Transform Chemicals with SAP S/4HANA®
AGENDA

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CHEMICALS ON SAP S/4HANA®: OVERVIEW

Transform Your Digital Core with SAP S/4HANA®

We are at the dawn of the next big technology change where everything is connected and software is embedded in our lives. This technology change is bringing new opportunities and new threats. Cycle time for innovation is 5x–10x faster, and chemical companies can no longer compete unless complexity is reduced, business is reinvented, and data becomes the fuel for value creation for customers and shareholders.

The chemical world as we know it is experiencing a revolution on both the supply and demand sides of the value chain. We are experiencing a digital revolution from the technology advances of hyperconnectivity, supercomputing, cloud computing, smart technology, blockchain, and cybersecurity. We see a strong adoption of cloud solutions already, in particular for nonstrategic processes like HR or procurement, however, cybersecurity remains an important aspect for the asset- and operations-intensive chemical industry.

This revolution will transform the chemical industry away from the traditional, vertically integrated business models to an industry where access to information will overtake access to raw materials and resources as the competitive differentiator. These same disruptive technologies can also be used to reach new levels of safety, cost control, and agility in a competitive environment, while providing a bridge to success in the new, diversified, and outcome-focused economy.

To succeed, chemical companies will need to put in place a coherent digital vision with clearly articulated strategies. In particular, they will need to address emerging business models such as driving outcome-based engagements and flexible sourcing of resources through external talent networks. To execute on this, firms will not only need to reengineer their business processes, but they will also have to evaluate if they have the right technology platform that can deliver on that vision.

This platform requires an IT architecture that provides both stability and long-term reliability for core enterprise processes, and at the same time allows for flexibility in areas where change is happening on a constant basis. The digital core is the foundation for the core processes that need to run consistently and flexibly. It provides uninterrupted, real-time transactions and analytics, the ability to work with Big Data and connectivity to line-of-business (LoB) extensions that enable supporting processes such as chemical solutions and chemical-specific SAP Fiori® apps.

SAP S/4HANA® is the real-time platform at the core of an extended digital framework, enabling companies to connect seamlessly both internally and externally. The digital network starts with a digital core that interconnects all aspects of the value network in real time to drive business outcomes. The digital core gives chemical companies the opportunity to rationalize and simplify product innovation, manufacturing, or supply chain processes and integrate those with analytics in real time to enable a smarter, faster, and simpler enterprise.

Asian Paints
20%–30%
Call center productivity increase

“The road ahead is to integrate all our stakeholders including suppliers, employees, and customers, and create an extended enterprise.”
Deepak Bhosale, Chief Manager – IT, Asian Paints Limited

Fertimig
50%
More time for strategic tasks

“With SAP S/4HANA Finance, Fertimig started counting on optimized processes and integrated management to support its audacious growth target set for 2020.”
Diogo Gonçalves Nunes, Controller, Fertimig Fertilizantes Ltda
CHEMICALS ON SAP S/4HANA: OVERVIEW

SAP S/4HANA: Sources of Value
The value from SAP S/4HANA comes through simplification of the user experience, architecture, and process.

Simplified User Experience: Across All Devices
SAP S/4HANA empowers frontline users with an end-user-centric consumer-grade experience. It’s the frontline employees that add value to clients. SAP is driving simplification and innovation in how business users work with a consistent, role-based user experience available on any device.

Simplified Architecture: No Aggregates – No Redundancies
SAP S/4HANA has a simplified data model that provides an advanced digital data architecture, which in turn provides, in real time, a single source of the truth for both transactions and analytics. This enables extensive flexibility to adapt to changing business models, such as simulating the impact of business reorganizations in minutes rather than days.

Simplified Processes: Key Industry Capabilities with SAP S/4HANA*

Product Innovation and Integrity
- Project and portfolio management
- Compliant product lifecycle management
- Quality assurance
- Corporate sustainability

Supply Chain Management
- Sales, inventory, and operations planning
- Demand management
- Response and supply management
- Transportation management
- Warehouse management
- Logistics network

Manufacturing
- Production operations management
- Production network
- Environment, health, and safety
- Asset operations and maintenance
- Asset network

Sales and Marketing
- Real-time customer insight
- Collaborative sales force automation
- Quote to cash
- Sales performance management
- Service process and operations
- Omnichannel commerce

*This is a subset of the complete industry portfolio shown later in the SAP S/4HANA: Portfolio for Chemicals section.
CHEMICALS ON SAP S/4HANA: OVERVIEW

EXAMPLE: User Experience Simplification
SAP S/4HANA provides reengineered and simplified business processes for chemical companies which can yield significant benefits transforming the execution from multi-step, batch driven processes with latency in terms of key performance indicators to real-time processes with actionable insights.

SAP S/4HANA: Capital Project Management Provides a Single Source of Truth for All Capital-Related Projects

Traditional SAP ERP application
- Owner/Operator and contractor work in different applications and constantly realign on budgets and status

SAP S/4HANA
An intuitive user experience on any device providing a single consolidated source of truth on a single platform for all project-related information at the lowest level of granularity

One single point of entry

10%–20%
Increased revenue through faster completion of projects

20%–30%
Reduced project cost overruns

20%–30%
Reduced capital projects management cost

*Benefits are based on early adopters of SAP S/4HANA or conservative outside-in benefits due to moving from a traditional SAP ERP application to enhanced SAP S/4HANA + LoB/cloud capabilities as each enterprise is at a different level of maturity, our recommendation is to work with you to determine the value proposition for your enterprise.
CHEMICALS ON SAP S/4HANA: OVERVIEW

EXAMPLE: User Experience and Process Simplification
SAP S/4HANA provides a new MRP cockpit which supports single-step, exception-based working models accompanied by simulation features and decision support with easy-to-use SAP Fiori apps.

SAP S/4HANA: Manufacturing Requirements Planning Simplifies Order Commitment and Fulfillment Process

Traditional SAP ERP
Multiple batch processes and summarized reporting at period end delays order commitment and fulfillment process.

SAP S/4HANA
System analyzes the material flow of all materials in real time. It creates alerts and displays most urgent issues.

MRP cockpit
Balance demand with supply based on simulations and key performance indicator (KPI)-driven suggestions to support decisions. Release optimal plan to operative MRP.

- 10x Faster MRP planning run
- Up to 10% Reduction in total manufacturing cost

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EXAMPLE: User Experience and Process Simplification
The SAP Predictive Maintenance and Service solution provides real-time health information of assets based on critical values and trends, thus allowing the most efficient asset maintenance strategies for better managing cost, risk, and performance.

EXAMPLE: SAP S/4HANA and SAP Predictive Maintenance and Service Solution Provide Operational Excellence for Chemical Plants

Traditional SAP ERP
- Time and/or condition-based inspection and maintenance
- Real-time risk of failure and performance are not known
- No optimization of cost, risk, and performance

SAP S/4HANA and SAP Predictive Maintenance and Service
SAP Predictive Maintenance and Service solution allows for real-time monitoring of asset health and predicting failure before it happens. Maintenance orders are triggered just in time, avoiding unnecessary inspections and decreasing cost and risk of unplanned failure.

More than smarter and faster – reimagining work

10%–15%
Reduction in asset service and maintenance cost

5%–10%
Reduction in unplanned asset downtime

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EXAMPLE: User Experience and Process Simplification
SAP S/4HANA provides reengineered and simplified business processes that can yield significant benefits, transforming the execution from multistep, batch-driven processes with latency in terms of key performance indicators to real-time processes with actionable insights to avoid errors and protect profitability.

EXAMPLE: SAP S/4HANA Simplifies Sales and Order Fulfillment Order-Related Issue Resolution

Traditional SAP ERP
When trying to ensure high quality order fulfillment, issues and exceptions are typically identified by working through multiple disparate lists – a time-consuming and error-prone process.

SAP S/4HANA
Simple, role-based cockpit shows a list of issues and exceptions to help sales employees easily identify and resolve issues and exceptions in the order fulfillment process. This improves customer satisfaction and retention.

Sales Manager
Ensure perfect order is delivered
Open sales order monitor
Identify incomplete orders
Delivery issues
Billing issues
Monitor delivery
Delivery shipped – often with lower on-time delivery or with costly expedited carrier

Sales Manager
One single point of entry

10%–15% Improvement in internal sales productivity
25%–30% Improvement in subscription invoice processing time

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## DEEP DIVE PER CHEMICALS INDUSTRY PRIORITY

Product Innovation and Integrity Deep Dive

<table>
<thead>
<tr>
<th>Typical challenges</th>
<th>Traditional SAP ERP</th>
<th>SAP S/4HANA, enhancements</th>
<th>Benefits*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to prioritize project portfolio and product development decisions in alignment with corporate strategy</td>
<td>Visibility into complete project portfolio, profitability, and investment structure Planning, progress, roll-up, analysis, and simulation is done in batch runs</td>
<td>Live tracking of financial project KPIs by leveraging the in-memory technology of SAP HANA</td>
<td>• 10%–20% increased revenue from new products&lt;br&gt;• 15%–20% increased new products meeting revenue/margin targets&lt;br&gt;• 20%–30% lower R&amp;D expenses&lt;br&gt;• 70%–80% faster management of project tasks</td>
</tr>
<tr>
<td>Lack of transparency into project resource demands and allocation leads to project delays as well as low resource utilization</td>
<td>Capacity planning, detailed project role planning, and project staffing in a single application</td>
<td>Real-time access to resource availability, skillsets, and organizational assignment during project staffing process</td>
<td>• 10%–55% faster time to market&lt;br&gt;• Reduced fines and recalls due to noncompliance&lt;br&gt;• Reduced scrap&lt;br&gt;• Increased gross margins&lt;br&gt;• Increased project and portfolio management resource productivity&lt;br&gt;• Reduced engineering change cost</td>
</tr>
<tr>
<td>Inability to plan project costs and budgets efficiently and track actual versus planned costs leads to budget overruns</td>
<td>Work breakdown structure serves as basis for hierarchical project accounting; actual project cost visibility by using multiple applications</td>
<td>Change the status of a work breakdown structure (WBS) element through SAP Fiori apps; actual project costs visibility by using one integrated application</td>
<td><em>Benefits are based on early adopters of SAP S/4HANA or conservative outside-in benefits due to moving from a traditional SAP ERP to enhanced SAP S/4HANA with LoB and cloud capabilities. As each enterprise is at a different level of maturity, we recommend working with you to determine the value proposition for your enterprise.</em></td>
</tr>
<tr>
<td>Inability to bring consumer-driven product offerings to market in a timely manner leads to low brand equity and stagnant growth</td>
<td>Product-related documents managed and linked to master data in SAP ERP throughout the end-to-end process Context-sensitive analytics</td>
<td>Searchable development history to increase reuse or decrease time and investment in development efforts that go nowhere Increased profitability from executing engineering changes with full knowledge of downstream costs</td>
<td></td>
</tr>
<tr>
<td>Inability to use existing knowledge or leverage external partnerships leads to inefficiency</td>
<td>Integration with the SAP Recipe Management application Ability to access the rules available in SAP ERP for selected markets and product categories</td>
<td>Accurate recipes for R&amp;D, plant, and site by using different recipe types (with recipe development) leveraging SAP HANA for seamless end-to-end processes</td>
<td></td>
</tr>
</tbody>
</table>
# DEEP DIVE PER CHEMICALS INDUSTRY PRIORITY

Manufacturing Deep Dive (1)

<table>
<thead>
<tr>
<th>Typical challenges</th>
<th>Traditional SAP ERP</th>
<th>SAP S/4HANA, enhancements</th>
<th>Benefits*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long and overnight batch runs result in planning inefficiencies</td>
<td>Planning runs at predefined times with data that first must be consolidated from various systems</td>
<td>Live MRP available</td>
<td>• Up to 10% lower manufacturing cycle time</td>
</tr>
<tr>
<td>Inflexibility to include real-time changing demands in the planning run leads to outdated and inaccurate planning</td>
<td>Separate manufacturing planning processes available in planning systems and SAP ERP applications</td>
<td>Improved effectiveness of planning with more frequent and faster MRP runs – multiple times a day and 10 times faster</td>
<td>• Up to 10% improved labor utilization with “live” production monitoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New MRP cockpit supports exception-based working model accompanied by simulation features and decision support with easy-to-use SAP Fiori apps</td>
<td>• Up to 10% reduction in total manufacturing costs</td>
</tr>
<tr>
<td>Complexity in back-order processing</td>
<td>Low-volume back-order processing supported</td>
<td>Easy-to-use, high-volume back-order processing</td>
<td>10%–15% reduction in order lead times</td>
</tr>
<tr>
<td>Inefficient strategies to fulfill orders from the entire network or to substitute products automatically</td>
<td></td>
<td>Performance improvements for releasing large production orders</td>
<td>10%–12% reduced days in inventory</td>
</tr>
<tr>
<td>Higher cost of ownership for available-to-promise functionality in SAP ERP, which requires the use of supplemental software products</td>
<td>Sophisticated ATP requirements, like global ATP, require system integration with additional products, like the SAP Advanced Planning and Optimization component</td>
<td>In the digital core of SAP S/4HANA and SAP ERP, planning functions are available in the same system, on the same database</td>
<td>10%–12% increased on-time delivery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mass product availability check enabled by the SAP HANA database for sales, planned, and production orders</td>
<td>4%–6% reduction in revenue loss due to fulfillment issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advanced ATP check for all items of multiple order at once</td>
<td>Reduction in back-ordered items canceled</td>
</tr>
<tr>
<td>Inefficient strategies to sell scarce products in a fair manner.</td>
<td></td>
<td></td>
<td>Lower cost of ownership</td>
</tr>
<tr>
<td>Disparate planning and transactional systems lead to data integration latency and errors</td>
<td>Inventory management systems and planning systems need integration with SAP ERP for material requirement planning</td>
<td>SAP ERP and planning are part of the same digital core of SAP S/4HANA</td>
<td>Reduced IT costs</td>
</tr>
<tr>
<td>Complex and expensive system landscapes with multiple shop floor systems in distributed plants, resulting in high TCO</td>
<td>SAP Business Suite software provides an integrated solution from enterprise planning to shop floor execution</td>
<td>Fundamentally new data models and functions reduce the number of systems required, simplifying the IT landscape and lowering TCO</td>
<td>Increased inventory accuracy</td>
</tr>
</tbody>
</table>

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## Typical challenges

| Inefficient application proximity often requires shop floor workers to go to a central terminal to make required entries, resulting in delays and errors |
| SAP Manufacturing Execution application provides configurable, role- and place-specific and personalized dashboards for operators; SAP Manufacturing Execution and SAP ERP need to be integrated |
| Touch screen operator UIs for use on manufacturing floor |
| Browser-based UI5/HTML5 mobile applications for wireless bar code scanners used on the shop floor |

| Delayed material postings caused by system locking behaviors |
| Inventory status is calculated overnight |
| Live inventory updates are not available; inventory status is reflected in the system with time offset |

| Distributed systems or pre-aggregated data leads to inaccurate stock reporting |
| Limited inventory visibility, thereby increasing error rates, driving supply shortages, and inhibiting profitable inventory sourcing |
| Inventory analysis is possible via a separate analytical system with data integration issues and data latency |
| Limited visibility across the material flow and inventory monitoring results in poor on-time delivery performance |
| Material buffers are needed that increase average inventory levels |

| In-process valuation leads to longer locks of materials on site level |
| Complexity in valuating inventories in multiple currencies and for different valuation methods (legal, profit center, and reporting purposes) |
| Material ledger activation available along with functionality of actual costing; however, inventory valuation data exists in multiple aggregated tables |
| Inefficient processes for carrying out actual costing redistribution/revaluation; slow reporting |

| Difficulty getting an end-to-end view of quality due to distributed systems |
| Quality-management-relevant functions are integrated with supply chain, covering the areas of quality engineering, quality inspection, and quality improvement |

## Traditional SAP ERP

| Traditional SAP ERP |
| SAP Manufacturing Execution application provides configurable, role- and place-specific and personalized dashboards for operators; SAP Manufacturing Execution and SAP ERP need to be integrated |
| Touch screen operator UIs for use on manufacturing floor |
| Browser-based UI5/HTML5 mobile applications for wireless bar code scanners used on the shop floor |

## SAP S/4HANA, enhancements

| SAP S/4HANA, enhancements |
| UI simplification, role-based (persona-based) UI5 or SAP Fiori apps to support production transactions (for example, order confirmations, operation confirmations, and so on) |
| Live inventory management through redesigned data model enables unlimited simultaneous material movements, which allows for true transparency on inventory and material flows |
| Easy-to-use and intuitive SAP Fiori apps for inventory managers and warehouse clerks |
| Material ledger available as a default option; all inventory valuation data exists in material ledger, removing redundancies and aggregates |
| Supports core quality management processes for user roles of quality engineering, quality inspection, and quality improvement |

## Benefits*

| Benefits* |
| Up to 10% improved labor utilization with “live” production monitoring |
| 10%–12% increased on-time delivery |
| Up to 25% reduction in scrap value |
| Optimized inventory levels |
| Reduced TCO through landscape simplification |
| Increased inventory accuracy |
| Increased visibility into actual profitability, allowing for margin optimization |
| Reduction in the cost to support quality management |
| Improved manufacturing execution technician productivity |
| Increased gross margins |

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## Typical challenges

<table>
<thead>
<tr>
<th>Lack of real-time view into ongoing maintenance activities and asset performance indicators, hinders timely decision-making</th>
<th>Multi-tiered landscape consisting of SAP ERP, additional component extensions, and business intelligence solution makes it challenging to obtain a real-time view of maintenance activities</th>
<th>Real-time view for planners into ongoing maintenance activities with the ability to reschedule multiple times a day in order to better plan and schedule maintenance activities and achieve higher efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited ability to analyze data by machines and sensors leads to high asset downtime and increased time to determine the root cause of failures</td>
<td>Analysis is based on past performance and lagging indicators, which increases the time to identify potential activities that can improve asset performance. Sophisticated analytics are disconnected from real-time operational data, thereby losing the transparency of strategy changes.</td>
<td>Improved performance of many transactions, such as scheduling of maintenance plans and material requirements (MRP) runs.</td>
</tr>
<tr>
<td>Limited ability to share and learn vital best practices on installation, usage, and performance of equipment between different stakeholders hampers the process of improving asset performance</td>
<td>Information sharing is only possible via direct interfaces between individual systems, which makes it difficult to achieve effective collaboration among different stakeholders.</td>
<td>SAP S/4HANA integrated with SAP Asset Intelligence Network</td>
</tr>
<tr>
<td>Limited ability to effectively analyze EH&amp;S data to reduce workplace risk</td>
<td>Analysis is based on past performance, which limits the scope of proactively driving EH&amp;S risk reduction. Data is processed in batches, which increases the time required to analyze EH&amp;S-related information.</td>
<td>Embedded analytics based on live data that help EH&amp;S practitioners act in the moment</td>
</tr>
</tbody>
</table>

### Benefits* |

- 5%–10% decrease in unplanned asset downtime or outages
- 10%–15% lower service and maintenance costs
- 1%–5% lower EH&S management cost
- 1%–5% reduced lost-time accident
- Increased return on assets
- Improvements in operational efficiency
- Reduced EH&S management cost

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## Typical challenges

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<tr>
<th>Difficulty driving sales and operations planning (S&amp;OP) process with executional SAP ERP</th>
<th>Traditional SAP ERP</th>
<th>SAP S/4HANA, enhancements</th>
<th>Benefits*</th>
</tr>
</thead>
</table>
| Collaboration around a sales and operations plan needs separate integration; difficult to analyze different scenarios of future demand and supply and hard to come up with an actionable plan | Fast MRP run and new working model for MRP controllers based on decision support | • 3%–5% lower supply chain planning cost  
• 10%–12% lower total logistics cost  
• 10%–15% reduction in revenue loss due to stock-outs  
• 10%–12% reduction in days of inventory  
• Reduced sales and operations planning cycle time  
• Increased forecast accuracy  
• Improved manufacturing function planning efficiency  
• Improved supply chain planning FTE productivity  
• Increased inventory accuracy  
• Reduced supply and inventory planning cost  
• Increased inventory accuracy  
• Reduced order fulfillment lead time  
• Reduced TCO through landscape simplification |

| Not able to include real-time changing demands in the planning run, leading to outdated and inaccurate planning | Basic demand planning features exist with limited ability to sense or predict short-term demand based on growing number of demand signals | Changes in demand are visible without waiting for lengthy batch runs like back-order processing |  |

| Inability to include the real-time changing demands in the planning run and analysis leads to outdated and inaccurate planning decisions | MRP lists are working with snapshots of the planning situation during the planning run | SAP Fiori apps for MRP (cockpit) provide real-time insights into material availability and flow |  |

| Lack of visibility into the end-to-end supply chain leads to poor decision support and slow corrective actions | Supply chain analytics possible using an online analytical processing (OLAP) engine like a business warehouse (BW); the data is not real time | Embedded analytics allow on-the-fly simulations with real-time data; user- and use-case-centric views are also supported |  |

| Limited inventory visibility, increasing error rate and supply shortages | Inventory analysis is possible via a separate analytical system with data integration issues and data latency | SAP Fiori apps for inventory managers and warehouse clerks |  |

| Missing visibility and control of material flow and real-time inventory monitoring result in poor on-time delivery performance | Visibility on overall progress across system boundaries; ability to achieve overview on shipping and transportation process status with messaging interface between SAP ERP and SAP Extended Warehouse Management application, SAP Transportation Management application, and the track and trace package | SAP Extended Warehouse Management integrated with SAP S/4HANA, supporting all levels of warehouse complexity  
SAP Transportation Management integrated with SAP S/4HANA, supporting distribution and logistics holistically |  |

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Typical challenges | Traditional SAP ERP | SAP S/4HANA, enhancements | Benefits*
--- | --- | --- | ---
Lack of visibility into the order management system results in slow resolution of order fulfillment issues with risk of delayed delivery | Responsible employee has to check multiple reports to get a holistic view of all process-related issues | Relevant insights, contacts, and collaboration features for internal sales | • 10%–20% increased customer satisfaction
• 10%–30% increased on-time delivery
• 25%–30% reduction in subscription invoice processing time
• 10%–15% increased order management FTE productivity
• 25%–30% reduced days in inventory
• 4%–5% increased customer billing FTE productivity
• Increased contract management efficiency, resulting in reduced SG&A
• Reduced DSO for large customer volumes

Inability to see and manage one single quote, contract, and invoice statement listing all provided products that are sold together | Limited support for complex business-to-business (B2B) agreements and contractual relationships, which combine terms for physical goods in a single contract and invoice | Master agreements for large enterprise customers managed by bundling one-time sales of products with subscriptions and usage-based services in one contract

Difficulty in getting all customer information | Little consolidation of customer information: inaccurate, outdated customer data | Provide customers with contextual, consistent, and relevant sales experiences, regardless of channel or device

Less visibility in warehousing and shipping operations | Visibility into overall delivery progress across system boundaries; overview of shipping status is achieved through a messaging interface between SAP ERP and the SAP Extended Warehouse Management application and the SAP Transportation Management application | Easy-to-use and intuitive SAP Fiori apps for inventory managers, warehouse clerks, and shipping specialists to enable complete visibility into inventory

Lack of real-time inventory monitoring results in less-than-optimal on-time delivery performance | No robust analytical tools for billing administrators to have quick insight into the ongoing billing process | Native SAP Fiori apps simplify the administration of standard billing apps with user-friendly operational tools

Lack of adequate reporting and operational tools to analyze, review, and control billing processes | | Native SAP Fiori apps simplify the administration of standard billing apps with user-friendly operational tools

Difficulty in generating invoices and running bulk collection and payment processes in a timely manner | Normal billing runs well, but bulk processes are considerably slower using traditional relational databases | Faster and better billing, accommodating bulk processes through enhanced capabilities of SAP HANA

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SAP S/4HANA: PORTFOLIO FOR CHEMICALS

SAP S/4HANA, the digital core, also provides native prebuilt integration to allow firms to leverage SAP’s complete portfolio of solutions to comprehensively address their needs demanded by today’s digital economy. Processes are designed from the outset to flow end to end across the portfolio of cloud-based solution extensions that are each fully integrated with SAP S/4HANA Enterprise Management and are optionally deployed to address business needs. The solution capabilities in the dark blue band, the digital core, are delivered as part of S/4HANA Enterprise Management. The lighter blue band, also in the digital core, are part of S/4HANA Enterprise Management, but added on as needed.

### SAP S/4HANA Enterprise Management
- **SAP S/4HANA R&D**
  - Regulatory Documentation

- **SAP S/4HANA MANUFACTURING**
  - Manufacturing Intelligence and Integration
  - Mobile Asset Management
  - Predictive Maintenance and Service
  - Asset Information Collaboration

- **SAP S/4HANA SUPPLY CHAIN**
  - Integrated Business Planning
  - Extended Warehouse Management
  - Transportation Management
  - Global Batch Traceability
  - Track and Trace

- **SAP S/4HANA FINANCE**
  - Governance, Risk, and Compliance for Finance

### SAP S/4HANA Human Resources
- SAP SuccessFactors
  - Core Human Resources
  - Talent Management
  - Time and Attendance Management

### SAP S/4HANA Sourcing and Procurement
- SAP Ariba
  - Supplier Collaboration
  - Business Network
  - Guided End-User Buying
  - External Workforce Management

### SAP S/4HANA Cloud Platform
- Customize applications
- Integrate apps, data, and processes
- Build new apps

### SAP HANA Cloud Platform
- Customize apps and processes

### SAP S/4HANA: PORTFOLIO FOR CHEMICALS

<table>
<thead>
<tr>
<th>Suite</th>
<th>Products</th>
<th>Digital Core</th>
<th>LoB extensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP S/4HANA R&amp;D</td>
<td>• Regulatory Documentation</td>
<td>• Enterprise Portfolio and Project Management</td>
<td>• Product Development and Project Control</td>
</tr>
<tr>
<td>SAP S/4HANA MANUFACTURING</td>
<td>• Manufacturing Intelligence and Integration</td>
<td>• Constrained Production Planning</td>
<td>• Product Development and Project Control</td>
</tr>
<tr>
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### SAP S/4HANA Cloud Platform
- Customize applications
- Integrate apps, data, and processes
- Build new apps

### SAP HANA Cloud Platform
- Customize apps and processes
SAP S/4HANA: PORTFOLIO FOR CHEMICALS

An end-to-end solution for chemical companies

Chemical companies must digitize to grow revenue and profits and reduce costs by simplifying their operations. The value of the digital economy is based on how to serve the customer. Value creation often comes from edge solutions which are based on and coordinated by the digital core solutions. The capabilities delivered with SAP S/4HANA and the prebuilt native integration with the LoB solutions are the platform for innovation and business process optimization, connecting the workforce, the Internet of Things, the supply network, and customers.

1. SAP Benchmarking DB, 2. Ariba Benchmarking DB, 3. SAP Reference DB: Results of a validation project by Zurich
SAP S/4HANA CHEMICALS: VALUE PROPOSITION

SAP S/4HANA provides chemical companies a proven framework to adopt industry best practices while attaining operational excellence across the full value chain.

Strategy enablement
- Accelerate creation of new business models
- Enter new markets and industries
- Accelerate M&A synergy
- Run live (SAP Digital Boardroom)
- Reorganize on the fly
- Achieve greater speed and agility
- Run Simple (master complexity)
- Manage risk and ensure compliance

Business benefits*
- 10%–20% increased portfolio and project management resource productivity
- 40%–50% reduced days to close annual books
- 10%–12% reduced days in inventory
- 10%–12% increased on-time delivery
- 5%–10% reduction in unplanned asset downtime or outages
- 10%–15% reduced asset service and maintenance costs
- Faster adoption to business changes
- High user efficiency
- Increased return on assets
- Reduced EH&S management cost

Empowered employees
- Establish finance as a partner for strategic decisions instead of just for “collecting numbers”
- Increase in productivity and faster user adoption through tailored UIs enabled by the SAP Fiori user experience (UX)

IT benefits and TCO
- Reduce data footprint
- Merge online analytical and transaction processing (OLAP and OLTP)
- Eliminate many desktop clients
- Lower testing costs
- Simplify landscapes
- Take advantage of native integration

*Benefits are based on early adopters of SAP S/4HANA or conservative outside-in benefits due to moving from a traditional SAP ERP to enhanced SAP S/4HANA + LoB/cloud capabilities. As each enterprise is at a different level of maturity, we recommend working with you to determine the value proposition for your enterprise.
Asian Paints
Through extending into a network of 45,000 retailers, Asian Paints reimagined its business model from selling paints to selling a consumer experience and helping people to beautify their homes.

Combining the power of SAP HANA, SAP ERP, and peripheral customer-centric and innovative applications, Asian Paints can now more precisely target customers with personalized offers in real time. This also changed the way sales people work at Asian Paints.

“The road ahead is to integrate all our stakeholders, including suppliers, employees, and customers, and create an extended enterprise.”
Deepak Bhosale, Chief Manager – IT, Asian Paints Limited

Fertimig Fertilizantes Ltda
Fertimig Fertilizantes Ltda has grown by leaps and bounds since it was founded in 2003. To keep up this pace and achieve its bold growth target, in 2015 it implemented the SAP S/4HANA Finance solution. This new management system allowed Fertimig to automate processes, adopt market best practices, optimize outcomes, and lay solid foundations for sustainable business growth.

“With SAP S/4HANA Finance, Fertimig started counting on optimized processes and integrated management to support its audacious growth target set for 2020.”
Diogo Gonçalves Nunes, Controller, Fertimig Fertilizantes Ltda.