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The AI world requires speed, scale, agility, and continuous innovation. The foundation for business in this new AI world is a powerful, modern, AI-enabled cloud ERP system with one version of the truth.

Empower the Enterprise with the Powerful Core Capabilities of a Modern, AI-Enabled Cloud ERP

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The New AI Era: Modern, AI-Enabled Cloud ERP Technology

The world is now in the AI era — and organizations making the shift to AI-enabled cloud systems are leveraging the technology to gain competitive advantage, automate workflows, and innovate continuously. IDC's August 2025 *Future Enterprise Resiliency and Spending Survey, Wave 7,* found that AI enablement brings a host of benefits:

- 50% of organizations found increased technical performance of software, including accuracy of predictions, speed of processing, and reduced errors.
- 48% found operational efficiencies of greater automation, faster processing time, and reduced manual workflows.
- 42% had improved key performance indicators like customer satisfaction and financial outcomes, including cost reductions and increased revenue.

These benefits help heighten the demand for AI-enabled cloud systems. IDC's 2025 *SaaS Path Survey* found that 53% of respondents already use AI features in their applications. However, 44% plan to advance their technology based on the generative AI (GenAI) available in the vendor's product releases. This latter point is significant as organizations now recognize they need AI enablement in their enterprise applications to spur better performance. While this may sound like an easy switch, it is a journey for every organization.

AT A GLANCE

The AI world necessitates modern, easy-to-consume AI-enabled enterprise applications without complexity and legacy-related configuration issues.

KEY STATS

According to IDC's May 2025 *SaaS Path Survey*:

- 44% of organizations plan to adopt new ERP systems with generative AI included within the next 24 months.
- 82% plan to replace their current cloud ERP system at the end of its subscription.
- 37% must have a modern intelligent system that enables the business to scale with speed and agility.
- 34% need better configurability from their ERP system.
- 33% require embedded AI workflows and intelligence.

WHAT'S IMPORTANT

- AI-enabled cloud ERP systems
- Standardized business processes
- Automated AI-enabled workflows
- AI and ML
- Microservices architecture
- APIs
- A clean core strategy

In IDC's 2025 *Future Enterprise Resiliency and Spending Survey, Wave 7,* 59% of organizations indicated they are still digitally transforming toward greater value creation as they become more dependent upon digital technologies, of which AI is a critical component. Companies in the midst of value creation and digital transformation have told IDC of their frustrations as they modernize their technology:

> *"All of the customizations we have spent years doing to make our lives easier [aren't] as easy to understand and unravel, especially as we move to more modern, standardized cloud-based technology."* — CIO, global manufacturer

> *"As we look at our business processes now, we worry that we will be spending more to customize the workflows once again. It is easier and more advantageous for us to take advantage of AI-enabled cloud ERP."* — CIO, technology business

> *"We no longer have time, nor do we want to customize our workflows. We would rather put our resources into running the business in the easiest way possible. This means reducing our touch time with our enterprise software and using standards that are reconfigured outside of the software and only as really needed."* — CIO, U.S. manufacturer

Digitally transforming, especially in the AI world, isn't easy or quick. Successful organizations find that this transformation requires:

- Thinking about a strategic plan, change management, and the total cost of ownership
- Managing the transformation successfully with smooth user adoption
- Generating a realistic data-driven plan for migration and ongoing operations impact

Successful transformation also relies on other key elements such as technology, data security, integrations, and connectivity, as well as customizations and extensibility.

Technology

A cloud-first strategy to leverage more standard technology functionality is critical in the digital world. In fact, moving toward more automation to encompass all business processes will help bring a more efficient organization while gaining consistency. Some organizations are taking advantage of low-code/no-code solutions to extend their business processes without impacting their digital core. And many are exploring continuous innovation opportunities, such as AI, GenAI, machine learning (ML), and agentic AI to continually enhance their technology.

Data Security

Data, and its security, is critical to every business and must be protected throughout the migration and in the cloud. Utilizing the right migration methods can assist in governing and managing risks.

Integrations and Connectivity

A smooth dataflow that enhances the user experience is the goal. However, this flow can become disturbed when transitioning integrations to existing or new technology. The organization must ensure optimal response times and minimal business disruptions while supporting integrations that are upgrade stable.

Customizations and Extensibility

Businesses must think about which processes might need customization. While the cloud offers an opportunity to have more standardized workflows, there may be industry and regulatory standards to consider. Customizations must not impact upgrades or innovation, so instituting governance and adhering to code quality and standards are a must.

Legacy Systems Compound the Movement to Digital Business

Many digitally transforming businesses still use legacy systems, particularly for ERP. This tendency exposes the organization to risk in its ability to compete. Companies with legacy systems often cannot run their business with as much agility, resiliency, speed, and scale as competitors with more modern technology. Without implementing more modern systems, these organizations are left struggling with:

- Data inconsistencies, inefficient processes, and difficulties in generating comprehensive reports
- Complex, costly customizations requiring specialized technical expertise to update them
- Difficulties in responding to swiftly evolving market circumstances
- Lags in decision-making due to delayed reporting cycles and data analysis that requires time-consuming manual data extraction and manipulation
- Management of costly operations

Legacy systems have been customized to keep current infrastructure functioning. However, this tactic creates technical debt that:

- Is complex, as many business processes have been customized into the system code directly, modifying it to meet business needs
- Is more expensive to run and upgrade as well as latent in response time
- Enables complex and costly innovation that requires too many resources and increases the potential for business disruption

Modern Technology Systems Offer Simpler Configuration and Standardization Methodologies

Modern enterprise application systems hosted in the cloud have automated workflows, a microservices architecture, and APIs. Enhanced with AI and ML, these systems enable organizations to move with speed, agility, and scale. Organizations using modern enterprise applications have told IDC:

> *"Our current pace of business requires that we access information quickly and make the right decisions based on the insights we receive so we can be successful. It doesn't matter if it is an external customer request, an internal business owner, or even financial input, we need to move quickly and efficiently."* — CIO, CPG company

> *"We have moved into the digital era. Our very survival depends upon modern technology that is easy to operate, in the cloud, and automates as many of our business processes as possible."* — CFO, technology organization

Organizations using modern enterprise applications find that:

- **SaaS, cloud, and AI-enabled** applications empower employees with greater flexibility to work anywhere, at any time, and on any device, surfacing greater insights quickly while enabling faster decision-making.
- **Standard business processes** that come from industry best practices can be utilized out of the box.
- **A cloud-friendly extension framework** can be leveraged with composable capabilities to deliver quick business benefits.
- **Automated workflows** complete tasks faster, reduce human errors, capture more critical operational information, and enhance an organization's decision-making abilities. AI, GenAI, and ML help streamline business processes, provide greater insights, and can also detect and deploy repeatable workflows based on real-time data to improve the user experience. In addition, agentic AI brings more autonomous workflows, aiding the employee in faster guided responses.
- **A modular composable enterprise system** evolves the technology stack because it is a collection of loosely coupled services that are independently deployable and organized around business capabilities.
- **Integrations and APIs** facilitate increased automation by streamlining the flow of data between applications as well as the speed with which they are deployed.

From an ERP perspective, IDC finds that organizations not only want these attributes found in modern enterprise applications but also count on them. IDC's May 2025 *SaaS Path Survey* gathered responses from over 2,877 individuals globally across 23 application areas. Respondents included 150 ERP system users whose vision of the perfect ERP system is described in Figure 1.

This ERP vision means organizations want one platform that ties into their front-office systems and is modern and intelligent. They want the ERP system and the platform it sits on to be simple to update with easy integrations, more speed, greater agility, and an ability to scale as needed. All these features mean the ERP system is on a platform to digest data, so sound business decisions can be made. These attributes are table stakes in the AI era. Of equal importance is understanding that the underlying ERP system has few or no customizations. These more modern enterprise applications can enable configurable workflows that do not disrupt the core of the product, instead keeping the data clean and ensuring a smoother path to upgrades and innovation. This concept is called a clean core.

FIGURE 1: ***Vision of the Perfect ERP System***

Q *What is your vision of the perfect ERP system?*

n = 150

Source: IDC's SaaS Path Survey, May 2025

A Clean Core

IDC defines a clean core as the core of the technology system remaining clean such that the data within it — configuration data, master data, and transactional data — is not impacted by any additional customizations. When organizations adopt an ERP clean core strategy, it makes it easier to adopt the latest release quickly, reduce modifications, and enable extensions and customizations to continue because they are cloud compliant. When the underlying ERP operations are standardized, best practices can be leveraged and customizations are only done to differentiate the business.

When a company has a clean core, it can:

- Add functionality by extending what is needed without impacting the built-in standards.
- Enable the system to be integrated with other systems and with extensions for additional functionality without impacting the information contained within the system.
- Use the business processes contained within the system without modifying what is there.

- Innovate as needed without costly additions to workflows or test times.

Organizations using this clean core strategy find they can develop and consume innovation on their own or with a partner at a faster pace. They also find upgrading the system is simpler, takes less time, and doesn't disrupt legacy systems and operations. And it allows more resources to focus on deploying innovation rather than chasing bespoke extensions and integrations.

Benefits of Modern Technology with a Clean Core Strategy

A clean core strategy keeps an organization's core enterprise technology systems pristine. This cleanliness means the system can be maintained more easily and in a faster manner and typically brings a lower total cost of ownership. Such an approach helps keep the code clean, data lean, modifications controlled and in compliance, processes simple and clear, and integrations and landscape predictable. Organizations using this strategy experience numerous benefits, including:

- Greater system adaptability to meet changing business requirements and adopt new capabilities while ensuring permanent traceability in all areas of the core
- Less software customization, with more business processes standardized and automated
- Faster and easier use of the latest innovations, with little impact on the underlying data and processes
- Better execution for the business with higher-quality data, more data ingestion, and one version of the truth
- More agility with a leaner environment and decreased time to value (Additional process requirements can be implemented faster, and business models can adapt to short-term challenges more easily.)
- Greater optimization of processes across the entire business so organizations are more efficient and productive
- Acceleration of innovation by leveraging regular upgrades and powerful development tools that make updates and upgrades easier and integrate cloud services faster
- Better execution with improved data quality and consistent data that allows reliable forecasts and precise predictions
- New levels of IT efficiency while mitigating business risk
- Savings due to less coding and integration work
- Reduction in costs attributed to data integration, poor data quality, and data security
- Flexibility to scale operations more efficiently and effectively
- An ability to be future ready and competitive at any point in time

Clean Core: Why It Matters

A clean core strategy is one way to leverage the cloud and use standardized business processes to innovate quickly, extend and upgrade easily, and remain compliant. For an organization using a modern ERP in the cloud, the ERP vision is

easier to achieve because it can stay on the most current release, use the technology tools and features to its advantage, and avoid accumulating technical debt. In addition, for organizations with a hybrid environment, ensuring that upgrades can happen quickly and are much easier because the core remains clean is crucial. Operations with a single source of truth that can quickly assimilate data, find insights, and make better and more informed decisions are those that will secure their AI world future.

AI World Trends and the Pace of Change

The AI world requires speed, scale, and agility, along with leveraging technology to be and remain competitive. Organizations thriving in this new world recognize they need a powerful AI-enabled cloud ERP system as their underpinning to bring more value creation with AI. These organizations are taking advantage of extreme automation as well as innovations such as AI, ML, GenAI, and agentic AI. This means they must efficiently and effectively upgrade, change, adapt, and innovate at lightning speed so the business can meet customer demands.

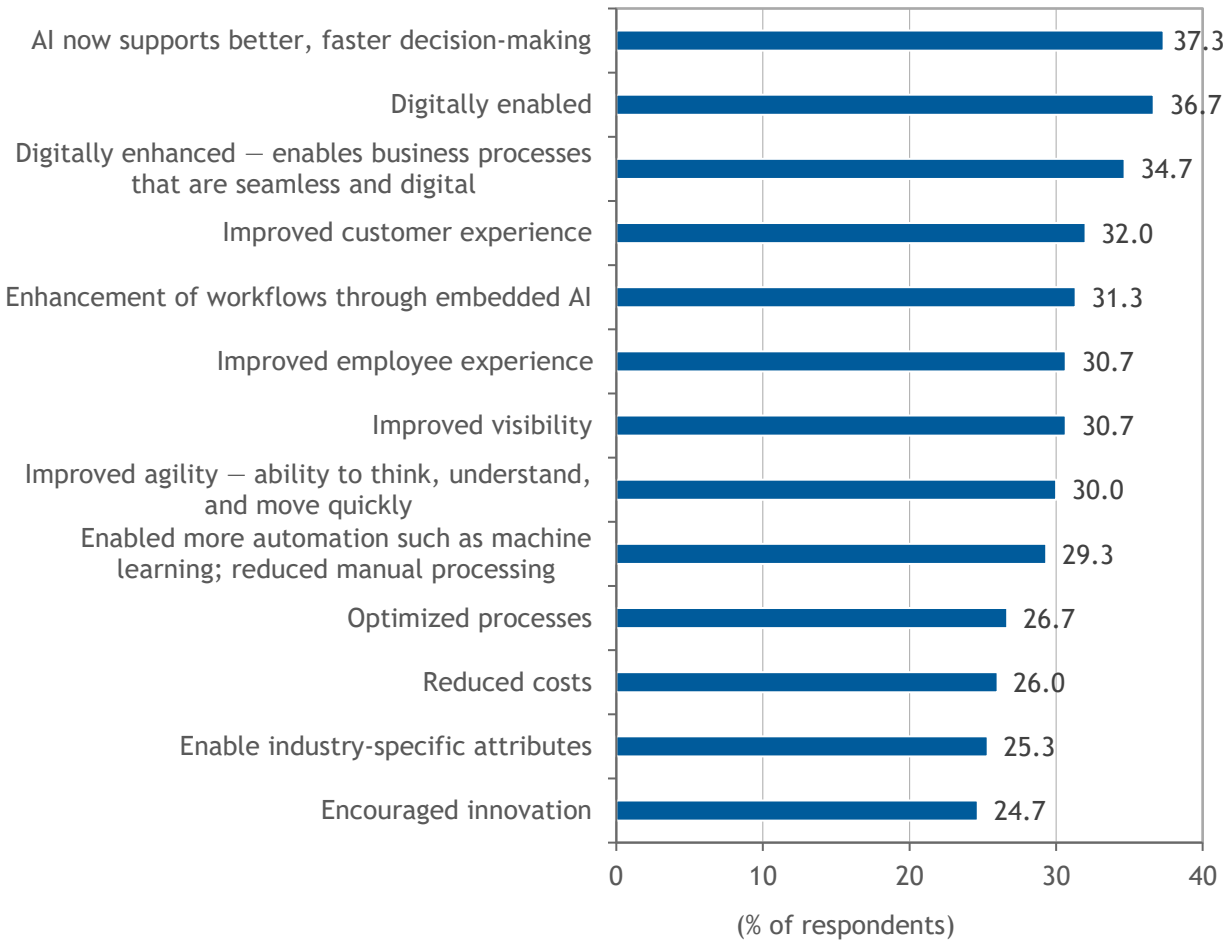
Industry differentiation remains a major factor in the digital world as the pace of change increases by the minute. Transforming processes, integrating new systems, and reshaping complex workflows can be a nightmare without utilizing modern and competitive technology to meet greater demand.

Navigating geopolitical turmoil, climate change, supply chain issues, talent shortages, and new competitors can also wreak havoc on the business. Leveraging the right systems is critical to managing the velocity of change. Modern ERP systems can help organizations adapt and stay relevant as the speed of business accelerates. This context sets the stage for why AI-enabled cloud ERP with a clean core is foundational.

Organizations moving to new ERP systems are more digitally enabled with improved customer experience, enhanced agility, and optimized processes, as shown in Figure 2.

FIGURE 2: ***Impact of Moving to a New ERP System on the Business***

Q How has/will the move to a new ERP system impacted/impact your business outcomes? Select all that apply.



n = 150

Source: IDC's SaaS Path Survey, May 2025

Considering SAP

SAP, headquartered in Walldorf, Germany, is a global leader in enterprise software solutions. With a rich history spanning over four decades, SAP has established itself as a trusted provider of innovative technologies that help businesses of all sizes and industries thrive in the digital age.

SAP offers a comprehensive suite of software products. Its flagship offering, RISE with SAP, combines intelligent technologies, cloud infrastructure, and migration services to enable businesses to achieve operational excellence and drive innovation in the cloud.

At the core of RISE with SAP lies SAP S/4HANA Cloud, private edition. SAP S/4HANA Cloud, an intelligent AI-enabled ERP solution, integrates all key business functions, including finance, sales, procurement, and manufacturing, into a single, unified platform. With advanced in-memory computing technology, SAP S/4HANA Cloud provides real-time analytics, predictive insights, and streamlined processes, empowering businesses to make faster, data-driven decisions and respond quickly to changing market dynamics.

By adopting SAP S/4HANA Cloud, businesses can eliminate unnecessary customizations and leverage best practices embedded in the system, enabling a clean and efficient ERP core. Integration of data sources and business functions ensures a cohesive and intelligent ERP environment with advanced analytics capabilities, enabling businesses to access real-time insights for informed decision-making.

The concept of an ERP clean core strategy has gained significant traction in recent years. It revolves around simplifying and standardizing ERP systems to minimize complexity, reduce customizations, and ensure seamless upgrades. SAP's RISE with SAP offering aligns with this concept and provides several key features that aid businesses in achieving and maintaining a clean core.

RISE with SAP: Pathway to a Clean Core

RISE with SAP is a comprehensive journey designed to guide customer transformation to the SAP Business Suite. It facilitates quicker and more efficient adoption of advanced business processes and innovations. Organizations are provided with clear, structured guidance to achieve their transformation objectives, running their systems on a "clean core" to enable rapid adoption of new business processes and innovations.

The RISE with SAP Methodology offers step-by-step project task descriptions built on insights from thousands of RISE projects, enriched with critical clean core activities, accelerators, and links to recommended tools. This ensures a streamlined, effective transformation journey for organizations, allowing them to leverage the full potential of SAP S/4HANA Cloud's capabilities.

The SAP Business Technology Platform underpins RISE with SAP, offering robust operations and integrated services to accelerate digital transformation. Tools like SAP Signavio for Business Process Transformation and SAP LeanIX for Enterprise Architecture Management further enhance the solution.

Challenges

While businesses want to thrive in the digital world, many cannot move past their legacy systems. Most organizations generally understand the value that cloud technology can enable. A challenge for SAP and others in this space is to educate customers about the full capabilities this technology offers and how to best take advantage of them.

The complexity of migration and the potential for significant business disruption in moving legacy system capabilities to the cloud also pose challenges. These can be mitigated with a clear view of the move's impact in terms of customizations and extensions, integrations, data, process consistency and operations efficiency, and day-to-day clean core governance. Moving toward simplicity is the most preferred pathway. However, organizations often falter at a new way of doing business. If a company can operate on the latest release, eliminate modifications, run on cloud ERP that is compliant with cloud standards, and add in additional customizations that do not impact the core of the system, then cloud ERP becomes a win-win.

Conclusion

Despite the arrival of AI, too many companies continue their use of legacy applications that only add time, complexity, and costs to running the business. AI has brought a rapid acceleration of innovation in automation, requiring organizations to be nimble and to quickly and effectively swap out technology to ensure their survival in this new world. Organizations need to navigate swiftly to meet the challenges of today's AI and are therefore moving toward the right technology to do so. AI requires speed, scale, agility, and continuous innovation. The foundation for business in this new world is a powerful, modern, AI-enabled cloud ERP system with one version of the truth.

About the Analyst

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Mickey North Rizza is group vice president for IDC's Enterprise Software. She leads the Enterprise Applications and Strategies research service along with a team of analysts responsible for IDC's coverage of the next generation of enterprise applications including digital commerce and other customer experience CIS, employee experience, enterprise asset management and smart facilities, ERP, financial applications, HCM and payroll applications, procurement, professional services automation, and related project-based solutions software, supply chain automation, and talent acquisition and strategies.

MESSAGE FROM THE SPONSOR

Access continuous innovations by modernizing your on-premises SAP ERP to SAP Business Suite. Benefit from Cloud based AI, data and applications by migrating to SAP Business Suite using the RISE methodology aligned to a clean core.

The RISE with SAP methodology in SAP Business Suite uses a clean core and leverages SAP Best Practices Processes wherever possible by running necessary extensions, integrations and customizations in a clean core compliant way, in-stack on your ERP or side by side on the SAP Business Technology Platform.

- Accelerate the adoption of new innovations through regular release upgrades and feature pack adoption
- Support latest business requirements to stay competitive by monitoring and transforming your business processes
- Reach new levels of IT efficiency and mitigate risks to the business by running your ERP in the SAP Business Suite

To learn more about how the SAP Business Suite uses a clean core strategy, visit: RISE with SAP | Transformation journey to SAP Business Suite.

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