The digital business world requires speed, scale, and agility. Digital businesses automate everything, use technology to compete, and rely on continuous innovation. At the heart of running a digital business is a powerful, modern cloud ERP system with a clean core that has one version of the truth, regardless of updates and innovative technology.

Digital World Success Leverages Powerful Core Capabilities of the Modern Cloud ERP

August 2023

Written by: Mickey North Rizza, Group Vice President, Enterprise Software

The New World Order: Modern, Technology Driven, and Digital

Companies recognize they are in a digital world. In fact, IDC's March 2023 *Future Enterprise Resiliency and Spending Survey, Wave 2,* found that 51% of respondents are running a digital business. In other words, these organizations use technology to compete and gain competitive advantage, rely on extreme automation, and innovate continuously with new technology. While this may sound easy, it isn't. IDC's research also found that 49% of organizations are still digitally transforming. Companies in the midst of 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 isn'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."* — CIO, technology business

Digitally transforming isn't for the faint of heart, nor is it as quick as snapping your fingers and making it happen. Successful organizations find that 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

AT A GLANCE

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

KEY STATS

According to IDC's April 2023 *SaaSPath Survey:*

» 44% of organizations plan to adopt new ERP systems within the next 36 months.

» 41% plan to replace their current cloud ERP system within the next 36 months.

» 20% find integration to be an ERP issue.

» 16% are concerned innovation and upgrades are issues for their ERP systems.

» 14% wish their ERP systems had little to no customizations.

WHAT'S IMPORTANT

» SaaS and cloud-enabled ERP systems

» Standardized business processes

» Automated workflows

» Artificial intelligence and machine learning

» Microservices architecture

» APIs

» A clean core strategy

Successful transformation also relies upon other key elements such as technology, security, integrations and connectivity, and 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 artificial intelligence (AI) and machine learning (ML), 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 data flow 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 required industry and regulatory standards to consider. The customizations must be kept without impacting 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 that are in the cloud have automated workflows, a microservices architecture, and APIs. Enhanced with artificial intelligence and machine learning, 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 much of our business processes as possible." — CFO, technology organization
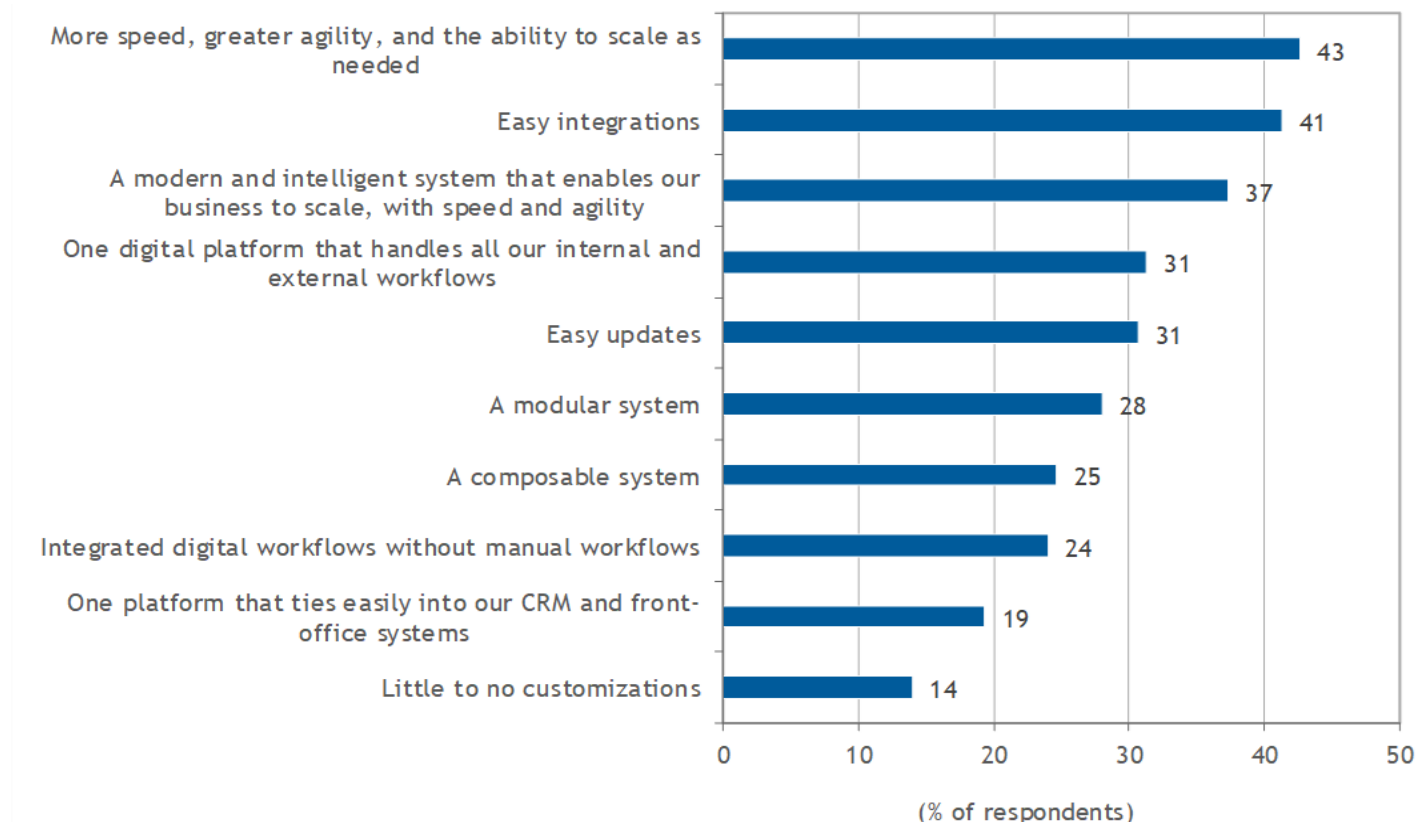
Organizations using modern enterprise applications find that:

» **SaaS and cloud-enabled** applications empower employees with greater flexibility to work anywhere, at any time, and on any device.

» **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 and ML help streamline business processes and provide greater insights and can also detect and deploy repeatable workflows based on real-time data to improve the user experience.

» **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 April 2023 *SaaSPath Survey* gathered responses from over 2,800 individuals globally across 23 application areas. Respondents included 150 ERP system users whose vision of the perfect ERP system is described in Figure 1.

FIGURE 1: *Vision of the Perfect ERP System*

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

Attribute	% of respondents
More speed, greater agility, and the ability to scale as needed	43
Easy integrations	41
A modern and intelligent system that enables our business to scale, with speed and agility	37
One digital platform that handles all our internal and external workflows	31
Easy updates	31
A modular system	28
A composable system	25
Integrated digital workflows without manual workflows	24
One platform that ties easily into our CRM and front-office systems	19
Little to no customizations	14

n = 150

Source: IDC's SaaSPath Survey, April 2023

This ERP vision means organizations need systems that are simple to implement, easy to integrate, and intelligent so they can use and digest data to make sound business decisions. These attributes are table stakes in the digital era. Of equal importance is understanding that the underlying systems do not have to be customized. 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.

The 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 in an easier and faster manner and typically brings a lower total cost of ownership. Such an approach helps keep the codes 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

Digital World Trends

The digital world requires speed, scale, and agility, along with leveraging technology to be and remain competitive. Organizations thriving in this environment are running digital businesses using extreme automation as well as innovations such as AI and ML. This means they must efficiently and effectively upgrade, change, adapt, and innovate at lightning speed so the business can meet customer demands.

Industry differentiation continues to be 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.

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*

Q *How has/will the move to a new ERP system impacted/impact your business outcomes? Select all that apply.*
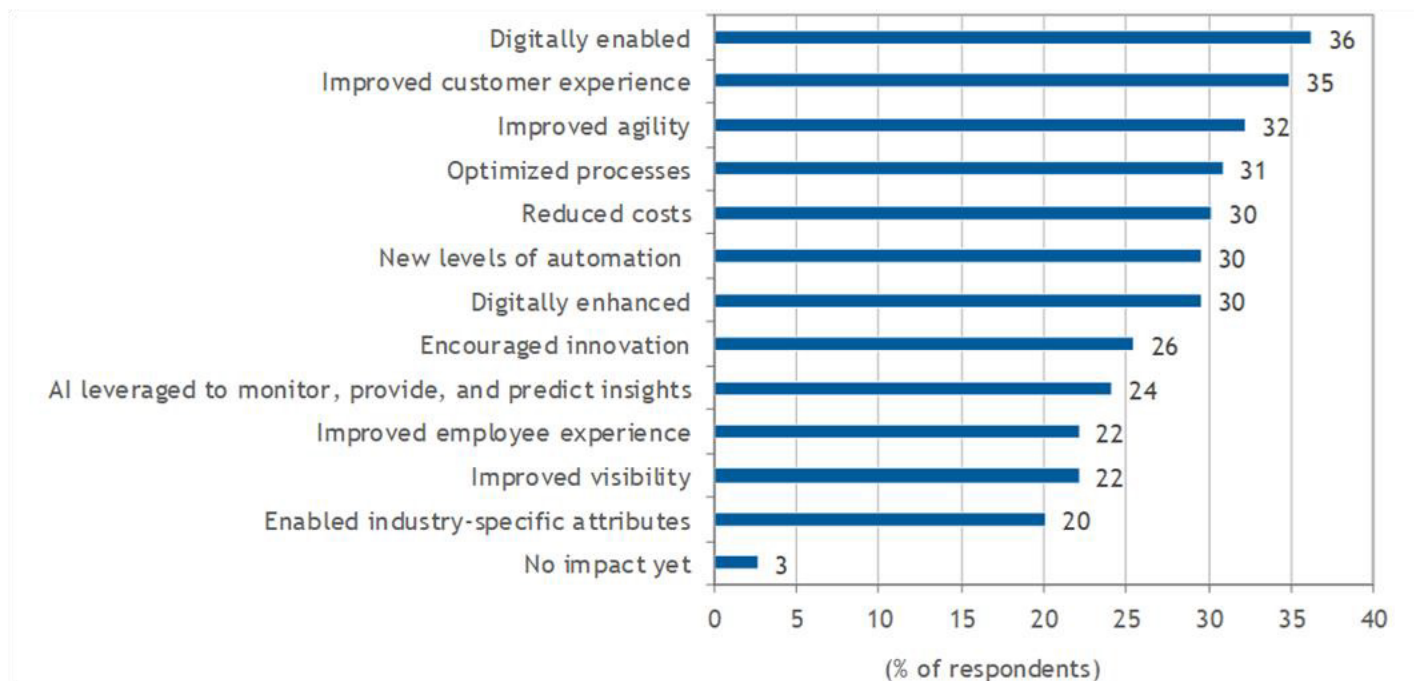
n = 149

Source: IDC's SaaSPath Survey, April 2023

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

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.

By adopting 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.

RISE with SAP also includes starter packs for SAP Business Technology Platform (BTP) and SAP Signavio. These solutions work together with S/4HANA to help businesses get to a clean core and stay clean.

SAP BTP enables a single source of the truth and can serve as a central hub for master data. It also provides a framework for decoupling extensions and using built-in integrations in a cloud-compliant manner. Recently, SAP introduced SAP Build, a low-code/no-code tool to create new user experiences quickly and easily or extend existing ones.

SAP Signavio provides tools to visually document processes to identify inconsistencies and bottlenecks as well as a collaboration framework to connect across stakeholders and teams to integrate business processes. SAP Signavio also helps with document modifications and tracks changes for review and approval.

SAP's RISE with SAP offering, along with the SAP S/4HANA Cloud ERP system, SAP Business Technology Platform, SAP Signavio, and the company's cloud infrastructure and migration services, supports every dimension of an ERP clean core strategy.

Challenges

While businesses want to thrive in the digital world, many cannot move past their legacy systems. Most generally understand the value 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 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

Although the digital world is upon us, too many companies continue their use of legacy applications that only add time, complexity, and costs to running the business. The digital world has brought a rapid acceleration of innovation in generative AI, 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 digital world and are therefore looking toward the right technology to do so.

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 is much easier because the core remains clean. 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 digital world future.

About the Analyst

Mickey North Rizza, *Group Vice President, Enterprise Software*

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

Operate Your Cloud ERP with Greater Ease, Agility, and Control with a Clean Core

An ERP clean core strategy helps ensure organizations use the latest release, minimize or eliminate modifications, and run with cloud-compliant extensions and customizations. By standardizing underlying ERP operations, you can leverage more best practices where possible and customize only what you need to differentiate your business.

» Accelerate innovation by leveraging regular upgrades and powerful development tools

» Execute better with improved data quality

» Reach new levels of IT efficiency and mitigate risks to the business

To learn more about an ERP clean core strategy, contact your SAP Partner.

IDC Custom Solutions

The content in this paper was adapted from existing IDC research published on www.idc.com.

IDC Research, Inc.

140 Kendrick Street

Building B

Needham, MA 02494, USA

T 508.872.8200

F 508.935.4015

Twitter @IDC

idc-insights-community.com

www.idc.com