ERP systems provide an integrated financial business perspective utilized to drive business performance. When an ERP system is fueled with AI, it becomes more intelligent, automated, and innovative, providing an opportunity for the business to create a differentiating competitive advantage.

AI and ERP: Intelligently Automating the Enterprise and Creating Differentiating Value

September 2023

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

The Digital World Is Reshaping the Use of Technology

The digital world has arrived — and with it comes more reliance on technology. IDC's March 2023 *Future Resiliency and Spending Survey, Wave 2,* found 51% of respondents were running a digital business. This means an organization uses technology to compete and gain competitive advantage, relies on extreme automation, and innovates continuously with new technology, such as artificial intelligence (AI). While this may sound easy, it isn't. In addition, IDC's research found that 49% of organizations were still digitally transforming, so it's clear the journey to a digital business can be difficult. However, digital transformation success requires an organization to focus on:

» Enabling a cloud strategy as it makes sense to the business

» Moving toward more automation for all business processes, enabling more consistency and efficiency while standardizing functionality

» Exploring and applying continuous innovation opportunities such as AI

This focus isn't always easy as organizations have much on their plate, including building a technology strategy to reshape the organization for the digital world, which means they must understand and modernize their current technology portfolio around the edges of their legacy on-premises solutions. Adding to this overall strategy is an understanding of the opportunities that come to light when continuous innovation such as AI is applied to their software suite. In this case, ERP can quickly be enhanced with AI, yielding more intelligent insights to enable employees to quickly navigate and respond faster, improving their decisioning and, in turn, boosting an organization's performance.

AT A GLANCE

KEY STATS

IDC's 2022 *AIPath Survey* found that AI's impact on business processes is critical to being more competitive in the digital world:

» 53% of organizations found AI enables the system to take more actions of preconfigured workflows and approvals.

» 51.2% found the business insights are brought forward quickly for employee review and action.

» 45.2% found it provides an ability to model future business outcomes.
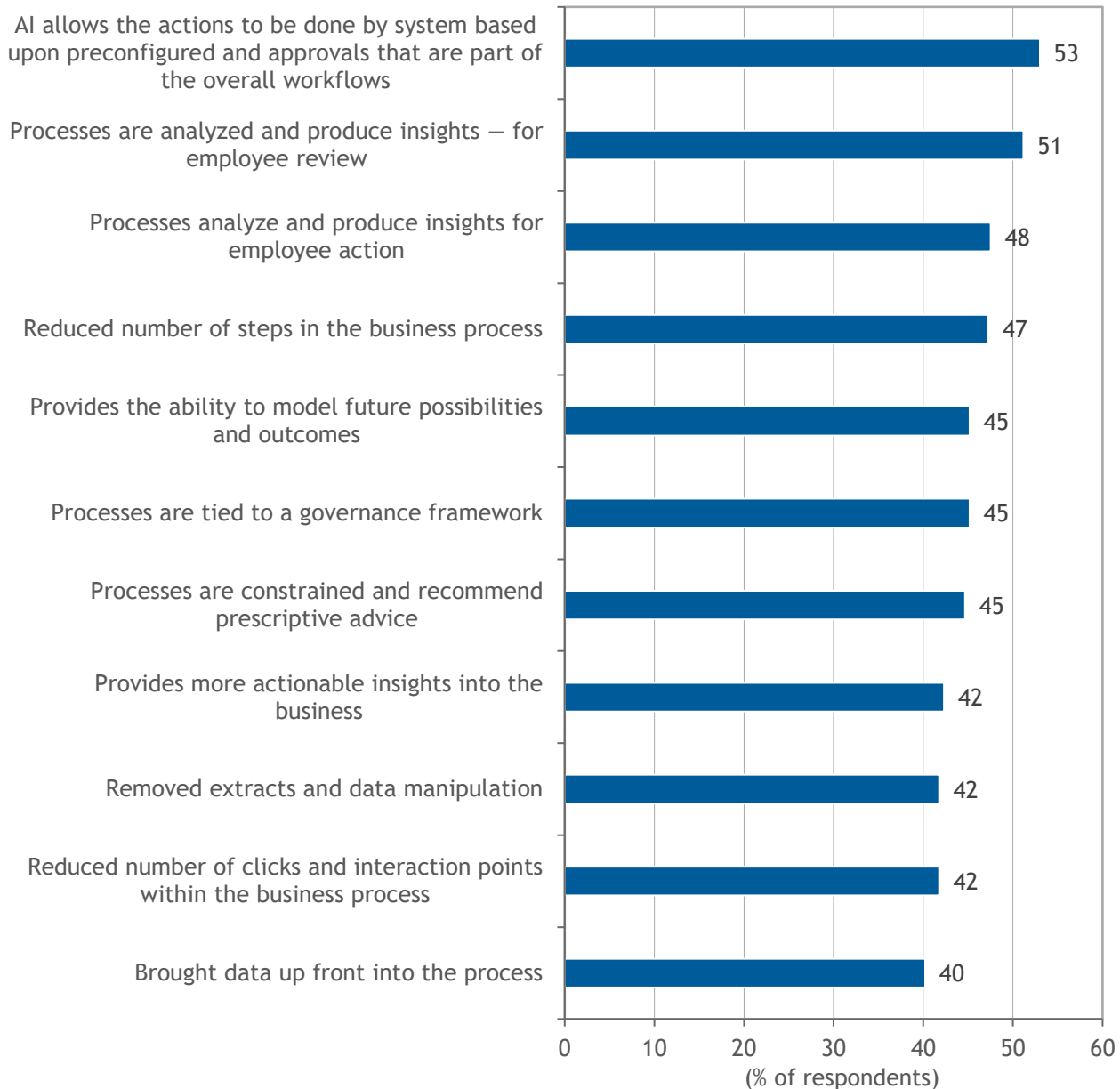
WHAT'S IMPORTANT

Embracing innovative AI with an ERP system will bring a new approach to using technology as a business partner for better performance.

AI: An Intelligent Automation Enhancement

Organizations find AI can enhance many business processes, bringing more automation to the system, while also reducing the employees' time to action with more actionable insights. In addition, AI can provide employees with an ability to model future opportunities and outcomes. IDC's 2022 *Industry AIPath Survey* finds the top employee engagement changes using AI in the ERP business processes are substantial (see Figure 1).

FIGURE 1. *AI's Impact on Business Processes*

Q *How has AI changed the business process and your engagement with it? (Rank top 5.)*

n = 383

Source: IDC's Industry AIPath Survey, 2022

The AI impact on ERP business processes is tremendous. From productivity and efficiency improvements to business processes to reduction in employee clicks and interaction points to proactively planning the future instead of reacting to past history that may no longer be valid, the business performance improvements can be substantial. The following are a few ERP use cases organizations find more effective when AI is applied:

» **Manufacturing operations:** When an organization applies AI to use cases such as manufacturing operations, they move away from sifting through the data to find the transaction information so they can understand what has been happening, including monitoring productivity levels and operational efficiencies. With AI, this information surfaces immediately, shedding light on what transpired, offering prescriptive advice to fix any issues that occurred, and providing insights into what can be done next to move the business along. In this way, the technology resource brings continuous intelligent information so the employee resource can fine-tune the business performance. In this instance alone, an organization can take out many steps in the process so employees are no longer digging for information and then trying to piece together what may have happened (reactionary record keeping used to project the future) and instead can use the insights provided to tweak processes, improving performance and setting the business up for better results overall.

» **Financial close:** As AI is applied to the financial close process, automated consolidation and reporting occurs. In addition, currencies are reconciled across geographies to match closing country requirements. Because there are so many data aggregation and extraction exercises by the accounting teams, the room for error, rechecking, and semi-automated processes can take weeks to close the financial books. With AI at the helm of the financial close and reporting processes, organizations can meet revenue recognition and accounting standard requirements, even highlighting areas that may need additional oversight to be compliant. In the process, organizations can take off days in the financial close.

» **Budget to plan:** Most organizations find that planning and budgeting is a top-down and bottom-up process that occurs once a year. This process is typically manual, featuring spreadsheets and databases to manage the information workflows. After weeks of preparation, the information is compiled and rolled up to indicate an organization's new plans, which are then the foundation for budgetary discussions. In some organizations, this process occurs on a continuous basis, dependent upon the requirements of the company, until it is complete. With AI, the process becomes extremely intelligent, with historical perspectives, new inputs for future requirements, and then the use of predictive capabilities, enabling a better understanding of the projected future outcomes.

» **Working capital:** Working capital, while easy to calculate, can be difficult to manage. Current systems can roll up the data from cash to inventory to orders, but this typically involves manual data compilation from many systems both internal and external to the enterprise. Understanding the current cash position to accounts receivable (AR) and accounts payable (AP) to inventory is an arduous task. When an organization applies AI to this aspect of financial considerations, a real-time view including AR, AP, inventory, and bank accounts can quickly come together to provide current and future factors for the organization to consider in terms of smart settlements, investment opportunities, and the time value of money.

» **Profit and loss:** Applying AI to the profit and loss aspect of the organization is a quick way to keep tabs on the financial health of an organization by monitoring profitability in real time. From margins in services and product fulfillment and delivery to moving from activity-based costing to actual real-time costing, an organization can

quickly capture what is important and understand its performance at any point in time. The value-added insights enabled by AI across the processes make it easier to look into issues that may be brought forward and course correct them such that the profitability is impacted positively.

Top Areas for Improvement with AI

IDC's 2022 *Industry AIPath Survey* found the addition of AI to some business processes dramatically improved an organization's ERP performance metrics in these areas:
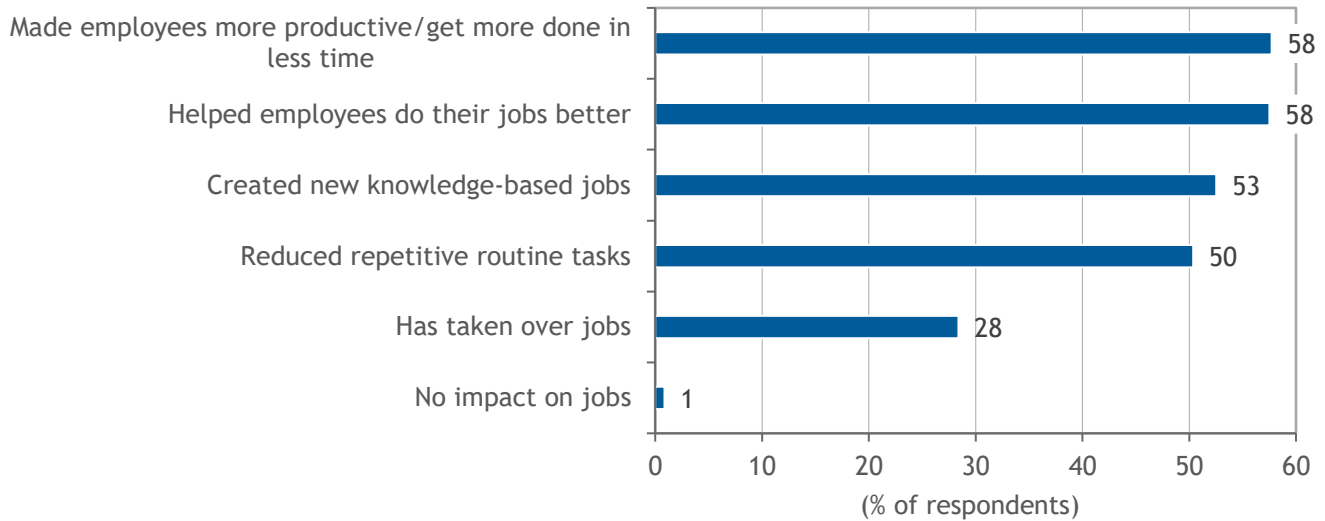
» **Project management:** 33.5% of 397 organizations found they increases their project management metrics with AI because of its ability to surface insights that enable faster resolution. With visibility into the project itself, clarity on budget and status to completion enabled resources to make better decisions, quickly meet project deliverables, and close out the project, while also meeting budget requirements.

» **Product life cycle and fulfillment:** 32.5% of 397 organizations found they increased their product life cycle and management metrics with AI because of its ability to surface all product fulfillment issues quickly and suggest alternative products in case of stockouts or quality issues.

» **Plan to perform:** 29.7% of 397 organizations discovered they could increase their plan to perform management metrics with AI because of the ability to surface plan differentials that may hinder the performance requirements. This surfacing of issues enabled the organization to remedy the issues quickly.

» **Services management:** 29.2% of 397 organizations found they could increase their ability to deliver their services better as AI because of its ability to detect anomalies that hinder deliveries. Anomaly detection highlighted the need to make course corrective actions, which can improve services delivery quickly.

» **Book to bill:** 24.2% of 397 organizations found AI enables the ability to see the rate of orders received to the rate of orders shipped much faster, even helping to predict issues so remedies can be made quickly within the organizations.

Benefits of AI in ERP

The use cases discussed showcase many of the benefits of AI. While much of the benefit is around time savings, which in turn improves organizational efficiency and productivity, employees can leverage the intelligence in AI-enhanced systems to drive better business outcomes. The 1,970 respondents in IDC's 2022 *Industry AIPath Survey* indicated that AI had significantly impacted jobs at their organizations (see Figure 2).

FIGURE 2: *AI's Impact on Jobs*

Q *How has AI impacted your organizations over the past 12 months? (Select all that apply.)*

n = 1,970

Source: IDC's Industry AIPath Survey, 2022

This impact has resulted in improvements for employees in productivity, by equipping employees with information to do their jobs better. AI has also contributed to the creation of new knowledge-based jobs, reduced the volume of repetitive tasks and clicks, and has added more value with job augmentation. This job augmentation means the organization is leveraging resources of both people and technology much better, optimizing its resources to achieve better performance overall.

In the same research, organizations indicated that they have realized other significant benefits as a result of using AI, including:

» 29.5% improved business agility

» 28.3% increased business resilience

» 27.4% improved risk management

» 27.1% helped drive top-line revenue growth

» 26.7% increased competitiveness, market share gains, and margins

AI adds an element to modernizing the ERP system for the betterment of the organization. In IDC's 2023 *SaaSPath Survey,* 37.3% of 150 organizations are focused on investing in a modern and intelligent system that enables their organization to scale with speed and agility. And 24% are investing in modern intelligent ERP systems to bring integrated digital workflows without manual workflows. These two findings indicate that organizations recognize that intelligently automating their business processes can deliver competitive differentiation.

The 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 along with a rapid pace of innovation enabled by technologies such as AI and machine learning (ML). To thrive, an organization must efficiently and effectively upgrade, change, adapt, and innovate at lightning speed so the business can meet customer demands.

Modern, flexible SaaS- and cloud-enabled systems are required. Organizations increasingly want AI-infused software and standardized processes, architected with microservices and coupled with APIs. These attributes can enable the organization to update, innovate, and meet the requirements of digital business.

AI has become the de facto innovation trend in 2023 as organizations continue to invest in it. In IDC's July 2023 *Future Intelligence Spending and Resiliency Survey, Wave 6,* 77% of organizations are either exploring potential use cases or investing significantly in generative AI. Many organizations are experimenting on their own to understand the technology, while others are working closely with their software technology vendors to harness the power of AI. In IDC's 2022 *Industry AIPath Survey*, 40.3% of 397 respondents said AI was an important criteria for their ERP application investment. In addition, 15.9% said embedded AI was a must-have for their ERP software. With over 65% of organizations believing AI is critical to their ERP system, AI and the innovation it can foster is now becoming mandatory for new ERP systems.

Considering Rimini Street

Rimini Street Inc. is a global provider of comprehensive end-to-end enterprise software support, products, and services; a third-party support provider for Oracle and SAP software; and a Salesforce and AWS partner. Rimini Street offers a variety of solutions to help your enterprise application, database and technology platforms work in harmony to deliver more business value, while also freeing up resources and critical IT funds for innovation.

Rimini Street is helping ERP clients migrate their products to the cloud, without losing valuable information and optimizing the organization's time with an AI integrated workflow to make it easier to migrate to a new system.

Challenges

Organizations are more dependent on technology than ever before, yet not all organizations understand or see the benefits of AI coupled with ERP. Some organizations remain stuck in a legacy world that emphasizes asset utilization, which is not the means to achieve market differentiation or a characteristic of running a digital business. Organizations need to understand what is important for them and weigh all aspects of costs and benefits when it comes to creating and maintaining competitive advantage in the digital world.

In addition, vendors that assist an organization moving toward more innovation benefits are critical to success. Organizations must exercise caution when evaluating the full scope of a vendor's capabilities, including its own use of innovation to sustain and grow its business and how that experience then is incorporated to address client needs. AI is an area many vendors are still experimenting with, so understanding its use both by a vendor and how that translates to clients is a critical parameter for every business to understand during the selection process.

Conclusion

AI is an innovative differentiator that is foundationally changing the nature and use of ERP systems. As organizations move beyond transforming and running a digital business, technology will be used even more strategically in the future. Laying this foundation is critical for the organization's long-term viability. It is not *if* an organization will embrace AI but *how quickly* it will embrace AI.

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 & Strategies research service along with a team of analysts responsible for IDC's coverage of 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

Rimini Street, Inc. (Nasdaq: RMNI), a Russell 2000 Company, is a global provider of end-to-end enterprise software support, products and services; the leading third-party support provider for Oracle and SAP software; and a Salesforce and AWS partner. The company has operations globally and offers a comprehensive family of unified solutions to run, manage, support, customize, configure, connect, , monitor, optimize and help protect enterprise application, database, and technology software, and enables clients to achieve better business outcomes, significantly reduce costs and reallocate resources for innovation. To date, over 5,200 Fortune 500, Fortune Global 100, midmarket, public sector, and other organizations from a broad range of industries have relied on Rimini Street as their trusted enterprise software solutions provider. To learn more, please visit http://www.riministreet.com, and connect with Rimini Street on Twitter, Facebook and LinkedIn. (IR-RMNI).

IDC Custom Solutions

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

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.