SAP HANA

SAP Moves to SAP HANA®
Stories of SAP’s Journey to the Intelligent Enterprise
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>The Data Platform for the Intelligent Enterprise</td>
</tr>
<tr>
<td>5</td>
<td>SAP S/4HANA: The Speed and Power of Simplification</td>
</tr>
<tr>
<td>9</td>
<td>SAP Ariba Solutions: Performance Gains and a Better Customer Experience</td>
</tr>
<tr>
<td>12</td>
<td>SAP SuccessFactors Solutions: Visibility Across the Suite and Faster Innovation</td>
</tr>
<tr>
<td>16</td>
<td>SAP Customer Experience Solutions: Simplification and Improved Scalability</td>
</tr>
<tr>
<td>19</td>
<td>The Core of the Intelligent Enterprise: SAP HANA and the Road Ahead</td>
</tr>
</tbody>
</table>
The Data Platform for the Intelligent Enterprise

An intelligent enterprise runs on insight from data – and more than ever, this insight needs to be delivered in real time. Speed is of the essence. Complexity is the enemy. The ability to connect to all data types across sources and silos is critical for success. What organizations need is a data platform up to the task. This is as true for SAP customers as it is for SAP itself – which is why SAP has moved to the SAP HANA® platform.

Today’s technology is creating a “new possible” for organizations willing to seize the opportunity. Yesterday’s best practices are giving way to “next practices” – where organizations use intelligent technologies to deliver better outcomes for their customers.

These intelligent technologies include the Internet of Things, machine learning, analytics, and blockchain. Today, they’re fueling intelligent enterprises by enabling a new set of capabilities, including:

- **Increased visibility** – to see across business silos and recognize unseen patterns
- **Improved focus** – to simulate the impact of business decisions and choose the best path forward
- **Greater agility** – to respond to market forces and pivot business processes toward the right outcomes

With these capabilities, companies are entering a new era of efficiency, automation, and expanding growth horizons. Today, real-time market insights and the ability to capitalize on them is within reach – but only for organizations that know how to extract value from data.

An intelligent enterprise is defined by an ability to use data assets to achieve desired outcomes faster and with less risk. Such outcomes include:

- **Improved customer experiences** – through personalized interactions and self-service tools that put customers in control
- **New heights of productivity** – through operational automation, real-time demand responsiveness, and the ability to predict what’s coming before it happens
- **Transformative workforce engagement** – through executive dashboards, automated employee approvals, and guided procurement that minimizes rogue buying

Achieving these outcomes, however, requires fast, flexible, and scalable data processing. This – especially in the age of ever-growing data volumes – requires a modern data platform that manages data in new ways.

No wonder so many SAP customers are moving to SAP HANA. Since it was introduced in 2011, more than 30,000 SAP customers have adopted SAP HANA as of July 2019 – in the cloud and on premise – to achieve real-time, end-to-end situational awareness of their businesses.
Designed with an enterprise-grade, in-memory architecture, SAP HANA dramatically speeds data processing compared to traditional disk-based solutions. By combining live transactional data with historical data in the moment, it also yields the deep insight needed to make the right decisions here and now. And with multimodel data support and built-in advanced analytics capabilities such as machine learning, SAP HANA helps organizations set themselves apart by empowering everyone with data.

**SAP RUNS SAP HANA**

At SAP, we do more than preach digital transformation, we also walk the walk. What choice do we have? The imperative of the digital economy – use data to deliver better customer experiences – applies to us as much as it does to our customers.

For the past several years, SAP has been pursuing its own digital transformation – moving to the cloud, changing business models, and adopting intelligent technologies to get the most out of our data. A critical part of this journey has been to move our cloud offerings off legacy databases and onto the SAP HANA platform – a project that is now complete for the majority of our cloud line-of-business (LoB) solution portfolios.

This paper explores the transformation stories of the organizational units that support these solutions. These units – including the teams supporting SAP S/4HANA®, SAP® Ariba® solutions, SAP SuccessFactors® solutions, and SAP Customer Experience solutions – faced two common challenges.

The first challenge focused on adapting each solution to take full advantage of the architecture of SAP HANA. Applications and solutions were reengineered to exploit its ability to bring together transactions and analytics on a single instance of the data, thus enabling real-time business insight.

The second challenge related to the downtime window for migrating customer data. To minimize this downtime, SAP developed migration technology to automate data conversion and accelerate the migration process.

Our focus at SAP is always on doing whatever we can to help our customers thrive in the digital economy by becoming intelligent enterprises. We’ve designed our own transformation with this goal in mind. The result has been greater support for an intelligent suite of cloud-based applications that help SAP customers get more value from their data, seize more opportunities faster, and deliver the kinds of customer experiences that drive business forward. Read on to learn how the move to SAP HANA at SAP is helping us follow through.
At SAP, we refer to SAP S/4HANA as the next-generation of ERP. What does this mean? It means SAP S/4HANA eliminates the complexities of legacy ERP databases, giving organizations a vastly simplified digital core with access to business-critical data in real time.

The “S” in SAP S/4HANA is a nod to our legacy business suite. For the SAP S/4HANA team at SAP, however, the goal was not merely to move the legacy suite to an in-memory data platform. It is true that running ERP in active memory (rather than on disk) increases processing speed. Some competing databases, in fact, support this option. SAP S/4HANA is something much more.

SAP S/4HANA is optimized for SAP HANA, which supports a data model that simplifies the business computing environment dramatically (technical explanation [here](#)). To take full advantage of this design, the SAP S/4HANA team set out to reimagine and recode the business suite from the ground up.

**REUNIFICATION**
Traditionally, the typical enterprise computing environment has been split between online transactional processing (OLTP) and online analytical processing (OLAP). This split is a compromise made long ago: each system gets a copy of the original transactional data, commonly in a different data model, with each optimized for the type of workload (OLTP versus OLAP) in that system. This compromise, though, comes at the cost and complexity of managing two separate environments and moving data between them.

Because SAP HANA can support performing analytical calculations and transformations on the fly, organizations can now bring OLTP and OLAP together again. Gone are the complex “helper structures” (indexes and data aggregate tables) that are used to overcome system performance issues running at the speed of disk. Now, with a simplified data model and the speed of in-memory processing, organizations can perform analytics on all data (live and historical) in a single environment – in the moment, as needed.

**SIMPLICITY**
By redesigning ERP for SAP HANA, the SAP S/4HANA development team reduced the number of tables dramatically across a wide range of functions. Take, for instance, finance and controlling. While in the past, data was structured in subledgers (accounts payable, accounts receivable, general ledger, asset accounting, cost center accounting, and so on), today they run on a single universal journal.

This universal journal brings together postings related to finance (FI) and controlling (CO) in one single source table. The integrity of financial data is guaranteed by design, eliminating reconciliation effort between FI and CO and ensuring that everyone can always access the most current data. Teams are aligned and more effective because the complexity has been removed. Forecasting is faster and more accurate. Key performance indicators such as days sales outstanding (DSO) are available in real time on a granular level. Profit center reporting, profitability analysis, and other real-time analytics performed on top of the universal journal become a reality.

As much as this simplification helps SAP, it also helps our customers. The SAP Tax Compliance application, for example, helps to streamline tax compliance through an automated tax control framework and now runs in SAP S/4HANA.
instead of a separate system that requires data replication. This application provides an enterprise-wide repository of compliance checks and enables corrections continuously during the current declaration period, freeing tax specialists from searching for anomalies.

Changes like these are transformative across customer enterprises. Finance can move faster, the supply chain has more visibility, and IT can focus less on administrative overhead and more on innovation. In the place of complex legacy databases, customers can now enjoy a single source of truth that speeds and simplifies nearly everything.

This simplification to a single source of truth supports new benefits – such as comprehensive enterprise search. Now business users can search for master data and documents across different LoBs and across systems for a holistic view of the enterprise with zero latency in a modern user interface. At the same time, a built-in authorization framework helps to minimize administrative overhead and enable single sign-on so that users can work across LoBs in a secure fashion, without impediments.

**COMPLETE ANALYTICS FOR CONTEXTUAL AND CONFIDENT DECISION-MAKING**

SAP HANA is also a driving force behind the power of the SAP Analytics Cloud solution – which brings together augmented business intelligence (BI) and enterprise planning on a single platform with predictive analytics and machine learning technology embedded to drive insight, improve decision-making, and enhance the user experience.

• **Augmented BI** – A powerful combination of BI and advanced analytics gives organizations the ability to move faster while making smarter decisions. Use cases range far and wide, including financial close and reconciliation, disclosure management, attrition analysis, campaign optimization, internal management and board reporting, variance analysis, and more. Automated technology, enabled by SAP HANA, helps organizations avoid biased and agenda-driven decision-making by revealing the story of what drives the business. Users can run queries as the need arises – working with all of the data that exists in a given context for comprehensive insight.

• **Enterprise planning** – Teams can improve accuracy and meet quarterly goals by quickly comparing actuals to plan. Use cases include budgeting, collaborative revenue forecasting, long-range strategic planning, workforce and capital planning, and predictive planning. With powerful simulation tools, users can also quickly run what-if scenarios to evaluate the best way forward based on what the data says.

As the name suggests, SAP Analytics Cloud is a cloud-native solution. This means that organizations can get up and running with powerful analytics quickly – without the lead times associated with other analytics solutions. And because it is managed by SAP, updates and other solution management duties are no longer the responsibility of internal IT teams.
But ultimately, it is the end user for which SAP Analytics Cloud is designed. On an ad hoc basis, users can tap its self-service features to discover, access, and process data without performance constraints – and without the assistance of IT. An interface based on the SAP Fiori® user experience helps improve usability and the overall user experience.

Because SAP Analytics Cloud runs on SAP HANA, users can do something they cannot do with any other analytics solution: real-time analytics on transactional data from virtually any source in almost any form (including spatial, graph, JSON documents, and text). With SAP Analytics Cloud, access to SAP HANA data is direct or live – meaning that analytics is now replication free. No copying of data into SAP Analytics Cloud is required, so the business can have a single source for all data and all analytics – together.

This saves a tremendous amount of data management time and energy – enabling organizations to move faster while making better, more informed decisions. With live data connectivity to SAP HANA, SAP Analytics Cloud helps users to see the data instantly, understand the business impact, and react immediately. This technology combination uniquely enables organizations to embed analytics directly into business processes to turn instant insight into action.

Direct access to SAP HANA data also helps streamline compliance with regulations such as the General Data Protection Regulation. Without the need to copy data into a separate analytics environment, organizations no longer need to replicate all the required authorizations.

Data, of course, can come from anywhere – and most businesses require the flexibility to create their own datasets. This is why SAP Analytics Cloud also supports the ability to mashup data from more than 150 sources with SAP HANA – enabling organizations to combine new data sources with existing corporate data for a comprehensive view into almost anything impacting the business.

SAP Analytics Cloud also empowers SAP customers to embed analytics and insight directly into cloud solutions from SAP. Take, for instance, SAP SuccessFactors solutions, which embed data and analytics within business processes using SAP Analytics Cloud to help organizations increase the effectiveness and visibility of HR while improving business decisions at the point of action.

Sharing a common SAP HANA platform allows these solutions to do reporting on live transactional data integrated from multiple business systems. This, in turn, enables HR professionals to investigate trends in hiring, diversity, turnover, and performance – while providing insights on how investments in people impact business results. Embedded SAP Analytics Cloud technology provides a platform to share trends and insights, with compelling visualizations to accelerate change and simplified story-driven reporting directly within existing workstreams in SAP SuccessFactors solutions.
SAP Analytics Cloud powers the “boardroom of the future” as well. **SAP Digital Boardroom**. With real-time analytical and operational tools, organizations can empower senior leadership to monitor operations from 30,000 feet – or to zero in on the details from one LoB. People across the organization can instantly join discussions to spot risks before issues develop and seize opportunities before competitors react. Actionable information and collaborative workflows at everyone’s fingertips during critical meetings make short work of emergencies and drive long-term business success as never before.

**INTELLIGENT TECHNOLOGY FOR THE INTELLIGENT ENTERPRISE**
A simplified data model is imperative for intelligent technologies, such as machine learning. Traditional database models that maintain acceptable performance only with added complexity simply cannot scale to meet the needs of machine learning deployments. To run simulations, train algorithms, and improve visibility into what’s coming next, technologies need a data model up to the task. With **SAP S/4HANA**, SAP is leveraging machine learning technology in the solution itself. One example is accelerated accounts receivable. With legacy databases and complex data models, accounts receivable can be an error-prone process that crosses multiple systems to match purchase orders to invoices. With **SAP Cash Application software on SAP S/4HANA**, machine learning technology does the matching automatically – and gets better over time with the addition of new data.

**THE DIGITAL CORE**
With **SAP HANA** as its foundation, **SAP S/4HANA** serves as a digital core for the business – one that helps drive business agility, improve customer experiences, and increase business performance. To fully leverage the advantages of this digital core, the various LoBs at SAP also needed to migrate over to the SAP HANA platform. Following are the stories of these LoBs.
SAP Ariba Solutions: Performance Gains and a Better Customer Experience

At a time when supply chain speed and agility is what separates the leaders from the followers, SAP Ariba solutions give customers access to the world’s largest business network, bringing buyers and sellers together in the cloud. The result is that organizations can quickly find new supply chain partners to dynamically meet demand – and then manage the end-to-end procurement process to accelerate execution.

The SAP Ariba team at SAP is responsible for three main areas of the SAP Ariba solution portfolio. These include strategic procurement, operational procurement, and Ariba Network. By moving each offering to SAP HANA, the SAP Ariba team has helped SAP and its customers achieve the benefits detailed below.

- ~25% Improvement in UI response time
- 75% Reduction in time required for product upgrades
- 10x Improvement in search performance for SAP Ariba Procurement solutions

QUICK FACTS

- Customer sites: >10,000
- Data volume: 300 TB
- Compression factor: 4

© 2019 SAP SE or an SAP affiliate company. All rights reserved.
EARLY PAYOFF
As of this writing, strategic procurement and operational procurement are complete across 15 data centers – with work on Ariba Network underway. A number of SAP tools have played a role – such as SAP Replication Server for use in moving the data and the data assurance option for SAP Replication Server for use in maintaining data integrity.

Also, on the list of duties for the team has been the job of porting critical services to SAP HANA. The migration of directory services is now complete – as are electronic data interchange and message queue for Ariba Network. Supplier and buyer communities are currently in the testing phase.

By the time of project completion, the team will have moved more than 10,000 customer sites, more than 200 database schemas, and approximately 300 terabytes of data to SAP HANA. “We’ve been moving along at an accelerating pace,” says Brian Luo, VP of engineering, who has led the migration effort for the SAP Ariba team. “Each phase of the project goes faster than the one before. But already, we’re seeing benefits – both to our customers and to our internal teams.”

BETTER PERFORMANCE
Almost immediately, customers noticed performance improvements – due in large part to the speed of the SAP HANA in-memory database. “Pages were immediately rendering faster,” says Luo. “Customers noticed the difference immediately after the cutover to SAP HANA.”

Some customers, in fact, were not aware of the cutover. “They just noticed the improvement and called us to learn why,” says Luo. Another customer that had been experiencing search performance issues found that they disappeared as soon the move to SAP HANA was complete.

Data uploads and large batch processes move much faster as well, while time-outs are virtually eliminated. This can be attributed to the simplification of the SAP HANA database. With less code and technology overhead than legacy databases, SAP HANA helps speed database transactions dramatically.

IMPROVED CUSTOMER EXPERIENCE
Speed and performance are at the root of almost everything in the digital economy. This is why the SAP Ariba team has implemented “cloud health monitoring” as part of its move to SAP HANA. “Think of cloud health as a measure of customer frustration,” says Vinay Santurkar, senior director of engineering. “As performance issues with things like UI rendering slow things down, frustration goes up.”

With real-time cloud health monitoring and comparison for UI performance, the SAP Ariba team can determine a crucial aspect of the customer experience: are customers pleased or frustrated? By moving to SAP HANA, the SAP Ariba team has been able to bring up its overall cloud health number by 18 points (on a 100-point absolute scale) across the board.
ADDITIONAL BENEFITS
The column-oriented storage approach of SAP HANA makes it easier to compress data compared to row-oriented approaches. This has helped the SAP Ariba team reduce its footprint for structured data by a factor of four.

While the cost of memory may outweigh the cost of disk, this reduction in database size – along with a number of other factors – helps to balance total cost of ownership in favor of SAP HANA. These other factors include:
- Faster throughput: SAP HANA gives SAP Ariba solution customers much faster throughput. Queries take less time, which helps improve the user experience.
- More efficient innovation: The time it takes for product upgrades has been reduced by 75%. This is due to improved cluster startup times, faster query processing, and the ability of SAP HANA to manage more than twice as many connections from application servers compared to the legacy database.
- Greater flexibility: With smart data integration and a multitenant architecture, it is now easier for the SAP Ariba team to move customer sites from one database to another. This is helpful for customers that are growing quickly or may need to move to a different data center to comply with regional data-use regulations.

NEW HORIZONS
With SAP HANA in place, the SAP Ariba team will turn its attention to intelligent technologies that need a faster, simpler, and more flexible data platform.

Projects using machine learning and predictive analytics will be prioritized moving forward. With predictive analytics, for example, customers can build algorithms that yield insights into demand or detect fraud in the supply chain. And with machine learning, they can train these algorithms to get better over time – thus driving continuous improvement and continuous value to customers.

After the cutover to SAP HANA, pages were immediately rendering faster. Customers noticed the difference immediately.

Brian Luo, VP of Engineering, SAP Ariba, SAP SE
With 7,000 SAP SuccessFactors solution customers and 120 million users across more than 200 countries, SAP is one of the world’s largest providers of cloud-based solutions for human capital management (HCM). The SAP SuccessFactors HCM Suite covers critical HCM areas, including:

- Core HR and payroll
- Time and attendance management
- Learning and development
- Performance and compensation
- Recruiting and onboarding
- Workforce management and HR analytics

Brought into the SAP fold in 2012, SAP SuccessFactors solutions reflect the history of how the portfolio has developed over the years. With each new focus area added, database complexity grew. The result was thousands of unique database schemas and data redundancies across the suite. For the SAP SuccessFactors team, this made for a complex landscape to manage. For customers, it produced process gaps while impeding enterprise search, high-level reporting, and scalability.

Moving to SAP HANA for relevant workloads is changing this. The team has reimagined the legacy programming model for SAP SuccessFactors solutions – moving data processing tasks from the underlying application code to SAP HANA itself. There, a simplified data model makes possible a single version of the truth across the suite. This helps improve visibility and accelerate innovation.

“The project began with smaller customers first,” says Darren Sapper, senior director of technical program management with the SAP SuccessFactors team at SAP. “This gave us the experience to take on the bigger transformations with confidence.”

**SAP SuccessFactors Solutions: Visibility Across the Suite and Faster Innovation**

| Tenants: 28,000 |
| Data volume: 1 PB |
| Compression factor: 3 |

875 million Cloud transactions supported by SAP HANA daily

>120 million Unique end users
Today, the SAP SuccessFactors team has successfully completed a 100% migration to SAP HANA. This is a crucial milestone for the journey to unified real-time reporting, advanced analytical capabilities, and accelerated innovation. In all, the team was able to:

- Migrate more than 1 PB of legacy data and 28,000 tenants to SAP HANA
- Build 130 SAP HANA databases, consisting of 780 physical SAP HANA servers
- Convert a quality assurance automation framework from the legacy database to SAP HANA

Based on this work, the SAP SuccessFactors team has started to realize significant advantages.

**UNIFIED REPORTING**

“Customers in a digital economy need a unified reporting environment,” says Sapper. “With SAP HANA, we’re delivering.”

Now, customers can do direct reporting off of the source database with a simplified data model that eliminates data replication to an OLAP environment and makes information available across the HCM suite. With no latency, query performance is dramatically improved – even for data-intensive scenarios where scalability on demand is required.

Reporting is not only unified across the suite but also across other SAP offerings. “With the move to SAP HANA,” says Sapper. “Customers of SAP SuccessFactors solutions can now generate reports that pull in data from other SAP solutions. This enables a more complete picture of what’s happening in the business at any point in time.”

**ADVANCED ANALYTICS**

Because of the nature of SAP HANA – which brings together OLTP and OLAP on one data platform – customers can now run analytics in real time. “The delays associated with separate business analytics environments are gone,” says Yamin Polisetty, vice president of product management with the SAP SuccessFactors team. “Now, customers have instantaneous reporting on demand – without any lags.”

With a simplified data model, SAP SuccessFactors solution customers can also get more use from SAP Analytics Cloud. Today, business users – not data experts – can use self-service tools to run sophisticated analytics scenarios. With machine learning embedded in SAP HANA, users can identify process patterns and analyze employee data to yield insights for continuous improvements.

SAP Analytics Cloud allows you to monitor operations from 30,000 feet or to zero in on the details from one LoB so you can **spot risks before issues develop** and seize opportunities before competitors react.
FASTER INNOVATION
Simplification of the data model helps speed development as well. “In the past, the implementation of any new features had to contend with a complex array of data sources,” says Polisetty. “Now we have one centralized source for customers’ workforce-related data.”

This helps speed the development of new features and innovations. Because SAP SuccessFactors solutions run in the cloud, this innovation is delivered without disturbing users. “A lot of times, users won’t even notice the new updates until they go to use them,” says Polisetty. “This helps keep our customers satisfied and on the leading edge.”

NEXT MOVES
With the simplified data model made possible by the move to SAP HANA, the SAP SuccessFactors team is looking forward to the road ahead. Future plans include enhancements for workforce planning; the integration of SAP Analytics Cloud; robust support for intelligent technologies, such as predictive analytics and machine learning; and access to advanced analytics features in SAP HANA – including spatial processing, geocoding, clustering, and location mapping.

“The SAP HANA opens up whole new doors for our customers and our team,” says Sapper. “With improved visibility, greater insight, and increased support for intelligent technologies, SAP SuccessFactors solutions will continue to deliver the value to our customers well into the future.”

“The delays associated with separate business analytics environments are gone. Now, customers have instantaneous reporting on demand – without any lags.”

Yamini Polisetty, Vice President of Product Management, SAP SuccessFactors, SAP SE
Customers in a digital economy need a unified reporting environment. With SAP HANA, we’re delivering.

Darren Sapper, Senior Director of Technical Program Management, SAP SuccessFactors, SAP SE
SAP Customer Experience Solutions: Simplification and Improved Scalability

SAP Customer Experience solutions help organizations build trusted relationships between their brands and their customers using SAP C/4HANA®, the fourth-generation CRM technology suite from SAP. Combining data, machine learning, and microservices, the SAP C/4HANA suite powers real-time customer engagements across sales, service, marketing, and commerce.

Some of the core components in this portfolio stem from SAP’s 2018 acquisition of Callidus Software. This acquisition adds cloud solutions for end-to-end lead-to-cash processes that enable companies to manage compensation, commissions, and contract lifecycles.

Part of the job for the SAP Customer Experience team at SAP was to move the newly acquired Callidus portfolio to SAP HANA. Already the team has identified significant advantages.

Since it was introduced in 2011, more than 30,000 SAP customers have adopted SAP HANA as of July 2019 – in the cloud and on premise – to achieve real-time, end-to-end situational awareness of their businesses.
IMPROVED PERFORMANCE WITH NO PARTITIONS
With its legacy database, the SAP Customer Experience team used partitions and fine-tuned indexes to maintain acceptable levels of solution performance for the newly acquired solutions. With SAP HANA, partitions and indexes are no longer needed. The result is improved performance and simplified IT management.

In one load test, for example, the legacy database attempted to process more than 100,000 records in batch mode. “After three hours, the process was still not completed, so we shut it down,” says Karuna Sundaresan, senior staff engineer with the SAP Customer Experience team. “But with SAP HANA, it only took eight minutes.”

In another test, SAP HANA completed nonparallel processing for 1 million transactions in 34 minutes. The same process for the legacy database needed to be shut down after 10 hours of running.

Or take the example of data processing demand for compensation and pay data. A load test on actual customer data found that the new system based on SAP HANA processed approximately half a million sales transactions 14% faster compared to the legacy database.

SAP HANA has also accelerated a critical import process that involves customers loading sales and commissions data into the cloud tool either on a schedule or ad hoc. According to Sundaresan, this process “is up to three times as fast as it was before.”

SMALLER DATA FOOTPRINT
With a column orientation that allows for higher data compression ratios, SAP HANA helps to minimize the data footprint. As Mike Wilkes, head of cloud operations and technical support for the SAP Sales Cloud portfolio, notes: “Commissions management for SAP Sales Cloud saw compression rates of up to 10 times. This is remarkable compared to our legacy setup.”

For SAP customers, this smaller data footprint means lower data storage costs – and faster backup and recovery.

SIMPLIFIED MANAGEMENT THROUGH A TENANT-BASED ARCHITECTURE
SAP HANA is a multitenant database, which allows organizations to house multiple logical databases on one physical database. If more resources are needed, for instance, the multitenant architecture allows you to quickly move a single tenant from one SAP HANA system to another as needed.

“When it comes to scalability and agility, this is a big deal,” says Wilkes. “When a customer wants to set up a new test or development environment, we can support this quickly. Or if a customer suddenly starts growing, we now have the portability to move the tenant database for that customer to a bigger server. We can now manage change with greater ease and efficiency.”

FUTURE OUTLOOK
One new project currently underway is a unified environment that brings reporting and analytics to the next level on a single platform – also integrating with SAP Analytics Cloud. Other areas of focus moving forward will emphasize the use of intelligent technologies such as predictive analytics and machine learning to help drive efficiency and performance.
We can now manage change with greater ease and efficiency.

Mike Wilkes, Head of Cloud Operations and Technical Support for SAP Sales Cloud, SAP SE
The Core of the Intelligent Enterprise: SAP HANA and the Road Ahead

SAP’s move to SAP HANA is based on a two-fold business case. First, the move away from legacy databases to SAP’s own database eliminates third-party licenses and maintenance, thus generating substantial cost savings that can be passed on to customers and stakeholders alike.

Second, as has been discussed throughout this paper, the move to SAP HANA drives dramatic performance improvements for our growing portfolio of cloud solutions. With a simplified data model that harmonizes solutions and standardizes the technology stack across SAP S/4HANA, SAP Ariba solutions, SAP SuccessFactors solutions, and SAP Customer Experience solutions, customers can now manage transactions and analytics on diverse data in a single environment.

The fact is, businesses in a digital economy simply cannot afford to make decisions based on stale insights. By moving to SAP HANA, SAP is helping customers outpace the competition with fast and automated analysis that drives competitive advantage. Today, real-time situational business awareness is within reach – based on a data platform that brings transactions and analytics together to drive intelligent technologies that make instantaneous insight a reality. The road ahead for SAP and its customers leads toward becoming an intelligent enterprise – the kind of company that uses its data creatively to maximize value and deliver superior customer experiences.

Join us on that road and turn your own organization into an intelligent enterprise.

FIND OUT MORE
To learn more about how SAP HANA can support your company in becoming an intelligent enterprise with speed, agility, and landscape simplification, visit us online.

Our focus at SAP is always on doing whatever we can to help our customers thrive in the digital economy by becoming intelligent enterprises.