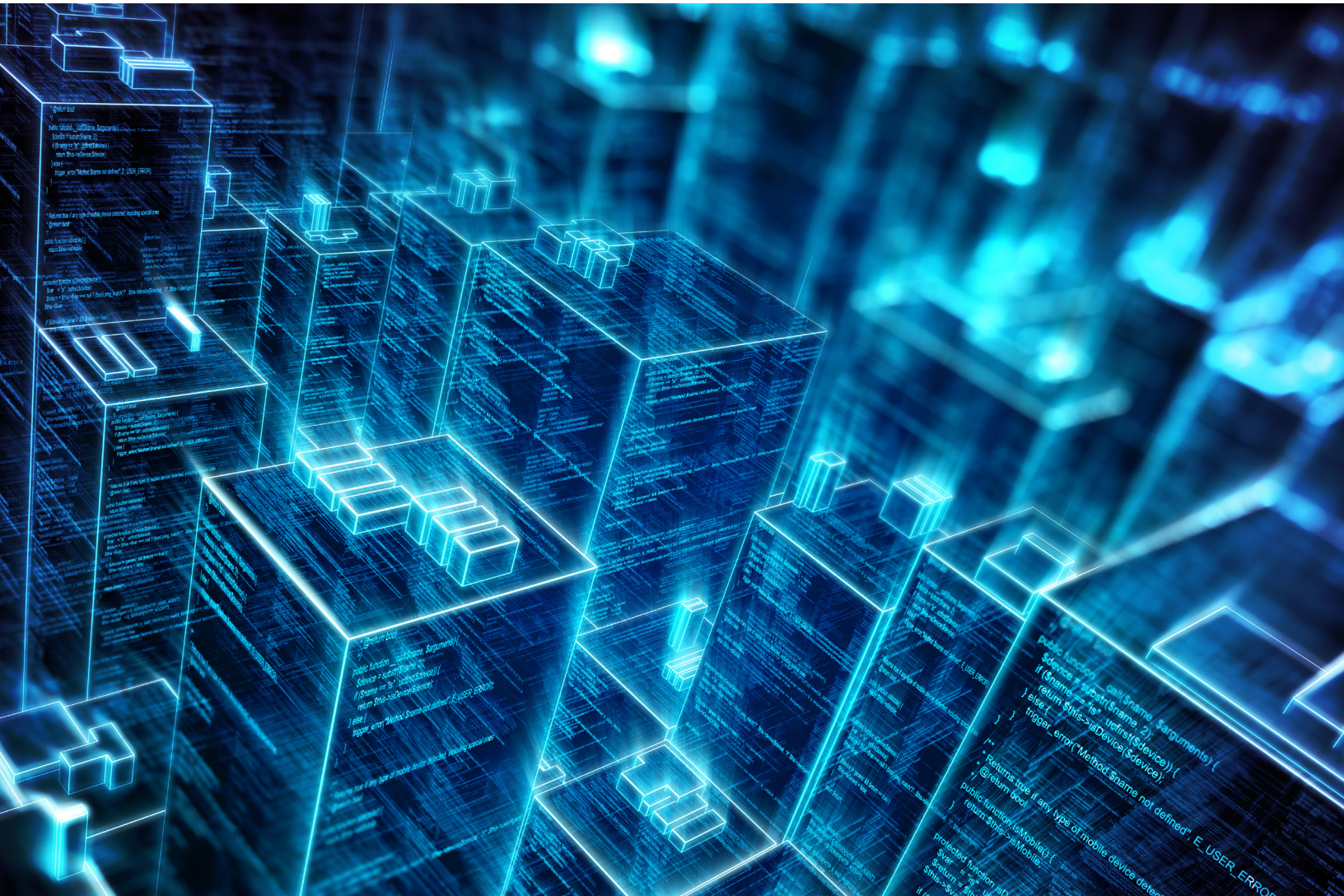
Cognizant

Digital Operations

Financial services automation: Taking off the training wheels

Process automation is vital to banking's future, yet many financial institutions are struggling to move beyond early proofs of concept, our latest research reveals. To realize the promise of automation, financial institutions need to transcend technological myopia, focus on end-to-end business function innovation, and proactively address essential security challenges and risk.



Executive summary

Nearly two-thirds (65%) of financial institution (FI) executives in North America believe their organizations are still in the early stages of identifying and testing process automation proof-of-concept projects, if they've done anything at all.

Yet nearly all of the 302 industry leaders who participated in our recent study (90%) appear convinced that process automation in all shapes and forms is important or critical to their business now and in the future. (To see how we defined automation for the study, see Quick Take, page 6. For more on the methodology, see page 29).

Why is adoption of automation so slow for a capability deemed so critical? Our findings reveal five major factors behind the inertia.

- **Automation isn't about technology overhaul – but many firms are treating it like it is**. This misunderstanding is hindering business leaders' ability to take advantage of what, in many cases, is minimal coding required to adapt non-invasive process automation platforms to interact with legacy systems.
- **FIs are likely under-resourcing their automation efforts**. This is a critical shortcoming given the sheer scale of opportunity and the amount of business process knowledge it takes to capture it.
- **FIs are having difficulty dealing with security and risk**. Not surprisingly, the chief barriers to moving forward with automation of key processes include uncertainty and lack of standardization around privacy, security, legal and compliance issues.
- **FIs are still figuring out the post-deployment operating model for bots**. Training, reassignment and traditional change management are a given. But bots also introduce a human resources factor to the equation, exposing a gap in their ongoing management.
- **There's a major disconnect between the benefits** IT departments expect to enable and those that business users expect to realize. These disconnects complicate cost/benefit analysis, internal buy-in and the evaluation of results – bringing the lack of upfront business involvement full circle.

All of these challenges are solvable. Banks have a number of proven automation adoption strategies at their disposal, from increasing cross-functional collaboration and execution, to achieving "quick wins" via automation of small (but painful) tasks. What's critical to moving forward is an understanding that automation is not a silver bullet. Instead, FIs must view automation as a vital component of an overall digital business strategy that over time will include cognitive computing, human-centric design, the Internet of Things (IoT) and blockchain in the mix.

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Key findings

Our study reveals the factors inhibiting FIs from more deeply embracing automation tools and techniques, as well as actions they can take to break the impasse.

- **Business users remain on the sidelines of automation**. A majority of respondents (55%) said the automation roadmap belongs solely to the IT group or IT executive (CIO, CTO, etc.). Only 21% said the expert in charge of their automation initiative hails from business operations or units. Firms seem to view automation as a technology endeavor, even though automation is a non-invasive platform with no significant impact on existing systems or data.

  Although many respondents are engaging external experts to help with automation, for the most part these resources originate from a technology organization of platform vendors and start-ups. This makes it less likely that firms are pursuing automation with an adequate understanding of key factors, such as how process change and digitization affects other areas of the organization, potential liabilities that ensue from automation and whether such initiatives truly support business goals.

- **When it comes to strategy, firms are pulling their punches**. Nearly all respondents (95%) said they either already have an automation strategy or are in the midst of defining one. Significant majorities believe they have all the pieces in place to pursue automation. Most have either assessed the internal skills or talent they need for an automation initiative or are in the process of doing so.

  However, in our view, respondents may be overly optimistic. For instance, roughly half indicated they possess insufficient internal know-how across a range of critical areas, from process optimization to the technology itself. In addition, a majority (57%) said their automation teams have fewer than 20 people, indicating a level of resourcing inconsistent with a comprehensive approach. And nearly three-quarters (74%) said their annual budget for automation is relatively modest.

There's also evidence that firms are not coordinating automation across the enterprise. Just 16% of respondents said a center of excellence (CoE) owns the automation roadmap in their organization, implying a lack of focus, governance and visibility. Meanwhile, 12% of respondents said individual business teams own the automation roadmap, indicating a siloed approach to automation that results in higher overall costs to the FI.

- Automation adoption must clear security and risk hurdles. Four out of five respondents (81%) said privacy and security are top external barriers to automation adoption; 56% noted the same about legal and regulatory issues. Data security, legal and compliance issues were cited as common barriers internally as well.

  Security, compliance and risk management are among the most challenging elements of any automation project, respondents noted. While FIs possess compliance and risk expertise, they need help applying these elements to automation. Further, because mature products don't yet exist for bot security, platform vendors leave it to the FIs to decide how they want to handle security and compliance. Uncertainties around security and risk may be impeding FIs' ability to identify automation use cases and move beyond the early or proof-of-concept (POC) stages.

- Post-automation, FIs face uncharted terrain. Respondents seem confident in the impact of automation on business processes and human personnel. Half expect a significant impact on jobs. Even more said that, nonetheless, they've already identified new opportunities for displaced employees, as well as the training for other affected employees.

  But this confidence falters when it comes to managing the post-automation environment. For instance, 42% said they have no well-defined plan for if a bot fails or encounters security issues, how quickly an alert would be sent and whether a human would be available to respond. IT change management traditionally emphasizes user adoption, leaving an unanswered question about what to do once adoption is complete and a bot breaks down. Does the business repair it – or IT?

- Disconnects exist over how to capture and evaluate automation's benefits. Not surprisingly, a large majority of respondents (90%) believe RPA and cognitive technologies are important to the future of their business. However, only 9% indicated that they expect to benefit from automation.

  This raises several possibilities, including a disconnect between what IT believes are automation's key benefits and what business units seek. For example, nearly half of respondents believe automation will improve customer service, even though this is something automation is unlikely to enable on its own. Also, only 1% said the number-one benefit of automation is to free full-time employees (FTEs) for more constructive and creative work, even though this may be exactly what many understaffed business units hope to achieve.

  In addition, while nearly all respondents said they expect cost savings from automation, four out of five believe the amount will be less than 30%. The reason for this is likely that automation's

reach is today somewhat limited. In fact, most available and less costly automation solutions are non-cognitive and can automate only simple processes. But a comprehensive automation implementation effort could eventually involve the deployment of thousands of bots across end-to-end processes, resulting in more significant and compounded cost savings.

- Financial institutions have numerous ways of overcoming these conditions and jumpstarting their automation efforts. The first step is to identify automation as a top strategic initiative and appoint a seasoned business executive as automation leader. FIs should also support this leader with a task force to address issues related to privacy, security and regulatory compliance.

  Next, identify strong partners that can help quickly assess and take advantage of emerging intelligent automation technologies. By involving the business units, all parties can collaborate on solutions that add strong business value.

  Finally, chart the path forward with a vision of what the automation-enhanced operations will look like, a plan for managing change, training to address skill gaps and a performance model to aid managers in producing results from their robot-enhanced staffs.

As FIs master task-level automation and gauge automation's short-term potential, it will be important to keep an eye on the horizon. FIs need to look beyond simple rule-based automation and start identifying opportunities in line with larger business goals – an approach that will likely include advanced artificial intelligence (AI) technologies as the financial services industry continues its march into the future.

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Quick take

An automation primer

In the context of our survey, automation is a collective term for two types of technology: robotic process automation (RPA) and cognitive computing.

RPA is software that mimics routine ways in which humans interact with data and IT systems. For example, RPA can extract information from a credit card application, validate it and submit it for approval. From logging in to entering data and even scanning and sending email messages, RPA is aimed at speeding up processing times – and, not incidentally, relieving people of some of the more mundane aspects of their work.

What about tasks that aren't so routine? That's where cognitive computing steps in. On top of RPA capabilities, cognitive computing can infer meaningful information from large amounts of data. That gives it the ability to automate tasks, such as document intake processes, Anti-Money Laundering (AML) and risk analysis that require judgment and interaction with data sources and systems.

Overall, automation – both RPA and cognitive computing – involves software that learns what to do by observing human rules or activity. RPA is more appropriate for tasks that follow a finite set of instructions, while cognitive computing can handle more complicated scenarios where inference is required.

Examining automation's core

A multimillion-dollar commercial loan is approved in 45 minutes. A voice command to your intelligent personal assistant pays your credit card bill. A trade settlement bot reduces the reconciliation time for a failed transaction from several minutes to a quarter of a second, and with machine learning, it also predicts the possibility of transaction failure.

Financial institutions have started putting automation to work – and early results are revealing. After studying pilot projects at 10 banks and insurers, analyst firm IDC concluded that RPA on its own can yield savings of 30% to 60%. What's more, implementation times are just six to 12 weeks, with firms breaking even on their technology investment in as little as 10 months.[1]

In light of such advantages, it's tempting to conclude that the industry is in a veritable arms race to take up automation. But that's not the case. In our study, nearly two-thirds of respondents (65%) acknowledged that their organization's automation efforts remain at the early or POC stage – if they've done anything at all.

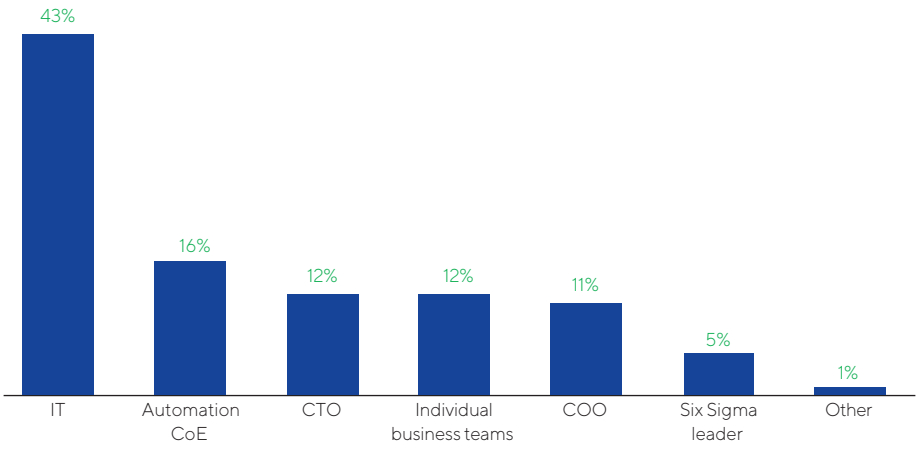
Based on the study and our first-hand experience with our banking clients, we'll cover five key conclusions that explain the impasse the industry has reached with automation adoption. We'll also lay out the findings that led us to those conclusions, and then offer some guidance on how FIs can break that impasse and put their businesses firmly on the path of an automation-enhanced destiny.

Business users on the sidelines

Unpacking the current state of automation in financial services begins with identifying where it lives. According to our study, that's largely with IT – a majority of respondents (55%) said the automation roadmap belongs solely to the IT group or the IT executive (CIO, CTO, etc.). Only 12% said it belongs to the business units (see Figure 1).

Ownership of the automation roadmap

In most respondent organizations, the automation roadmap belongs to the IT group or the CTO.



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 1

Further, most respondents (79%) said they have at least one strong expert or thought leader driving their organization's automation adoption. More often than not, however, this thought leader is not from the business or operational side of the house. Clearly, many appear to view automation as a technology endeavor. To underscore this deduction, most respondents (87% to 89%) said they believe automation has a high impact on IT and data management.

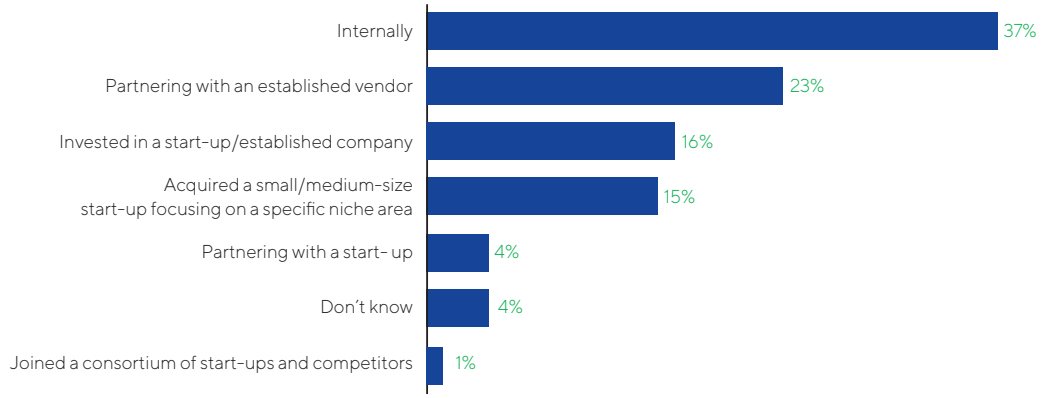
But automation isn't about remaking IT. In fact, one of the most appealing aspects of automation is that it requires minimal engineering and coding, and can be implemented via simple, business-friendly interfaces. It interacts with legacy systems. Implementing an automation application is primarily a matter of having someone in the business train it. In short, automation is an extraordinarily straightforward way for FIs to digitize many manual tasks.

IT does need to know where and how technology is being deployed and managed in the organization. Without partnership from the business, however, it's unclear how fast automation adoption can be – especially in light of an often-heavy IT workload.

Of course, firms could bring in a third party to kick things off and coordinate between IT and the business. And many are engaging outside help. Among respondents, 31% said they're pursuing automation by acquiring or investing in technology companies. Another 27% are partnering with an established vendor or a start-up (see Figure 2).

Routes to automation

A plurality of respondents are pursuing automation internally, while most others are working with outside vendors or taking a stake in a technology company.



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 2

Respondents claimed to be well on their way to assessing skills for their automation initiative.

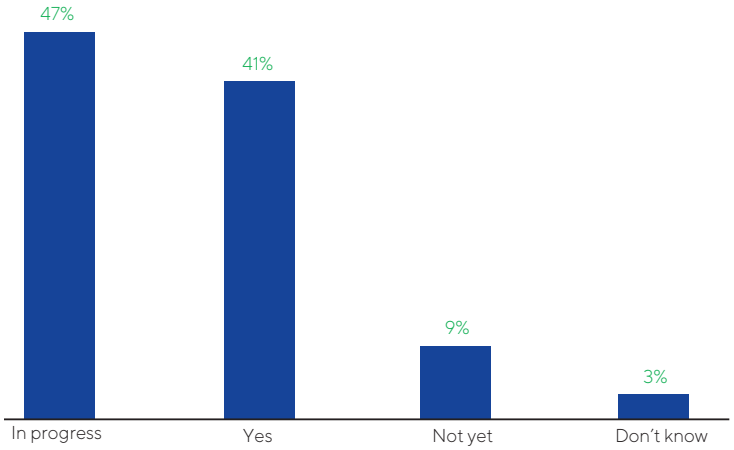
In other words, to the extent FIs are going outside for help, they're mostly working with technology companies. This reduces the likelihood that firms are pursuing automation with an adequate understanding of key factors such as how the process affects other areas of the organization, potential liabilities associated with automation and whether automation actually supports business goals.

Pulled punches on strategy

Nearly all respondents (95%) said they already have an automation strategy or are in the midst of defining one. Asked whether their organization has assessed the internal skills or talent necessary to support an automation initiative, 41% said yes, and another 47% said they're in the process of doing so (see Figure 3).

Talent for an automation initiative

Most have either assessed the skills or talent they need for an automation initiative or are in the process of doing so.



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 3

What's more, significant majorities claimed to have all the pieces in place to pursue automation (see Figure 4).

However, other responses indicate this may be an optimistic view. One tipoff: In any of eight given areas, from process optimization to the technology itself, only about half of respondents believe they have enough expertise to proceed with automation (see Figure 5, next page).

Business readiness

Most respondents have what they need to pursue automation.

Readiness component	Respondents
An identified set of standardized business processes ready for automation	78%
An identified set of business processes to simplify and standardize for automation	75%
A business process transformation team that helps with process simplification and standardization	74%
A clear view of who should lead the automation program	74%
The business processes where automation will augment or replace humans	73%
A communication plan about process automation to manage internal and external stakeholders	72%
Openness to implementing a process automation program in partnership with the current business process service provider	72%
An ability to partner with service providers to augment the process automation program	71%
A defined, time-bound plan to insource automated processes back from the current business process service provider	69%
A defined governance model for managing the process automation service provider	69%
A clear view on who and how automated business processes will be supervised	68%
A well-defined change management process to implement automation	62%

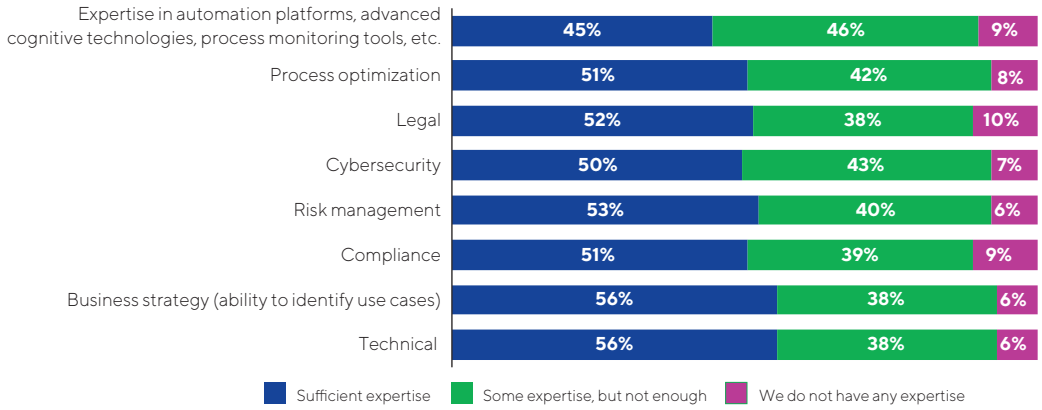
Multiple responses permitted
Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 4

Despite claiming to have all the pieces in place for automation, only about half of respondents believe they have enough expertise to proceed with an initiative.

In addition, a majority of respondents (57%) said their automation teams have fewer than 20 people (see Figure 6). This level of resourcing is inconsistent with a comprehensive approach. For instance, some of the FIs we've worked with on automation adoption have required the involvement of as many as 200 people – often a mix of in-house and outside resources.

Internal automation expertise

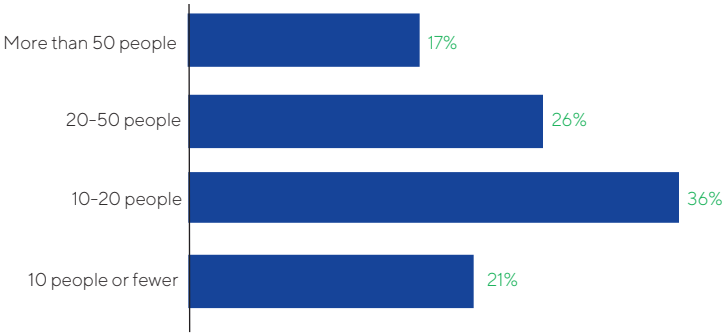
About half of respondents said they possessed insufficient internal know-how across a range of critical areas.



Percentages may not total 100% due to rounding
Response base: 302 business leaders at North America financial institutions
Source: Cognizant
Figure 5

Automation team size

Most respondents said their automation teams consist of fewer than 20 people.



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 6

There are other hints that when it comes to automation, firms are holding back. One is the common absence of a CoE. Revisiting Figure 1 (page 7), only 16% of respondents said their organizations have a CoE that owns its automation roadmap. A CoE gives projects focus and a governance framework. Without one, it becomes difficult to evaluate potential projects and monitor for impact and change. It also becomes harder to determine the people, processes and platforms (i.e., applications) involved with automating the enterprise.

Additionally, looking again at Figure 1, we see instances where individual business teams own the automation roadmap (12%). In other words, those firms are taking a very siloed approach to the advancement of automation, which typically contributes to spiraling costs.

Quick take

Six automation scenarios for banks

FIs looking to energize an automation effort should consider the short-term wins these technologies can deliver. Recently, we've seen banks derive results from automation across a number of functional areas, including:

- **Risk and compliance reporting.** We're working with banks to create fiduciary risk management reporting capabilities, which involves going through multiple email systems, external websites and broker statements to generate reports and highlight anomalies. Banks can automate 90% of these processes, saving significant costs and time.
- **AML and know your customer (KYC).** We've helped several banks automate the processes for inspecting suspicious transactions reported by AML systems. In each instance, automation proved a faster, cheaper alternative to pure-play business process management solutions. Regarding KYC, banks can use an automation solution to quickly bridge the integration gap between disparate systems that users need to access. RPA combined with cognitive computing can also enhance the effectiveness of

both functions by reducing false positives, proactively heading off fraud and digitizing the end-to-end KYC process.

- **Accounting.** Several key accounting and reporting processes require data to be captured from multiple systems on a regular basis. These range from relatively simple financial and management reporting to more specialized functions, such as automating a bank's Fair Valuation of Assets Reporting process. In these cases, we've used a calculation of net asset values for investment funds and created efficiencies in the product control function of investment banks.
- **Mortgages.** Given the number of third-party entities in the mortgage value chain, the significant use of paper and the fragmented nature of the systems, automation can play a key role in providing near-term efficiencies. We're working with multiple lenders in the area of loan origination and servicing, including document preparation, valuations, escrow, underwriting, foreclosure and tax management.
- **Reconciliations.** In most cases, reconciliation is already automated. But the process to investigate and resolve reconciliation breaks remains manual. For several clients, we've used automation with predictive algorithms to reduce exceptions and streamline the resolution process.
- **Front office:** Front-office and contact center staff often need to access multiple applications to work with customers. We're working with several banks to use automation to bring all relevant information from multiple systems to one screen so that support staff can provide effective service.

These six areas aren't the only ones that can benefit from automation. Any rules-based, data-intensive, largely-manual task is worth consideration. Examples include cards and payments, as well as asset and wealth management.

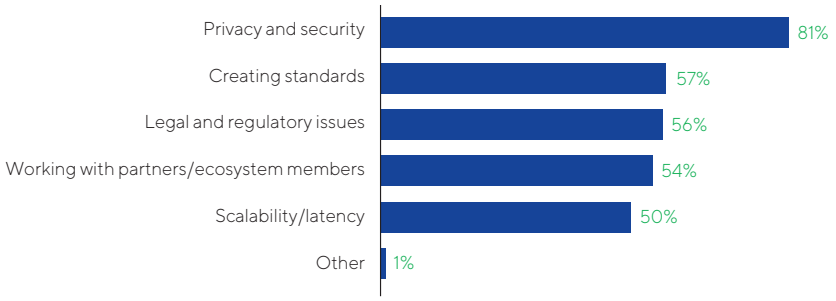
Among respondents, four out of five (81%) said privacy and security is a top external roadblock to adoption, with 56% saying the same about legal and regulatory issues (see Figure 7).

It's highly difficult to overcome security and compliance issues, according to 52% of respondents, with another 39% saying it's moderately difficult. A total of 91% said that risk management and business continuity planning are of high to medium difficulty (see Figure 8).

Lack of expertise may be part of the issue. As revealed in Figure 5 (page 11), only about half of respon-

External roadblocks

Privacy and security top most respondents' lists of external barriers to automation adoption.



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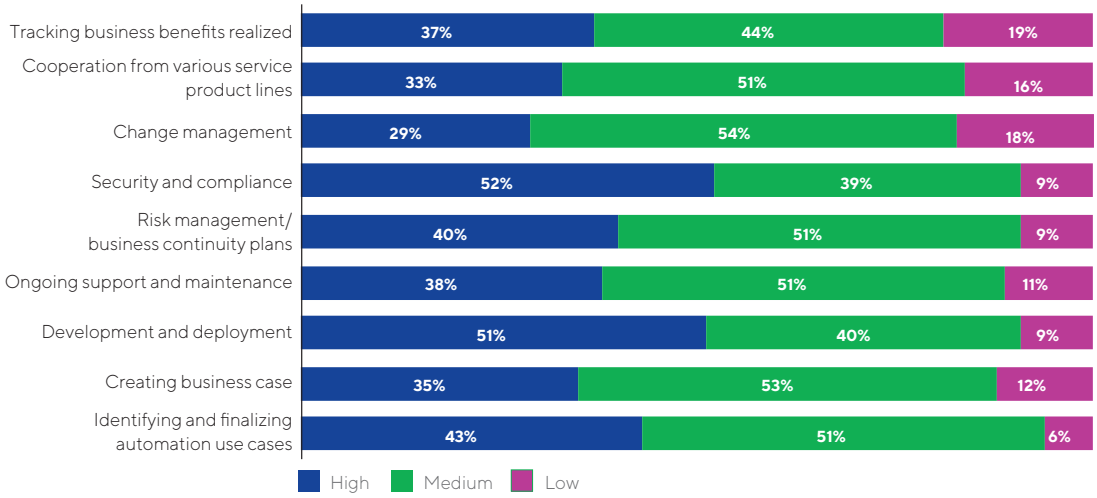
Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 7

Adoption challenges

Security, compliance and risk management are among the most difficult aspects of working on automation projects.



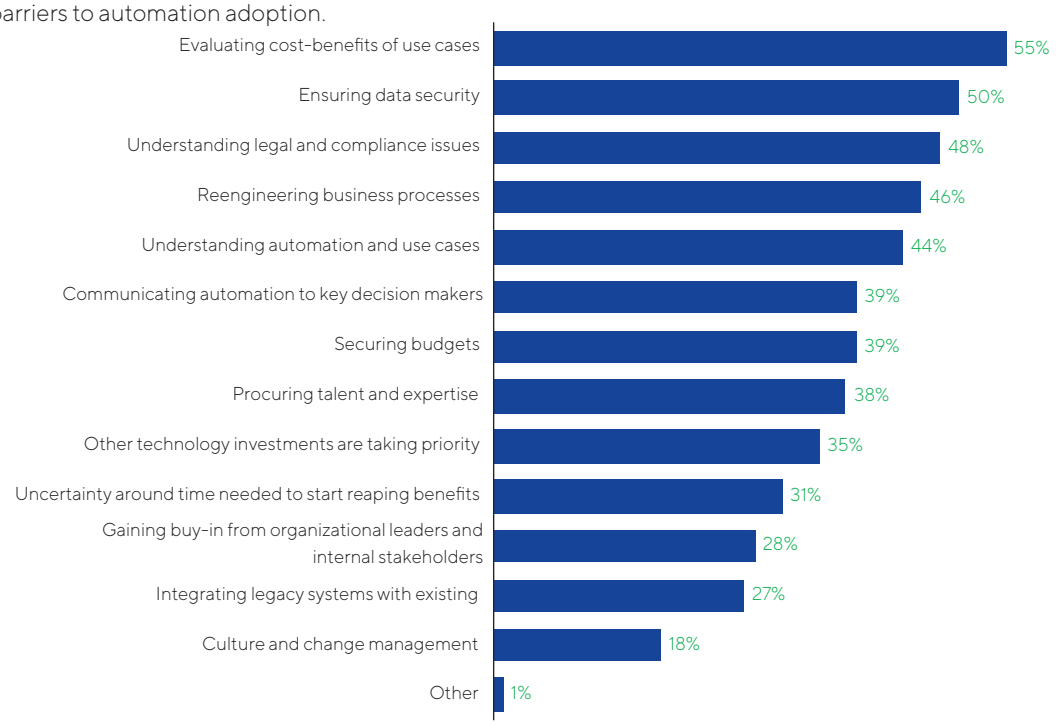
Percentages may not total 100% due to rounding
Multiple responses permitted
Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 8

dents believe their knowledge of compliance, risk management and cybersecurity is strong enough to proceed with automation.

To the extent that cloud-based systems are involved, this concern may be overblown. Third-party service providers typically have security protocols in place that prevent bots from accessing their systems, due to concerns that bots may be vulnerable to hacking. Internally, many FIs have similar concerns about the confidential data that a bot might pass between internal and external systems.

Internal roadblocks

For about half of respondents, security, legal and compliance issues are among the top internal barriers to automation adoption.



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Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 9

It's also worth noting that automation challenges can be interrelated. For instance, concerns about security, compliance and risk management can affect FIs' ability to identify use cases for the technology. In fact, understanding automation use cases is a top concern for about four in 10 respondents, while evaluating use case costs and benefits is a top concern for over half. Data security, legal and compliance issues also figure among the most common automation barriers inside respondent organizations (see Figure 9).

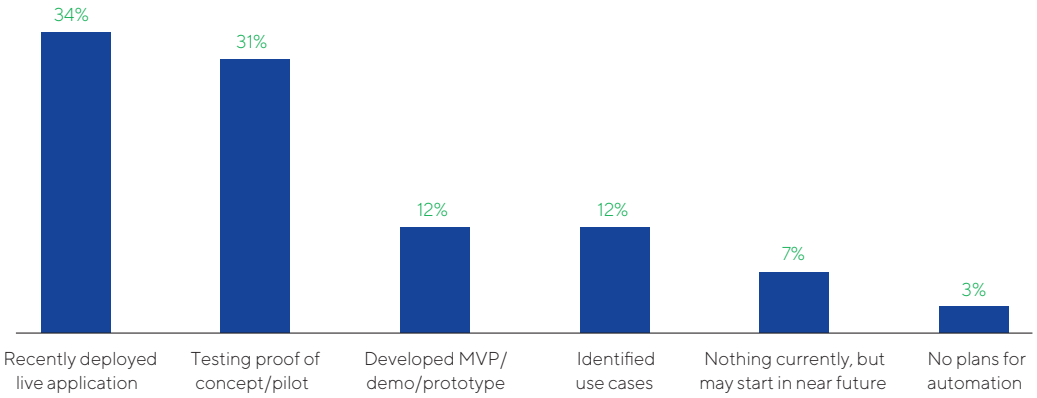
Uncertainties around security and risk may be impeding FIs' ability to identify automation use cases and move beyond the early or POC stages. Indeed, only 34% of respondents reported going live with an RPA or cognitive computing application (see Figure 10, next page).

Uncharted post-automation terrain

As shown in Figure 4 (page 10), nearly three-quarters (73%) of respondents reported that they'd identified the business processes where automation will augment or replace humans. Elsewhere in our survey, we asked respondents to estimate the share of jobs they expect will be automated. About half (49%) believe it will be no less than 5% (see Figure 11).

Progress on automation

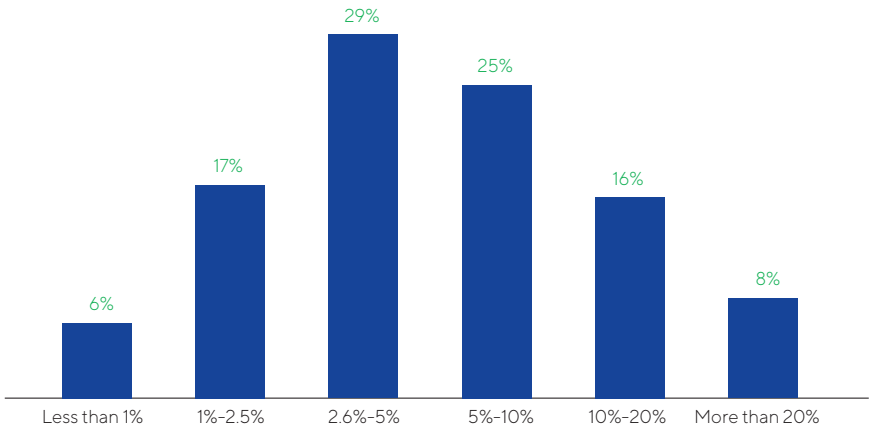
Fully 65% of automation efforts remain at the early or proof-of-concept (POC) stage.



Percentages may not total 100% due to rounding
Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 10

Jobs to be automated

About half of respondents believe automation will eliminate at least 5% of the jobs in their organization.



Percentages may not total 100% due to rounding
Response base: 302 business leaders at North America financial institutions
Source: Cognizant
Figure 11

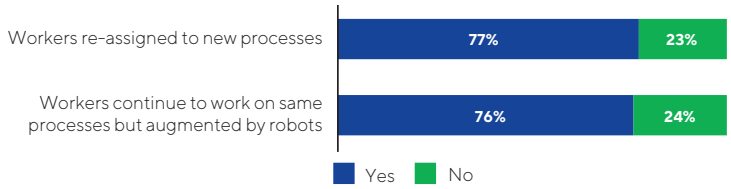
In the spirit of "every solution begets a problem," many jobs in the future will owe their existence to the implementation of automation.

That said, a majority (63%) indicated they'd already identified new opportunities for the employees they expect will be made redundant via automation. Since 90% of respondents are involved with the automation project in their organizations, they're in a better position than many to see the new problems likely to arise in the wake of solving other problems with intelligent machines – problems that people will need to address. In the spirit of "every solution begets a problem," many jobs in the future will owe their existence to the implementation of automation. (For more on this topic, please see our "21 Jobs of the Future" report[2] and our book *What to Do When Machines Do Everything.*[3])

In light of automation's potential to reconfigure jobs, most respondents (77%) rated its effect on people as medium to high. However, about the same proportion indicated they're aware of what training affected employees will need – whether the employee takes on a new role or stays in the old one with a new bot to assist (see Figure 12).

Training for affected employees

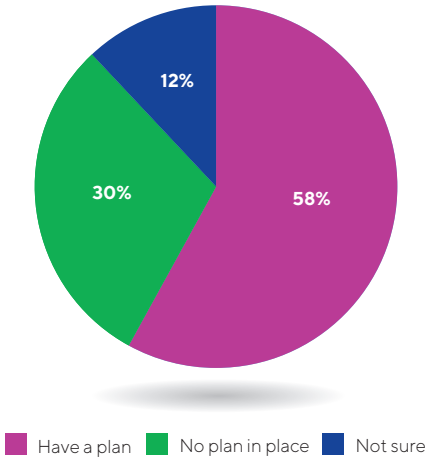
Most respondents have identified the training needs of retained workers who are impacted by automation.



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 12

Contingency plan for bot failure

Forty-two percent of respondents said they lack operating plans for when a bot (without human redundancy) fails to function, or they're unsure if plans are in place.



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 13

At first, it seems that respondents are almost as confident about ongoing management of the post-automation environment. Consider Figure 4 again (page 10): Among respondents, 68% said they had a clear view of how automated business processes will be supervised and who will do the supervision. However, that level of confidence fell to 58% when respondents were specifically asked whether they had a plan for what to do if a bot breaks down and there's no human to back it up (see Figure 13).

This shows that, as is so often the case, the devil is in the details. A high percentage (89%) of respondents said they have created new support policies, governance and controls for automation. And most (64%) said they have a change management strategy to help advance these technologies.

But while IT change management traditionally aims to encourage user adoption, automation upends this approach because it introduces a human resources element. If a bot fails on the job, is it the business's responsibility to set it straight – or is it IT's? Respondents seemed to grasp the dilemma. As Figure 8 (page 14), suggests, respondents believe, unequivocally, that ongoing support and maintenance is among the most challenging aspects of automation projects.

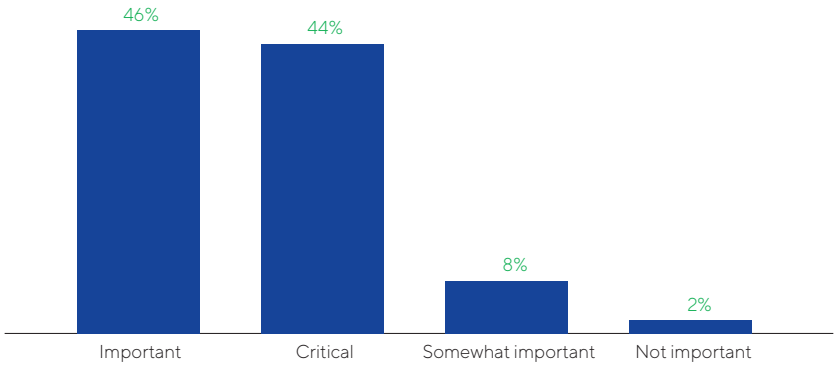
Automation upends traditional IT change management because it introduces a human resources element. If a bot fails on the job, is it the business's responsibility to set it straight – or is it IT's?

Disconnects on automation's benefits

Banks are convinced of the power of automation. Ninety percent of respondents believe RPA and cognitive technologies are important or critical to the future of their business (see Figure 14). Yet only 9% identified themselves as beneficiaries of automation (see Figure 15). This raises the possibility that business units may be unaware of the transformation headed their way – or, if they are, they're not altogether sold on it.

Importance of automation

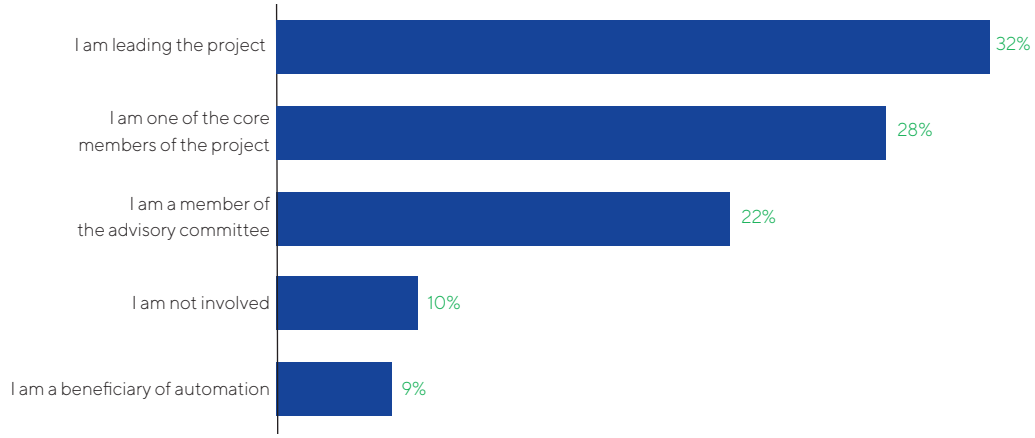
Nearly all respondents believe automation and cognitive technologies are important to the future of their business ...



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 14

Involvement with automation

... but less than one in 10 identify as a beneficiary of the technology.



Percentages may not total 100% due to rounding
Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 15

Automation introduces the opportunity to reimagine the process in the context of a larger business transformation, a concept that operational or business professionals may not yet grasp.

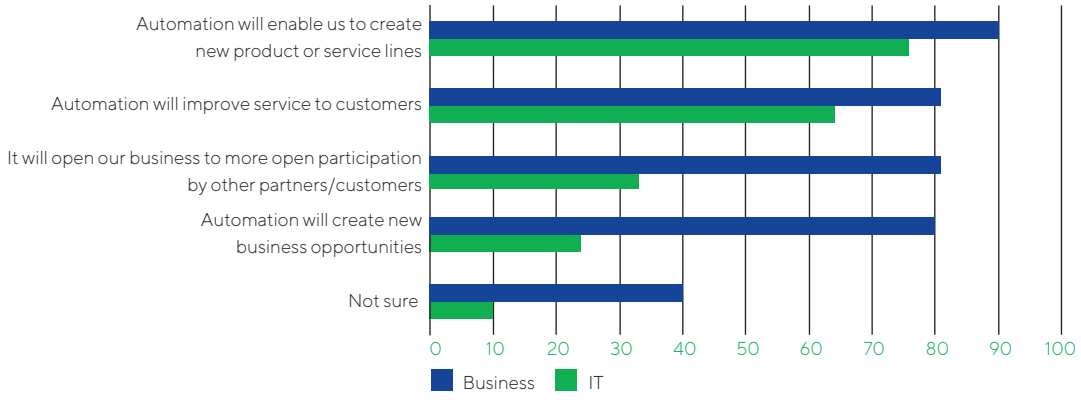
Other findings support a potential disconnect between IT and business users. For instance, consider how respondents believe automation will affect current business models. Nearly half said it will improve customer service, and most of the remaining respondents say it will enable new product or service development, greater partner or customer engagement or new business opportunities. A closer look at the data reveals that respondents from the business are far more likely to anticipate these improvements than are respondents from IT (see Figure 16).

Why the disconnect? Unquestionably, by carrying out data-intensive tasks more quickly and accurately, automation can improve how FIs handle business processes such as customer service, customer and partner engagement, and the development of new offerings. But automation is unlikely to enable these improvements on its own. A more realistic perspective – which IT professionals may be more likely to have – is to look at automation as a key part of end-to-end process optimization. Automation introduces the opportunity to reimagine the process in the context of a larger business transformation, a concept that operational or business professionals may not yet grasp.

Context is important here. While automation can't fix a broken process, it can certainly optimize one that works, and in fairly short order. While it shouldn't be the goal to take an ad hoc approach to automation, a certain number of carefully-planned quick wins is likely to capture the attention and buy-in of business users tired of manual processes that are slowing them down.

The impact disconnect

Respondents from the business are far more optimistic than IT respondents about the impact of automation.



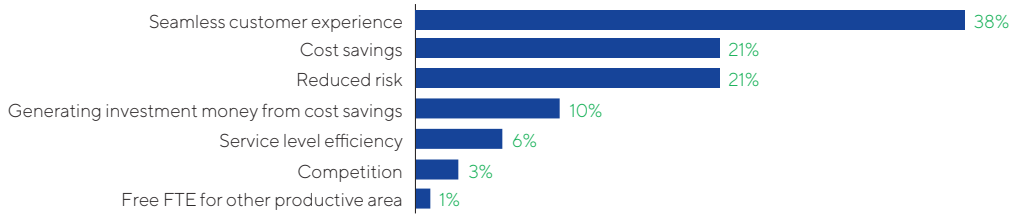
Multiple responses permitted
Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 16

Concerning manual processes, a scant 1% of respondents said the number-one benefit they expect automation to deliver is freeing full-time employees (FTEs) for other productive areas (see Figure 17).

In keeping with that viewpoint, relatively few respondents counted improved record-keeping (24%), faster settlement time (27%) and fewer back-office tasks (35%) among their list of top-five automa-tion benefits (see Figure 18).

Automation's top benefit

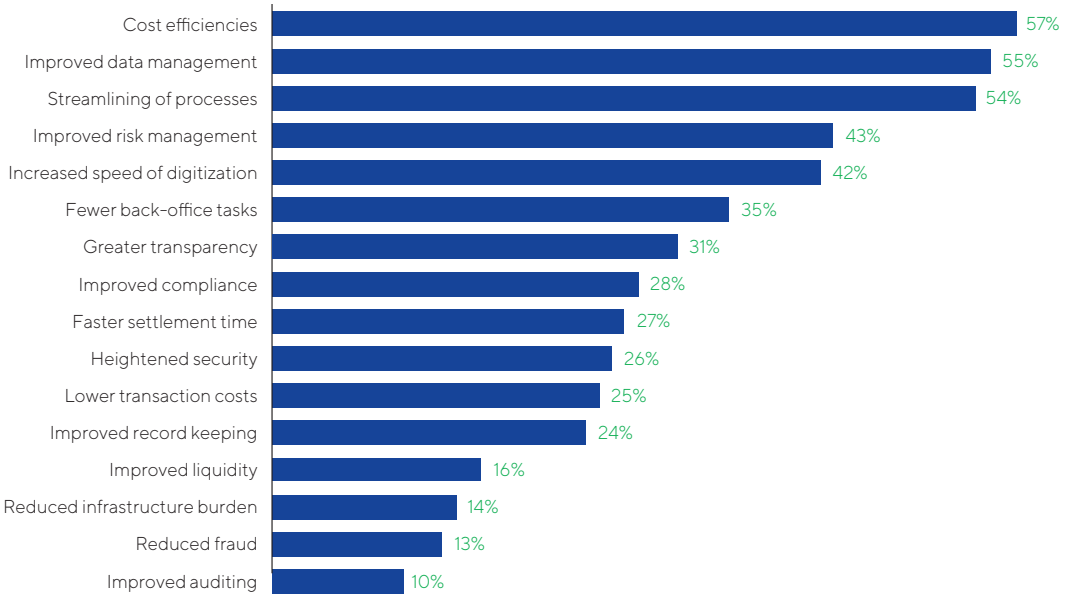
For a plurality of respondents, a seamless customer experience is the most significant benefit they want to achieve through automation.



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 17

Expected benefits of automation

Respondents named a wide array of benefits as part of the top five they expect to see from automation.



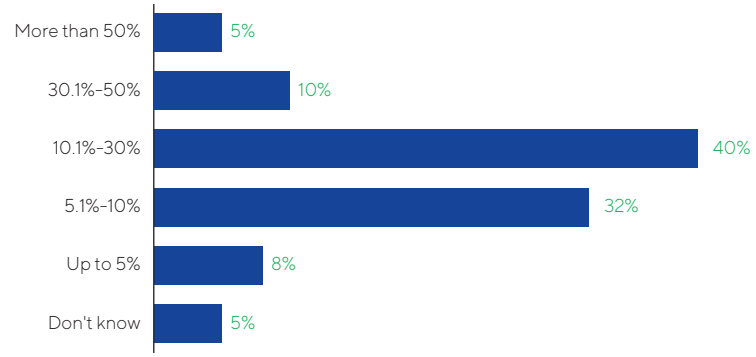
Multiple responses permitted
Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 18

It's entirely understandable for respondents to be focused on benefits that are more strategic or have greater visibility to senior management. IT is perennially under pressure to justify the business value of the technologies deployed on its watch. However, automating dull tasks and freeing FTEs for more constructive and creative work may be exactly what many understaffed business units hope to achieve.

Finally, although nearly all respondents said they expect cost savings from automation, four out of five believe the amount will be less than 30% (see Figure 19). The reality is that automation could save much more than that.

Expected cost savings

Nearly all respondents expect to save money from automation.



Response base: 302 business leaders at North American financial institutions
Source: Cognizant
Figure 19

One reason for respondents' relatively low expectations of cost savings is automation's somewhat limited current reach. In fact, most available solutions automate only small, inexpensive processes, some of which might reside on a vendor system. However, a comprehensive automation implementation effort could eventually involve the deployment of thousands of bots among end-to-end processes. Given their dispersion across the enterprise, cost savings could be a challenge to assess – but their sum could be significant.

Quick take

Different strokes for different folks

Many global FIs started the automation journey early on and are now streamlining their automation initiatives, while many regional firms are still testing tools and trying out automation projects in specific areas. We see the following approaches being taken:

- **Proof of concept**: Almost all FIs that began their automation journey in the last two years started with small PoC projects. In most cases, choosing the correct PoC had a bearing on how quickly the automation initiative could be scaled.
- **One line of business at a time:** Some institutions start in a single line of business (LoB) that exhibits high operational costs but simple processes. This approach can help organizations prove benefits quickly and manage change effectively.
- **From simple to complex processes:** Others have identified a small set of simple, rules-based processes that are common in multiple LoBs and that can be automated, and then measured their success across the organization. This approach has advantages over the previous two, but it needs enterprise support upfront and takes longer to plan.
- **Biggest impact area first:** Several FIs have begun by identifying a single process that has a bigger impact when automated in terms of cost savings or efficiency. This approach has worked best when a firm wants to prove the full impact of automation and create a funding model for strategic initiatives through cost savings gained from automation.

With so many diverse and innovative uses of automation in use today and planned for the future, it's tempting to rush in, identify a PoC opportunity and start automating processes. Yet a more measured approach is advantageous, especially if it's considered in the broader context of digital business.

A final word: Jumpstarting the automation effort

Financial institutions have numerous ways to overcome these conditions and jumpstart their automation efforts. The first step is understanding why to apply automation at all. Rather than seeing it as the "flavor of the month" or as a panacea for outmoded processes and technologies, decision makers need to be clear-minded about what they hope to achieve from embarking on an automation journey.

With that in mind, here are three steps financial institutions can take to move on with their automation efforts:

1. **Create winning partnerships**. Secure support for automation from both executive and operational leadership. This makes it possible to identify top candidates for automation, create an organizational change management plan and scale the technologies across the enterprise.

   Next, appoint an automation champion. The champion can help provide enterprise-wide visibility, credibility and funding. This person can also situate evangelists throughout the various business units to identify critical on-ground challenges and opportunities.

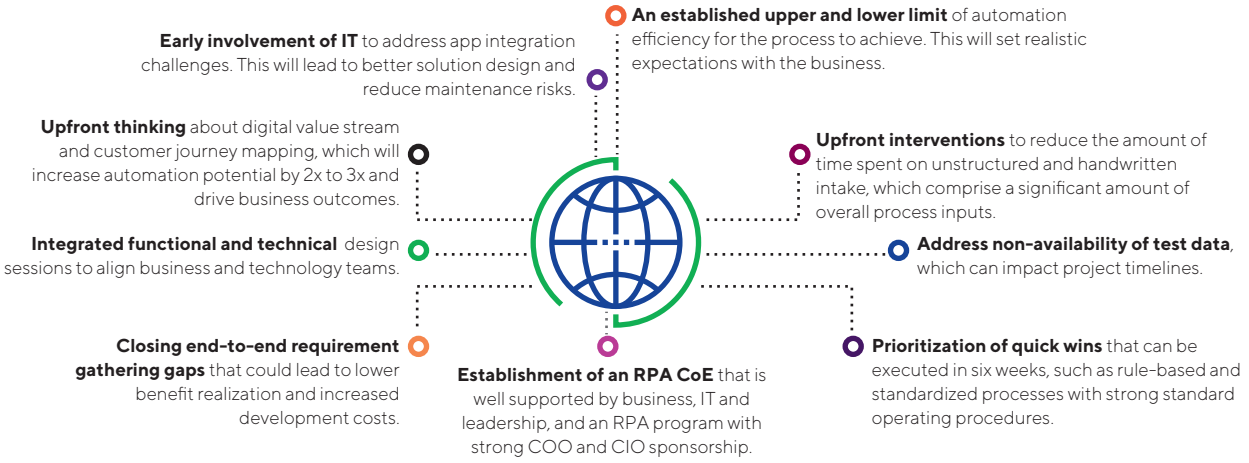
   A CoE can provide a focal point and governance framework for key aspects of the automation initiative, including the organization's evaluation of potential projects; the people, process and technology required; and monitoring of program impact and change. Meanwhile, a dedicated task force can identify and address issues related to privacy, security and regulatory compliance.

   Be sure to bring the business units into the conversation early. This will enable them to work collaboratively on solutions that add strong business value – not just in terms of cost savings, but also in key areas such as customer experience, service improvement and new business development. At the same time, the business units can serve as a key reality check on expectations around automation and help keep the focus on eliminating tedium from their day-to-day work.

   Finally, no single organization has the capacity to learn about, absorb and manage all things automation-related. FIs will need strong external partners to help them quickly assess and exploit potentially game-changing, but little-known, intelligent automation technologies. Such partners can help FIs understand what's worked for other institutions, and clearly articulate the benefits for their own organizations (see Figure 20, next page).

Lessons from other automation efforts

An analysis of more than 300 implementations, spanning a variety of geographies and environments, reveals common pitfalls to address before venturing into an automation initiative.



Source: Cognizant engagement experiences
Figure 20

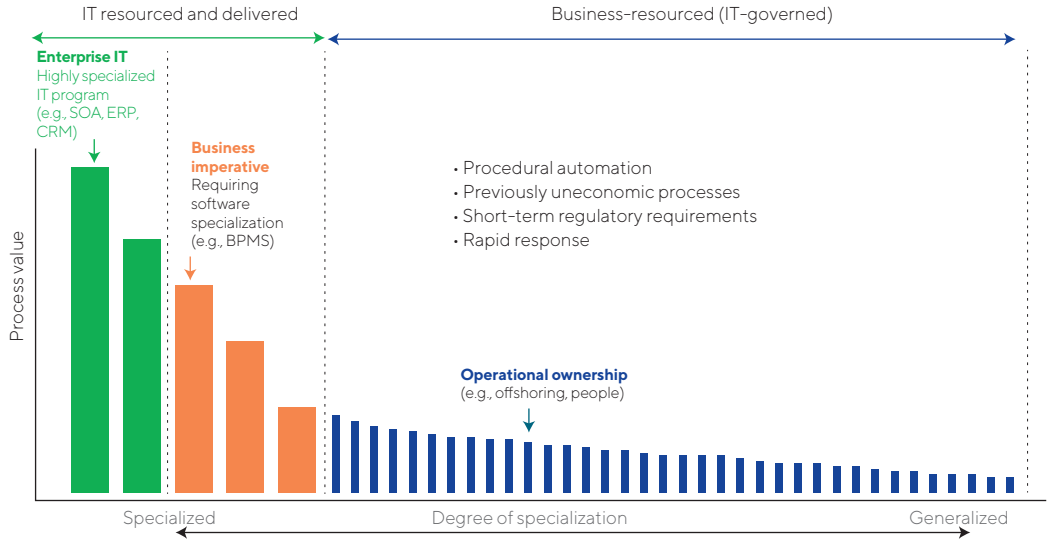
2. **Think big, scale fast.** To get the most from automation, FIs need to look beyond proof-of-concept tactics and identify specific opportunities in line with larger business goals. This approach requires an understanding of both employee-level processes and where automation fits in with the FI's longer-term evolution.

   After that, reconsider business processes from the perspective of customers and employees rather than from an IT view. This can help increase the efficiency of human-process interactions and enhance the user experience. If a process is broken or inefficient, think about how to improve or align it with larger business objectives before moving forward with automation.

   The key to this step is to avoid over-engineering and keep an open mind about the possibilities for automation. Against an enterprise-level frame of reference, FIs can tackle many processes and generate the benefits necessary both to justify using automation and to see great results. Indeed, a practical approach initially would be to apply automation to many small or niche processes throughout the organization (see Figure 21, next page).

Targeting business processes for automation

Look for processes that are highly routine, previously uneconomical to digitize, necessary to meet short-term regulatory requirements and/or required to produce a rapid response.



Source: Cognizant engagement experiences
Figure 21

3. **Chart the path forward.** Using the knowledge gained from the previous step, draw up a blueprint portraying what day-to-day operations will look like once automation is in place and the process transformation is complete. Include plans for what will happen to the existing workforce and organization, including potential skill gaps left by automation. The firm can then evaluate use cases on their own merits, without worrying about how to deal with the headcount impact.

   Keep in mind that when a bot goes into production, the surrounding systems will feel it. What a human can do in an hour, the bot does in a fraction of the time, dramatically increasing data volumes that hit interfacing systems. This is a key opportunity for IT to help determine thresholds on various systems and configure robots to suit existing environments. By doing so, the business can avoid disaster on the first day of deployment caused by the unexpected surge in transactions.

   Next, design a performance model that lets business managers know how to ensure the machine learning is taking place and producing the expected results. A continuous monitoring program can help organizations keep track of the bot's impact on interfacing applications and IT infrastructure, initiating actions when necessary.

Finally, identify other factors for success, and focus on them relentlessly. These will be different for every FI, but we've found the following to be impactful:

- Establish leadership-level commitment and a sound COE. Both executive and operational leadership support for RPA initiatives are essential to identify which processes are top candidates for

automation, create an organizational change management plan for the initiative, and scale RPA across the enterprise. Establishment of a COE can provide a focal point and governance framework for key aspects of the RPA initiative.

- Even before a proof of concept project, say "Hello World!" Remember the days when introducing a new programming language relied on an initial environment setup that helped establish the syntax of the language? Deploying an RPA version of "Hello, World" can help uncover organizational, procedural and infrastructural needs that, once sorted out, will streamline subsequent deployment of real bots.
- Optimize, then automate. Automating a broken or inefficient process is a recipe for disaster and can jeopardize the automation program. Once a process becomes an RPA candidate based on potential return on investment, it is important to determine whether the process can be improved and aligned with larger business objectives, and then make those changes before commencing automation.
- Design to-be processes from employee and customer perspectives. Design processes from the point of view of customers and employees, rather than from a system perspective. This can help improve the efficiency of human-process interactions and enhance the user experience.
- Think beyond a single RPA platform. No single platform can serve all your automation requirements. We suggest a careful assessment of each platform player's roadmap, investment and funding plans to determine which fits most of your company's needs.
- Do as much work as possible with "normal" scripting languages. RPA platforms are still evolving, so relying on a particular RPA development tool at this time can lock an organization in with its vendor and the vendor's update schedule. Open source languages can handle much of the RPA data extraction and integration within the ecosystem, while RPA tools can be used to orchestrate process, monitoring and scheduling. Using this approach keeps you from being at the mercy of a single vendor's capabilities and roadmap.

Once FIs kick into high gear with automation, the temptation will be to get lost in task-level optimiza tion and short-term potential. Although necessary, these are insufficient to take full advantage of what automation has to offer. As firms cast off the training wheels of automation, the transformative effect of automation will become all but unstoppable across the financial services industry.

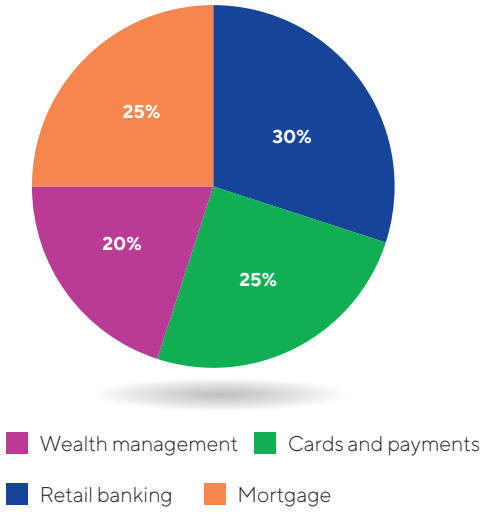
Methodology

We conducted an online survey in the U.S. among 302 individuals familiar with automation in retail banking, cards & payments, wealth management and mortgage organizations from January through early March 2018. When asked to describe their level of involvement in their respective automation projects, 32% described themselves as leading the project, 28% as core members, 22% as members of the advisory committee, 9% as beneficiaries of automation and 9% as not involved directly with automation.

Respondents have the following titles: 16% C-suite business (CEO, CFO and COO), 13% C-suite IT (CTO, CIO), 27% executive management, and 44% middle management.

Respondents work in the following functional areas: 27% in IT, 27% in operations, 19% in sales & marketing, 6% in compliance and security, 5% in strategy, 4% in the automation center of excellence, 2% in R&D and innovation, 7% in product management and 3% in the legal department.

Organizations Represented



Source: Cognizant

Endnotes

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About the author

Makarand Pande is a Digital Partner at Cognizant, leading the Automation Practice for the company's North American Banking & Financial Services business unit. During his tenure at Cognizant, Makarand has held multiple roles, including lead for Technology Consulting and the Mobile Practice. He works closely with customers on solving business problems through collaboration, co-innovation and using emerging digital technologies. Makarand can be reached at Makarand.Pande@cognizant.com.

Makarand Pande

Digital Partner, BFS Automation, Cognizant's North American Banking & Financial Services business unit

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Cognizant's Banking and Financial Services (BFS) practice is one of the largest industry verticals that partners with large financial institutions (FIs) to evolve their business and technology landscape and enable end-to-end digital transformation. Seventeen of the top 20 North American FIs, and all of the top 10 European banks (which includes those in the UK), rely on us to manage their technology portfolio across multiple business entities and geographies. We serve the entire financial services spectrum, including retail and wholesale banking, consumer lending, cards and payments, investment banking and brokerage, asset and wealth management, securities services, and governance, risk and compliance. Our consulting-led approach, deep domain expertise and partner ecosystem enable clients to address the dual mandate of "optimizing the business" while "driving digital at scale." From large-scale core banking or payment transformation to adoption of cutting-edge technologies like artificial intelligence, analytics, blockchain and robotic process automation, we partner with FIs to envision and build the digital bank of the future. Learn more about Cognizant's BFS practice at www.cognizant.com/banking-financial-services.

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Cognizant

World Headquarters
500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277

European Headquarters
1 Kingdom Street
Paddington Central
London W2 6BD England
Phone: +44 (0) 20 7297 7600
Fax: +44 (0) 20 7121 0102

India Operations Headquarters
#5/535 Old Mahabalipuram Road
Okkiyam Pettai, Thoraipakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060

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