SAP Point of View

SAP Business Technology Platform
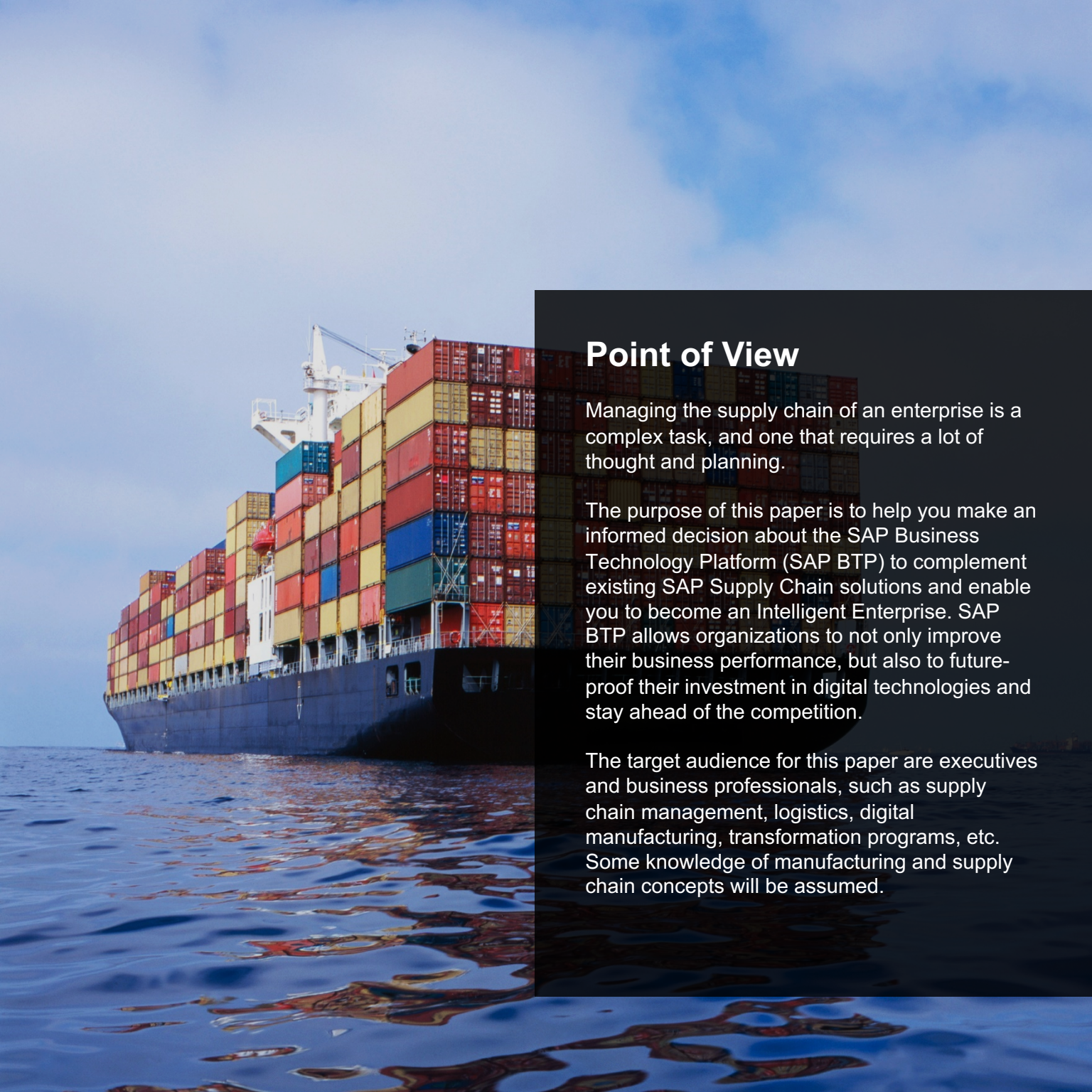Journey to the Intelligent Enterprise with Digital Supply Chain

Updated November 2021

Point of View

Managing the supply chain of an enterprise is a complex task, and one that requires a lot of thought and planning.

The purpose of this paper is to help you make an informed decision about the SAP Business Technology Platform (SAP BTP) to complement existing SAP Supply Chain solutions and enable you to become an Intelligent Enterprise. SAP BTP allows organizations to not only improve their business performance, but also to future-proof their investment in digital technologies and stay ahead of the competition.

The target audience for this paper are executives and business professionals, such as supply chain management, logistics, digital manufacturing, transformation programs, etc. Some knowledge of manufacturing and supply chain concepts will be assumed.

Executive Summary

Summary

In our ever-changing world, today's supply chains must not only be more resilient, but they need to holistically and seamlessly connect their business operations and their networks. There is a common theme around the challenges in supply chain management: getting access to more information and deriving insight from the massive amount of data. By digitalizing the supply chain, companies are able to address current vulnerabilities and stay future-proof.

SAP Business Technology Platform (SAP BTP) is an integrated offering comprised of database and data management, application development and integration, analytics, and intelligent technologies. The platform offers users the ability to turn data into business value, compose end-to-end business processes, and build and extend SAP applications quickly.

SAP BTP gives the same platform for developing our solutions to customers or partners. This presents a clear advantage compared with other development platforms with availability of reusable components.

Objectives

- Enhance insight across all applications related to a more resilient and sustainable supply chain
- Connect processes to lower costs while enhancing long-term value
- Integrate and extend current digital capabilities and innovate new ones to maintain peak performance

SAP BTP drives a progression toward a unified system of data, applications, and business processes that counters infrastructure costs and operational complexity. This is delivered through data-to-value outcomes, integration enablement, and extensible and personalized application solutions. With a robust and agile foundation, you can improve reliability and performance across your supply chain.

Solutions for Positive Impact

- **Real-Time Analytics** provide a consolidated view across all your supply chain functions and the data residing in a multitude of data assets or applications used by these.
- **Extensibility** allows functional barriers to be broken down by correlating data from different areas which provide insights on profitability when making operational decisions, e.g. supply and demand with financial data sets.
- **Integration** is essential to enhance business operations across the entire supply chain by connecting all applications, data and processes seamlessly.

Benefits to Your Business

- Automate and streamline supply chain processes with a flexible, scalable platform
- Improve quality and customer service from product performance insight related to manufacturing
- Boost brand loyalty by satisfying customer expectations with fast, data-driven insight and action
- Increase sales revenue by maintaining an integrated and smooth-running supply chain
- Deliver an agile, resilient and sustainable supply chain from design to operate

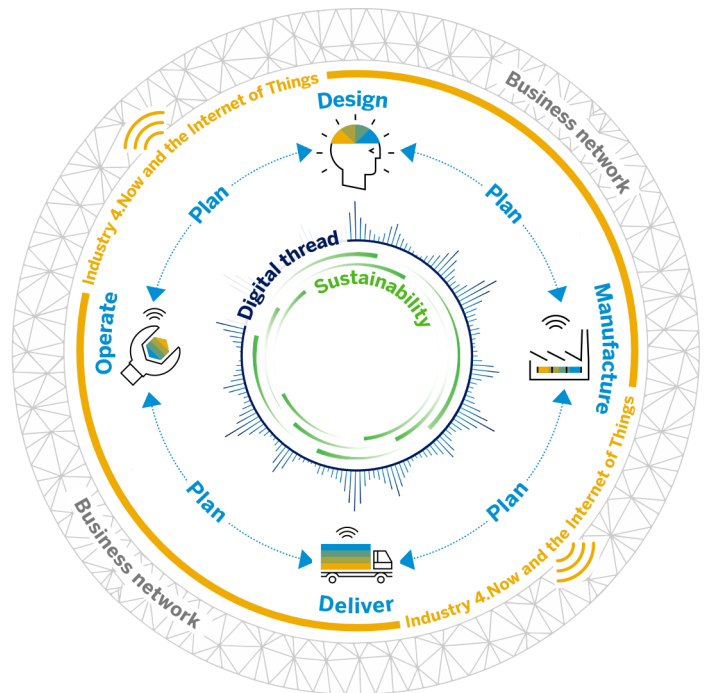# Modern Challenges for the Digital Supply Chain

For most companies, the digital revolution of the supply chain is just beginning. The way businesses operate will continue to change dramatically, especially for supply chains, which need to be more resilient and resistant to disruption.

Yet, disruption can materialize in many ways: Technologies, regulations, social issues, environmental risks, and trade conflicts can easily unsettle even the most reliable supply chains. Every action taken in the supply chain to counteract challenges can have significant impact on other parts of the business.

SAP helps companies connect all facets of the supply chain – from product design to manufacturing, logistics and service. Every part of the organization runs holistically and seamlessly, and at the speed of the fast-moving, unpredictable challenges they face.
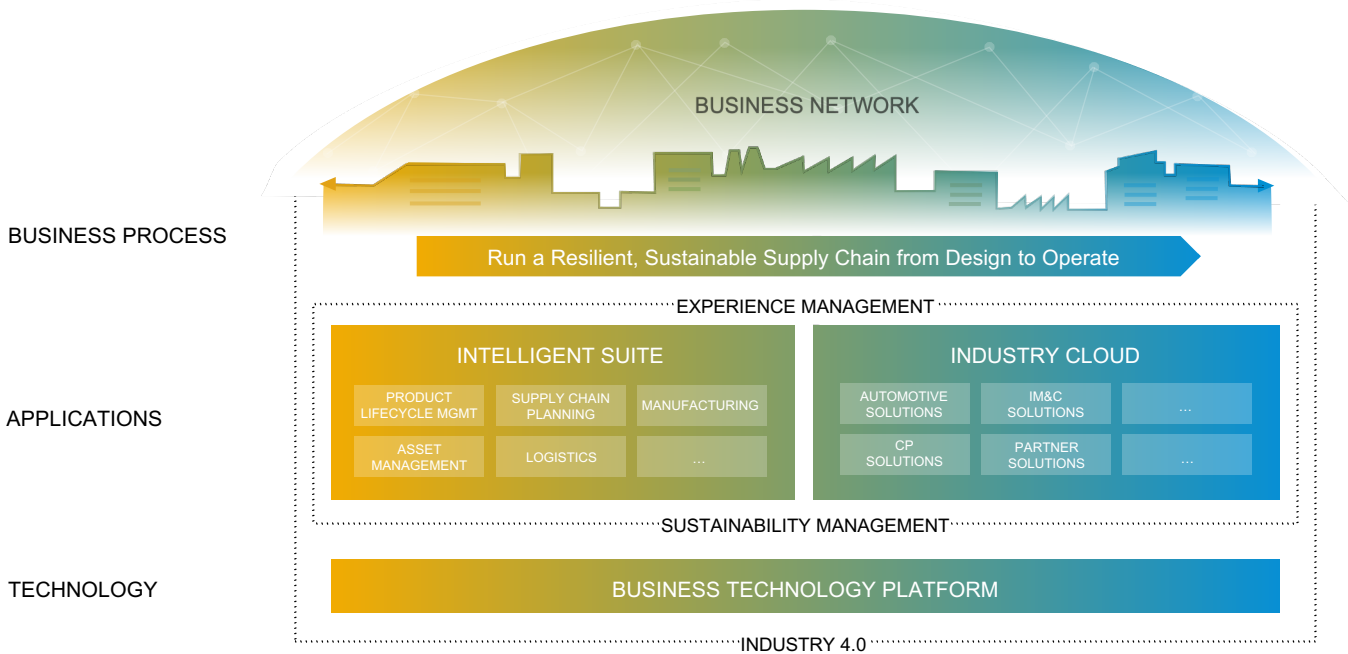
Working together with our customers, we are reinventing how supply chains run. Reconceiving how we plan and use resources. And, adopting new holistic business models for greater resiliency, profitability, and sustainability – end-to-end, from design to operate.

Wherever you are in your own digital journey, SAP can help guide your way. We can help you think beyond tomorrow while addressing the challenges of the here and now. Whether it be through simple process improvement or a more complex change: You gain the agility you need to address challenges head on.

SAP Business Technology Platform (SAP BTP)
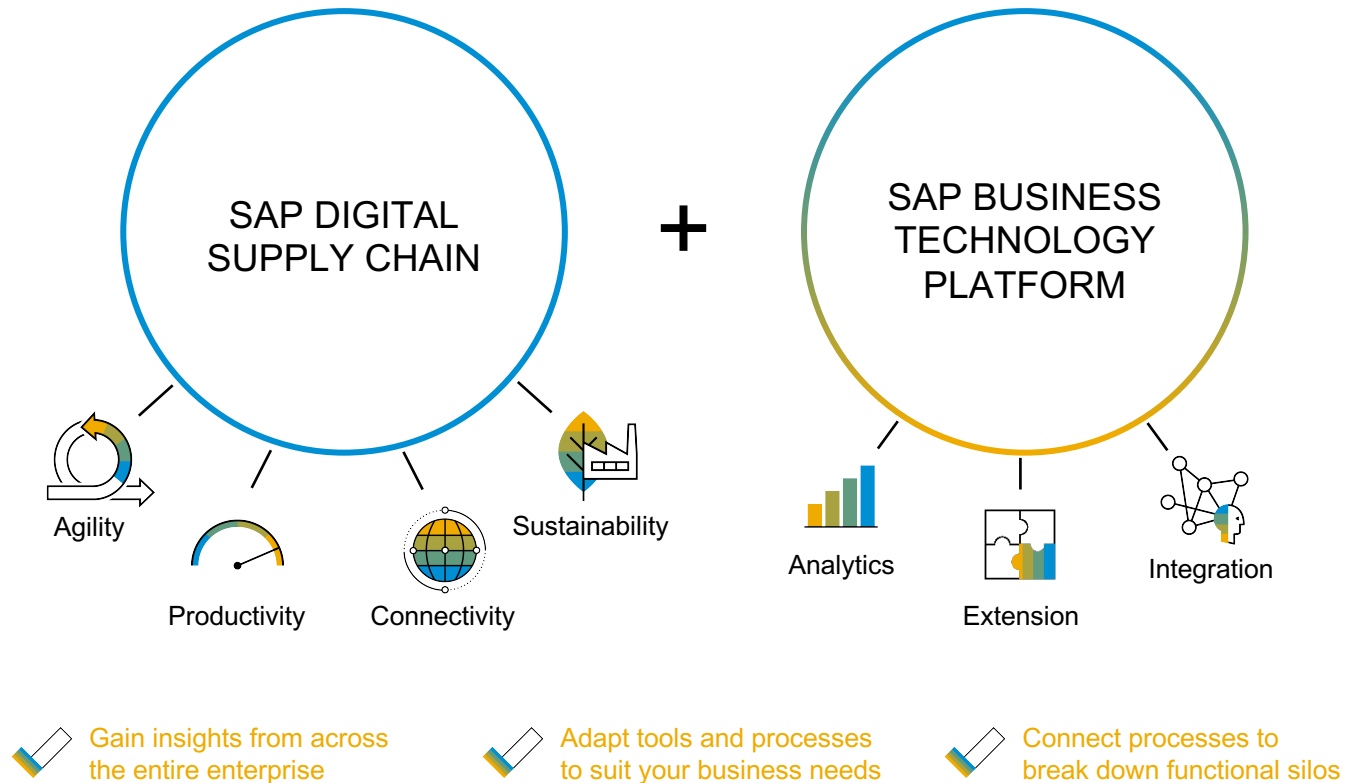## The Platform for the Intelligent Enterprise

BUSINESS NETWORK

BUSINESS PROCESS

Run a Resilient, Sustainable Supply Chain from Design to Operate

EXPERIENCE MANAGEMENT

APPLICATIONS

INTELLIGENT SUITE			INDUSTRY CLOUD		
PRODUCT LIFECYCLE MGMT	SUPPLY CHAIN PLANNING	MANUFACTURING	AUTOMOTIVE SOLUTIONS	IM&C SOLUTIONS	...
ASSET MANAGEMENT	LOGISTICS	...	CP SOLUTIONS	PARTNER SOLUTIONS	...

SUSTAINABILITY MANAGEMENT

TECHNOLOGY

BUSINESS TECHNOLOGY PLATFORM

INDUSTRY 4.0

The most successful companies have one mission in common: **they respond to changing market conditions with ease and agility**, while consistently delivering exceptional experiences for all stakeholders. They are intelligent enterprises, and they use SAP BTP as their unified, business-centric and open data and development platform for their entire SAP ecosystem.

Reinvent Manufacturing with Industry 4.0 and Intelligent Technologies

In a global networked economy, your business success is fundamentally tied to the success of your supply chain. When disruptions occur – natural disasters, trade wars, geopolitical events, supply shortages, transportation delays – is your supply chain designed to swiftly respond and recover? Adapt and respond faster to disruptions, proactively manage manufacturing operations, and build a resilient supply chain with SAP Supply Chain Management solutions with SAP BTP.

SAP DIGITAL SUPPLY CHAIN

+

SAP BUSINESS TECHNOLOGY PLATFORM

Agility

Productivity

Connectivity

Sustainability

Analytics

Extension

Integration

Gain insights from across the entire enterprise

Adapt tools and processes to suit your business needs

Connect processes to break down functional silos

What Makes SAP BTP Unique?

SAP BTP provides the same platform for developing solutions to customers and partners. Reusable components, such as master data are available through APIs, giving a clear advantage compared to other platforms.

With an open architected platform, users can easily extend their IT landscapes, bridging on-premise and cloud landscapes to build new functionality, while leveraging their existing investments. The platform is unified in its data and processes, technology, functionalities, and user experience. This not only reduces data movement, but also preserves data integrity and reduces the total cost of ownership (TCO). SAP BTP contains all the ready-built, end-to-end tools to accelerate development and to achieve faster time to value

SAP BTP plus SAP Digital Supply Chain needs SAP S/4HANA for effective execution. One key differentiator of SAP BTP plus SAP Digital Supply Chain is the ability to integrate natively to SAP S/4HANA (UX, process, data, and system integration). Because SAP Digital Supply Chain is part of the SAP S/4HANA, you can be sure that your processes will run seamlessly across planning and execution.

All of this is powered by SAP BTP as further illustrated below:
1. SAP BTP uniquely provides a full suite of platform technologies to accelerate development and deployment with specialized capabilities around, such as integration with pre-built integration content, analytics with pre-built dashboards, and process automation with pre-built bots.
2. SAP BTP contains all the end-to-end tools to accelerate development: Analytics, dashboards, simple forms, process extensions, chatbots, etc.
3. SAP BTP enables improved citizen and pro developer productivity utilizing native no- and low-code, and workflow management and Intelligent RPA capabilities.

Customer Needs and Solutions

A lack of insight into the supply chain increases risk and costs to your business. Supply chain and logistics issues can impact every phase of your company and negatively effect customer experience. The digital supply chain plays a key role in the success of an Intelligent Enterprise, with the customer at the center of the business. With full transparency across supply chain networks using SAP BTP, you can improve reliability and performance. You can sense and respond to changing conditions by using AI and real-time insights from smart products and services.

SAP BTP is not just another platform. It is an opportunity to integrate, extend, and build data to value at scale across spending activities while revealing the potential of your existing investments, expertise, and supplier network. Businesses need to respond to ever-changing environments in their own way. By combing the available technologies, customers can build, integrate and extend business applications with development agility and speed. SAP BTP helps them respond to multiple challenges, using one or, more often, several SAP BTP products and services.

SAP BTP provides outcomes across three main customer scenarios:

Real-Time Analytics

- Gain strategic insights with a unified view from design to operate
- Extend operational, strategic, and financial plans across the business
- Predict digital supply chain health and performance with machine learning-driven insights
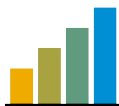
Extensibility

- Transform your supply chain processes with real-time insights from the shop floor, devices, and applications
- Automate supply chain processes by leveraging IoT-generated data and intelligence, and take on new opportunities with enterprise-grade app development tools
- Extend supply chain planning with additional or proprietary machine learning algorithms

Integration

- Connect processes, data and experiences across SAP and third-party solutions, using 2,000+ prebuilt integrations
- Unlock data and services securely with API management and event-based integration
- Provide end-to-end superior customer service by connecting field service and other applications (e.g. SAP S/4HANA)
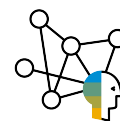
Grow Business Value with Real-Time Analytics

The SAP Analytics Cloud solution delivers 360-degree insights on your departments, buying categories, and suppliers to provide a clear view of overall spend – automatically and in real time. Plus, you can make smarter decisions with embedded AI that drives insights and predictions that help ensure optimal business performance.

When you combine SAP Analytics Cloud with the SAP Data Warehouse Cloud solution, you can quickly track key metrics and smoothly link critical data and processes to external sources and third-party systems and take advantage of scenario modelling and what-if analysis with real-time data.

SAP Analytics Cloud & SAP Data Warehouse Cloud

- Proactively predict and improve asset performance
- Transform processes with live sensor data from products and factories and assets
- Make smarter decisions with AI-driven insights and predictions to ensure optimal business performance
- Visualize end-to-end planning processes through collaborative planning and digital boardroom

Accelerate Innovation and Personalization with Extensibility

Companies often encounter operational issues which require new processes, people behaviors, and workforce skills. However, not all solutions to these issues are available off the shelf. Instead, companies must extend existing processes using reliable technologies to address unique needs and with a digital core to connect manufacturing, supply chain and warehouse management.

SAP BTP facilitates such innovation with flexible application development capabilities, process management, and intelligent business services. With the platform's extensibility, you can create an experience that offers supply chain users an array of options to get the insight they need and can act on – anytime, anywhere, and from any device. For example, you can design new processes and reroute, augment, or automate existing ones to adapt to your business needs. You may even choose to add innovative capabilities, deliver customizations, and embed them into current solutions. Additionally, intelligent workflows and business networks can help simplify and accelerate enterprise supply chain functions, including product design, planning, manufacturing, logistics and asset management.

SAP Extension Suite

- Automate processes with intelligent factories that optimize efficiency and productivity by extending the capabilities of manufacturing assets and people

- Maximize availability and asset health across the operations to reduce processing times and costs

- Ensure superior customer service by connecting field service and other apps

- Quickly build and test SAP apps that lower cost of extensibility for supply chain solutions
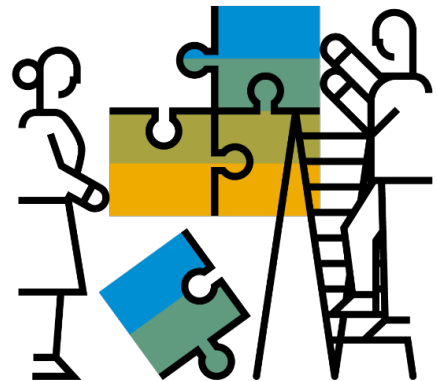
Strengthen Insights and Outcomes with Broad Integration

Many companies face complexity due to heterogenous (from multiple vendors) and hybrid (mix of clouds and on-premises). For you to fully benefit from business intelligence, data from applications in your IT landscape and from all design-to-operate processes must be integrated. This comprehensive approach helps capture, manage, and govern your data and provide integrated end-to-end business processes to drive better business outcomes for your supply chain. You can then use intelligent capabilities, such as machine learning and automation, to optimize processes and ignite innovation. Also, you can leverage new ways of consolidating, connecting, and accessing information. These capabilities provide connected, automated intelligent business processes.

You can improve user experience and supply chain efficiency by delivering comprehensive business processes, rerouting existing business processes to adapt to your needs, linking critical data and processes to external sources and third-party systems, and integrating across digital supply chain solutions from SAP to effectively manage cost and financial information. Furthermore, your organization can use tools such as digital boardrooms, stories, dashboards, visualization, conversational analytics, and applications with embedded AI to explore data confidently, analyze predictions, and plan for the enterprise.

SAP Integration Suite

- Connect data, processes and experiences with thousands of pre-built integrations
- Maximize visibility with a unified real-time view of the entire supply chain
- Seamlessly link critical data and processes to external sources and third-party systems
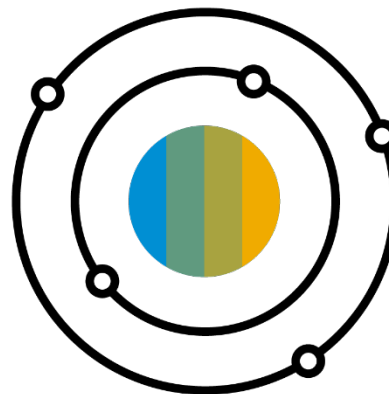
Top Accelerators

Ready-built content and services enable and accelerate time-to-value and address developer shortages
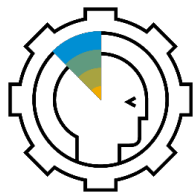
Combines digital transformation with existing SAP landscapes and data volumes, and enables constant adaption of end-to-end processes

Services can be deployed on and **across the hyper-scaler infrastructure providers,** proving freedom of choice

Scale costs and resources to not have to look any further for services and solutions with extension, integration, analytics, and data

Defining Intelligent Value

SAP Customer Engagement Model
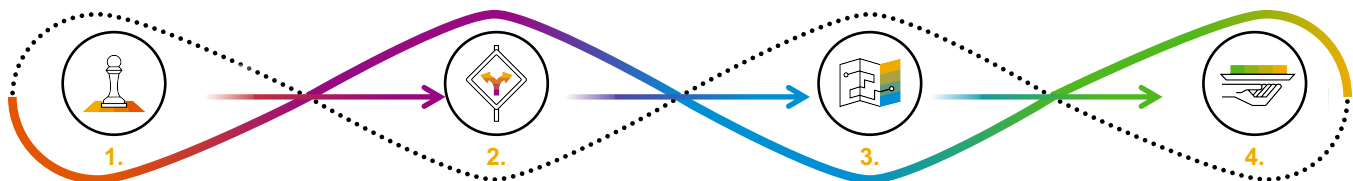
1.
Align on Vision & Strategy
Align on business and IT strategy and get buy-in across the organization

2.
Build the Case
Build the case for change and identify key initiatives with expected outcomes

3.
Plan the Path Forward
Create transformation roadmap and define deployment plan

4.
Deliver Business Value
Deliver quick adoption & time-to-value and drive continuous innovation & optimization

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Analytics

"We want to help customers expand from operational analytics to enterprise analytics."

"We want to merge supply chain data with enterprise data for better insight."

"We need to combine solution data with other data sets, like financial and sales data, for a unified view."

Extension

"We are facing new business challenges or requirements, i.e. COVID."

"Our leadership team wants to explore new, innovative processes."

"We need to streamline or optimize a business process."

"We have unique requirements and need greater flexibility to meet our users' needs."

Integration

"We are evaluating a competitive solution integration."

"We are struggling with fragmented data across systems."

"We want to expand the reach of our data to a third-party."

Value Drivers for Your Business

Supply chains must act as a single, living, predictive, and integrated network, where connectivity, visibility, and collaboration make operational boundaries disappear. By combining SAP Digital Supply Chain solutions and SAP BTP, you achieve global unity and coordinated harmony from design to operate. The technologies help deliver the high-quality products that customers seek with streamlined processes and enable you to use Industry 4.0 and IoT technologies to further drive operational excellence.

Process Area	SAP's Value Proposition	Value Drivers
Real-Time Analytics	- Answer business questions quickly with easy, self-service data exploration - Benefit from built-in feedback, assistance, and support functions - Create and share impactful stories about your business with SAP Data Warehouse Cloud - Enable secure management and sharing of all analytics content in the cloud - Enhance your data and prepare it for analysis	- Reduce manual effort in operational data gathering and manipulation - Improve benefits tracking and realization - Improve quality of operations data - Enhance production recording and stock reporting with better analytics - Better demand forecasting
Extensibility	- Build complete mobile end-to-end solutions from scratch with scalable, low-code tooling - Develop add-ons with the same tools used for SAP applications - Develop, configure, and run enterprise-grade native apps running on iOS mobile devices that provide access to enterprise data - Develop, test, build, and run your business applications for the Intelligent Enterprise with a powerful and modern development environment	- Improve user experience and productivity of operations staff - Improve credibility of Operations Directors to engage business stakeholders (internal and external) - Drive specific supply chain performance through tailored solutions (inventory levels, service levels, OEE, OTIF, etc.) - Simplify design-to-operate processes with intelligent workflows
Integration	- Enable application developers to build UI components that interact with a service or solution - Enable deep out-of-the box integration, easy extension, and consistent APIs across business processes for the Intelligent Enterprise - Connect SAP and non-SAP applications in the cloud or on premise - Connect applications, services, and systems across different landscapes - Deliver a seamless digital experience for you and your business - Automate through Robotics Process Automation and Machine Learning in data intelligence to improve the business processes	- Improve user experience and productivity of operations staff - Improve credibility of Operations Directors to engage business stakeholders (internal and external) - Drive specific supply chain performance through integrated processes and systems (inventory levels, service levels, OEE, OTIF, etc.) - Optimize business processes - Automate through Robotics Process Automation and Machine Learning to improve business processes

Why Adopt SAP BTP Now?

Simply put, it's time. Adopting SAP BTP is a straightforward process, because the platform is included in all cloud solutions from SAP through free trials and a flexible consumption model

Many companies lack the flexibility required to adapt and respond to change:

- Their employees and customers are confronted with different interfaces and follow convoluted procedures to get to what they need. All while the business scuffles to retain customers and increase employee engagement.
- Business processes are fragmented across siloed applications, and organizations are using error-prone manual tasks to fill the missing links, adding cost and latency to operations.
- Digitalization of new processes is progressing slowly as complex landscapes and outdated technologies delay innovation and prevent the smooth integration of new and old.

The most successful companies have one mission in common: **they respond to changing market conditions with ease and agility,** while consistently delivering exceptional experiences for all stakeholders. They are Intelligent Enterprises, and they use SAP BTP as the unified, business-centric and open data and development platform for their entire SAP ecosystem.

With unrivaled development efficiency, SAP BTP empowers users to integrate, create value from data, and extend in SAP landscapes. We brought together our existing technology products (e.g. SAP HANA, SAP Integration Suite, SAP Analytics Cloud) in concert with new capabilities (e.g. low-code/no code, marketplace) in one place for consumption. All built on a stable multicloud, multi-runtime foundation.

62% of organizations consider it important to move from reactive to predictive business by combining data from assets, sensors, and other external sources with internal data and transactions...

...But only 15% are able to do so*
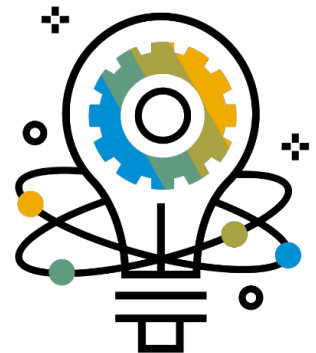
* SAP VLM Digital Insights

Embarking on a Smart Factory Transformation with SAP Solutions and Services

Solutions

- Digital core to connect manufacturing, supply chains, and warehouse management
- SAP BTP for integration of field sensor data flows with back-end systems and extended, IoT-enabled business processes
- Expertise of the SAP Innovation Services organization and experts covering the SAP Services and Support offerings

Benefits

- Greater process integration across lines of business and group companies
- 40% more suppliers expected to digitally share quality control data
- 80% less time and effort to onboard new customers in the services portal
- Simplified and streamlined supply chain and warehouse management
- Product performance insight related to manufacturing to improve quality and customer service
- Expected substantial increase in services revenues

ANSALDO ENERGIA

Ansaldo Energia S.p.A.
Genoa, Italy

Industry
Industrial machinery and components

Featured Solutions and Services
SAP Business Technology Platform, SAP S/4HANA, SAP Predictive Maintenance and Service solution

Next Steps

- Contact your SAP Account Executive or Customer Success Partner for a **demo that brings to life the benefits** of SAP BTP with a practical use case

- Collaborate with SAP in **reviewing the effectiveness** of your current processes and systems for design to operate

- Identify **improvement opportunities** to be addressed by SAP Digital Supply Chain solutions

- Consider how **additional opportunities for leading practices** can be met through the unique analytics, extension, and/or integration capabilities of SAP BTP

- Build the business case with SAP to **increase the buy-in and likelihood of success** for the SAP BTP business transformation

- For more solution overview information, visit our SAP Business Technology Platform and digital supply chain pages, and review the related solution brief.

"We already run the world's largest supplier network with more than five million connected enterprises. And because our applications run supply chains across every industry, we have the most relevant data and expertise."

Christian Klein, CEO SAP

THE BEST RUN **SAP**