COMMENTARY

SAP Connect: Describing the Architecture for the Future

Takeaways

This year's SAP Connect unified five previously separate events, underscoring SAP's holistic approach to integrating customer experience, finance, spend management, human resources, and supply chain solutions.

SAP's introduction of a three-tier architecture—SAP Business AI, Business Data Cloud, and Application layers—is designed to leverage AI for deeper insights, enable automation, and future-proof enterprise operations.

SAP announced "Role-Aware" AI Assistants and Joule Agents, which are tailored to specific business roles and help break down functional silos by automating and orchestrating tasks across SAP applications.

The launch of Business Data Cloud Connect (BDC) enables secure, zero-copy, bidirectional data sharing with platforms like Databricks and Google Cloud, enhancing analytics and AI capabilities without creating data silos.

SAP Supply Chain Orchestration and WalkMe integration were spotlighted, providing end-to-end supply chain visibility, AI-driven risk mitigation, and improved user adoption and workflow efficiency through in-app guidance and automation.

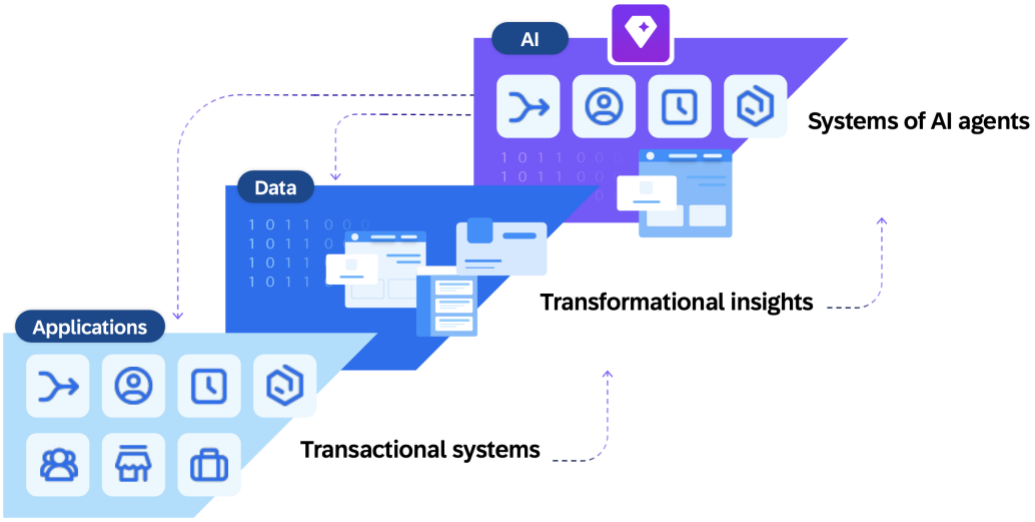
For those considering an SAP upgrade, the functional and technology richness of SAP's AI-Data-App three-tiered architecture should be very compelling, even to the point where companies look to migrate to gain access to natively well-integrated PLM functionality.

In early October, CIMdata had the opportunity to attend SAP's Connect event, held in Las Vegas, Nevada. SAP Connect represents the rebranding of SAP's SuccessConnect event. This new event was attended by a few thousand people and brought together SAP practitioners, partners, media, and industry analysts from around the world. The event combined five previously independent events—Customer Experience Connect, Finance Connect, Spend Connect, Success Connect, and Supply Chain Connect. PLM's announcements and discussions were positioned under Supply Chain Connect.[1]

SAP emphasized its three-tier architecture consisting of an SAP Business AI layer, SAP Business Data Cloud layer, and an SAP Application layer built on its new Business Technology Platform (BTP). Many SAP

[1] Research for this paper was partially supported by SAP.

presenters stressed that this three-tier architecture has been designed to be future-proof and take full advantage of AI in a "flywheel" motion—where all three layers work together to uncover new insight, and support and automate repeatable tasks throughout an enterprise's connected SAP ecosystem.



SAP's Three-Tier Architecture
(Courtesy of SAP)

As with many SAP events in the past, this event was full of new announcements, many of which focused on SAP Joule-enabled push into AI agents, as well as SAP's migration to the cloud. Mr. Muhammad Alam, Member of the Executive Board of SAP SE, SAP Product & Engineering, stated, "Our announcements today demonstrate the power of SAP Business Suite, where AI, data, and applications come together in an experience to propel smarter decisions, faster execution, and scalable transformation." One of SAP's biggest announcements centered on AI, specifically, the development and availability of AI Assistants.

The "Role-Aware" AI Assistants represent the next step in SAP Joule's AI-agent enablement. These assistants have been designed to partner with users in specific business roles to assist them in completing tasks within the SAP Business Suite. These assistants can be used to identify tasks that need to be completed and then support the user by executing, configuring, orchestrating, and managing them as required. Additionally, SAP announced a set of new Joule Agents that support these assistants in completing role-specific tasks. It is important to note that these assistants can eliminate business functional silos by enabling the completion of tasks that cross various SAP applications.

At the data tier, SAP announced the launch of Business Data Cloud Connect (BDC), which incorporates semantically "normalized" data across transactional and operational systems for better supply chain management awareness and analysis. This SAP solution enables zero-copy sharing, bidirectional data sharing between SAP's data ecosystem and external platforms such as Databricks and Google Cloud. This allows organizations to leverage their SAP data with other tools for analytics and AI, thereby breaking down data silos and integrating with existing systems without duplicating data. The feature uses the Delta Sharing protocol to grant access to data in SAP's Business Data Cloud. This allows SAP to work with other technology providers to build data connections, thereby enabling better data sharing, as well as cross-platform AI agent applications.

Another intriguing announcement centered on what SAP calls Customer Experience. In this announcement, SAP introduced SAP Engagement Cloud. The SAP Engagement Cloud, which the company describes as a "unified system of engagement," appears to align with the SAP Business Data Cloud. It has been designed to unify data from customer-facing departments and orchestrate communications that connect marketing, sales, service, and commerce to deliver personalized customer experiences by using real-time data and AI. SAP intends for it to replace an organization's disconnected systems by providing

a single platform to orchestrate interactions and gain a comprehensive view of customers across the entire lifecycle. Here's a lifecycle-focused example on how SAP can, unlike most other enterprise solution providers, enable a set of enterprise-wide and deep capabilities that support true lifecycle optimization.

SAP also announced the availability of SAP Supply Chain Orchestration. This new SAP solution has been designed to create a synchronized, end-to-end view of the supply chain to improve risk detection, deliver actionable insights, and enable coordinated responses. It can be used to connect internal systems with external partners to provide multi-tier visibility, identify potential disruptions early, and trigger AI-led actions across procurement, manufacturing, logistics, and planning to minimize impact. Reportedly, its embedded Joule agents work with a live knowledge graph to detect real-time risks to supply chains and orchestrate an appropriate, coordinated response, with prioritized actions. In today's world of supply disruption and uncertainty, this is a welcome solution that should prove to be indispensable.

In SAP Ariba (i.e., SAP's cloud-based procurement and supply chain platform) related news, SAP used the event to announce the rollout of the next generation of its Ariba solutions. The most significant part of the announcement was that SAP Ariba has been totally re-platformed on SAP's BTP, thereby enabling native integrations with SAP's suite of applications, as well as enabling similar integrations with third-party ERP solutions. Besides a set of new features (e.g., automated sourcing, enhanced 360-degree supplier profiles, and a new central intake management feature), the re-platformed solution delivers a new and simplified user interface, as well as a set of AI tools that have been designed to assist users with tasks like reviewing contracts, analyzing bids, and generating supplier summaries. This re-platforming appears to be the future of many of its current solutions.

Among many other announcements, WalkMe has been integrated with SAP's Customer Experience portfolio of solutions. WalkMe, a 2024 SAP acquisition, is described as a Digital Adoption Platform (DAP) that helps users navigate and use software by providing in-application guidance, automation, and analytics. It overlays applications to offer real-time support, automate repetitive tasks, and guide users through complex workflows. This can improve software adoption, productivity, and user experience for both employees and customers. It can be used to identify workflow inefficiencies, suggest fixes, and recommend workflow improvements. SAP also announced that the integration will be generally available this quarter with a free embedded version for customers, and premium features offered at a cost.

The preceding announcements are only a sample of what was discussed during SAP's multi-day event. Unfortunately, not much was shared with the audience regarding SAP's progress in developing its PLM offering on its BTP. CIMdata had hoped that some of that work would have been more prominently displayed, given how every transaction SAP's ecosystem enables is in support of a company that has a product and/or service that it delivers to the market. Given some one-on-one discussions with key SAP management team members, this appears to be changing. As a result, CIMdata expects additional focus and positioning to be given to its PLM capabilities in the coming months, especially as new and enhanced PLM-enabling capabilities are released based on its BTP. From other recent briefings CIMdata has received, SAP continues to make good progress while it develops additional PLM-related capabilities for discrete, as well as its process industry customers. For those PLM capabilities built on top of the BTP, access to SAP's rich and extensive Joule-enabled AI capabilities, alongside access to and leveraging of SAP's Business Data Cloud, should prove to be highly competitive. For those considering an SAP upgrade, the functional and technology richness of SAP's AI-Data-App three-tiered architecture should be very compelling, even to the point where companies look to migrate to gain access to natively well-integrated PLM functionality.

About CIMdata

CIMdata, a global strategic management consulting firm, provides services designed to maximize an enterprise's ability to design, deliver, and support innovative products and services. For more than forty years, CIMdata has provided industrial organizations, providers of digital technologies and services, and investment firms with world-class insight, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) topics and the digital transformation they enable. CIMdata also offers research, subscription services, publications, and education through certificate programs and international conferences. To learn more, visit www.CIMdata.com or email info@CIMdata.com.