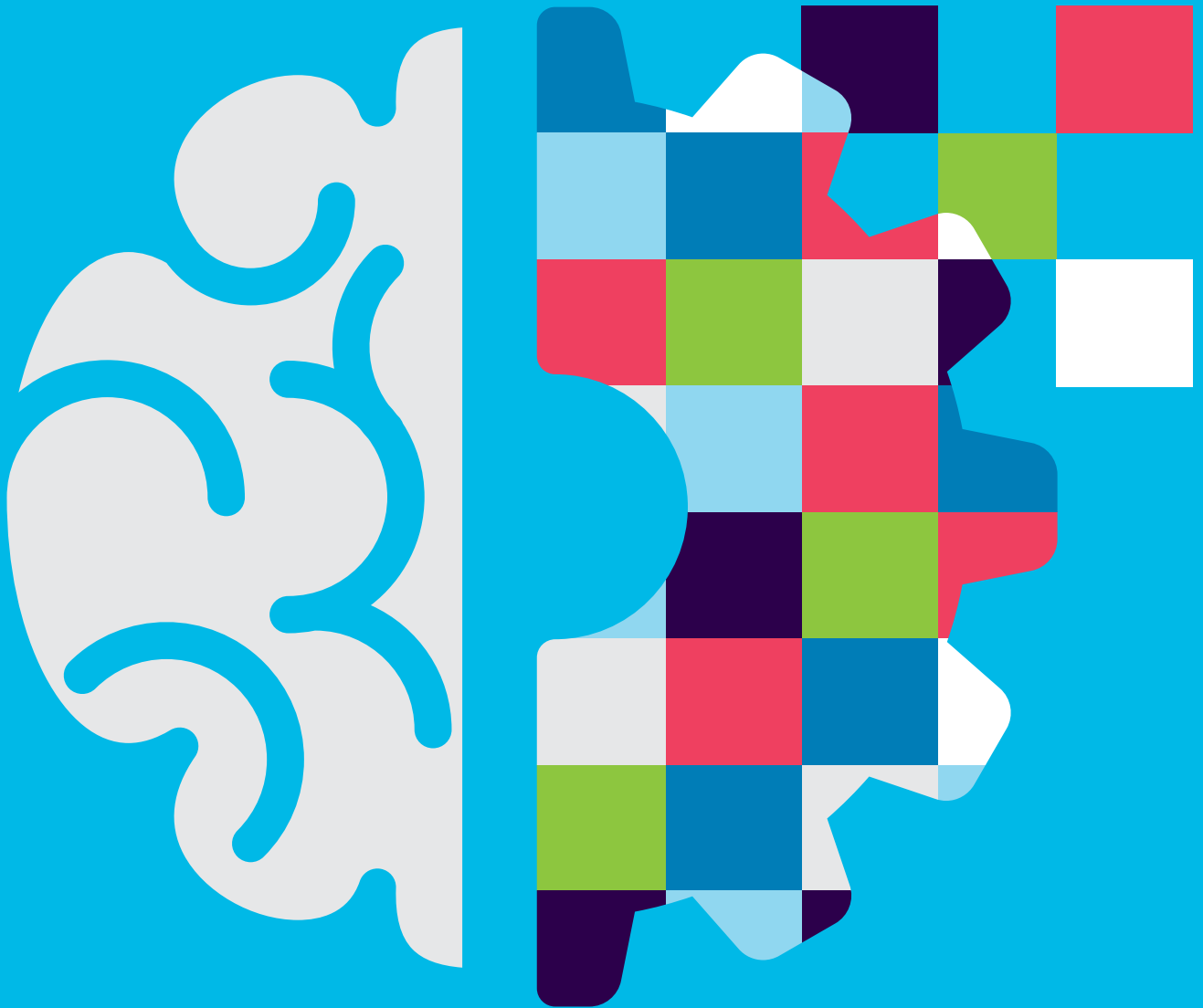


# Growth in the Machine

How **financial services** can move intelligent automation from a cost play to a growth strategy





# Introduction

Financial services firms around the world are using automation to transform their operating models as they target process efficiency and reduced operational costs. The economics of this efficiency play are compelling: a 10–25% increase in cost savings, potentially reaching 30–50% with cognitive automation.<sup>1</sup>

But, in a challenging and highly competitive environment, financial services firms are seeking additional ways to unlock further value beyond just the efficiency play. We found that 45% of financial services organizations believe that internet giants, such as Google, Facebook, or Amazon, will be their main competitors in the next five years. This is one factor that explains why we are seeing a gradual shift in focus to *intelligent automation* as companies target increased revenue growth and customer satisfaction. **“I would say, across financial services, intelligent automation is a revenue driver. It also improves customer satisfaction, because you are fundamentally creating a better experience for the consumer,”** says Xing Xin, head of US Business Development, Tractable, an artificial intelligence start-up.

To understand how organizations can use intelligent automation to reduce costs and drive growth, we surveyed more than 1,500 senior executives implementing automation solutions at global financial services organizations. We also analyzed around 50 real-world use cases from across the sector – retail banking, capital markets, and insurance – to assess which had the most impact. In the analysis that follows, we examine four areas:

1. The opportunities that intelligent automation offers beyond cost savings and productivity improvements
2. How many organizations are struggling to realize the full value of intelligent automation
3. The challenges faced by banks and insurance firms in scaling automation deployment
4. The critical building blocks in designing an intelligent automation strategy.

## Intelligent automation defined

For this study, we define intelligent automation as the right combination of RPA, artificial intelligence, and business process optimization applied cohesively to achieve strategic business objectives:

- Robotic process automation: Uses software to handle high-volume, repeatable, and rule-based tasks
- Artificial intelligence: Simulates human cognition using AI-based technologies such as machine learning, natural language processing (NLP), computer vision, and

biometrics intelligence, enhancing users' ability to solve business problems

- Business process optimization: A process redesign approach focused on efficient task processing, where organizations systematically look to drive incremental changes in the efficiency and quality of processes.

# Intelligent automation offers more than just cost savings

Where once financial services firms were focused on the cost-saving potential of intelligent automation, their attention is now shifting to its top-line value. **“Automation, particularly through AI, is great for cleaning up operating expenses,”** said Ryan Welsh, founder and CEO of Kyndi, an artificial intelligence company. **“But, for organizations that think about it the right way, it is going to be a huge revenue driver.”**

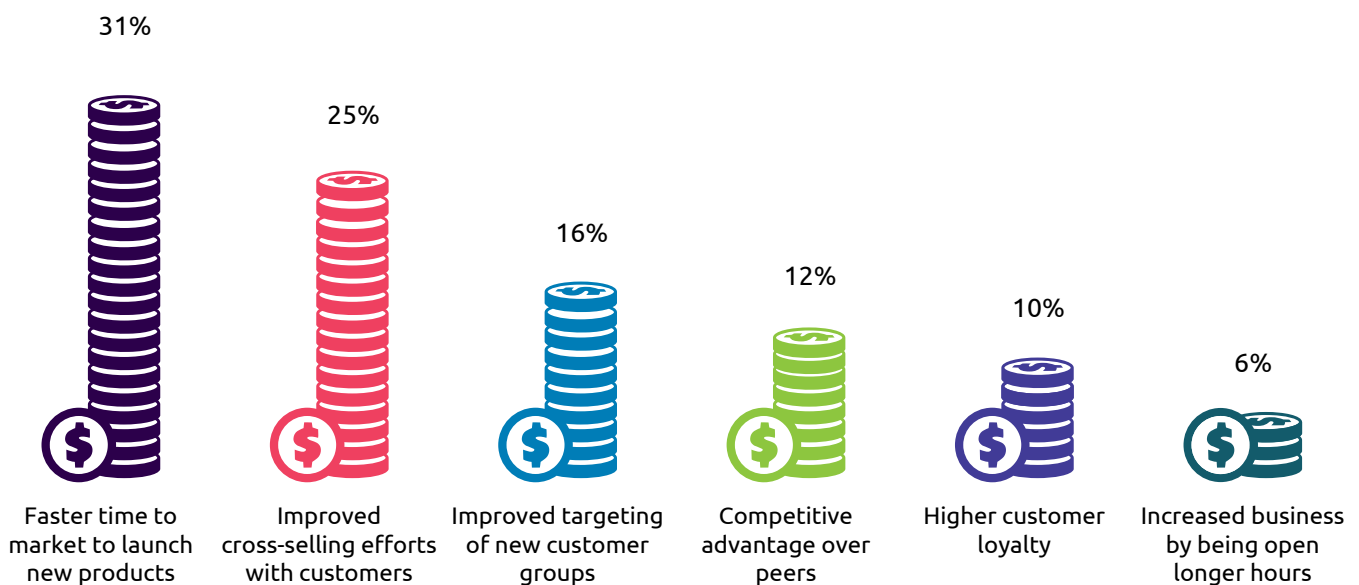
We found that many organizations (52%) are still focused on cost savings as a key objective for automation. But we also found 55% that are focused on increasing customer satisfaction and 45% that are focused on growing revenue.

## Revenue growth

On average, over a third (35%) of financial services players have seen a 2%–5% increase in topline growth thanks to intelligent automation. This increase spans across sectors, with 37% of capital markets players, 34% of retail and commercial

banks, and 33% of insurers seeing these gains. The key factors influencing gains are faster time to market and improved cross-selling efforts (Figure 1).

**Figure 1. Key revenue drivers from intelligent automation implementation**



**Source:** Capgemini Digital Transformation Institute, Automation in Financial Services survey; February–March 2018, N=750 companies



## Intelligent automation could add \$512 billion to the global revenues of financial services firms by 2020

We estimate that, with additional investments in intelligent automation solutions and improved benefits from existing automation initiatives, \$512 billion<sup>i</sup> can be added to the

revenue base of financial services industry by 2020, with \$243 billion<sup>i</sup> gained in insurance and \$269 billion<sup>i</sup> in banking and capital markets:

### Insurance:

Factors	Conservative estimates	Optimistic estimates
a. Overall projected revenue base for insurance sector in the nine surveyed countries in 2020*	\$3,650 Bn	\$3,650 Bn
b. Average revenue uplift from automation for insurance sector in the nine countries surveyed **	4.68%	6.66%
c. Incremental revenues resulting from automation initiatives (a*b)	\$169 Bn <sup>ii</sup>	\$243 Bn <sup>i</sup>

### Banking and capital markets:

Factors (Banking and Capital Markets)	Conservative estimates	Optimistic estimates
d. Overall projected revenue base for banking and capital markets in the nine surveyed countries by 2020*	\$3,864 Bn	\$3,864 Bn
e. Average revenue uplift from automation for banking and capital markets in the nine countries surveyed **	4.82%	6.77%
f. Incremental revenues resulting from automation initiatives (d*e)	\$189 Bn <sup>ii</sup>	\$269 Bn <sup>i</sup>

In a conservative scenario, intelligent automation has the potential to add \$358 billion<sup>ii</sup> in incremental revenues to the financial services industry.

i. \$243 Bn + \$269 Bn = \$512 Bn

ii. \$169 Bn + \$189 Bn = \$358 Bn

\* Source Bloomberg data for sector revenues and revenue growth CAGR across nine countries surveyed.

\*\* Source Capgemini Digital Transformation Institute, Automation in Financial Services Survey; February–March 2018, N=750 companies.



# \$512 billion

## What intelligent automation could add to the global revenues of financial services firms by 2020



**Faster time to market to launch new products:** OCBC Bank, one of the largest banks in Southeast Asia, has successfully leveraged AI-based automation to drive new revenue streams. In 2017, OCBC launched “Emma,” its specialized home and renovation loan chatbot service. Within four months, Emma had successfully handled 20,000 inquiries, with more than 10% of the chat sessions materializing into mortgage loan sales prospects. Emma successfully generated over \$100 million in home loans since its launch and 90% of customers were satisfied with the chatbot interaction. Emma is fully trained to answer customer questions about home and renovation loans and can update the answers based on changes in rules and regulations.<sup>2</sup>

**Improved cross selling efforts with customers:** Ally Bank, a leading US automotive financial services company,

automated its marketing processes to increase customer satisfaction, retention, and loyalty. The solution includes a targeted email tool for customers that has achieved click-through rates as high as 70%. Through a personalized automated communication, Ally commands 50% loyalty rates when customers refinance loans. Ally also developed algorithms to suggest how many times it could offer another product or service before the customer opted out of email communication.<sup>3</sup> Self-service accounts based on personal URLs were implemented, allowing customers to check their loan or lease-end information, such as mileage requirements, and purchase real-time extra mileage. The personalized websites offer up-sell and cross-sell opportunities and provide timely information from welcome and onboarding all the way through lease-end education and retail retention.<sup>4</sup>



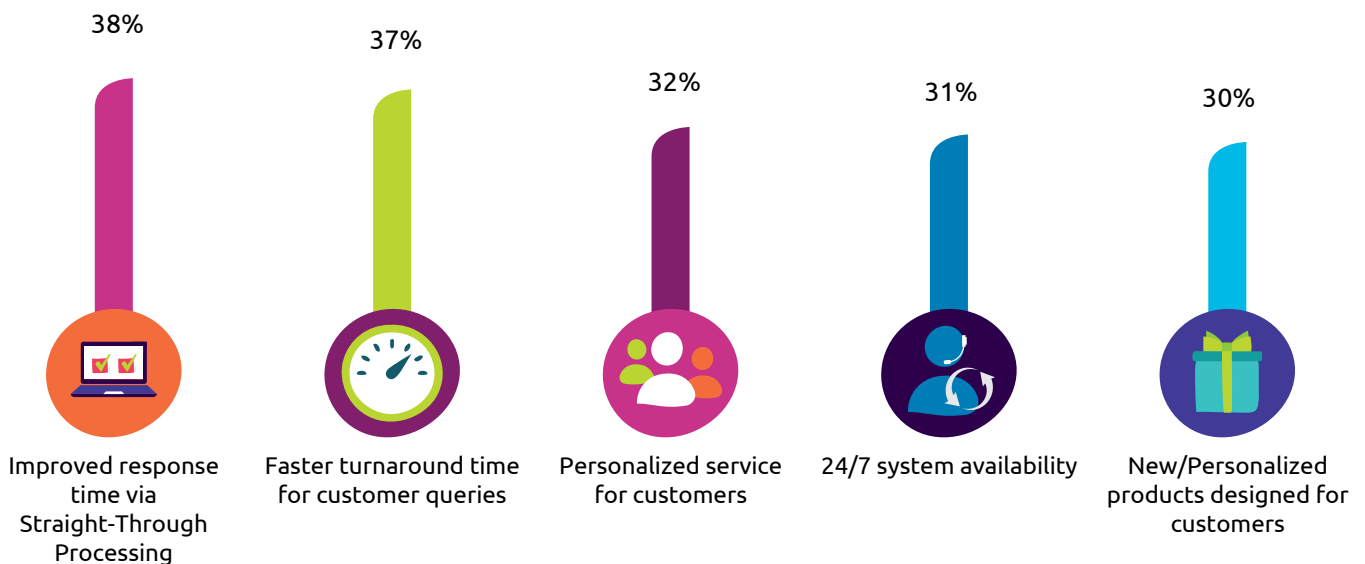
64% of organizations have improved customer satisfaction through intelligent automation

### Customer satisfaction

A range of studies demonstrate how a positive customer experience can drive revenues through improved customer retention.<sup>5</sup> On average, 64% of organizations have improved customer satisfaction by more than 60% through intelligent automation. We found that 65% of companies in insurance, retail, and commercial banking, and 62% of capital market players, have seen this satisfaction uptick.

As Figure 2 shows, the top-two influences are improved response time through straight-through processing and faster turnaround for customer queries (Figure 2).

Figure 2. Key drivers of customer satisfaction through intelligent automation implementation



Source: Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February – March 2018, N=750 companies



#### Improved response times through straight-through processing:

AIG’s Global Claims Automation, with its OneClaim system, has managed to eliminate various manual processes through a higher degree of automation. The system uses straight-through processing (STP) technologies to quickly process certain types of claims based on set rules, allowing AIG to handle the claims promptly and efficiently. STP capabilities, in combination with other digital capabilities, such as online claims reporting and management, have enabled AIG to provide better customer services. The OneClaim system deployed for UK personal accident claims team handles about 50% of the claims through STP.<sup>6</sup>



#### Faster turnaround time for customer queries.

Malaysia-based CIMB Bank started RPA implementation in September 2017 for automation of a host of banking operations, including financial reconciliation, maintenance, e-banking, audit confirmation, and auto checking/reminder follow-ups. To date, it has already automated 47 processes, with a marked improvement in the processing times. Additionally, the bank has managed to achieve an impressive 90% reduction in turnaround time for nine out of 15 banking processes that were automated using robotic process automation (RPA) in November 2017.<sup>7</sup>

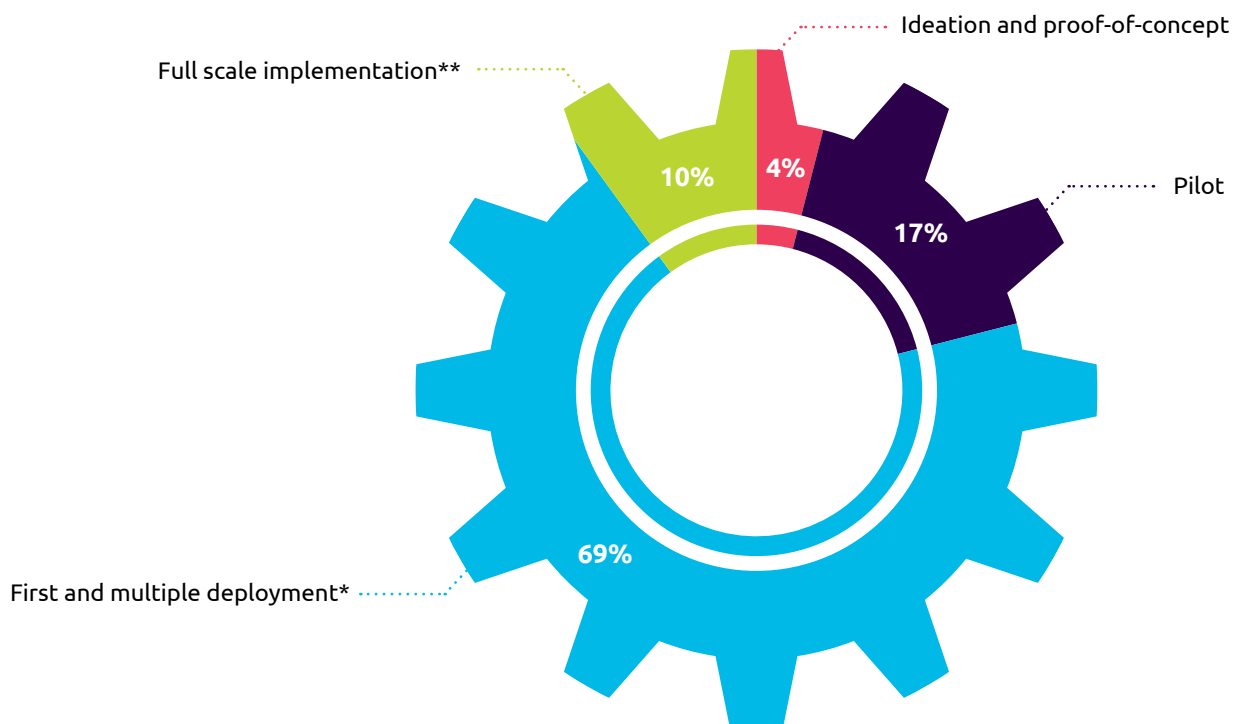
# Organizations are far from realizing the full value of intelligent automation

Unlocking the full value of automation depends on rapidly scaling up applications across the span of the business. However, this is a reality for only a minority:

- Just 10% have implemented automation at scale, i.e., across all the geographies and processes that the company operates in

- 17% are stuck at pilot stage
- Moreover, while a large number (69%) have managed to get past pilot stage to deploy at one or two sites, large-scale adoption across business processes, functions, or geographies is still elusive (Figure 3).

**Figure 3. Organizations deploying intelligent automation by different stages of implementation**



\* First deployment—implementation at a single geography or selected business processes; multiple deployment - implementation at multiple geographies or multiple business processes

\*\* Full-scale implementation means organizations with deployments across all geographies and processes that the company operates in

**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February –March 2018, N=750 companies





4% of organizations have adopted machine learning

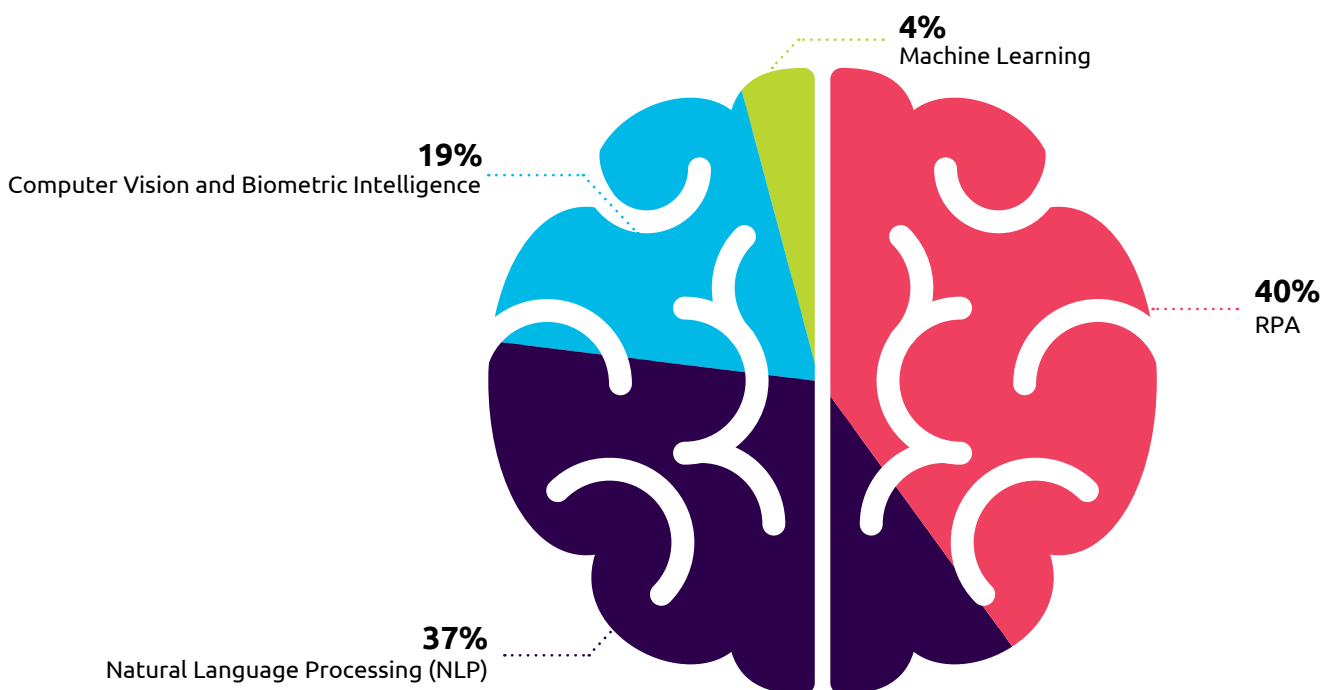
### Adoption of advanced AI-based technologies is still low

Automation through AI-based technologies holds significant innovation potential for financial services firms. “RPA’s benefit is that it can be deployed quickly,” said a senior executive from an enterprise business processes automation firm. “However, RPA is only a temporary fix to automate rules-based tasks, not the end-to-end process. It’s a patch that will eventually be replaced by APIs or web services and enhanced by AI-powered technology to automate the full process, including judgment-based tasks. I don’t think banks or insurers do position RPA as a long-term solution”.

Processes based on AI automation solutions can evolve based on the interactions they have and this technology can also automate processes that deal with unstructured data. For instance, machine learning can be used to identify the information required from an invoice.

Despite this potential, we found that RPA still continues to dominate. Looking across all stages of implementation – from concept to full-scale implementation – we find that 40% have adopted RPA, but only 4% have adopted machine learning (Figure 4).

Figure 4. Adoption of Automation Technologies\*



\*Across all implementation stages—from pilot to full-scale

Source: Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February –March 2018, N=750 companies

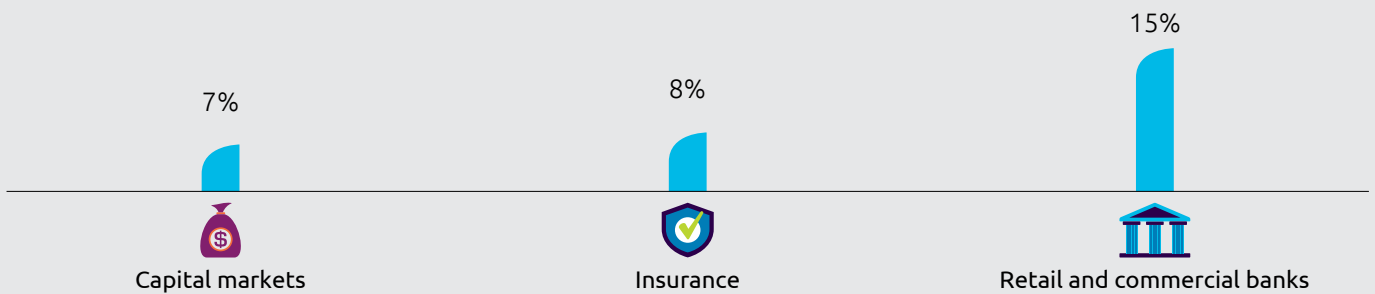


## How are different countries and segments faring in scaling-up intelligent automation?

In terms of segments, most progress has been made in retail and commercial banking (Figure 5). A number of factors explain this trend. For retail banks, in particular, the need to focus on improving customer experience due to more customer touchpoints propelled the adoption of intelligent automation in deposits and payments processing, loan

operations, and customer service (through chatbots). For commercial banks, reliance on manual processes in commercial loans processing and settlement creates opportunities for process efficiency through intelligent automation.

**Figure 5. Proportion of organizations with full scale intelligent automation implementation by sector**

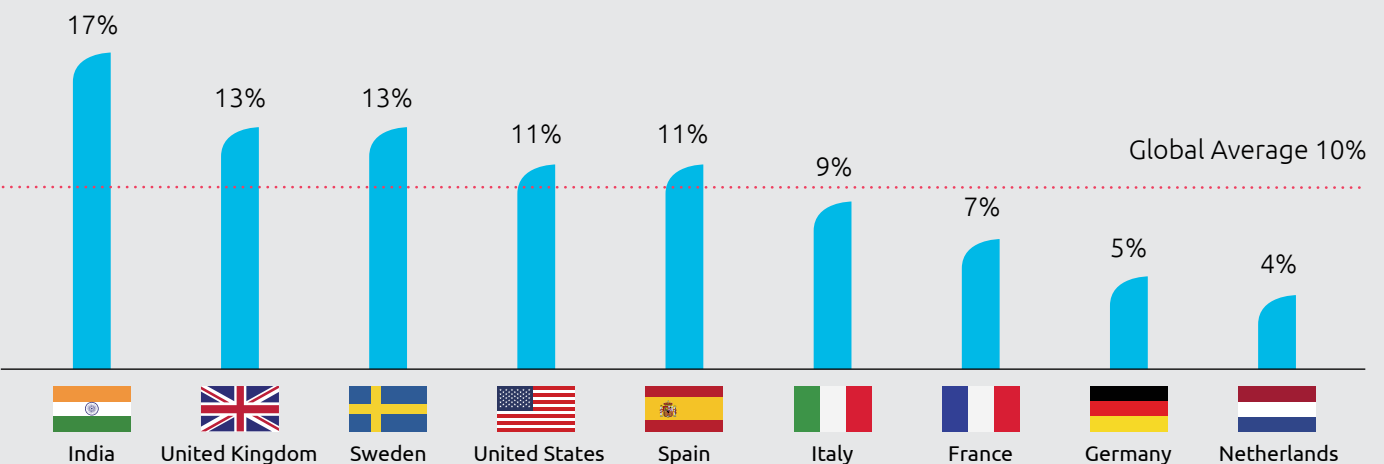


**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February – March 2018, N=750 companies

India leads in deployment of intelligent-automation initiatives at scale (Figure 6). This is corroborated by our earlier research, wherein India emerged as a leader in terms of AI implementation at scale.<sup>8</sup> This reflects significant investments and the availability of talent.<sup>9</sup> “It’s not surprising that India leads in automation deployment,” says a senior executive

from an Indian lending, wealth management, and insurance firm. “The automation technology capabilities can be built within a short span of time, but domain expertise is the differentiator for success. Talent is definitely not an issue for automation in Indian financial services firms. There is sufficient talent available.”

**Figure 6. Proportion of organizations implementing intelligent automation at full scale\*, by country**



\* Full-scale implementation means organizations with deployments across all geographies and processes that the company operates in

**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February – March 2018, N=750 companies



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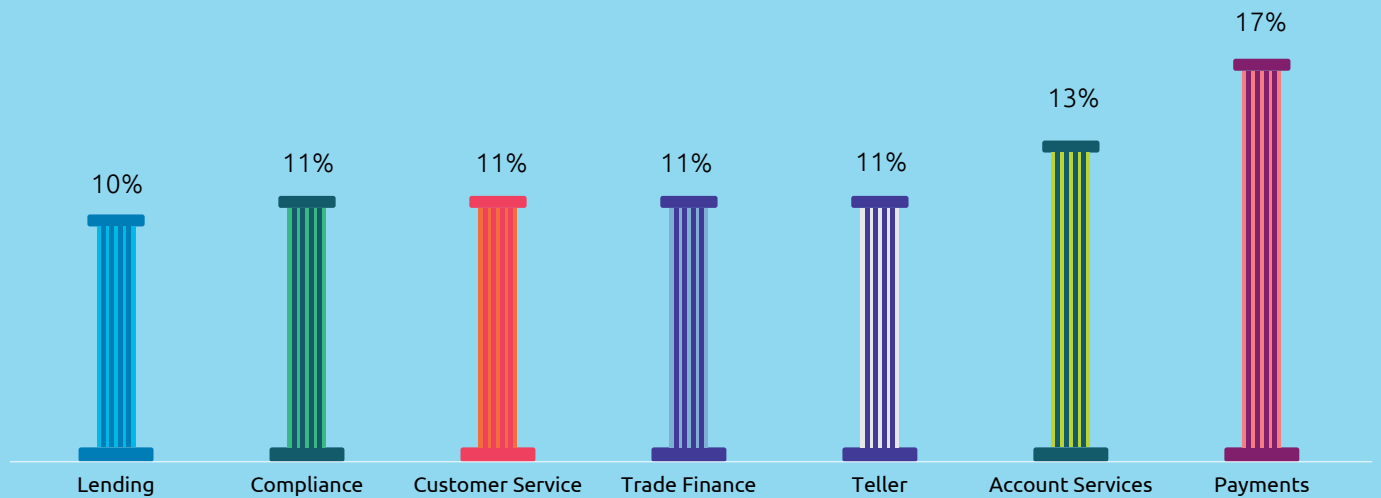
Retail and commercial banks are leading in automation implementation



## Potential for automation remains untapped across several business processes

Looking at processes across retail and commercial banks, capital market institutions and insurance firms, we found that full-scale automation is still rare (Figures 7, 8 and 9).

**Figure 7. Proportion of organizations with full scale intelligent automation implementation of the below business processes in retail and commercial banks**



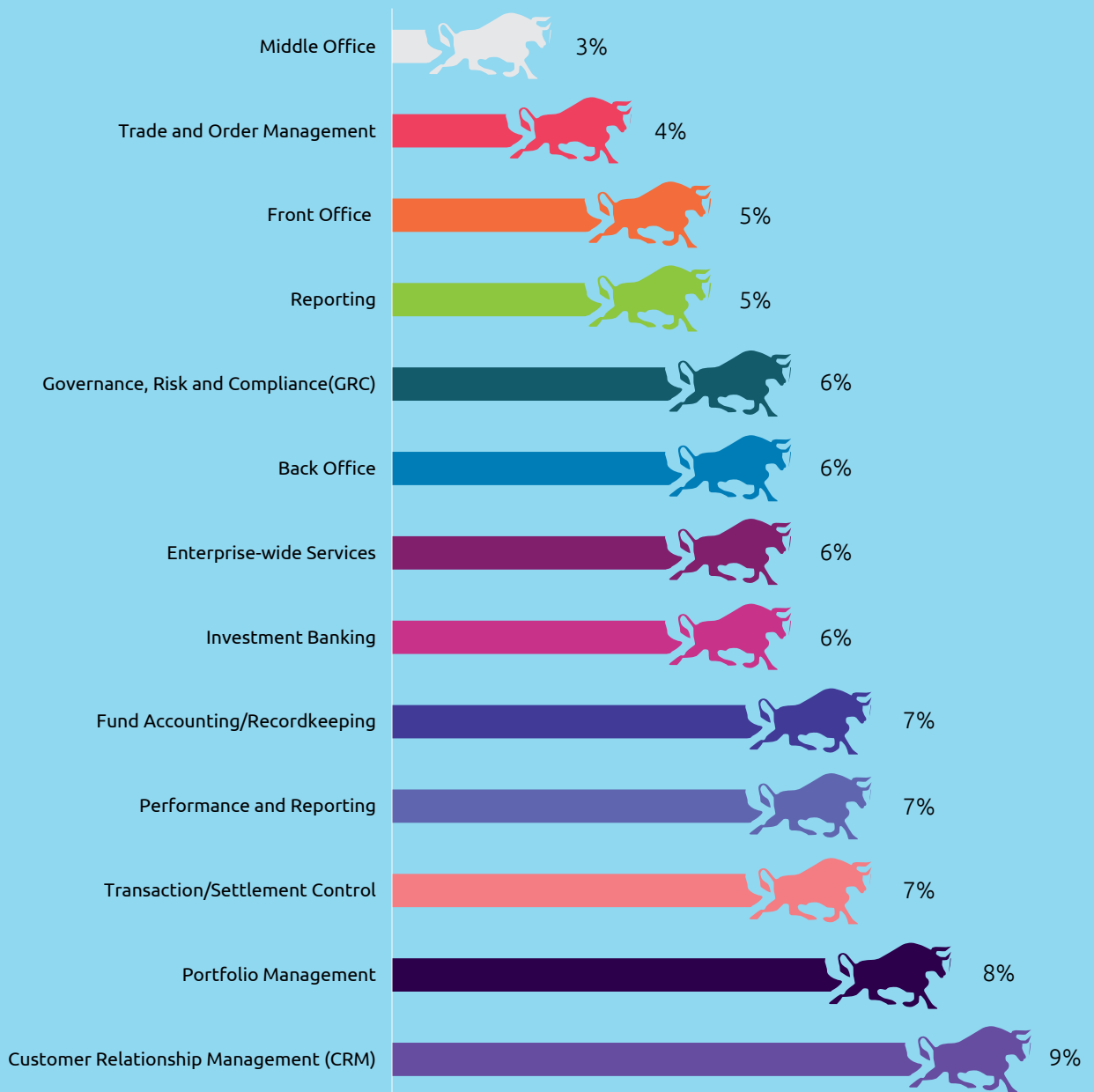
**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February –March 2018, N=236 companies

**Figure 8. Proportion of organizations with full scale intelligent automation implementation of the below business processes in life and non-life insurance firms**



**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February –March 2018, N=233 companies

**Figure 9. Proportion of organizations with full scale intelligent automation implementation of the below business processes in capital market institutions**



**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February–March 2018, N=281 companies



# Why organizations are struggling to achieve scale

Based on our research, and our experience in this area, we believe there are two areas where organizations' efforts fall short:

1. Putting the right focus on high-impact use cases
2. Overcoming critical business, technology, and people challenges.

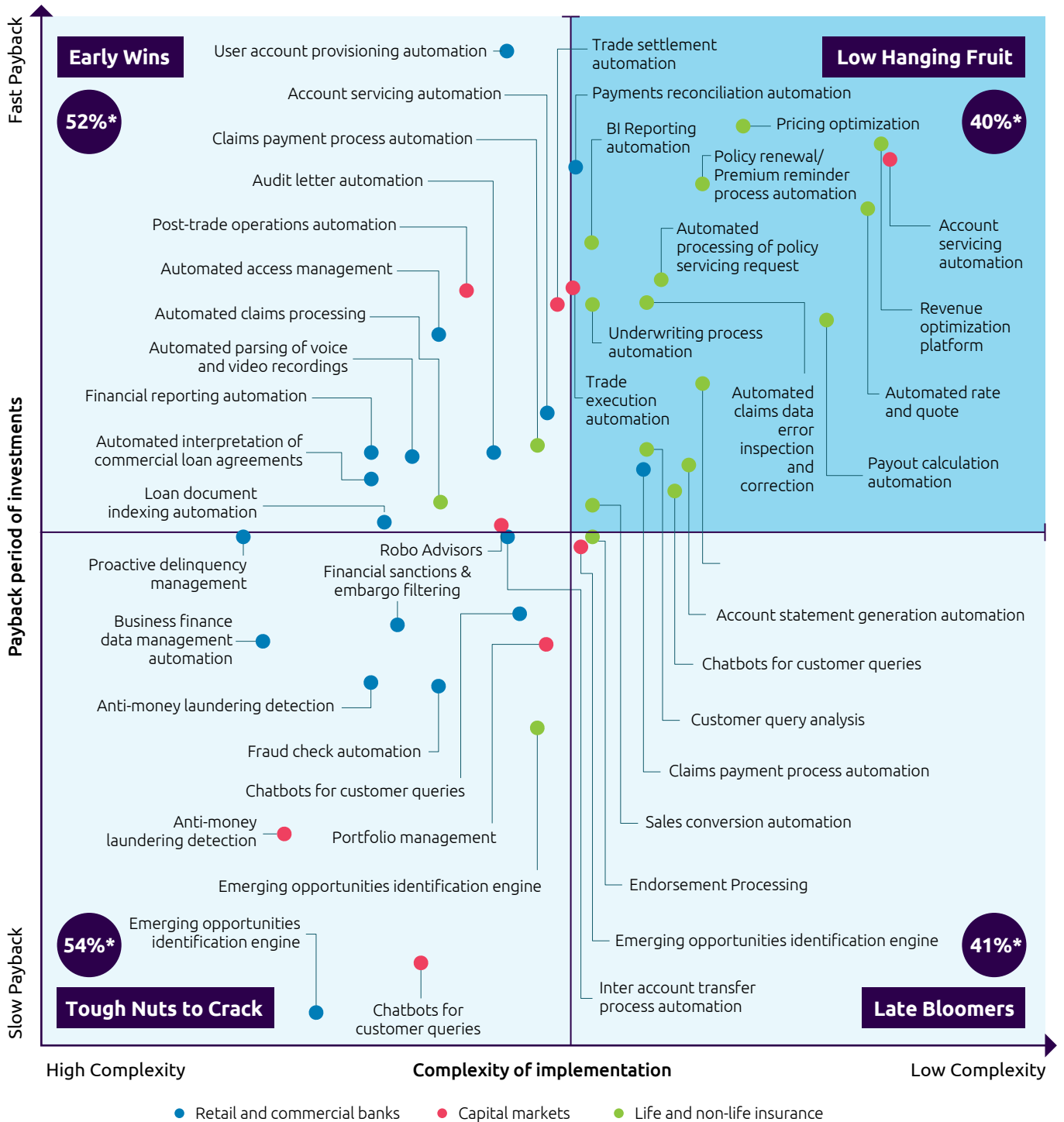
## Focusing on high-impact use cases

We examined approximately 50 use cases and segmented them by implementation complexity and payback period in order to understand whether organizations were effectively prioritizing use cases (Figure 10).

We found that more than half of organizations (54%) have implemented a set of complex use cases with slow payback,

which we call the "Tough Nuts to Crack" in Figure 10. That effort might have been better spent on scaling what we call the "Low-Hanging Fruit." These are easy-to-implement use cases that have a high-benefit upside. Organizations are missing an opportunity by failing to focus on high-potential use cases.

**Figure 10. Distribution of use cases by complexity of implementation and payback period**



**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February – March 2018, N=750 companies

\*Percentage indicates implementation of use cases in each quadrant by organizations in full scale. Full-scale implementation means organizations with deployments across all geographies and processes that the company operates in

X-axis denotes the relative complexity of the use cases; Y-axis denotes the relative payback period of the use cases



## High-impact use cases by sector



### Retail and commercial banks

- **Customer query analysis:** Nordea, a financial services group operating in Northern Europe, recently introduced AI-based technology to automate handling and forwarding of customer inquiries to the responsible department. The technology, developed by Estonian startup Feelingstream, analyzes and categorizes customers' messages, which are forwarded automatically to the relevant area for processing. The solution can parse hundreds of messages per second, leading to faster response times and improved customer experience.<sup>10</sup>
- **Payment processing and reconciliation:** Bank of America introduced a new intelligent receivables automation solution for streamlining payments processing for its corporate clients. The solution uses AI, optical character recognition (OCR), and machine learning to identify payments and match them with associated remittance data. This has the potential to reduce cost and improve cash forecasting.<sup>11</sup>



### Capital market institutions

- **Trade execution:** JPMorgan developed a bot to execute trades across its global equities algorithm business. The AI-based utility, LOXM, uses machine-learning techniques to learn how to efficiently resolve various issues while trading, such as avoiding market price movements while dumping high volumes of equities. The pilot of this bot achieved positive results in its trial runs.<sup>12</sup>



### Insurance

- **Pricing optimization:** AXA, a French multinational insurance firm, wanted to identify customers who are more likely to cause a large-loss traffic accident and when such an event could occur during the coverage period. AXA's R&D unit in Japan used machine-learning techniques and a neural-network model to come up with a proof of concept that predicts such accidents with 78% accuracy. Such systems would be critical for an insurer to optimize their pricing and explore real-time pricing at the point of sale.<sup>13</sup>
- **Chatbots:** When Allstate, a US personal lines insurer, launched its Allstate Business Insurance (ABI) division for commercial insurance products, the company was flooded with calls for basic information, leading to long wait times for clients. Allstate needed a knowledge-based system to help agents with quick answers as they worked with clients. Therefore, it developed a web-based chatbot, ABle (Allstate Business Insurance Expert), which helps agents by answering questions and quickly finding critical documents. ABle uses a combination of contextual knowledge and intelligent content to find answers. It handles more than 25,000 queries per month, a number that has been steadily increasing due to its growing adoption.<sup>14</sup>
- **Claims data-error inspection and correction:** For a multinational European insurance firm, the process it used to report claims had multiple human interventions. Claims professionals also spent time gathering basic information, such as postal codes. The insurer used RPA to automate repetitive tasks and managed to bring down process time from two hours to 15 minutes. It also allowed its claims handlers to focus on higher-value tasks.<sup>15</sup>





41% of organizations are struggling to get leadership commitment for advanced automation

## Overcoming critical business, technology and people challenges

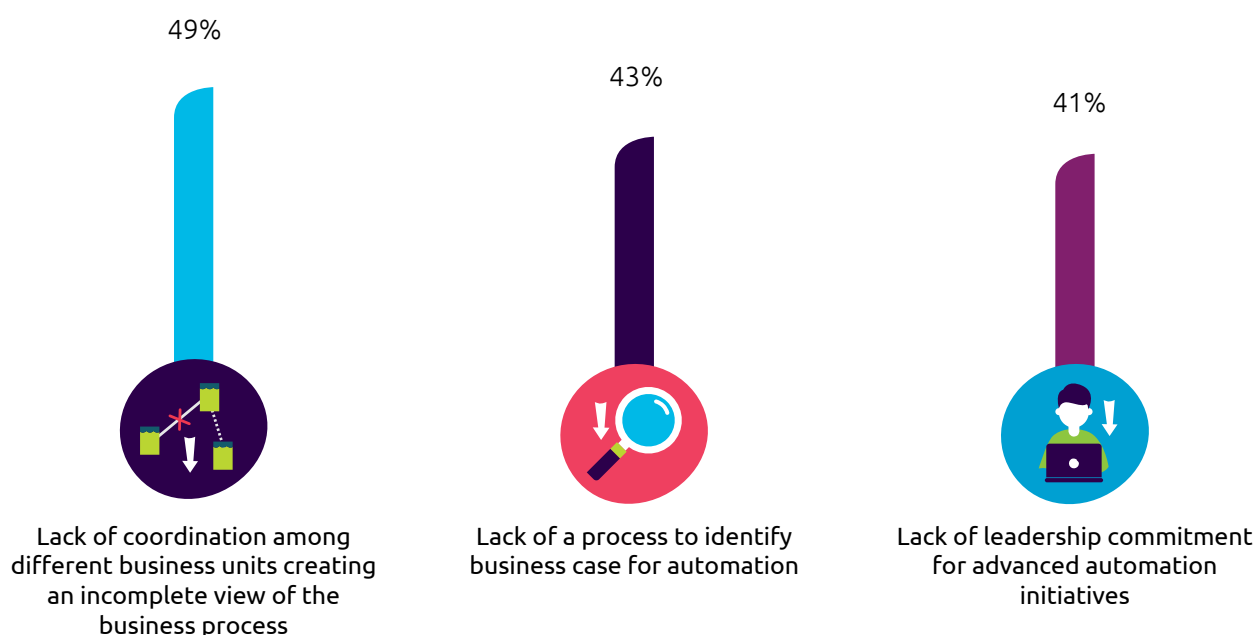
### Business challenges

**Inability to establish a business case:** We found that 43% of organizations say they do not have a process for identifying the business case for automation (Figure 11). This reflects the lack of focus on high-impact use cases. When teams execute complex use cases with long payback periods, senior leaders' backing for future pilots is challenged. In fact, 41% say they are struggling to get leadership commitment for advanced automation.

**Lack of coordination between business units:** Gaining consensus across the business – on issues such as the

processes to be optimized or clarity on roles – has been particularly challenging for nearly half of organizations (49%). Units are often reluctant to relinquish autonomy in areas they consider to be critical to their existence. **“Split ownership of processes is a concern, especially when front-end or online processes are not integrated with other processes,”** says Nils Henrikson, program director Digitization and Claims Automation for Trygg-Hansa, a Scandinavian insurance company. **“It is important to have end-to-end ownership of a process. It means firms can drive automation initiatives with full control and better coordination.”**

Figure 11. Share of organizations facing business challenges in implementing intelligent automation initiatives



Source: Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February – March 2018, N=750 companies



48% of organizations face issues in integrating their automation platforms with legacy software systems and tools

## Technology challenges

**Data management:** AI-based automation algorithms require the right data at sufficient volumes. Although industry players have made significant investments in data governance programs focused on quality and availability, we found that 46% said that the lack of an adequate data management strategy hampers progress (Figure 12). **“We have huge amounts of data in our business, and we are not really using it to a full extent,”** said Trygg-Hansa’s Nils Henrikson. **“I think we can do a lot more with better use of data with machine learning.”**

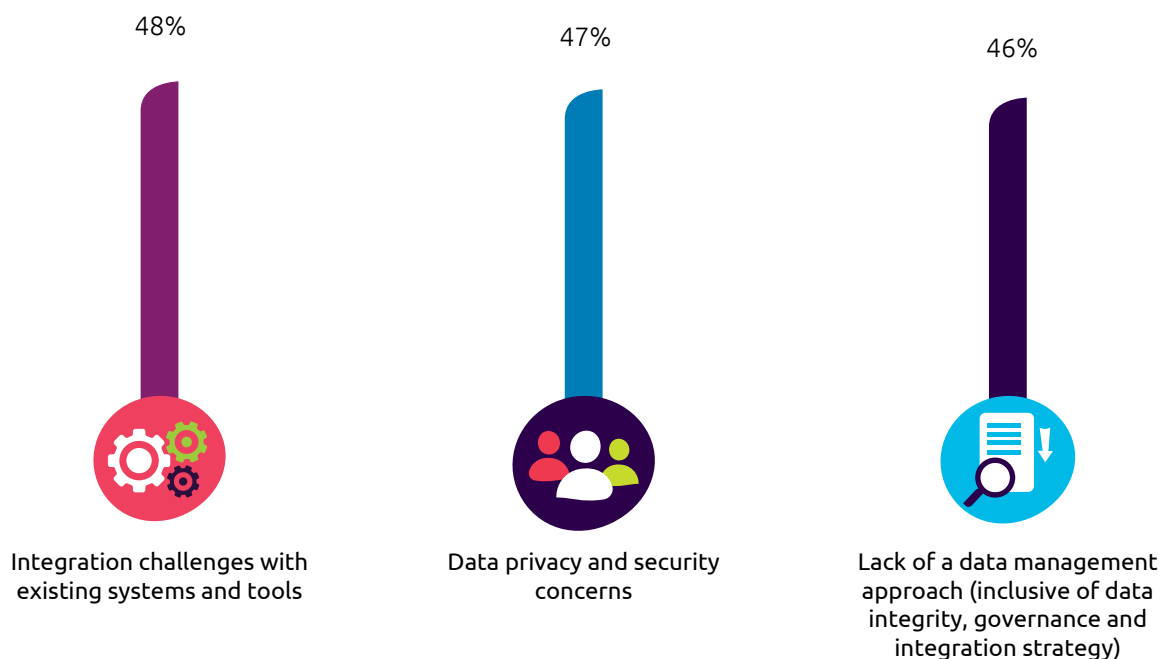
**Security and data privacy:** Around half of respondents (47%) say cybersecurity and data privacy are major factors preventing action. Privacy concern stems from the potential misuse of data containing customers’ personally identifiable information (PII), such as names and addresses. Data privacy regulations, such as the General Data Protection Regulation (GDPR), impose significant penalties for those who fail to safeguard consumer data.<sup>16</sup> The financial services sector has been particularly attractive for cybercriminals over the years, making it vulnerable to breaches.<sup>17</sup> As the scale of automation

expands to more customer-centric processes within FS organizations, the magnitude of the security and privacy concern will only increase.

**System integration constraints:** Around half of organizations (48%) face issues in integrating their automation platforms with legacy software systems and tools. For an automation program to run successfully, it needs to have access to all the source data from multiple systems. This is particularly true for those processes, such as payments, that rely on access to data from multiple systems. Getting and maintaining that access is complicated by many factors: technology integration, change control, and other risk and control issues.

**“We have had a lot of technical challenges with different platforms and discovered that some platforms are not very robot friendly,”** says Jenny Dahlström, head of Robotic Implementation for Handelsbanken Capital Markets, a boutique investment banking firm. **“We faced problems with traceability, access rights, and firewalls.”**

**Figure 12. Share of organizations facing technology challenges in intelligent automation implementation**



**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February –March 2018, N=750 companies



46% of organizations point to the problem of intense competition for talent from digital native firms such as Google, Apple, and Amazon

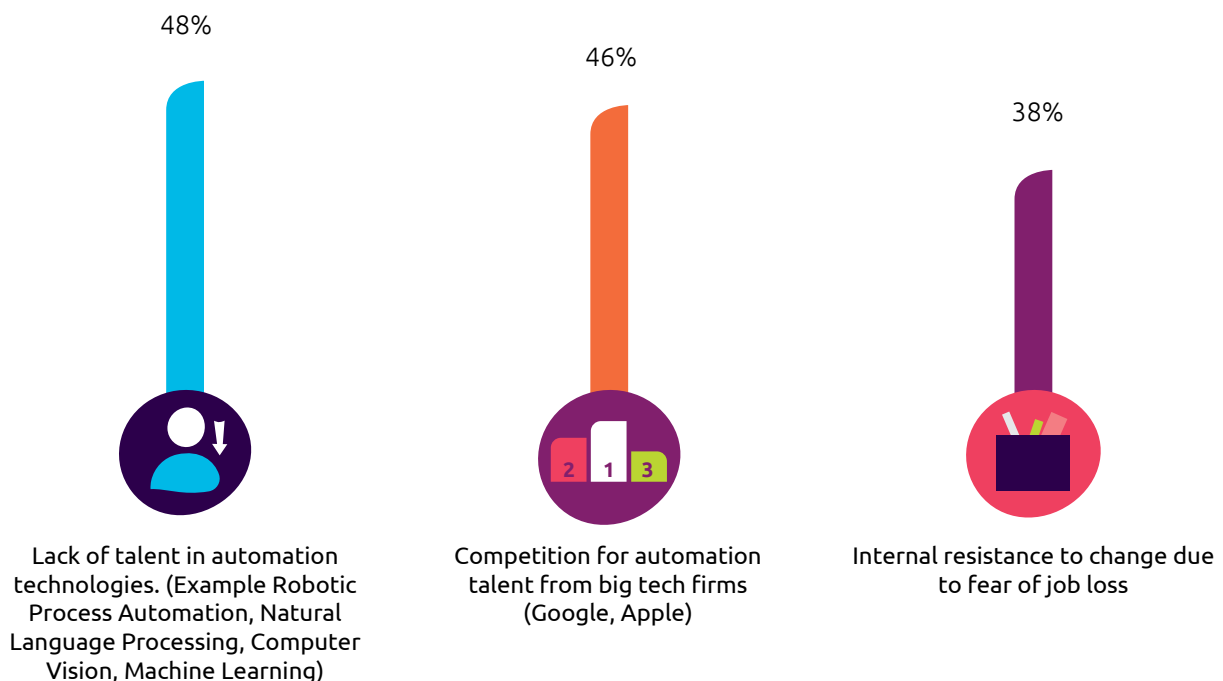
### Talent and people challenges

**Lack of automation talent:** Successful automation deployment and scaling-up require talent with a deep understanding of RPA and AI technologies and their implementation. Close to half (48%) say that they struggle to find the right resources. *“When recruiting for automation talent, we look for both an element of creativity and also skills in business and process analysis,”* said Gina Gray, commercial director, Celaton, an artificial intelligence solutions company. *“This is to be able to look at a business problem and determine the best techniques and algorithms to use to deliver efficiencies within the process plus deliver the*

*required outcome. Finding talent with combination of these two skills is very difficult.”* Fierce competition for talent is part of the problem, with 46% of organizations pointing to the problem of intense competition for talent from digital native firms such as Google, Apple, and Amazon (Figure 13).

**Internal resistance:** In more than a third of organizations, employees are reluctant to embrace automation because they see it as a potential threat to their livelihood. Failing to overcome resistance will slow implementation and undermine objectives.

**Figure 13. Share of organizations facing talent-related challenges in implementing intelligent automation initiative**



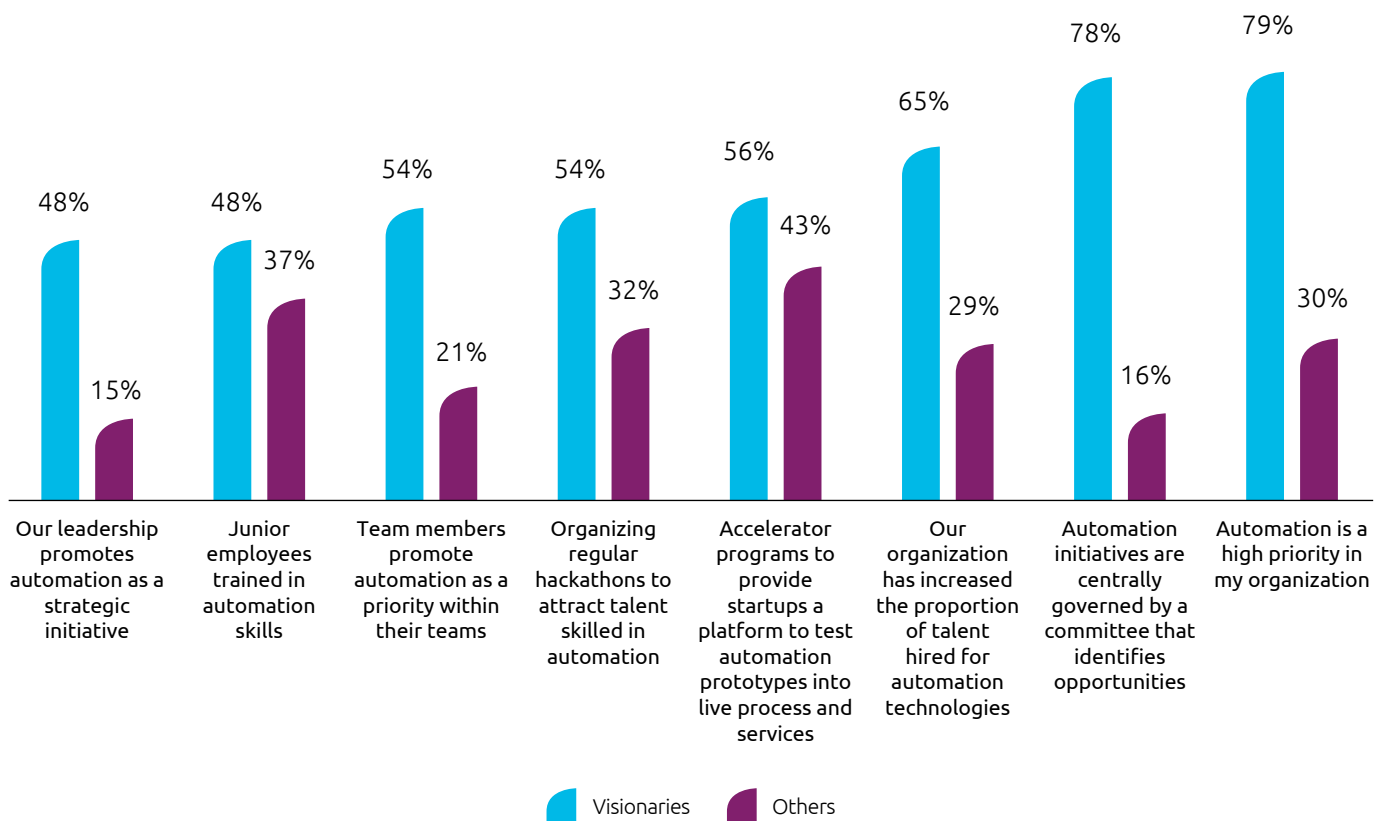
**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February –March 2018, N=750 companies

# Scaling up intelligent automation to drive growth

We wanted to understand what characterizes organizations that had successfully scaled up intelligent automation. We identified a leader group (11% of the sample), which we call the *Visionaries*, who have taken 50% or more automation use cases from pilot to scale and achieved significant value as opposed to rest of the sample who have taken 6% of use cases from pilot to scale. We found 62% of Visionaries achieved a greater-than-average revenue uplift, compared with 42% of others.

The characteristics of Visionaries provide important pointers about the building blocks of an automation transformation journey (Figure 14). Visionaries promote automation as a strategic initiative and transform processes, talent and operating model through a roadmap.

**Figure 14. Characteristics Of Visionaries**



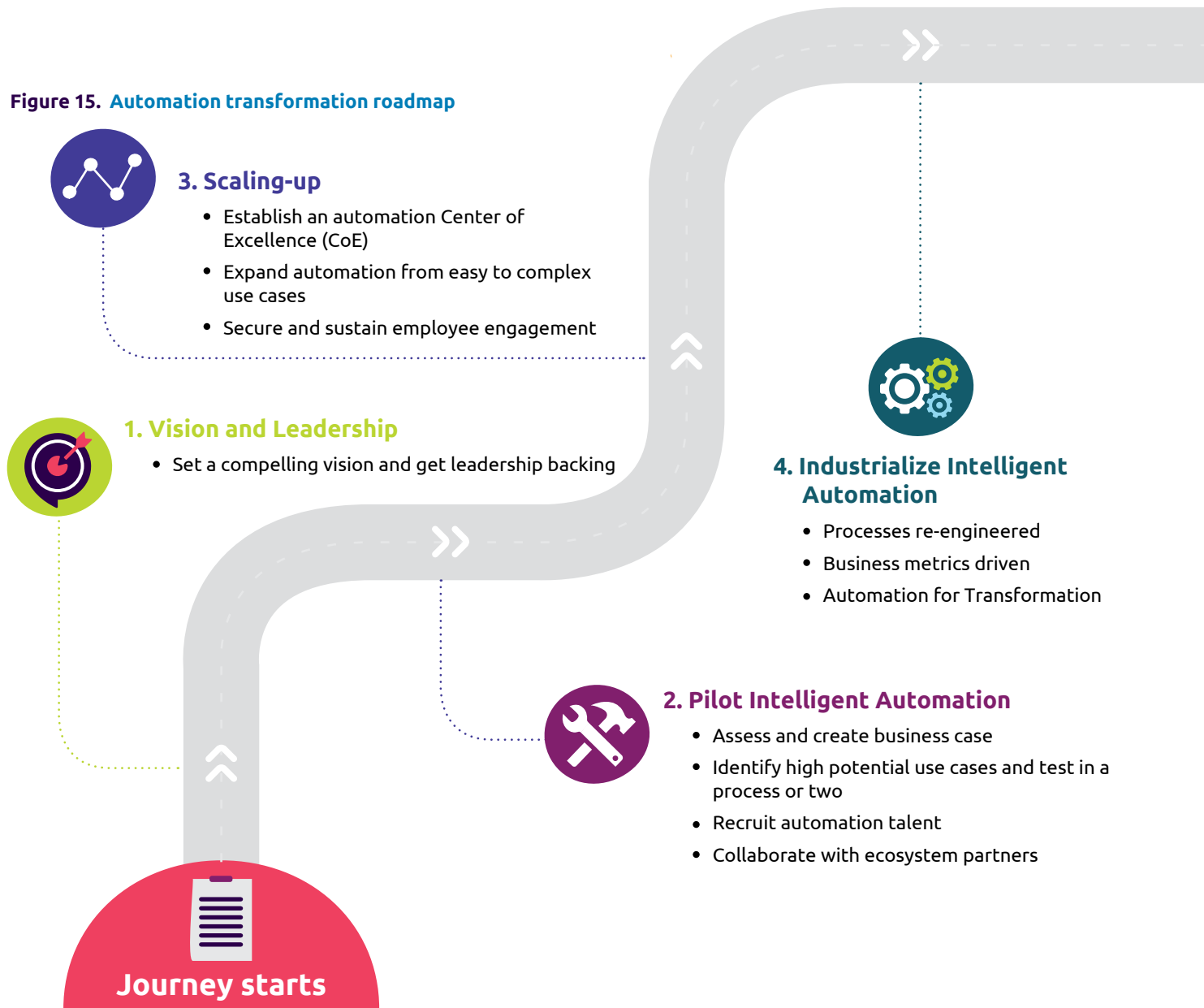
**Source:** Capgemini Digital Transformation Institute survey, Automation in Financial Services Survey; February –March 2018, N=750 companies, N=81 Visionary organizations, 669 Others

## Developing a roadmap for automation transformation

To embrace the full benefits of intelligent automation, organizations need to develop a high-level roadmap setting

out the implementation sequencing of the automation-transformation journey (Figure 15).

Figure 15. Automation transformation roadmap



## 1. Vision and Leadership

By establishing a clear and compelling vision, organizations demonstrate that intelligent automation is a strategic imperative and are able to answer critical questions. What is it that the organization is trying to achieve through automation—driving growth, cutting down costs, or both? What are the business problems that the organization is trying

to solve? A compelling vision also helps secure leadership support and backing. **“Automation is a top priority for our CEO and top management,”** said Handelsbanken’s Jenny Dahlström. **“They are very interested in automation and have high expectations of it. We update top management every two weeks on what we are doing.”**

## 2. Pilot Intelligent Automation

### Create the business case

The automation business case will need to assess the impact on transaction processing time and employee time saved and consider variables such as the volume of transactions or the number of exceptions in a specific process. We found that 70% of Visionaries consider the volume of transactions in a process

as a parameter to select automation initiatives, compared to just 22% of other organizations. Similarly, the number of exceptions within a process that may require human intervention adds to the automation complexity. Yet, only 24% of others consider exceptions and human intervention

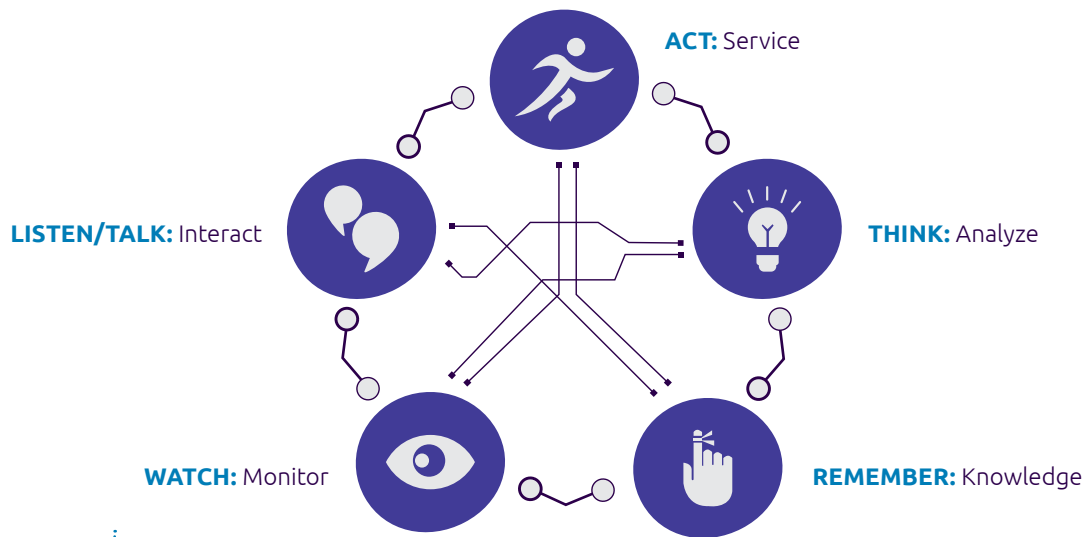


79% of Visionaries say automation is a high priority in their organization compared to 30% of others

in a process as a parameter to select an automation initiative compared to 73% of Visionaries. The assessment also helps to identify the processes where AI would have significant impact, and those where RPA might be the best solution.

Our “Five Senses of Intelligent Automation” framework helps organizations make the right impact assessment for intelligent automation (Figure 16).

**Figure 16. Five Senses of Intelligent Automation \***



**WATCH:** Monitor

This is the ability to watch and record key business data. It is essentially used to create knowledge.

**Practical Examples**

IoT, CCTV, Server logs



**LISTEN/TALK:** Interact

This is the ability to listen, read, talk, write and respond to users. The aim here is for technology to ensure that the interaction feels intuitive and your customer is always happy – just as they are when they deal with a pleasant human representative.

**Practical Examples**

Chatbots, Virtual Agents



**ACT:** Service

This area uses technology to complete processes and tasks. You’ve seen robots working on an assembly line – but now we’re moving them into your office.

**Practical Examples**

IT Process Automation/NLP/ RPA/ Service orchestration



**THINK:** Analyze

This is the ability to detect patterns and recognize trends. It applies algorithms to knowledge to determine the appropriate action or predict future consequences.

**Practical Examples**

Machine/Deep learning, Algorithms, Neural networks, Cognitive computing



**REMEMBER:** Knowledge

This is about being able to store and find information effectively within your business using components like databases and search engines.

**Practical Examples**

AI and Knowledge Extraction algorithms

**Source:** Capgemini Automation Drive Framework




\* The Five Senses of Intelligent Automation framework was introduced as a unique Capgemini methodology bridging human and artificial intelligence through a mix of senses, experiences and knowledge that combine to create intelligent automation solutions, and deliver responsive, relevant, and intuitive user experiences.

## Focus on low-hanging fruit

Organizations need to focus their efforts on use cases that meet two criteria. First, they are not too complex to implement. Second, they deliver value with a short payback.

Figure 17 illustrates *low-hanging fruit* use cases across segments from our research that organizations should pilot initially before moving to more complex use cases.

**Figure 17. Low hanging fruit use cases by segment**

Sector	Low hanging fruit use cases
 <b>Retail and commercial banks</b>	<ul style="list-style-type: none"> <li>• Payments reconciliation automation</li> <li>• Customer query analysis: Classification and processing</li> </ul>
 <b>Capital markets</b>	<ul style="list-style-type: none"> <li>• Account servicing automation</li> <li>• Trade execution automation</li> </ul>
 <b>Insurance</b>	<ul style="list-style-type: none"> <li>• Revenue optimization platform</li> <li>• Pricing optimization</li> <li>• Automated rate and quote</li> <li>• Underwriting process automation</li> <li>• Automated billing with multiple payment options</li> <li>• Automated processing of policy servicing request (financial and non-financial)</li> <li>• Policy renewal/Premium reminder process automation</li> <li>• Claims management/ Claims payment process automation</li> <li>• Payout calculation automation</li> <li>• Automated claims data error inspection and correction</li> <li>• Account statement generation automation</li> <li>• Chatbots for customer queries</li> <li>• BI Reporting automation</li> <li>• Sales conversion automation</li> </ul>

## Attract automation talent through hackathons

In our research, we found that 65% of Visionaries have increased the proportion of hires who focus on automation technologies, compared to 29% of others. They use innovative approaches to attract talent, with 54% regularly organizing hackathons. Visionaries also empower employees

with training: 48% train junior employees in automation technologies like RPA, NLP, computer vision and biometric intelligence, and machine learning, compared to 37% of other organizations.



56% of Visionaries run accelerator programs to give FinTechs a platform to test automation prototypes with live processes and services

### Collaborate with ecosystem partners through accelerator programs

Because developing in-house platforms can be time-consuming and costly, organizations should engage with start-ups and vendors early in the journey. **“It’s very hard to build a platform at scale with a lot of integrated machine-learning components,”** says Adrien Cipel, VP Sales EMEA, WorkFusion, an enterprise business processes automation firm. **“This is not something you do in two days! It took substantial VC funding and R&D effort for WorkFusion to build its platform combining AI, OCR, and people.”**

We found over half of Visionaries (56%) run accelerator programs to give FinTechs a platform to test automation prototypes with live processes and services. Engaging with FinTechs through accelerator programs can be a win-win for both parties. The parent firms get access to ready-to-deploy automation platforms in a short time. The FinTechs get access to the parent’s processes and data to test and fine-tune their platforms.

## 3. Scaling-up

### Establish an automation CoE

Setting up an automation center of excellence (CoE) early in the journey boosts your chances of seeing enterprise-wide adoption as a centralized team focusing on end-to-end automation implementation ensures similar processes across business units are automated quickly and benchmarked to derive more value. **“The CoE is a centralized team supporting the entire organization,”** explains Jose Ordinas Lewis, head, Robotic Automation Center, Swiss Re. **“It works with the different business units to develop automation strategies**

**related to their business processes and designs and implements robotic automation to support that strategy.”** The CoE also closely monitors implementation – from proof-of-concept to full implementation – with a strong focus on ensuring benefits outweigh the investment. To promote effective collaboration with the CoE, organizations should consider incentivizing functions based on business benefits derived from implementation of intelligent automation.

### Expand automation from easy to complex use cases

Organizations need to put in place a transformation program to scale up successes from pilots of easy use cases to complex use cases. A judicious approach is to begin by tackling *Low-Hanging Fruit* within a process before moving on to tackle *Early*

*Wins* – medium to highly complex use cases with fast payback (Figure 10). Implementation based on a transformation approach will ensure that an entire process is automated and not just few tasks within it.

### Secure and sustain employee engagement

Organizations need to clearly communicate the benefits of automation and how it can enhance people’s roles. **“Everyone doesn’t like bots and some people get scared when they hear about it,”** said Handelsbanken’s Jenny Dahlström. **“It is important to work with the team to explain that it is not a threat but an opportunity.”** Part of the upside will be the

speed at which people can do their jobs, rather than their jobs being under threat. **“I don’t think the workforce is going to shrink. What’s going to happen is that due to automation people are going to increase the velocity of the work they’re doing,”** says Chris Cheatham, CEO RiskGenius, an AI-based insurance underwriting automation startup.

## 4. Industrialize Intelligent Automation

Organizations need to view automation as a coherent transformation program rather than a series of opportunistic, ad-hoc, and discrete projects. A smarter, holistic approach

ensures the organization reengineers processes to remove exceptions and that benefits are measured at an enterprise level rather than at a use case or process level.





# Conclusion

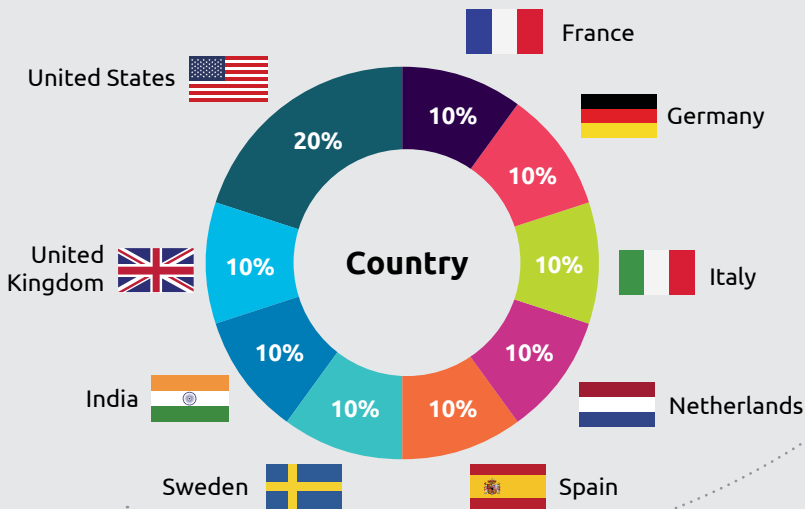
Financial services firms face intense competition. In this environment, operating model innovation is critical as firms seek a sustainable competitive edge. While organizations have driven significant efficiency gains through RPA, a new suite of emerging technologies offers an exciting opportunity to rethink the industry's operating model, drive efficiency and unlock value in terms of productivity and customer satisfaction. However, our research shows that many struggle to make a success of intelligent automation, failing to achieve scale and drive value. Enterprise leaders need complete clarity on the strategic rationale for intelligent automation, driving it as a transformation program and tackling critical challenges head-on, from talent to ecosystem. Initiatives that are undertaken in silos, or which only scratch the surface of what is possible, will disappoint. A comprehensive and detailed program with feedback loops and iterative steps is the only route to securing the considerable potential achievable with a full intelligent automation transformation.

# Research methodology

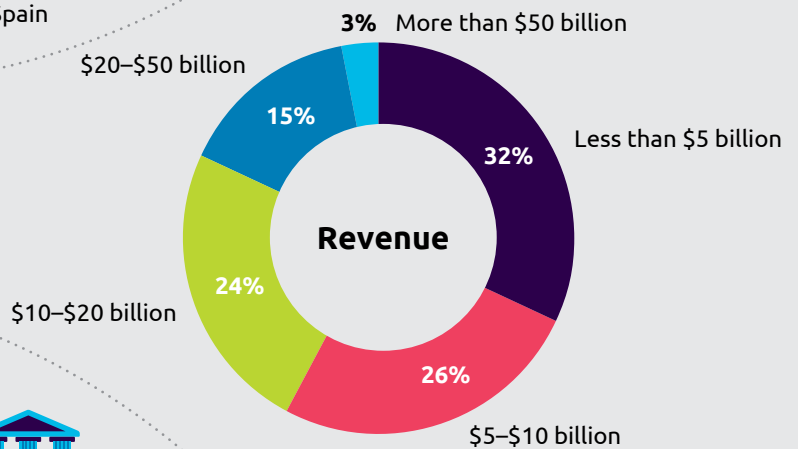
We surveyed 1,500 senior executives from 750 global organizations across nine countries. In each organization, we surveyed a senior automation executive with high involvement in automation initiatives implementation and a senior business executive with high involvement in the business decision-making process.

The sectors we focused on were retail and commercial banks, capital markets – and life and non-life insurance. Of the organizations, 42% had global revenues greater than \$10 billion.

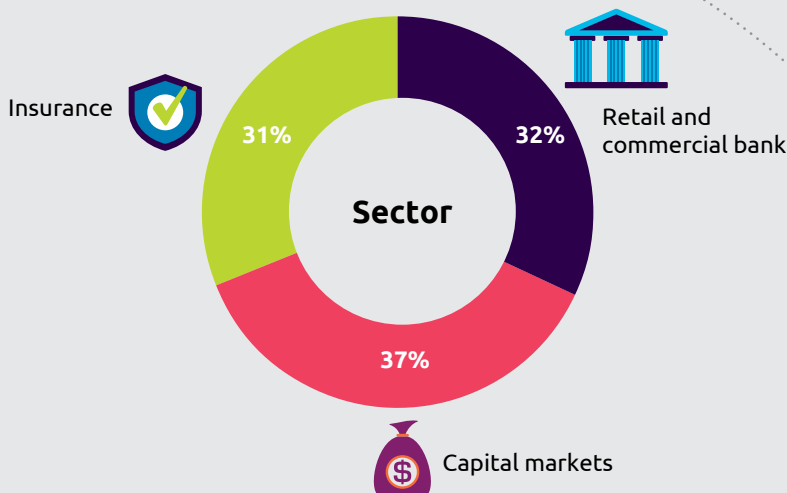
**Figure 18. Organizations by country**



**Figure 19. Organizations by revenue**



**Figure 20. Organizations by sector**



We also conducted in-depth focus interview of 10 senior executives from automation field from financial services firms. We also interviewed CEO's and senior executives from start-ups and vendors focused on automation and artificial intelligence.

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The Digital Transformation Institute is Capgemini's in-house think-tank on all things digital. The Institute publishes research on the impact of digital technologies on large traditional businesses. The team draws on the worldwide network of Capgemini experts and works closely with academic and technology partners. The Institute has dedicated research centers in the United Kingdom, United States and India.

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## Increase Revenue and Provide an Enhanced Customer Experience with Capgemini's Automation Drive

Today's digital world is all about agility. The increased use of automation processes in financial services has reduced operational costs and enhanced process efficiency. But financial services firms are now looking to gain more value from automation. With BigTechs potentially entering the financial services industry and attracting market share, incumbent firms must discover new and innovative ways to remain competitive.

As a result, many organizations are shifting from basic automation to **Intelligent Automation**, defined as the best combination of Robotic Process Automation (RPA), Artificial Intelligence (AI) and Business Process Optimization, applied together to achieve business objectives. While basic automation reliably reduces costs and increases efficiency, Intelligent Automation brings intuition into the picture to increase customer satisfaction and drive revenue growth.

**Automation Drive** is Capgemini's comprehensive and dynamic suite of tools, expertise and services that embraces the full spectrum of what Intelligent Automation has to offer – from monitoring, robotics and orchestration services to advanced artificial intelligence and cognition. The solution has an immediate impact on business, bringing innovative services as well as speed and scalability to business and IT processes.

Automation Drive is based on "**Five Senses of Intelligent Automation**," our unique framework that amplifies people and business with Intelligent Automation solutions. Our approach is built on three guiding principles: a Design-for-automation-first mindset, Strategizing to combine best-in-class partner technologies with Capgemini IP to create unique solutions for our client's exact needs, and centering Knowledge as the currency of Intelligent Automation, cultivated through intuitive interactions and continuous learning experiences. Automation Drive offers an innovative portfolio of services and solutions with a strong business and technology edge, spanning the full life-cycle:

**Advise:** to define, plan and design your unique Intelligent Automation **strategy and roadmap**

**Deliver:** to transform your business operation with our **implementation services**

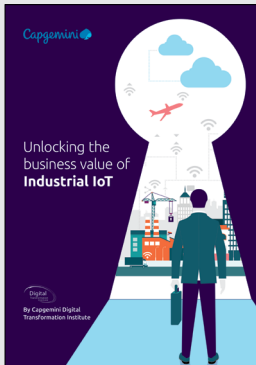
**Operate:** to manage, optimize and maintain your processes with our **run services**

In augmenting your Intelligent Automation journey, we offer a series of powerful Automation Drive enablers to realize standardization, industrialization and agility for your projects. With our prize-awarded **ESOAR methodology** we help you successfully transform your business by eliminating waste and barriers, **standardizing** processes, **optimizing** the IT landscape, and **automating** and **robotizing** process and functions.

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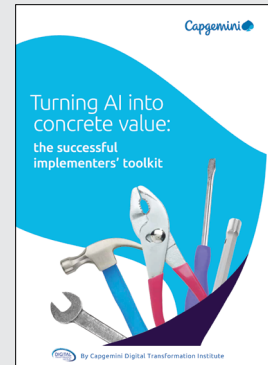
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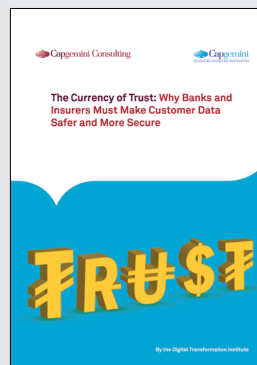
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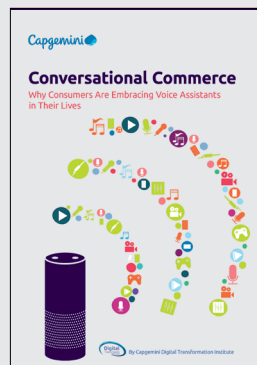
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