

How Capgemini Helps SAP Customers Accelerate Their Business Transformation

Capgemini has been a global SAP partner since 1993, specializing in integration and helping clients navigate complex SAP transformations. One of the world's largest and most experienced SAP systems integrators and group of SAP S/4HANA-certified consultants, Capgemini has approximately 20,000 practitioners — with over 6,000 certified resources in various SAP solution areas — and more than 1,300 clients worldwide. In partnership with SAP, Capgemini is developing new products and co-innovating on industry-specific initiatives including SAP S/4HANA Cloud for Automotive Suppliers, which delivers agility to automotive clients and discrete manufacturing Industries, designed to harness the power of Industry 4.0, Industrial Internet of Things (IIoT), cloud, big data, and more.

Clients worldwide benefit from Capgemini's SAP centers of excellence, proven SAP implementation methodologies, innovation-based approach, and pre-configured SAP solutions. From strategy to design, licensing, implementation, infrastructure support, and application management, SAP specialists help clients in their transformation journey by leveraging the latest SAP technology and innovation available, allowing them to be future-ready — today.

Simplifying the Digital Core Allows Businesses to Move Fast

Become a Renewable Enterprise: Employ Intelligent Technologies to Respond to Accelerating Trends

by Brianna Shipley, Senior Editor, SAPinsider

Restoring processes at the speed of business evolution, protecting mission-critical applications with data-driven agility, and inviting technical change in the face of disruption, a “[Renewable Enterprise](#)” welcomes the future, unafraid. Its tools and technologies inform proactive decision making and its simplified core can anticipate and accommodate shifting customer expectations. It is, in a word, ready.

However, before a business can become what Capgemini calls a Renewable Enterprise,¹ it must first stop; take a breath; and rethink the contents of its existing legacy core.

Assessing and prioritizing what to keep, remove, or move to the cloud is the first step to preparing your business for the future. It will ensure that operations are streamlined, cost-effective, responsive, and flexible, and requires viewing a move to a next-generation platform such as SAP S/4HANA as a complete transformation, not just a technical upgrade. Many companies operating under worn-out ways of legacy thinking, however, still envision implementing incremental additions or changes — assuming they can take systems and processes as they are and put them on SAP S/4HANA to solve all their problems. Although businesses are encouraged to “move fast” to successfully meet the demands of today’s digital age — and the customer-service-oriented business model in particular — they are also being cautioned against trading resiliency and sustainability for speed.

So, how can organizations become resilient and agile quickly without risking quality?

Enterprises That Take Time to Prepare Achieve Enduring Change

While building customizations around the existing legacy core — a symptom of legacy thinking — has allowed organizations to differentiate themselves from their competitors in the past, it has also resulted in significant technical debt. “The more customizations you add, the harder it is to update, the more costly it is to retest, and the more complex your IT landscape becomes. This complexity essentially slows down an organization’s ability to innovate and be agile,” says Ken Todd, Principal, NA SAP Center of Excellence Leader & Global Leader for Highway to S/4HANA offering at Capgemini.

¹ Capgemini leverages the SAP S/4HANA platform to deliver on the promise of what it calls ‘the Renewable Enterprise’, a company able to constantly grow and adapt, ‘renew’ itself, unlock business value, and outpace competition.

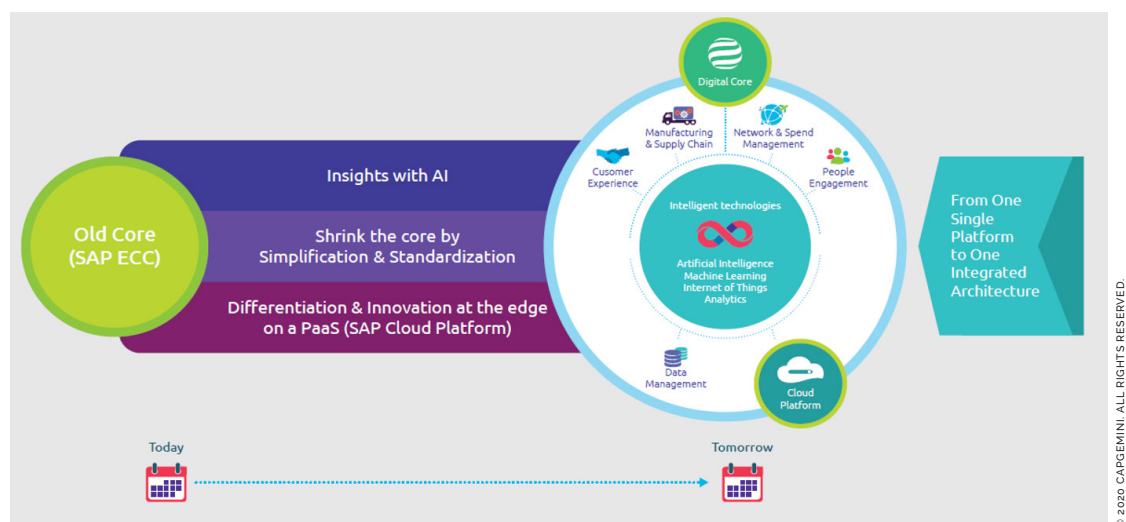


Figure 1 Capgemini encourages customers to move to SAP S/4HANA in an incremental fashion with the right support and guidance, gradually becoming a Renewable Enterprise along the way

In fact, when organizations take the time to assess what is currently in their legacy core and what is essential to keep when migrating to a new SAP S/4HANA digital core, they find that including certain customizations would be redundant, because the capabilities and functions are now available on the evolved platform (whereas, in the past, they did not exist out of the box).

Therefore, to optimize its systems and become a Renewable Enterprise, an organization should undergo a thorough preparatory stage, cleaning its core to allow for a sustainable and agile environment. Organizations need to rid their system of customizations or complexities that are no longer needed, and move valuable innovations, extensions, and differentiating enhancements that may need to be continually updated onto the cloud or other edge solutions before migrating to SAP S/4HANA. **Figure 1** shows a representation of how a Renewable Enterprise moves from the old legacy core to the digital core's integrated architecture.

Simplifying the digital core will also position organizations to take full advantage of intelligent technologies such as artificial intelligence, machine learning, and robotic process automation that are available through application programming interfaces, cloud solutions, and cloud-native applications.

"The Renewable Enterprise becomes renewable because it has access to all of these rapidly evolving tools in a way that doesn't burden the entire system

and allows the organization to constantly innovate and refresh specific pieces of it without impacting and slowing down the whole," says Todd.

Having such flexibility is even more important as business models move away from selling a product to selling solutions as a service — for example, an air products manufacturer that previously sold air compressors might pivot to selling air by the minute. "So much seems to be moving to an as-a-service model — whether it's in the cloud or even now with HPE's GreenLake and Dell EMC Flex On Demand — that on premise doesn't seem like it will even be an option in the future and everything will be as a service," says Henning Eid, SAP Global Strategy Director at Intel.

To understand how a forward-thinking approach is applied in practice, consider how the supply chain benefits from increased visibility. When it comes to forecasting demand and planning, many companies download reports from their ERP system that detail the historical consumption of a product, for example. The company then uses this information offline, typically in the form of a spreadsheet, to forecast for the coming year or to make decisions about inventory.

What happens in this kind of reactive planning is that companies are responding to issues — such as customer service complaints, excess inventory, incorrect information about product lead times and suppliers — rather than putting processes in place to predict and

prevent the problems from occurring in the first place, according to Rodney Dawson, Managing Consultant and Co-innovation and Transformation Evangelist - NA SAP Go to Market at Capgemini. Dawson cites two of the most significant issues that supply chains are currently experiencing as being related to master data quality and lack of real-time visibility, which leads to working in silos. “The supply chain planners are disconnected from what’s actually happening on the factory floor, the shop floor doesn’t know what the warehouse is doing, and everybody is pointing fingers at each other,” he says. “Typically, that’s where we enter the conversation and discuss how the company can better utilize the tools they already have, how the new generation of integrated business planning tools from SAP can run actual simulations and create a future vision, and how they can improve the process proactively.”

Dawson explains that this kind of transformational change is slow in supply chain functions because “even those companies that have evolved from working in offline spreadsheets to working in SAP Advanced Planning and Optimization or another third-party application still implement a very batch-mode process of extracting data from their ERP and/or BI system and working offline to create the forecast — therefore

looking backward to plan, rather than utilizing real-time, proactive intelligent planning.”

Using Intelligent Technologies to Achieve Rapid Response

Despite change being slow to catch on, many supply chains had to become more agile in the face of the COVID-19 outbreak. This ability to respond and pivot quickly feeds into Capgemini’s future vision of a fully integrated, intelligent supply chain (**Figure 2**).

“Agility and resilience go hand-in-hand,” says Henning.

The fully integrated intelligent supply chain vision is achieved by extending the SAP Integrated Business Planning for Supply Chain solution through tight integration with the SAP S/4HANA digital core for execution and other intelligent suite solutions to create end-to-end integrated processes. SAP offers solutions infused with intelligent technologies that map to each of the integrated areas (sense, plan, engage, budget, operate, and extend) shown in Figure 2. For example, SAP Ariba solutions provide supplier intelligence and Qualtrics dispenses customer intelligence, while SAP Business Planning and Consolidation supplies financial intelligence and SAP Transformation Management offers logistics intelligence.

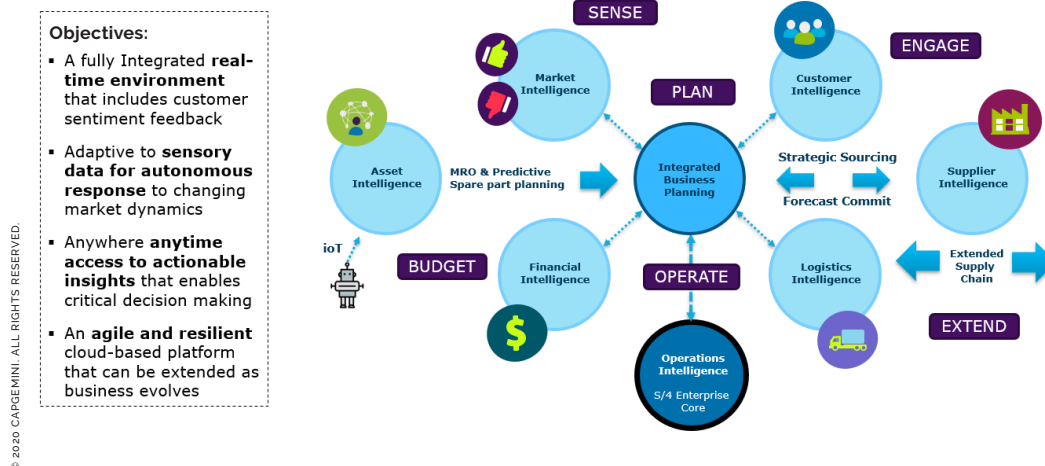


Figure 2 An integrated, intelligent supply chain allows for a real-time environment, a data-driven response to changing market dynamics, access to actionable insights, and an agile and resilient platform

How Intel and SAP Co-Innovations Help Fuel the Intelligent Enterprise

SAP and Intel have partnered for many years, co-innovating on new solutions that use in-memory computing. The result is an optimized SAP HANA platform using Intel Xeon scalable processors and Intel Optane persistent memory (PMem). Together, these technologies offer enhanced business agility and flexibility with real-time analytics and reimagined performance — which serve as a foundation for a Renewable Enterprise.

Using Intel Optane as persistent memory with SAP S/4HANA software also yields tremendous benefits. The persistent memory of Intel Optane offers higher memory density, nonvolatile data persistence, and near-DRAM processing speed — yet it comes with a significantly lower cost of ownership than other memory types.

As SAP S/4HANA is increasingly used to handle more complex data management tasks — such as performing analytics on live transactions and delivering real-time, online reporting of business activities — data volumes are growing exponentially. Understanding how innovations from SAP and Intel address this data can help organizations optimize their overall data management strategy.

More specifically, Intel and SAP co-innovations are helping simplify operations and fuel the transition to a more Renewable Enterprise in three ways:

Achieve high return on infrastructure investments with landscape optimization:

- Enterprises are lowering infrastructure costs by consolidating to fewer servers, all on a larger memory footprint provided by Intel Optane PMem.
- With more memory density than DRAM-only systems can provide, organizations can dramatically simplify their SAP HANA workloads.
- Larger scale-up instances provide better system consolidation for less administration.
- Support for VMware provides compatibility with the existing datacenter infrastructure.

Increase business agility and flexibility to deliver insights faster:

- The synergy between SAP HANA, Intel Xeon Scalable processors, and Intel Optane PMem enhances application responsiveness, latency, and performance so that large amounts of data are processed and scanned at blazing speeds, giving businesses a single source of truth.
- Enterprises can scale up their memory capacities through Intel Optane PMem and consolidate with multi-tenancy for simpler cross-database analytics and faster time to insights.
- Organizations can increase developer and operational agility by applying bug fixes with less interruption due to faster restarts.

Protect and future-proof the enterprise with modern infrastructure components:

- An Intel-based SAP landscape provides the ability to scale performance, increase memory capacity, and accelerate machine learning and artificial intelligence workloads.
- Due to the non-volatile nature and larger capacity of Intel Optane PMem, smaller DRAM-based SAP HANA nodes can replicate their data to a larger node for multiple purposes, such as quality assurance (QA) and development.
- Large memory capacity can be a repository for production data that is activated instantly in disaster recovery.
- High-endurance Intel Optane PMem modules also enhance security through hardware encryption, and they help increase developer agility with fewer systems to manage, patch, and upgrade.
- Data persistency enables faster restart times for better business continuity.

Using Intel technology with SAP solutions requires no special training because SAP and Intel optimized Intel Optane PMem to run on SAP HANA. Also, deploying Intel Optane PMem requires no changes by SAP system administrators. Intel Optane PMem is available through most hardware providers and some cloud providers. SAP HANA running on Intel Optane PMem revolutionizes the capabilities of SAP S/4HANA, helping fuel an organization's transition to a more renewable and intelligent enterprise.

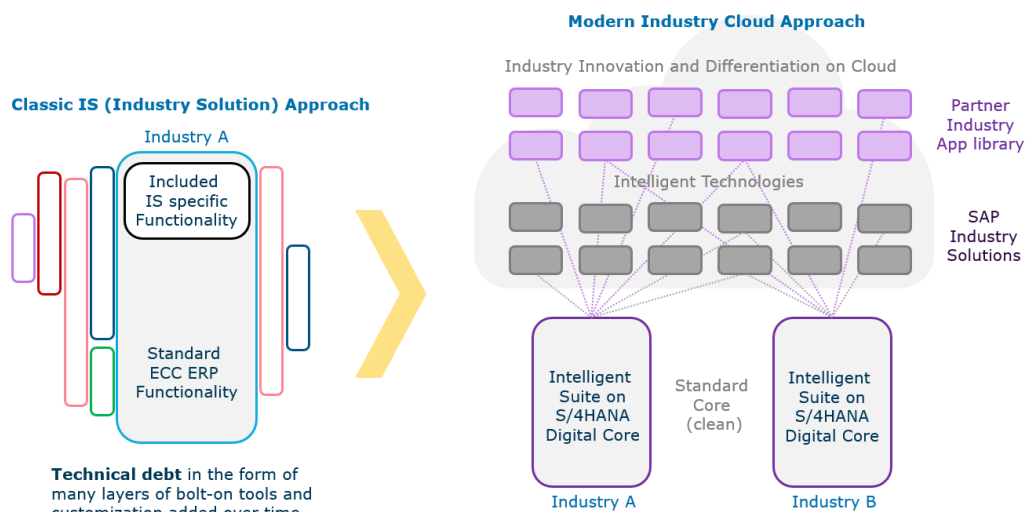


Figure 3 SAP's industry cloud model dovetails with Capgemini's Renewable Enterprise strategy by allowing SAP partners to further extend into the market with customer-specific applications and address the need for constantly evolving strategic opportunities

In addition, the Intel and SAP co-innovations are helping fuel the intelligent enterprise in three ways (see the sidebar to the left for more details). They help organizations:

- Achieve a high return on infrastructure investments with landscape optimization
- Increase business agility and flexibility to deliver insights faster
- Protect and future-proof the enterprise with modern infrastructure components

Customer-Centric Applications Are Key to Differentiation

If building customizations in the digital core is considered a legacy approach that creates unwanted complexity, how can companies develop applications that integrate with their unique processes to address customer expectations? Develop them in the cloud, says Dawson.

In the past, SAP has created classic industry solutions (IS) with certain functionality specific to a market, whether that be oil and gas, utilities, automotive, or retail, for example. This has been referred to as the IS approach, where a company would purchase a complete solution in a box that would address 80% of its needs. Organizations would then have to personalize the solution to meet 100% of their needs, resulting

in technical debt, which is represented in **Figure 3** as layers of bolt-on tools and customizations added over time (on the left side of the figure).

"This became the way of making a system specific to an industry," says Dawson.

Now, SAP is moving away from the out-of-the-box solution to a more modern industry cloud approach. Allowing businesses to innovate in and receive personalization from the cloud without building up technical debt aligns with the guidance in Capgemini's Renewable Enterprise strategy to strip off excess customizations and bolt-ons to achieve a clean, simplified digital core.

SAP's industry cloud contains solutions built by SAP as well as solutions built by SAP partners such as Capgemini, as represented in Figure 3 (on the right side). "The whole concept of the industry cloud is building a library of applications that may or may not be applicable to any given industry or company so organizations can build their competitive advantage in the spirit of sharing and innovation," says Dawson. "It becomes a very agile approach to adding on customizations and innovations by moving away from a hard-to-move monolith to an industry cloud model that is about a simple, clean, standard core, with any additional customizations happening in the cloud."

To learn more, visit www.intel.com/sap and www.capgemini.com/service/intelligent-enterprise. ■