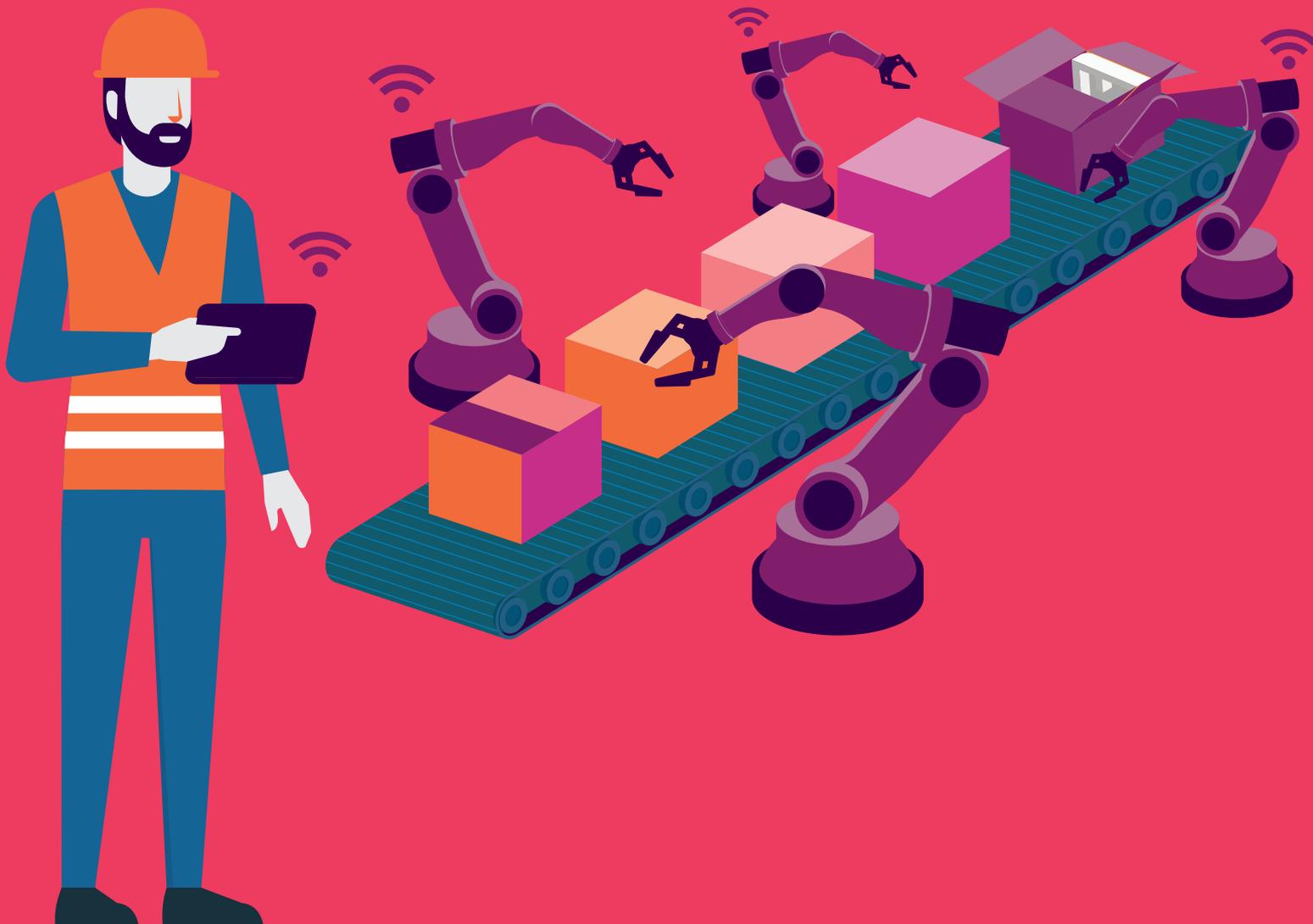


# Digitize and Transform with a Data-Driven Responsive Supply Chain

An example how digitization of your supply chain enables you to track real world events, anticipate challenges and protect profit by avoiding unplanned supply chain disruptions.





## Executive Summary



*Over this four-year period, manufacturing organizations stand to achieve 60% greater return on their data assets.*

*Potential productivity improvements are worth \$162 billion, while operational improvements can amount to \$117 billion.*

*Product innovation adds \$55 billion, and customer facing processes add \$38 billion to the economic potential of digitization in manufacturing"*

### IDC study

*Harvesting data from the physical world is not only an academic exercise to keep CIOs and IT departments busy. A recent **IDC study** quantifies the net value of the "data dividend" over a four-year period for the manufacturing sector embracing data smart technology at a staggering \$371 billion.*

*Data-driven Responsive Supply Chain demonstrates a manifestation of "Digital Supply Chain" and allows companies to avoid supply chain disruptions and minimize the damage by streaming and predictively evaluating shop floor data to mitigate risks before they become critical incidents.*

*The showcase illustrates how Capgemini and SAP® jointly provide what it takes to help manufacturers overcome the challenges and hurdles on their digital transformation journey by transforming raw data in to business information, provide mission critical decision support tools and take evasive action to profitably navigate complex, volatile demand and supply scenarios in a high-velocity buyer's market.*

### Adjusting the role of supply chain departments

A decade ago, the supply chain goals of manufacturing companies were primarily focused on achieving operational excellence. We wanted to run lean, drive down costs, and operate efficiently. In hindsight, those seem like simpler times. Supply chain planning has evolved from a cost saving and execution organization towards a business-shaping keystone in the very heart of the company's operations. It has become instrumental in achieving the company's strategic goals such as stellar customer service, profitable growth and operational excellence.

### Creating a unified, granular view through real world connectivity

To support these requirements, companies need to align operations horizontally—across departments and their demand and supply networks—as well as vertically, from the highest KPI level to the most detailed sales order and machine sensor. This data granularity provides discrete industry firms with the business information they need to identify root causes on transactional and even shop floor level. Having access to this kind of information and the ability to act and react in real time will have a significant impact on profitability and resilience of operations.

## “Data Driven Responsive Supply Chain” – A tangible example for Digital Transformation

Data Driven Responsive Supply Chain is a joint use-case leveraging Capgemini’s IoT, SAP S/4 HANA® and IBP expertise and SAP’s guidance on key technology. It embraces SAP’s platform for digital manufacturing and includes, Capgemini’s “SAP IoT in a box” and the “IoT Demo kit”. This use-case represents a manifestation of a “Digitized Supply Chain”, showing how integration of physical world data and its transformation and subsequent interpretation by decision

support tools allows manufacturing companies to reinvent the way they are running their shop floor and planning operations—from reactive firefighting towards proactive and profitable business orchestration.

This use-case demonstrates how SAP Leonardo and SAP Cloud Platform solutions fit together, accelerated by Capgemini’s expertise and high value packaged solutions to enable manufactures to save money by avoiding costly unexpected disruptions, generally minimizing downtime and making profit-driven decisions by linking supply operations with customer order management.

Demo setup-visualization: During its operation, a motor generates vibration and temperature data that is continuously captured and monitored by SAP Predictive Analytics. If asset specific parameters are malfunctioning, the system automatically alerts the user and suggests the necessary steps to avoid equipment failure. The data is immediately available in the SAP Cloud Platform and, after an evaluation and decision step by a technician, is sent to SAP S/4 HANA® and SAP Integrated Business Planning to enable proactive risk mitigation and ensure smooth, continuous business operations and high customer service levels.





## Why manufacturers need to focus on operational analytics

Evidence of the transformative potential of digital and the urgency among manufacturers for digital transformation comes from a recent Capgemini Consulting study of operations analytics adoption by manufacturers. This study indicates that the strategic priority of operational analytics has remained largely unexploited. Today, more than 70 percent of respondents put more emphasis on operations analytics initiatives than on customer-focused processes. However, only 18 percent had extensively integrated their analytics initiatives across business operations and successfully realized their objectives.

Many manufacturers are still thinking of “going digital” in terms of either the shop floor or their customer but not both. Only by looking at digitizing and connecting customers, supply chain partners, and smart operations, can manufacturers truly realize the optimization and disruptive capabilities of digital to drive growth.

### The Value add for Clients

By establishing end-to-end visibility on all supply chain relevant data and operations, we are able to drastically reduce the time from incident to reaction by eliminating the gap between operational and strategic planning data and the ability to aggregate and disaggregate from high-level KPI to order information.

The Data Driven Responsive Supply Chain use-case, collaboratively created and implemented by a Capgemini and SAP Discrete Industry team as part of the “Fast Digital 4 Discrete Industries” initiative leverages SAP technology to illustrate the potential of digital supply chain transformation and how it can change the role of supply chain teams in a company from a mere cost center to a department that drives profitability and other strategic goals like, customer retention, inventory turns, and manufacturing efficiency while reducing financial risk.



## Fast Digital 4 Discrete Industries-at the heart of the digital transformation in manufacturing

The “Fast Digital 4 Discrete Industries” by SAP and Capgemini initiative addresses the technological and organizational challenges of going digital. It leverages Capgemini’s proven “Digital Transformation Framework” and global expertise in consulting, insights and data, cloud, and digital manufacturing with SAP S/4HANA® as the digital core.

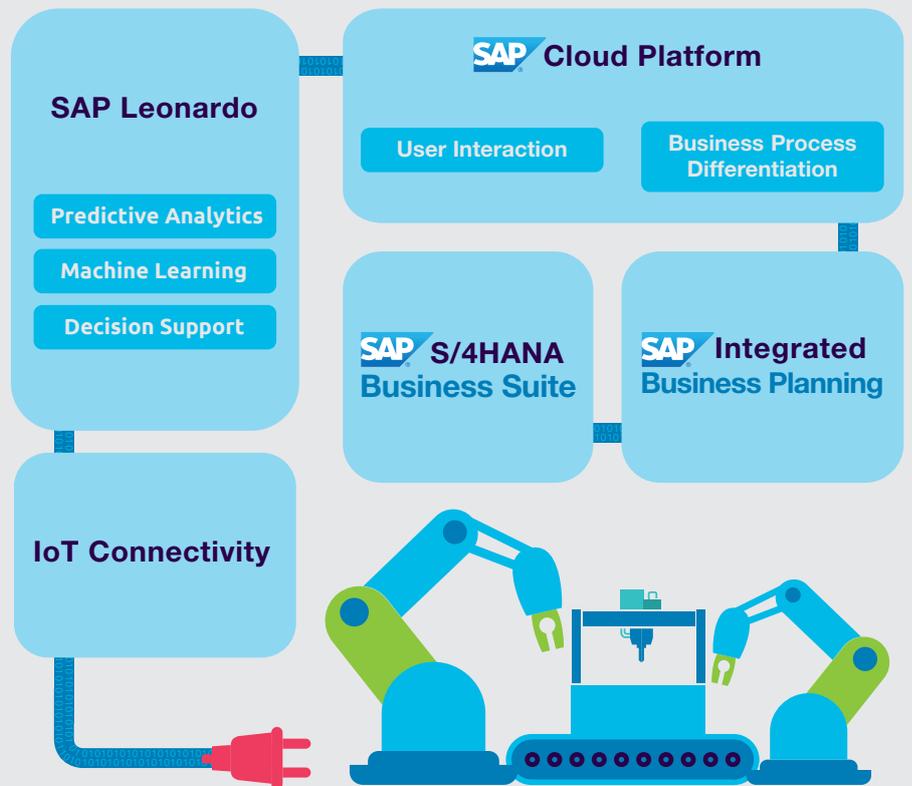
This graphic illustrates the solution stack and flow of information that enables the above described use-case “Data Driven Responsive Supply Chain” from generation of vibration data via integration technology to decision support.

SAP Leonardo provides everything needed to connect essential business data from where it is created with the tools and people making decisions and running the business.

SAP S/4 HANA® is an in-memory, end-to-end software suite designed for a digital and connected world. This suite delivers the business intelligence that helps manufacturing companies with production planning and work instructions and leveraging current operational data from the shop floor.

SAP Integrated Business Planning is the cloud solution that offers demand and supply optimization, simulation and decision support capabilities and bridges planning and execution processes through demand sensing and response orchestration.

SAP Cloud Platform provides the tools to leverage the best of both worlds—the advantages of SAP’s cloud solutions and the ability to support company specific processes and requirements.



## The Digital Transformation Journey

The digital economy is real and will continue to transform the discrete manufacturing industries. Digital value creation implies that manufacturers engage their business partners and customers in entirely new ways. The goal of Capgemini and SAP is to help manufacturers successfully master their digital transformation.

From the very core, to the edge of the enterprise and beyond, digitization stands to transform every facet of your organization. Embracing this transformation allows companies to capture every opportunity presented in a digital world.

The industry knowledge and digitization expertise of Capgemini and SAP support manufacturers in deriving business value and economic benefits from their digital transformation journey.

*Capgemini and SAP, two global players, are uniquely positioned to help manufacturers score quick wins and build on the success of their digital transformation.*



*Going digital creates significant opportunities for companies in the discrete manufacturing industries. The “Fast Digital 4 Discrete Industries by SAP and Capgemini” initiative helps manufacturers create smart, connected products, assets, and operations that offer the potential for time-to-market reduction, productivity gains, cost savings, and new revenue streams.*

*Capgemini and SAP have joined forces to drive the complexity out of the digital transformation.*

*“Are you ready to go digital?” - This is the perfect time to get started.*

## About SAP

As the market leader in enterprise application software, SAP is at the center of today's business and technology revolution. SAP helps you streamline your processes, giving you the ability to use live data to predict customer trends – live and in the moment. Across your entire business. When you run live, you run simple with SAP.

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## About Capgemini

A global leader in consulting and technology services, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of 200,000 team members in over 40 countries. The Group reported 2016 global revenues of EUR 12.5 billion.

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