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No **Enterprise Resource Planning (ERP)** left behind

Next step: **The orchestrated organization**


About the Deloitte AI Institute

The Deloitte AI Institute helps organizations connect all the different dimensions of the robust, highly dynamic and rapidly evolving AI ecosystem. The AI Institute leads conversations on applied AI innovation across industries, with cutting-edge insights, to promote human-machine collaboration in the “Age of With”. Deloitte AI Institute aims to promote a dialogue and development of artificial intelligence, stimulate innovation, and examine challenges to AI implementation and ways to address them. The AI Institute collaborates with an ecosystem composed of academic research groups, start-ups, entrepreneurs, innovators, mature AI product leaders, and AI visionaries, to explore key areas of artificial intelligence including risks, policies, ethics, future of work and talent, and applied AI use cases. Combined with Deloitte’s deep knowledge and experience in artificial intelligence applications, the Institute helps make sense of this complex ecosystem, and as a result, deliver impactful perspectives to help organizations succeed by making informed AI decisions.

No matter what stage of the AI journey you’re in; whether you’re a board member or a C-suite leader driving strategy for your organization, or a hands on data scientist, bringing an AI strategy to life, the Deloitte AI institute can help you learn more about how enterprises across the world are leveraging AI for a competitive advantage. Visit us at the Deloitte AI Institute for a full body of our work, subscribe to our podcasts and newsletter, and join us at our meet ups and live events. Let’s explore the future of AI together.

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A woman with short dark hair, wearing a dark blue polo shirt, is seated at a desk in an office. She is looking intently at a laptop screen. In the background, there are several other computer monitors displaying data and charts. The office has large windows with blinds, and the lighting is soft and focused on the workspace.

Tasks, tasks, and more tasks. Even when tasks are digitized and more useful to the organization, they are still a standalone tree. The forest—now that’s the big picture. And if all those digitized tasks, which, when all connected, create a big, beautiful forest that a workforce can not only see, but also can *use*, that’s when you’ve added real value to your organization. Automation may not only improve accuracy and productivity, but it could also empower and encourage a workforce to be strategic thinkers.

Today, an organization’s ability to use its data smartly is essential. Some may have already taken the step of digitizing data into a cloud-based platform, but why does it still take so long to get the desired results? Continuous development is needed for data to reach its full potential: *Business intelligence for improved decision-making*. For some organizations, legacy data may still need to be reviewed, manipulated, and finessed, and could require even more tasks and more decisions. It’s time to see the forest, not just the trees. It’s time to realize a solid ROI on your digitization, so that it can operate on its own more fluidly and in concert with your organization’s strategic goals.



What can your **ERP** *not* do?

Let us take something as mundane, but essential, as processing invoices. Automating specific tasks through Enterprise Resource Planning (ERP) was supposed to be the answer, managing all the steps in a myriad of financial operations such as accounts payable. But there are still too many manual steps—queries must be constantly defined, redefined, and fine-tuned. Optical Character Recognition (OCR) imaging may not be operating quite like it was originally intended, and organizations are wondering what the point of ERP implementation is if not to allow systems to perform functions without multiple, manual, and time-consuming inputs and reports from employees. Other organizations may have other questions: Is there a work-around solution companies have not yet identified? And is the reason because we don't yet know what's really possible?

When you answer the question, "What can our ERP *not* do?", you may have the answer to the next step. The challenge—and the desired outcome – may be to help create a broad digital ecosystem, an orchestrated organization that could use radical innovations in technologies such as Artificial Intelligence (AI) and Machine Learning (ML). All of these may take some effort out of everyday task management for everything from invoicing to procurement to financial reporting.

By incorporating AI and ML into the ERP operations and ancillary systems, manual and troublesome processes could be eliminated.

Microsolutions now have emerged to help allow machines to perform at a higher level with less input and decision-making, which ultimately can help to reduce manual updates and provide clear prompts to humans when machines need additional help with anomalies. By consuming the functional process steps that don't exist in today's flagship ERPs, AI and ML are changing the way organizations conduct business in their existing ERP systems, boundary systems, and cloud hyperscalers. Enabling machine learning in the workforce could reduce work, but the more important goal may be to improve accuracy at the transaction level. Employees can now have strategic conversations that help add real value to the organization. This goes way beyond time-intensive tasks such as working with multiple employees in multiple departments to resolve a single data point.¹



Achieving seamless orchestration through microservices

Question

What's a microservice?

Answer

It isn't more employees. But it *could be a way* to help organizations overcome the challenges of "What does my ERP *not* do?"

Microservices help support the enterprise with clear prompts to humans for interventions only when things don't line up. Such microservices help to free up employees for other strategic and productive tasks because employees may not have to clear up or triage the prompts. Microservices can assist organizations in a multitude of areas that include everything from data management to policy compliance to supplier records management to purchase requisition/purchase order (PR/PO) processing. Organizations can decide on the scope of microservices that can help enhance their financial operations with the flexibility to choose procurement, for example, or simply drill down to individual procurement tasks such as receiving goods and services.





AI, machine learning, microsolutions—all help create the vision of a broad ecosystem with complete orchestration. The dream? An end-to-end process that could accurately and efficiently run itself in orchestration with a workforce armed with better intelligence. But every organization could potentially embrace four important foundation steps to achieve this:

- Create rules-based “touchless” transactions.
- Implement full ecosystem orchestration, with no ERP left behind.
- Create seamless, end-to-end business processes, not just steps within them.
- Make process administration more autonomous.



1. Create rules-based “touchless” transactions, where human decision-making is supported and focused on exceptions, which may result in less work that is more accurate.

Consider your supplier management function. Your suppliers may grapple with self-service registration and your employees could manually assess risk with each new supplier—micro-managing supplier profile updates and manually updating supplier diversity certifications and COI certifications. Now consider how different this could be: a microsolution that helps to eliminate these issues and, instead, could result in a more collaborative relationship that includes better onboarding, risk mitigation, supplier evaluation, and historical performance.

This focus on human-centered work could also include an AI/ML invoicing microsolution that transforms an accounts payable (AP) team’s day-to-day workflow. Eliminating manual payment holds, OCR error assessment, and online invoice, tax and payment processing errors can free up AP staff to focus on increasing processing accuracy, accelerating invoice processing, optimizing payment timing, and focusing on analytics for optimizing payment discounts.





2. Implement full ecosystem orchestration, with no ERP left behind—it's time to link systems seamlessly in an automated way, so all data works in concert.

This is not just about grabbing data and displaying it on a dashboard. Full orchestration means using the data to make a decision that helps carry action, like a transaction, and helps to establish the connectors to write that transaction back to the ERP system. This scenario may not require employees to manually cleanse data and manipulate it so that it is not just data, it is *quality* data. And quality data could help solve problems and improve operations.



3. Create seamless, end-to-end business processes, not just steps within them.

Get to the forest, not just to the (automated) trees. Imagine if your organization could incorporate a seamless digital accountant and autonomous financial close, for month-, quarter-, or year-end reporting. This microsolution could deliver an AI-based framework that takes proactive steps across the financial close process to help enable an accelerated and more touchless close. With this approach, typical, manual steps that lead to closing the books are driven by ML, not done by humans.

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4. Make process administration more autonomous.

Let us assume your organization sells subscriptions and that you want to free employees from the tasks of identifying subscriptions for renewal, drafting the renewal, creating a new subscription, communicating with customers, and activating that subscription. With an automated process for each task in the chain, the human-required subscription process can decrease to a fraction of the original, manual steps. And – Congratulations, your touchless operations could take over.

By redesigning work and the employee experience to focus on high-value, high-impact decisions and actions, employees could be happier, more productive, and feel more valued. And for the organization, the downstream impact on staffing that affects workforce experience, recruiting, and retention may be invaluable. This could be a game changer for organizations managing in-person, remote, and hybrid workforces.



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A man with a beard, wearing a dark suit and white shirt, is sitting at a desk in an office. He is holding a mobile phone to his ear with his left hand and looking towards a computer monitor. The monitor displays a data visualization with a line graph and several colored bars (green, red, blue). The background is a bright, out-of-focus office environment.


A transformative pivot

Managing data well might be a strategic priority for the organization. And using AI and ML could provide the ultimate value and advantage. It can be a true, transformative pivot—from task management to orchestration management.²

The future of AI/ML can be exciting. Imagine that your organization's supply chain orders could easily connect with finance for billing and payment. Imagine that a process-specific application could support all of your critical financial operations—procurement, invoicing, and supplier and materials data management. Imagine that new AI/ML technologies could lower your organization's risk and provide better accuracy and transparency. And now imagine that these AI technologies can be activated in weeks or months, not years. Because they can—and with quicker time to impact, organizations can help maximize data collaboration in real time.

Ultimately, the value-add in operational efficiency could elevate the human experience through more proactive and productive interactions and decision-making. By transitioning from single-task automation to full-process orchestration, the new way forward allows machines to do what they do best, which is act on mass amounts of real-time data, and for humans to add strategic value by managing complex decisions.

Shifting the focus to a fully orchestrated organization is a transformative pivot. It goes a step beyond digitization on a cloud. When organizations make the decision to plug in AI at scale, they will begin working quicker, smarter, and harder with minimal upfront investments—and a fully orchestrated “big picture.”



End notes

1. AI Magazine [AIOPS.D: Enterprise Autonomous Operations in the AI Age](#)
2. Ibid., AI Magazine [AIOPS.D: Enterprise Autonomous Operations in the AI Age](#)

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