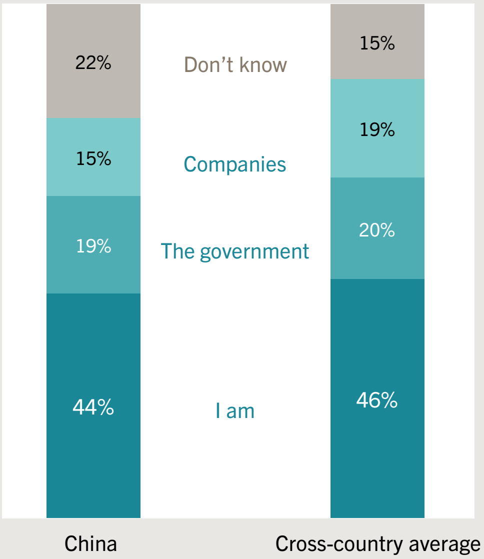


Workers' expectations of the nature of impact each force will have on their future



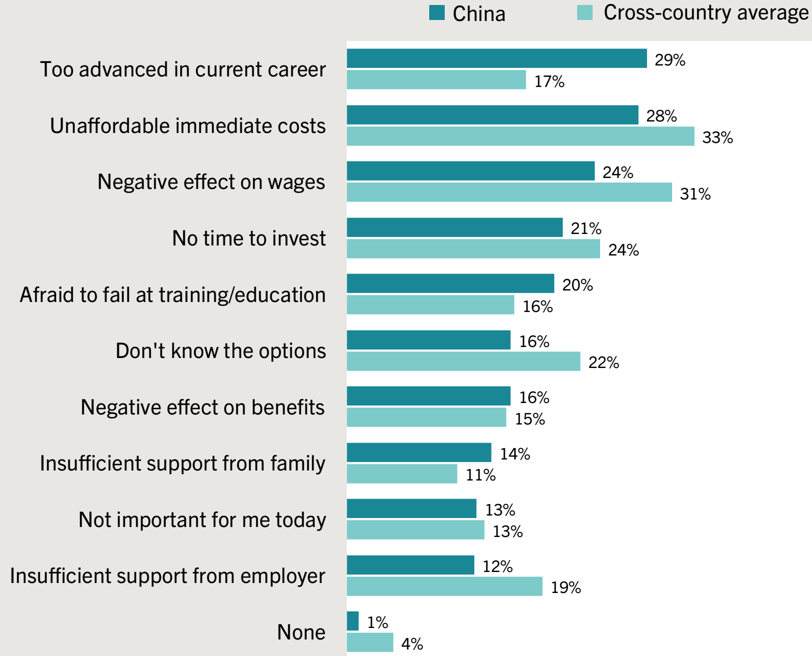
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

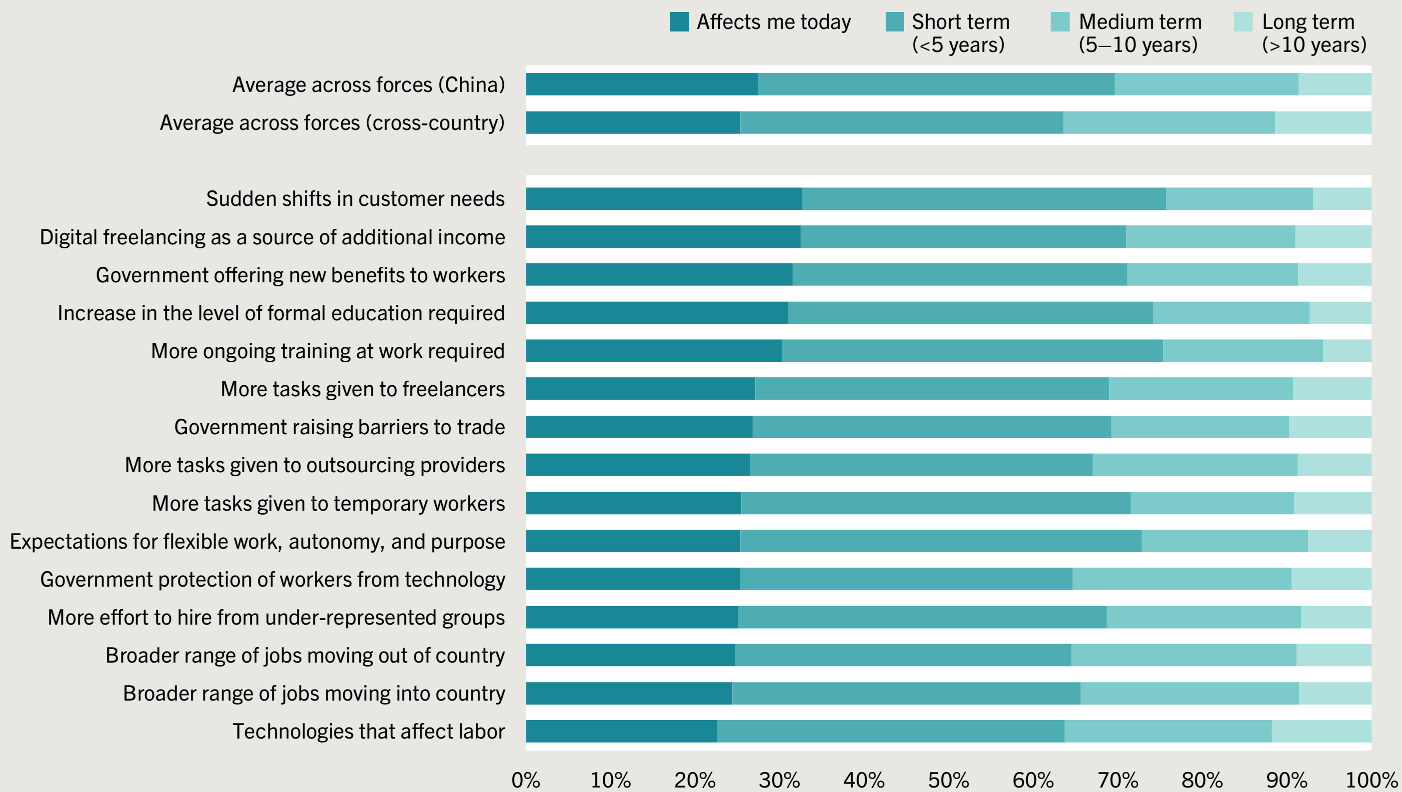


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



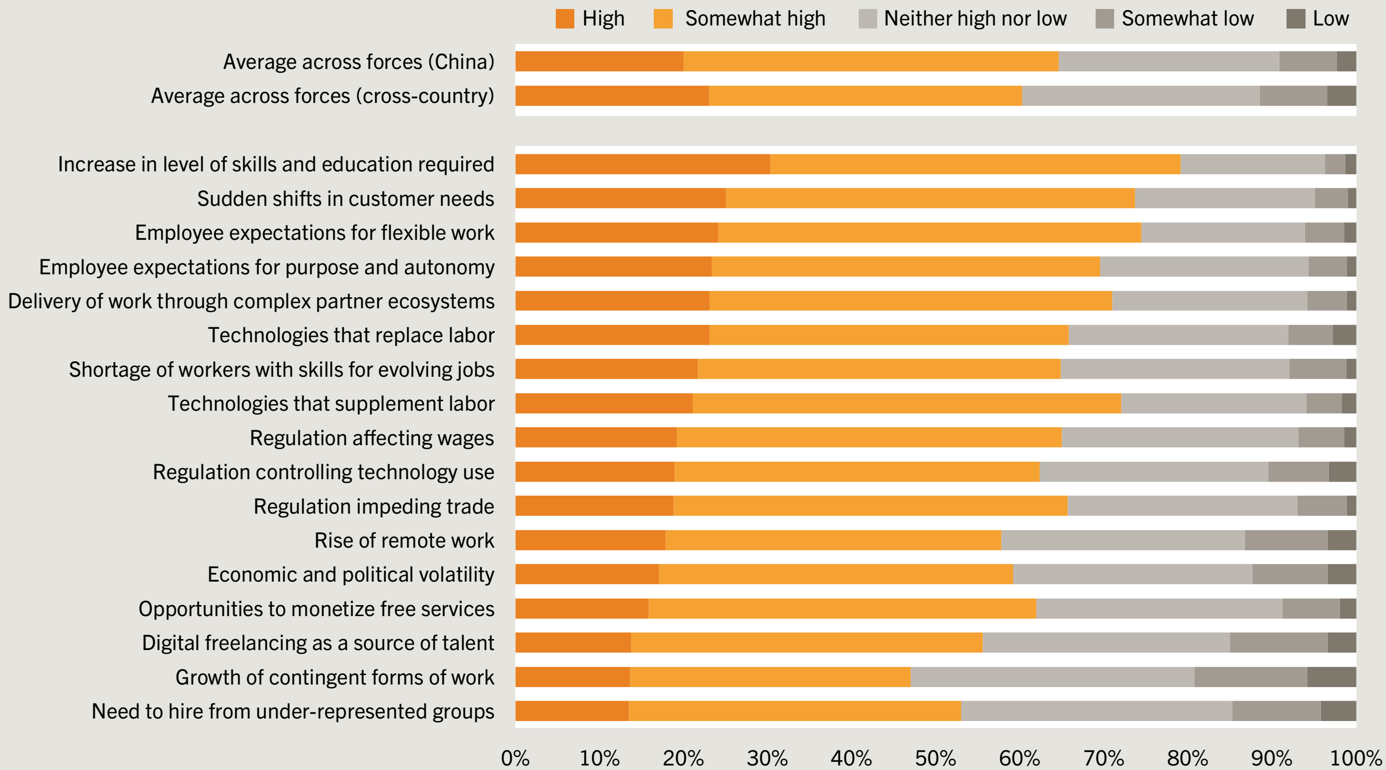
Workers' expectations of when the forces they deemed impactful would affect them



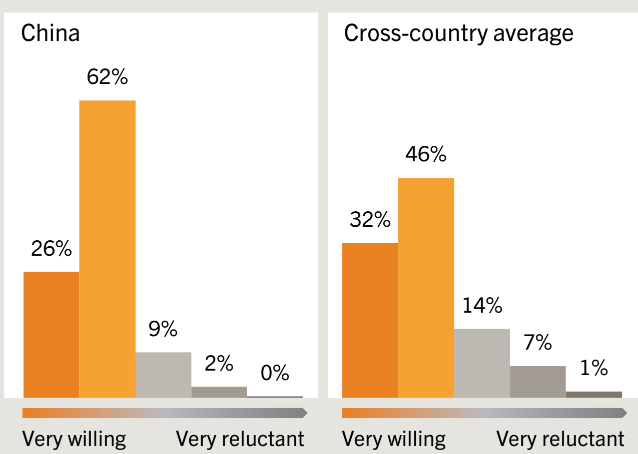
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

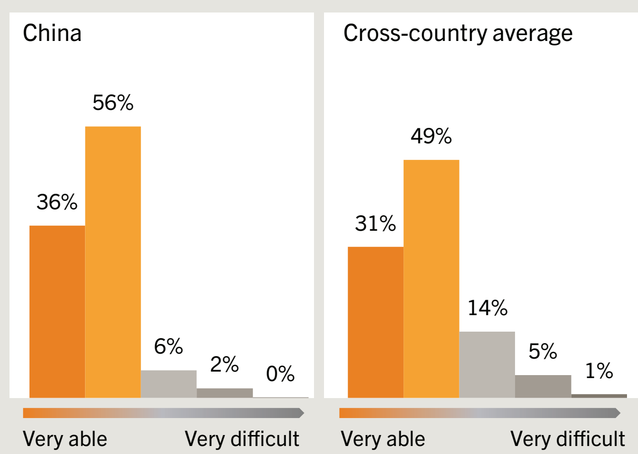
Business leaders' expectations of the level of significance of each force



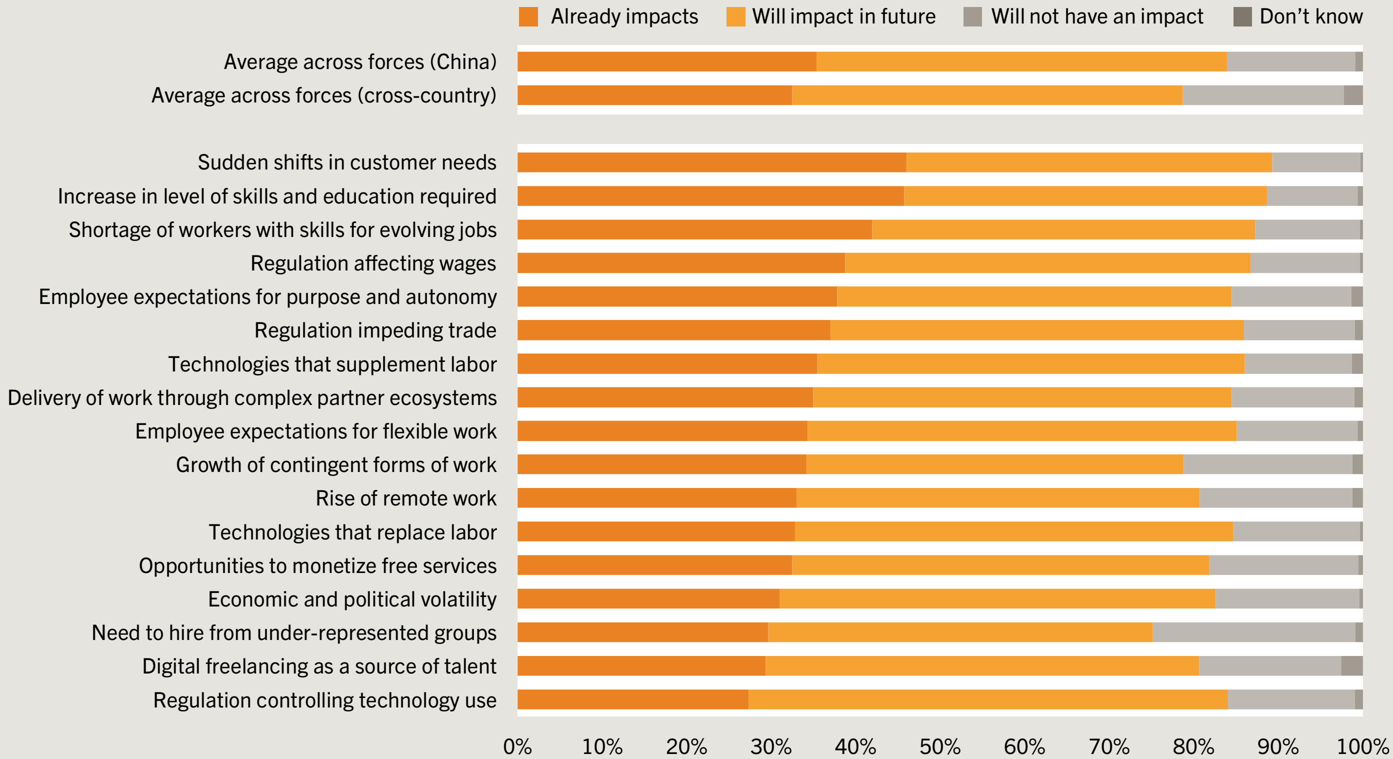
Business leaders' perceptions about workers' willingness to prepare



Business leaders' perceptions about workers' ability to prepare

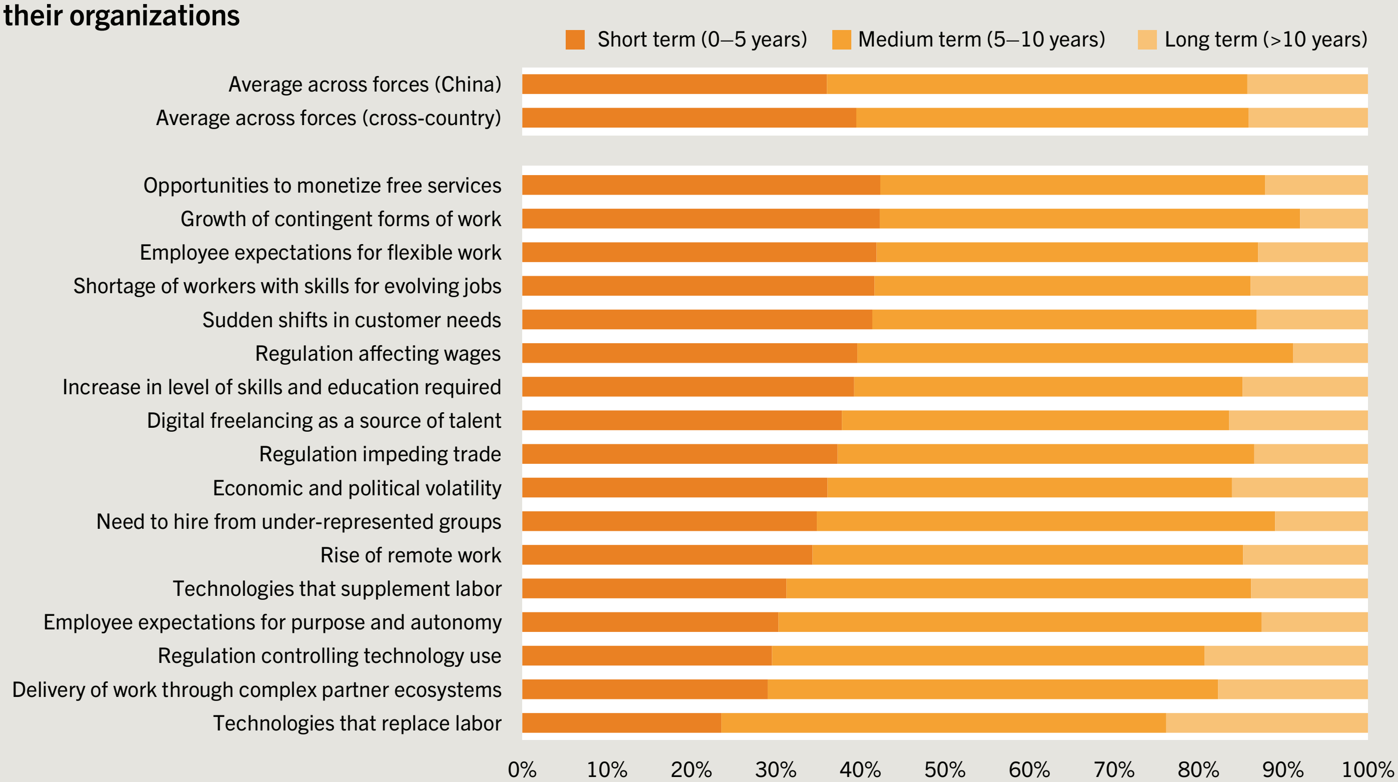


Business leaders' expectations of when the forces they deemed significant would impact their organizations



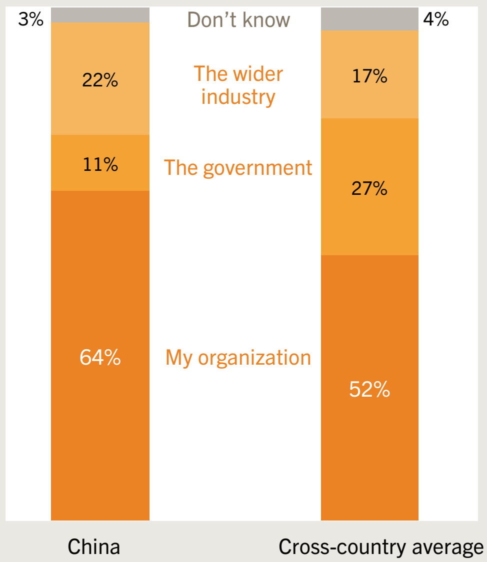
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance.

Business leaders' expectations of when in the future the forces they deemed significant would impact their organizations



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Business leaders' views on who is responsible for developing the solutions needed



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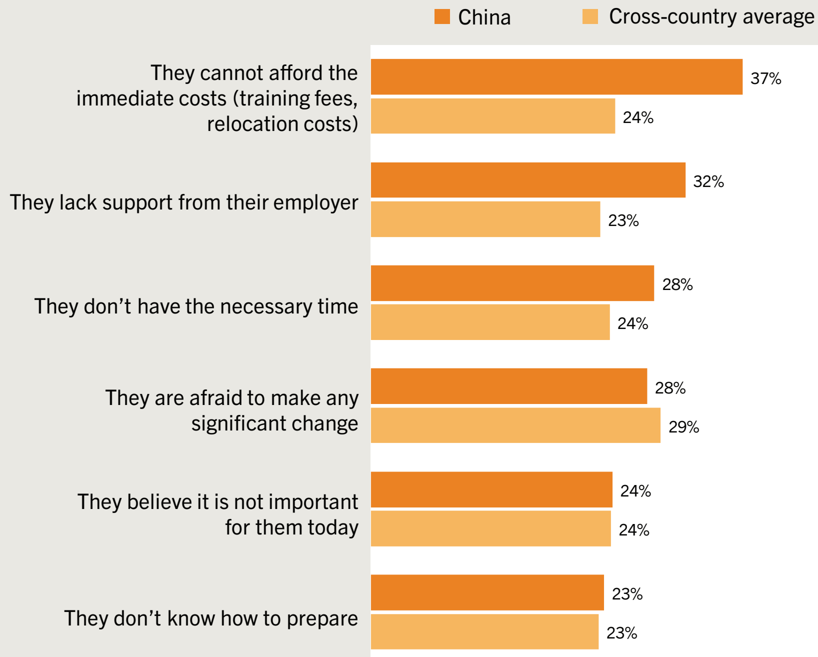
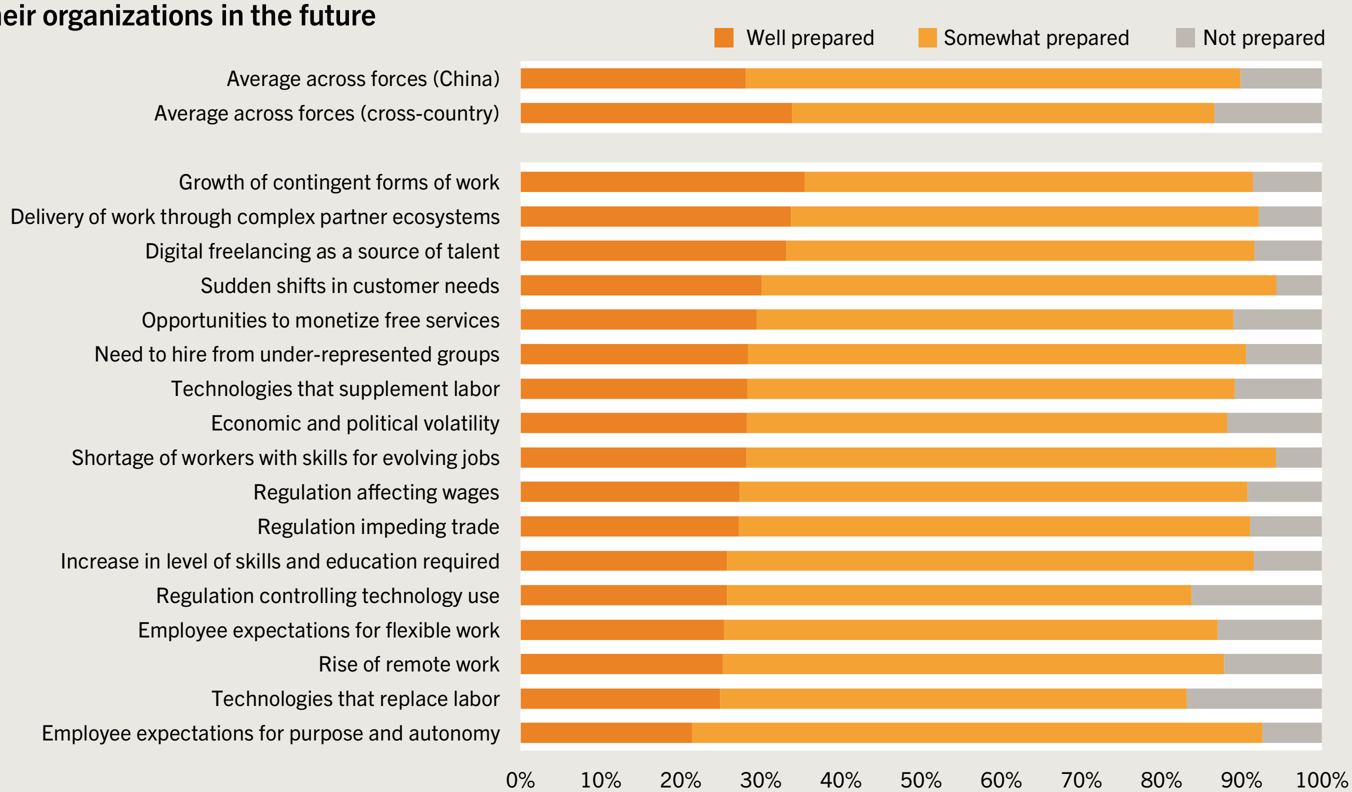
Business leaders' views on what prevents employees from preparing



Business leaders' perceptions of their organizations' preparedness for forces that will impact their organizations in the future



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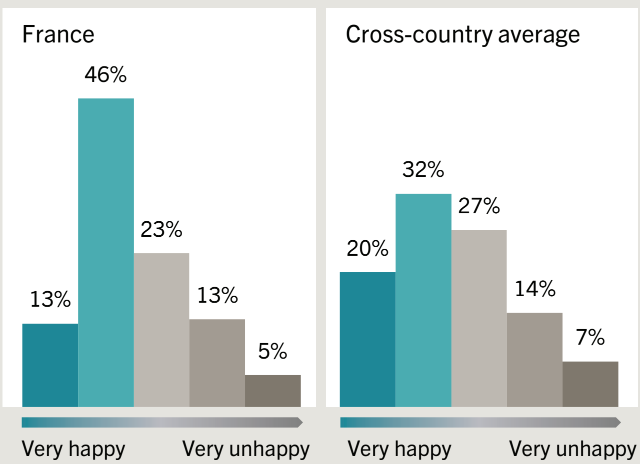
Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

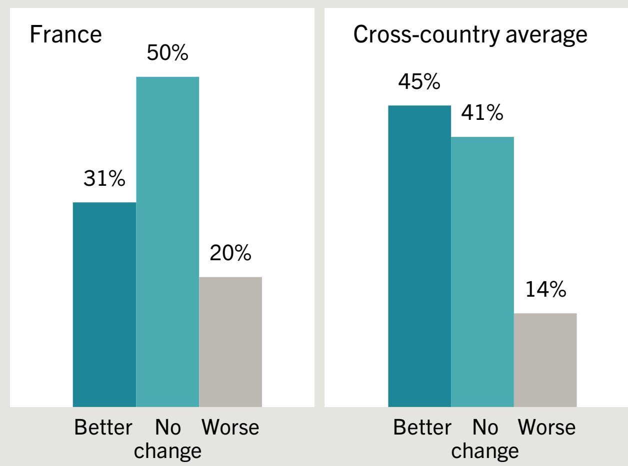
- Business leaders in France rated their preparedness for economic and political volatility lower than leaders in developing nations and most other advanced nations.
- Workers put the onus on government to prepare them for the future, while business leaders held their organizations responsible for preparing employees.
- Compared with their international peers, business leaders in France were more apt to think that workers feared making significant changes.
- Workers were generally more likely to believe the forces would affect them in the long term, whereas business leaders anticipated effects in the near term.
- Workers in France were the second least likely, after Japanese workers, to report positive change over the previous five years. They anticipated significant impact from increased outsourcing.

WORKERS

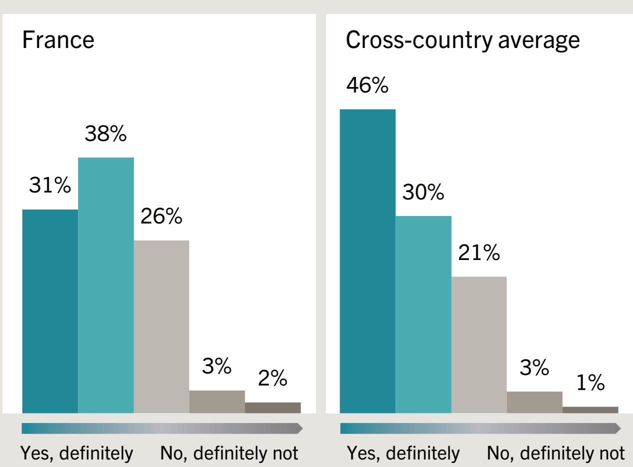
Happiness with current employment situation



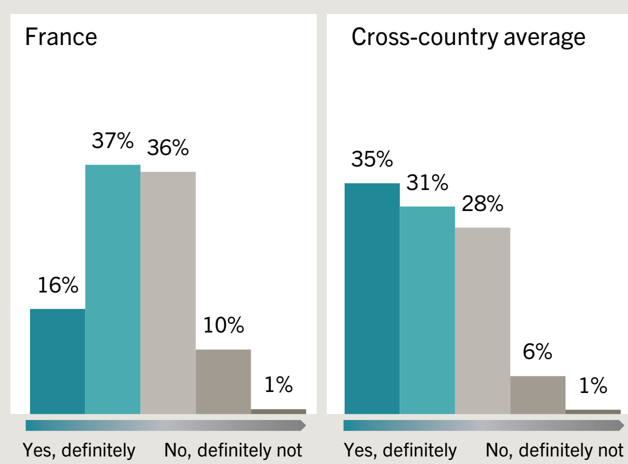
Employment situation over the previous five years



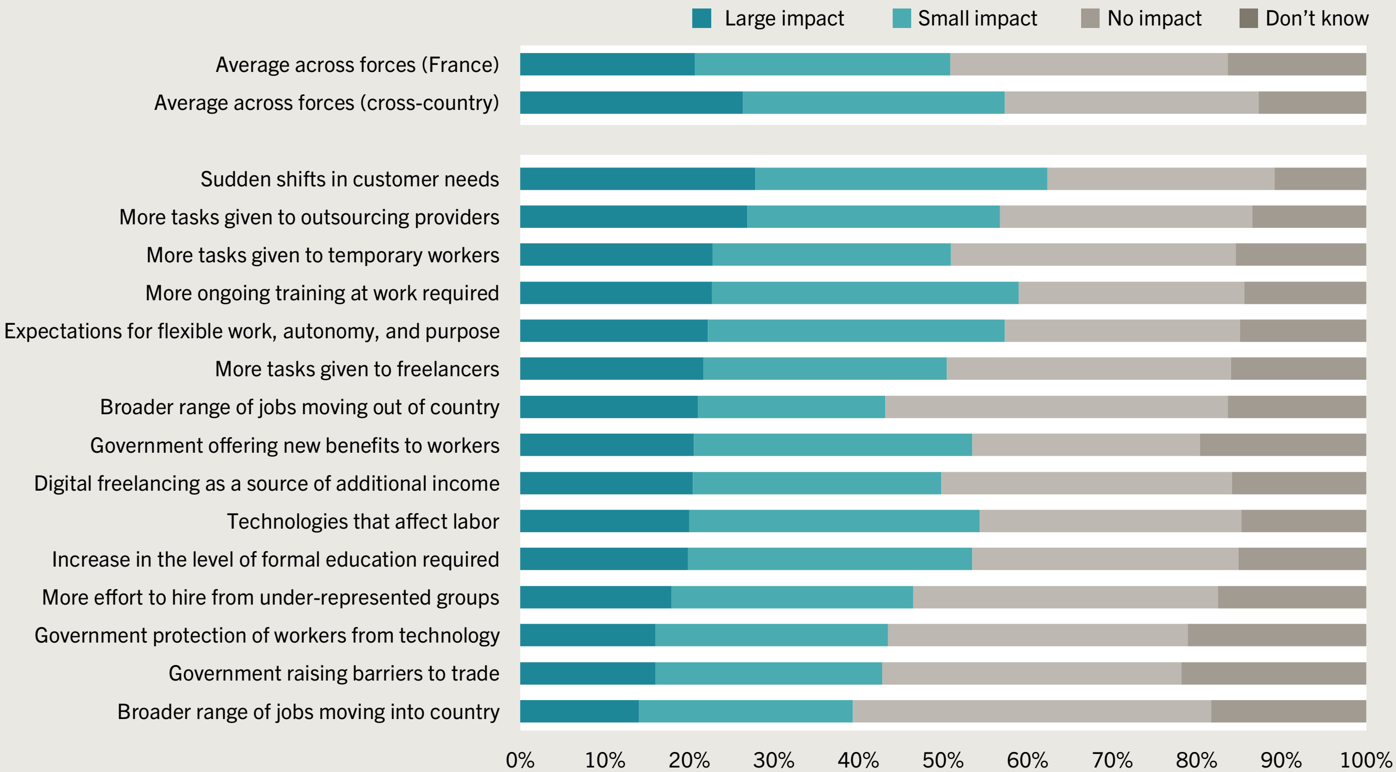
Workers' perceptions of necessity to prepare for the future



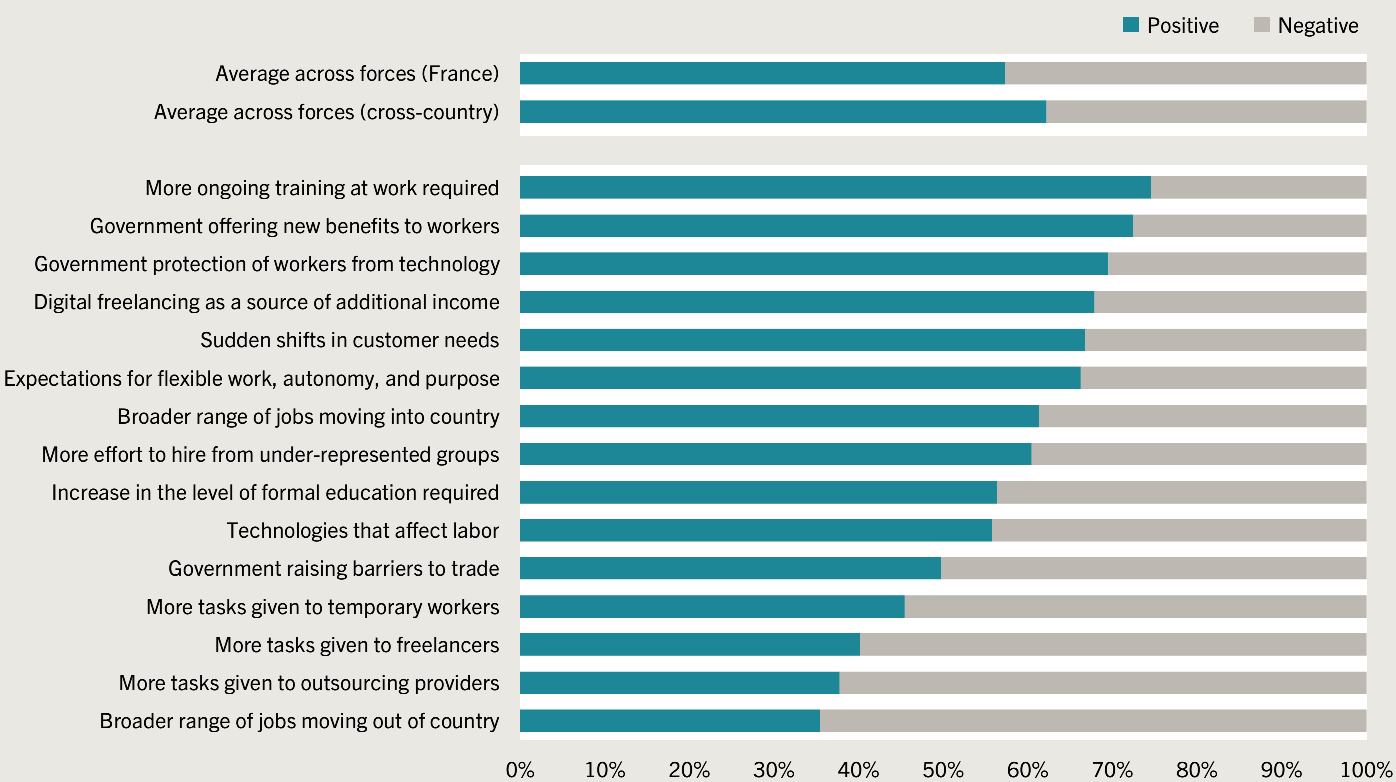
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

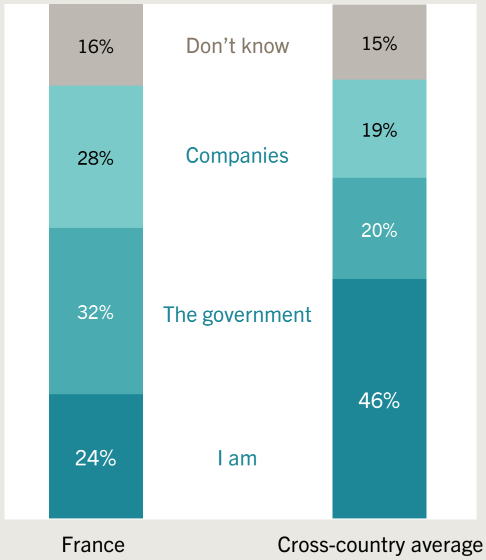


Workers' expectations of the nature of impact each force will have on their future



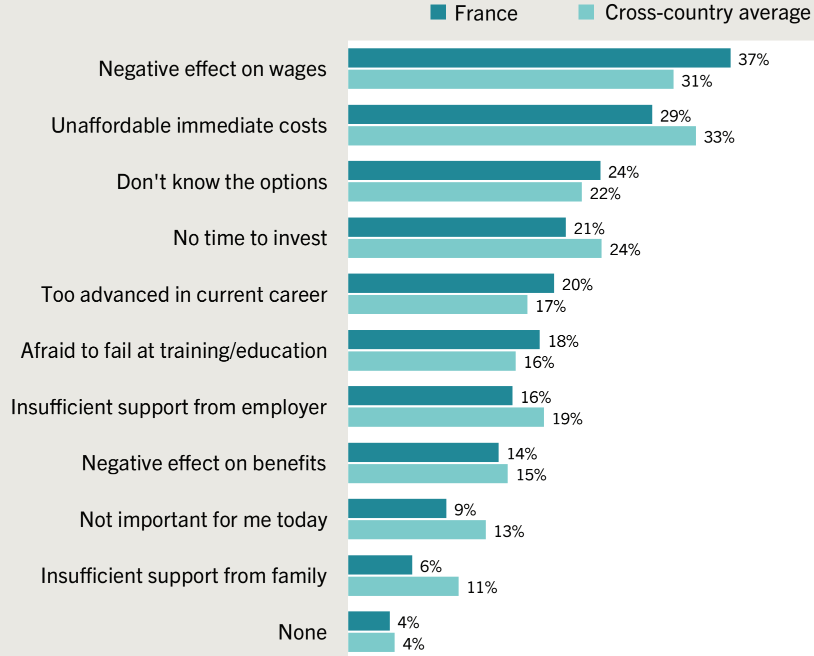
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

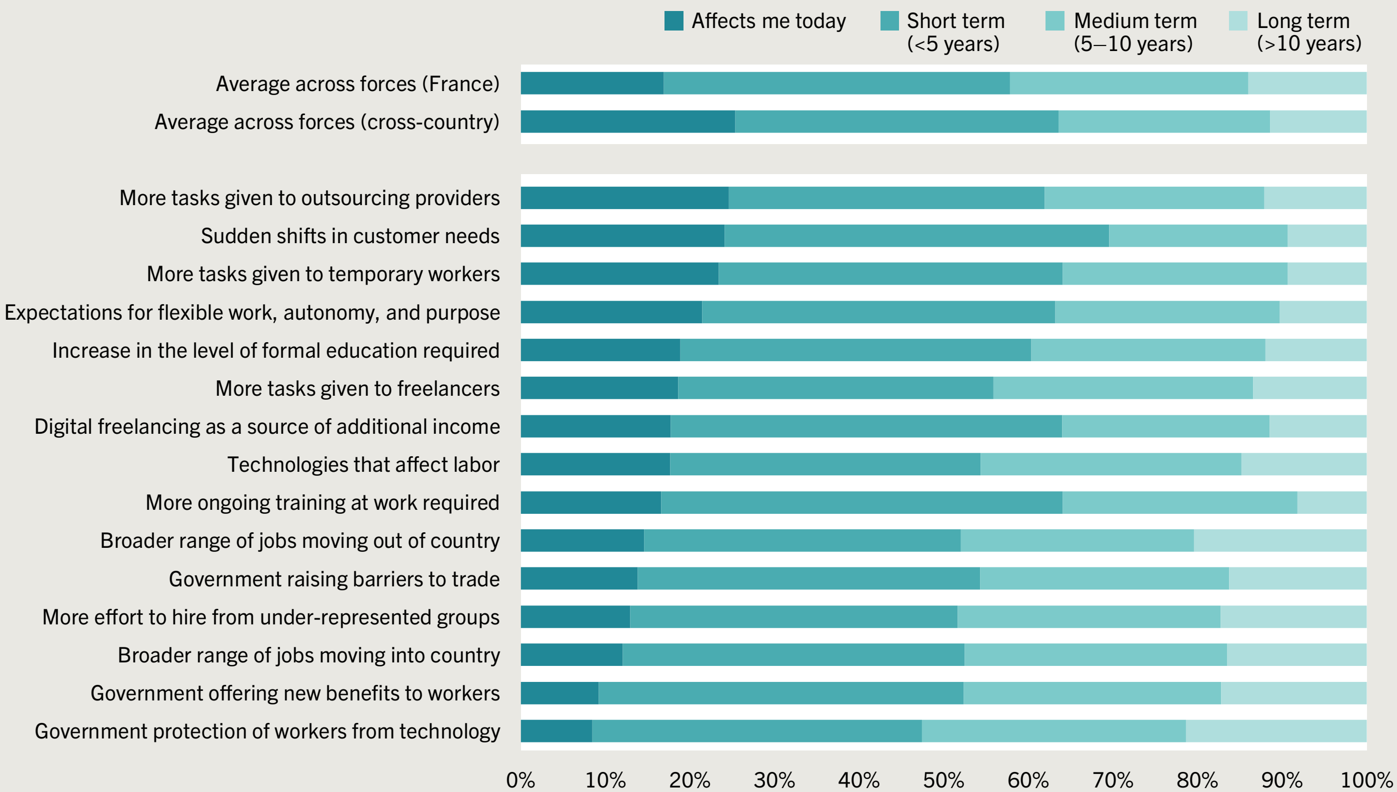


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



Workers' expectations of when the forces they deemed impactful would affect them



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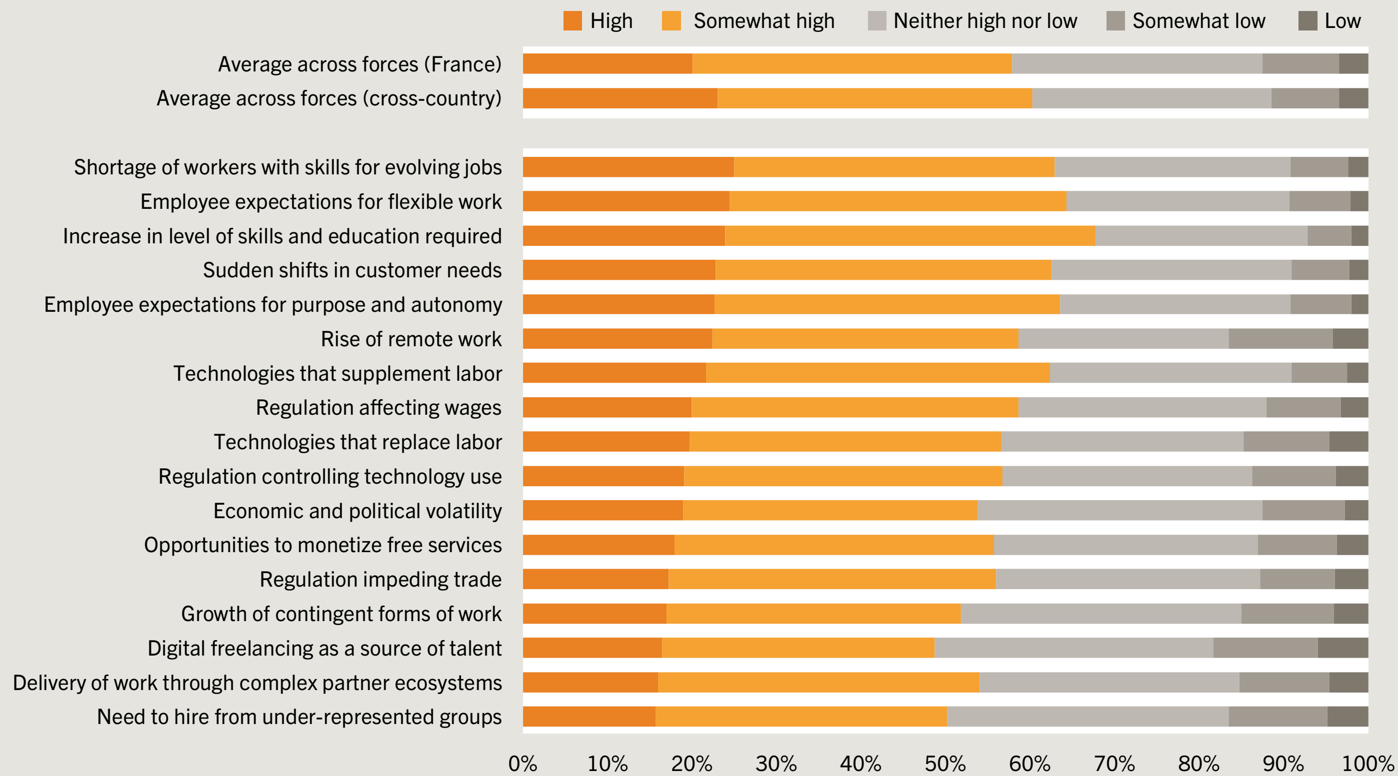
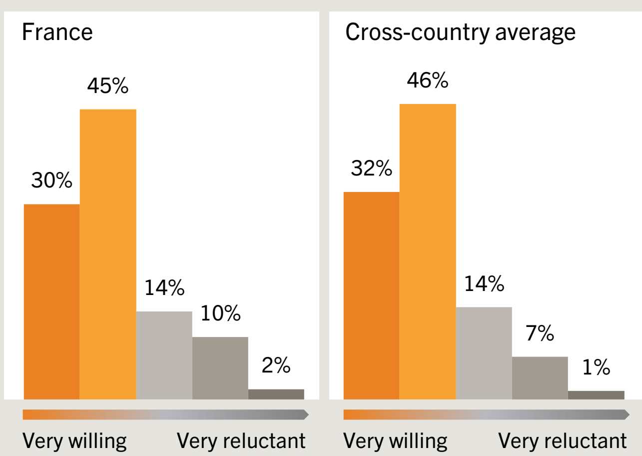
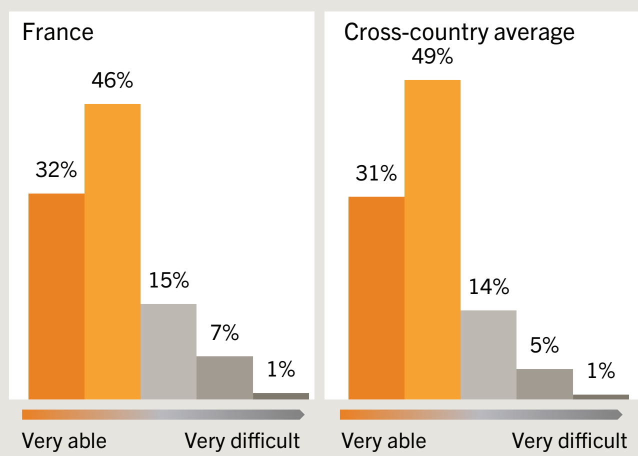
Business leaders' expectations of the level of significance of each force



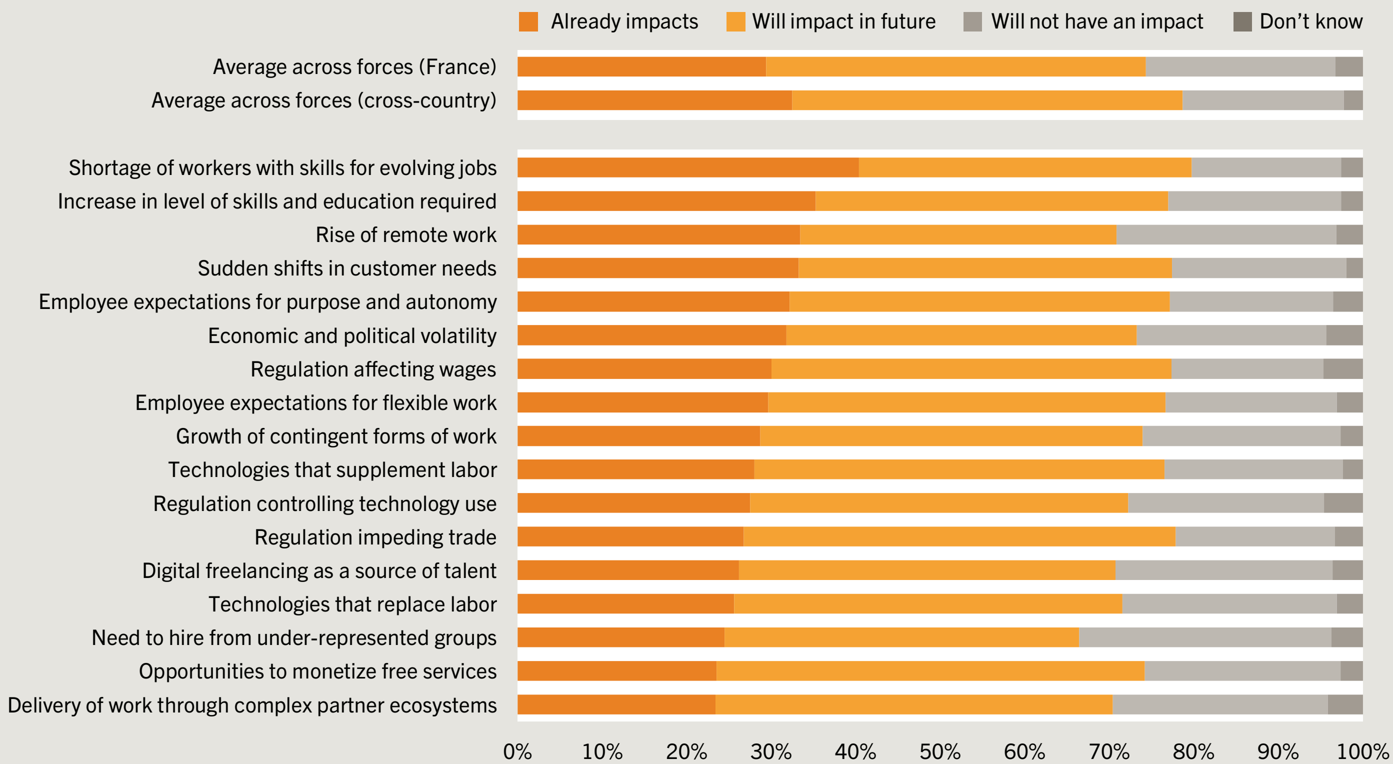
Business leaders' perceptions about workers' willingness to prepare



Business leaders' perceptions about workers' ability to prepare

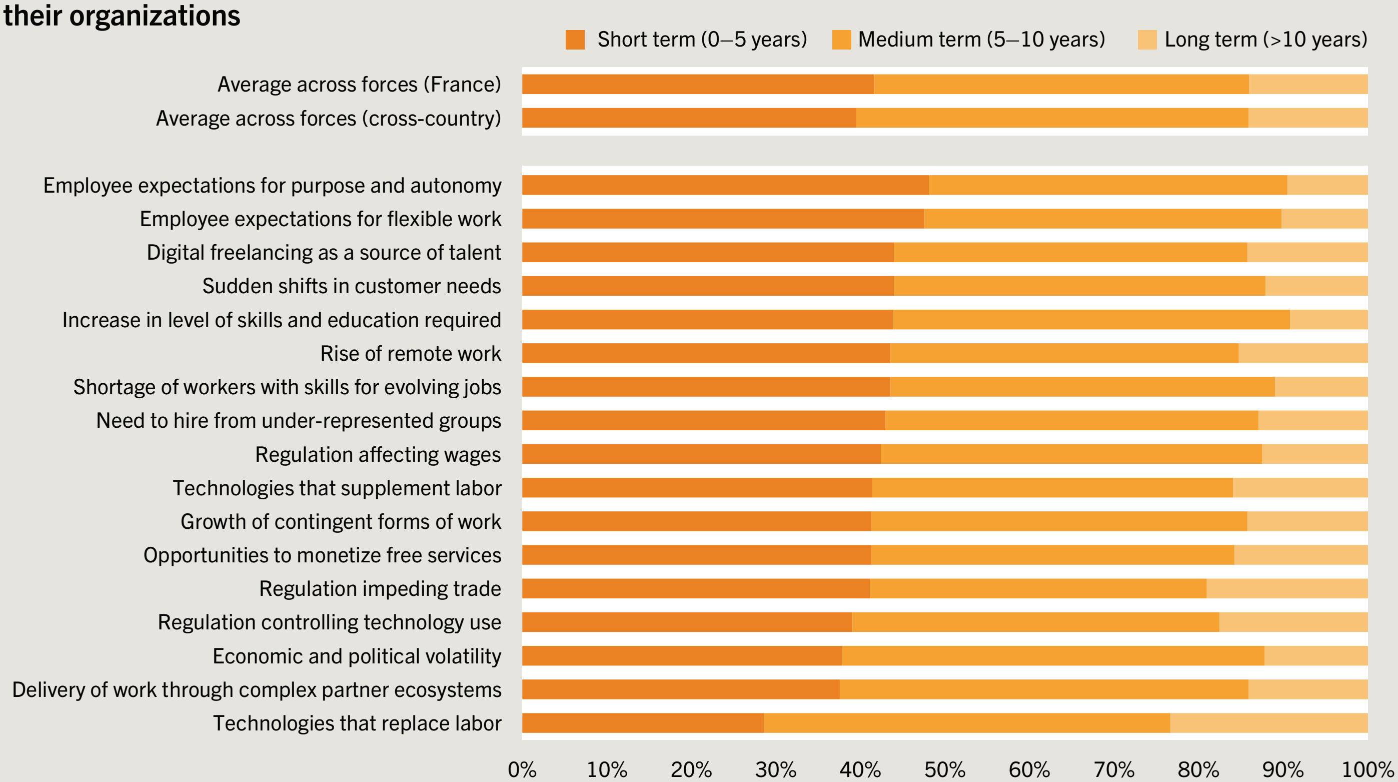


Business leaders' expectations of when the forces they deemed significant would impact their organizations



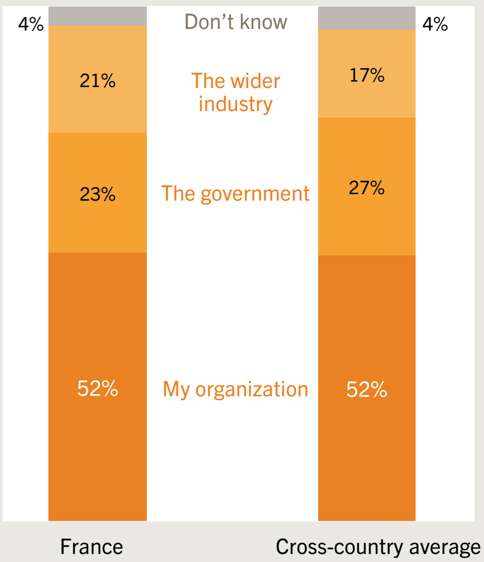
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance.

Business leaders' expectations of when in the future the forces they deemed significant would impact their organizations



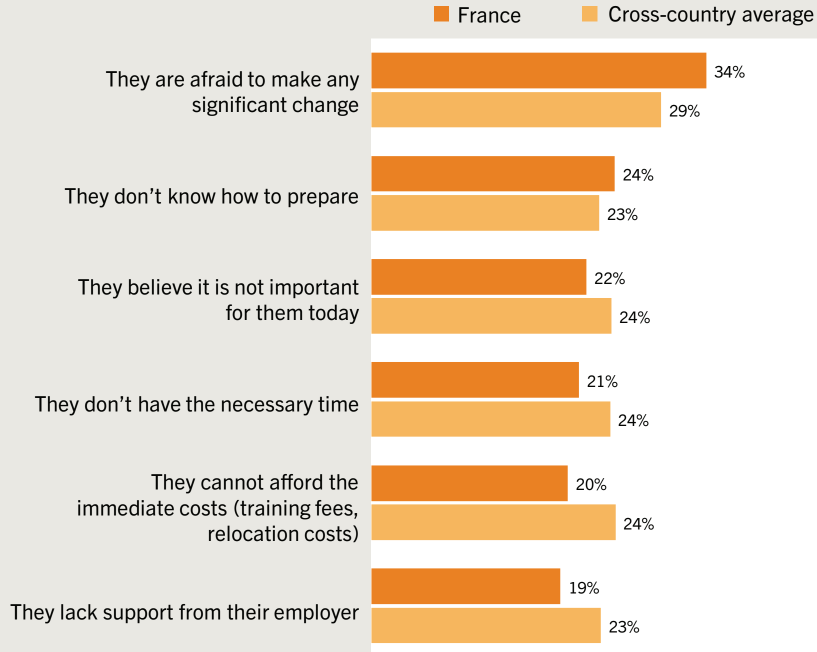
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Business leaders' views on who is responsible for developing the solutions needed

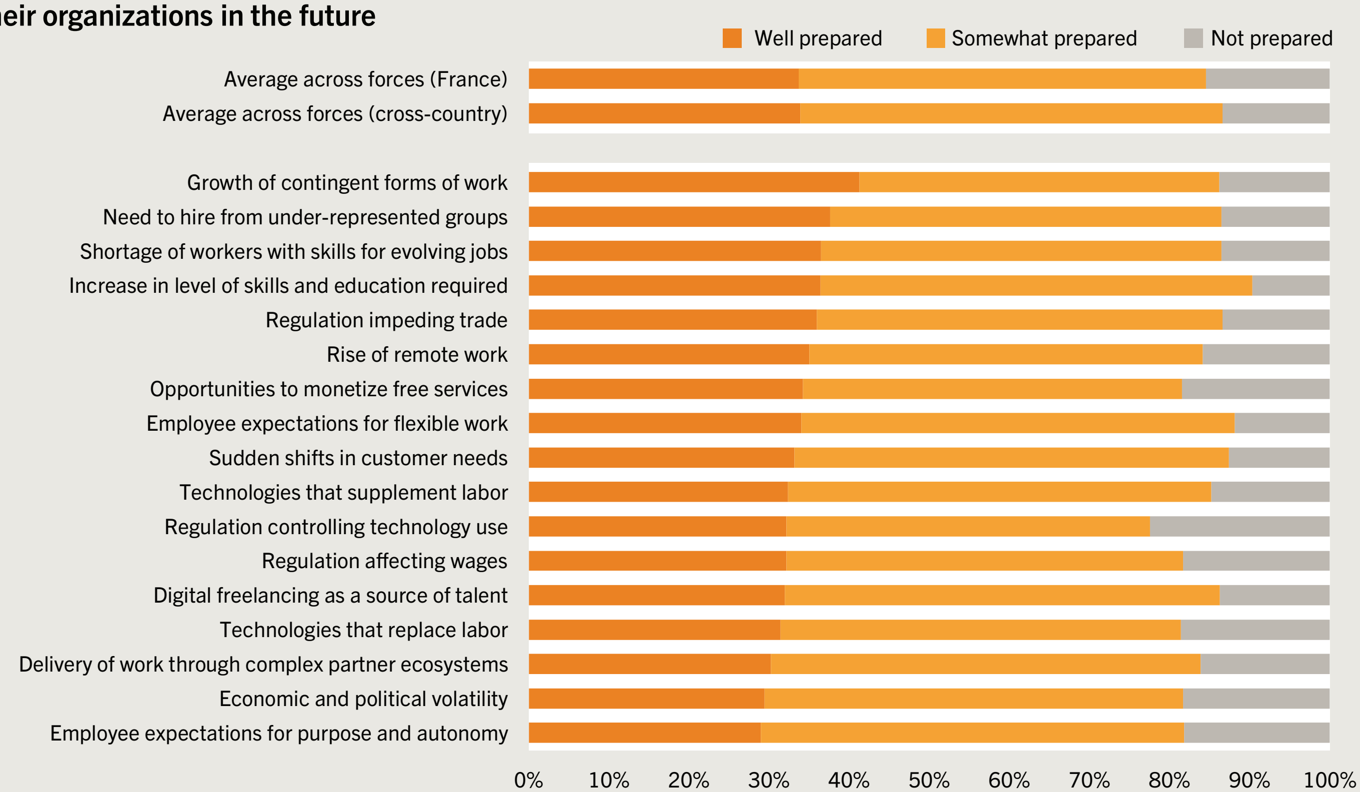


Note: Respondents were asked to rank a group as first by level of responsibility.

Business leaders' views on what prevents employees from preparing



Business leaders' perceptions of their organizations' preparedness for forces that will impact their organizations in the future



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

Fewer German workers responded that they felt able to prepare compared with workers in other countries on average. When asked about barriers to preparing, they were more likely to cite negative effects on wages and less likely to cite cost.

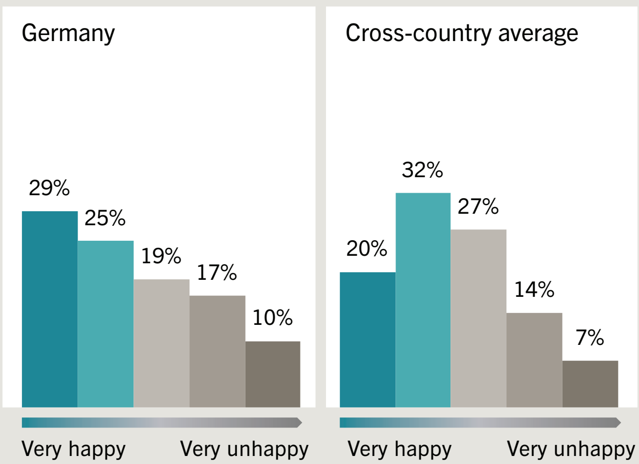
Like their peers in advanced countries, business leaders in Germany were highly concerned with the shortage of qualified workers. They expressed confidence in their readiness for changeable customer needs, complex partner ecosystems, remote workers, and regulatory changes.

German workers were less enthusiastic about government protection from technology than were workers in other countries. They were also among the most welcoming of hiring from under-represented groups, second only to workers in Brazil.

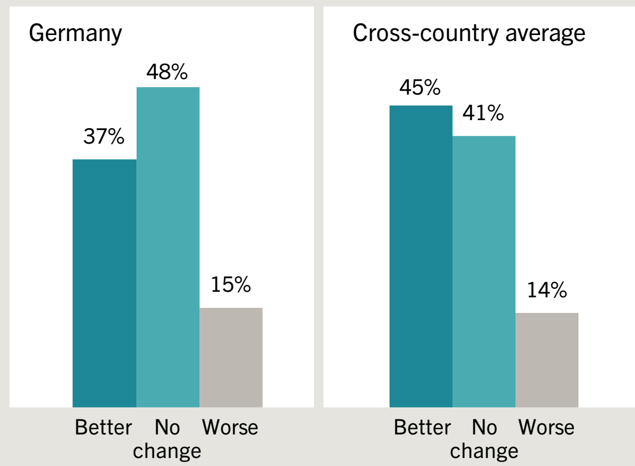
Among advanced economies, workers in Germany were second to those in Spain in feeling the impact of the 15 forces today. They noted as significant the impact of the influx of a broader range of jobs into the country.

WORKERS

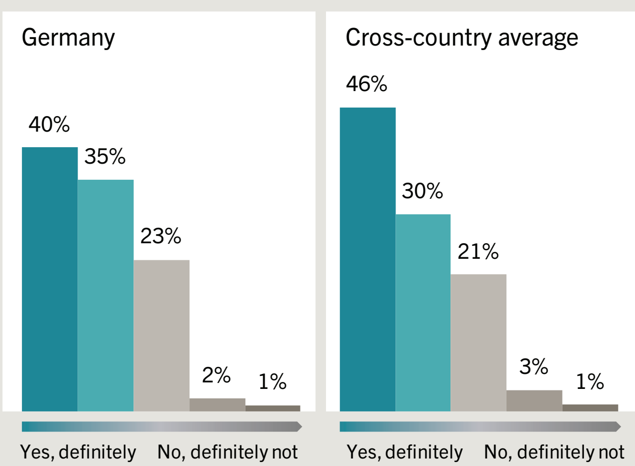
Happiness with current employment situation



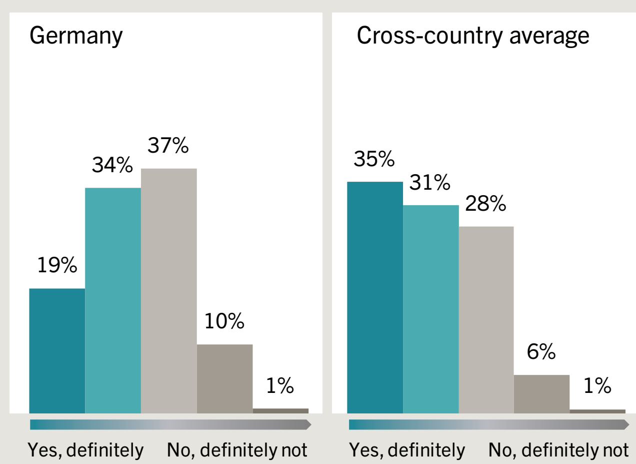
Employment situation over the previous five years



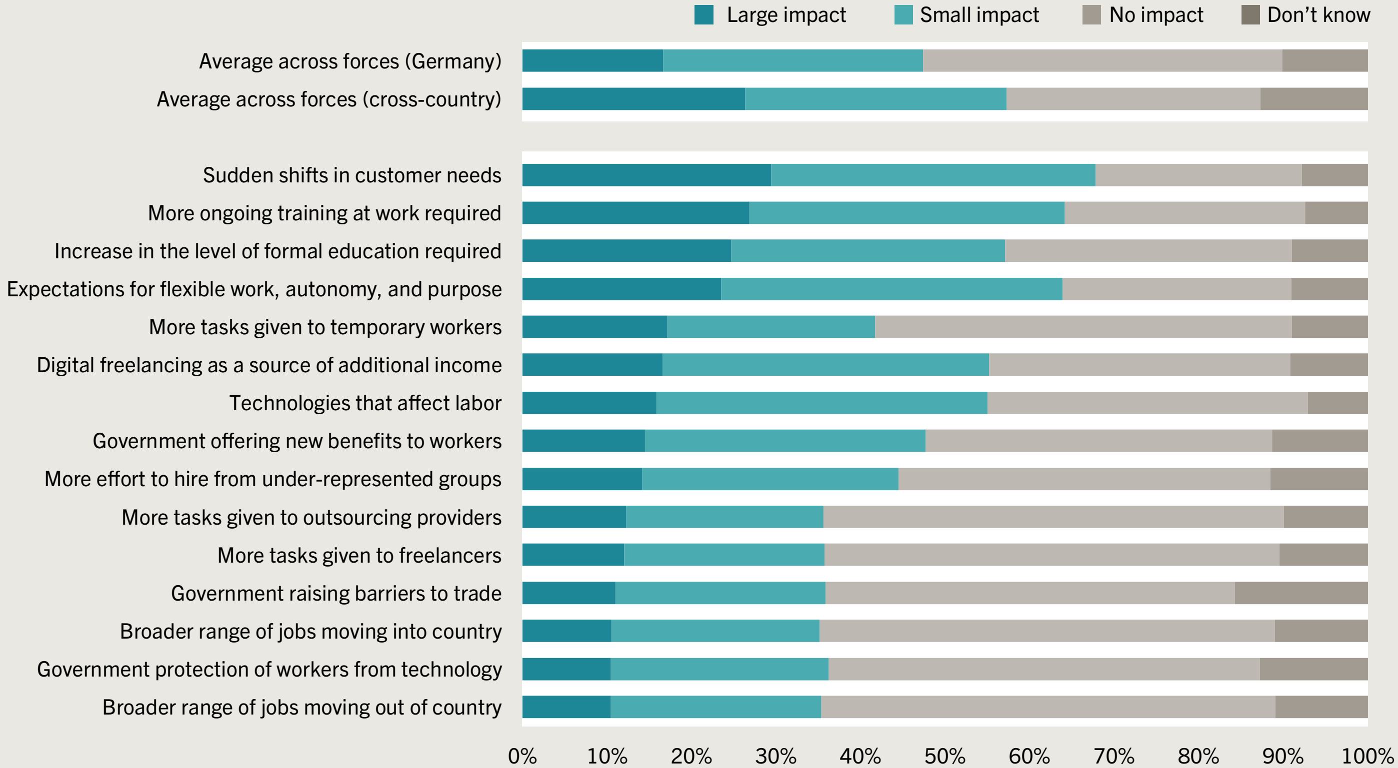
Workers' perceptions of necessity to prepare for the future



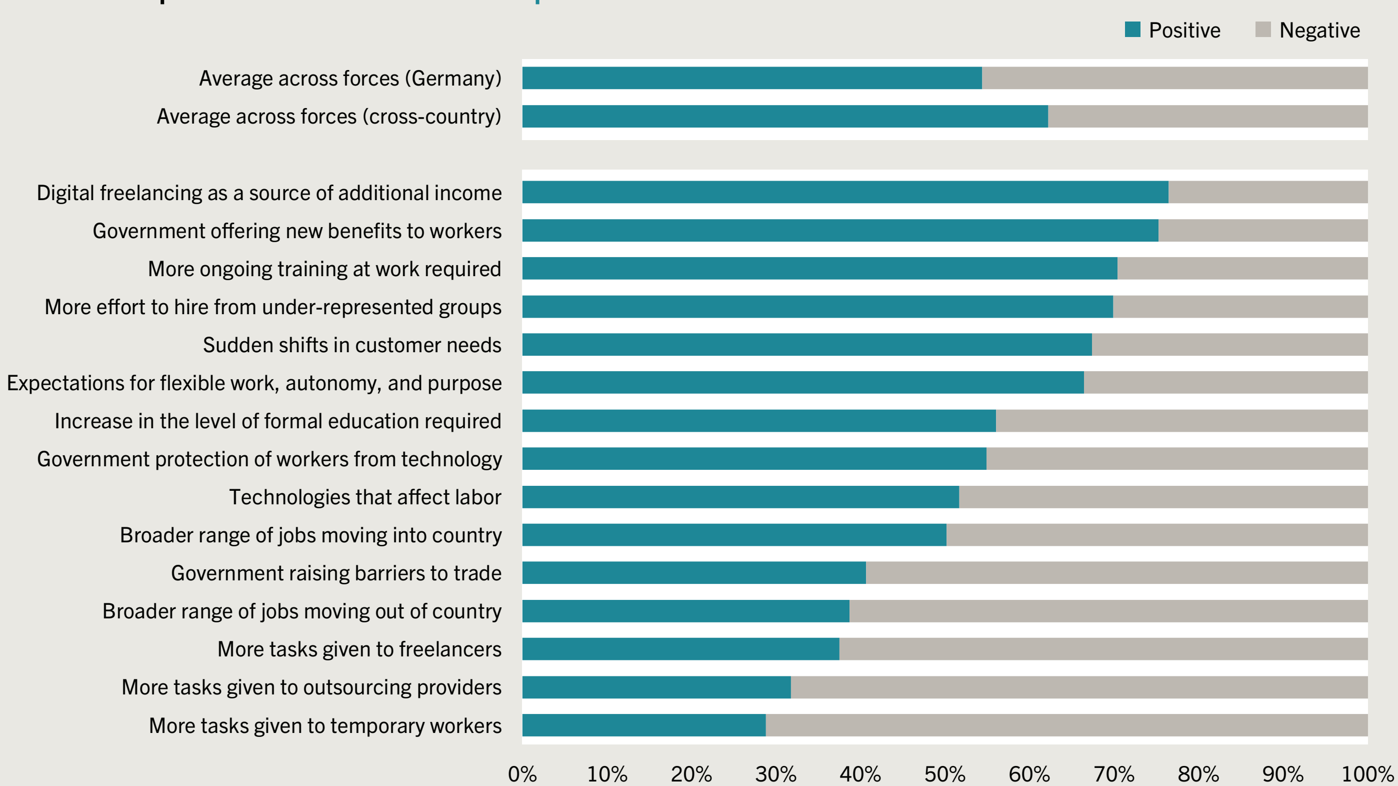
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

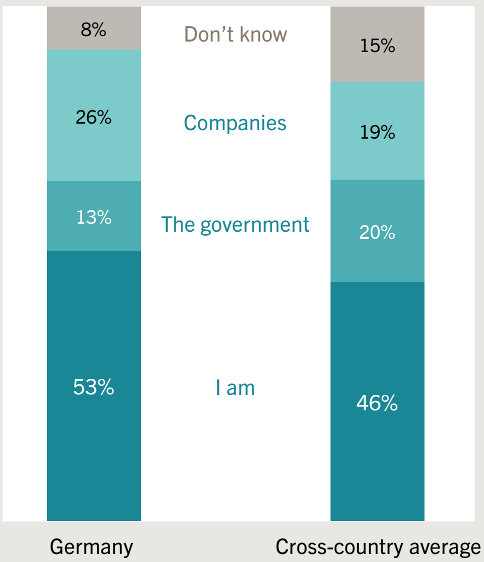


Workers' expectations of the nature of impact each force will have on their future



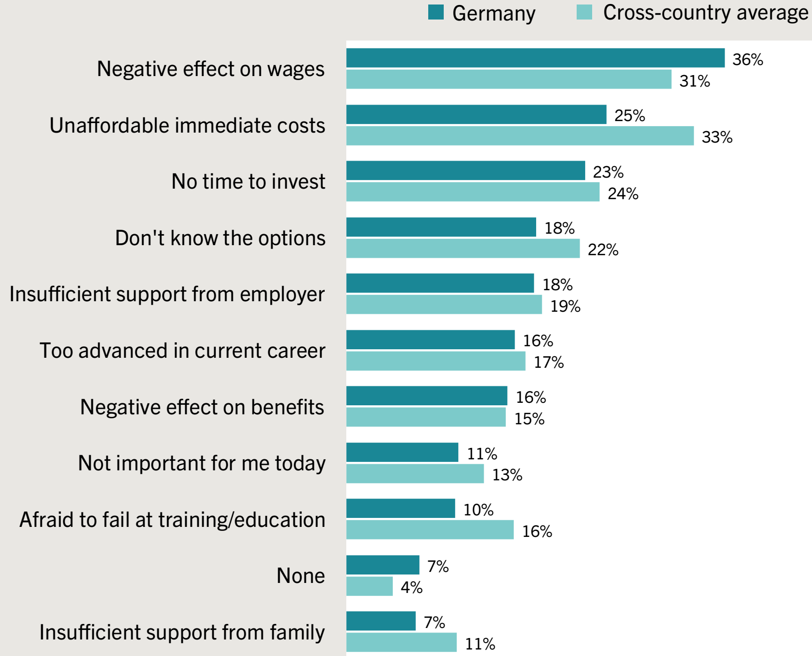
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

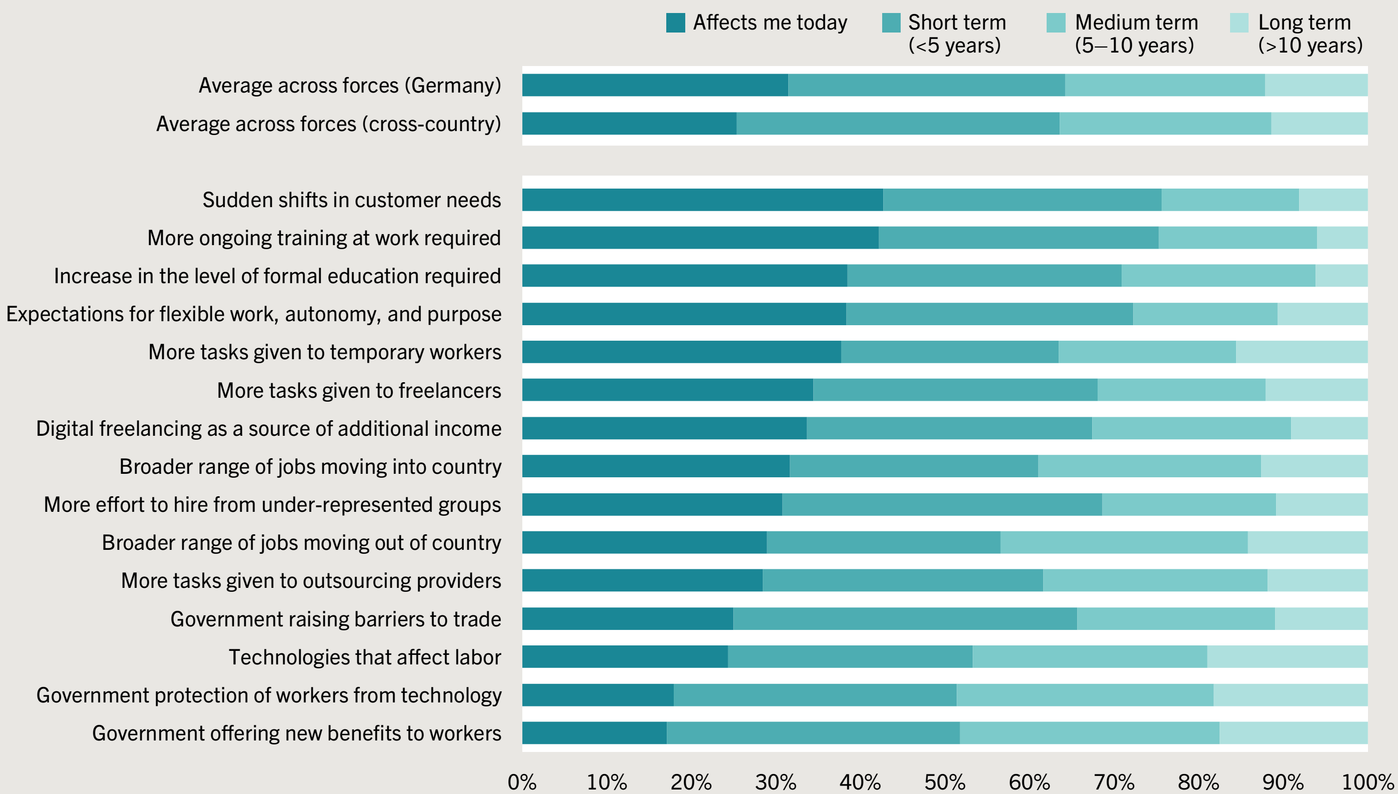


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



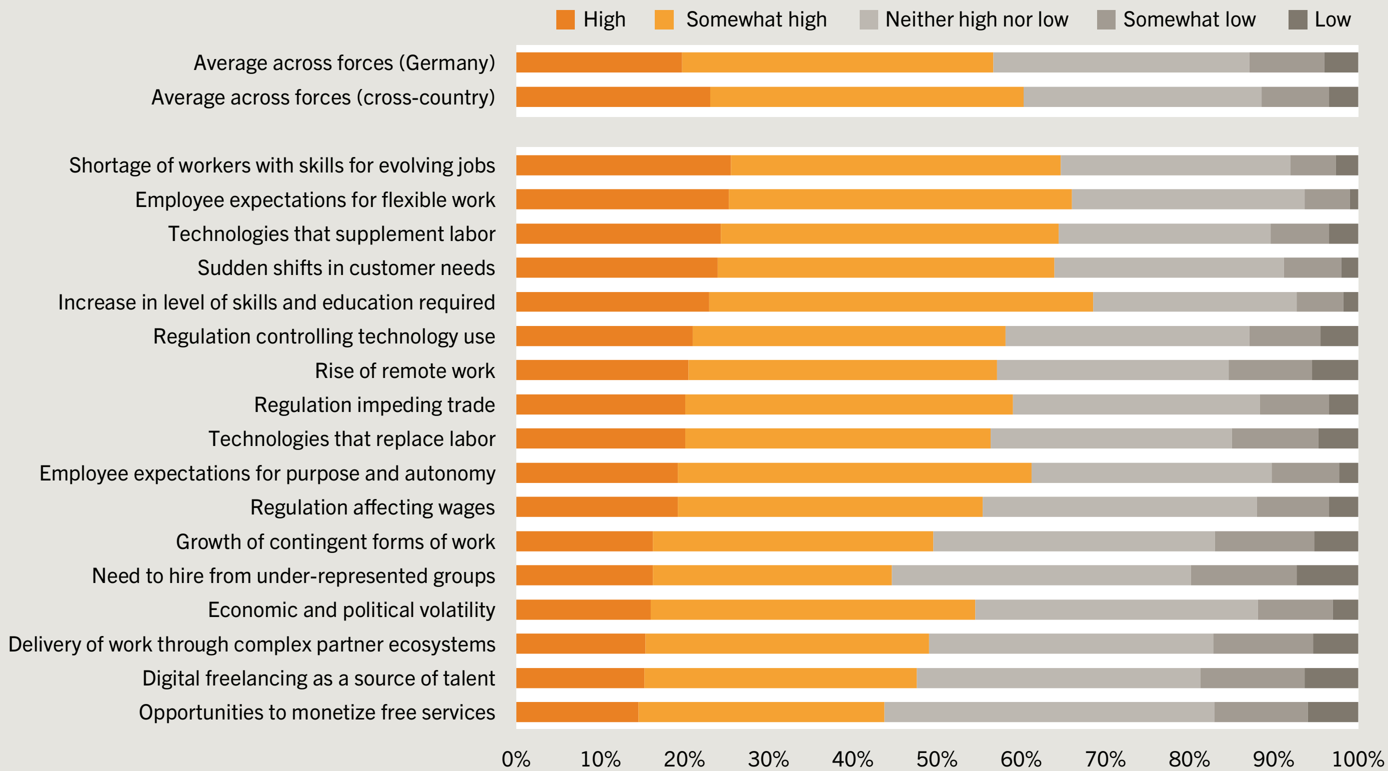
Workers' expectations of when the forces they deemed impactful would affect them



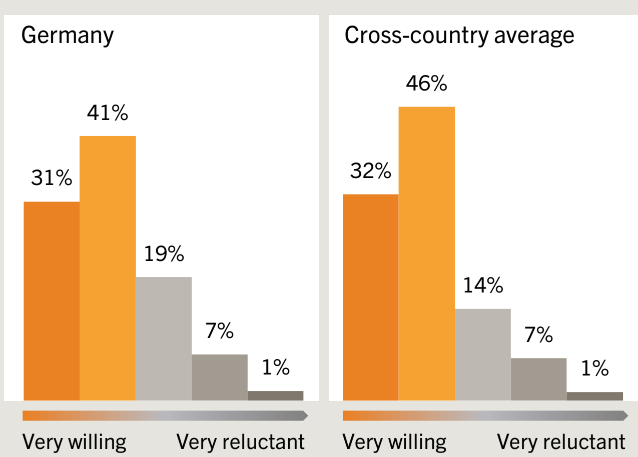
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

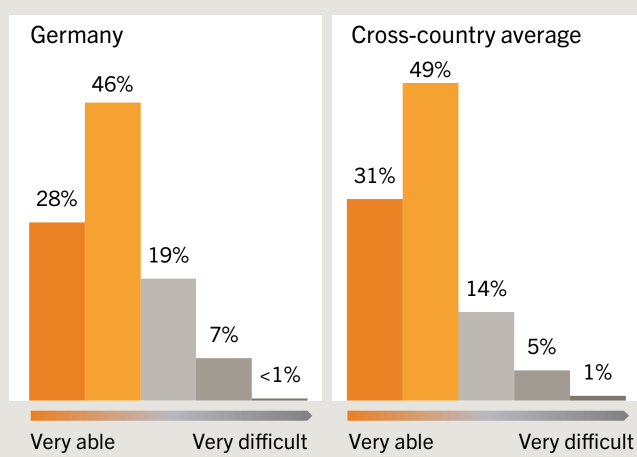
Business leaders' expectations of the level of significance of each force



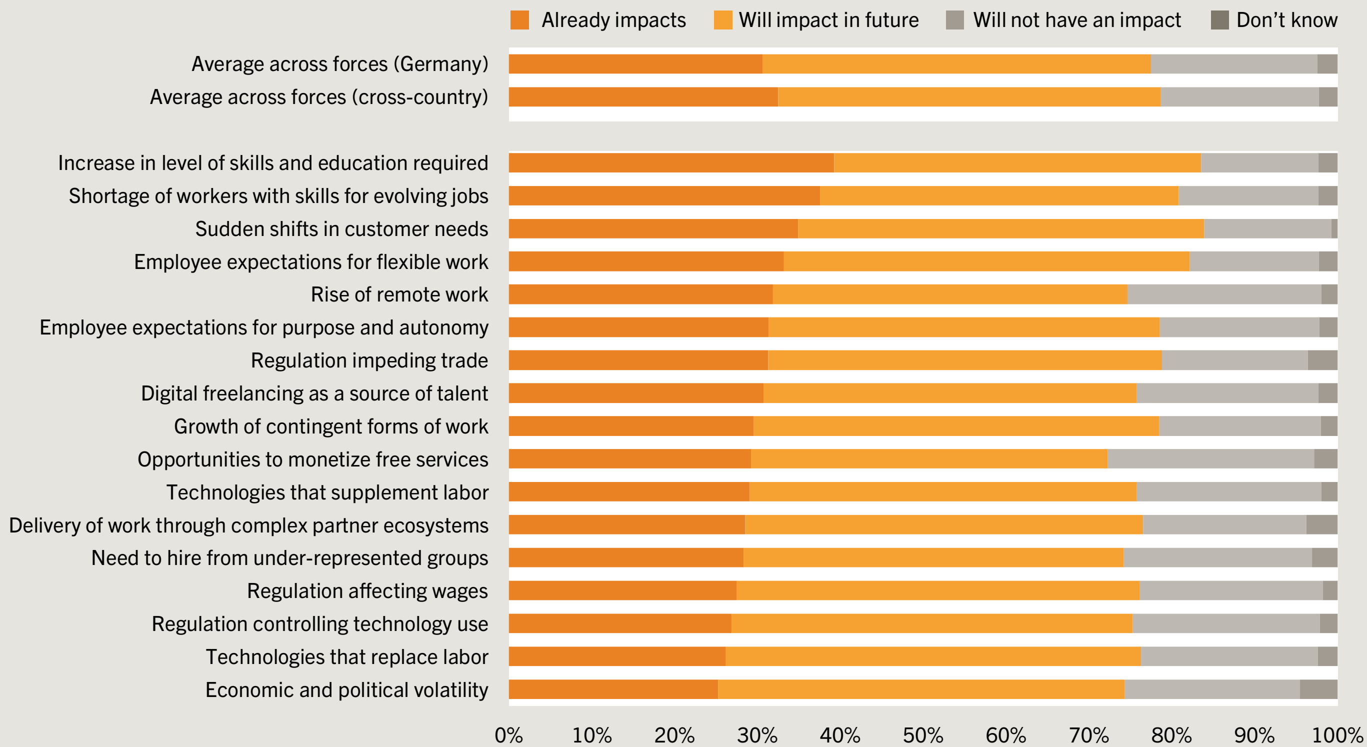
Business leaders' perceptions about workers' willingness to prepare



Business leaders' perceptions about workers' ability to prepare

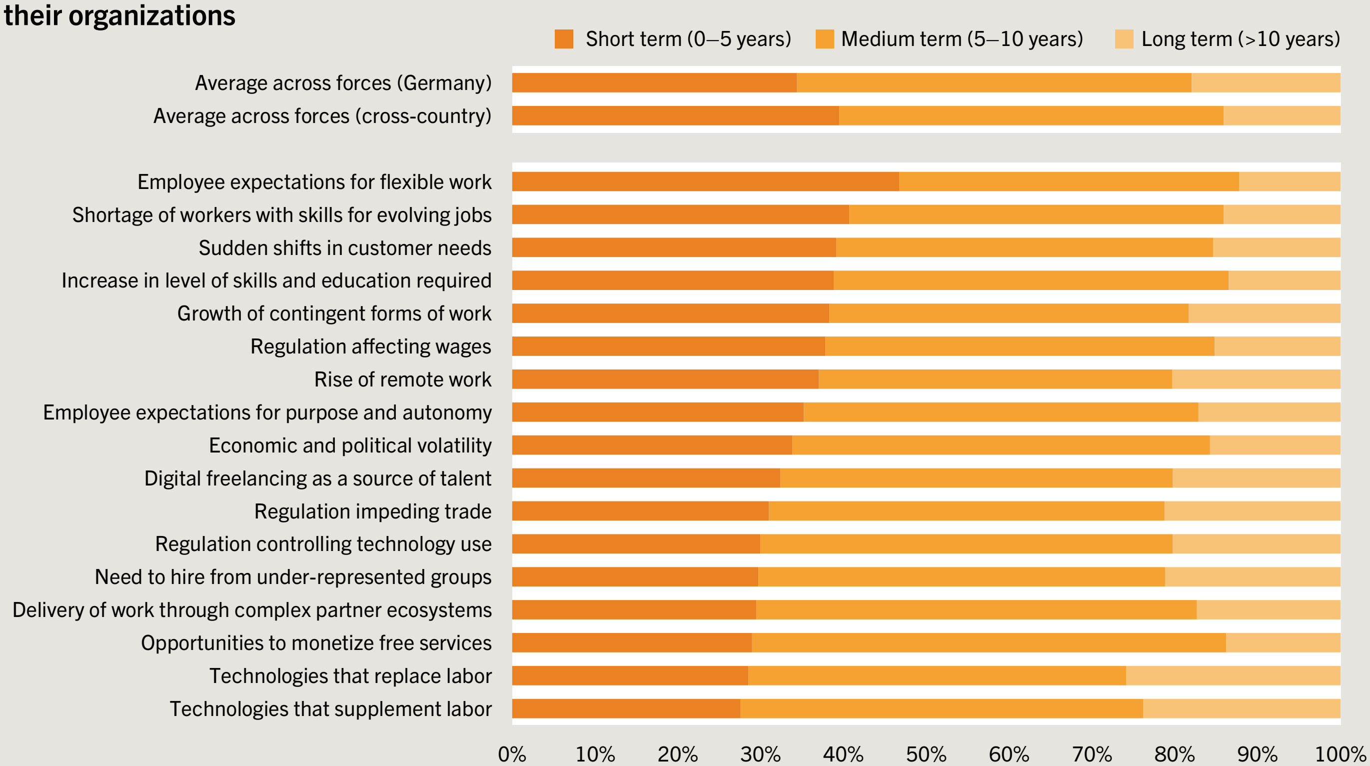


Business leaders’ expectations of when the forces they deemed significant would impact their organizations



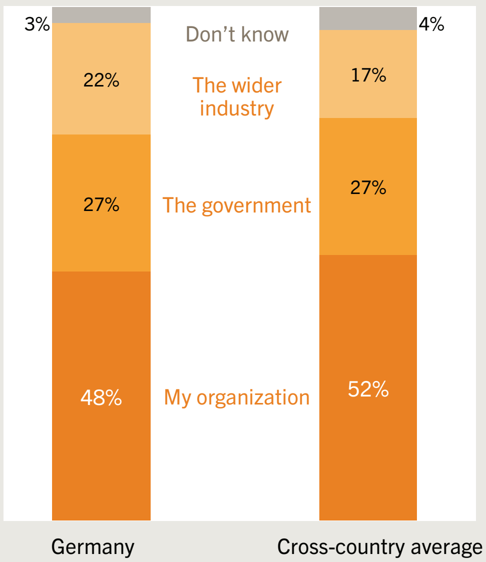
Note: This question was shown to respondents who indicated a force was of “high” or “somewhat high” significance.

Business leaders’ expectations of when in the future the forces they deemed significant would impact their organizations



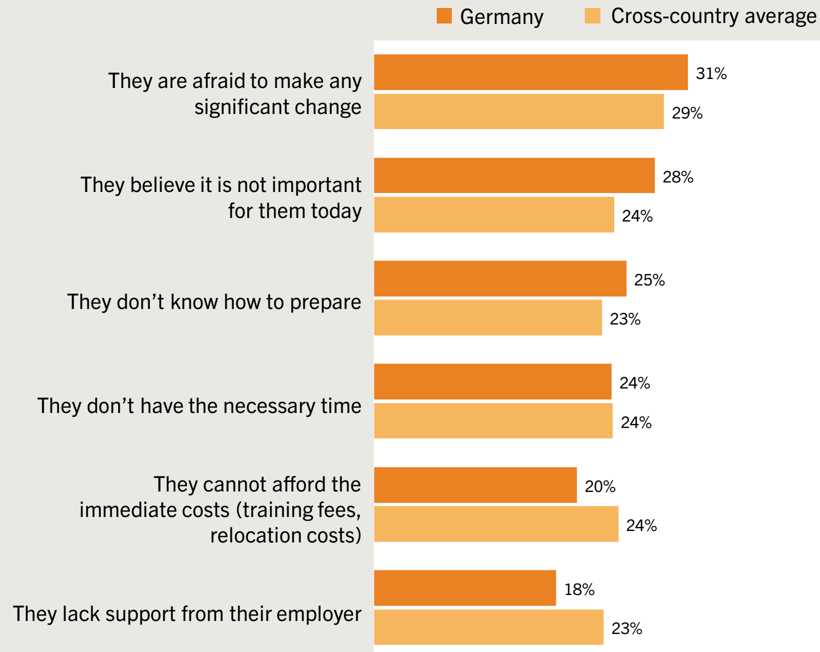
Note: This question was shown to respondents who indicated a force was of “high” or “somewhat high” significance and selected “This force will impact my organization in the future.”

Business leaders' views on who is responsible for developing the solutions needed

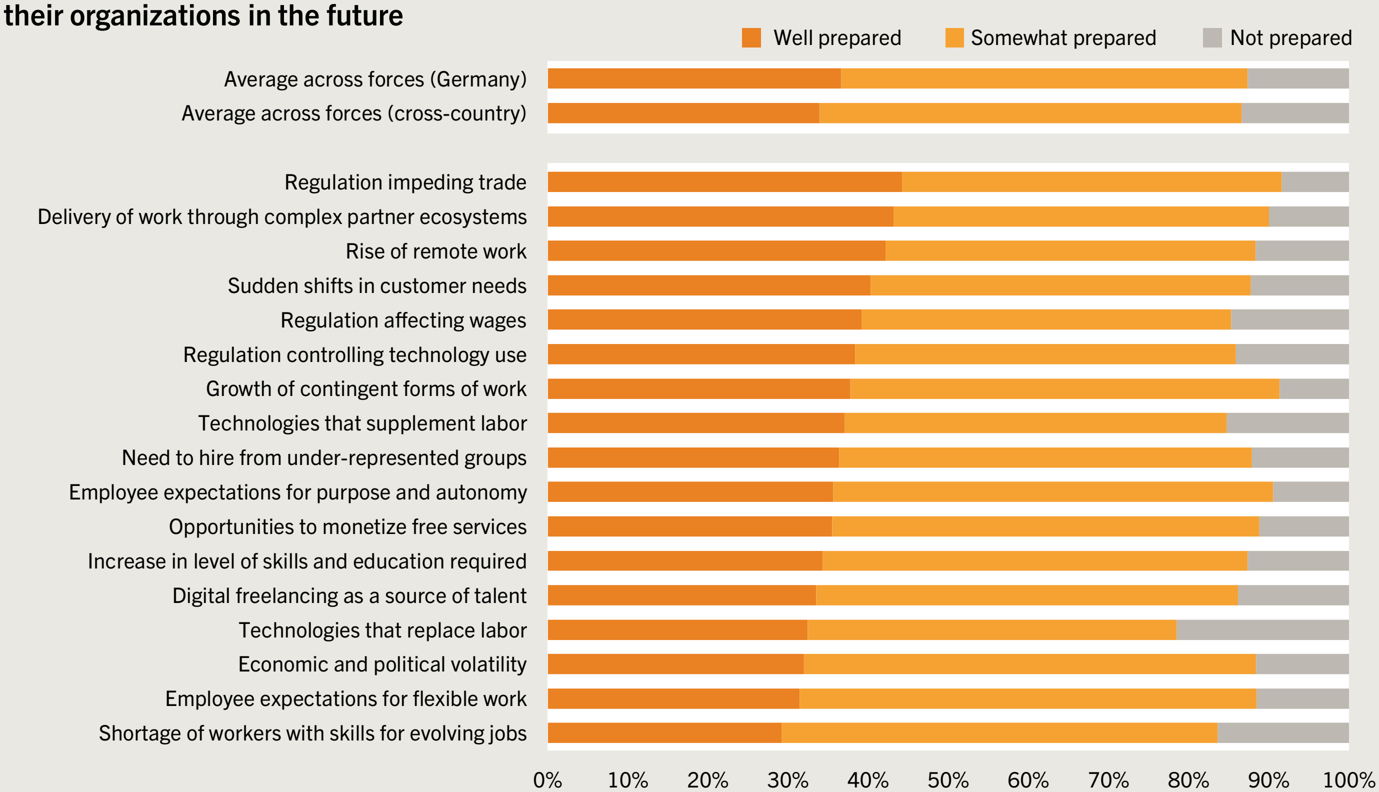


Note: Respondents were asked to rank a group as first by level of responsibility.

Business leaders' views on what prevents employees from preparing



Business leaders' perceptions of their organizations' preparedness for forces that will impact their organizations in the future



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

Business leaders in India were the most likely to report already experiencing the effects of automation, relative to those in other countries, but claimed higher confidence in their overall preparedness toward the 17 forces.

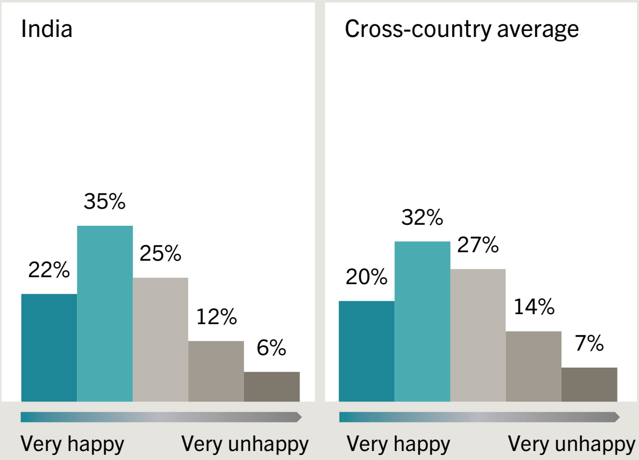
Workers were among the most likely to assume responsibility and claim readiness for preparing, but cited cost, time, and lack of employer support as barriers; business leaders acknowledged workers' sense that they lacked support.

Workers in India were among the most positive toward change, particularly concerning digital freelancing and the need for more on-the-job training. They also were most likely to view as significant the influx of a broader range of jobs into the country.

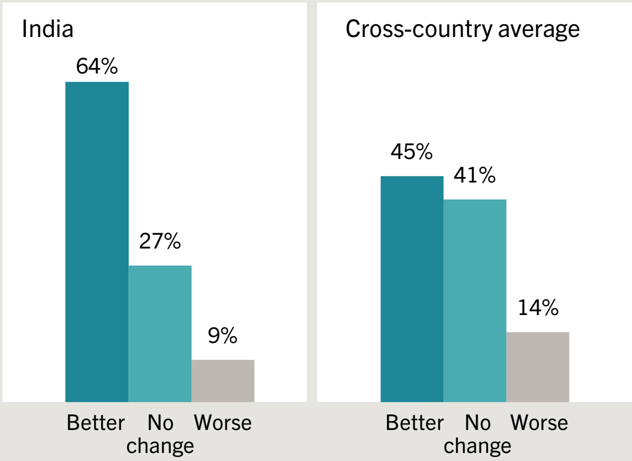
Workers were more concerned about technologies that affect labor than their peers in all other countries. But they were relatively positive about the impact of technology.

WORKERS

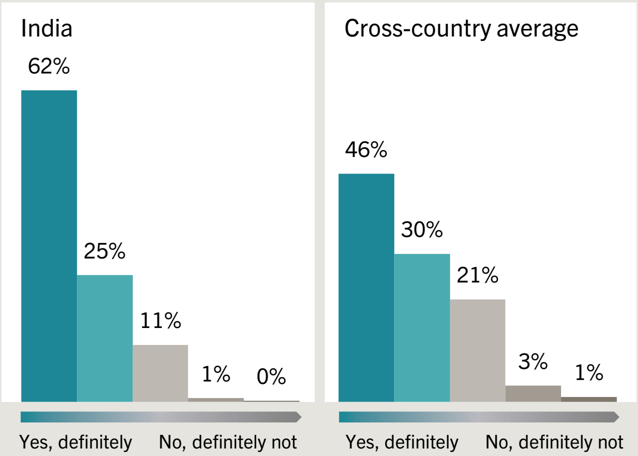
Happiness with current employment situation



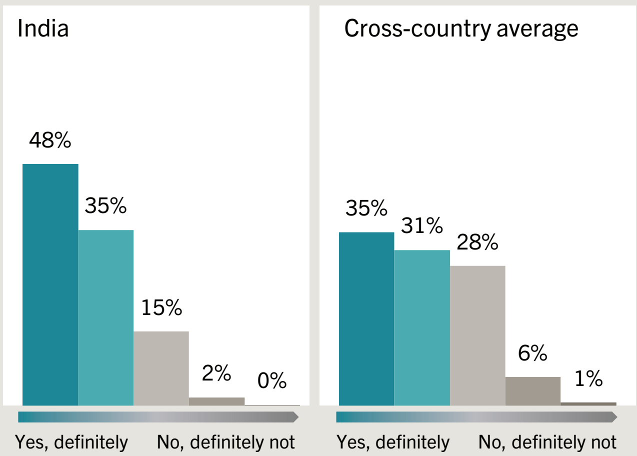
Employment situation over the previous five years



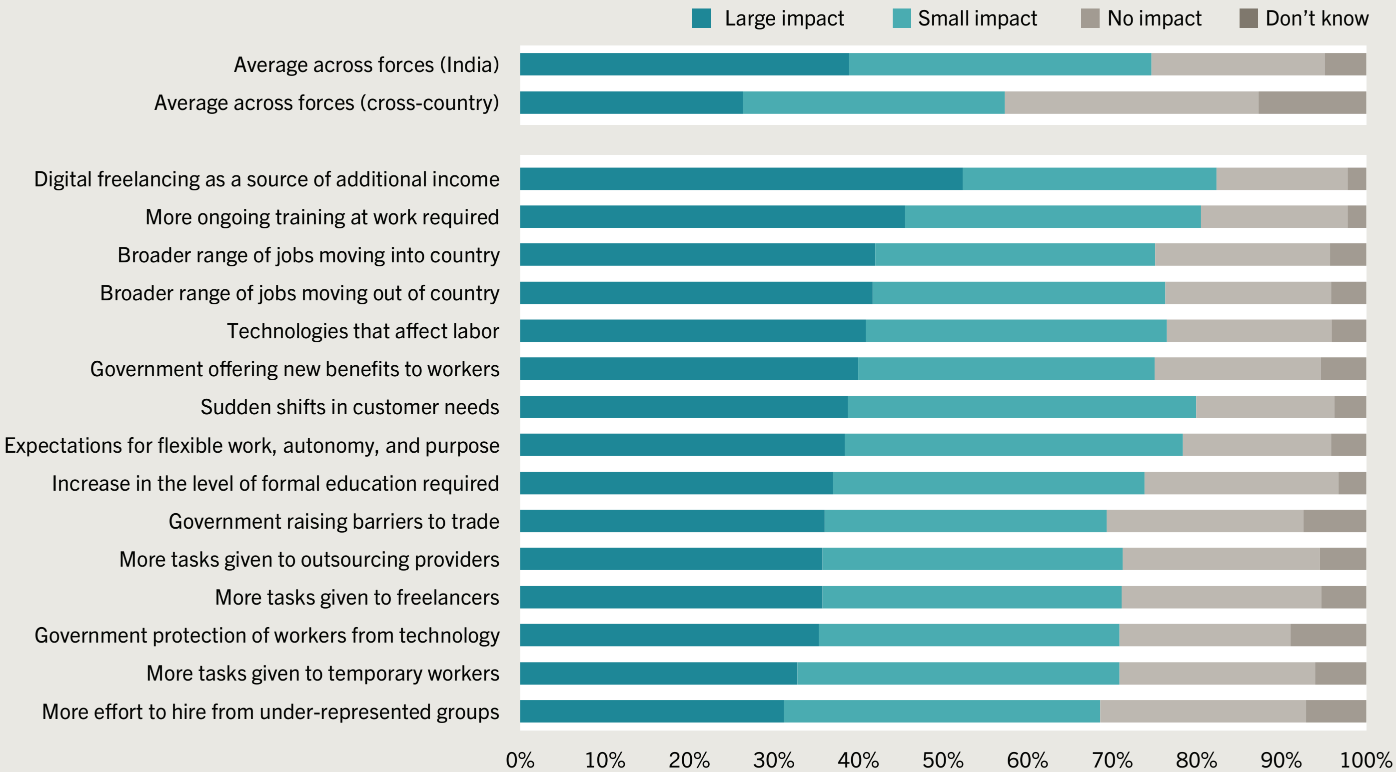
Workers' perceptions of necessity to prepare for the future



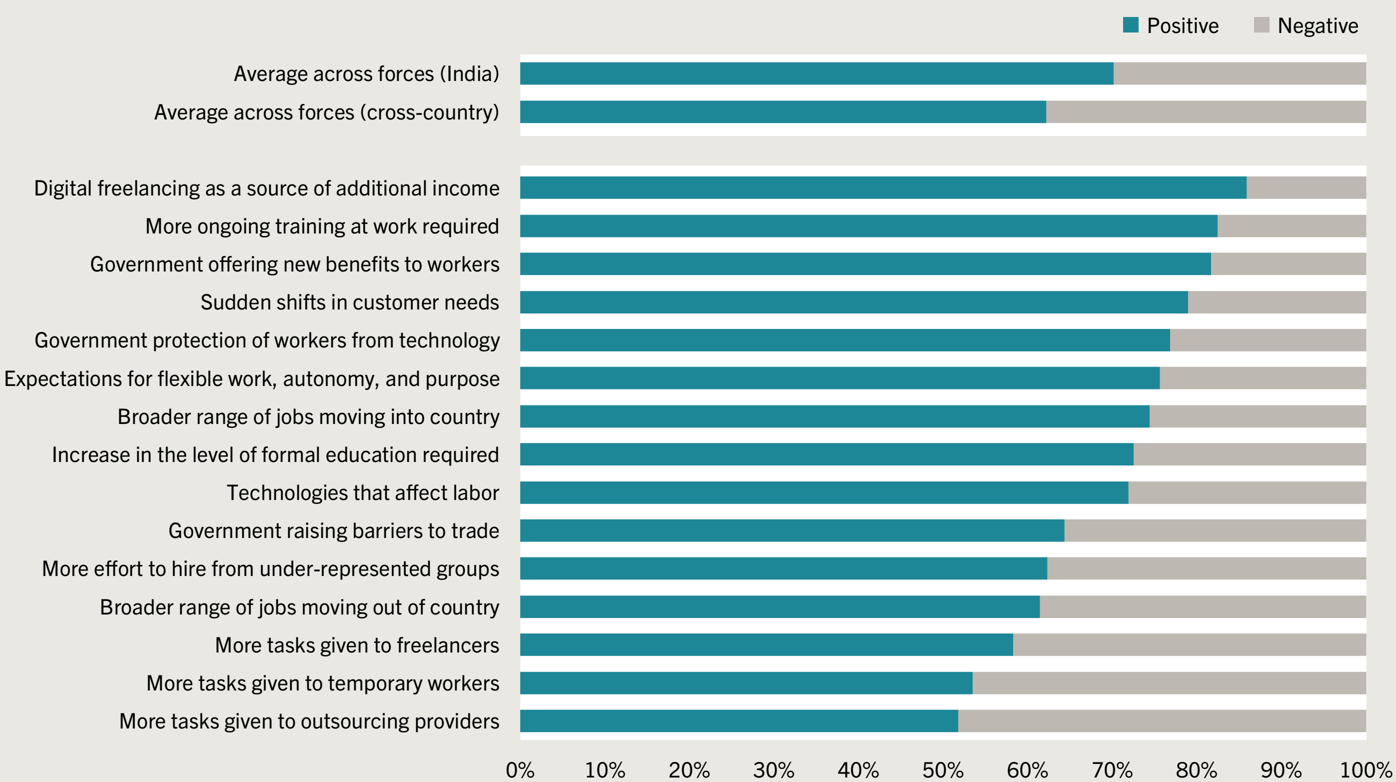
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

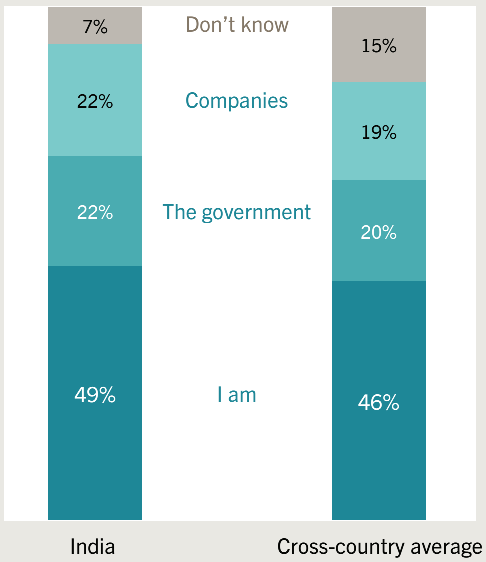


Workers' expectations of the nature of impact each force will have on their future



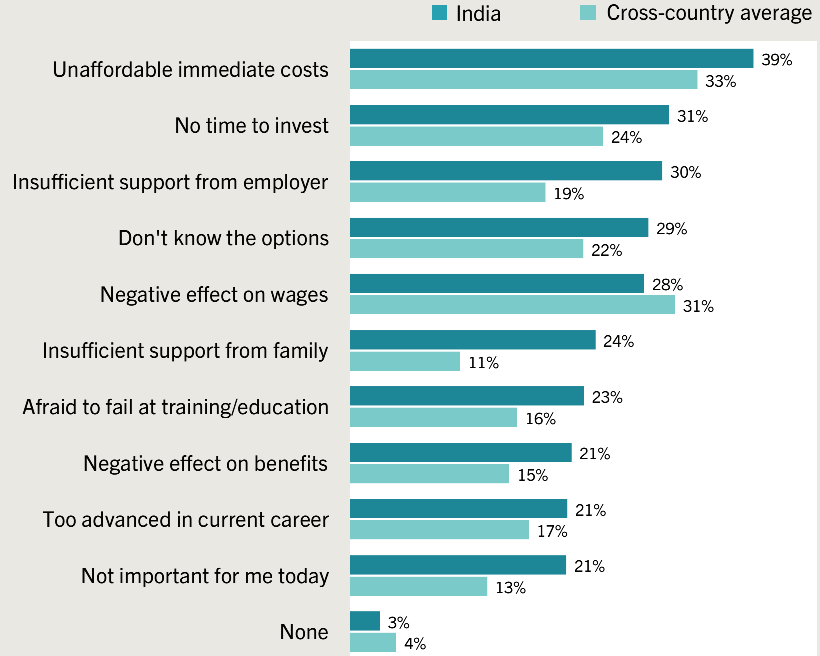
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

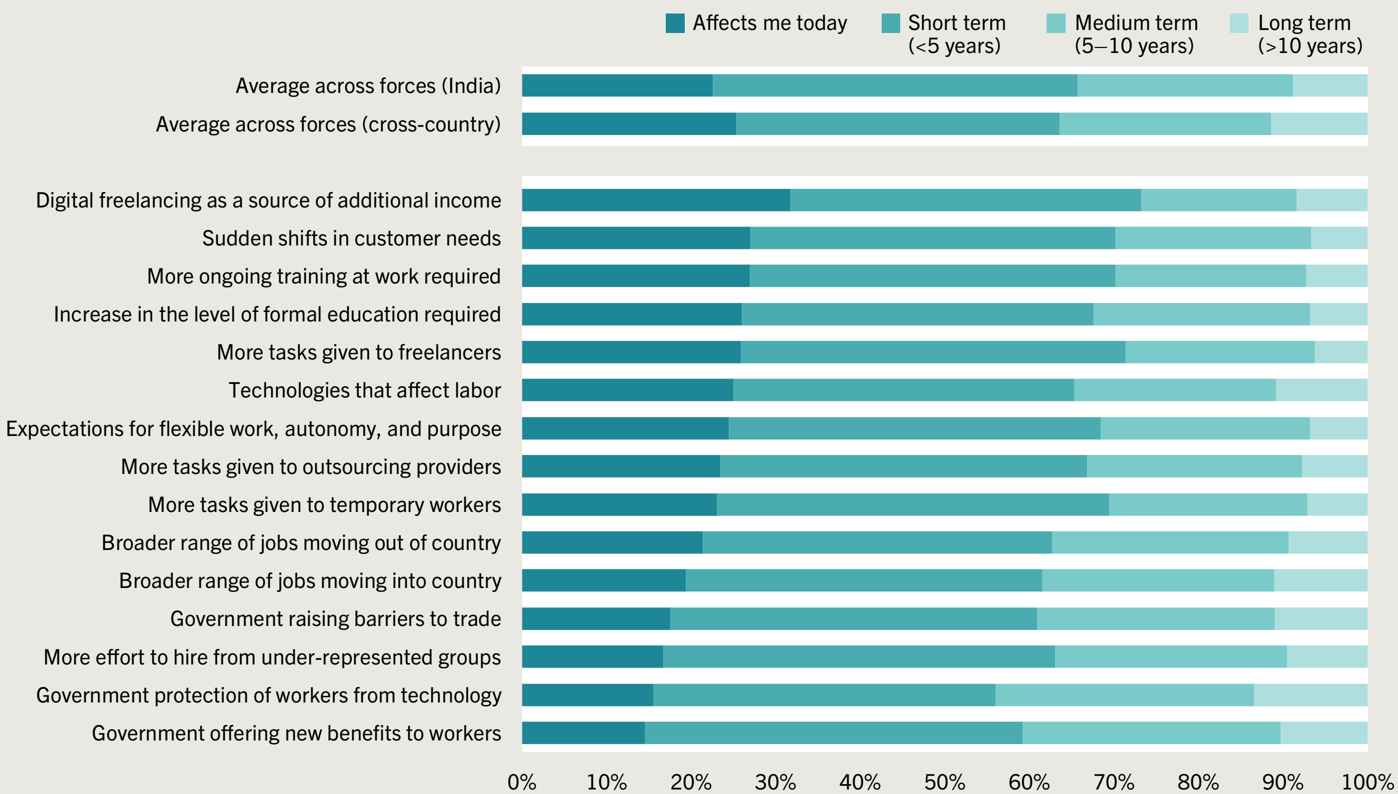


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



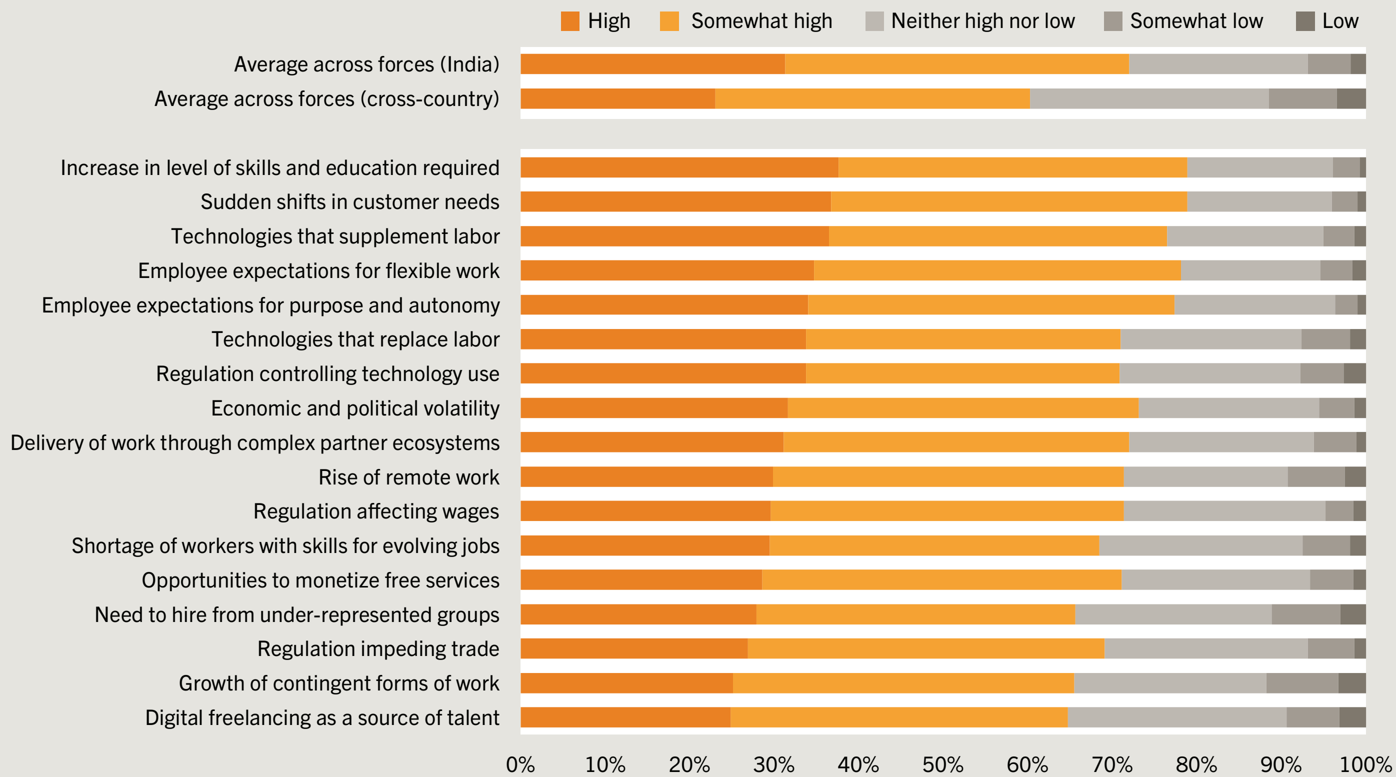
Workers' expectations of when the forces they deemed impactful would affect them



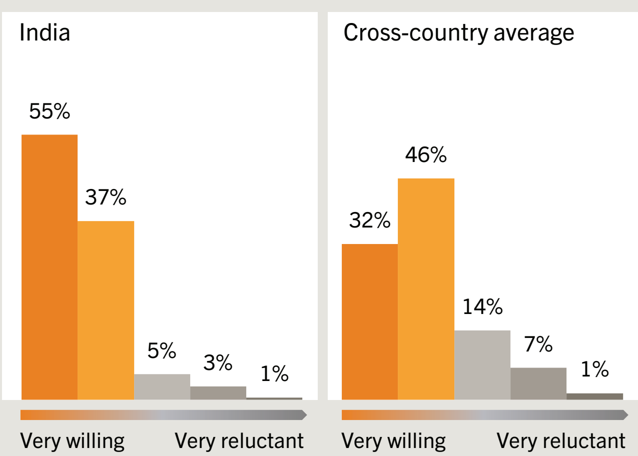
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

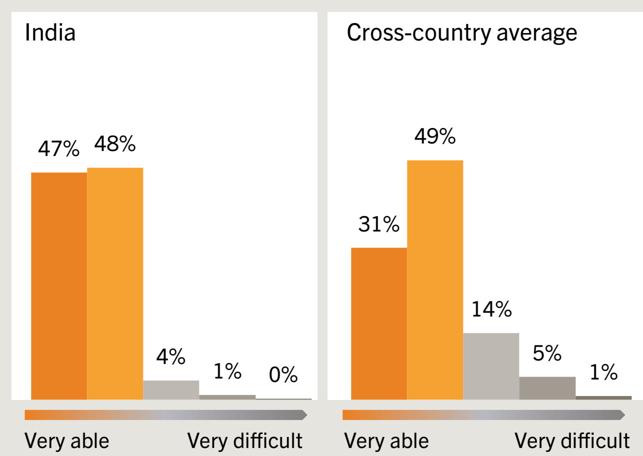
Business leaders' expectations of the level of significance of each force



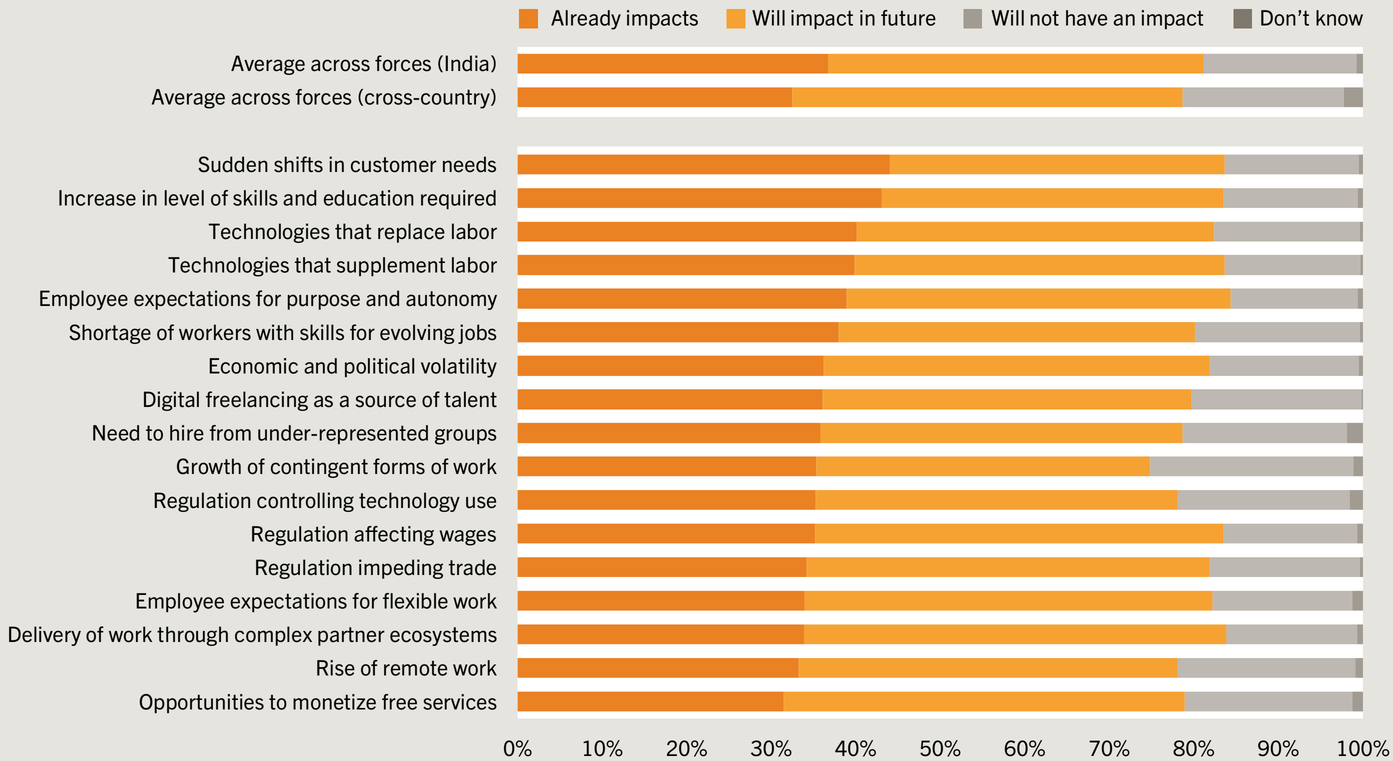
Business leaders' perceptions about workers' willingness to prepare



Business leaders' perceptions about workers' ability to prepare

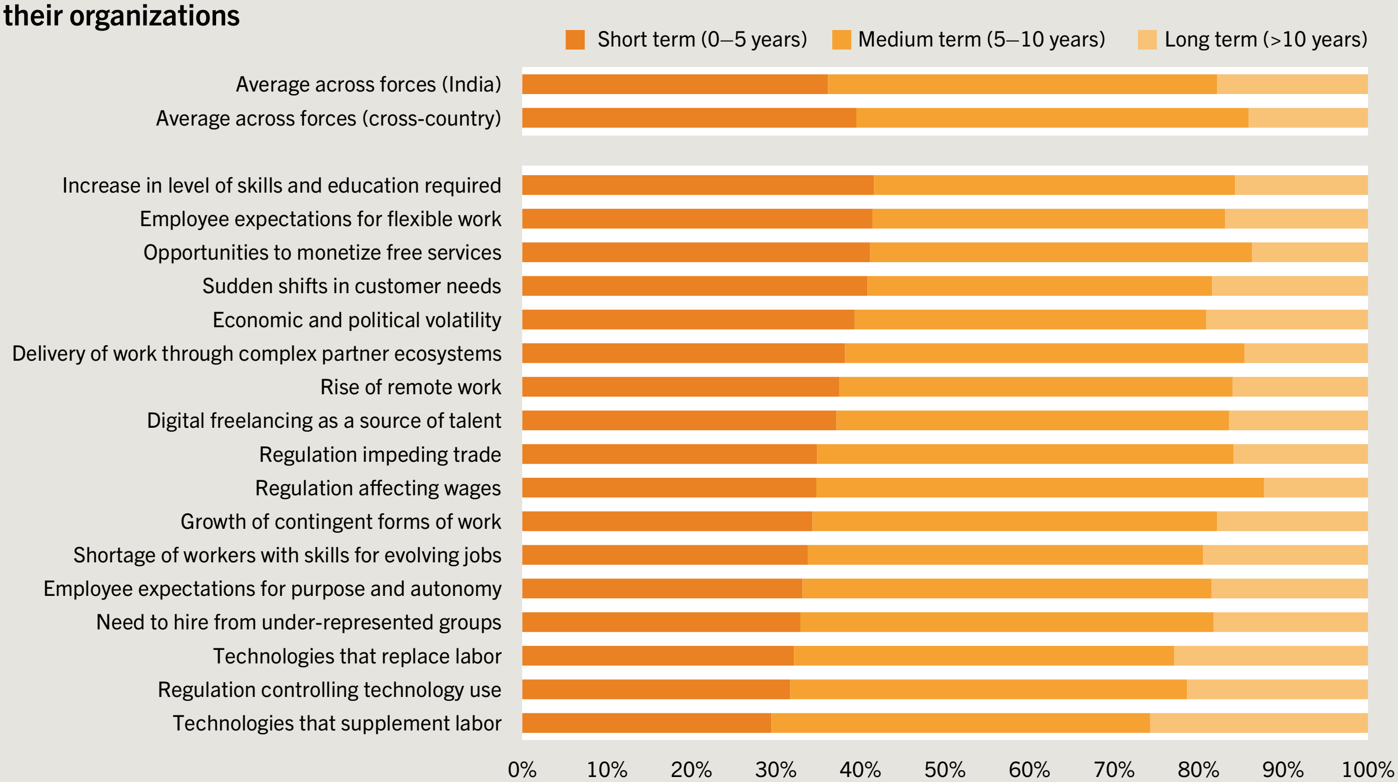


Business leaders' expectations of when the forces they deemed significant would impact their organizations



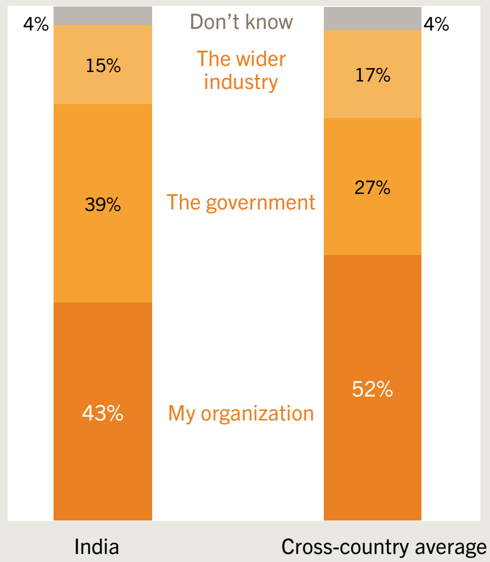
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance.

Business leaders' expectations of when in the future the forces they deemed significant would impact their organizations



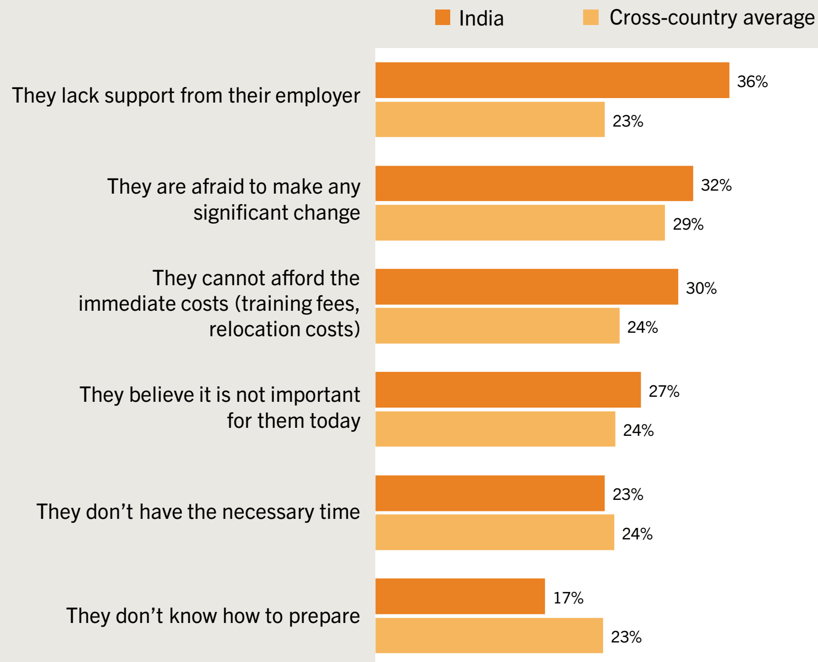
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Business leaders' views on who is responsible for developing the solutions needed

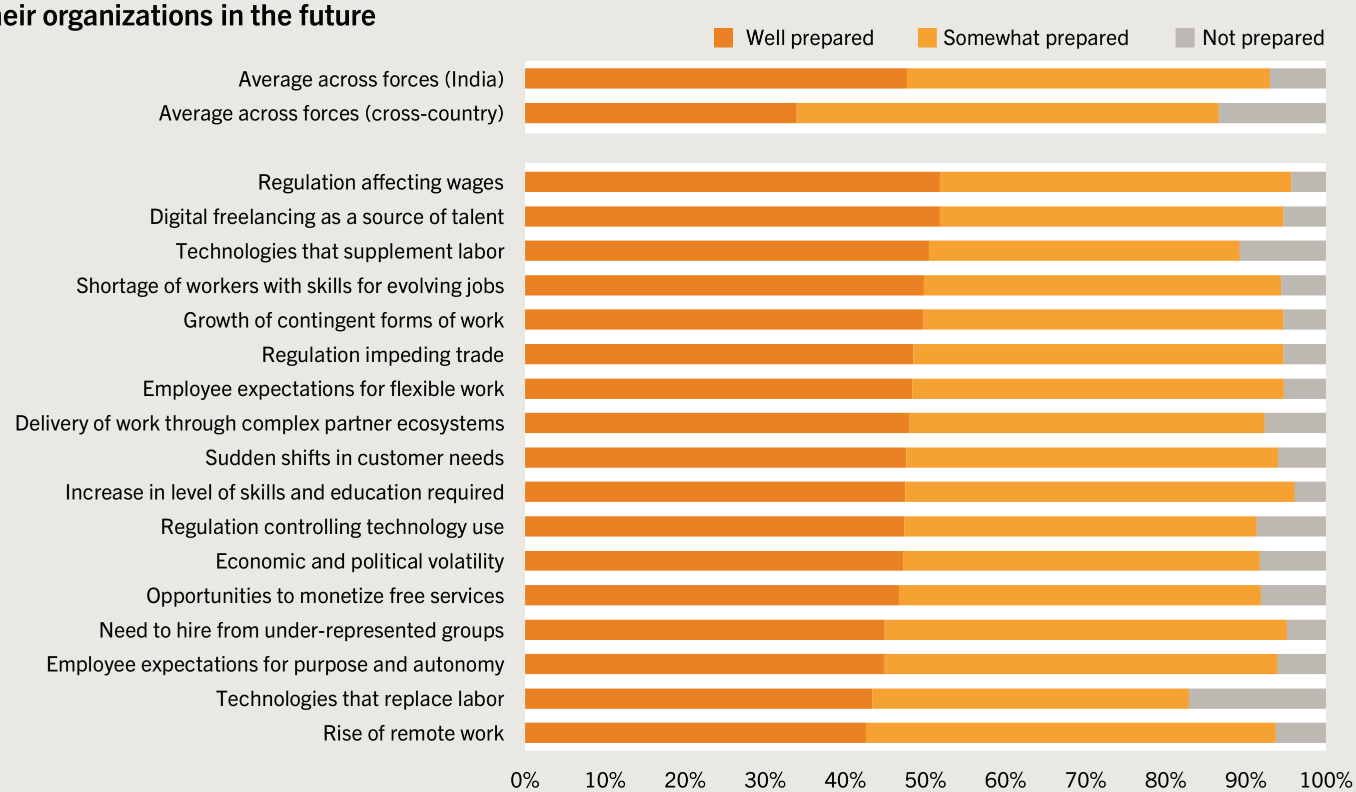


Note: Respondents were asked to rank a group as first by level of responsibility.

Business leaders' views on what prevents employees from preparing



Business leaders' perceptions of their organizations' preparedness for forces that will impact their organizations in the future



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

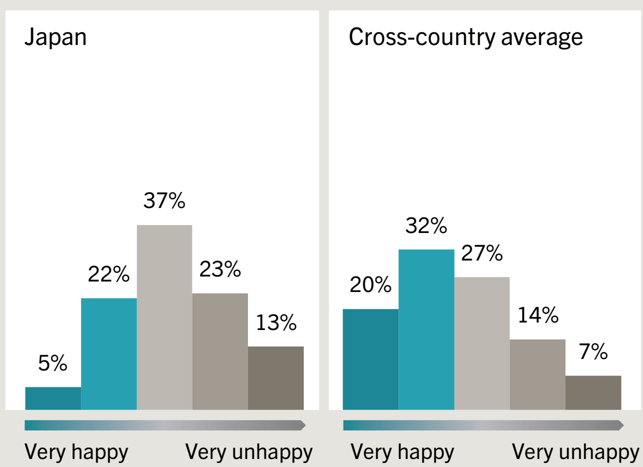
Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

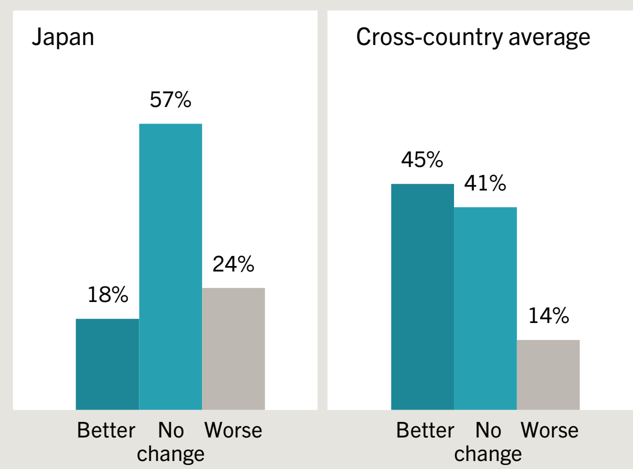
- Across the board, business leaders were much less likely to report being prepared for the 17 forces. For example, Japan had the lowest percentage of leaders who reported being very prepared for sudden shifts in customer needs.
- Japanese workers were the least satisfied with their current situation and its development over the previous five years. They were also least likely to recognize a need or ability to prepare for the future; business leaders' view aligned.
- Workers expressed uncertainty about who is responsible for preparing them for the future, and were least likely to claim responsibility themselves, compared with the 10 other countries.
- Compared with workers in 10 other countries, Japanese workers were least likely to say that they were too advanced in their career to prepare for the future.

WORKERS

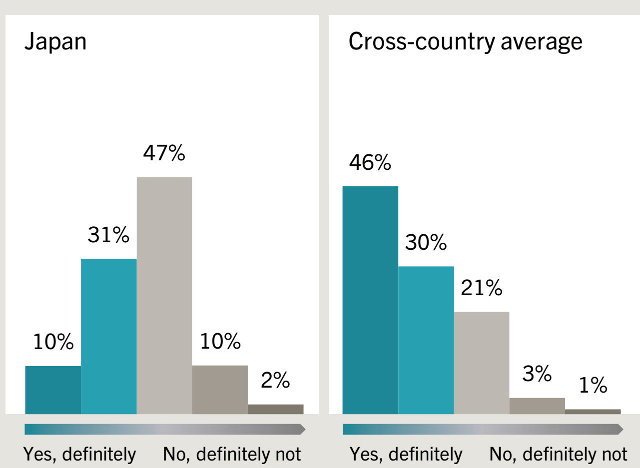
Happiness with current employment situation



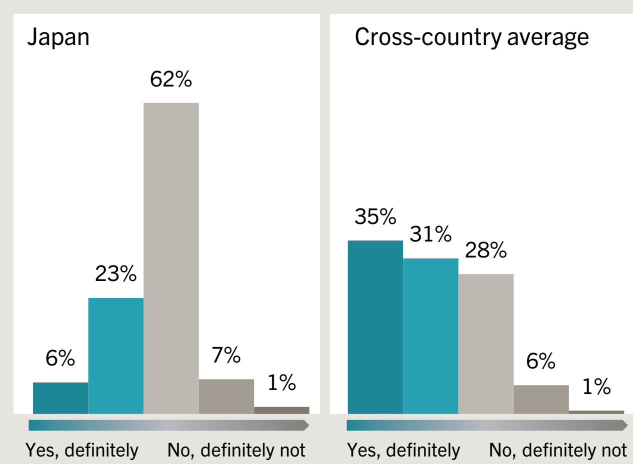
Employment situation over the previous five years



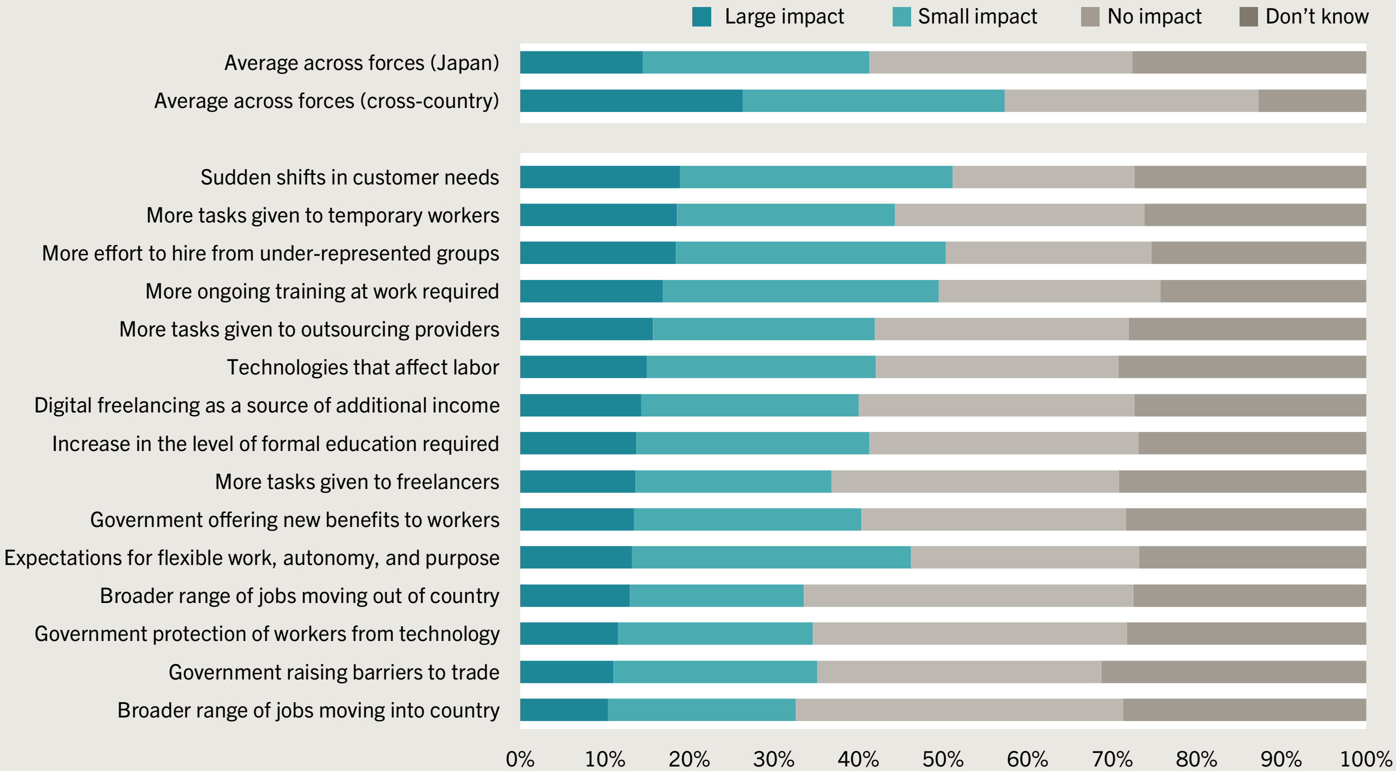
Workers' perceptions of necessity to prepare for the future



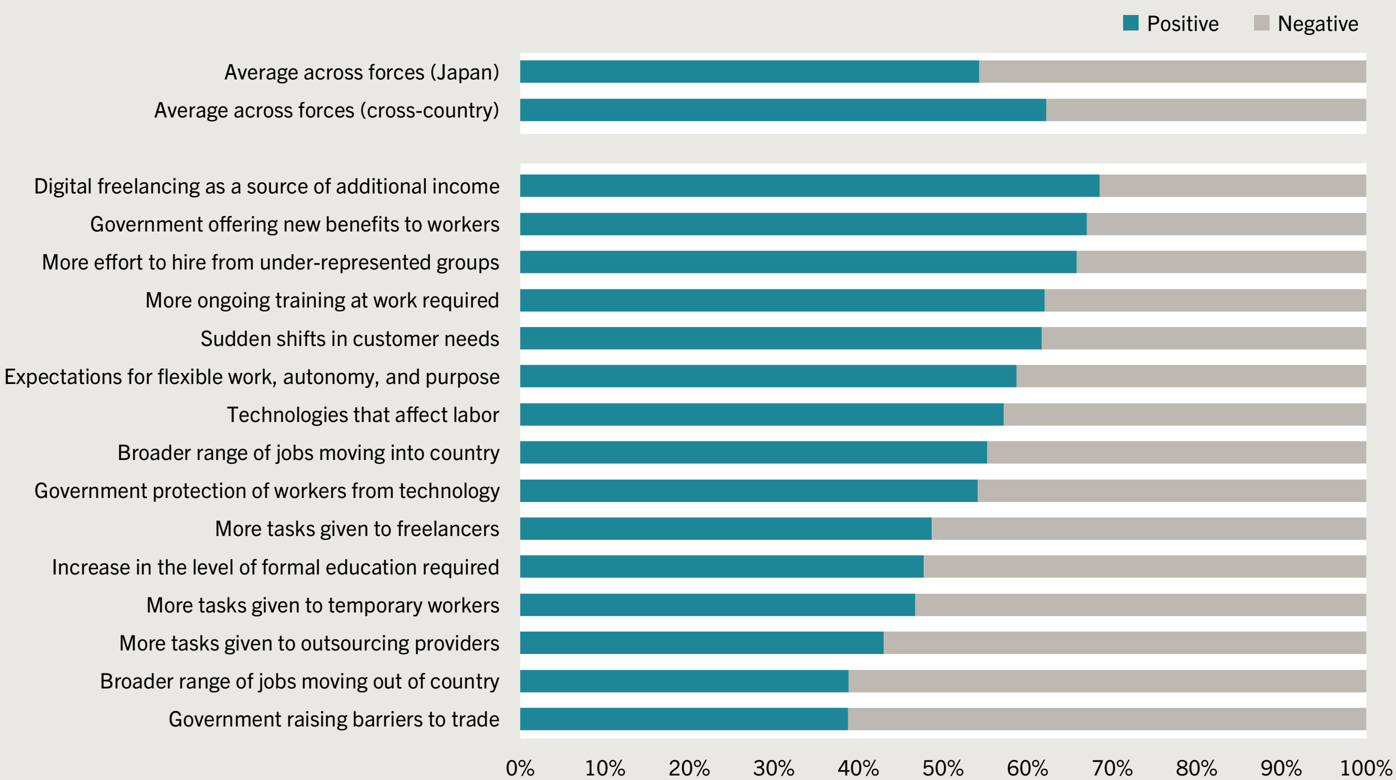
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

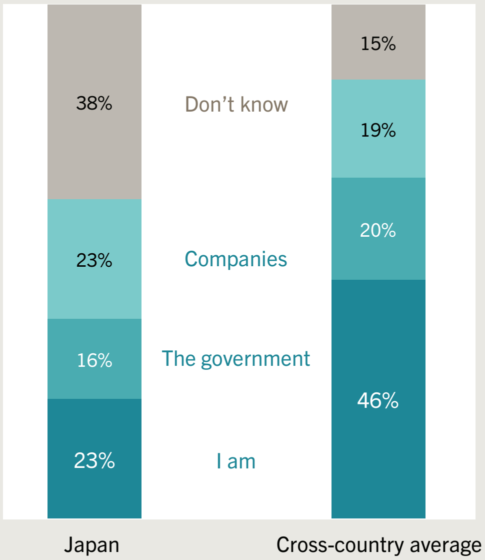


Workers' expectations of the nature of impact each force will have on their future



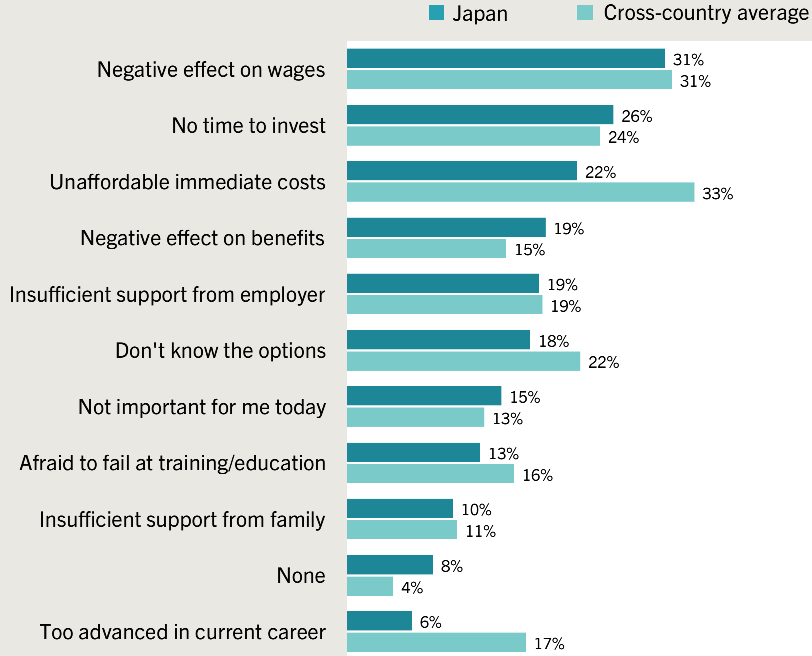
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

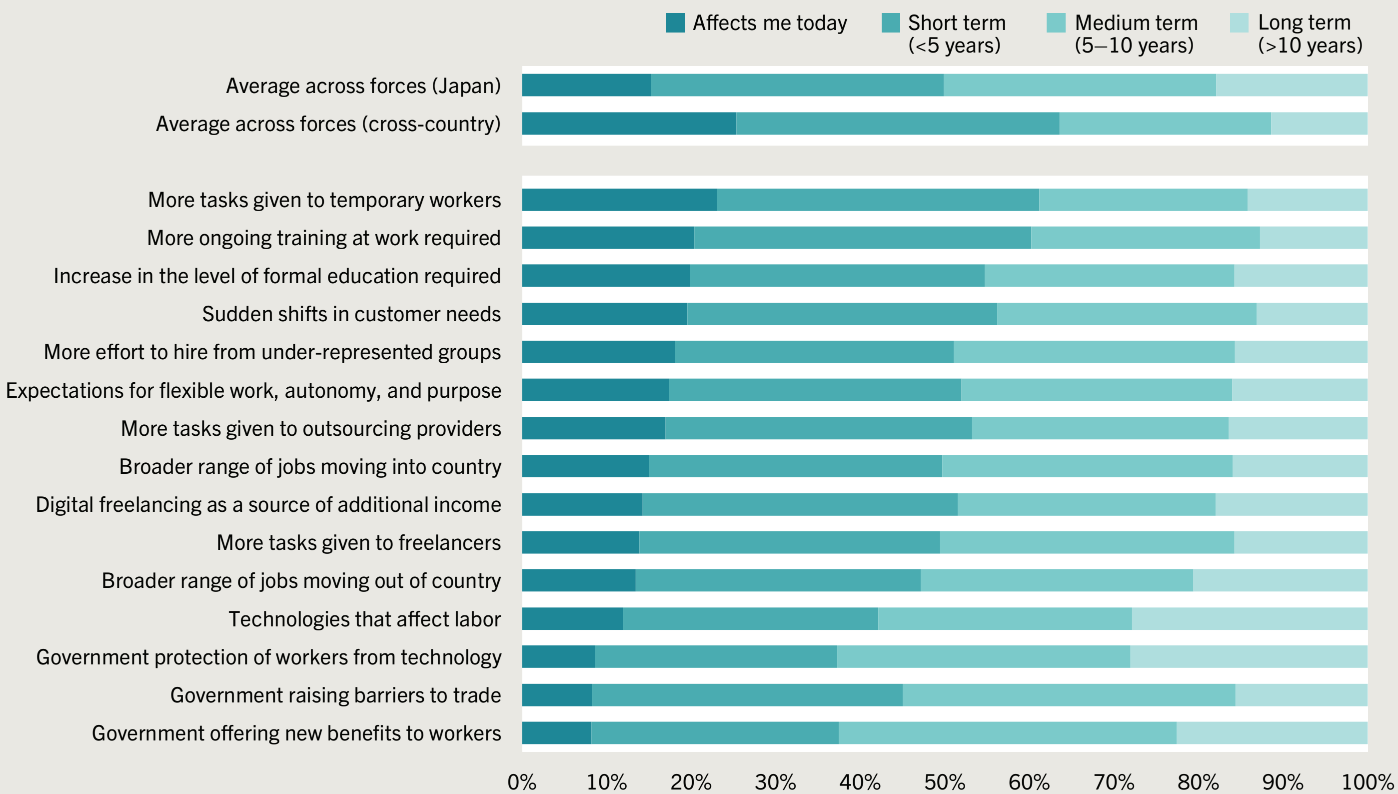


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



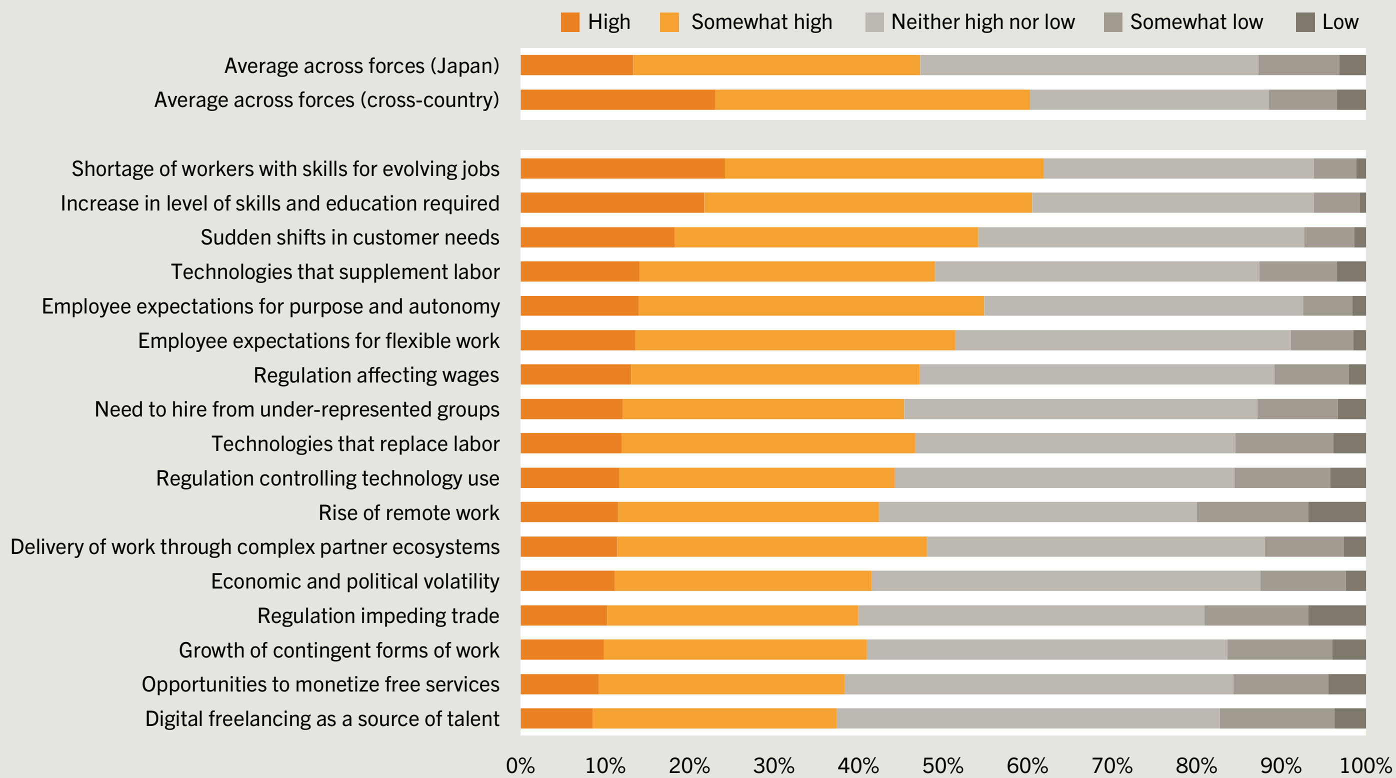
Workers' expectations of when the forces they deemed impactful would affect them



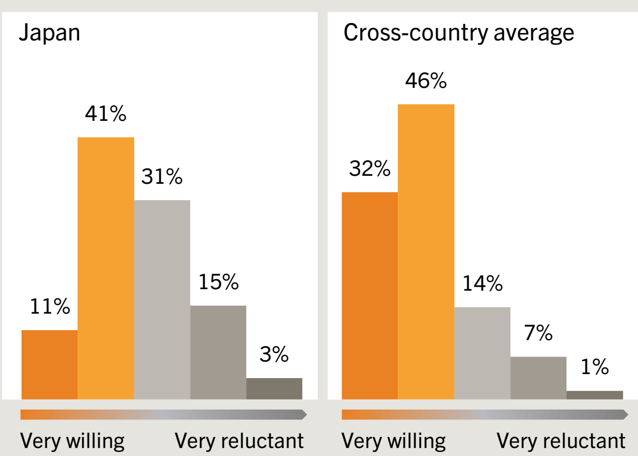
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

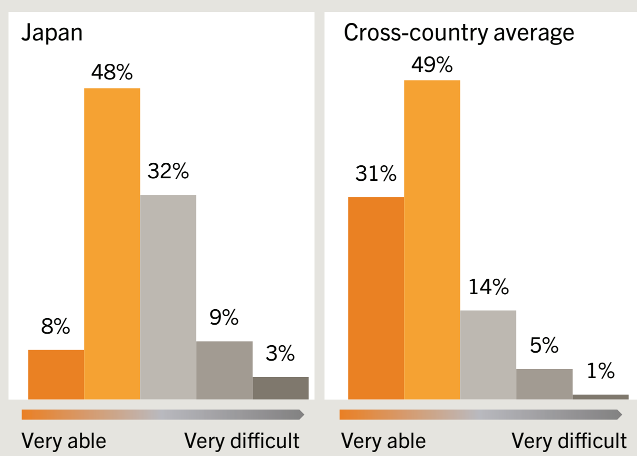
Business leaders' expectations of the level of significance of each force



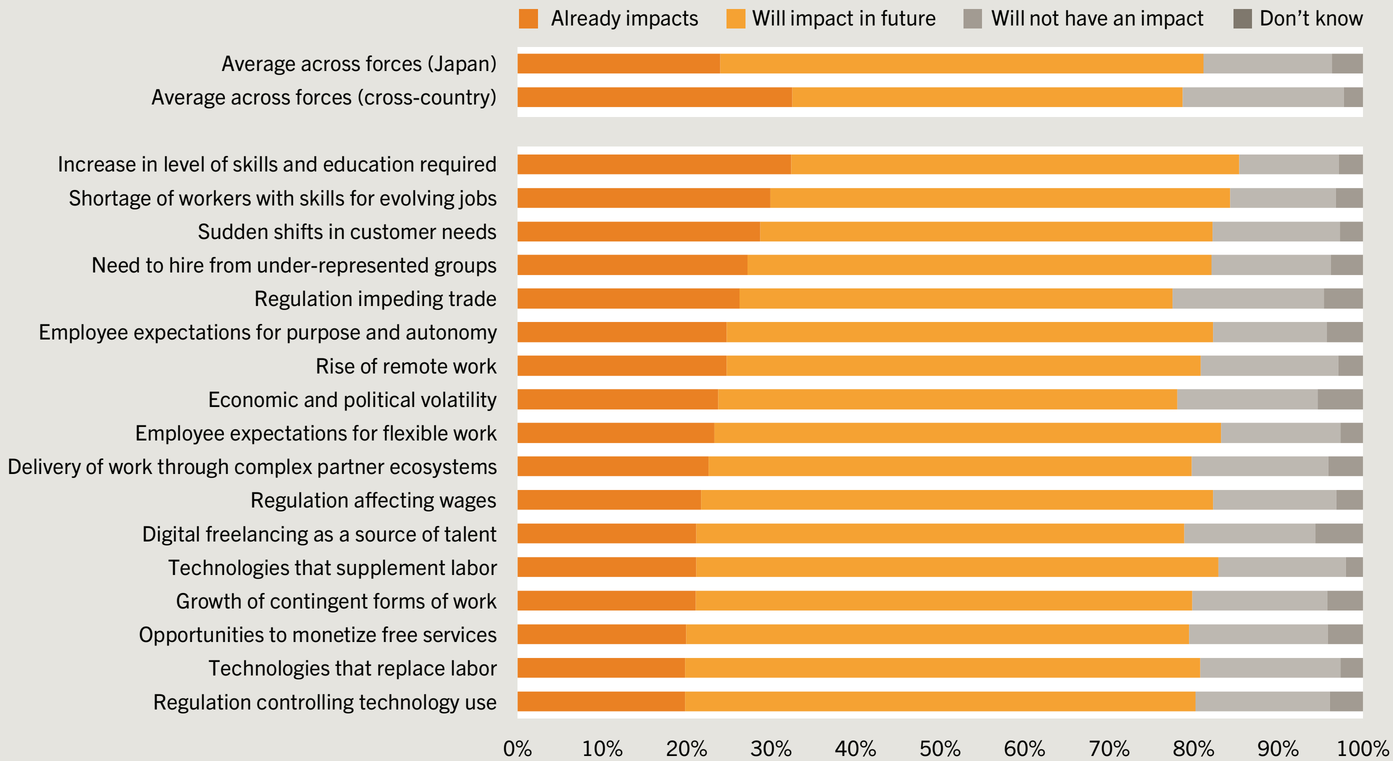
Business leaders' perceptions about workers' willingness to prepare



Business leaders' perceptions about workers' ability to prepare

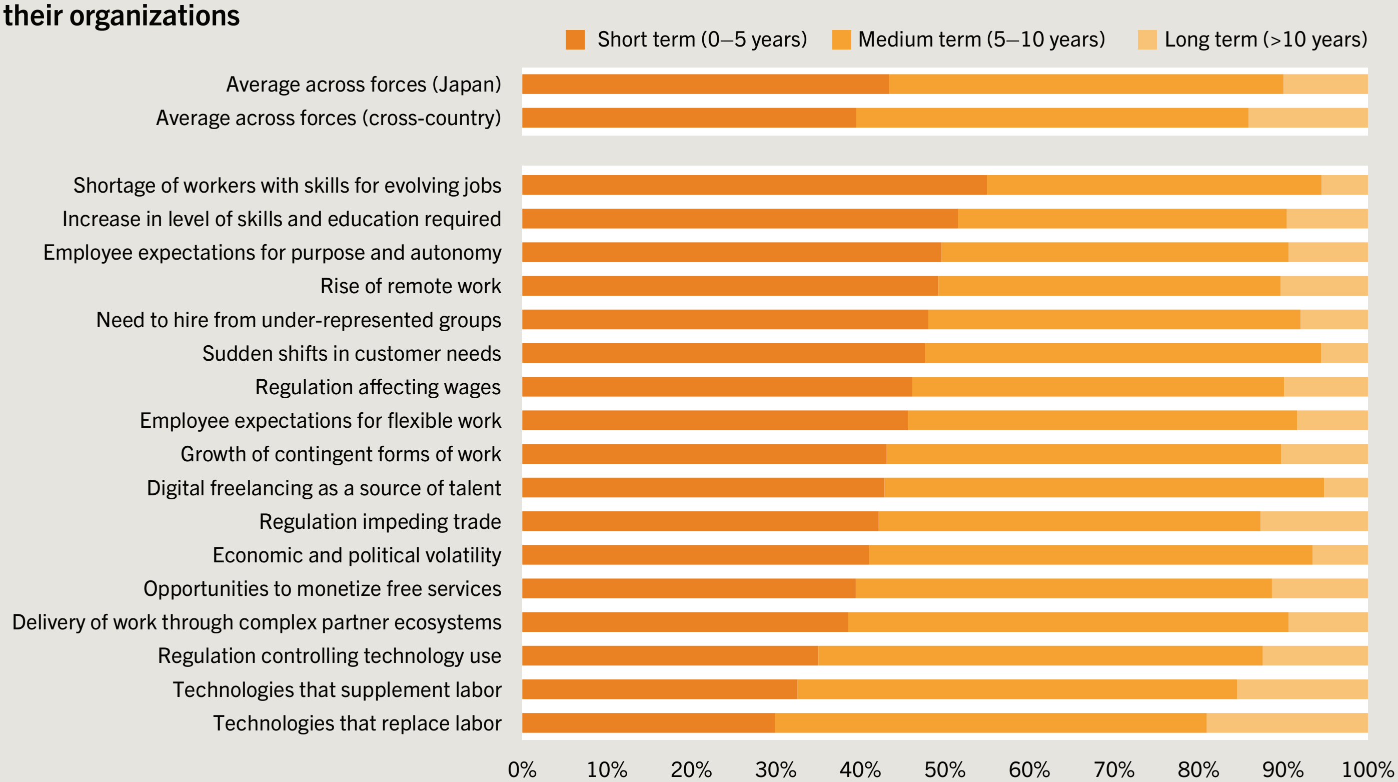


Business leaders' expectations of when the forces they deemed significant would impact their organizations



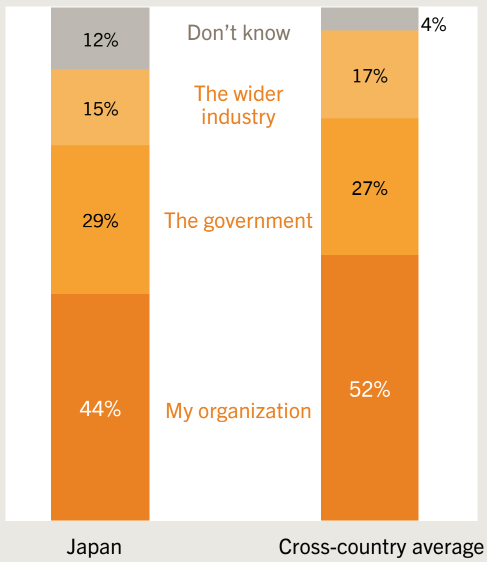
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance.

Business leaders' expectations of when in the future the forces they deemed significant would impact their organizations



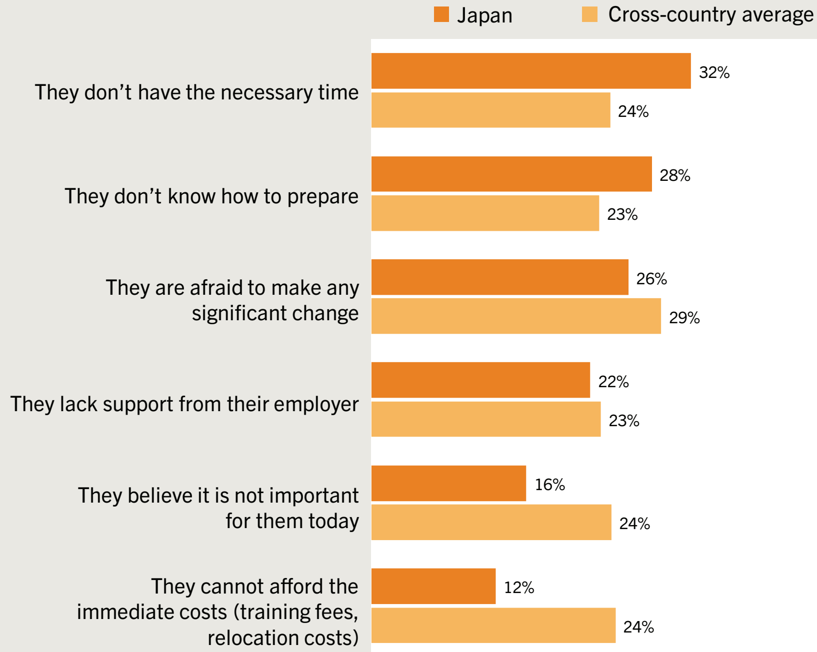
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Business leaders' views on who is responsible for developing the solutions needed

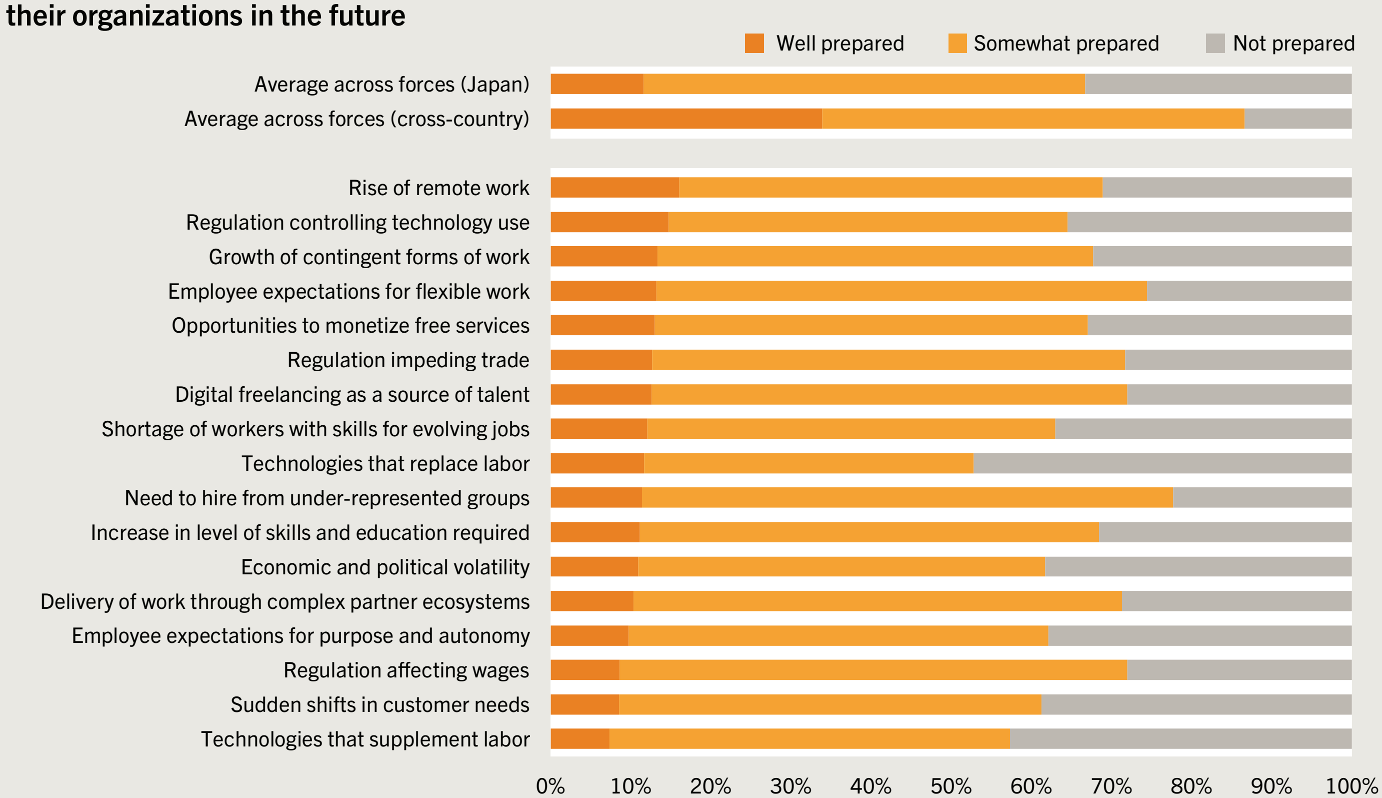


Note: Respondents were asked to rank a group as first by level of responsibility.

Business leaders' views on what prevents employees from preparing



Business leaders' perceptions of their organizations' preparedness for forces that will impact their organizations in the future



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

Business leaders in the UK were more likely to be concerned about economic and political volatility and increased trade barriers than business leaders in any other developed country surveyed.

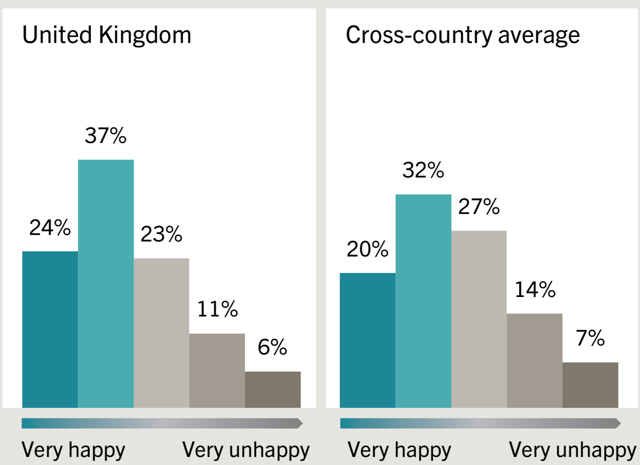
UK workers were second to those in Japan as least likely to feel the urgency to prepare, and third least confident in their ability to do so. They were second only to Swedish workers in citing negative effects on wages as a barrier.

Workers in the UK, along with those in France, were more likely to expect to be affected by outsourcing. They were especially pessimistic about offshoring and businesses' increasing reliance on freelancers and temporary workers.

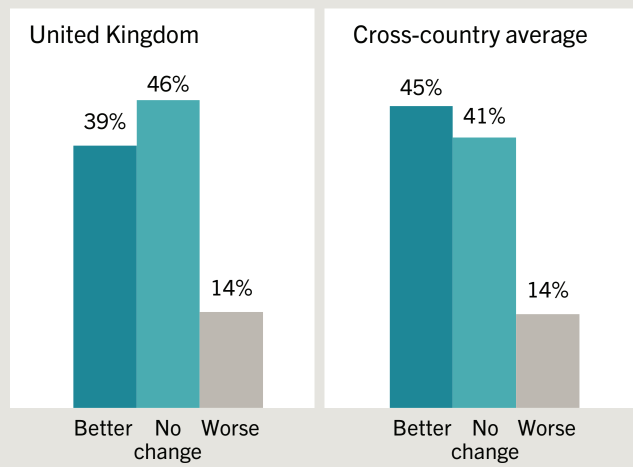
Business leaders rated employee expectations of flexible work as highly significant and were more concerned with technologies that replace labor relative to other forces than their international peers.

WORKERS

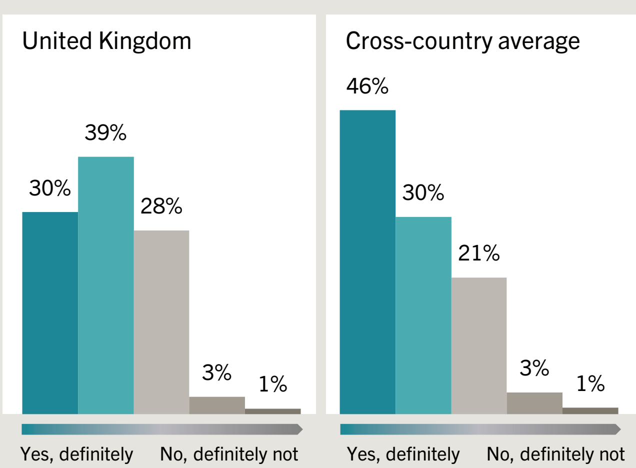
Happiness with current employment situation



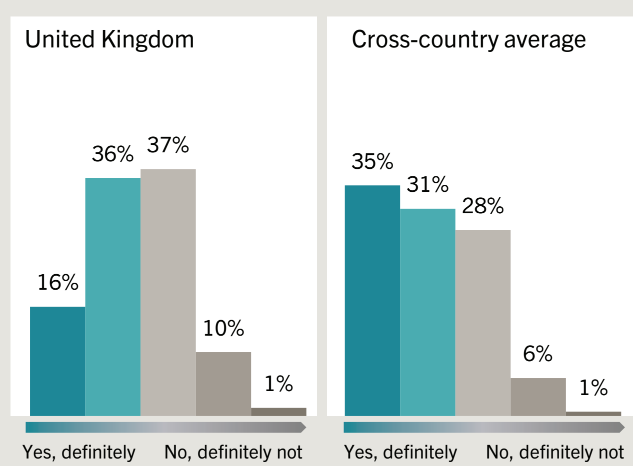
Employment situation over the previous five years



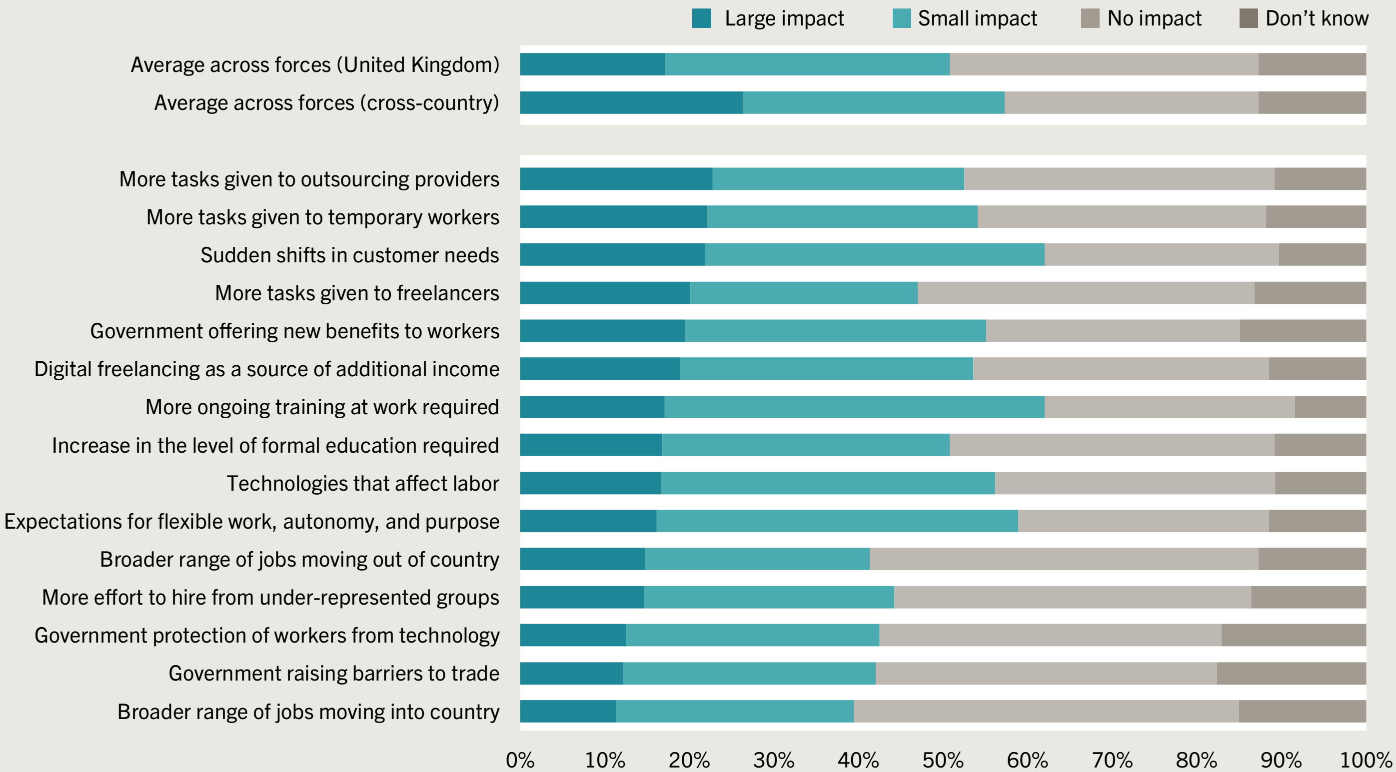
Workers' perceptions of necessity to prepare for the future



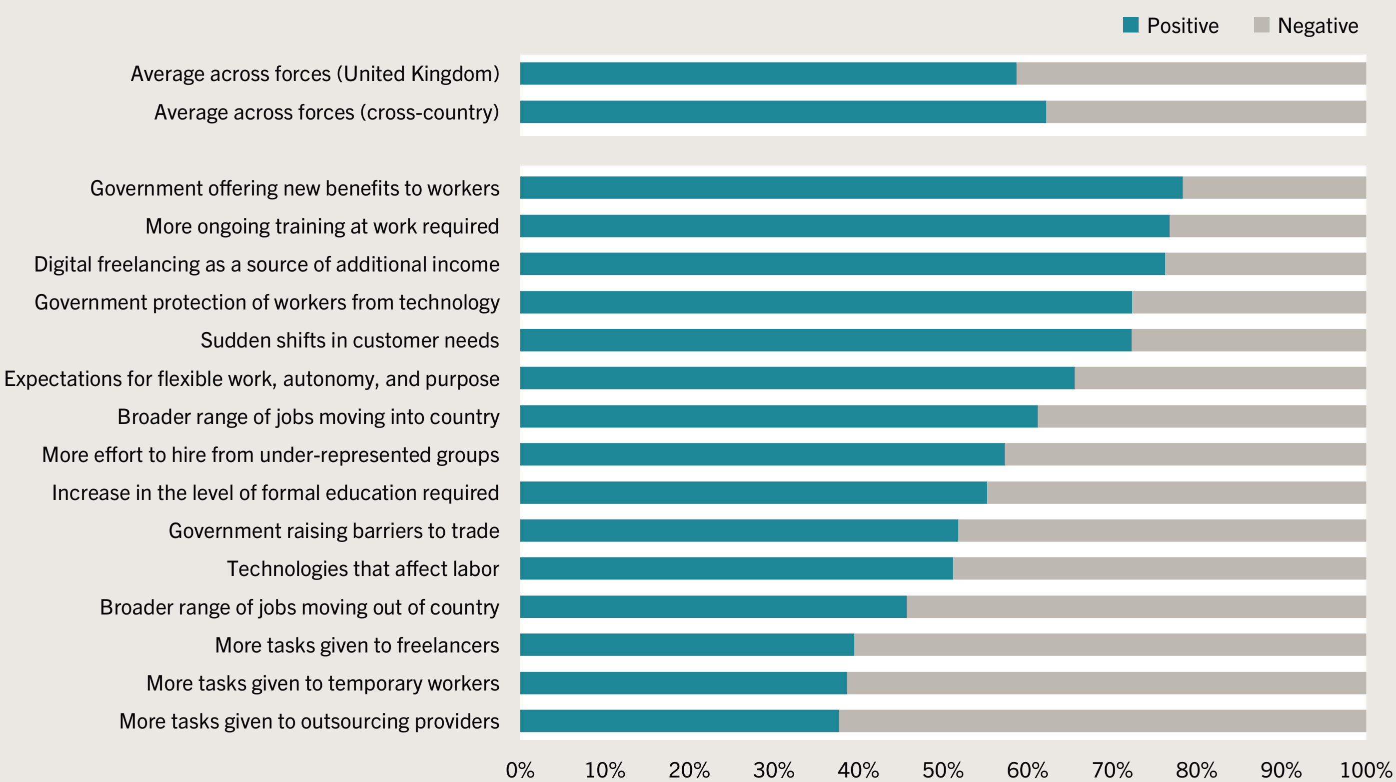
Workers' perceptions of ability to prepare for the future



Workers’ expectations of the impact of forces on them

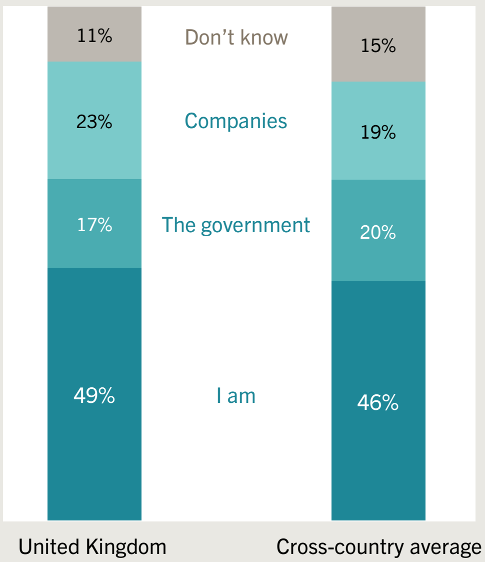


Workers’ expectations of the nature of impact each force will have on their future



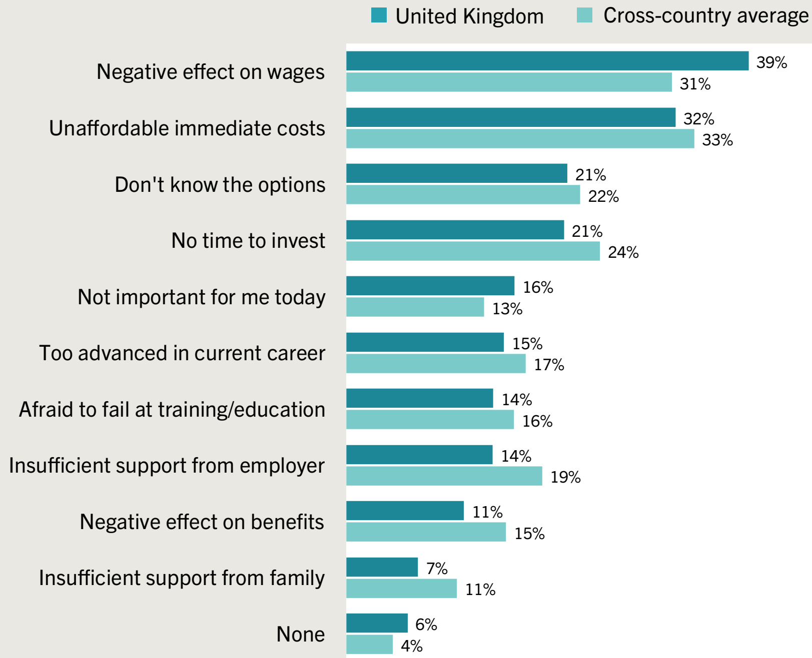
Note: This question was shown to respondents who indicated a force would have any impact, “small” or “large,” on them.

Workers' perceptions on who is responsible for preparing them for the future

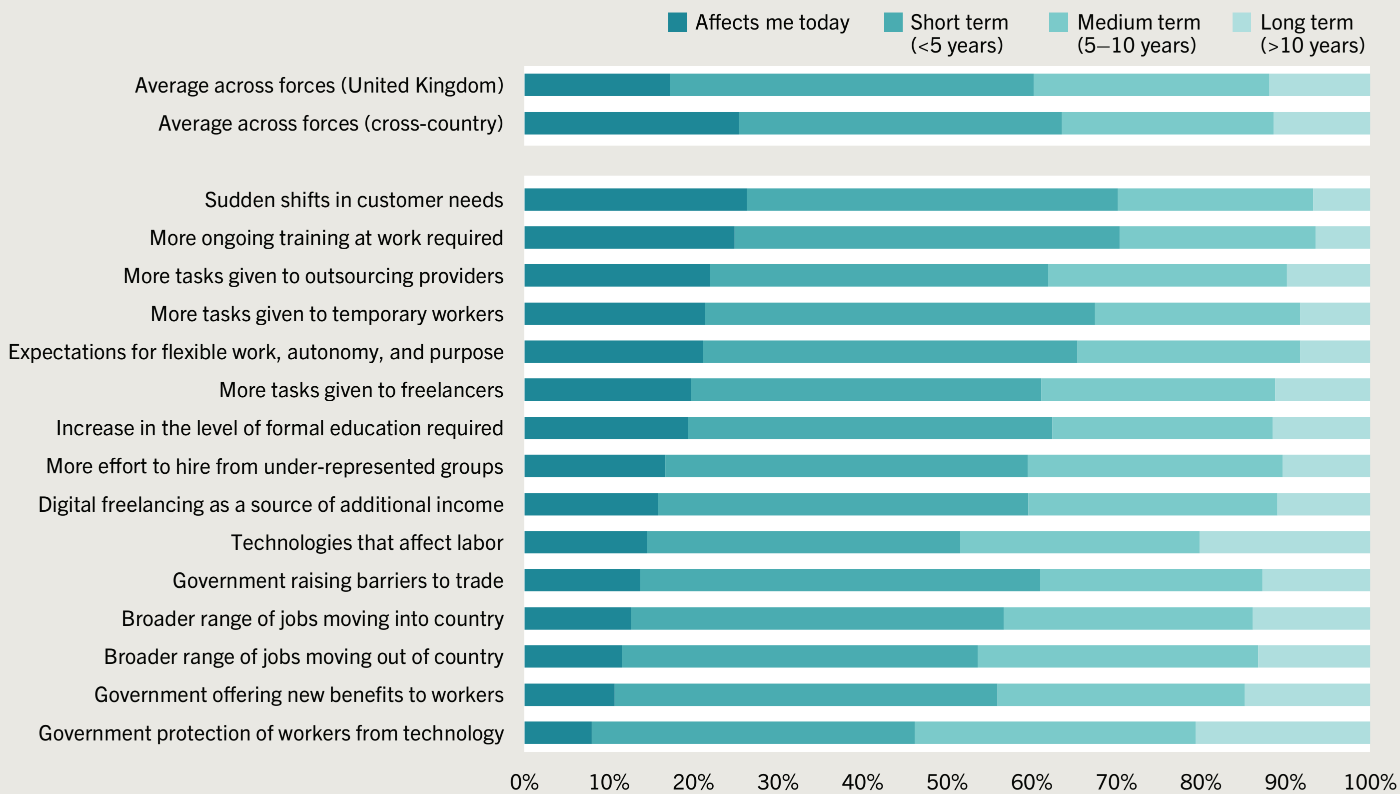


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



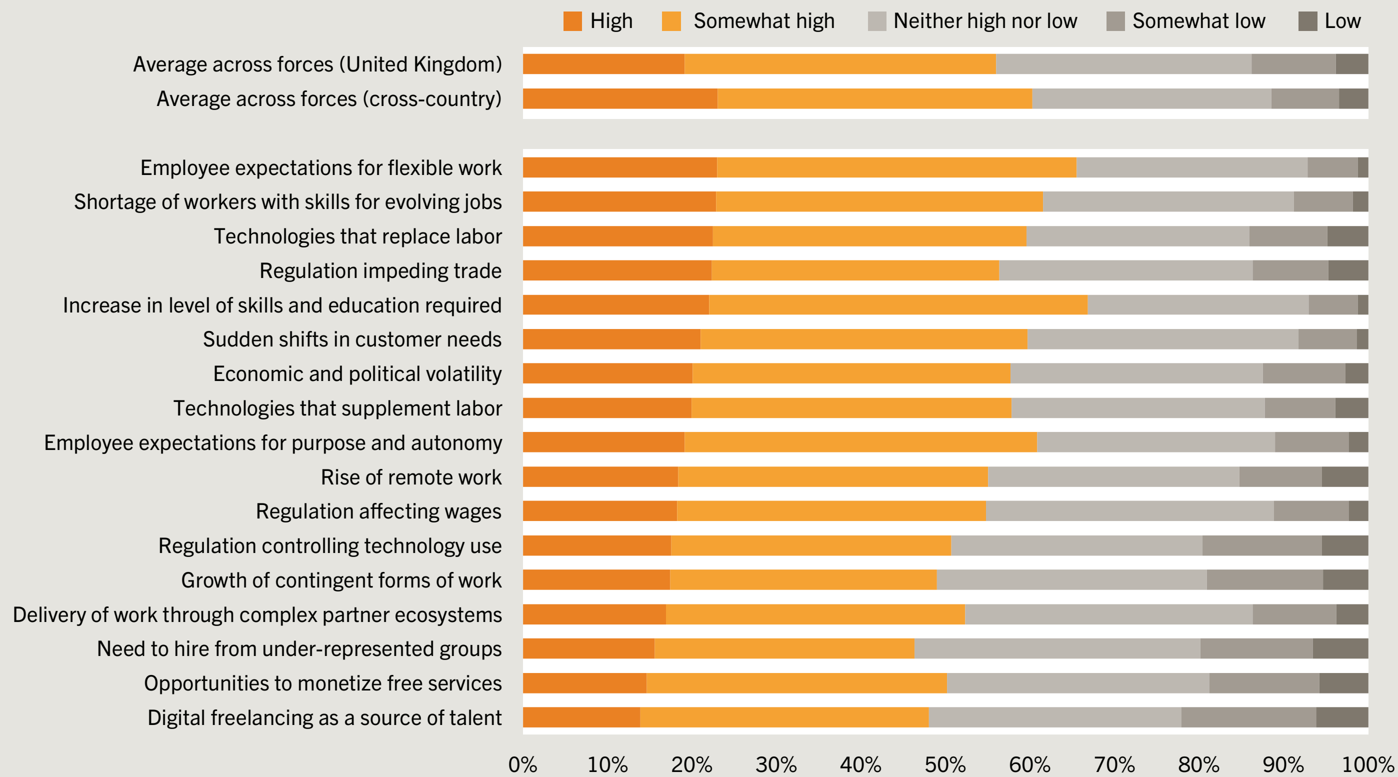
Workers' expectations of when the forces they deemed impactful would affect them



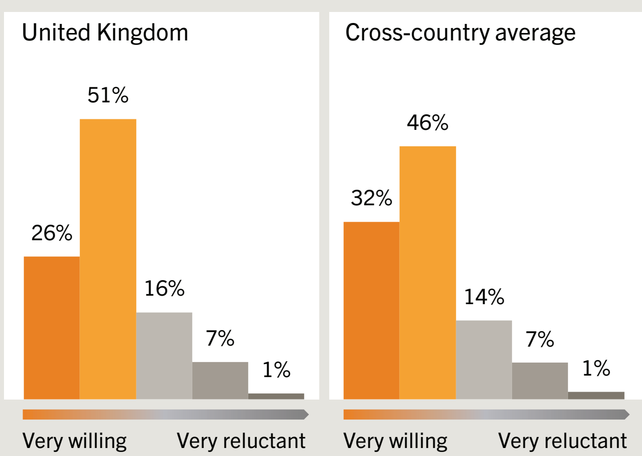
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

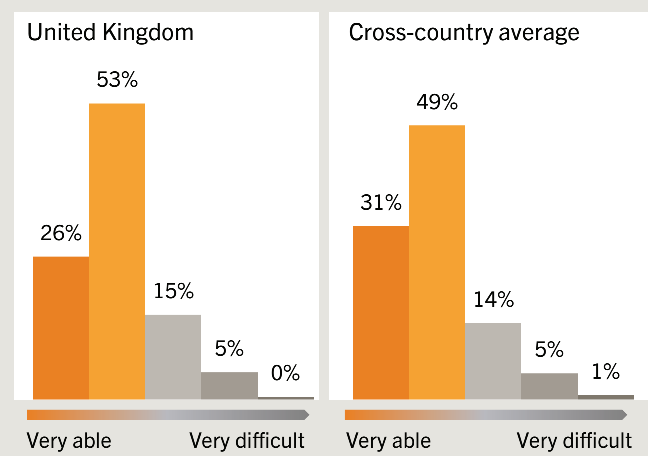
Business leaders' expectations of the level of significance of each force



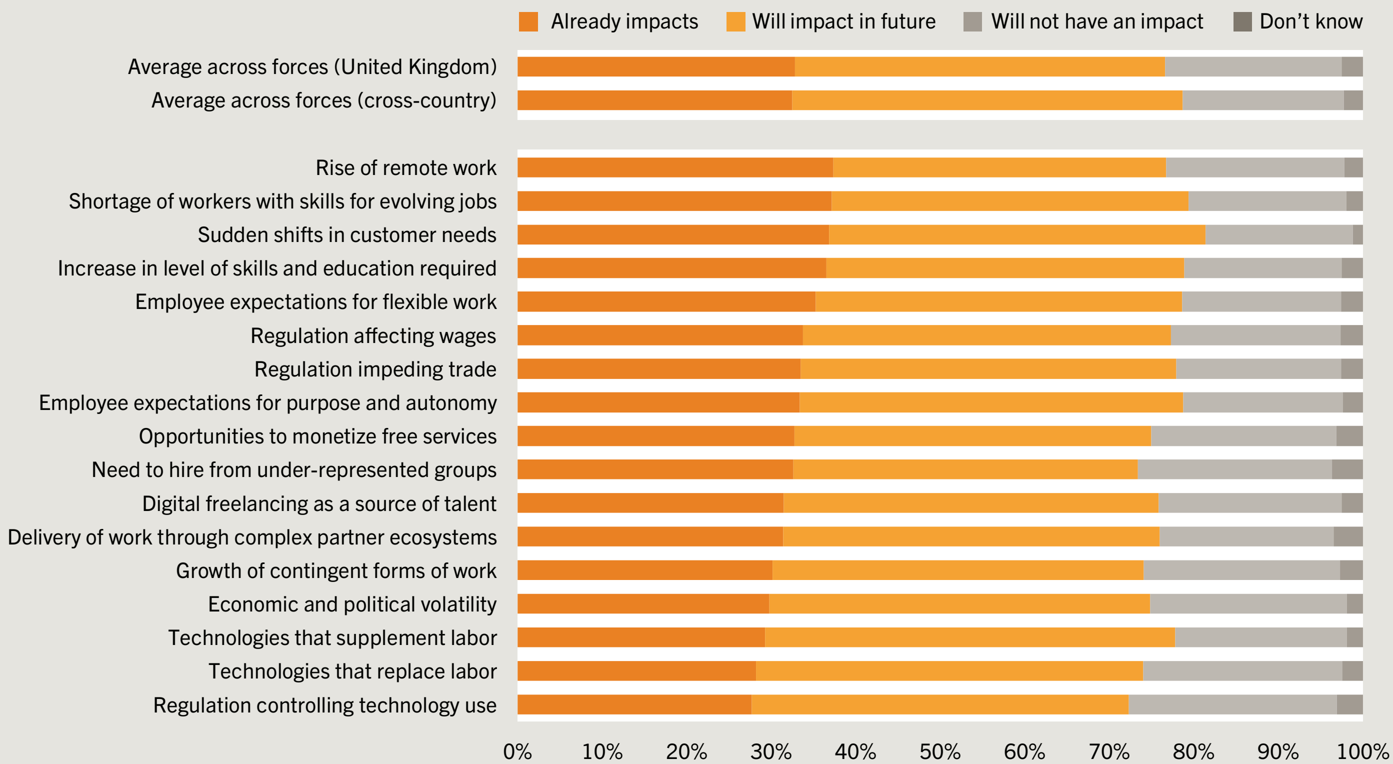
Business leaders' perceptions about workers' willingness to prepare



Business leaders' perceptions about workers' ability to prepare

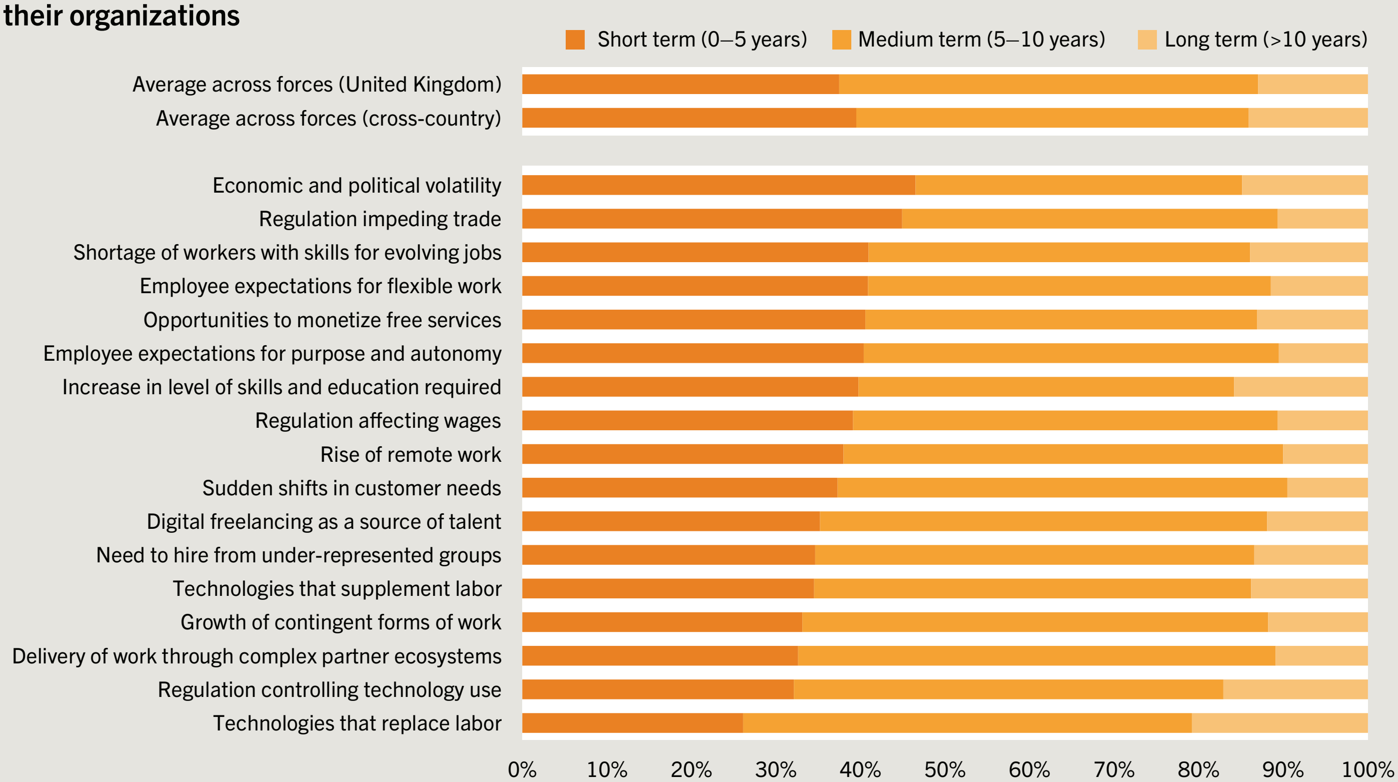


Business leaders' expectations of when the forces they deemed significant would impact their organizations



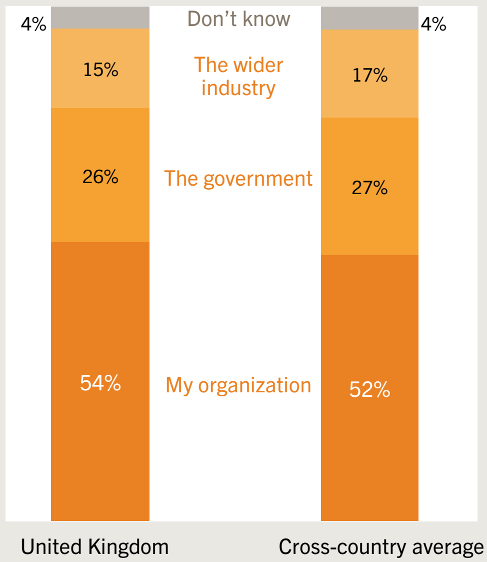
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance.

Business leaders' expectations of when in the future the forces they deemed significant would impact their organizations



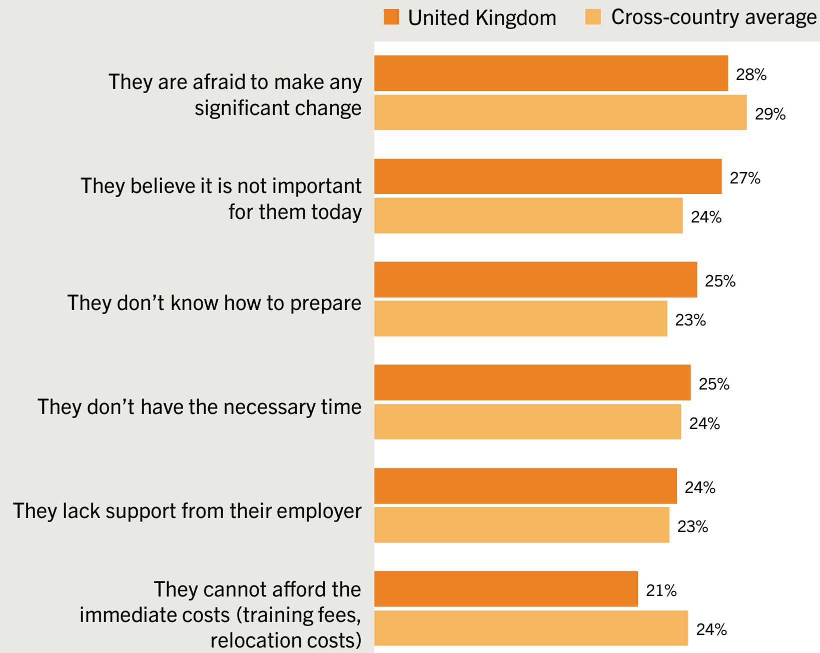
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Business leaders' views on who is responsible for developing the solutions needed

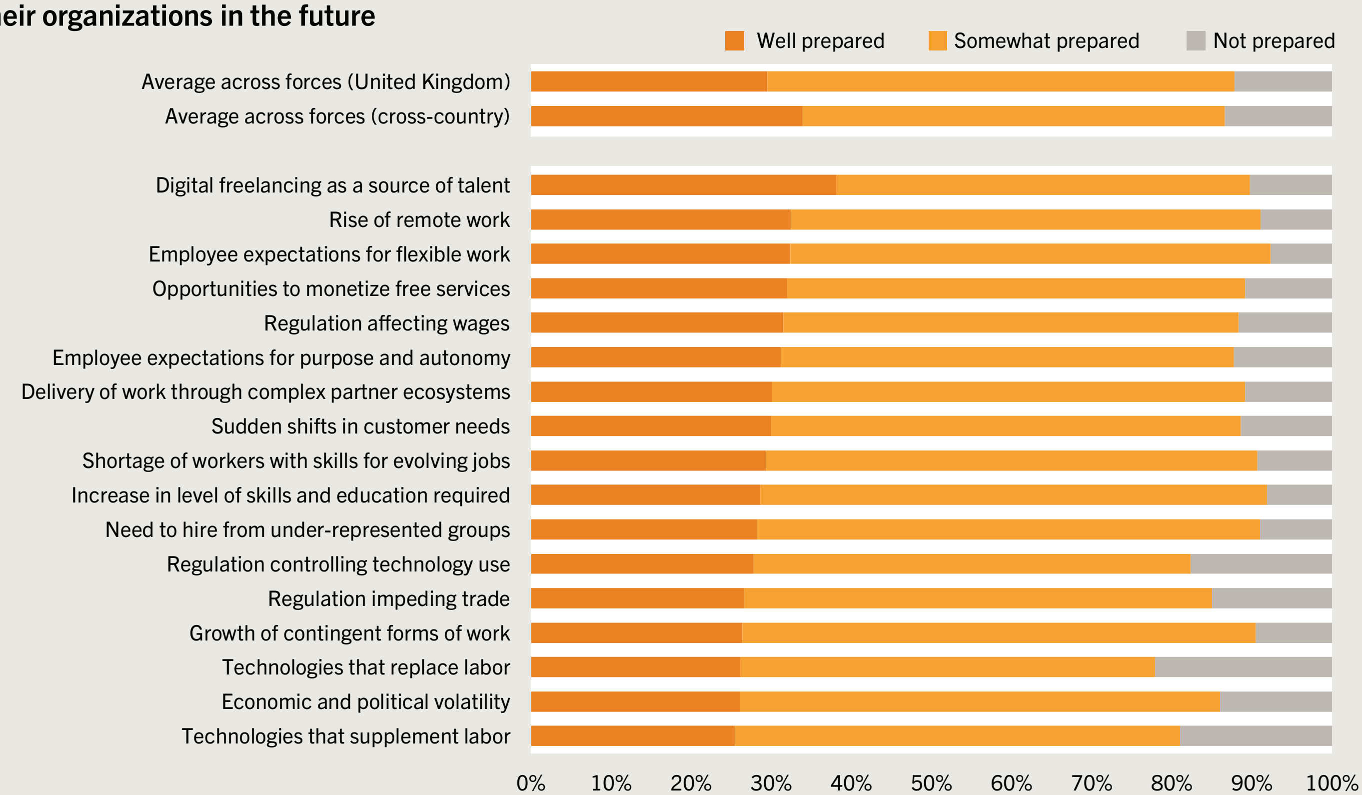


Note: Respondents were asked to rank a group as first by level of responsibility.

Business leaders' views on what prevents employees from preparing



Business leaders' perceptions of their organizations' preparedness for forces that will impact their organizations in the future



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

Workers in the US were the most likely to hold themselves, rather than companies or government, responsible for preparing. They were among the most likely to view cost as a barrier to preparing.

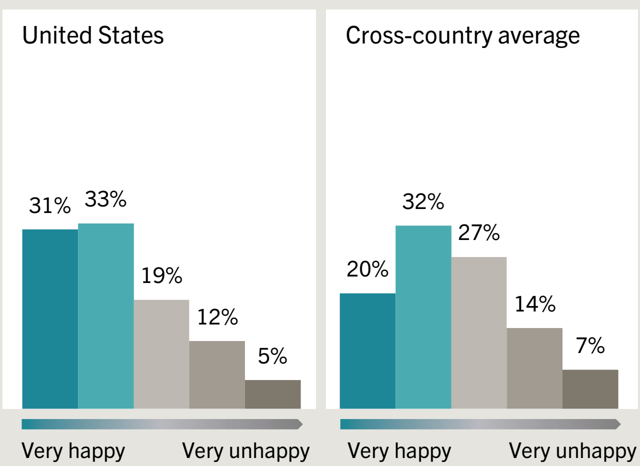
Business leaders in the US were more likely to believe they were well prepared for the future compared with leaders in other advanced countries.

US workers were more likely to be satisfied with their current work situations and how they evolved over the previous five years. They were least likely to expect higher formal education requirements to have a positive impact on their future, after Japanese workers.

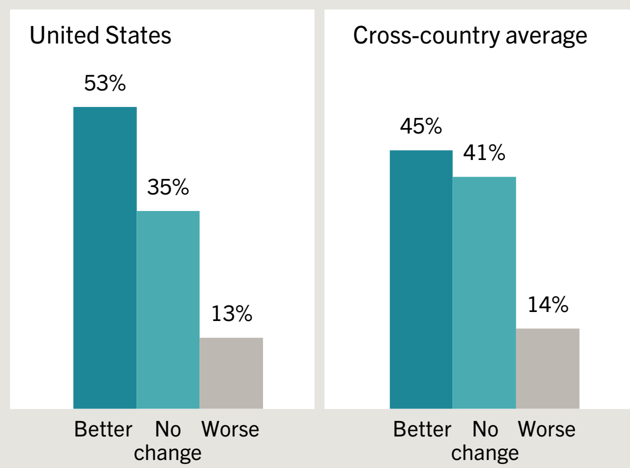
Workers were more positive about digital freelancing, barriers to trade, shifting customer needs, and more jobs moving into the country than their peers in advanced countries. They joined Swedish workers as among the most concerned with offshoring.

WORKERS

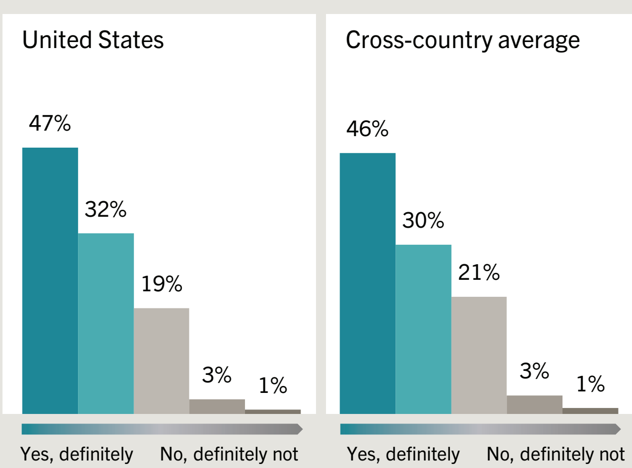
Happiness with current employment situation



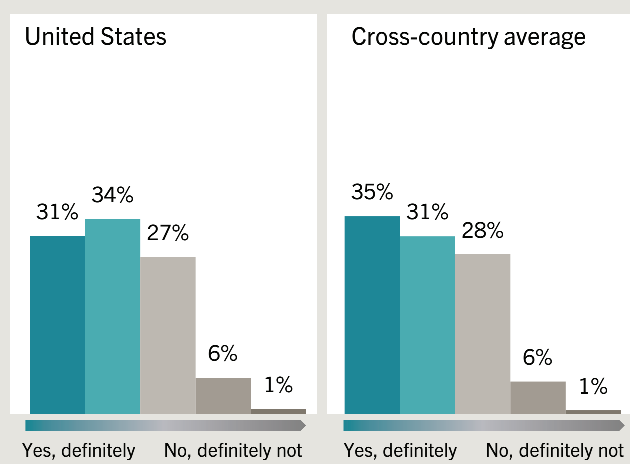
Employment situation over the previous five years



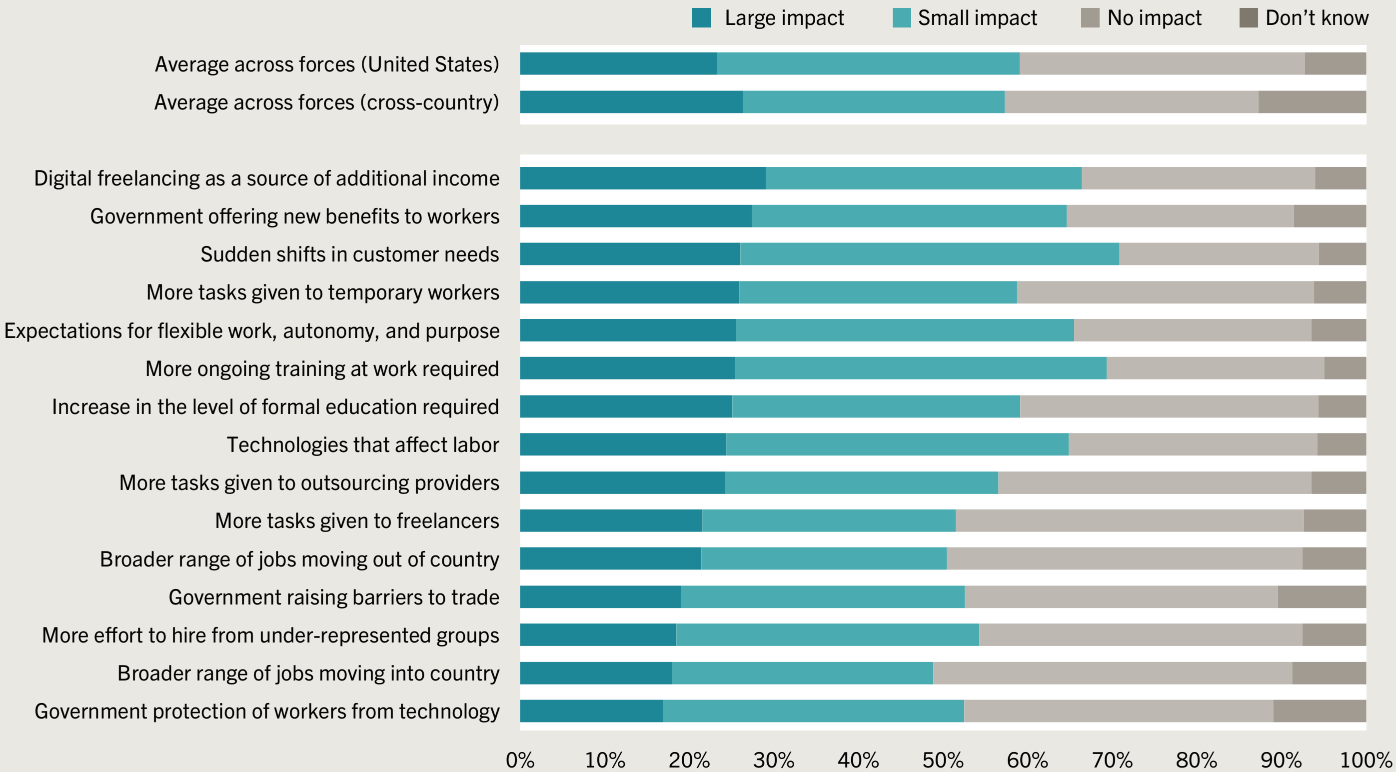
Workers' perceptions of necessity to prepare for the future



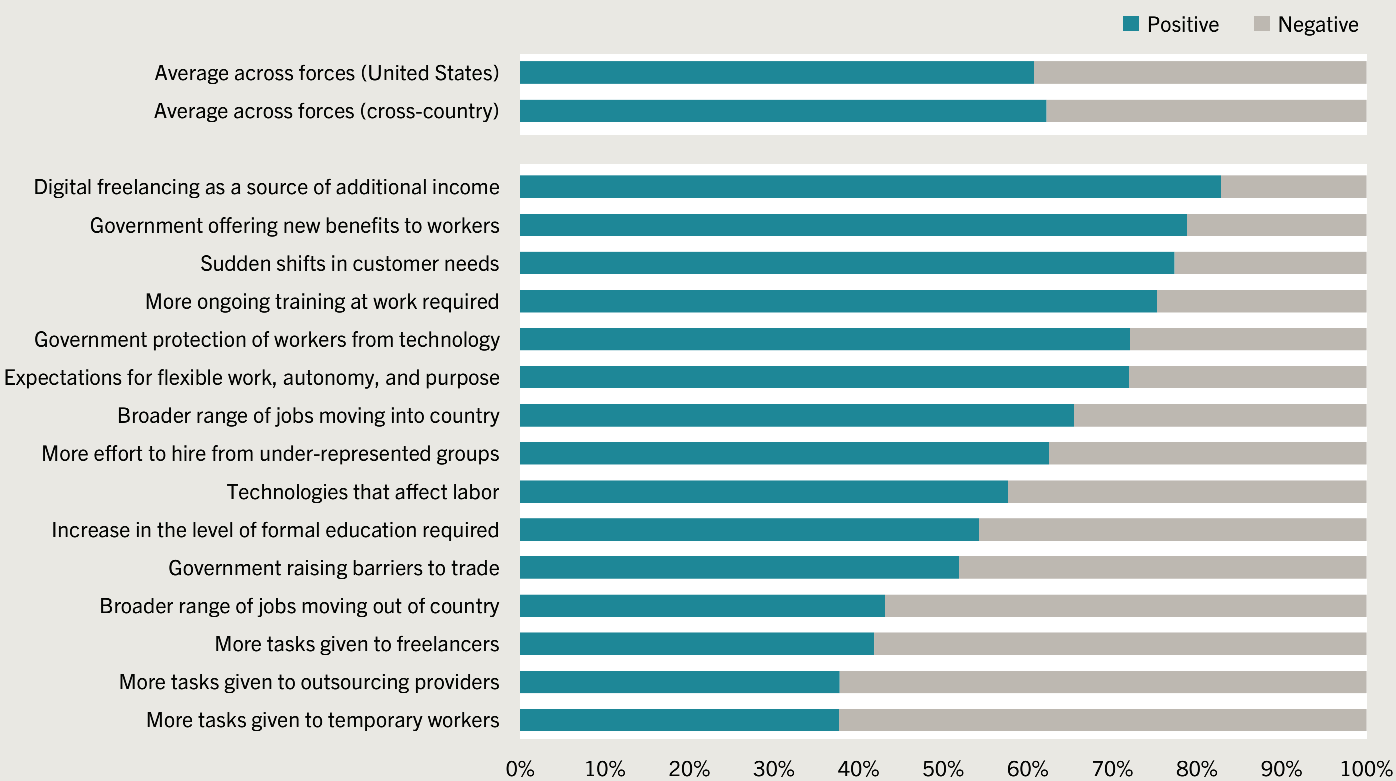
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

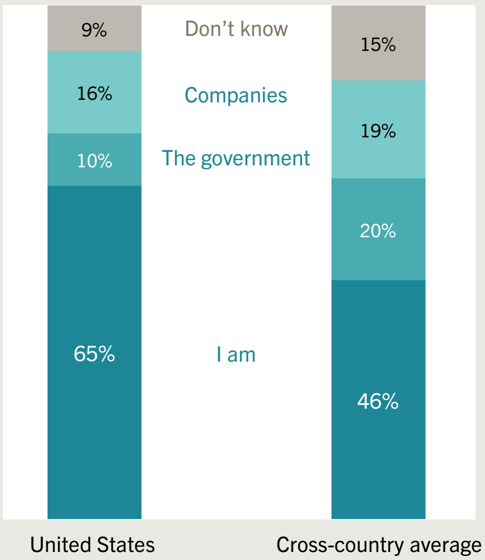


Workers' expectations of the nature of impact each force will have on their future



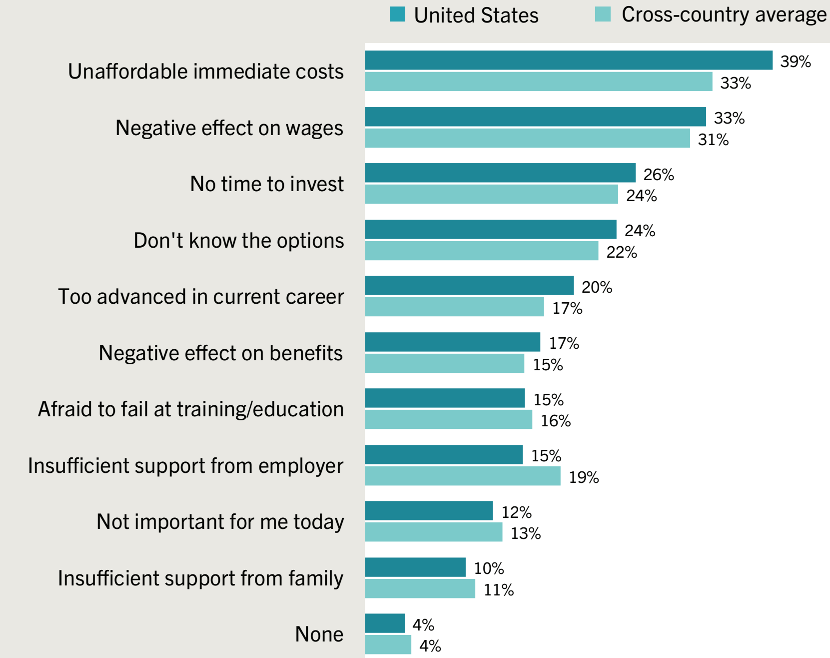
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

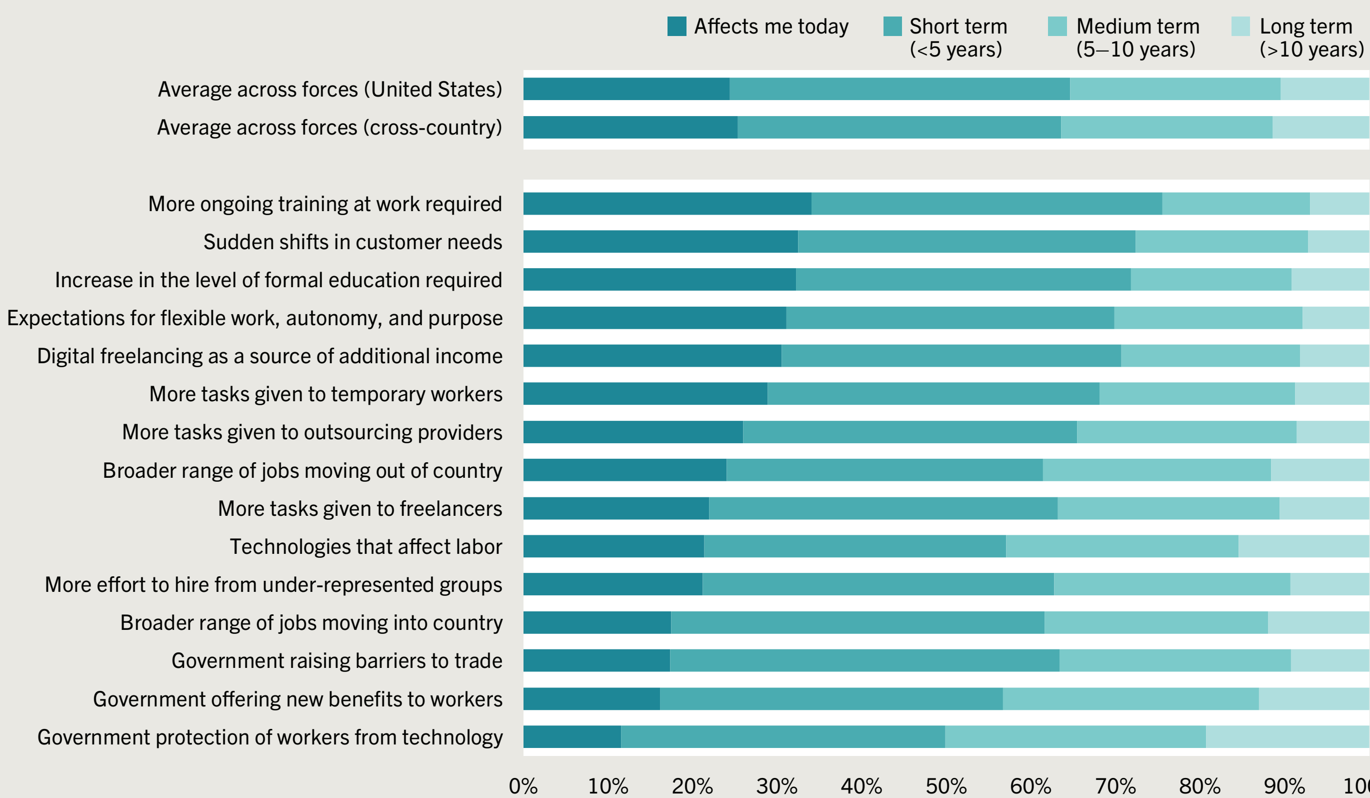


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



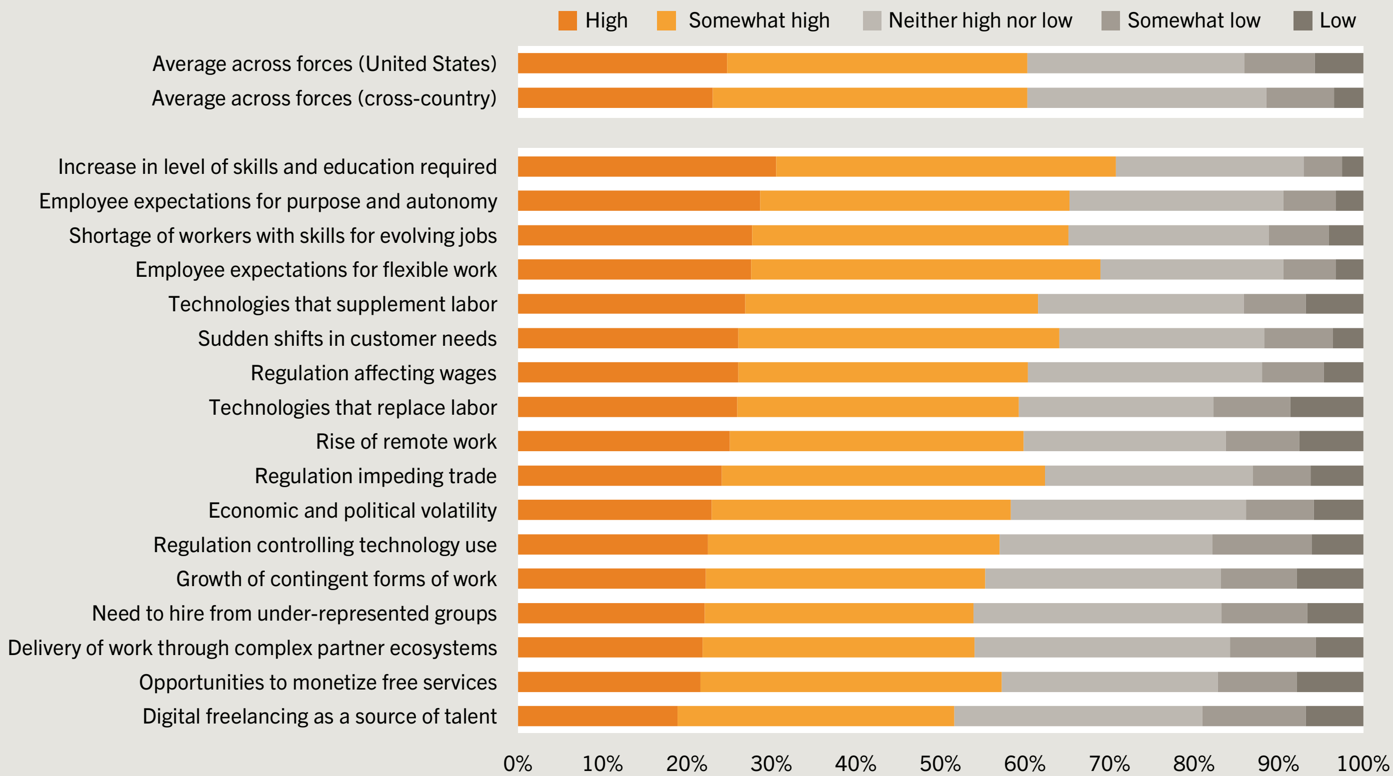
Workers' expectations of when the forces they deemed impactful would affect them



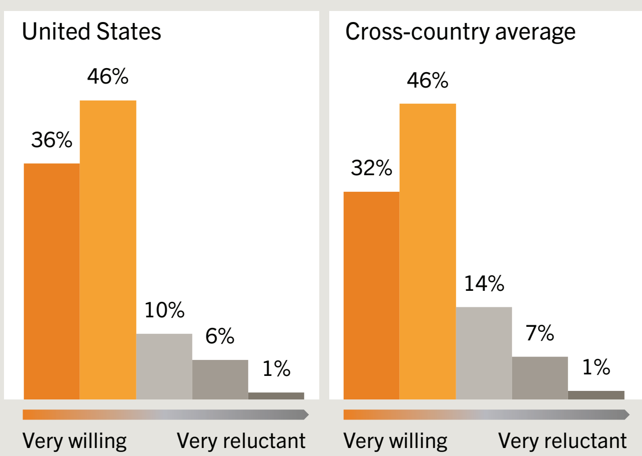
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

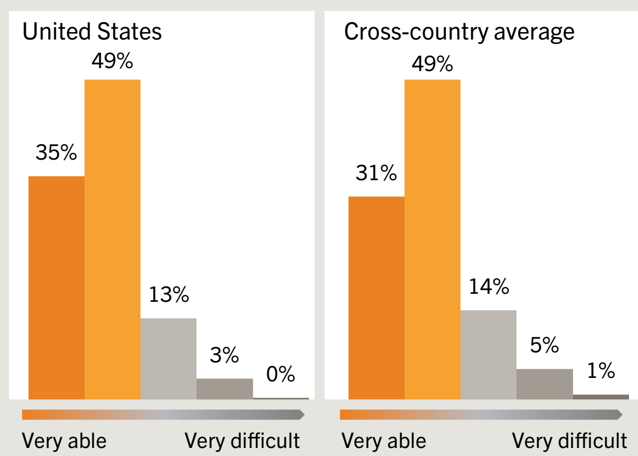
Business leaders' expectations of the level of significance of each force



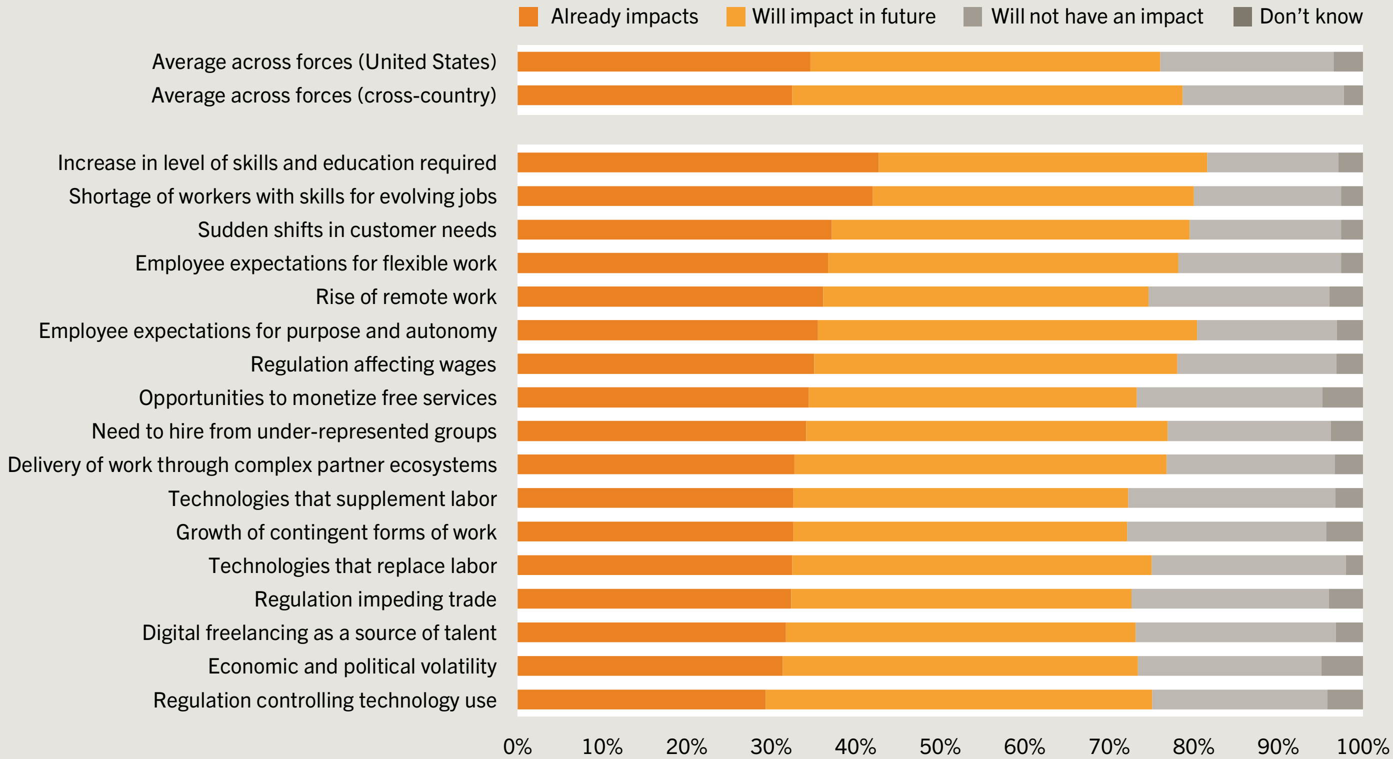
Business leaders' perceptions about workers' willingness to prepare



Business leaders' perceptions about workers' ability to prepare

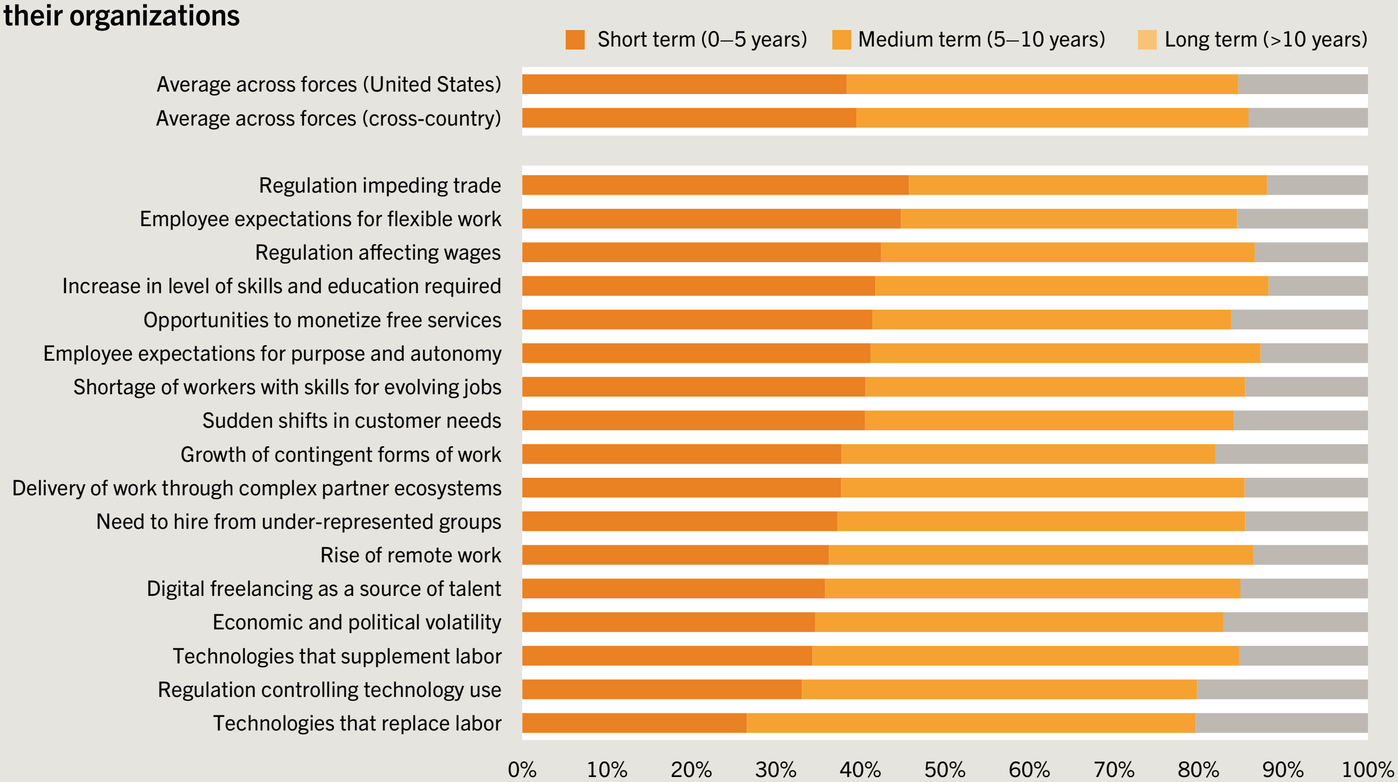


Business leaders' expectations of when the forces they deemed significant would impact their organizations



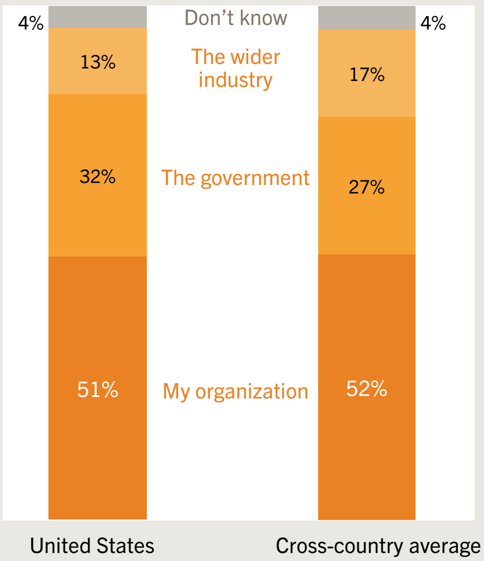
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance.

Business leaders' expectations of when in the future the forces they deemed significant would impact their organizations



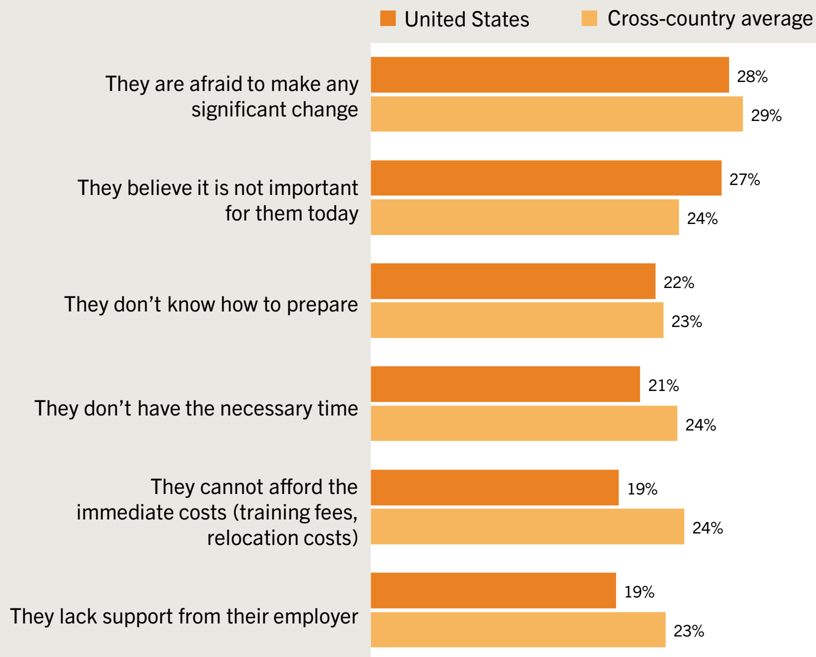
Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

Business leaders' views on who is responsible for developing the solutions needed

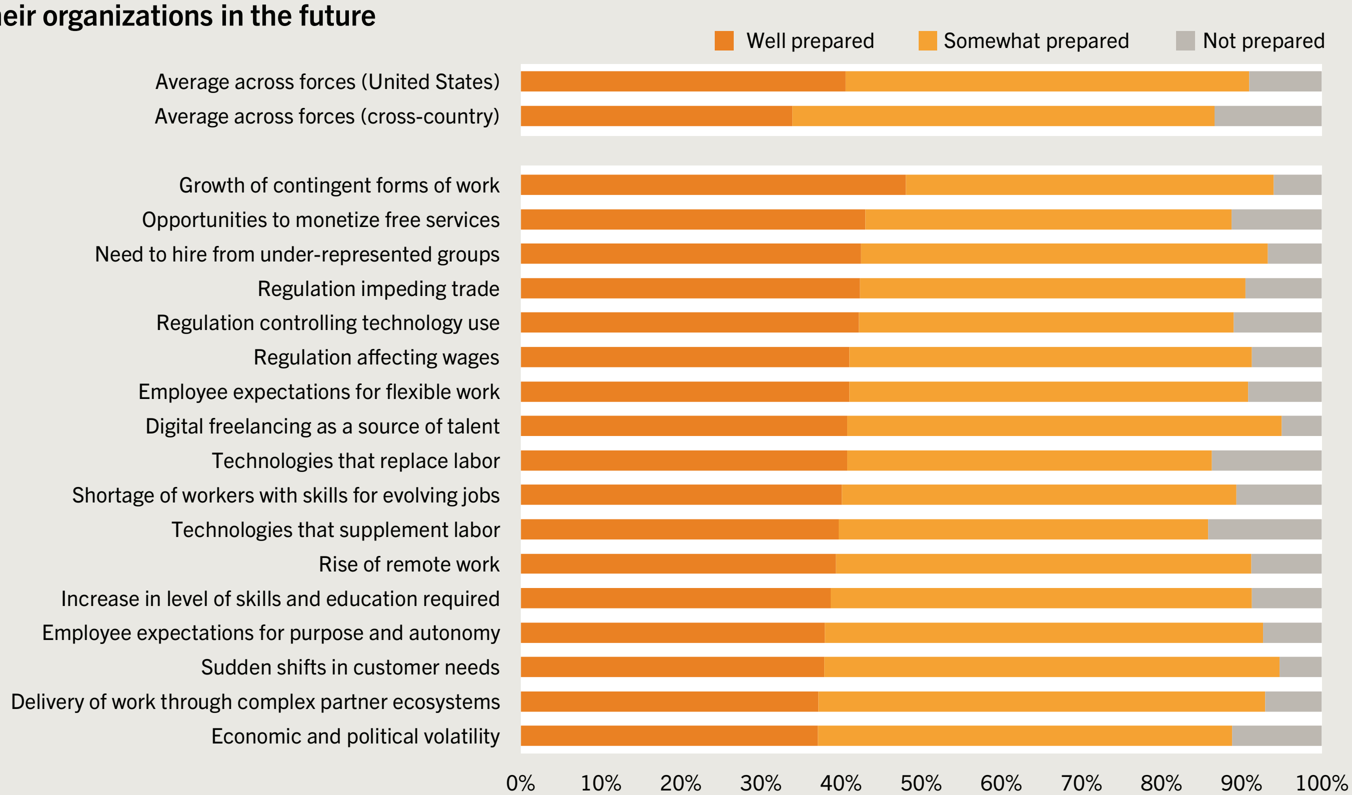


Note: Respondents were asked to rank a group as first by level of responsibility.

Business leaders' views on what prevents employees from preparing



Business leaders' perceptions of their organizations' preparedness for forces that will impact their organizations in the future



Note: This question was shown to respondents who indicated a force was of "high" or "somewhat high" significance and selected "This force will impact my organization in the future."

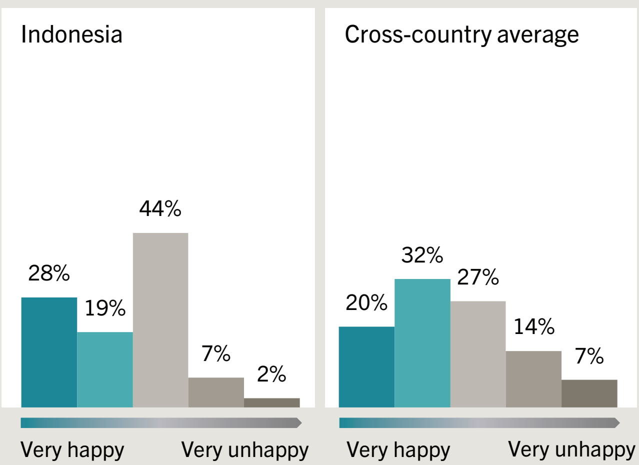
Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Business Leaders Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

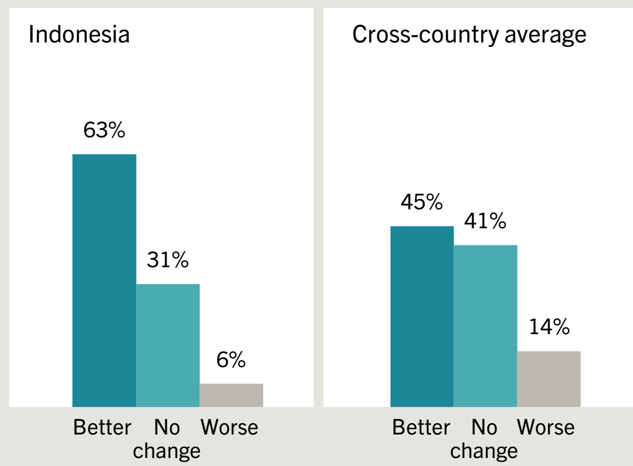
- Indonesian workers were most happy, second to those in India, with how their employment situation developed over the previous five years, though fewer than half reported they were happy with their current situation.
- Compared with all other countries, more workers in Indonesia said they needed to and were able to prepare for the future. They were also least likely to hold their companies responsible for preparing them.
- Workers generally expected greater impact from the 15 forces shaping the future and were more optimistic about the results. They were also more likely to report already experiencing the impacts than expecting them in the future.
- Workers in Indonesia were more likely to report not knowing their options for preparing and to count among the obstacles a lack of support from their employer or family.

WORKERS

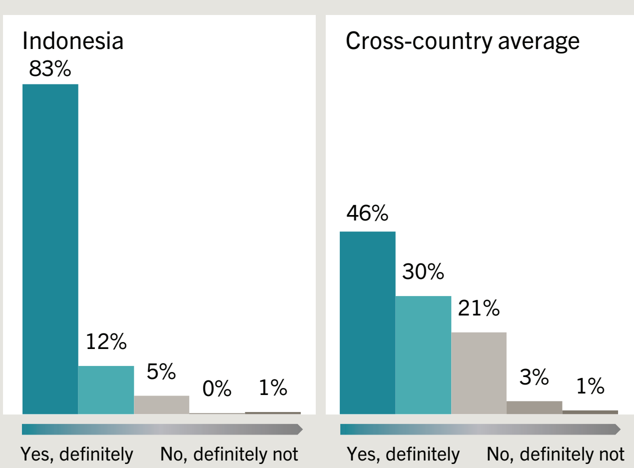
Happiness with current employment situation



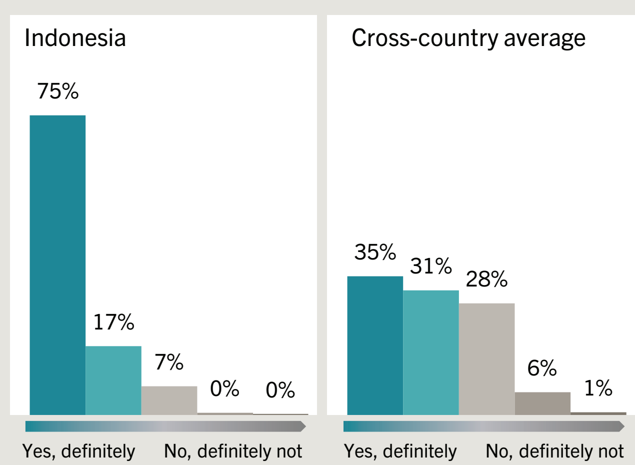
Employment situation over the previous five years



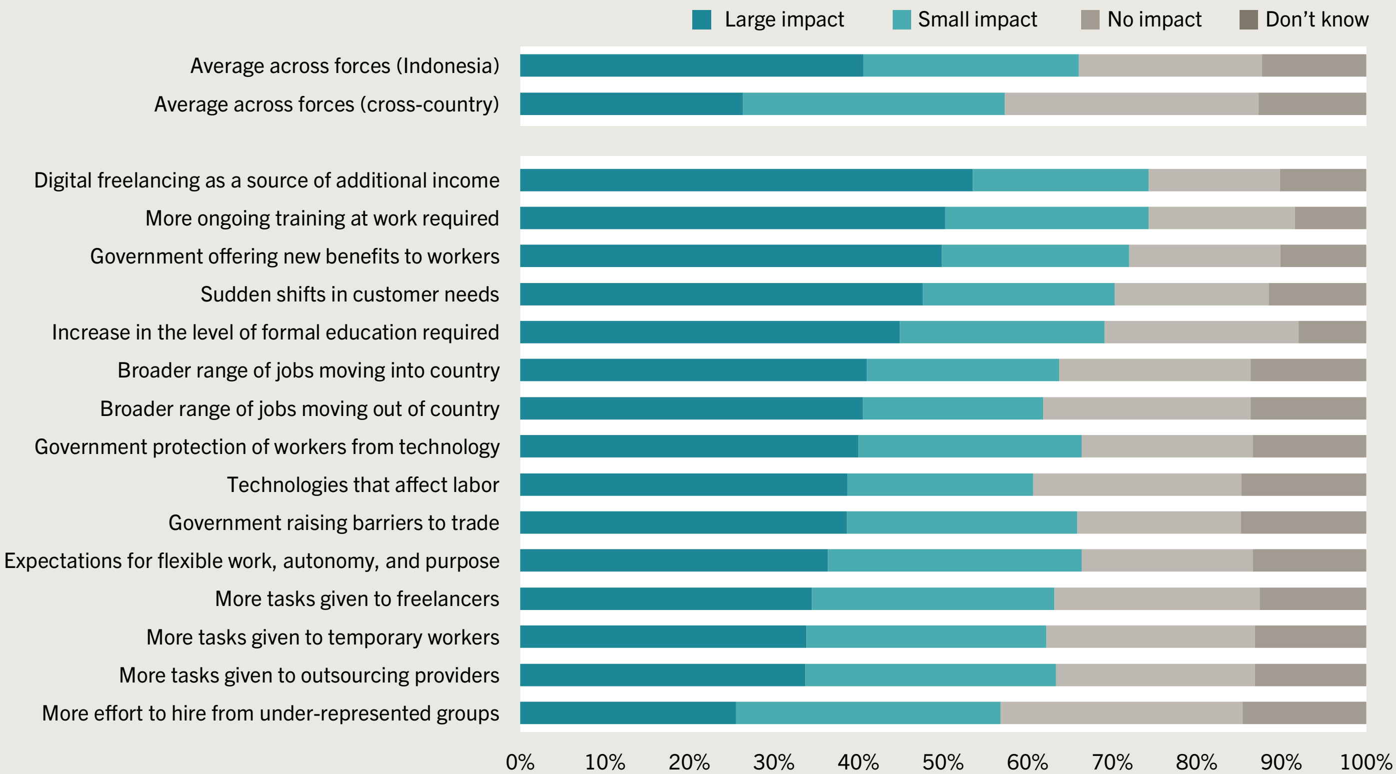
Workers' perceptions of necessity to prepare for the future



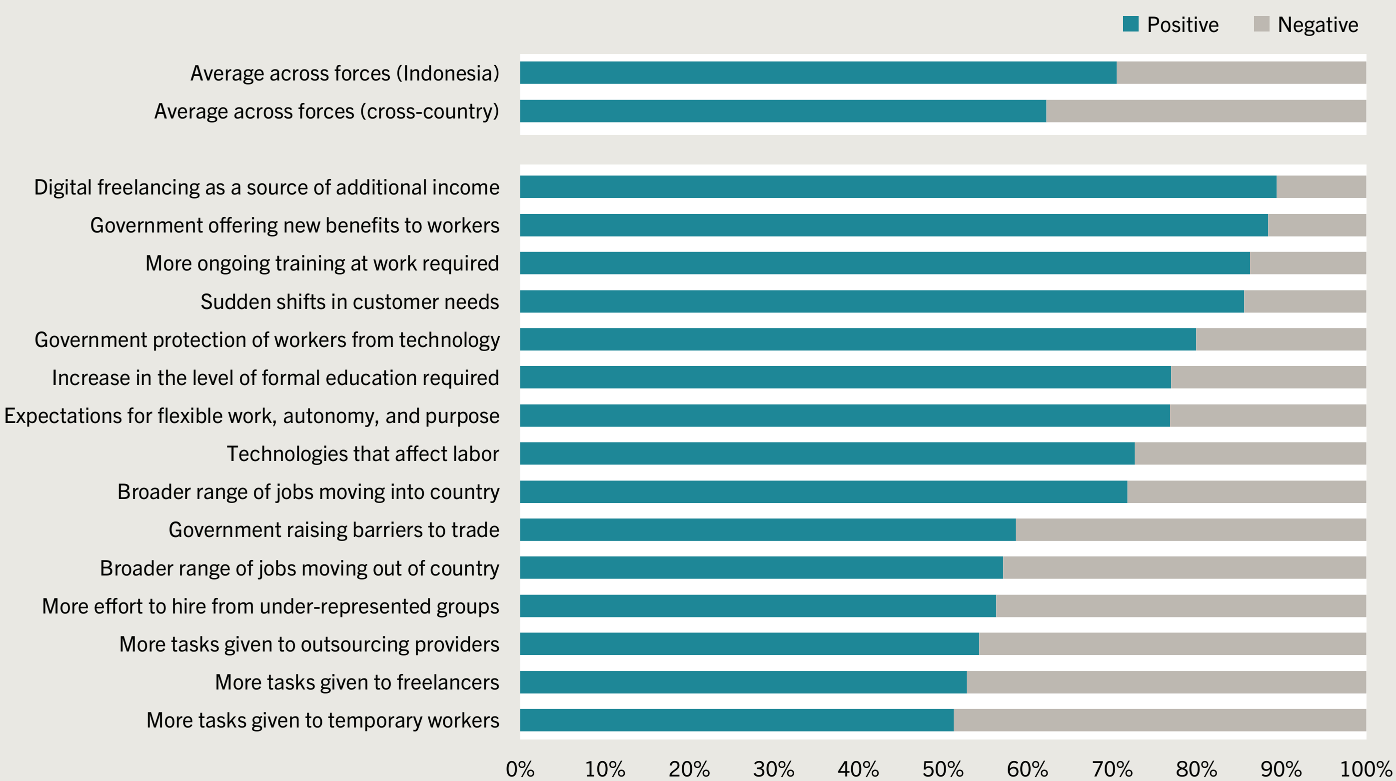
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

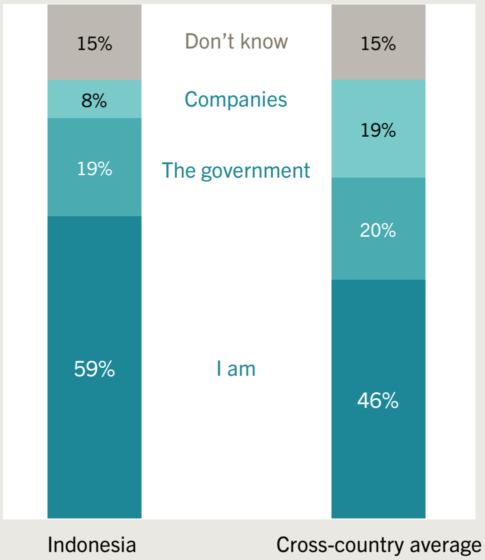


Workers' expectations of the nature of impact each force will have on their future



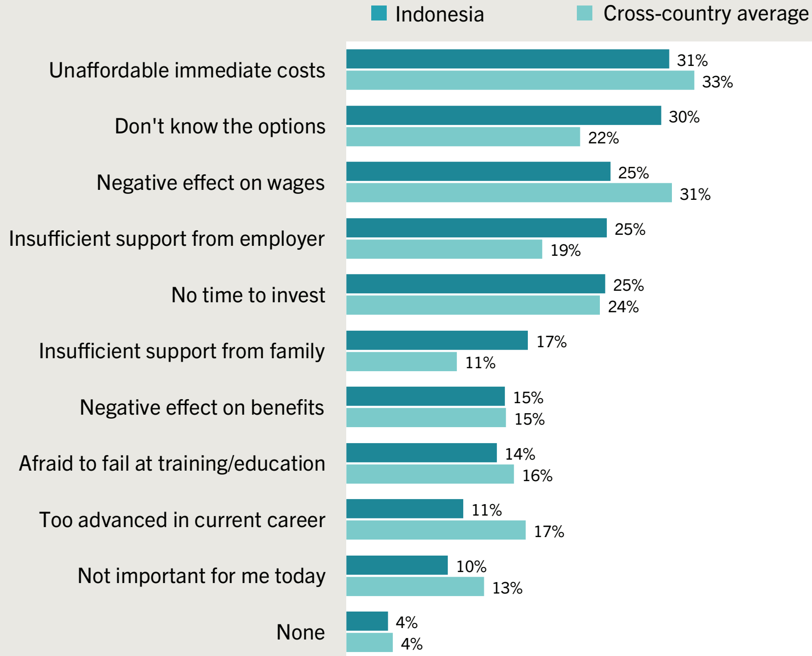
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

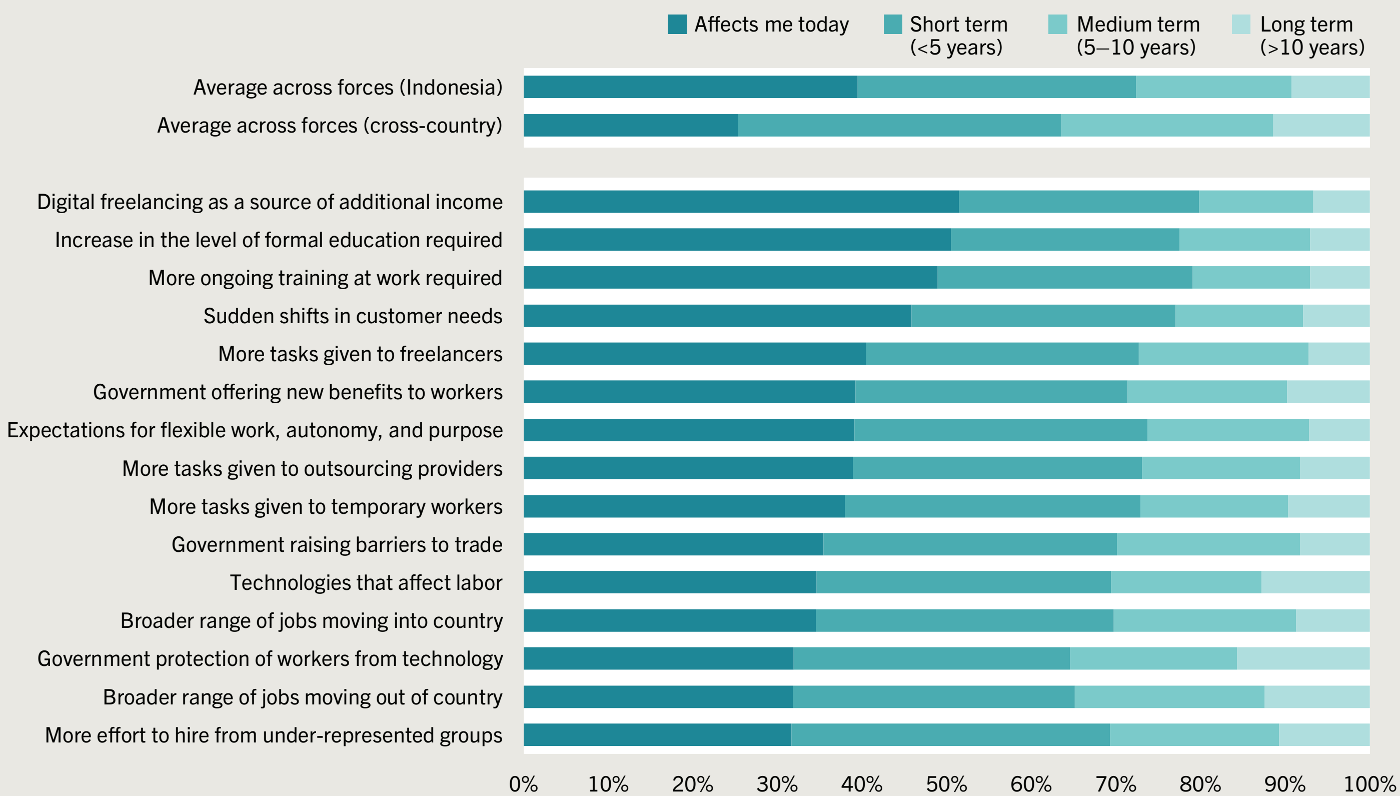


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



Workers' expectations of when the forces they deemed impactful would affect them



Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

Workers in Spain were less likely to perceive a need to prepare for future workplace demands, but were more likely to state that they definitely or probably could prepare for the future.

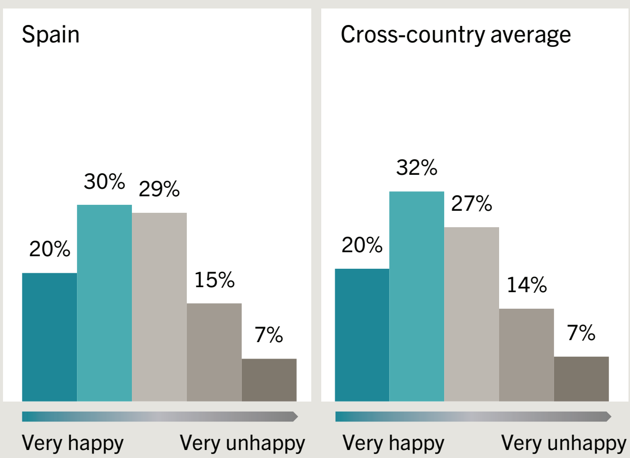
Workers were most positive regarding the prospect of new government-mandated benefits, digital freelance opportunities, requirements for more ongoing training at work, and government protection from the influence of technology.

Spanish workers trailed only French workers in assigning significant responsibility to government for preparing them, but placed primary responsibility with themselves. They cited cost, negative impact on wages, and lack of time, as barriers.

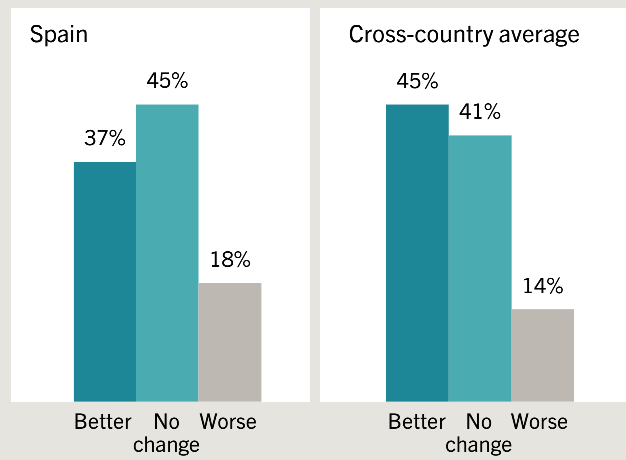
Workers in Spain tied those in Japan as least likely in the 11 countries to expect flexible work, autonomy, and purpose to have a positive impact on their future.

WORKERS

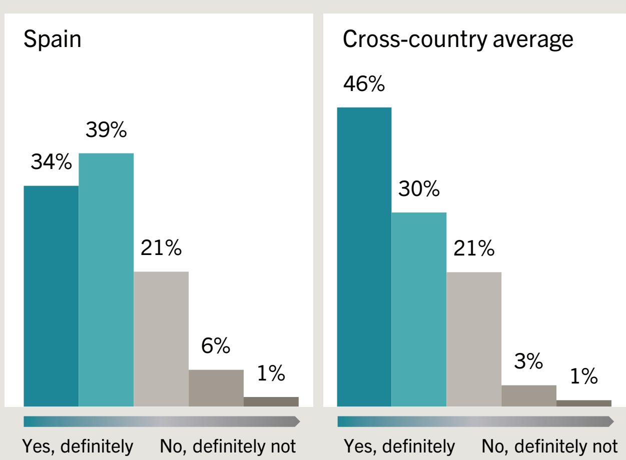
Happiness with current employment situation



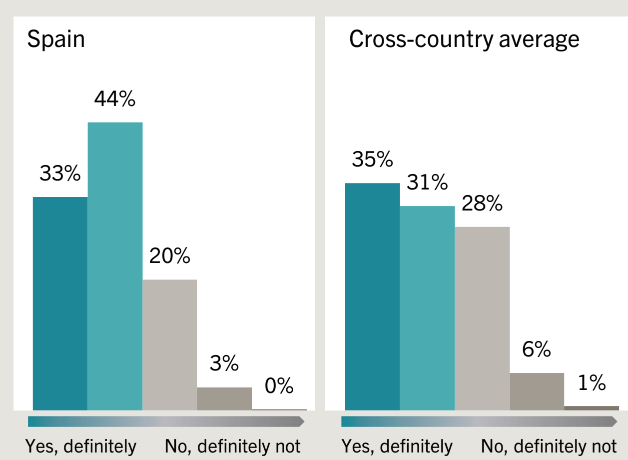
Employment situation over the previous five years



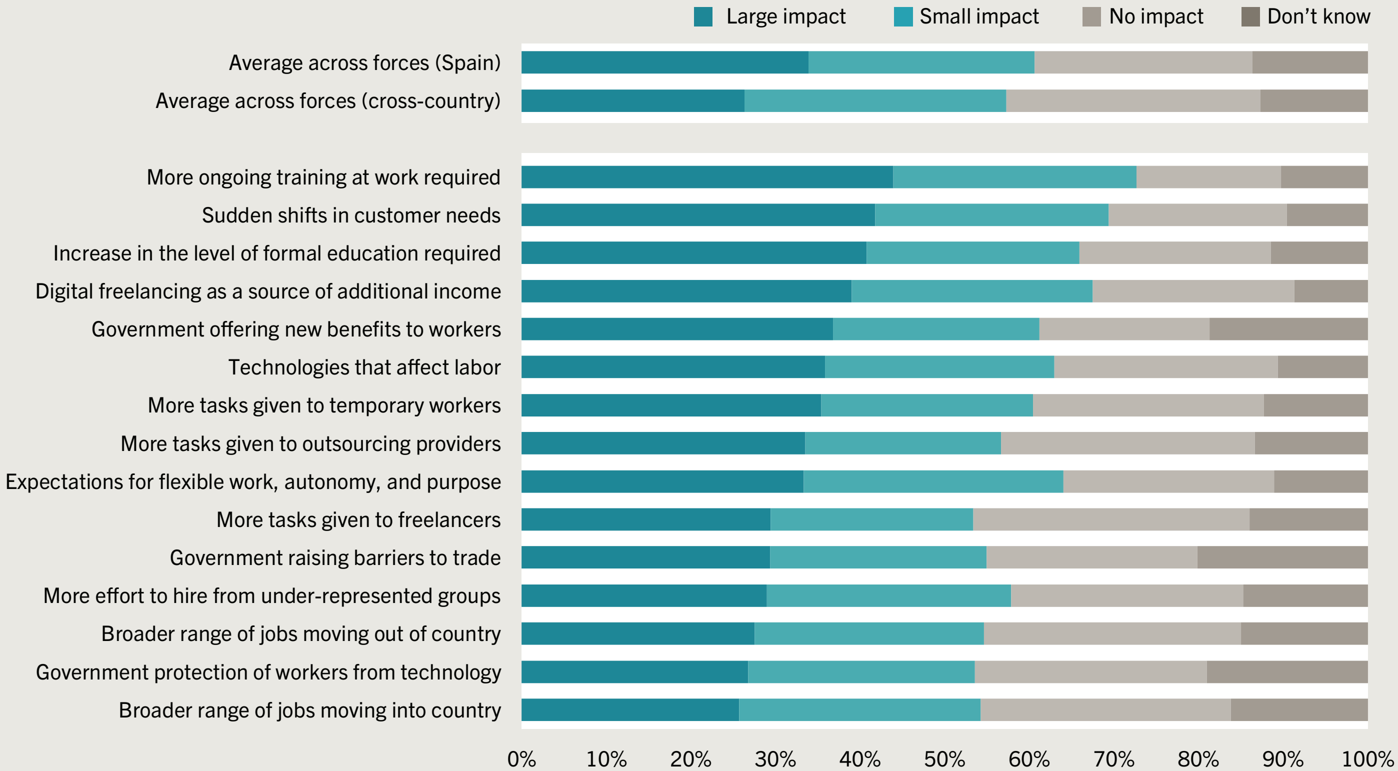
Workers' perceptions of necessity to prepare for the future



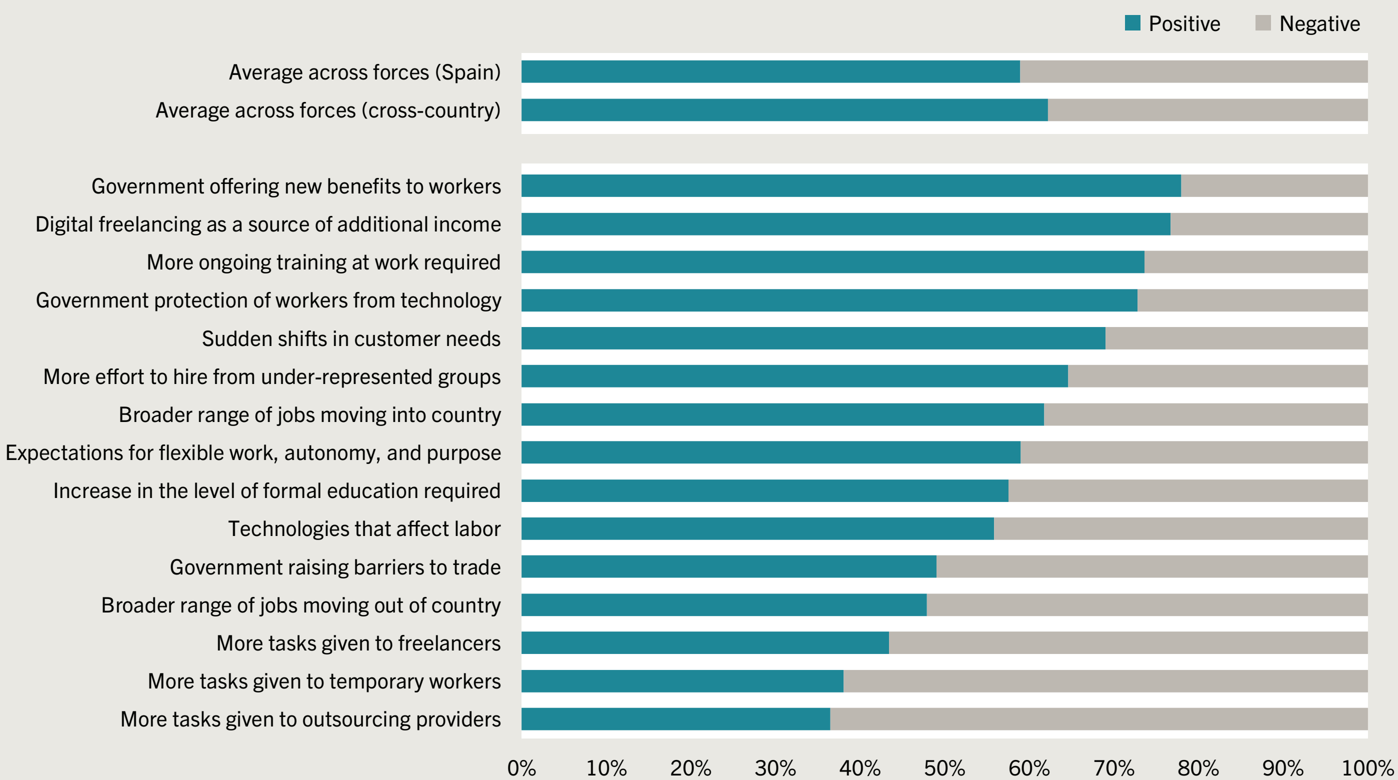
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

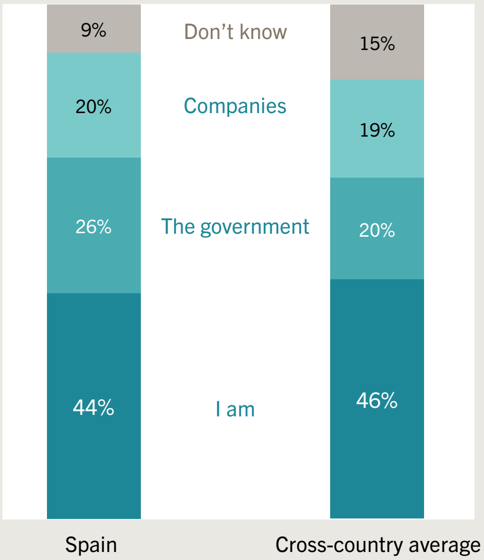


Workers' expectations of the nature of impact each force will have on their future



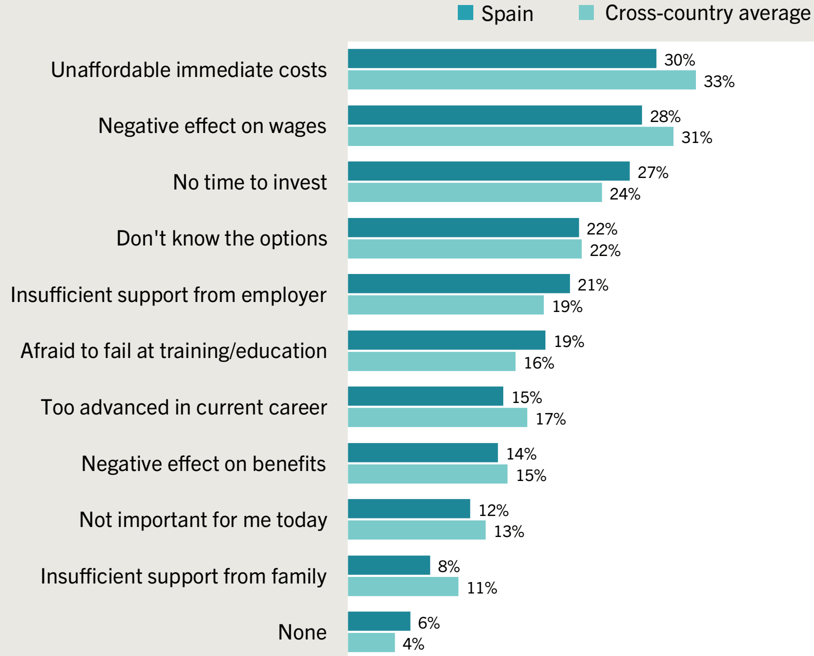
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers' perceptions on who is responsible for preparing them for the future

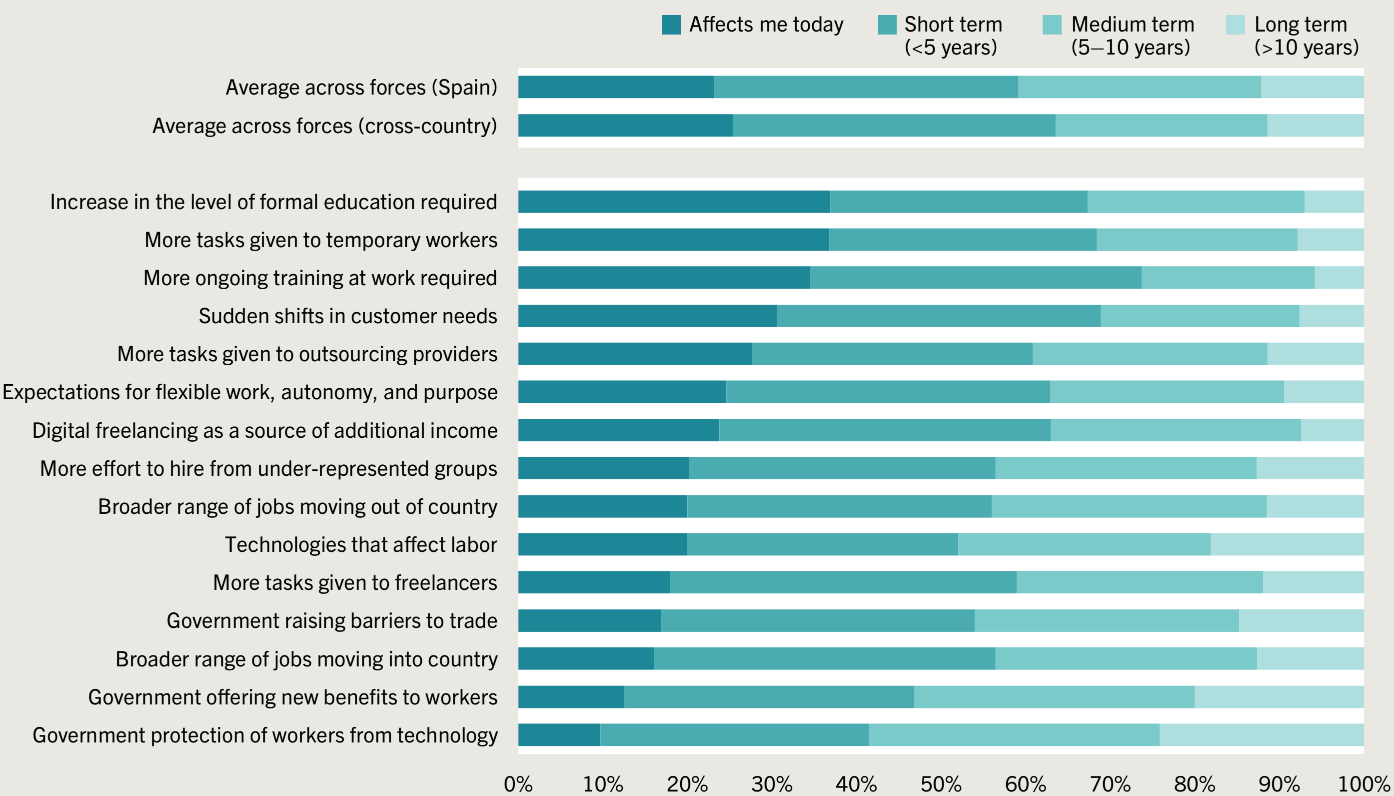


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



Workers' expectations of when the forces they deemed impactful would affect them



Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

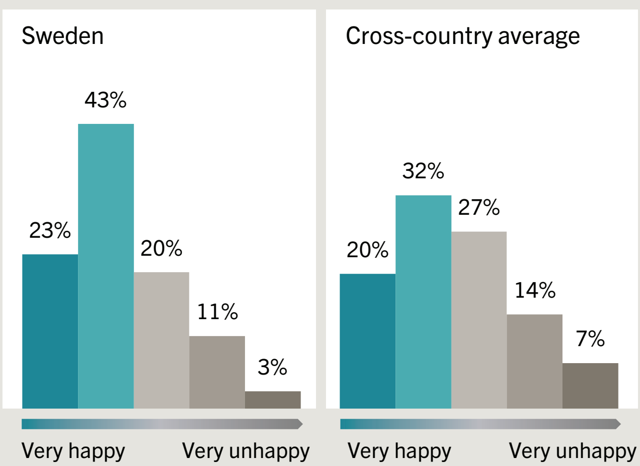
Note: Percentages may not add to 100% due to rounding.
Source: "The Future of Human Work Workers Survey." Harvard Business School's Project on Managing the Future of Work and BCG's Henderson Institute, 2018.

Key points:

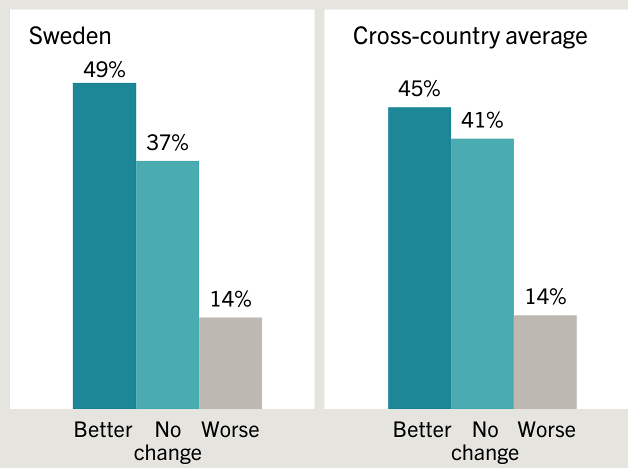
- Swedish workers were less likely than all but Japanese workers to say that they must or can prepare for the future. They were also more likely than workers in other countries to list concern for their wages as a reason for not preparing.
- Workers in Sweden were more likely than those in other advanced countries to assign responsibility for preparing them to the government.
- Swedish workers took the most negative view of the exodus of jobs relative to workers in other countries. They were least likely to anticipate that technologies affecting labor would have a large impact on them.
- Workers in Sweden were more likely to say that preparing for the future was not important for them today, second only to those in India.

WORKERS

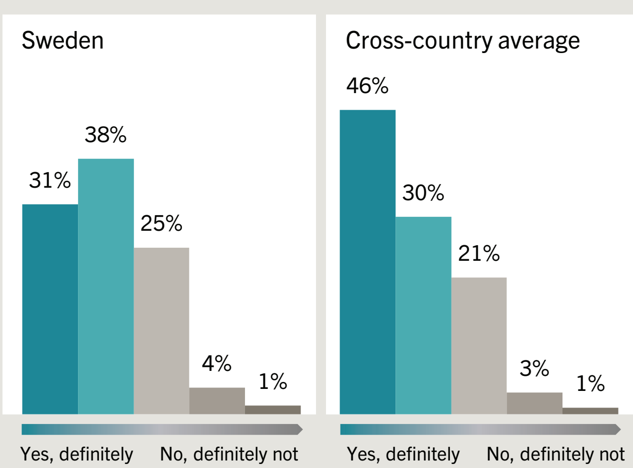
Happiness with current employment situation



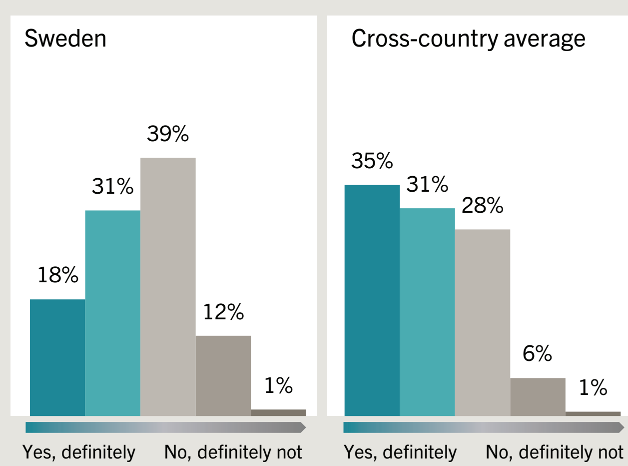
Employment situation over the previous five years



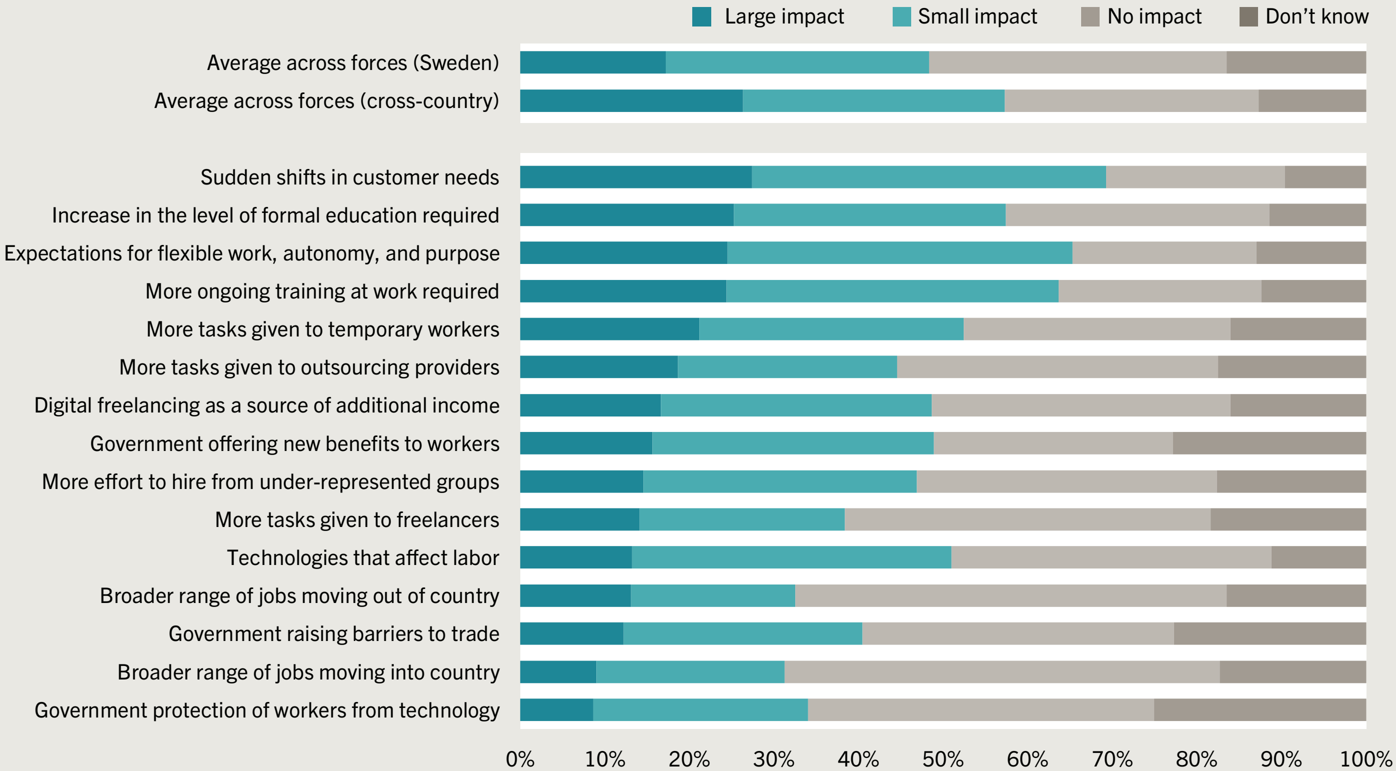
Workers' perceptions of necessity to prepare for the future



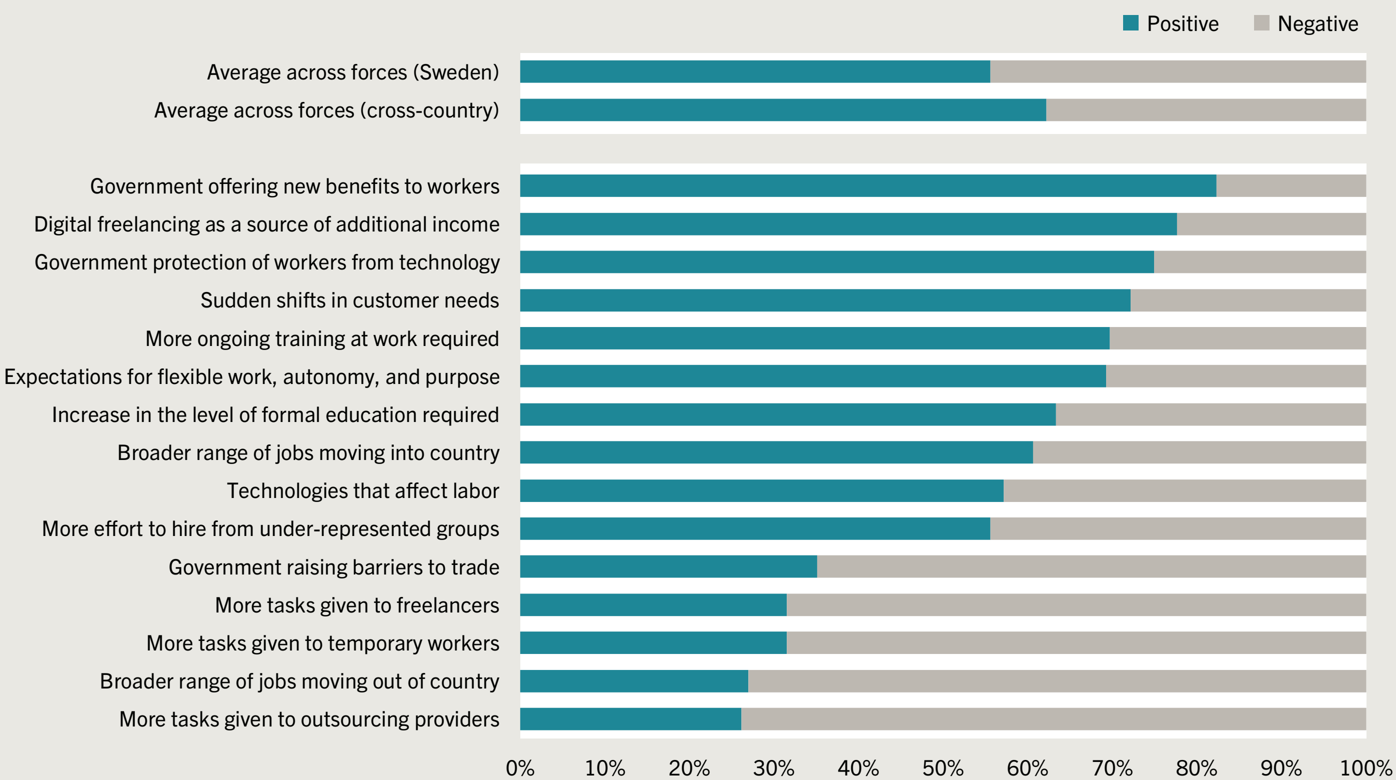
Workers' perceptions of ability to prepare for the future



Workers' expectations of the impact of forces on them

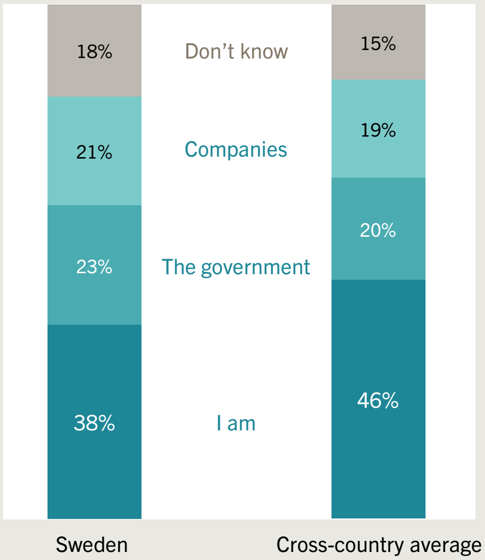


Workers' expectations of the nature of impact each force will have on their future



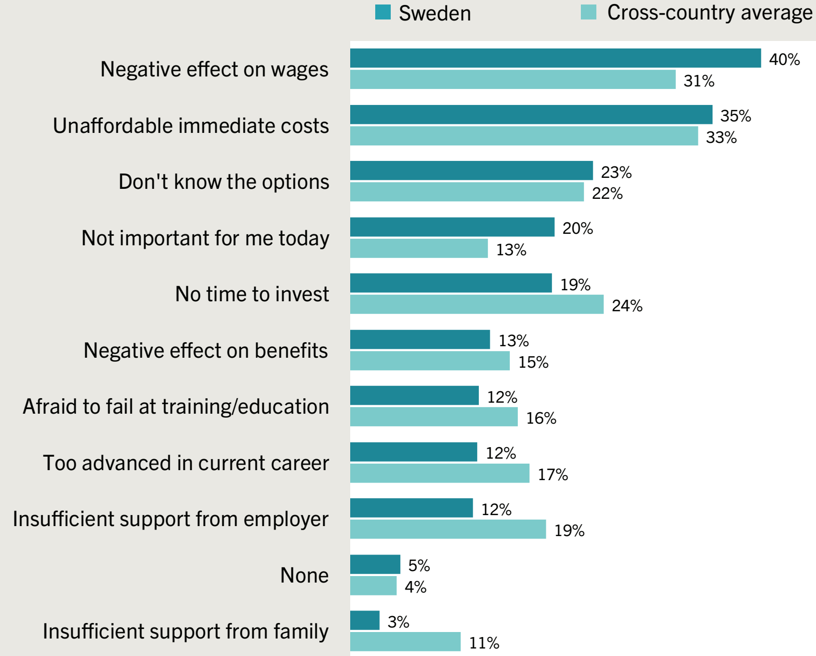
Note: This question was shown to respondents who indicated a force would have any impact, "small" or "large," on them.

Workers’ perceptions on who is responsible for preparing them for the future

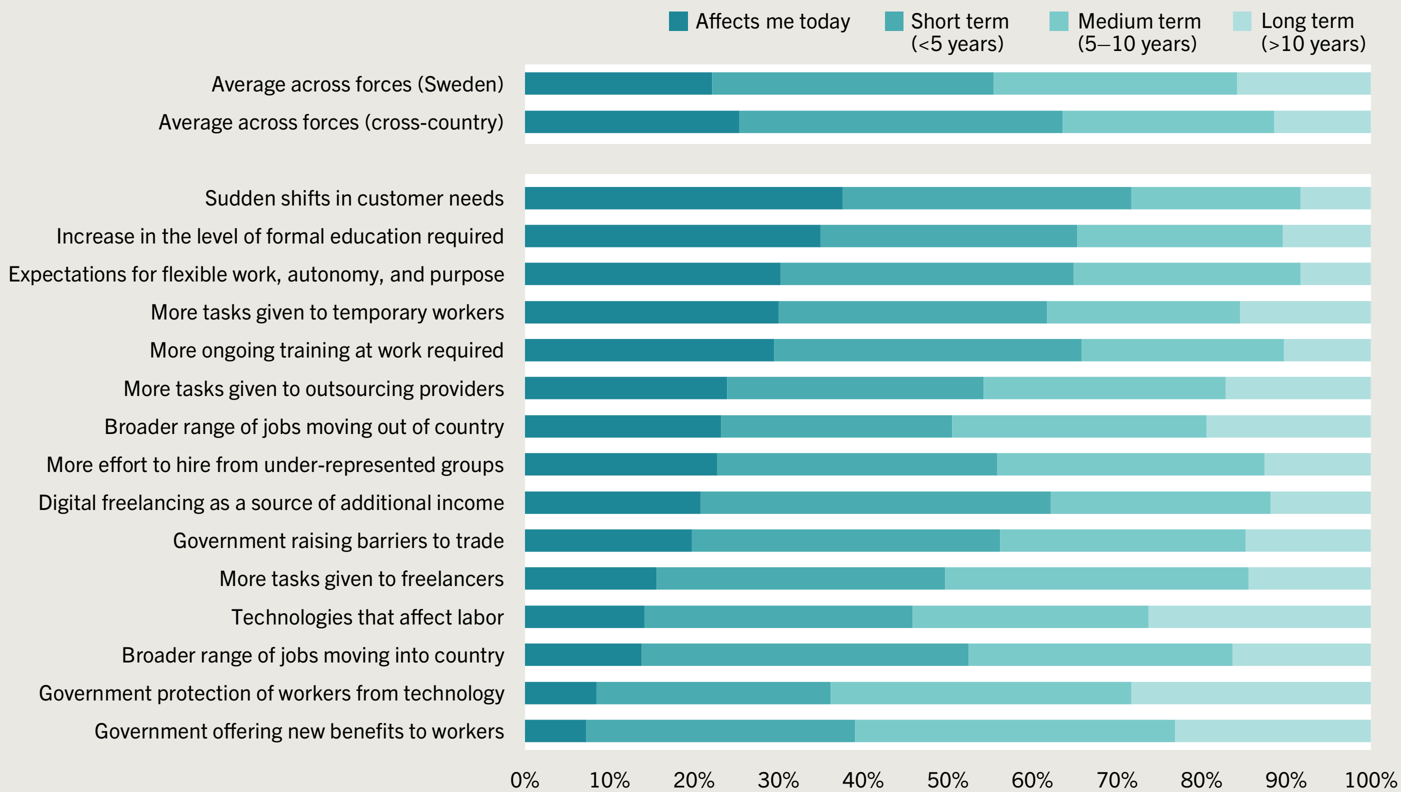


Note: Respondents were asked to rank a group as first by level of responsibility.

Obstacles workers perceive are preventing them from taking action today



Workers’ expectations of when the forces they deemed impactful would affect them



Note: This question was shown to respondents who indicated a force would have any impact, “small” or “large,” on them.

Note: Percentages may not add to 100% due to rounding.
Source: “The Future of Human Work Workers Survey.” Harvard Business School’s Project on Managing the Future of Work and BCG’s Henderson Institute, 2018.

Appendix II: Workers survey methodology

In May 2018, the BCG Henderson Institute surveyed 11,000 workers in 11 countries: Brazil, China, France, Germany, India, Indonesia, Japan, Spain, Sweden, the United Kingdom, and the United States.

The survey was conducted by the research firm ResearchNow SSI, using an online panel.

The sample of approximately 1,000 per country was designed to exclude highly educated workers—those with four-year college degrees and above. It focused specifically on middle-skills workers, those with less education than a four-year baccalaureate degree. It thus included a large share of people with lower incomes. Among respondents, 60% to 85% had household incomes below national averages, and just 29% had two to three years of college. The sample represented a full range of age groups and work status, including salaried employees as well as part-time, temporary, and short-term unemployed workers. Workers who had been unemployed for more than one year were excluded from the sample.

As a convention, when comparing data between business leaders and workers, we used the same set of eight countries. When showcasing only data from the survey of workers, we used the full set of 11 countries.

In the survey design, there was no effort at organization-level commonality in terms of companies represented in the workers survey and the business leaders survey.

Main characteristics of workers

	Brazil	China	France	Germany	India	Indonesia	Japan	Spain	Sweden	UK	US	Total %	Total #
Workers	1,010	1,000	1,033	1,016	1,011	1,067	1,000	1,036	902	1,006	1,008	100%	11,089
Education level	Brazil	China	France	Germany	India	Indonesia	Japan	Spain	Sweden	UK	US	Total %	Total #
Middle school or less	4.2%	13.7%	13.1%	15.7%	0.6%	9.5%	5.6%	34.7%	6.5%	10.3%	0.4%	10.5%	1,163
Trade school or vocational training	0.4%	24.1%	40.9%	52.4%	1.5%	0.6%	1.7%	19.1%	12.0%	10.6%	5.9%	15.4%	1,710
High school graduate	74.0%	49.1%	33.4%	23.4%	11.2%	54.5%	90.2%	24.5%	56.5%	49.3%	36.5%	45.5%	5,046
Two- to three-year college education	21.5%	13.1%	12.6%	8.5%	86.7%	35.4%	2.5%	21.7%	24.9%	29.7%	57.2%	28.6%	3,170
Gender	Brazil	China	France	Germany	India	Indonesia	Japan	Spain	Sweden	UK	US	Total %	Total #
Male	51.2%	49.7%	47.5%	48.1%	52.1%	51.2%	50.4%	49.9%	41.8%	50.6%	49.9%	49.4%	5,477
Female	48.6%	49.9%	52.4%	51.6%	47.8%	48.5%	49.1%	50.0%	58.0%	49.3%	49.8%	50.4%	5,586
Other	0.2%	0.1%	0.1%	0.1%	0.0%	0.2%	0.2%	0.0%	0.2%	0.0%	0.1%	0.1%	12
Prefer not to say	0.0%	0.3%	0.0%	0.2%	0.1%	0.1%	0.3%	0.1%	0.0%	0.1%	0.2%	0.1%	14
Age	Brazil	China	France	Germany	India	Indonesia	Japan	Spain	Sweden	UK	US	Total %	Total #
18–25	21.4%	23.0%	14.0%	10.6%	23.9%	27.7%	12.2%	11.8%	11.6%	12.6%	15.9%	16.9%	1,873
26–35	26.5%	29.1%	19.2%	17.3%	27.1%	33.4%	19.5%	20.6%	19.7%	19.0%	18.7%	22.8%	2,528
36–45	21.9%	29.5%	23.4%	21.7%	23.0%	28.5%	17.8%	26.2%	22.2%	20.6%	19.3%	23.1%	2,566
46–55	17.5%	17.0%	22.4%	22.6%	17.2%	9.6%	18.0%	23.4%	21.8%	20.2%	21.1%	19.1%	2,119
56–65	11.0%	1.1%	18.9%	19.7%	7.5%	0.7%	19.6%	17.3%	20.8%	17.0%	16.4%	13.5%	1,500
66–75	1.7%	0.3%	2.1%	8.1%	1.2%	0.1%	12.9%	0.9%	3.8%	10.6%	8.6%	4.5%	503

Main characteristics of workers

Position	Brazil	China	France	Germany	India	Indonesia	Japan	Spain	Sweden	UK	US	Total %	Total #
Salaried employee in a large company (50 employees or more)	38.8%	36.6%	52.7%	53.5%	46.3%	28.9%	41.0%	44.9%	64.5%	55.3%	49.2%	46.3%	5,131
Salaried employee in a small company (less than 50 employees)	19.8%	20.6%	27.6%	24.8%	16.9%	24.4%	28.6%	27.2%	20.2%	21.3%	19.1%	22.8%	2,531
Company owner with 5 or more employees	4.6%	3.5%	1.8%	3.7%	4.9%	2.3%	2.5%	3.2%	1.8%	2.7%	6.7%	3.4%	382
Self-employed (e.g., a tradesperson, independent professional, freelancer) with fewer than 5 employees	32.6%	33.5%	15.5%	15.6%	29.3%	41.4%	17.8%	19.3%	9.5%	17.7%	20.9%	23.2%	2,573
Temporary worker employed by staffing agency (e.g,. Randstad, Adecco) or similar companies	2.8%	4.3%	1.7%	2.0%	2.3%	2.2%	8.6%	4.2%	2.4%	2.5%	2.5%	3.2%	356
Unemployed	1.5%	1.5%	0.7%	0.4%	0.3%	0.8%	1.5%	1.3%	1.6%	0.6%	1.5%	1.0%	116

Industry	Brazil	China	France	Germany	India	Indonesia	Japan	Spain	Sweden	UK	US	Total %	Total #
Construction and Real Estate	4.3%	5.5%	3.3%	5.4%	4.0%	3.4%	9.0%	6.1%	5.1%	5.6%	6.3%	5.2%	582
Education and Public Administration	9.1%	4.9%	13.2%	9.3%	13.6%	8.4%	3.2%	8.2%	13.2%	12.5%	8.4%	9.4%	1,046
Finance and Insurance	3.1%	4.4%	3.5%	4.2%	9.5%	5.5%	2.3%	3.0%	2.5%	6.0%	4.9%	4.5%	495
Healthcare and Social Assistance	4.6%	2.7%	9.5%	12.9%	5.1%	3.6%	4.1%	6.8%	16.7%	10.1%	9.8%	7.7%	855
Information	4.0%	3.6%	1.5%	5.0%	11.9%	4.4%	3.8%	3.9%	3.9%	4.3%	3.7%	4.5%	502
Manufacturing	13.5%	34.0%	13.0%	13.2%	14.3%	17.8%	21.8%	12.1%	12.1%	9.0%	9.3%	15.5%	1,716
Primary Sector	2.8%	6.1%	5.7%	0.9%	3.3%	4.5%	1.8%	8.7%	4.8%	1.4%	2.2%	3.8%	425
Services	25.2%	17.3%	19.4%	20.9%	17.1%	18.7%	25.2%	24.4%	15.4%	16.1%	18.9%	19.9%	2,209
Transportation and Logistics	4.9%	4.0%	7.2%	4.7%	2.6%	4.5%	7.0%	4.2%	7.5%	7.2%	4.0%	5.2%	579
Wholesale and Retail Trade	13.5%	11.4%	9.4%	12.2%	7.7%	16.2%	10.6%	8.3%	6.9%	12.7%	12.8%	11.1%	1,233
Other	15.2%	6.1%	14.5%	11.3%	10.9%	13.0%	11.2%	14.4%	11.9%	15.1%	19.6%	13.0%	1,447

Appendix III: Business leaders survey methodology

In August and September 2018, BCG's Henderson Institute and Harvard Business School's Project on Managing the Future of Work surveyed 6,500 C-level executives, managing directors and senior managers—more than 800 in each of eight countries: Brazil, China, France, Germany, India, Japan, the United Kingdom, and the United States.

The survey was conducted by the research firm ResearchNow SSI, using an online panel.

The total sample consisted of 56% of C-level executives and managing directors and 44% of senior managers with a minimum of 43% C-level executives and managing directors in each country. In total, respondents were 63% male and 37% female—with a minimum of 30% female achieved in all countries except Japan, due to gender distribution in senior managerial positions. Respondents worked full time in organizations across a wide range of industries. The share of respondents working in organizations with revenues below $250 million was only 27% in total, to ensure a significant share of voice to those organizations that will be most prominent in shaping the future of work. In total, 44% of respondents worked in organizations with revenues above $1 billion. Respondents from organizations with less than 20 employees were excluded from the sample.

Main characteristics of business leaders

	Brazil	China	France	Germany	India	Japan	UK	US	Total %	Total #
Business leaders	820	834	807	807	800	811	827	837	100%	6,543
Position	Brazil	China	France	Germany	India	Japan	UK	US	Total %	Total #
C-level & Managing Director	77.6%	50.1%	79.1%	52.4%	47.4%	43.2%	49.5%	48.9%	56.0%	3,662
Senior Manager	22.4%	49.9%	20.9%	47.6%	52.6%	56.8%	50.5%	51.1%	44.0%	2,881
Gender	Brazil	China	France	Germany	India	Japan	UK	US	Total %	Total #
Male	53.5%	53.6%	61.2%	71.3%	55.5%	83.1%	64.8%	60.8%	62.9%	4,118
Female	46.5%	46.4%	38.8%	28.7%	44.5%	16.6%	35.2%	39.2%	37.0%	2,423
Prefer not to say	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	2
Title	Brazil	China	France	Germany	India	Japan	UK	US	Total %	Total #
CEO / President / Owner / Managing Director	19.9%	9.1%	11.6%	13.8%	18.6%	9.5%	17.5%	23.7%	15.5%	1,013
CFO / Chief Treasurer / Chief Controller	10.5%	4.2%	6.7%	5.2%	3.4%	3.5%	5.0%	6.2%	5.6%	365
CHRO	3.2%	4.6%	6.9%	2.2%	0.5%	1.4%	0.2%	1.2%	2.5%	165
CIO / Technology Director	20.9%	20.6%	17.6%	17.5%	16.1%	7.2%	17.9%	11.9%	16.2%	1,061
CMO	3.8%	1.4%	7.2%	3.3%	1.4%	2.1%	2.3%	1.2%	2.8%	185
COO	9.9%	6.8%	10.4%	3.5%	1.6%	2.2%	2.4%	1.1%	4.7%	310
Other board member	3.7%	1.1%	1.6%	2.1%	1.8%	9.5%	2.1%	1.7%	2.9%	191
Other C-level executive or equivalent	5.9%	2.3%	17.0%	4.8%	4.0%	7.9%	2.1%	1.9%	5.7%	372
Senior VP / VP / Director	1.7%	10.0%	1.5%	7.2%	15.6%	1.8%	15.1%	22.9%	9.5%	624
Head of business unit, department or division	10.0%	22.3%	6.9%	32.5%	20.6%	47.6%	16.6%	12.4%	21.1%	1,378
Manager whose direct reports are managers	10.7%	17.6%	12.5%	7.9%	16.4%	7.4%	18.9%	15.8%	13.4%	879

Business leaders' organization characteristics

Industry	Brazil	China	France	Germany	India	Japan	UK	US	Total %	Total #
Construction and Real Estate	6.0%	9.5%	5.8%	5.8%	4.3%	9.4%	8.1%	6.9%	7.0%	457
Finance and Insurance	12.9%	7.3%	12.0%	14.5%	13.9%	7.2%	18.9%	13.9%	12.6%	822
Healthcare	2.3%	1.4%	4.6%	3.8%	3.5%	3.6%	2.9%	6.3%	3.6%	233
Information, Media, Telecom	9.0%	9.1%	5.2%	17.5%	12.8%	9.0%	11.7%	8.4%	10.3%	675
Manufacturing	22.0%	44.4%	26.6%	26.6%	26.5%	32.6%	16.6%	17.7%	26.6%	1,741
Professional Services	10.6%	7.1%	10.5%	3.6%	14.5%	1.0%	12.6%	14.9%	9.4%	613
Transportation and Logistics	5.4%	3.7%	9.4%	5.8%	2.1%	5.7%	5.2%	4.7%	5.2%	343
Utilities, Mining, Agriculture	2.4%	4.8%	2.9%	2.2%	5.0%	2.1%	2.4%	2.5%	3.0%	199
Wholesale and Retail Trade	8.9%	4.6%	11.6%	12.8%	7.3%	10.2%	11.5%	9.3%	9.5%	622
Other services	20.5%	8.2%	11.3%	7.3%	10.3%	19.4%	10.2%	15.4%	12.8%	838

Revenue	Brazil	China	France	Germany	India	Japan	UK	US	Total %	Total #
<$25 M	0.5%	6.1%	7.2%	9.0%	5.8%	7.6%	5.8%	7.8%	6.2%	407
$25–49 M	10.0%	5.6%	5.2%	5.9%	5.6%	7.5%	4.8%	6.3%	6.4%	418
$50–99M	7.4%	6.1%	7.1%	4.8%	5.6%	6.0%	8.5%	7.5%	6.6%	435
$100–249 M	8.4%	9.6%	7.6%	6.3%	9.5%	7.6%	7.5%	8.5%	8.1%	532
$250–499 M	13.2%	15.9%	13.8%	14.4%	13.4%	13.2%	10.5%	12.7%	13.4%	875
$500–999 M	19.0%	18.1%	17.2%	17.7%	13.0%	10.4%	14.4%	15.5%	15.7%	1,026
$1–4.9 B	15.9%	17.6%	13.4%	16.0%	19.1%	16.3%	18.6%	18.0%	16.9%	1,104
$5–9.9 B	7.3%	9.4%	8.3%	7.4%	9.6%	7.8%	10.2%	7.5%	8.4%	552
$10–30 B	8.5%	7.8%	6.7%	6.2%	8.4%	7.5%	9.7%	5.0%	7.5%	489
>$30 B	3.5%	2.5%	6.9%	5.9%	7.6%	9.6%	5.7%	5.0%	5.8%	382
Non-profit	0.1%	0.0%	0.5%	0.0%	0.0%	0.2%	0.0%	0.2%	0.1%	9
Prefer not to say / don't know	6.1%	1.2%	6.2%	6.2%	2.4%	6.2%	4.4%	5.9%	4.8%	314

Size	Brazil	China	France	Germany	India	Japan	UK	US	Total %	Total #
<20 employees	-	-	-	-	-	-	-	-	-	-
20–99 employees	13.4%	7.3%	8.6%	10.7%	9.9%	11.3%	8.1%	16.2%	10.7%	700
100–999 employees	36.8%	39.2%	34.7%	35.1%	36.4%	34.8%	29.7%	34.2%	35.1%	2,297
1,000–9,999 employees	37.4%	44.1%	33.3%	35.6%	39.3%	33.7%	35.7%	32.4%	36.4%	2,384
10,000–100,000 employees	7.3%	6.7%	15.0%	13.6%	10.8%	15.0%	18.3%	11.5%	12.3%	802
>100,000 employees	5.0%	2.6%	8.4%	5.1%	3.8%	5.2%	8.2%	5.7%	5.5%	360

Notes

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