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Preparing Your Firm For The Future Of Work



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It is critical that firms begin to plan for the future of work, applying intelligent automation to support both their business and their workforce as a result of global disruptions.

Executive Summary

Successful companies have a future-of-work (FOW) view that accounts for the forces of advancing automation — scale, control, and convergence. A successful FOW view will use automation to build strategies aimed at reducing risk from global disruptions, including pandemics, climate change, and trade wars. Resiliency, the ability to recover quickly from disruptive change, is now a front-page headline. And the main topics of today's resiliency story are business continuity, work distribution, cloud migration, and cost efficiency.

Companies that understand how automation will change their business, and build the structure, processes and culture to help their entire workforce navigate both gradual and unexpected changes, will be more successful. Companies that prepare for the impact intelligent automation has on the future of work not only have more successful automation programs, but experience a broad set of business benefits.

IBM commissioned Forrester Consulting to evaluate how firms are preparing for intelligent automation adoption and its effects on the workforce. This resulted in a collection of three reports, which summarize the research based on studies of over 700 respondents. These reports can be viewed as a whole or individually. The first report, "Reinventing Workflows," emphasizes the role of process and workflow modernization in digital transformation. The second report, "How Intelligent Automation Will Shape The Workforce Of Tomorrow," describes the timing and issues of automation-led transformation. The third report, "Preparing Your Firm For The Future Of Work," makes the research of the first two reports actionable. Reports 2 and 3 are based on a January 2020 Forrester online survey with 269 IT and business decision makers that have executed and are responsible for automation and AI initiatives at global organizations. Based on the breadth of technologies they have adopted, these organizations consider themselves automation leaders.

It is critical that firms begin to plan for the future of work, applying intelligent automation to support both their business and their workforce as a result of global disruptions. Forrester has created a readiness model that has found that those firms with high-readiness scores are at a competitive advantage both now and in the future.

Companies that prepare for the impact intelligent automation has on the future of work not only have more successful automation programs, but experience a broad set of business benefits.

Preparing Your Firm For the Future Of Work

In the second paper of this series, “How Intelligent Automation Will Shape The Workforce Of Tomorrow,” we describe how the forces of automation are transforming the workforce. Survey respondents already feel the effects of automation on their workforce today, with the technology refresh cycle bringing job transformation faster than annually. This, coupled with a quickly changing economic landscape and shifting priorities for automation programs, means that all firms need to start transforming their organizational structure and culture now, in order to be adequately prepared for the impact intelligent automation will have on the workforce.

To better understand **how** firms are preparing for the future of work, and how best practices for automation and human-machine collaboration can affect the organization, we created a future of work readiness model (see Figure 1). This model is based on 17 practices and capabilities implemented today in three categories, scored on a 5-point scale:

- > Workforce preparation and change management.
- > Engagement and attitudes.
- > Adoption and technology.

Using the model, Forrester fielded a survey to determine how organizations are preparing for the future of work. We surveyed operational executives who are already undertaking automation programs of significant technological scope and can therefore be viewed as leaders in this space. We assessed respondents against our readiness model and looked at the different responses of those who scored in the bottom (low readiness), middle (intermediate readiness) and top-third (high readiness) of our model.

Analyzing the differences between our high- and low-scoring respondents can give insights into best practices, key challenges, and priorities for firms preparing for intelligent automation and the future of work.

All firms need to start transforming their organizational structure and culture now to be adequately prepared for the impact of automation on the workforce.

Figure 1

Future Of Work Practices And Capabilities

	1 Strongly disagree	2	3 Neutral	4	5 Strongly agree
Workforce preparation and change management					
We believe a new approach to training and skills certification must be developed to both manage emerging skills gaps and meet advancing automation.					
We believe our knowledge workers are happy and productive because they have the support (human or machine) they need to be effective at what matters most to the business.					
My company's leaders communicate honestly and empathetically with employees about how work will change.					
We are preparing for the talent/gig economy to augment our "owned workforce" through new security policies for new work styles.					
We are preparing to embrace the talent economy to augment our "owned workforce" through smart office design and other progressive approaches.					
We view ourselves as having innovative programs to close the skills gap with new forms of training and education.					
We view our understanding of the FOW as a core competency.					
Engagement and attitudes	1 Strongly disagree	2	3 Neutral	4	5 Strongly agree
We have an expanded view of a workforce made up of digital workers.					
Digital workers will help create a better working environment for swamped knowledge workers.					
Our employees view advancing AI and robotic technologies that replace some human activities positively.					
Our employees and management know when to question the results of an automated technology.					
Our employees can easily work with machines (digital workers) to jointly solve problems.					
Our culture, systems, and organization can accommodate a workforce with a balance of digital and human workers.					
We view monitoring of additional stress in the workforce as needed due to advancing automation and an increased pace of work.					
Adoption and technology	1 Strongly disagree	2	3 Neutral	4	5 Strongly agree
We have an automation center of excellence which engages across the business and IT.					
My company can articulate how different automation technologies can help us reengineer our current business processes.					
We are planning HR-type systems to manage digital workers (e.g., provision, credential, manage their lifecycle from development through retirement).					

Source: A commissioned study conducted by Forrester Consulting on behalf of IBM, January 2020

LOW READINESS

Looking at the attitudes and capabilities of firms that scored in the bottom one-third of our readiness model reveals that these firms are downplaying the potential for automation to change their business in the next five years — at great detriment to both themselves and their workers (see Figure 2). Looking deeper at these firms, we see they are:

- › **Focused on automation as a productivity tool.** These firms see the greatest value in automation that is designed to replace low value, repetitive tasks, particularly in driving more IT efficiency. These firms have implemented task automation and workflow tools like business process management (BPM), and ultimately they see automation as a way to more efficiently scale their business in the future.
- › **Downplaying the potential impact of automation.** These firms rated the possible impact of automation over a five-year span as the lowest across the three readiness groups. They were also most likely to minimize the impact of automation on their workforce, with just 15% predicting automation will have maximum disruption. This may be in part because they are primarily focused on task and workflow automation today. However, 74% of these low-readiness firms indicate that they are already upskilling or transforming their workforce yearly, due to the impact of automation. As this continues to accelerate, these firms may be scrambling to keep up.
- › **Lacking cultural and change management practices to appropriately prepare for the future of work.** While these firms believe their workers will be least affected by automation, they also say those same workers are highly anxious about how automation will affect their jobs. Sixty-four percent are challenged by employee anxiety about potential job loss or skills gaps, and 61% say their employees feel anxious or threatened by digital workers — the highest of all three readiness groups. Compounding this challenge, just 13% of these firms strongly agree that their leaders communicate honestly and empathetically about the future of work, and less than 20% say they have the culture, systems, and organization to accommodate digital workers alongside human workers.

61% of low-readiness firms say their employees feel anxious or threatened by digital workers.

INTERMEDIATE READINESS

The 37% of firms that fell into our intermediate-readiness bracket believe that automation will have a strong and transformative impact on their organization, and they are taking steps to understand and manage that change from an organizational perspective. However, they still have significant progress to make with integrating digital workers into their workforce alongside humans. Looking deeper at these firms, we see they are:

- › **Focusing automation efforts on productivity.** Like low-readiness firms, intermediate-readiness firms see the primary value of automation today as improving capacity and productivity. These firms are using digital workers towards this end and increasing investments in technologies like machine learning (ML) and conversational intelligence at higher rates than their low-readiness peers.

- › **Predicting a significant impact of automation on the workforce.** Not only do these firms see the forces of automation as having a much greater impact on these organizations than low-readiness firms, but they also are more aware of the impact that this will ultimately have on their workers as well. Sixty-three percent of intermediate-readiness firms say automation will disrupt their workforce, with almost 30% of those predicting maximum workforce disruption.
- › **Implementing change management practices to help workers grow and excel in the future.** Over half of intermediate-readiness firms say they have programs in place to close worker skills gaps with training and education. And just under half say that their leaders have open and honest communication with employees about how this will change in the future. For these reasons, intermediate firms report that only 41% of their workers feel anxious or threatened by the future of work. While this is a marked improvement from low-readiness firms, it's clear that there is still work that can be done here.
- › **Showing less readiness for the future of human-machine collaboration.** While these firms are doing well to prepare workers for the upcoming changes, they are less ready to actually facilitate human-machine collaboration. Less than half say they have the culture and organization in place to accommodate a balance of digital and human workers, and only 37% say their organization knows when to question the results of automation.

HIGH READINESS

The top 30% of surveyed firms say they are ready for both the future of work and human-machine collaboration. This preparation will be tested very soon, as these firms also see automation bringing massive transformation and change to their business and workforce in the next five years. Looking deeper at these firms, we see they are:

- › **Using automation to scale their business.** High-growth firms are already using automation to increase the reliability and scale of their businesses, with 84% saying this is a primary value of automation today. These firms are investing in a large array of intelligent automation solutions, including digital workers and unstructured content analytics. In the future, these firms will use automation to not only increase productivity and scale, but to also develop new products and services based on intelligent automation: 65% of high-readiness firms see this as one of the top values of automation in five years.
- › **Believing automation will fundamentally change their business and workforce.** Ninety percent of high-readiness firms see the three forces of automation as having significant impacts on their business in the next five years (8+ on a 10-point scale). In addition, nearly half (46%) say automation will cause maximum workforce disruption, including job loss and complete reskilling for many job personas. These firms are experiencing some disruption due to their automation initiatives already, with nearly half saying they are retraining or changing roles in their workforce every six months as a result.

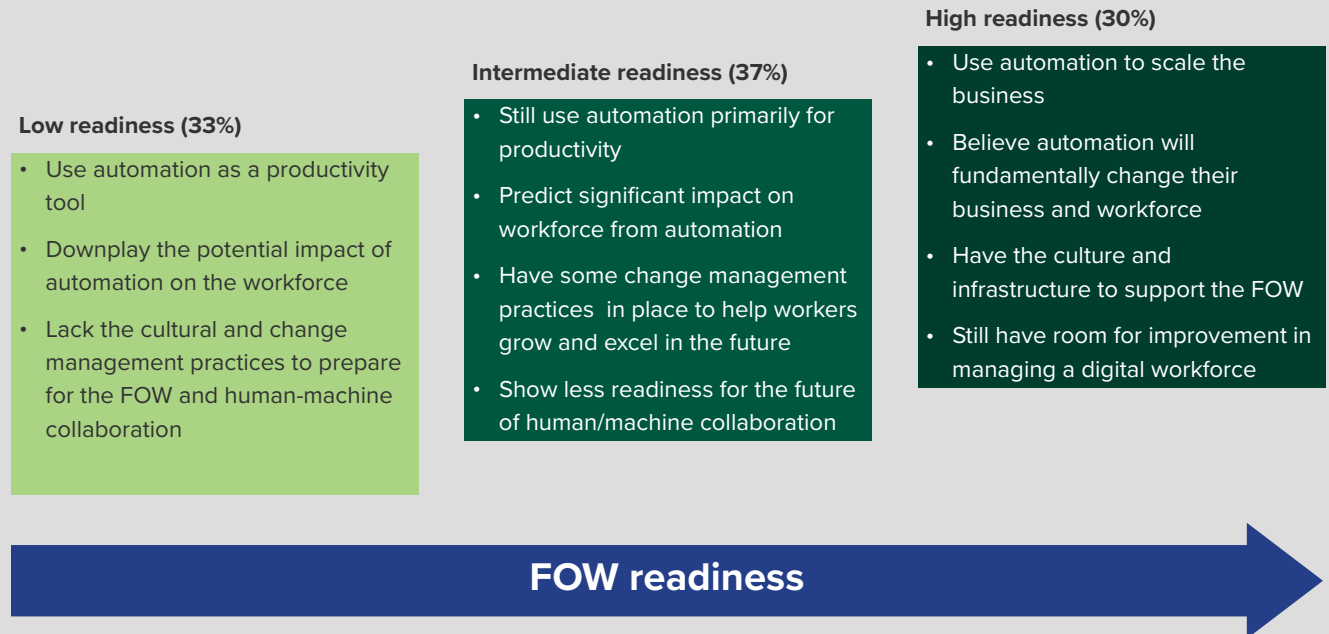
63% of intermediate-readiness firms say automation will disrupt their workforce, with almost **30%** of those predicting maximum workforce disruption.

High-readiness firms are experiencing some disruption due to their automation initiatives, with **nearly half (46%)** saying they are retraining or changing roles in their workforce every six months as a result.

- › **Supporting the future of work through culture and infrastructure.**
 These firms believe they are well prepared to support both workforce transformation and human-machine collaboration today. Almost eight in 10 firms say they have innovative training programs to close automation skills gaps, and seven in 10 are preparing to use the talent economy to offset workforce disruption and take advantage of new economies of scale and labor. Seventy-eight percent say they have created an automation center of excellence at their company that spans both business and IT.
- › **Looking to make increased gains in managing a digital workforce.**
 While 86% of high-readiness firms believe they have the organizational structure and culture to accommodate human-machine collaboration, less are putting practices in place that will allow them to manage their digital workers as part of the greater workforce. Sixty-four percent say they have a view of their workforce that includes digital workers as part of that, and 59% say they are planning to manage their digital workers like the would manage other employees, making these the capabilities where our high-readiness firms are least prepared.

Figure 2

Future Of Work Readiness By Maturity



Base: 269 business and technology decision makers and influencers (director+) responsible for automation, AI, and ML initiatives or centers of excellence at their organizations

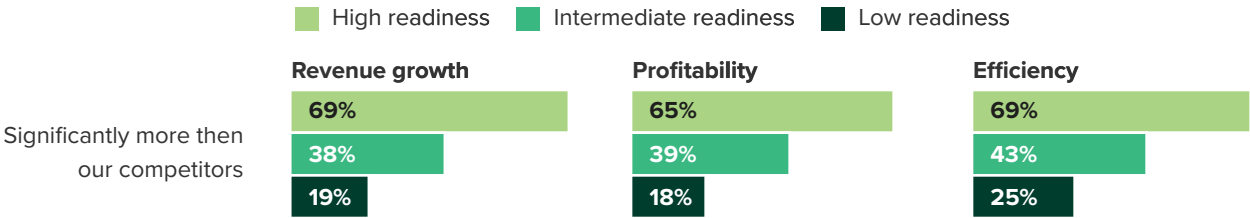
Source: a commissioned study conducted by Forrester Consulting on behalf of IBM, January 2020

The Most Ready Firms Reap The Business Benefits Of Intelligent Automation

While it will be essential that firms prepare for the incoming and accelerating effects of automation and digital transformation, being ahead of the curve today is beneficial. Readiness correlates with business benefits like increased revenue growth, profitability, and efficiency (see Figure 3). While almost 80% of high-readiness firms report a year over year revenue growth rate of 10% or more, just 41% of low-readiness firms do the same. And the average yearly revenue growth of high-readiness firms is nearly 5 percentage points higher than low-readiness firms. With major change on the horizon, these gaps are likely to increase rather than shrink, making it an imperative that businesses start preparing for the future of work today.

Figure 3

“Please rate the success of your organization compared with your competitors over the past three years across the following metrics.”



Base: 269 business and technology decision makers and influencers (director+) responsible for automation, AI, and ML initiatives or centers of excellence at their organizations

Source: a commissioned study conducted by Forrester Consulting on behalf of IBM, January 2020

Key Recommendations

The forces of automation will impact all organizations across the entire enterprise. The external environment will accelerate this impact. Firms must change both their strategies and their culture and worker management practices to succeed in the future of work. A review of the key challenges and best practices at various levels of FOW readiness yields tactical recommendations for organizations incorporating IA:



Use intelligent automation to add resilience to your employees and processes. Most recently, the remaining barriers around cloud and remote work were torn down as a response to the social distancing of the COVID-19 pandemic. Looking back on 2020, we will remember a sad, challenging, but creative period where new ways to work evolved at a dizzying speed. With this, comes a new focus on working around and lowering risks of global disruptions with resilient systems and processes. More localized supply chains, insights into employee health and well-being, and the creation of virtual events, are small examples of where automation investments will be applied.



For continued success, enterprises must drive innovation from the business. Scaling automation requires a process that drives ideas from the business as a formal set of steps that can be implemented. A culture of collaboration and ideation processes can generate automation ideas from all corners of the business. In today's climate, this may include shifting priorities and expectations of automation, as the need for continuity and resilience become drivers of transformation. ROI calculations, documentation, and business validation can be provided by a central automation center of excellence. The result? A pipeline of automation opportunity that feeds design and development teams.



Develop and support an automation governance model to enable scale. The difficult part is creating a model that everyone agrees to, but once official, a centralized or federated operating model will balance innovation and automation design with the needed controls to ensure business continuity, security, testing best practices, and other governance guidelines. Quality, consistency, standardization, and reuse of automation is the starting goal, but a culture and process for innovation is a must as well.



Understand that automation preparedness is not one size fits all. Automation will affect all workers differently, so the changes required and the resources needed to accommodate the future of work will not be the same for all. You must plan for change at the persona level — some workers will require more reskilling/retraining, while others will have the way they work dramatically altered. The growth of a hybrid human-machine workforce will have an organizational impact that differs by industry, function, and role. Use employee journey analysis to understand what shape the human-machine integration will take and develop tailored change management plans for each role.



Develop a culture of openness and positive communication regarding automation.

A shortcoming of even high-readiness firms, leaders must communicate openly and honestly about how advancing AI and automation technologies will change the business.¹ Standard change management methods should be just a starting point. Employee anxiety, skills gaps, relationships with machines that make decisions, explainability, and black box concerns, all introduce new issues and require new approaches. Attention to these emerging issues will foster trust and allow employees to understand potential changes to their roles. Employees and management should be taught to understand how automated decisions are made, while still being allowed to question the results of automation and retain autonomy for the workforce.



Develop automation-focused training to close expanding skills gaps.

Skills gaps for creating digital workers and coexisting alongside them are a top concern for firms today. New methods of training are necessary to address developing skills gaps. Companies must use formal certifications tailored to the enterprise automation roadmap to clearly define digital progress for each workforce persona.² Approaches should be based on the skills for each work persona. Cubicle workers, coordinators, and different levels of knowledge workers depend on different skills and will require training programs that specifically address them.



Establish management practices for the new hybrid workforce.

As digital workers take over more tasks from human workers, they must be performance-managed and considered as a part of the workforce. HR should have a view into digital workers' lifecycle from deployment to retirement, and digital workers should have clear managers. These managers should provision credentials for digital workers and be responsible for performance. By treating digital workers as part of the workforce, businesses will be able to accurately judge performance next to human workers and better plan for talent gaps and overlaps.



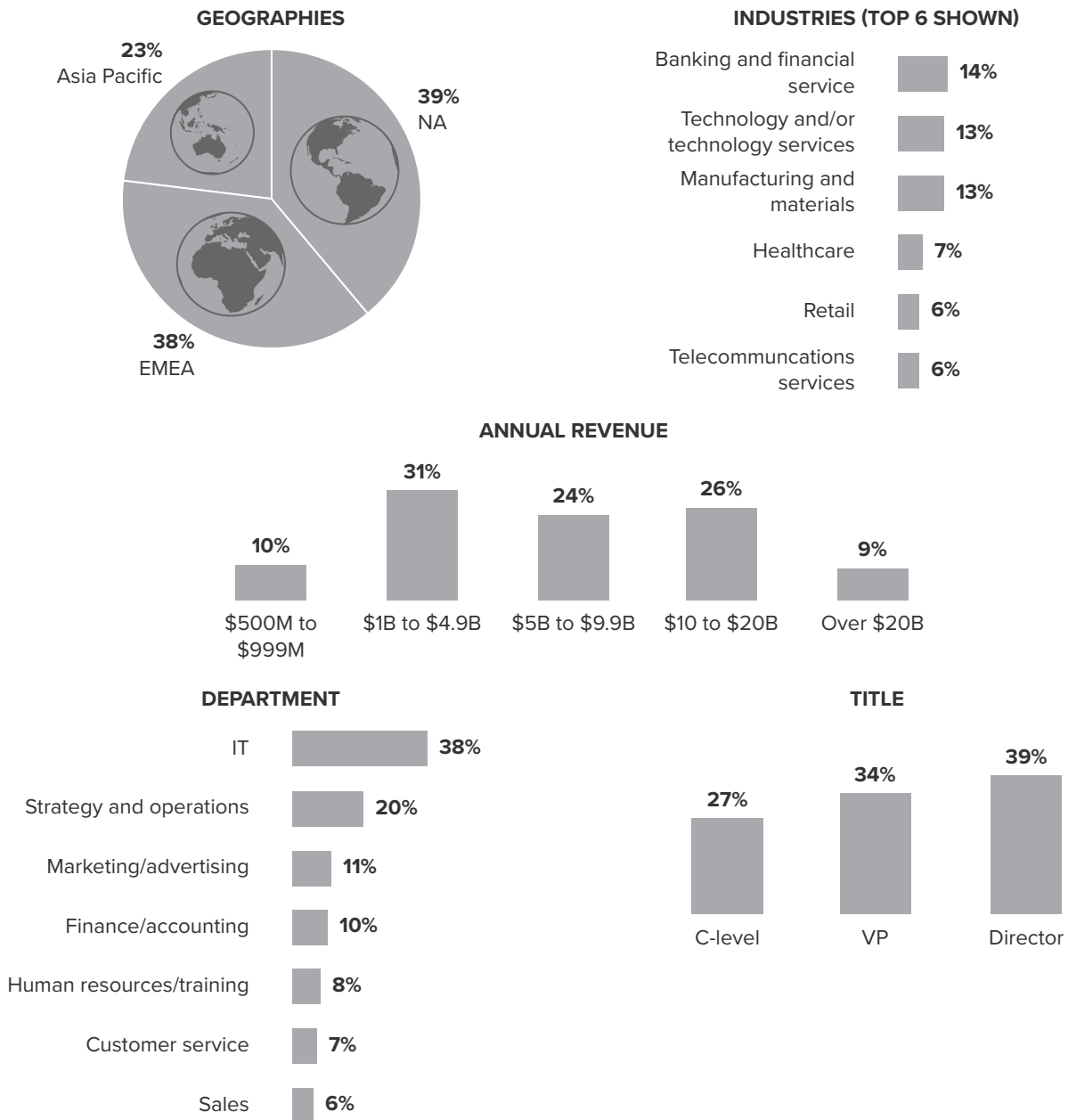
Intelligent automation requires a platform approach and the right partner.

Successful automation requires coordinating diverse automation technologies. Machine learning, conversational intelligence, task automation, and supporting workflows, for example, must be configured for the target use case, with the lowest skill set needed. As control and decision management moves to non-determinist environments like ML, control will shift from humans to machines. Explainability, audit trails, and bias reviews must be extensions of the automation platform used. The right platform and partner are essential for getting the most out of intelligent automation.

Appendix A: Methodology

In this study, Forrester conducted an online survey of 269 firms in Canada, China, France, Germany, Japan, the UK, and the US with annual revenues of \$500M or more to evaluate how these firms view the future of work with regards to intelligent automation. Survey participants included IT and business decision makers in C-level, vice president, or director positions responsible for AI and ML strategy development and technology selection at their organizations. The study was completed in January 2020.

Appendix B: Demographics/Data



Base: 269 business and technology decision makers and influencers (director+) responsible for automation, AI, and ML initiatives or centers of excellence at their organizations
 Source: a commissioned study conducted by Forrester Consulting on behalf of IBM, January 2020

Appendix C: Supplemental Material

RELATED FORRESTER RESEARCH

“Intelligent Automation (RPA Plus AI) Will Release \$134 Billion In Labor Value In 2022,” Forrester Research, Inc., February 21, 2020.

“Future Jobs: Plan Your Workforce For Automation Dividends And Deficits,” Forrester Research, Inc., April 30, 2019.

“Reinventing Work In The Era Of Automation,” Forrester Research, Inc., August 24, 2018.

Appendix D: Endnotes

¹ Source: “Intelligent Automation (RPA Plus AI) Will Release \$134 Billion In Labor Value In 2022,” Forrester Research, Inc., February 21, 2020.

² Ibid.