

Enable Business Users And Accelerate Process Automation With iPaaS

How Increasing iPaaS Maturity Decreases Complexity And Accelerates Collaboration

A FORRESTER CONSULTING THOUGHT LEADERSHIP PAPER COMMISSIONED BY CELIGO, AUGUST 2023

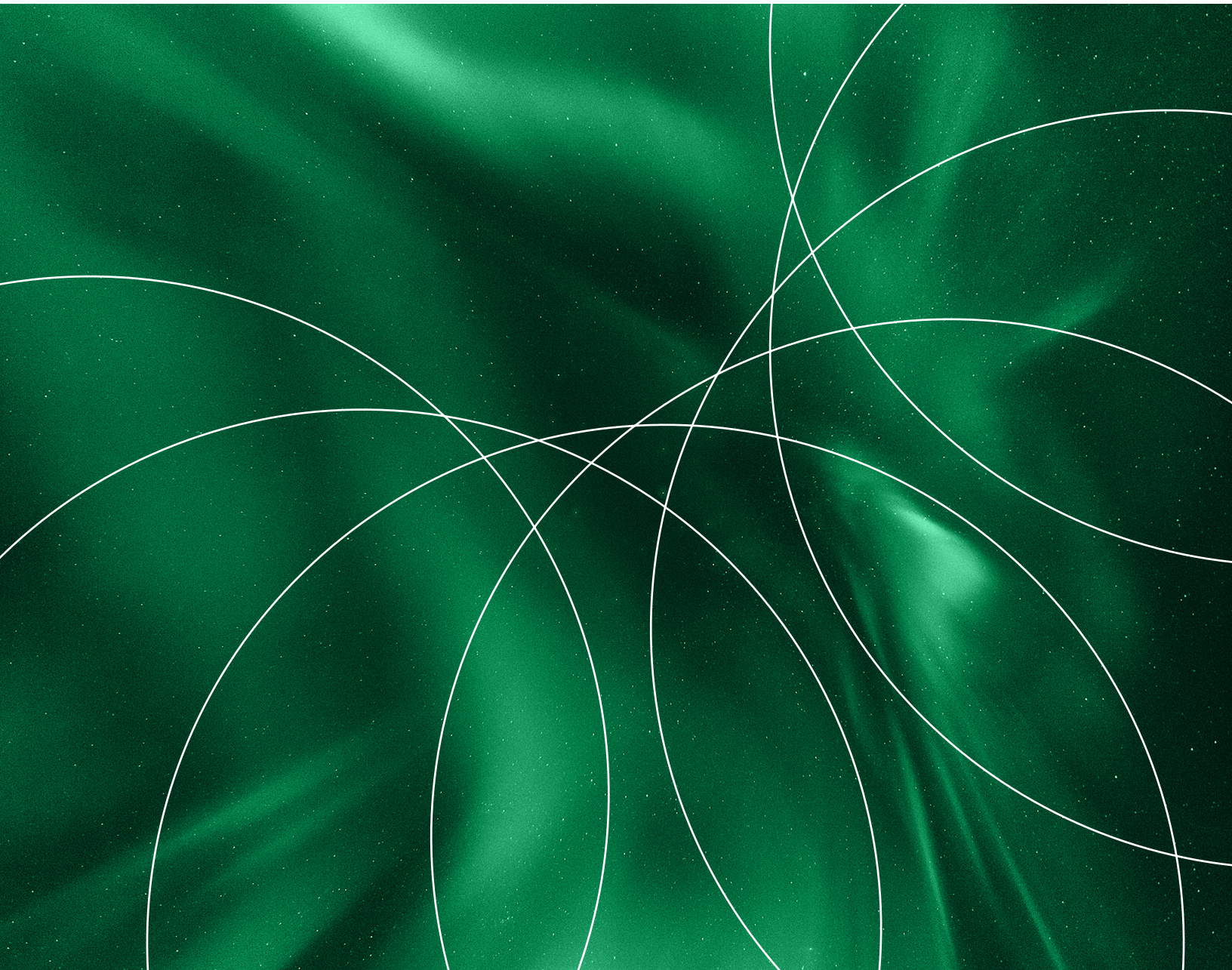


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Executive Summary

Over the last three years, midmarket companies have been ramping up their digital transformation efforts to keep pace with global events. But since the initial COVID-19 pandemic surge in adoption of new technologies, companies have taken a step back to assess their adoption and integration strategies. As more software-as-a-service (SaaS) applications were packed into their tech stacks, they realized they would need assistance integrating those applications and simplifying their SaaS environments. Many companies used a traditional or advanced integration-platform-as-a-service (iPaaS) tool to accomplish this and experienced success. Meanwhile, later adopters are still catching up.

In April 2023, Celigo commissioned Forrester Consulting to evaluate how companies are evolving their iPaaS adoption, and how that can impact their employees and their understanding of business processes. Forrester conducted an online survey with 408 global IT and finance decision-makers with insight into iPaaS at their organizations to explore this topic. We found that, while digital transformation is still ongoing for many companies, the number of iPaaS users has greatly increased over the last two years as leadership tries to increase visibility into business processes and enable citizen integrators (i.e., users in the lines of business) to develop their own business process automations. This will come from advanced iPaaS solutions that marry capabilities with AI/machine learning (ML), business process mining, security/governance, and reducing integration backlogs.

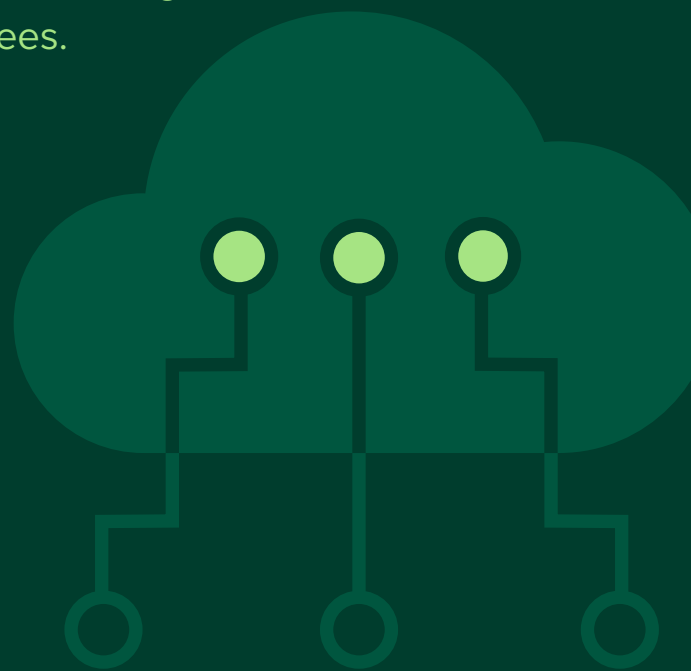


Key Findings

iPaaS decision-makers aren't slowing down their adoption or investment in digital transformation. Especially for those decision-makers whose organizations have lower digital business maturity, digital transformation in general is still a high priority. iPaaS adoption is also increasing alongside the complexity of SaaS environments.

Leadership struggles to enable users across the business. Process and personnel gaps intensify the chasm between IT and LOBs, with finance urging an increase in education and enablement.

An advanced iPaaS solution provides benefits across the business. The right advanced iPaaS solution can provide insights and visibility into business processes, while giving users the ability to create effective business process automations on their own in order to reduce the integration backlog and increase efficiency for employees.



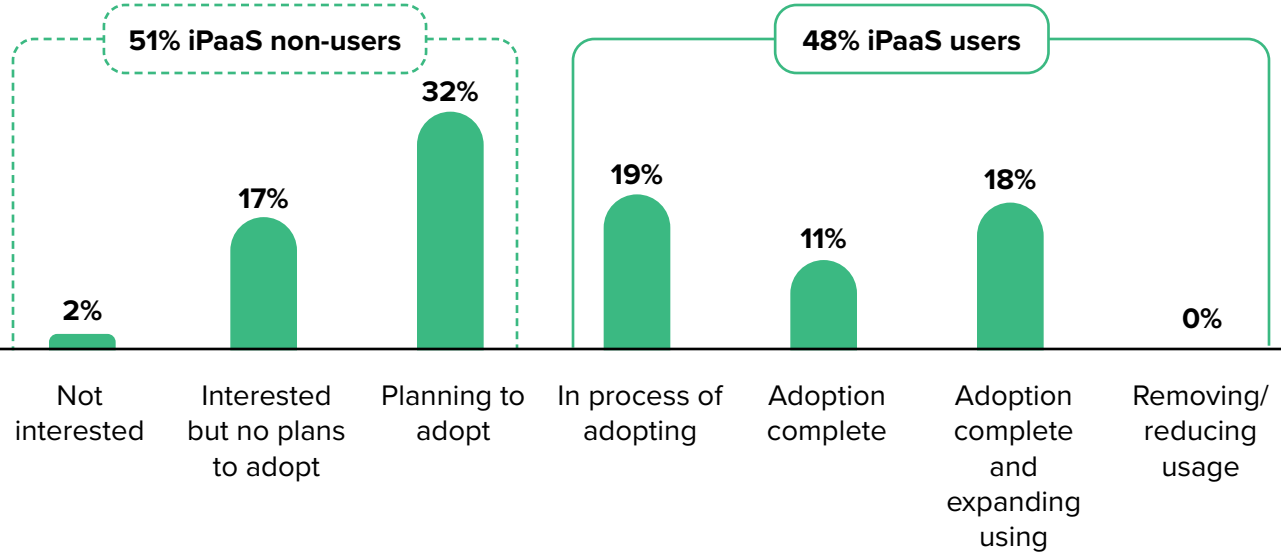
Decision-Makers Must Scale iPaaS Adoption As SaaS Environment Complexity Grows

Three years after the start of the pandemic, companies are still playing catchup with their technology adoption and integration strategies. Digital transformation is still an ongoing main priority for most organizations, with their investments continuing to increase rather than decrease. Close to one in three respondents have reached a state of constant digital transformation, which is necessary to adapt to rapid changes and unexpected events. Part of this constant transformation is improving the way the organizations adopt and integrate technologies. With most of respondents' organizations having an average of 33 SaaS applications in their environment, enabling users across the business to take an active role in building business processes will be vital to business health moving forward. In surveying 408 decision-makers, we found that:

- **SaaS environments are growing in complexity, but iPaaS can help.** Our survey found that the average organization has over 33 SaaS applications in use, iPaaS integration is increasing with nearly half of respondents using iPaaS for their integrations. In fact, 48% of respondents are iPaaS users while 32% plan to adopt iPaaS in the next twelve months. This is a notable increase from 2021, when just 22% of respondents in the study were iPaaS users and only 34% planned to adopt.¹ More specifically, iPaaS use for SaaS has increased by nearly 5% year over year since 2021 with another 10% expected increase over the next two to three years. iPaaS remains a key part of competitiveness strategy for most organizations, likely due to capabilities that enable users across the business and reduce the complexity of growing SaaS environments. Thirty-six percent of respondents said iPaaS is the single most important factor for their overall competitiveness, which they expect to increase to 40% two to three years from now (see Figure 1).

FIGURE 1

iPaaS Adoption Status



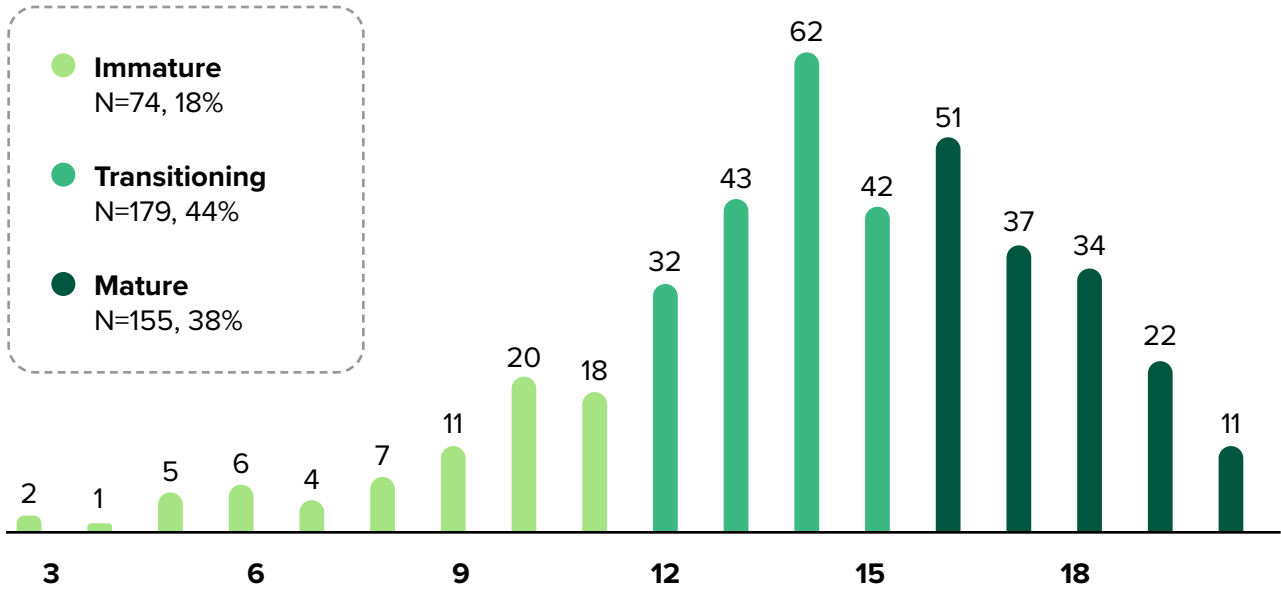
Base: 408 global finance and IT professionals at the director level or higher with insights into iPaaS
Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

- **Respondents’ organizations are prioritizing an increase in digital business maturity with 38% now mature.** To determine the digital business maturity of respondents’ organizations, we asked them a series of questions and scored their responses to place them on a maturity curve. From those scores, we identified three tiers of maturity: immature, transitioning, and mature (see Figure 2). Of our respondents, 38% were mature in their digital business efforts, 44% were transitioning, and 18% were immature.

This is a veritable sea change from 2021, when just 23% were mature, 53% were transitioning, 24% were still immature.² This prioritization of iPaaS adoption is part of a push to dedicate budget to digital transformation. The pandemic originally pushed 67% to increase their digital transformation investments in 2021; rather than steeply dropping post-pandemic, this number has only dropped by 2% to 65%.³

FIGURE 2

Digital Business Maturity In 2023



Base: 408 global finance and IT professionals at the director level or higher with insights into iPaaS
Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

- **For less mature organizations, digital transformation is an ongoing process.** Regarding respondents' digital transformation efforts, just 7% of the immature group has reached an advanced level of digital transformation (digital native, always in a state of transformation, or transformation complete); 42% of those of transitioning maturity are advanced in their digital transformation, while 95% of mature respondents are advanced.

76%

said iPaaS is one of, if not the single most, important factor for competitiveness this year.

Departmental Challenges Compound Application Integration Landscape Issues

IT and finance leadership see the gaps in their organizations' current integration landscape and how those gaps affect productivity. These gaps come in the form of personnel issues like lack of qualified staff (50%), complexity preventing changes from being made (50%), high implementation costs (48%), and an inability to meet business requirements (44%). These IT and business leaders need tools that not only fill in expertise chasms, but smooth and simplify the implementation and integration processes to meet the needs of the business. To move forward and enable employees to work efficiently, they will need to untangle and simplify their existing processes and revamp with an advanced iPaaS leading the way. We found that:

- **There is room for improvement in existing current application integration environments.** SaaS environments are complex; overall, over half (54%) of respondents are only getting 50% or less of their organization's needs met by their current application integration landscape, while only 19% are getting all of their organization's needs met. The numbers relating to maturity are more troubling; 36% of respondents from mature firms said their application integration landscape meets all of their organization's needs, while only 1% of respondents from immature firms could say the same. The reality for respondents from immature organizations is that 43% said their current app integration landscape meets a few of their business needs but not most or none at all.
- **IT and finance departments don't always see eye to eye on rollouts.** There is definitely room for improvement when it comes to the relationship between finance and IT. IT is fairly confident in their

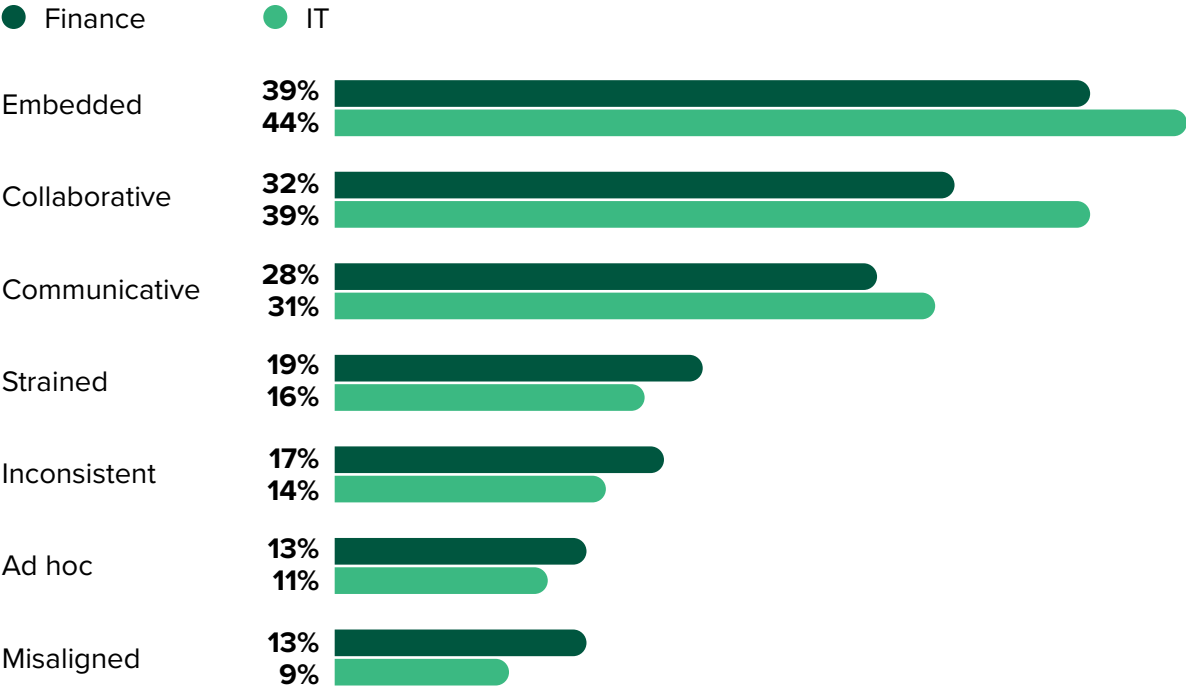


Just 1% of immature respondents say their firm's current application integration landscape meets all of its needs.

relationship with the business teams: 44% of IT respondents describe this relationship as embedded, while 39% say it is collaborative. Just 9% cite it as misaligned. On the other hand, finance respondents are less confident than IT in their relationships as IT struggles to roll out their solutions effectively and educationally to line of business (LOB). Thirteen percent of finance respondents labeled this relationship as misaligned, and just 32% said they are collaborative (see Figure 3). This relationship could be more productive by increasing education to ease rollout issues with the larger business, while providing business employees with the tools they need to independently create their own business processes without leaning on IT personnel. Currently, just 57% say there is regular, two-way communication between IT and finance with just 46% enabling the business with easy-to-understand education programs.

FIGURE 3

How Decision-Makers Describe Finance-IT Relationship Characteristics



Base: 236 global IT professionals and 172 global finance professionals at the director level or higher with insights into iPaaS
 Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

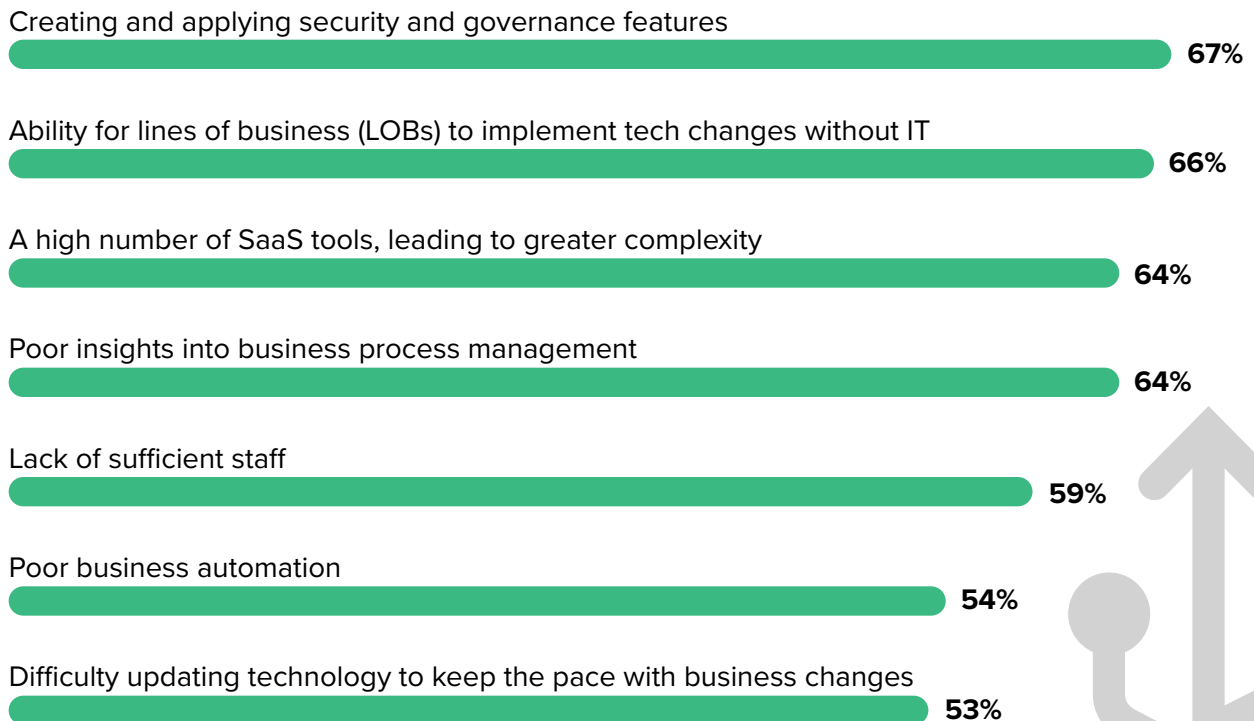
- Finance and IT respondents face similar challenges.** Both departments struggle with the growing complexity of large SaaS environments (64% of IT vs. 66% of finance). IT respondents are troubled by the inability of LOBs to implement tech changes without IT personnel (66%); both are challenged by a lack of efficient staff (59% of IT vs. 60% of finance). Meanwhile, 55% of finance respondents cite a lack of education from IT on technology. These groups lack sufficient staff, expertise, and bandwidth to achieve a successful rollout and an increase of citizen integrators (see Figure 4).

FIGURE 4

IT And Finance Challenges

(Showing “Extremely challenging” and “Very challenging”)

● IT



Base: 408 global finance and IT professionals at the director level or higher with insights into iPaaS
 Note: Showing top 7 responses
 Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

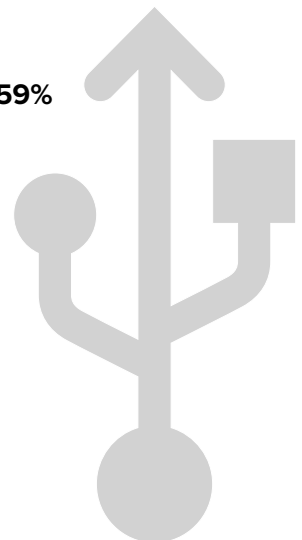
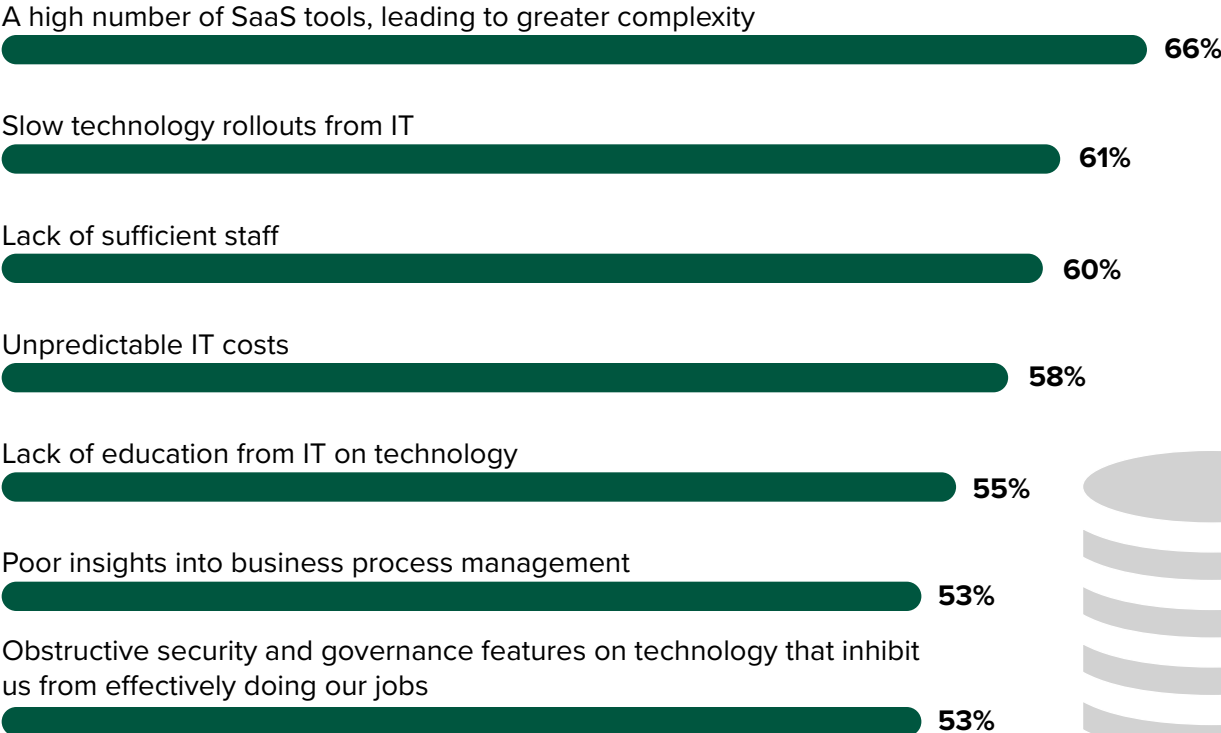


FIGURE 4 (CONT.)

IT And Finance Challenges

(Showing “Extremely challenging” and “Very challenging”)

● Finance



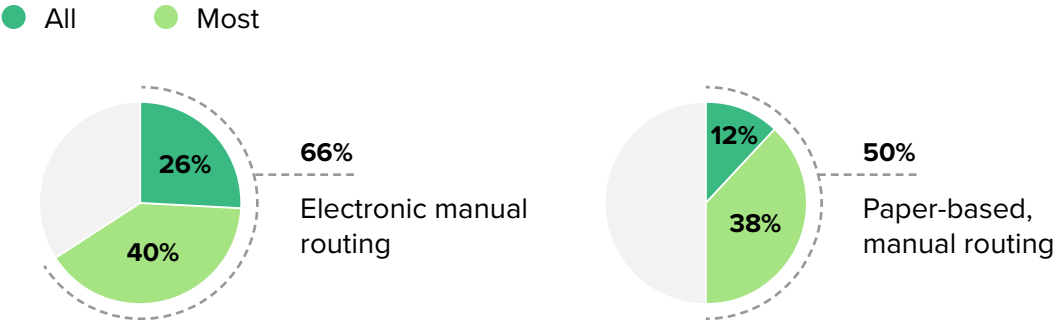
Base: 408 global finance and IT professionals at the director level or higher with insights into iPaaS
Note: Showing top 7 responses
Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

- **Immature organizations still lag in updating their business processes and could use a boost.** According to 66% of respondents, most or all of their organization’s business processes are automated via electronic manual routing (e.g., spreadsheets and email), and 50% say the same about paper-based, manual routing (see Figure 5). The current emphasis on manual work has spurred companies to plan to either overhaul their manual processes and start over or update existing processes to move away from manual work: 44% are planning to automate large numbers of currently manual processes; 25% plan to reinvent and reimagine existing

processes to better support digital business strategies; and 16% plan to completely transform end-to-end processes to better support those strategies. Respondents at immature organizations noted they are still focusing on implementing minor changes in different process steps to better support their digital business strategies (47%). In order to reach a greater level of digital business maturity, these immature organizations will need to rethink their strategies and start from scratch. A tool that provides capabilities to automate business processes will aid in this strategic transition.

FIGURE 5

Business Processes Currently Used To Automate Processes



Base: 408 global finance and IT professionals at the director level or higher with insights into iPaaS
 Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

- Not all iPaaS solutions are advanced enough for modern businesses.** For companies that are ready to accelerate their journey, an advanced iPaaS can pave the way to simpler rollouts and improved employee enablement for the broader business. Just 65% of current iPaaS solutions in use by respondents offer business process expertise, with 59% creating intelligent repeatability powered by AI/ML and 52% providing prebuilt applications with best practices built in. The right advanced iPaaS solution should provide the expertise needed for intelligent rollout of features while providing valuable insight into business processes and keeping data secure against vulnerabilities.

iPaaS Reduces Integration Backlogs And Improves Governance And Automation

Due to gaps in staff, IT education, and insights into business processes, IT and finance leaders are prioritizing the growth that comes with further iPaaS adoption. Currently, LOBs don't feel they are receiving the appropriate level of education and assistance from IT, while IT feels their resources are strapped and that they need help enabling the business. This is especially true when it comes to process automation: Currently, just 11% of respondents say LOBs are responsible for automating business processes. Wherever respondents are in their digital business maturity or adoption of iPaaS, there are clear steps toward success. Most will need to rethink their approach to their business processes and can benefit from the insight iPaaS can provide. We found that:

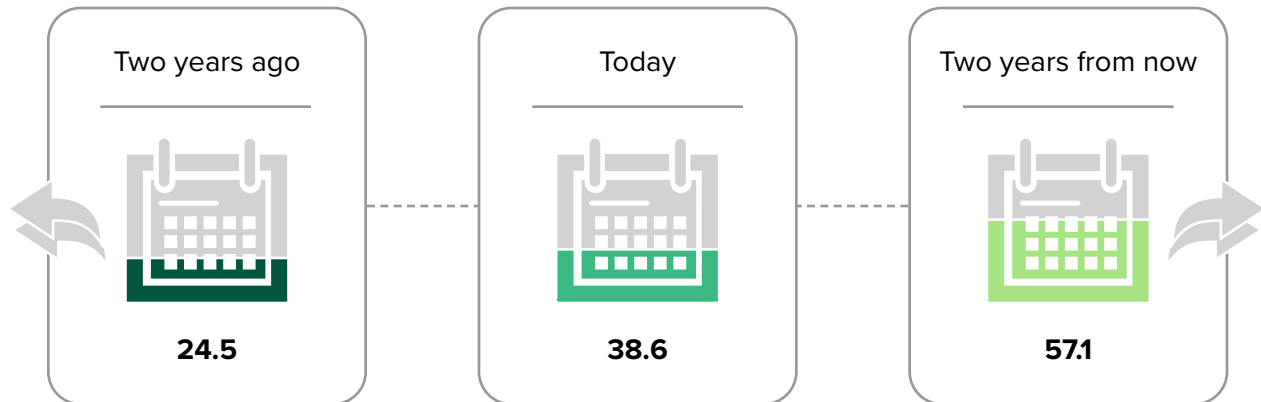


Just 11% of LOBs are currently responsible for automating business processes.

- **Leadership sees the continued benefits of prioritizing digital transformation and rethinking processes, including the continued adoption of extract, load, transform (ELT).** For those companies who have already begun to reimagine their business processes, the plan to automate holds fast. For those less mature organizations, they may need to focus on overhauling their existing processes in favor of more efficient processes. For all respondents, the plan to update their business processes also includes continued adoption of ELT. As of two years ago companies used ELT for an average of 24.5 of their data processes; that number has jumped to 38.6 for this year and is expected to continue rising to 57.1 two years from now (see Figure 6).⁴ Additionally, as leadership begins to prioritize the capabilities they want to see in their iPaaS investments, 60% say they the ability to replace extract, transform, load (ETL) tools with ELT pipelines will be critical or important in their iPaaS selection.

FIGURE 6

Number Of Data Processes That Use ELT Expected To Grow



Base: 408 global finance and IT professionals at the director level or higher with insights into iPaaS
Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

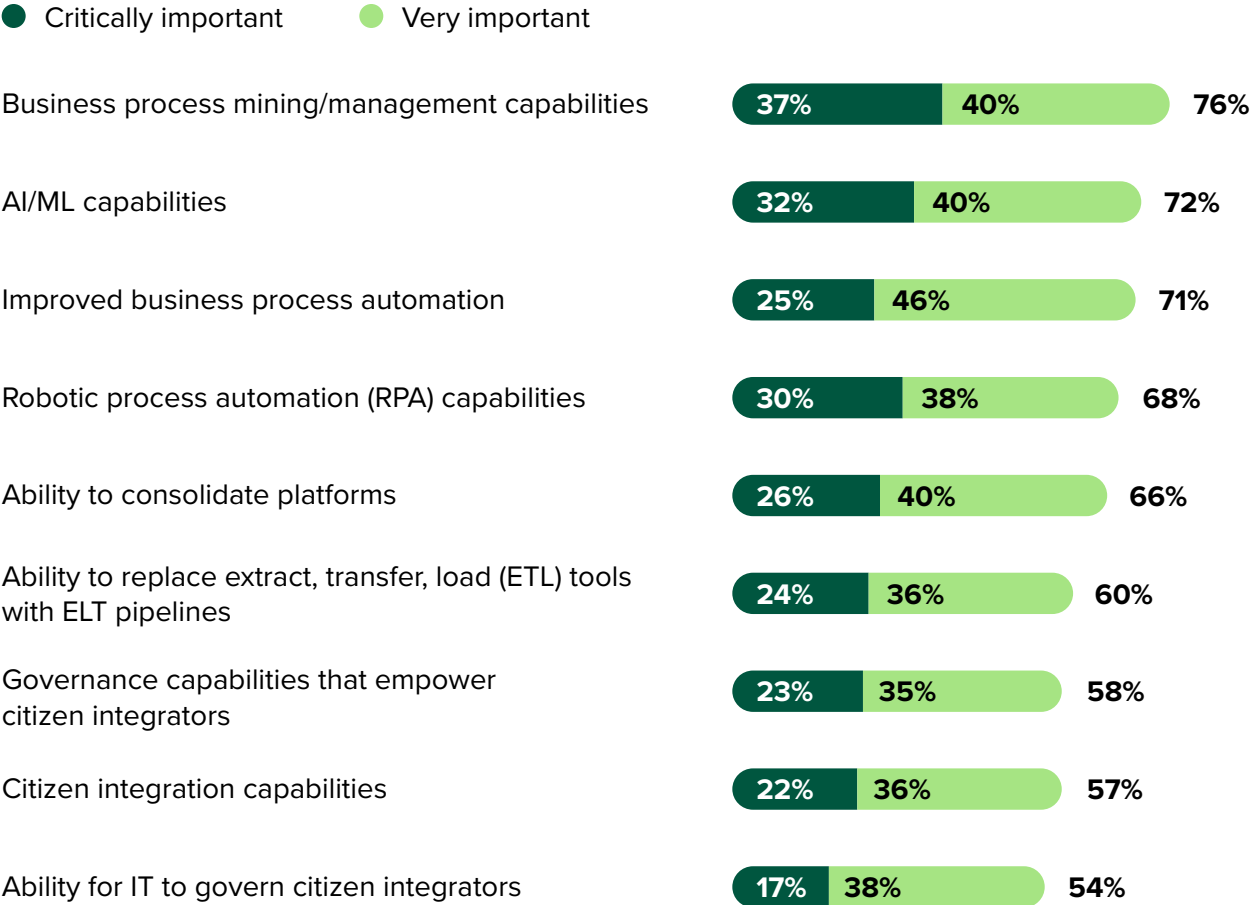
- **IT and finance decision-makers have a wish list of capabilities they expect from their next iPaaS investment.** That list is led by business process mining/management capabilities (76%), AI/ML capabilities (72%), improved business process automation (71%), and robotic process (RPA) capabilities (68%). This increase in advanced iPaaS functionality will be critical to enabling LOB employees to contribute to the business process automation effort and keep all employees operating at optimal capacity. In fact, 57% are hoping for citizen integrator capabilities.
- **Once ready for rollout, iPaaS can provide the visibility and capability to rethink business processes.** IT and finance leaders both know there is a need for better education around IT rollouts to mitigate expertise issues, and they know they could use some help. That's where iPaaS comes in. Respondents noted that iPaaS increases visibility into business processes by 73%. They also indicated their organizations currently only have 59% visibility into how their business processes are performing. But it doesn't stop at visibility. When selecting a new iPaaS solution, respondents

indicate their iPaaS selection hinges on capabilities like business process mining (76%), AI/ML capabilities (72%), improved business process automation (71%), and the ability to consolidate platforms (66%). Sixty percent also see the ability to replace ETL tools with ELT pipelines as very or critically important in their selection (see Figure 7).

74%
 expect iPaaS to increase visibility into business processes.

FIGURE 7

Top Advanced iPaaS Solution Features



Base: 408 global finance and IT professionals at the director level or higher with insights into iPaaS
 Note: Total percentages may not equal separate values due to rounding.
 Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

- iPaaS is beneficial in reducing integration backlogs and increasing efficiency.** iPaaS provides the capabilities needed to produce the metrics that can galvanize firms' bottom lines. Respondents believe the benefits of adopting an advanced iPaaS are very beneficial to the business, if not transformational. In fact, 74% expect a reduction of backlog of integrations and 73% expect more stringent security and governance features, while 72% believe iPaaS will create more efficient processes and 71% expect it to provide better business automation as a result of AI/ML. From adopting an advanced iPaaS solution, respondents note their organizations experienced/expected to experience an average increase of 23.8% in automation capabilities and a 33.3% increase in process efficiency. That comes with a 30.6% drop in the number of contracts, a 19.9% drop in the total cost of operations (TCO), and a 29.3% reduction of backlog (see Figure 8).

FIGURE 8

Transformational Benefits Of An Advanced iPaaS Solution

(Showing “Transformational” and “Very beneficial”)



Base: 408 global finance and IT professionals at the director level or higher with insights into iPaaS

Note: Showing top 12 responses

Source: A commissioned study conducted by Forrester Consulting on behalf of Celigo, April 2023

Key Recommendations

Forrester's in-depth survey of 408 IT and finance decision-makers at global organizations about their iPaaS use and strategies yielded several important recommendations:

Tackle SaaS sprawl with a coherent integration strategy.

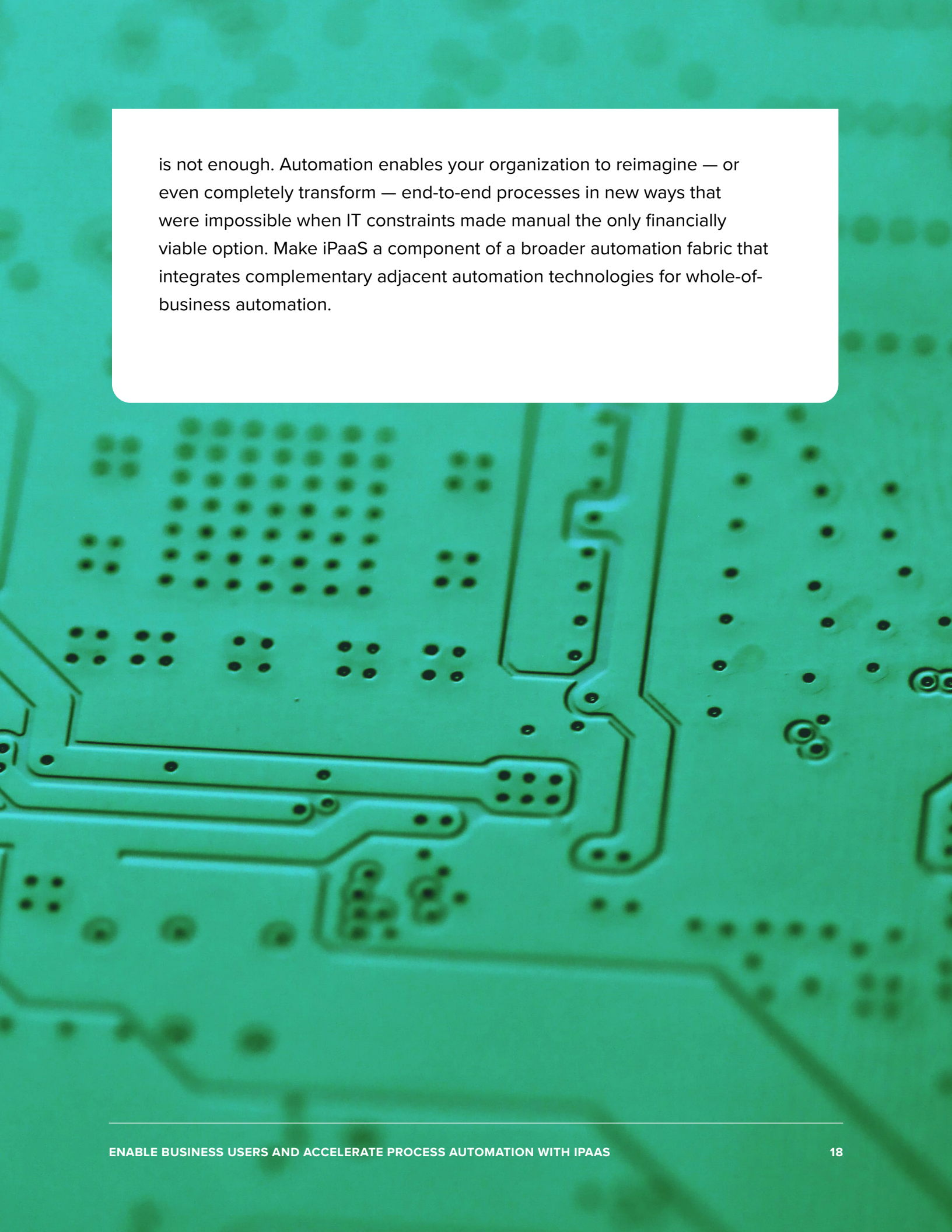
The volume of SaaS applications in IT portfolios will grow due to two trends. First is modernizing from legacy systems of record. Second is due to function-first thinking, which is identifying a business function first and buying the best tool for that function rather than buying a tool and then hammering every business function into that tool. Managing this sprawl requires a thoughtful integration strategy.

Repair the IT-business relationship with citizen integration.

The IT backlog doesn't keep pace with the needs of business, and this is often the justification for citizen development, including citizen integration. But it goes deeper than that: IT's inability to keep pace harms its relationship with business leaders, often without IT's complete awareness. IT leaders should not assume LOB leaders have a rosy picture of IT. Have clear communication between both organizations to understand candidly where IT fails to meet expectations. Then, IT can transform itself from obstacle to hero by providing LOB users with citizen tools to address pain points that budgetary constraints prevent IT from addressing.

Focus on business transformation and process automation.

An architecture that supports constant change is necessary to be positioned for unexpected change and disruption. Manual processes remain too common. Automation has moved beyond simply operational efficiency and cost reductions; simply replicating manual processes through automation



is not enough. Automation enables your organization to reimagine — or even completely transform — end-to-end processes in new ways that were impossible when IT constraints made manual the only financially viable option. Make iPaaS a component of a broader automation fabric that integrates complementary adjacent automation technologies for whole-of-business automation.

Appendix A: Methodology

In this study, Forrester conducted an online survey of 408 decision-makers at organizations in 11 countries to explore the adoption, maturity, and benefits of iPaaS. Survey participants included executive decision-makers at the director level or higher in IT and finance. Questions provided to the participants asked about their current and future levels of iPaaS adoption and their attitudes toward iPaaS. Respondents were offered a small incentive as a thank-you for time spent on the survey. The study began and was completed in April 2023.

Appendix B: Demographics

GEOGRAPHY	
United States	27%
Canada	22%
United Kingdom	10%
Germany	7%
Denmark	7%

NUMBER OF EMPLOYEES	
500 to 699 employees	23%
250 to 499 employees	37%
100 to 249 employees	25%
2 to 99 employees	15%

BUSINESS MODEL	
Combination B2B/B2C	43%
B2B	33%
B2B2C	13%
B2C	11%

RESPONDENT LEVEL	
Director	54%
Vice president	33%
C-level	14%

ANNUAL REVENUE	
\$400M to \$499M	13%
\$300M to \$399M	22%
\$200M to \$299M	25%
\$100M to \$199M	25%
\$1M to \$99M	13%
<\$1M	1%

INDUSTRY	
Manufacturing and materials	10%
Financial services and/or insurance	9%
Retail	7%
Healthcare	7%
Business or professional services	6%

TECHNOLOGIES CURRENTLY IN USE	
Enterprise resource planning (ERP)	100%
Customer relationship management (CRM)	100%
Human capital management (HCM)	80%

Note: Percentages may not total 100 due to rounding.

Appendix C: Supplemental Material

RELATED FORRESTER RESEARCH

[“Planning Guide 2024: Technology Architecture And Delivery,”](#) Forrester Research, Inc., August 1, 2023.

[“The Forrester Wave™: Integration Platforms As A Service, Q3 2023,”](#) Forrester Research, Inc., August 9, 2023.

Appendix D: Endnotes

¹ Source: “Simplify SaaS With iPaaS,” a commissioned study conducted by Forrester Consulting on behalf of Celigo, January 2022.

² Ibid.

³ Ibid.

⁴ Ibid.

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