

2025 AI, Automation and Orchestration Trends

The Future of Smart Business Operations



Introduction

“To prepare for 2025, decision-makers should balance AI innovation with the scale and reliability of traditional automation tools and methods... [and] recognize that deterministic automation will remain in control of the core long-running process, while AI models will support bursts of insight and efficiency.”

— Predictions 2025: Automation, Forrester, October 22, 2024

Where Is Automation Headed?

Artificial intelligence (AI), automation and process orchestration together are taking on more sophisticated, complex work on behalf of people –without requiring human intervention. Through developing technologies like generative AI, agentic AI and virtual assistants, we will likely see more work done autonomously in the future.

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Agentic AI

Moving Toward Autonomous Work

1 Agentic AI

Moving Toward Autonomous Work

The concept behind agentic AI is fully autonomous artificial intelligence that can take actions and make decisions without requiring human intervention. While this is a nascent capability in the market, the technology is evolving rapidly.

As of now, our focus is on how AI-powered enterprise agents can work with people to enhance business processes and decision-making. Enterprise agents function as integrated virtual colleagues with human-in-the-loop (HITL) verification to ensure consistent and reliable information delivery. This HITL step will ensure a level of governance that helps organizations, especially those in highly regulated fields, stay compliant within legal and internal requirements.

TOP TIPS

Determine areas where enterprise agents can streamline work.

Ensure human-in-the-loop verification to ensure outputs are consistent and reliable.

Set out a framework to guide your enterprise agents and ensure compliance.

12.7%

“Standalone automation will grow at five-year CAGR of 12.7% by 2028.”

— IDC, Worldwide Intelligent Process Automation Software Forecast, 2024-2028, doc # US52473124, August 2024

33%

According to Gartner®, “By 2028, 33% of enterprise software applications will include agentic AI, up from less than 1% in 2024.”

— Gartner, Top Strategic Technology Trends for 2025: Agentic AI, Tom Coshow, Arnold Gao, et al., 21 October 2024

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Agentic AI

What we're seeing



“While the market is still some way off true autonomous agentic AI, we’re anticipating plenty more intriguing applications of gen AI with automation and orchestration in 2025. Focus is already shifting from enhancing existing processes with AI, to now opening new discussions on where AI-powered enterprise agents – still firmly grounded by a human in the loop in the medium term – could transform an existing process and deliver business value.”

— **James Kelly**, senior product marketing manager



“Increasingly, organizations will start to look for ways to use gen AI to disrupt their operations in order to work differently and better, as opposed to just benefitting from incremental improvements to existing processes. With agentic capabilities comes the opportunity to allow more independent decision-making and action-based work to be done by AI. However, ongoing concerns around security, trust and governance will curtail the degree to which agents perform work autonomously. Instead, people will still be actively in the loop.”

— **Natalie Keightley**, VP of product marketing



“Agents often approach work in a non-deterministic way, and agentic capabilities are going to mature over time. As such, we’re likely to see the agents augment workflows rather than completely transform them. Companies will begin to replace some steps in their workflows to be handled by agents, likely with oversight from humans.”

— **Omid Hosseinitabar**, senior product manager



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Ecosystem Automation

Intelligence, API, Automation and Orchestration

2 Ecosystem Automation

Intelligence, API, Automation and Orchestration

On their own, technologies such as automation, orchestration, AI and application programming interfaces (APIs) can achieve a lot. But by combining these tools into one cohesive platform that works together seamlessly, organizations can connect systems, people and processes, and create more impactful and relevant outcomes across the business.

AI allows organizations to automate more complex decisions, where work is only assigned to humans in certain steps. By combining orchestration, automation, AI and APIs, businesses can grow rapidly without increasing their human workforce. Together, these tools can create more robust, flexible workflows, with predictive measures to help organizations stay proactive and agile in a competitive market.

TOP TIPS

Consider how combining AI, automation and orchestration with other technologies can benefit you.

Find software that can integrate with your existing systems to enhance operations.

Assign enterprise agents to areas of the business that take up valuable human time.

“[Predictive AI] can make the output of gen AI even smarter, leading to an increase in the proportion of use cases leveraging both technologies from today’s 28% to 35%.”

— Predictions 2025: Artificial Intelligence, Forrester, September 9, 2024

75%

“By early 2028, 75% of composite AI apps used by enterprises will be constructed on a unified platform framework that ensures trusted and efficient use of code, data and infrastructure resources.”

— IDC FutureScape: Worldwide IT Industry 2025 Predictions, doc # US51736824, October 2024

“By 2028, 75% of enterprises that establish an AI platform strategy built on a foundation of connecting processes to broader business functions will achieve enhanced value from their investments”

— IDC FutureScape: Worldwide Digital Business and AI Transformation 2025 Predictions, doc #US52641124, October 2024



Ecosystem Automation

What we're seeing



“Think of orchestration as an assembly line for all business processes: work is assigned to an individual, and once completed, that orchestrator assigns the next step to the next person. Like manufacturing assembly lines, we want to incorporate robotics and automation. Instead of just assigning work to humans, some steps can be assigned to automations or directly executed via an API. But business processes often involve more complex decisioning. That’s where AI comes in. [...] Automation, Orchestration, AI and APIs are all tools that benefit from working together to provide higher returns.”

— **Dr Lou Bachenheimer**, CTO



“Building an intelligent automation strategy requires integrating key capabilities like automation, orchestration, AI and APIs. Each plays a distinct role, and together, they create a powerful foundation that enables organizations to unlock efficiency, adaptability and innovation across their operations.”

— **Bhavik Patel**, head of competitive intelligence



“Integrating automation, orchestration, AI and APIs is essential for creating a cohesive IA strategy. These technologies combine reliability, adaptability connectivity for streamlined workflows, allowing organizations to adapt swiftly to changing business and application landscapes to drive innovation.”

— **Christopher Groenne**, product strategy consultant



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Human-Centric AI

Collaboration of Technology and People

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Human-Centric AI

Collaboration of Technology and People

With AI entering more workflows in the coming years, we'll see orchestration develop into more complex areas, where technologies and people interact seamlessly. AI will work alongside us (rather than merely automating administrative tasks) to reach a broader range of business activities, such as supporting knowledge workers. It will provide real-time insights and predictions to help people make faster, more informed decisions. Beyond that, though, it will enable people to get work done, like navigating applications and creating content.

Employees will increasingly see AI and gen AI as an extension of their workforce rather than an additive technology, and that collaborative mindset will help spur further innovation and value. This evolution of human-AI collaboration will require organizations to educate and advocate this technology to build trust and cooperability. An enterprise operating model can help prepare for this.

TOP TIPS

Educate your human workforce on how they can collaborate with AI enterprise agents.

Explore ways for your employees to shift their skills to more value-driving activities.

Expand peoples' tech ownership with participation in planning, designing and deploying.

30%

“Citizen developers will deliver 30% of gen AI-infused automation apps.”

— Predictions 2025: Automation, Forrester, October 22, 2024

2030

Gartner predicts, “By 2030, 80% of humans will engage with smart robots on a daily basis, up from less than 10% today.”

...

Gartner also predicts that, “By 2030, 30% of knowledge workers will be enhanced by, and dependent on, technologies such as BBMIs (both employer- and self-funded) to stay relevant with the rise of AI in the workplace, up from less than 1% in 2024.”

— Gartner, Top Strategic Technology Trends for 2025, Gene Alvarez, Tom Coshov, et al., 21 October 2024



Human-Centric AI

What we're seeing



“With the increased AI integration into business workflows in 2025 and beyond, we will see enhanced orchestration between enterprise agents and people, fostering more seamless collaboration. This trend will revolutionize how work gets done, further empowering humans to boost their productivity and creativity to deliver increased value towards business outcomes.”

— **Satish Shenoy**, RVP, global technology alliances and AI strategy



“Organizations will need to be more focused and structured when it comes to the management of their virtual workforce. Some organizations will appoint new roles to provide HR-like services for their AI agents, as well as do more to support the impact on their people. In other words, managing the virtual workforce will increasingly become as important and pervasive as managing people.”

— **Natalie Keightley**, VP of product marketing



“AI-powered orchestration platforms will manage task distribution and optimize workflow paths by assigning tasks to either digital or human workers based on skills, complexity and priority. These orchestration layers will coordinate digital workers handling repetitive tasks while humans handle decision-making, empathy-driven tasks or tasks needing creativity.”

— **Michael McLaughlin**, VP alliances and commercial operations

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Governance and Security

Compliance, Governance and Ethical AI



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Governance and Security

Compliance, Governance and Ethical AI

The increased use of AI and gen AI in organizations has brought up concerns about how to use the technology securely and ethically, especially in highly regulated industries. To build trust and ensure fair and transparent AI, organizations are leveraging supporting tools to guardrail their technology.

Frameworks via a reliable operating model will help govern and guide responsible AI deployment and use while ensuring it brings value to the business. For example, our Enterprise Operating Model helps with responsible AI adoption, using our existing orchestration capabilities like robust guardrails, built-in business rules and a non-repudiable audit trail. Establishing various points of security within an AI model, such as human-in-the-loop verification and automated rules, will help maintain safe practices.

TOP TIPS

Set a framework to guide your AI and ensure safe, legal and ethical practices.

Ensure your AI is fully auditable across its lifecycle to maintain transparency.

Implement supporting technologies to act as guardrails for your AI.

34%

of AI decision-makers at enterprise firms indicated that governance and risk are a major barrier to gen AI adoption.”

— Forrester’s July 2023 Artificial Intelligence Pulse Survey
– Generative AI: What It, Means For Governance, Risk And Compliance – Forrester Trends Report April 1, 2024

“AI governance is also top of mind; 22% of these decision-makers are concerned about the lack of transparency in AI/ML models, while 20% find it a challenge to maintain oversight and governance of machine decisions.”

— The State Of AI In Banking, 2023 – Forrester Trends Report, June 7, 2023

As stated by Gartner, “By 2028, organizations that implement comprehensive AI governance platforms will experience 40% fewer AI-related ethical incidents compared to those without such systems.”

— Gartner, Top Strategic Technology Trends for 2025: AI Governance Platforms, Jasleen Kaur Sindhu, Moutusi Sau, et al., 21 October 2024



Governance and Security

What we're seeing



“A new framework is required to enable organizations’ move into the adoption of AI. The SS&C Blue Prism Enterprise Operating Model (EOM) provides essential guardrails, emphasizing clear accountability, transparency and responsible use. With its structured approach, the new operating model will support enterprises in scaling AI securely and aligning its use with strategic objectives, helping organizations manage risks effectively as they move into 2025.”

— [Emma Kirby-Kidd](#), head of methodologies



“Deploying generic AI solutions in sensitive processes can be extremely risky. The good news is that guardrails and governance capabilities are increasing the levels of control and explainability in how AI operates, and using automatic hard-rule logic or human-in-the-loop can mitigate these risks and unlock new opportunities.”

— [Omid Hosseinitabar](#), senior product manager



“How to apply gen AI in both an effective and responsible way is the key question for enterprises to address in 2025. A large language model (LLM) in itself has wide-ranging value, but to get the most of its latent potential in an enterprise setting, organizations need the appropriate layering of supporting technology (like automation/RPA and orchestration/BPM), code of practices, and a suitable operating framework to ensure gen AI performs the work in the way you need it to.”

— [James Kelly](#), senior product marketing manager

The background features a dark blue gradient with glowing, isometric cubes in cyan and magenta. These cubes are connected by a network of glowing red and blue lines, resembling a circuit board or data flow. Small glowing dots are also scattered throughout the scene.

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Proactive Optimization

Process Intelligence and Mining

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Proactive Optimization

Process Intelligence and Mining

Tools such as process mining, task mining and process intelligence will enable deeper insights into how work is currently done in the organization. This will further enable organizations to take advantage of optimization opportunities and remove the bottlenecks slowing down operations.

Process discovery tools will be used to continuously monitor and analyze workflows in real-time, flagging issues as they emerge and suggesting adjustments. With AI and process discovery tools supporting (rather than replacing) employees' work, they will encourage a culture of continuous improvement, experimentation and learning – empowering employees to provide feedback on process changes and share insights into new pain points.

TOP TIPS

Employ process discovery tools in key areas of the business to discover growth opportunities.

Foster a work culture encouraging employees to learn and gain insights from these tools.

Integrate AI with your process discovery tools to extract deeper workflow insights.

“According to Forrester’s Q2 AI Pulse Survey, 2024, the distribution of enterprise use cases leveraging predictive AI (36%) is roughly equal to those leveraging gen AI (35%).”

— Predictions 2025: Artificial Intelligence, Forrester, September 9, 2024

77%+

“Over 77% of enterprise leaders find process transparency to be the top value brought by process mining tools.”

— Global Process Mining Survey, Deloitte, 2023



Proactive Optimization

What we're seeing



“Before any business process can be improved, accelerated or automated, it first must be understood fully. Looking into 2025 and beyond, AI enhancements will improve process intelligence tools to better gather and process that information. As analysts agree that scaled automation programs are quickly becoming a necessity to compete in a post-gen AI market, the need to identify precisely what to automate becomes a crucial capability.”

— **Dr Lou Bachenheimer**, CTO



“In 2025, process discovery will be pivotal in uncovering inefficiencies and continuous optimization of workflows. By leveraging advanced process mining tools, AI and IA technologies, companies can gain deep insights into their operations, enabling data-driven decisions that enhance efficiency and customer satisfaction.”

— **Christopher Groenne**, product strategy consultant



“Process digital twins will come to the fore in 2025; they will enable companies to test process modifications in a virtual environment, allowing them to visualize outcomes without disrupting live operations. Real-world data will be fed into the digital twin to test the impact of changes on key performance indicators (KPIs) like cycle time, resource usage and output quality.”

— **Michael McLaughlin**, VP alliances and commercial operations

A woman with dark hair, wearing a white hard hat and a high-visibility yellow safety vest over a dark shirt, is looking upwards and to the right. She is holding a tablet computer in her hands. The background is a blurred warehouse or industrial setting with shelves and equipment. The image is overlaid with a dark purple circular graphic on the right side and a greenish-purple circular graphic on the left side.

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AI-Augmented Orchestration

Insights and Decision-Making

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AI-Augmented Orchestration

Insights and Decision-Making

As more organizations integrate the benefits of AI enterprise agents, they will see a significant shift in how to orchestrate end-to-end processes. We'll see a rise in agentic workflows, where more activity within a workflow will have the potential to be automated. As AI evolves, we may even see it autonomously recommending and implementing improvements, anticipating needs, mitigating risks and finding new ways to achieve operational excellence.

Gen AI – and someday agentic AI – can help enterprises create more dynamic, adaptive workflows. This includes predictive measures, such as avoiding supply chain disruptions and automatically rerouting resources. AI will help break down organizational silos and unify data into a single decision platform that intelligently matches tasks with the most suitable resources.

TOP TIPS

Integrate your AI into a unified orchestration platform for better workflows.

Leverage AI to help people, agents and applications work together to deliver better outcomes.

Create more dynamic workflows with AI, orchestration and automation combined.

2026

“By 2026, features like RPA and DPA are already baseline expectations, and the focus of process tools will shift to orchestration.”

...

“By 2026, [orchestration tools] will independently drive the process with AI-driven workflows.”

— AI Is Reshaping Automation Markets – Forrester Trends Report, February 23, 2024

Gartner states that, “Organizations will integrate and orchestrate the growing numbers of new computing models with the many existing ones to optimize their use.”

— Gartner, Top Strategic Technology Trends for 2025: Agentic AI, Tom Coshov, Arnold Gao, et al., 21 October 2024



AI-Augmented Orchestration

What we're seeing



“In 2025, AI will continue transforming and revolutionizing process orchestration, transforming static workflows into adaptive, self-optimizing systems that enhance performance and enable smarter, data-driven decision-making. By leveraging AI-driven “living workflows”, organizations will unify isolated automation efforts.”

— **Patty Yan**, senior product marketing manager



“I believe orchestration tools will increasingly focus on integrating human expertise with AI insights, creating more intuitive interfaces that highlight critical decision points and provide clearer context in its explanations to enable better and – dare I say? – more nuanced problem-solving.”

— **Gregory Walker**, product marketing manager



“In 2025, AI will be the engine behind orchestration, connecting processes with adaptive intelligence that continuously learns and optimizes. Enterprises will rely on AI to enable real-time operational optimization, making them more agile, efficient and responsive to change.”

— **Bhavik Patel**, head of competitive intelligence

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Process Impact to Business Impact

Wider Scope of Business Goals



7 Process Impact to Business Impact

Wider Scope of Business Goals

Organizations need to move beyond single task or process automation to look at the wider scope of the end-to-end business. In 2024, SS&C Blue Prism commissioned Forrester Consulting to run a Total Economic Impact™ (TEI) study on our intelligent automation platform. The research dives into the benefits and value of combining automation and orchestration rather than integrating stand-alone technology. The TEI estimates a 330% return on investment and a 5.4% incremental annual revenue growth over three years.

With the combined power of gen AI, automation and orchestration, organizations can extract more value from everything people do. Gen AI works efficiently with unstructured datasets and across legacy and modern systems. Automation and orchestration help keep the AI on track, streamlining processes and reducing manual tasks for employees.

TOP TIPS

Define your AI goals early and establish key performance indicators (KPIs) of what you want to achieve.

Focus on more strategic outcomes like business growth, and customer and employee experience.

Continuously monitor your AI's performance against your established KPIs to determine your ROI.

330%

return on investment (ROI) over three years and less than six months to pay back investment from a combined orchestration and automation platform.”

— Forrester Consulting Total Economic Impact™ (TEI) Study
Commissioned by SS&C Blue Prism

65%

of organizations cite extended value across more/larger (potentially cross-departmental) end-to-end processes as the biggest benefit from a unified RPA and BPM orchestration solution.”

“65% of respondents stated intelligent automation has become a strategic initiative.”

— TEI Study



Process Impact to
Business Impact

What we're seeing



“To quantify the business impact of process transformation and intelligent automation, organizations must align their efforts with strategic priorities. By embedding gen AI into a unified automation and orchestration framework, businesses can achieve sustained strategic outcomes, enhancing efficiency, customer satisfaction and long-term value creation.”

— [Patty Yan](#), senior product marketing manager



“If your digital workers aren’t having a tangible impact on external-facing metrics, your organization is missing a trick. And if you – I’m looking at you, CoE head – aren’t measuring, quantifying and correlating these business outcomes, then someone else is taking credit for your hard work and ingenuity.”

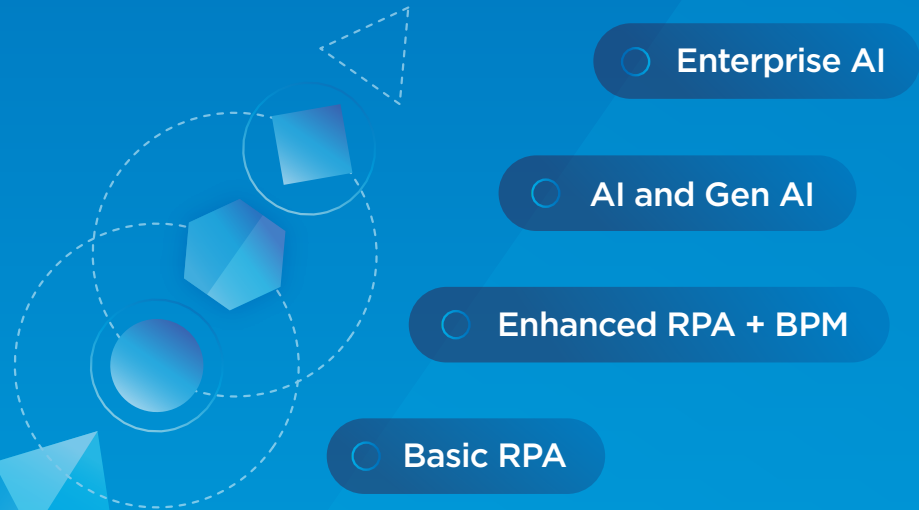
— [Dan Ternes](#), CTO, APAC



“As automation matures, so do the metrics — from early FTE savings and task efficiencies to mid-stage gains in lead times and service levels, and finally, to advanced measures of customer impact and strategic value. But those foundational metrics are always relevant, showing how small efficiencies build lasting impact.”

— [Christopher Groenne](#), product strategy consultant

The Evolution of Collaborative Technologies



What is Enterprise AI?

At SS&C Blue Prism, we have the experience and tools to help organizations and business leaders transform work with SS&C | Blue Prism® Enterprise AI. Enterprise AI uses AI-powered enterprise agents to augment peoples' work, helping them make faster decisions by putting the right information and resources at their fingertips.

Your 2025 Checklist

- ✓ Incorporate human-in-the-loop verification for all AI-automated processes.
- ✓ Establish a framework and cohesive set of tools to guardrail your enterprise agents.
- ✓ Seek the benefits of combining orchestration, automation and AI in one unified platform.
- ✓ Encourage AI innovation across your organization and people.
- ✓ Set up fully auditable AI with transparency across the entire lifecycle.
- ✓ Ensure responsible, ethical AI practices with robust governance practices.
- ✓ Extract valuable business insights through AI-powered process discovery tools.
- ✓ Set KPIs for your Enterprise AI initiative and continuously monitor its performance.

ANALYSTS AND CUSTOMERS TRUST US TO DELIVER VALUE WITH AUTOMATION



Leader in Process Orchestration
by Everest Process Orchestration
Products PEAK Matrix®
Assessment 2024



Leader in RPA for the 7th time by
Everest Group's RPA PEAK Matrix®
Assessment 2024



A 2024 Gartner Magic Quadrant™
Leader for Robotic Process
Automation

Start your digital transformation journey by speaking with one of our intelligent automation experts. Click below and please indicate your industry or area of interest so we can best assist you.

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Email us at bpm-contact@sscinc.com to learn how SS&C Blue Prism can help your organization realize transformational business value with intelligent automation.

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SS&C Blue Prism allows organizations to deliver transformational business value via our intelligent automation platform. We make products with one aim in mind — to improve experiences for people. By connecting people and digital workers, you can use the right resource, every time, for the best customer and business outcomes. We supply enterprise-wide software that not only provides full control and governance but also allows businesses to react fast to continuous change. Exceed customer expectations, stay competitive, accelerate growth.

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