SAPinsider

RESEARCH REPORT

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Process Productivity and Efficiency Through Process Automation and Intelligence 2024

By Mark Vigoroso

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Executive Summary

INSIDER PERSPECTIVE

"Our current process automation is focused on inter-company transactions across our Enterprise since we have a global supply chain with components being made in countries like Hungary, Mexico, China, India which are shipped to end assembly factories located in Japan, USA, France, Germany, UK and the like. End to end automation will simplify monthly inter-company reconciliation and free uptime for analytics."

SENIOR DIRECTOR OF IT FOR AGLOBAL MEDICAL TECHNOLOGY COMPANY

IN RECENT YEARS, process automation technologies have evolved from basic cost-reduction tools to strategic enablers that significantly enhance process visibility and boost employee productivity. This transformation highlights a shift towards using automation to optimize operational workflows, improve data transparency, and empower employees to focus on higher-value tasks, rather than solely aiming for cost efficiency.

To track the evolving trends and gather in-depth community insights on this transformative technology, SAPinsider has been conducting comprehensive benchmark research reports since 2020. Continuing this initiative, SAPinsider conducted a survey of 118 community members between June and August 2024 to analyze the current landscape and forecast future advancements in process automation.

Process automation is gaining prominence in digital transformation roadmaps, reflecting its growing importance in organizational strategies. The percentage of respondents who consider process automation to be "Extremely Important" has surged from 40% in 2023 to 54% in 2024. Meanwhile, those who regard it as simply "Important" have decreased from 49% to 42% over the same period. This data shows a shift towards viewing process automation as a critical component rather than a supplementary tool, underscoring the need for robust automation strategies to effectively advance digital transformation initiatives.

Finance-related processes have been the primary focus of process automation initiatives, initially targeting the reduction of

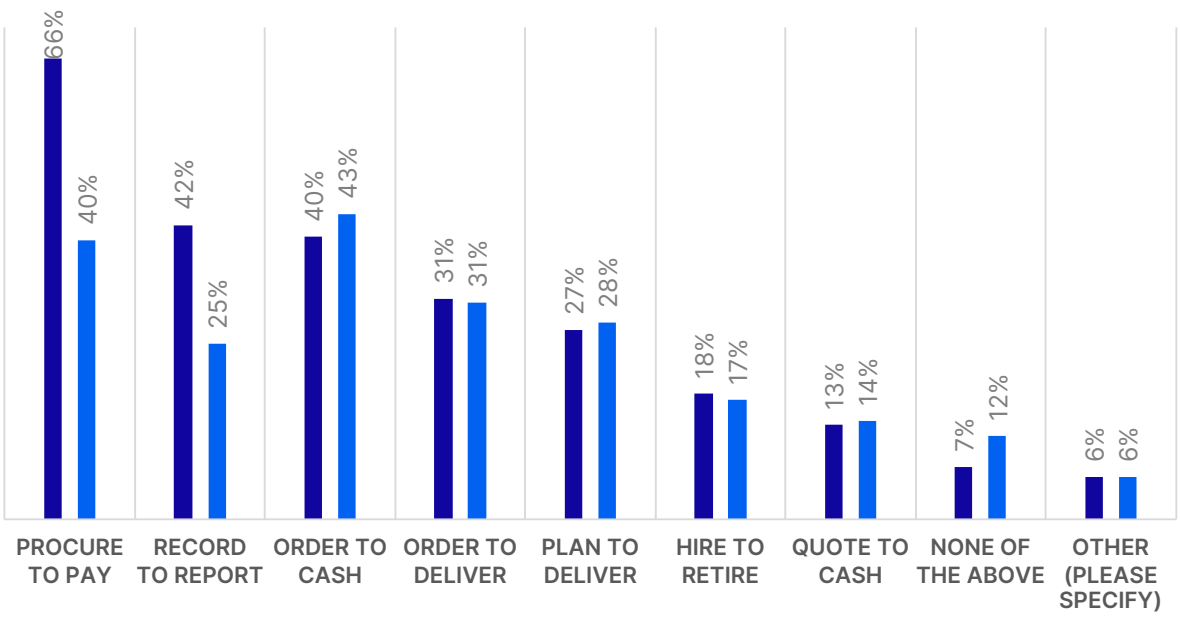
manual interventions and the optimization of workforce allocation. “Procure to Pay” demonstrates more advanced automation levels, indicating a significant push towards streamlining procurement processes through automation, with adoption rates rising sharply from 40% in 2023 to 66% in 2024 **(Figure 1)**. Components of procure-to-pay automation include automated purchase requisition, goods receipt and invoice processing, and automated supplier selection.

Focus Areas for Process Automation

This surge underscores an intensified effort to streamline procurement and payment workflows. Similarly, the “Record to Report” process has experienced a notable increase in prioritization, growing from 25% in 2023 to 42% in 2024, reflecting a heightened focus on improving the efficiency and accuracy of financial reporting. This automation enhances accuracy, reduces the time required to close financial books, and ensures compliance with regulatory requirements. Components include automated data capture, automated data consolidation, and automated closing entries. However, “Order to Cash” process has seen a slight decline, dropping from 43% in 2023 to 40% in 2024, indicating a potential shift in resource allocation or strategic emphasis. Meanwhile, “Order to Deliver” and “Plan to Deliver” processes have remained relatively stable, suggesting consistent but less aggressive attention in these areas over the same period.

According to a senior director of IT for a global medical technology company, “Our current process automation is focused on inter-company transactions across our Enterprise since we have a global supply chain with components being made in countries like Hungary, Mexico, China, India which are shipped to end assembly factories located in Japan, USA, France, Germany, UK and the like. End to end automation will simplify monthly inter-company reconciliation and free up time for analytics.”

Figure 1: Focus Areas For Process Automation

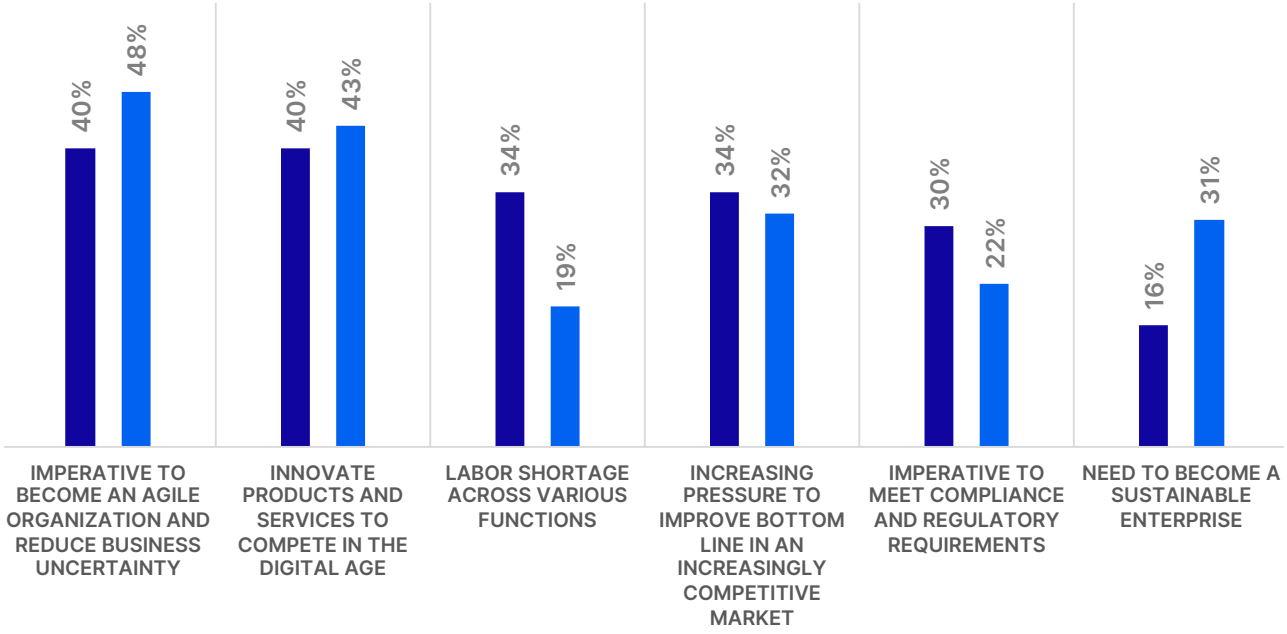


Process Automation Drivers

In 2024, the push to become an agile organization and reduce business uncertainty continues to be a key driver for many companies, though its urgency has slightly reduced compared to 2023 **(Figure 2)**. However, this slightly decreased from 48% in 2023 to 40% in 2024, indicating a shift in focus or possibly a stabilization in the need for agility and uncertainty reduction. On the other hand, rising concerns about labor shortages have significantly elevated the focus on automation as a solution to fill workforce gaps and enhance operational resilience (a notable increase from 19% in 2023 to 34% in 2024). As businesses face challenges in hiring and retaining enough skilled workers, they are turning to automation to maintain productivity, ensure operational efficiency, and continue meeting customer demands. Automation reduces reliance on highly specialized skills by standardizing and automating complex processes. This is particularly beneficial in industries experiencing shortages of skilled workers, such as IT, healthcare, and engineering. There is also a growing emphasis on meeting compliance and regulatory requirements (30%), underscoring the critical role of automation in ensuring adherence to evolving standards and regulations. While traditional drivers such as agility and cost efficiency still play a vital role, new challenges like labor shortages and regulatory compliance are increasingly shaping the direction of automation strategies.

The research data highlights a strong emphasis on comprehensive process mapping, system integration, and leveraging advanced technologies like AI and process mining to enhance automation strategies with 49% of organizations considering it important and 28% considering it "very important" **(Figure 3)**. Process mining is a technique used to analyze and improve business processes by extracting insights from event logs generated by information systems. It bridges the gap between data science and process management, providing a data-driven approach to understanding, optimizing, and monitoring business processes. Many respondents also emphasize the cruciality

Figure 2: Process Automation Drivers



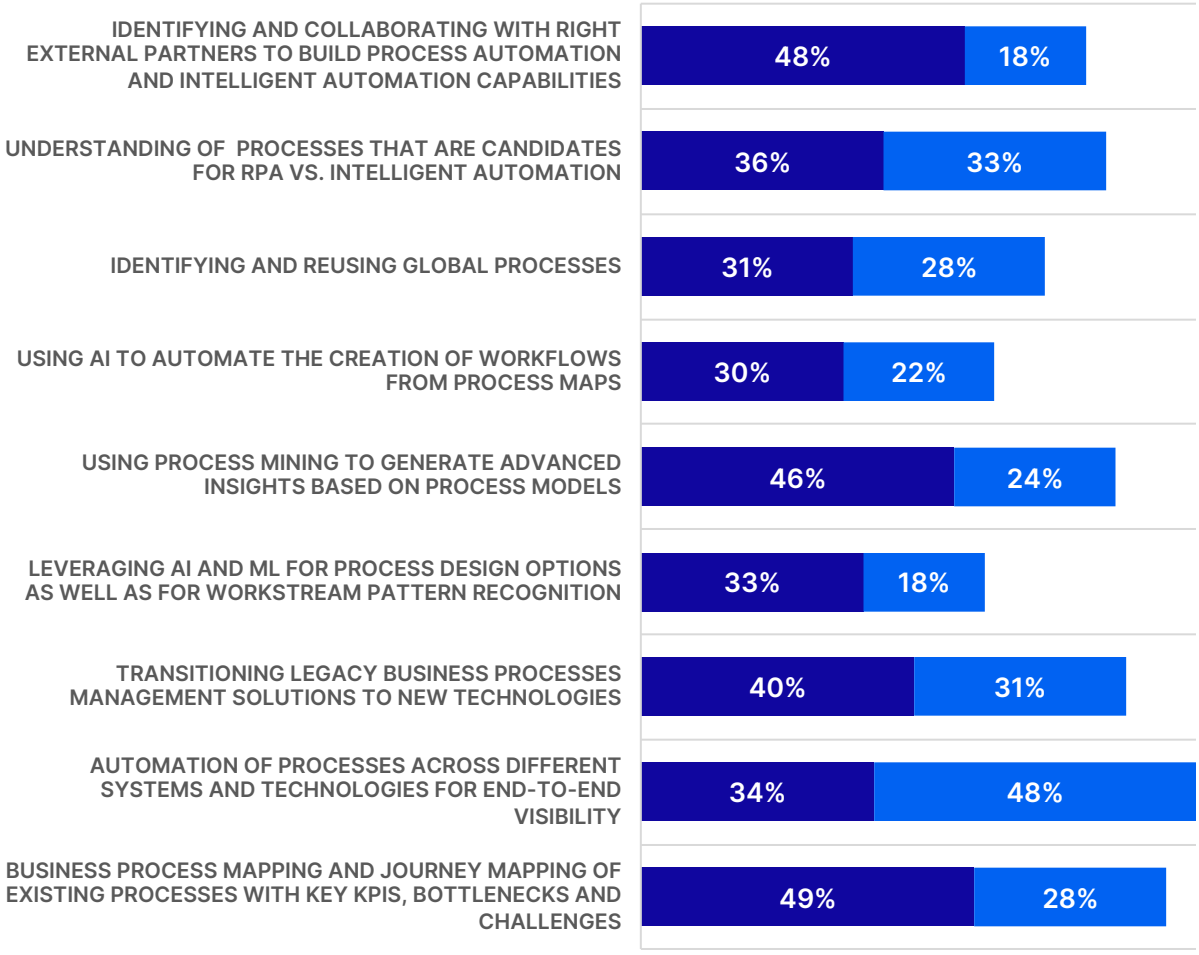
of automating processes across diverse systems and technologies to achieve end-to-end visibility (48%), highlighting a strong focus on seamless integration and comprehensive automation solutions. This underscores the increasing demand for robust strategies that can unify various technological environments into a cohesive system.

Requirements for Process Automation

There is a strong emphasis on differentiating between robotic process automation (RPA) and intelligent automation, highlighting the need to distinguish between more mature automation approaches like RPA and newer approaches like AI-enabled automation to maximize efficiency and effectiveness. This distinction is seen as critical, with 36% of respondents considering it "Important" and 33% viewing it as "Very Important," underscoring the necessity for organizations to be strategic in their adoption of various automation technologies to achieve optimal outcomes.

The findings reveal a comprehensive approach to expanding automation capabilities, combining established technologies with innovative solutions to enhance operational efficiency and agility **(Figure 4)**. Robotic Process Automation (RPA) platforms and invoice automation are prominently used (51% and 49% respectively), emphasizing a strategic focus on

Figure 3: Requirements For Process Automation



automating repetitive and manual tasks to reduce errors and increase productivity. Workflow automation (51%) and chatbots (51%) also have significant traction, reflecting their vital role in optimizing business processes and improving user engagement through automated interactions.

For some companies, like Hitachi Energy, important steps like systems consolidation, process centralization and standardization had to be completed before embarking on process automation and optimization. Hitachi Energy spun out of ABB and has spent the past four years rationalizing 37 different ERP instances down to one global ERP system.

"Now we can get to process automation. Now we have time to look at how do we create and drive greater efficiencies. Now we are ready to work on optimizing our workflows," said Marcel Bischof, Global SCM Tower Lead - CoE-Indirect Services at Hitachi Energy.

Process Automation Technologies

The adoption of API automation highlights the critical need for robust system integration and seamless data exchange between disparate systems, facilitating more cohesive and efficient operations. Additionally, there is a strong inclination towards deploying advanced technologies such as process mining and AI or machine learning-based automation platforms, indicating a shift towards more sophisticated analytics and intelligent automation solutions that drive data-driven decision-making and enhance strategic capabilities.

According to a senior director of IT at a global medical technology company, "We have a combination of in house and third party tools that have helped us in the automation journey and have provided visibility into a deep understanding of each step in the process thereby helping us to prioritize the key sub-processes and steps that will provide maximum benefit when automated. Most of the automation is done with the help of the business technology platform (BTP) in SAP and hence it has helped us a lot with integration with third party tools as well as internal development on the platform."

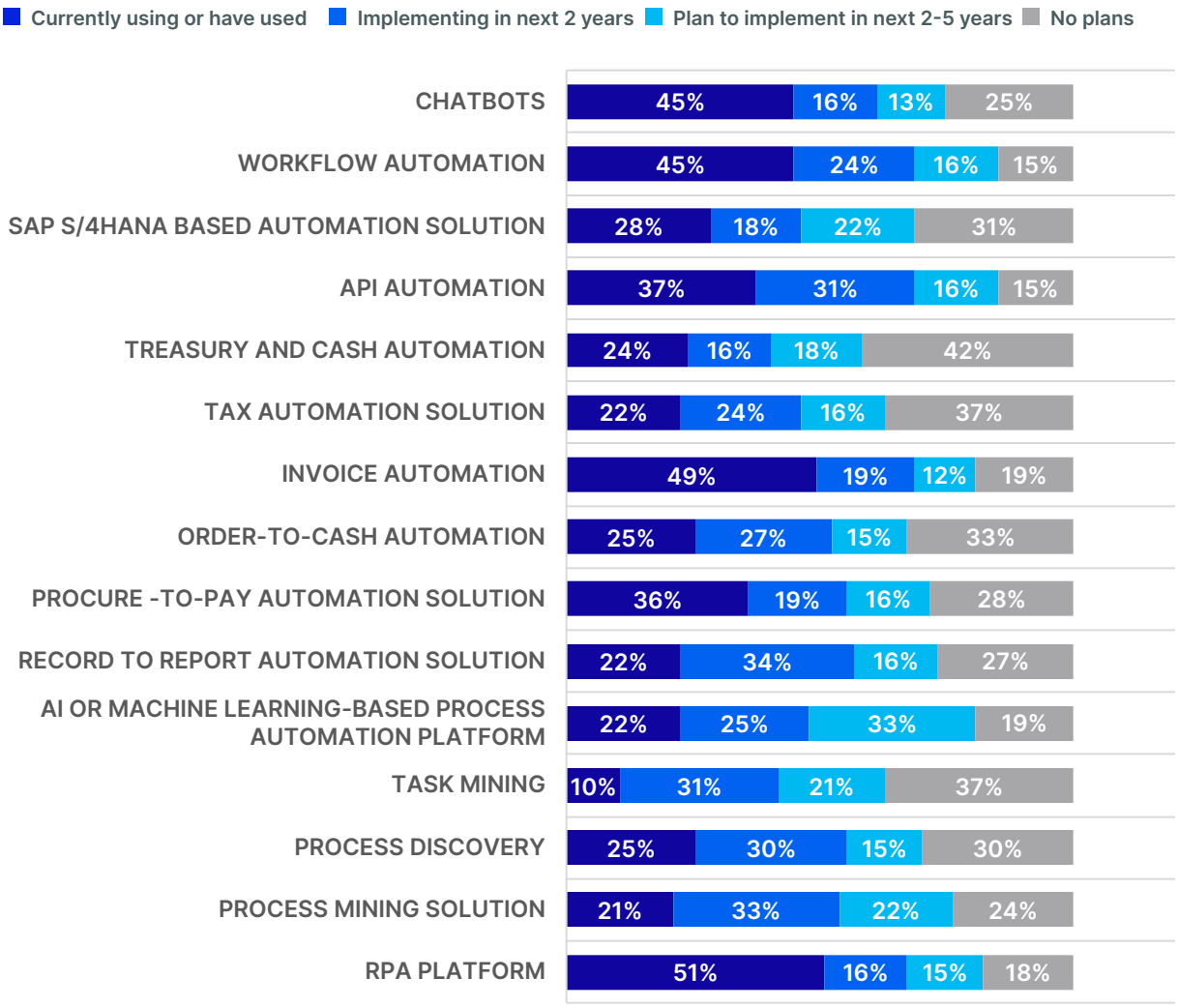
There is also a growing emphasis on enhancing workforce productivity and streamlining business processes. In 2024, the top priority is to boost productivity by automating repetitive tasks, with 76% of respondents prioritizing this, up from 59% in 2023 **(Figure 5)**. This reflects a strong emphasis on using automation to enable employees to focus on higher-value activities. Automation takes over repetitive, mundane tasks such as data entry, document processing, and routine reporting. This frees up employees' time, allowing them to concentrate on more complex and creative tasks that require human insight. Strategies to optimize and redesign processes for cost reduction have also gained importance, increasing from 49% to 60%.

INSIDER PERSPECTIVE

"Now we can get to process automation. Now we have time to look at how do we create and drive greater efficiencies. Now we are ready to work on optimizing our workflows,"

MARCEL BISCHOF, GLOBAL SCM TOWER LEAD - COE-INDIRECT SERVICES AT HITACHI ENERGY.

Figure 4: Process Automation Technologies



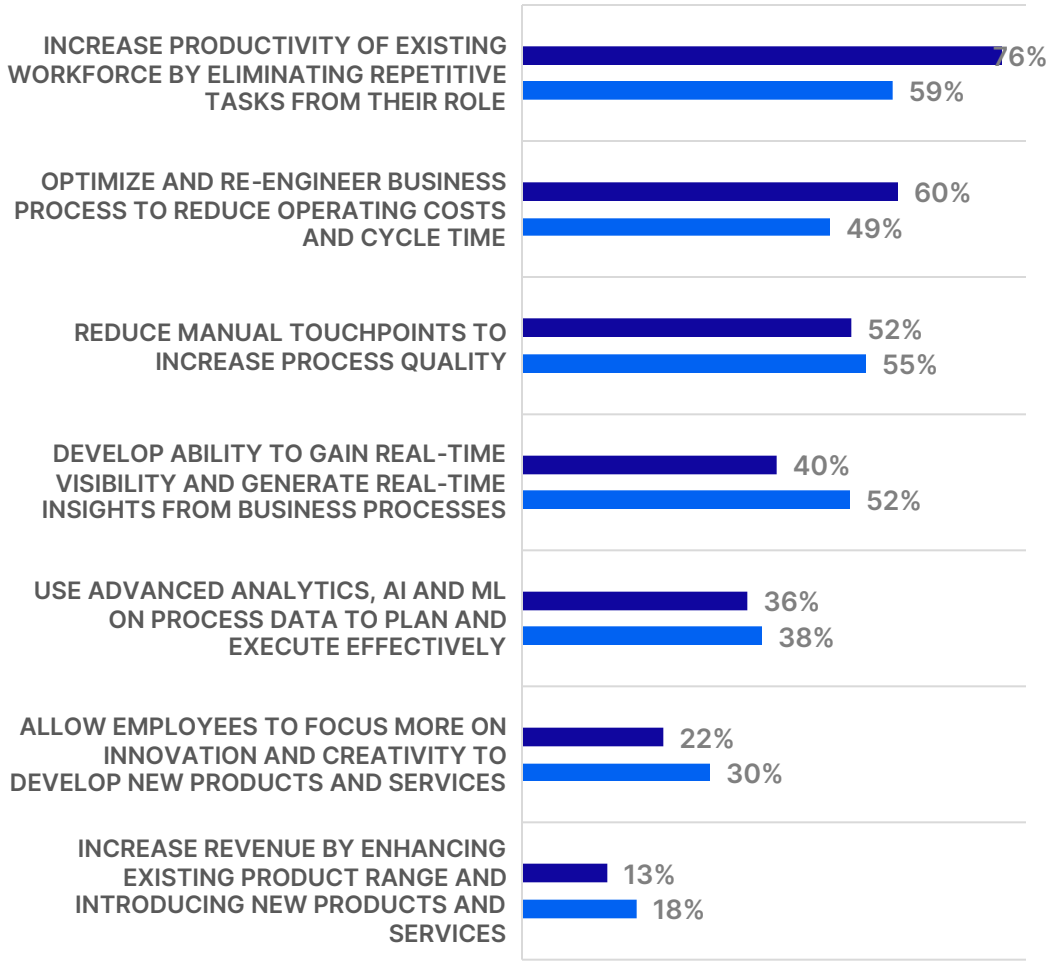
Process Automation Strategies

These shifts reflect a strong commitment to freeing employees from mundane tasks, enabling them to engage in more strategic and high-value activities. Simultaneously, strategies aimed at optimizing and redesigning processes for cost reduction have gained traction, highlighting the ongoing effort to improve operational efficiency.

At Hitachi Energy, the company is on a trajectory to grow 300% over the next 5 to 7 years. From Bischof's seat in the supply chain organization, the mandate is clear. Support the growing organization without growing the supply chain team by a proportional amount. This is where process automation becomes mission critical.

"We know what the target is for the next few years, so the question is how do we achieve the capacity and delivery performance that we need without having to hire three times the people that we have right now," said Bischof.

Figure 5: Process Automation Strategies



Process Automation Use

Finance-related processes have been the focus of most process automation initiatives, as the initial focus is removing manual touchpoints and eliminating headcount. “Procure to Pay” shows more advanced automation, with 30% of respondents indicating 31-50% automation and 20% reporting 51-80% automation, highlighting a more substantial focus on automating procurement processes. “Record to Report” also demonstrates higher levels of automation, with 26% in the 51-80% range, suggesting a stronger adoption of automation in financial reporting. “Order to Deliver” and ”Quote to Cash” processes have a moderate level of automation, with around 46-49% of organizations automating up to 30%, but with significant portions moving into higher automation brackets (21-24% for 31-50% automation and 17-21% for 51-80%).

The “Hire to Retire” process has the lowest automation levels, with 64% of organizations reporting 0-30% automation, indicating significant room for automation growth in human resource functions. Similarly, the “Quote to

Cash" process also has a high percentage of low automation, with 57% in the 0-30% range, reflecting limited automation in sales and revenue operations.

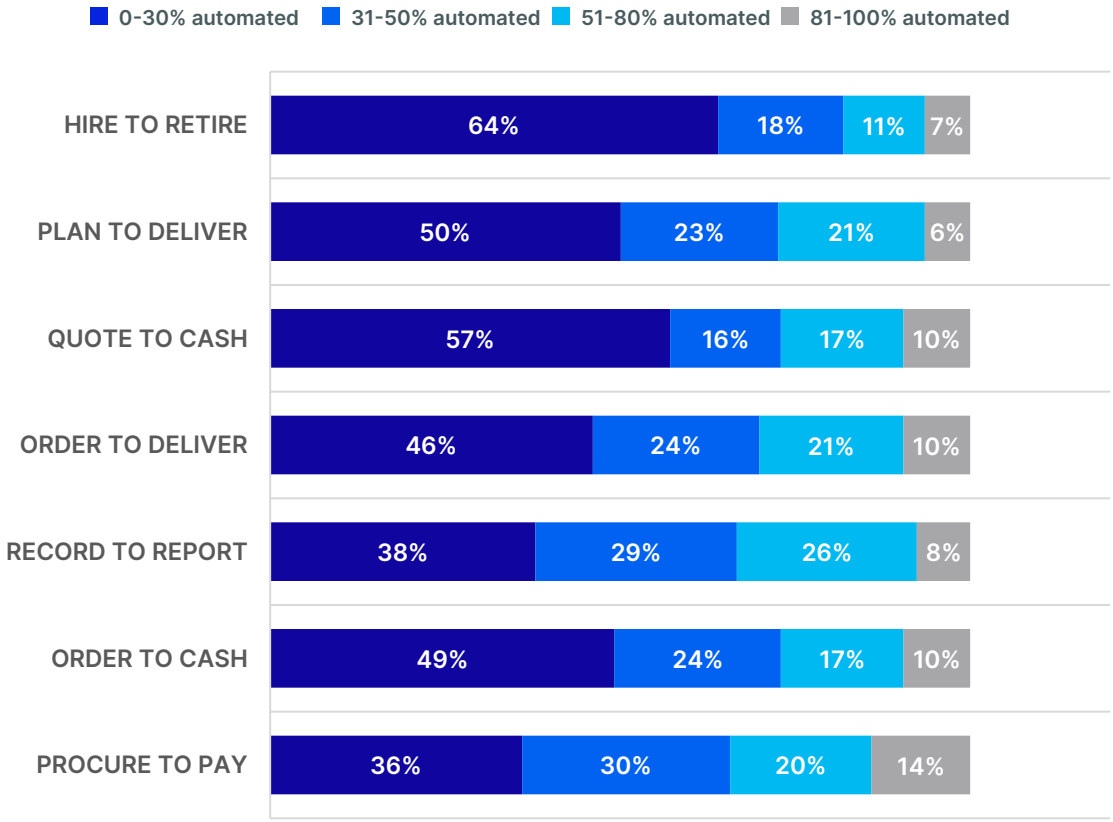
Regardless of the use case, executing on a process automation strategy is not without its set of challenges. Even after doing the hard work of process mining and mapping and opportunity identification, executing on automation opportunities often stalls due to lack of resources and competing priorities.

"So let's say we can do the process mining, we know where the gaps are and what the potential is. The next question is obviously how do we fund it?" said Bischof at Hitachi Energy.

More often than not, the greatest challenges with process automation are not technology related. Many companies reported more daunting challenges related to organizational change management, job function evolution, and employee communications.

"The biggest challenge is not the technology part, because that is a matter of development and coding and buying the right tools," said Bischof. "We have to convince our people that we're not doing this to get rid of them, but to do more work with the same amount of people. We have to relay our message to all our stakeholders and get them to join us on this journey that we're on."

Figure 6: Process Automation Use



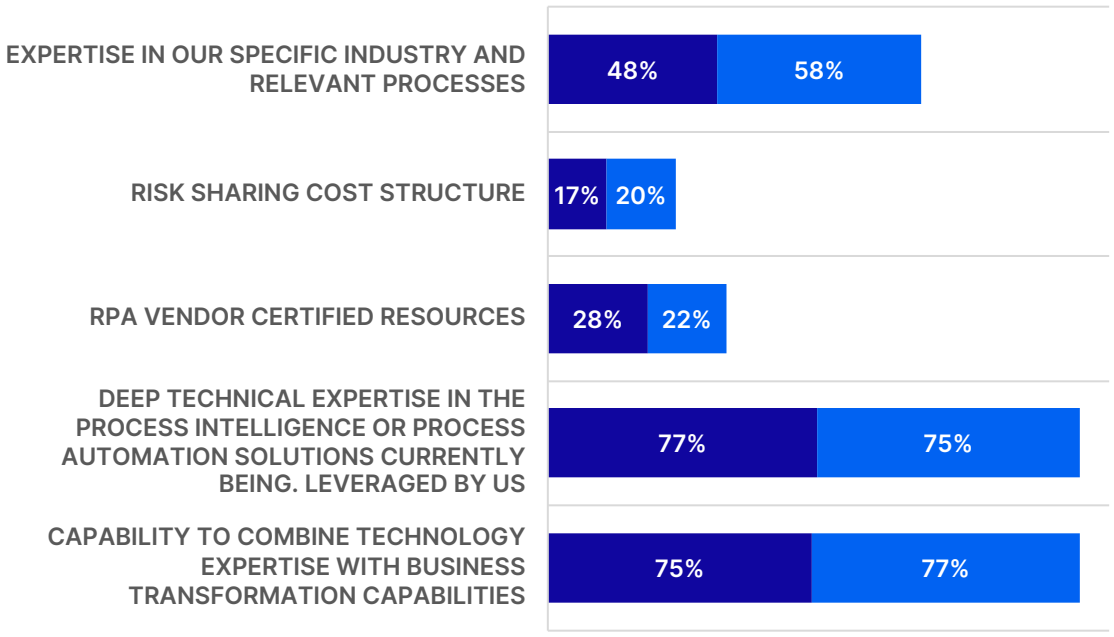
Criteria for Selecting External Partners

The research findings suggest that organizations are prioritizing deep technical expertise and the ability to deliver transformative business outcomes over other factors when selecting partners for their process automation efforts.

The criterion "Deep technical expertise in process intelligence or automation solutions," slightly increased from 75% in 2023 to 77% in 2024. This indicates a consistent preference for partners with advanced technical skills, reflecting the importance of specialized knowledge in driving successful automation initiatives.

Similarly, the criterion "Capability to combine technology expertise with business transformation capabilities" is highly valued, with a slight decrease from 77% in 2023 to 75% in 2024, suggesting a continued emphasis on partners who can align technical solutions with broader business goals.

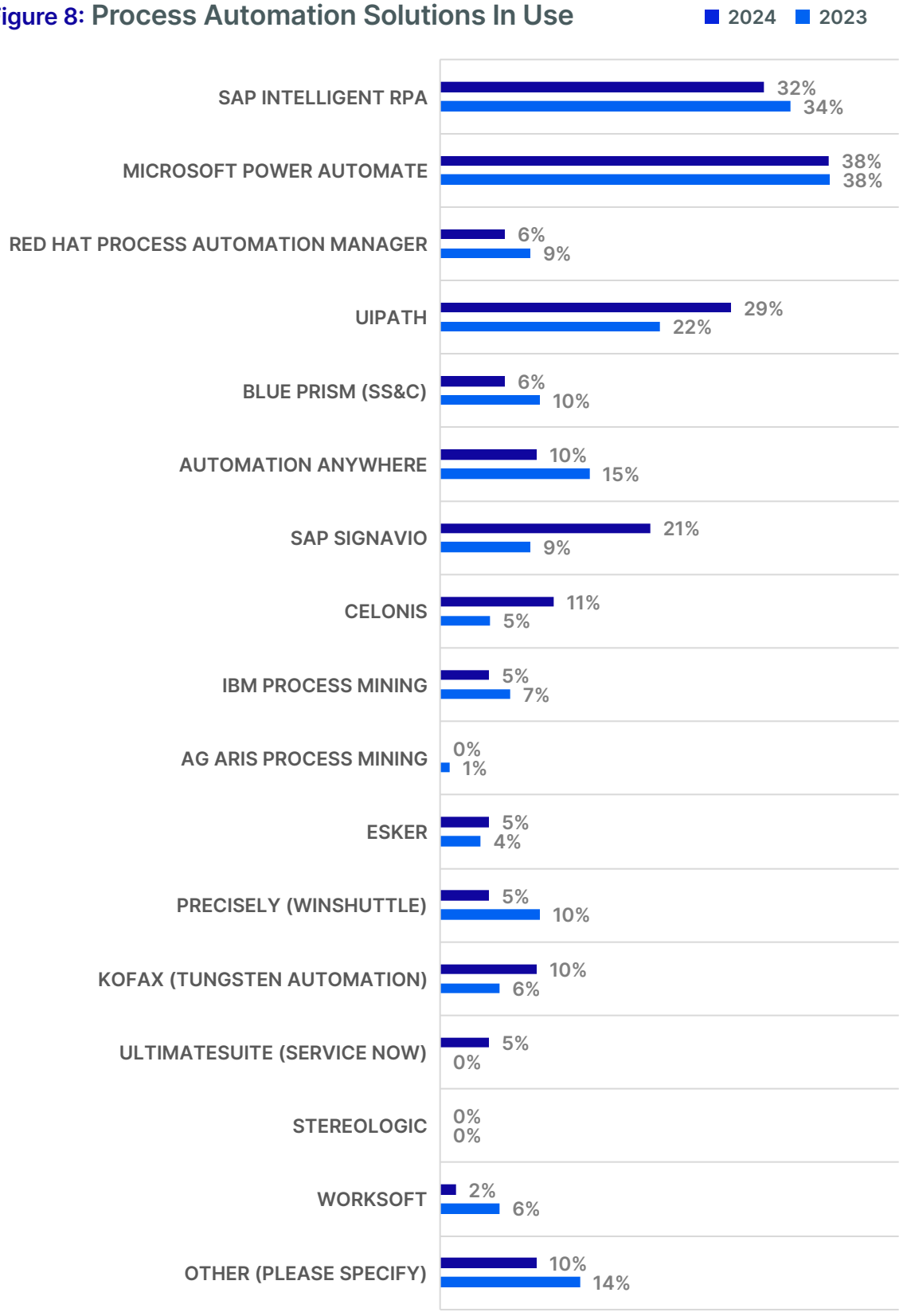
Figure 7: Criteria For Selecting External Partners



Process Automation Solutions in Use

We asked SAP organizations about specific solutions they are using for process automation. Microsoft Power Automate leads with consistent use at 38% in both years, reflecting its strong position as a preferred automation platform. SAP Intelligent RPA follows, showing a slight decrease from 34% in 2023 to 32% in 2024, indicating steady but slightly declining usage. UIPath also maintains a significant presence, increasing from 22% in 2023 to 29% in 2024, highlighting growing adoption and trust in its capabilities. Other solutions such as Automation Anywhere and SAP Signavio have seen notable increases, rising from 10% to 15% and 9% to 21%, respectively, suggesting expanding adoption of these platforms for automation needs. On the other hand, tools like Red Hat Process Automation Manager and Blue Prism (SS&C) have relatively low usage, with only slight increases, indicating limited but present interest.

Figure 8: Process Automation Solutions In Use



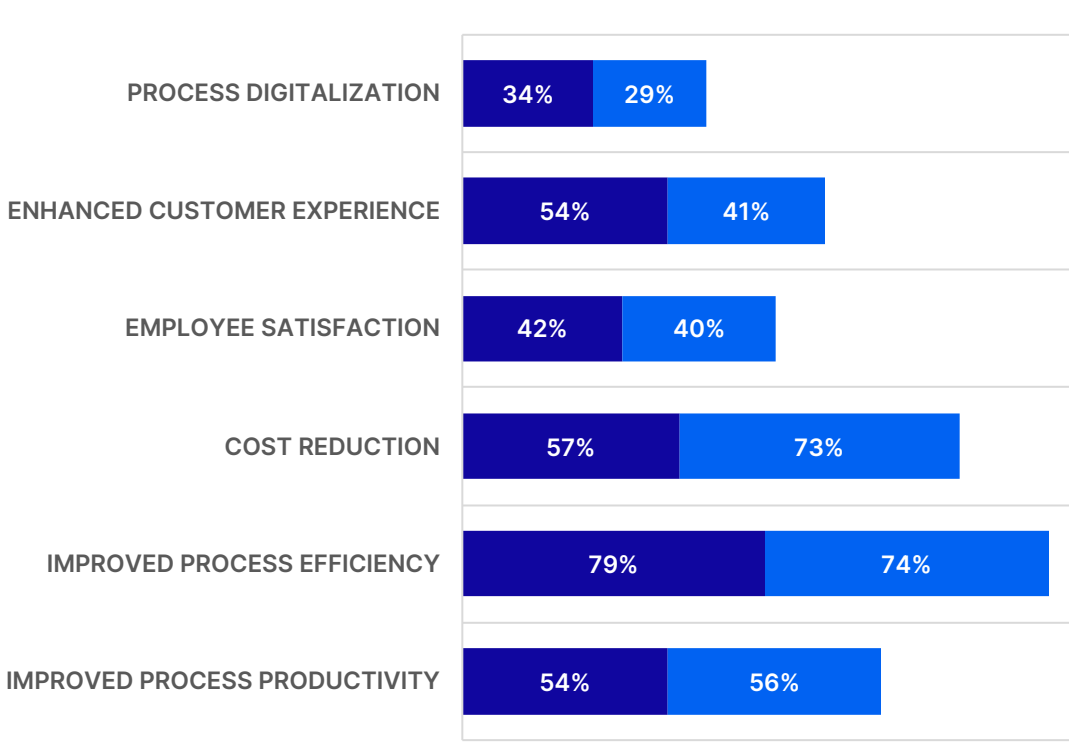
Criteria for Assessing the Success of Process Automation Initiatives

There is a shift towards measuring success based on efficiency, customer experience, and digital transformation, with less focus on cost reduction. Improved process efficiency is the top criterion in both years, increasing from 74% in 2023 to 79% in 2024, indicating a heightened focus on streamlining operations as a key measure of success. Automated processes can operate continuously without the delays inherent in human-dependent tasks, leading to faster completion of processes like order fulfillment, customer service responses, or financial transactions.

A senior director of IT at a global medical technology company cited success criteria such as fewer manual touchpoints, less time spent reconciling, increase in productivity and error reduction and elimination.

Cost reduction, however, has seen a notable decrease in importance, dropping from 73% in 2023 to 57% in 2024, suggesting a shift away from cost-saving as the primary objective of automation.

Figure 9: Criteria For Measuring Success Of Process Automation Initiatives



Required Actions

Based on the survey responses, organizations should make the following plans around their process automation strategies:

- **Create a tailored roadmap for building process automation capabilities.** Developing these capabilities requires more than just implementing technology; it involves a comprehensive strategy that encompasses various elements. A well-rounded automation strategy should include automation governance, application governance, deployment planning, and a focus on process excellence. A customized roadmap is essential as it guides organizations in systematically planning and developing these capabilities, ensuring a structured approach to achieving automation goals. According to a senior director of IT at global medical technology company, "Companies should implement process mapping with detailed steps involved with the help of subject matter experts to understand pain points and potential efficiencies when automated and then getting stakeholder sponsorship and a detailed automation execution plan including Plan B if the original plan does not work out."
- **Discover the most effective strategies for integrating advanced automation capabilities.** By enhancing robotic process automation (RPA) with artificial intelligence (AI) technologies, businesses can significantly expand their process automation potential. This combination, known as intelligent automation, offers the chance to completely transform business processes, seamlessly linking people, processes, and technology. Cognitive automation, a key feature embedded in many RPA platforms, facilitates basic decision-making within a human-machine collaboration, enabling more efficient and effective workflows.
- **Develop Comprehensive Process Monitoring and Measurement Capabilities.** To effectively assess the impact of process automation and drive continuous improvement, organizations must establish robust process monitoring and measurement systems. Instead of relying on outdated metrics or those commonly used by industry peers, it's essential to create a customized set of performance indicators that align with the organization's specific goals and automation initiatives. Leveraging advanced process control techniques, such as multivariate statistical process control (MSPC) for monitoring and machine learning-based predictive algorithms for anticipating anomalies or failures, can significantly enhance process control and optimization. However, these advanced methods require seamless access to real-time data generated by processes, underscoring the importance of a well-integrated data infrastructure.
- **Implement Specialized Reskilling Programs for Employees.** While process automation can lead to cost savings, the primary focus should not be on reducing headcount. Employees bring valuable expertise and insights into the processes they manage, which can be leveraged to enhance automated systems and create a more effective human-machine collaboration. To achieve this, it is crucial to involve employees early in automation initiatives and provide specialized training that enables them to fully utilize new tools and technologies. Automation pilots are particularly valuable for identifying training needs and ensuring that employees are well-equipped to work alongside automated systems, maximizing the benefits of automation while retaining valuable human knowledge and skills.

DART
MODEL FRAMEWORK

Process Productivity and Efficiency Through Process Automation and

DRIVERS

- Imperative to become an agile organization and reduce business uncertainty (40%)
- Innovate products and services to compete in the digital age (40%)
- Labor shortage across various functions (34%)
- Increasing pressure to improve bottom line in an increasingly competitive market (34%)
- Imperative to meet compliance and regulatory requirements (30%)
- Need to become a sustainable enterprise (16%)

ACTIONS

- Increase productivity of existing workforce by eliminating repetitive tasks from their role (76%)
- Optimize and re-engineer business process to reduce operating costs and cycle time (60%)
- Reduce manual touchpoints to increase process quality (52%)
- Develop ability to gain real-time visibility and generate real-time insights from business processes (40%)
- Use advanced analytics, AI and ML on process data to plan and execute effectively (36%)
- Allow employees to focus more on innovation and creativity to develop new products and services (22%)
- Increase revenue by enhancing existing product range and introducing new products and services (13%)

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REQUIREMENTS

- Business process mapping and journey mapping of existing processes with key KPIs, bottlenecks and challenges (49%)
- Identifying and collaborating with right external partners to build process automation and intelligent automation capabilities (48%)
- Transitioning legacy business processes management solutions to new technologies (40%)
- Using process mining to generate advanced insights based on process models (46%)
- Understanding of processes that are candidates for RPA vs. Intelligent automation (36%)
- Automation of processes across different systems and technologies for end-to-end visibility (34%)

TECHNOLOGIES

- Microsoft Power Automate (38%)
- SAP Intelligent RPA (32%)
- UiPath (29%)
- SAP Signavio (21%)
- Celonis (11%)
- Automation Anywhere (10%)
- Kofax (Tungsten Automation) (10%)
- Blue Prism (SS&C) (6%)
- Red Hat process Automation Manager (6%)
- IBM Process Mining (5%)
- Esker (5%)
- Precisely (Winshuttle) (5%)

The Dart™ Methodology

SAPinsider has rewritten the rules of research to provide actionable deliverables from its fact-based approach. The DART methodology serves as the very foundation on which SAPinsider educates end users to act, creates market awareness, drives demand, empowers sales forces, and validates return on investments. It is no wonder that organizations worldwide turn to SAPinsider for research with results.

The DART methodology provides practical insights, including:

DRIVERS	These are macro-level events that are affecting an organization. They can be both external and internal, and they require the implementation of strategic plans, people, processes, and systems.
ACTIONS	These are strategies that companies can implement to address the effects of drivers on the business. These are the integration of people, processes, and technology. These should be business-based actions first, but they should fully leverage technology-enabled solutions to be relevant for our focus.
REQUIREMENTS	These are business and process-level requirements that support the strategies. These tend to be end-to-end for a business process.
TECHNOLOGY	These are technology and systems-related requirements that enable the business requirements and support the company's overall strategies. The requirements must consider the current technology architecture and provide for the adoption of new and innovative technology-enabled capabilities.

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