

The Delaware logo, featuring a red circle with a white dot inside, followed by the word "delaware" in a lowercase, sans-serif font.

# six digital solutions for an agile supply chain

tools to boost your business,  
no matter what the future holds

we commit. we deliver.



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# introduction

## Helping you build an agile, adaptable and connected world class supply chain organization

Get the right people, processes, technology and culture in place, and your organization will strengthen, grow and succeed - whatever the future throws at you.

This eBook focuses on the exciting and positive impact of digital solutions, enabling organizations like yours to reap the full commercial benefits of an effective supply chain.

The world will always experience supply chain challenges, so if you are a Chief Supply Chain Officer (CSCO), Supply Chain Planning or Operation Leader, Warehouse Manager, C-Level executive or other senior leader with responsibility for supply chain, this thought leadership and accompanying solutions should resonate with you and provide insights and solutions to consider.



# 1

## benefits and challenges



# business benefits

## How will a resilient supply chain benefit your business?

In a 2021 survey, Gartner revealed the top 5 business benefits that CSCOs and other supply chain executives expect to achieve from a robust digital supply chain ecosystem:



**Faster response to unexpected changes or risks**



**Enhanced customer experience**



**Business growth**



**Reduced costs**



**Supporting new business model creation**

As business goals, do these sound similar to yours?

Gartner®, "Supply Chain Executive Report: Fostering a Digital Supply Chain Ecosystem", Pierfrancesco Manenti, 29 Sep 2021. GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved.



# current view

Global supply chains are inherently at risk to be impacted by world events - so equip your business to survive and thrive!

In 2020 and 2021, we saw how easily our highly connected global supply chains could be disrupted. Entire supply chain ecosystems ground to a halt: supermarket shelves sat empty, exports were stuck at borders and producers were unable to satisfy sky rocketing demand for even essential items.

And in 2022, when the Russian-Ukrainian conflict escalated to a full-scale war, agile organizations were able to efficiently comply with the additional complexities impacting import legislation and embargo conditions.

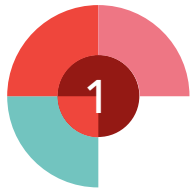
Life and business are in constant flux but one thing is certain: supply chain visibility and connectivity is crucial - and possible!

**Discover how your organization can better predict and prepare to adapt quickly to these situations - ensuring you continue to thrive and stay ahead of the competition...**



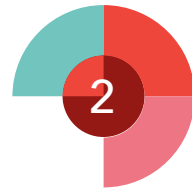
# challenges

Disruption causes major downstream impact, posing complex challenges including unpredictable delivery timeframes and the struggle to meet consumer demand. This impacts reputation, customer satisfaction and can prevent companies from achieving their long-term revenue goals.



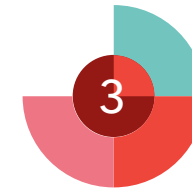
## Supply chain constraints

Delays in the delivery of critical parts manufactured abroad and essential in the final assembly of complex components. Without adequate supply chain solutions, late or uncertain delivery of critical parts undermines consumer confidence in companies' ability to ensure timely delivery of finished products.



## Labor shortages

Impact all stages of the global supply chain. During the pandemic, challenges included a lack of truck drivers, port workers and staff for sorting warehouses. This delayed the sorting and shipping of products to consumers.



## Loss of revenue

The ultimate impact for companies. If you cannot ensure when your product will arrive, consumers will lose confidence and choose different suppliers who can. Smaller suppliers lose customers (and revenue) to larger suppliers who have better visibility of their delivery systems and more transparent timeframes.



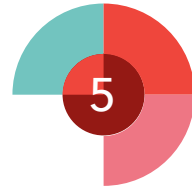
# impact of supply chain challenges



## Manual processes

Despite having complex processes, some organizations are still using tedious manual methods (e.g. spreadsheets) to track inventory and share information.

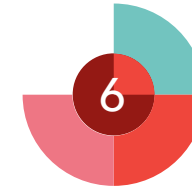
Outdated information and difficulty in accessing data across departments are a common business risk.



## Increased freight spend

In 2022, we experienced a substantial increase in all costs related to freight and transportation, with even bigger premiums for guaranteed or rush deliveries.

All these surcharges impact your organization's agility and bottom line.



## Multiple systems

Along the supply chain, partners may use multiple technology solutions - some of which aren't compatible with yours (or each other's). (e.g. Shippers employ different software for each transportation mode and zero integration between them.)





# 2

## best practices



# best practices

“Digitalization is an essential support for CSCOs moving up the maturity model. Future supply chains will be connected end to end. All internal functions as well as all trading partners will be connected using one common data platform.”

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# world class supply chain

Your most effective solution is a digital supply chain connected end-to-end from source to customer, led by a talented team.

The most aspirational (and inspirational) organizations are consistently reaching further. And so it goes with their supply chain: they have long since moved away from operating in rudimentarily effective siloes with the basest level of digital capability. They have passed through various levels of maturity until reaching a summit in which they are digitally connected to partners' value chain ecosystems, combining to deliver seamless and exceptional customer experiences.

To achieve supply chain 'nirvana' requires a significant shift in corporate mindset: you are not just resolving challenges but are being driven organizationally to be better and realize even greater potential.



# world class supply chain

To advance supply chain maturity, it is crucial that you extend your digital ecosystem to achieve end-to-end visibility.

You need to be equipped to answer critical questions in real time, meeting (if not exceeding) customers' expectations and earning strong confidence in your business.

Timely delivery is a measurable and achievable key performance indicator (KPI). If you have the right visibility into your supply chain, you will be able to:

- Confirm location and delivery window in real-time to consumers - with a high degree of certainty
- Maintain accurate internal visibility of, and control over, your supply chain
- Mitigate obstacles in a timely manner

Time to market is critical, putting immense value on being able to commit to accurate (and faster) delivery dates, increasingly customizing customers' deliveries, and tailoring them to fast-changing needs - regardless of market volatility.

Discover six digital solutions that will help you realize a more mature supply chain, elevating the relationships you have with partners and the service (and certainty) you offer customers.



# 3

## digital supply chain solutions



These 6 digital solutions will elevate supply chain organizations and increase maturity to achieve:

- **Greater visibility** across your departments, suppliers and entire supply chain ecosystem
- **Real-time** updates to address any changes
- Better **planning** to optimize your operations
- Tools to realize improved **decision-making**
- Increased **revenue** and cost efficiency
- Improved **customer experience**



# 6 digital solutions to a world class supply chain



## Process mining

Tools and Platform to identify, quantify, visualize and subsequently improve or automate process inefficiencies.



## Integrated Business Planning (IBP)

Cloud-based solution with supply chain analytics, what-if simulations and alerts. Combines sales and operations planning, forecasting and demand, response & supply, demand-driven replenishment and inventory planning.



## Extended Warehouse Management (EWM)

Comprehensive solution to digitize warehouse processes to increase visibility in real time. Provides on-demand resource management, operational reporting to give management an overview of workload progress and availability of resources.



## Transportation Management (TM)

An end-to-end multi-modal, multi-level solution that helps organizations, shippers, carriers, and forwarding agents to better track, plan and optimize your transportation processes.



## Advanced Available-To-Promise (aATP)

Intelligent order promising system to give your customers more accurate lead times and delivery information or change orders as their own demand fluctuates. Ability to prioritize product allocations for select customers to ensure service levels are maintained.



## Analytics for Supply Chain

Various analytical tools with best practice templated solutions in supply chain. Insights of your company's raw data into high-value information to give better business insights to enable accurate, data-driven decision-making.





We were looking for a **trusted partner** that specialized in digital supply chain. We hired delaware for their expertise in SAP S/4HANA as well as Extended Warehouse Management (EWM). We started with an **assessment and roadmap** of our existing warehouse solution. We were very pleased with the professional approach to the assessment, the **caliber of staff** assigned, the list of improvement areas uncovered, and a **sensible plan** on how to achieve them. We have since hired delaware to deliver a blueprint and business case to achieve these improvements.



**Food Manufacturing Client**



# 4

how can we help?  
what delaware  
offers



# optimization assessments

## Culture

- Employee engagement
- Process adherence and accuracy
- Communications
- Mission, vision and shared purpose



## Process

- Industry best practice process review
- Process efficiency review
- Accountability
- Measures and metrics



## Technology

- Automated and system guided functions
- Review non-standard customization
- Reporting and analytics
- Taking advantage of the cloud



## People

- Leadership and management
- Aligning staffing, structure, & functionality
- Skillsets, knowledge and capabilities
- Process training and adoption



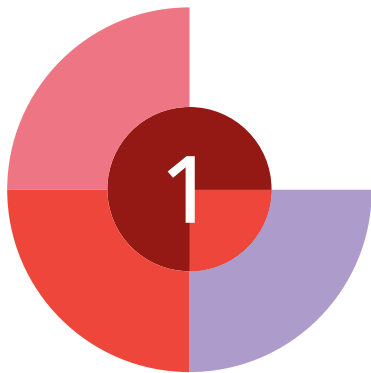
We establish if you are leveraging the benefits of your extended digital supply chain by providing a detailed analysis of your current supply chain system, people and processes.

We'll recommend next steps and areas of improvement in four core areas:

- People
- Process
- Technology
- Culture

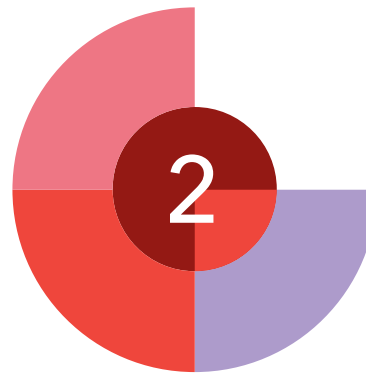
We align them with industry best practices to help you either re-work your existing solution or transition to a best practice optimized solution.

# assessment options



## Assessment and value case

The best way to get started. Our subject matter experts will meet with your key supply chain personnel and senior leadership to ask questions and identify your existing state and challenges. We then put together a recommendations report covering people, process, technology and culture.

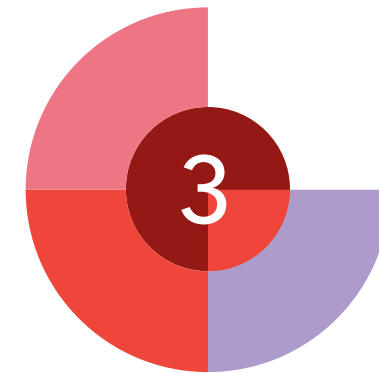


## Inspiration workshops

You won't know what solution you want if you don't know what's possible.

So, we show you the systems and technologies that are available - that are the best practices to elevate your business to the next level.

You will then receive a transformation roadmap to achieve your new goals.



## Proof of value

Our team will create a test system to run your business with a subset of your data. Our SAP S/4HANA Proof of Value enables you to see your own data in S/4HANA, allowing you to determine whether the supply chain solution corresponds with your business needs and IT requirements.

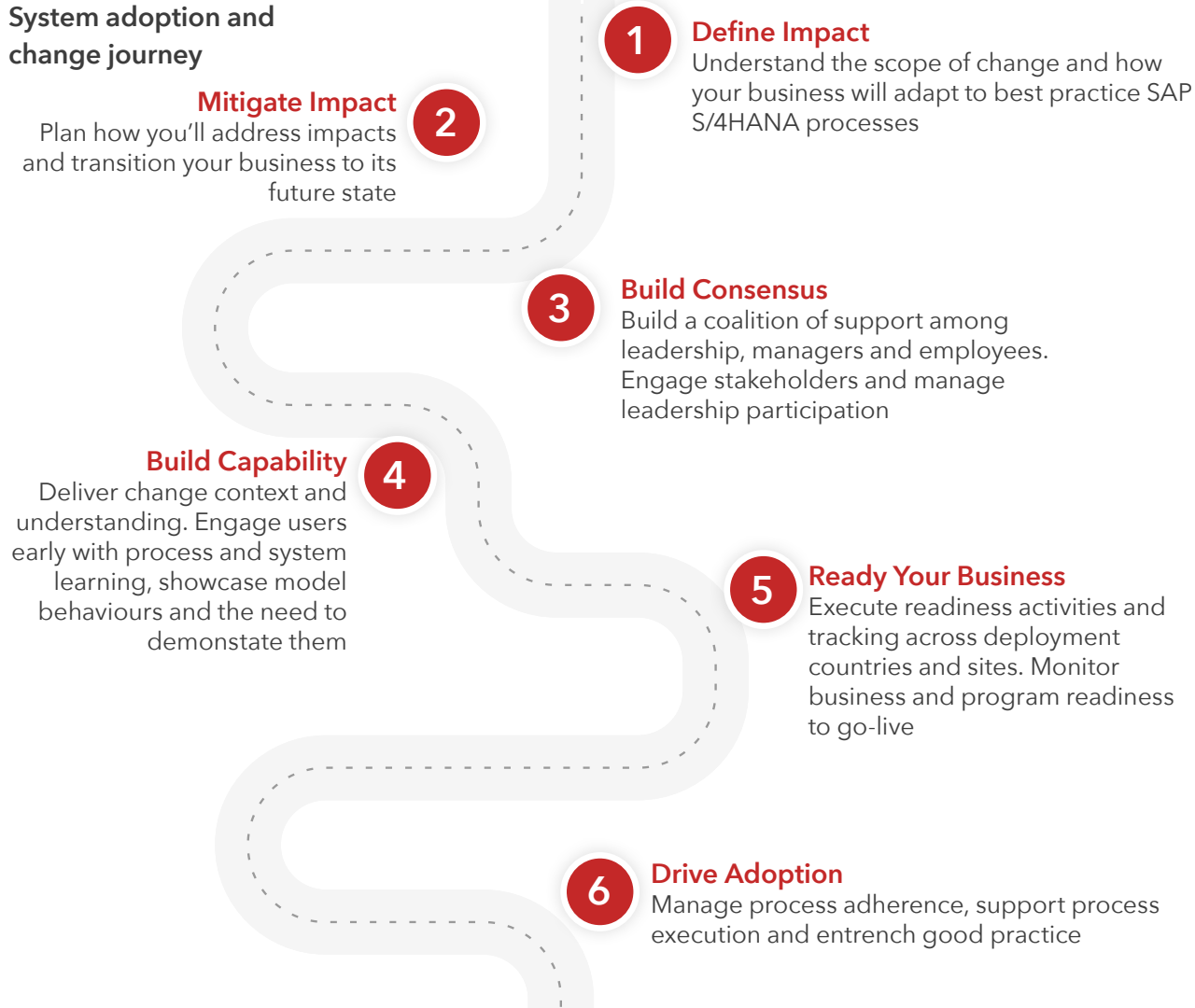
# manufacturing client

delaware supported our S/4HANA comprehensive assessment including inspiration workshops, move to cloud, benefits case, timeline, and staffing costs. We were very pleased with their approach, tools and people. They helped set us up for success.

**Airgas**  
an Air Liquide company

# user adoption assessment

## System adoption and change journey



Technology and processes are only as effective as their adoption by your organization's users. Truly embedding new supply chain processes and technologies requires sustained adoption management.

delaware helps you build the change journey to a best practice solution, defining key activities to get to your future state and enable your people, organization and culture with minimal disruption and risk.



# 5

## delaware difference





delaware: we bring  
everything you need  
to make your project  
a success

# why choose us? the delaware difference



## Pre-configured solutions

SAP certified accelerators built on best practices - we call them our FAST solutions



## Deep industry knowledge

Specializing in complex digital supply chain knowledge across a number of industries



## Experienced consultants

Our subject matter experts have 15+ years of implementation experience



## Best Practice Process Framework

Business processes that are tested and validated to be industry best practices



## Project implementation governance, methodologies and tools

We bring everything you need to make your project a success



## Training academies

Curriculum, documentation, demonstrations and hands-on exercises ready for roll-out to project teams or end users



## Consistent track record

delaware has over 20 years of successful SAP delivery



## Speed & agility tied to a business case

Leading the industry in speed of solution realization and program delivery tied to a robust business case

3500+ employees across 31 offices in 16 countries







delaware is a company with knowledge, experience and heart, and that's beyond rare in this industry.

**Alan Edmondson**

**etex**

# let's chat about your journey to a world class supply chain

## Our experts



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**Alan Smith**

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**delaware**

**we commit. we deliver.**

# 6

## appendix

details of the 6 digital supply chain solutions  
for those looking for more specific benefits,  
features and information



# Process Mining

**A tool and execution platform helping you identify, visualize and improve process inefficiencies**

## **Your challenge:**

Organizations are unable to quickly visualize or identify inefficiencies in their business processes and supply chains. This makes it difficult to make informed decisions and costly to test process improvements.

## **Typical users:**

- Business analysts
- Senior leadership

## **Business benefits:**

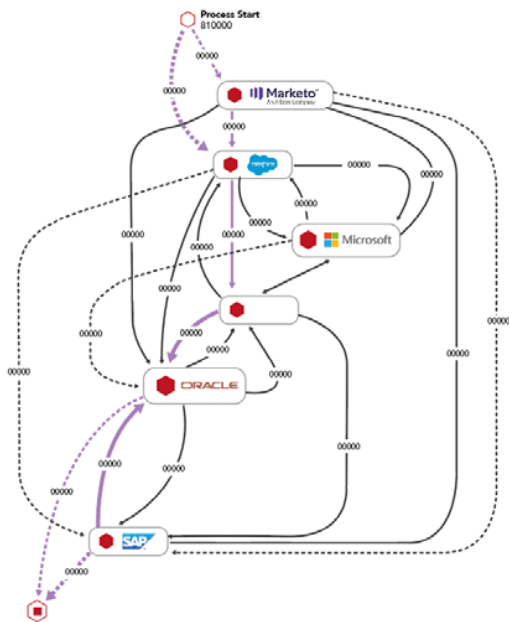
- The most efficient way to pinpoint root problems and inefficiencies
- Clear identification where the bottle necks are in your processes through process mining algorithms
- User-friendly reports to understand bottle necks and prioritize fixes - allowing for quicker user adoption
- Enables improved decision making on where to invest your improvement dollars
- Quick return on investment by leveraging the out of the box analytics provided by the solution

## **Key features:**

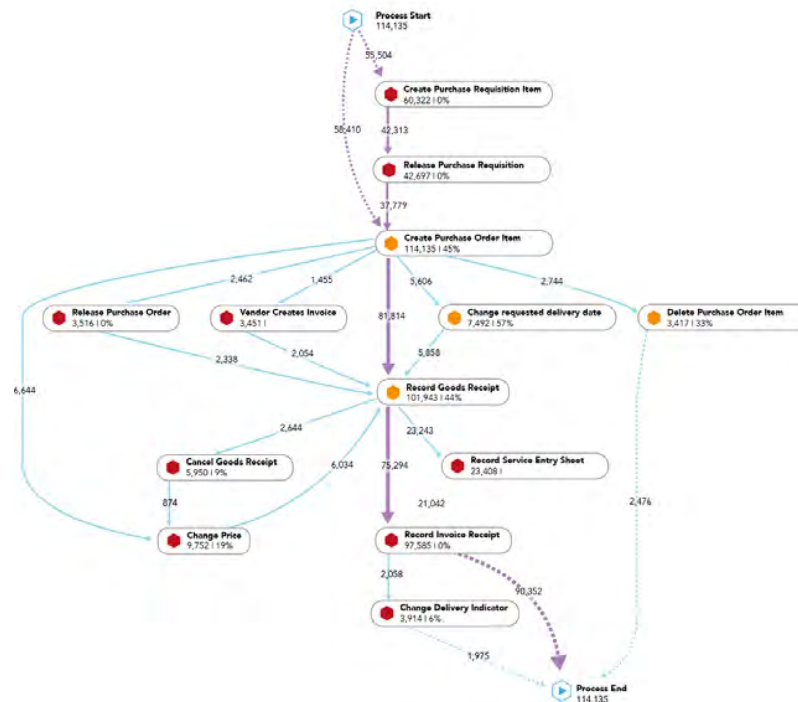
- Identifies and quantifies process deviations from best practices, and pinpoints process delays or waste
- Detects and prioritizes the root cause of process inefficiencies helping you tackle the biggest gaps first
- Lets you visualize your data in and across each of your processes (eg order management system, ERP, etc.)
- Tracks impact to remediations and improvements over time
- Automation possible to optimize current labor-intensive, but not value-add activities, across systems; with complex decision algorithms



# Process Mining



Being able to see existing systems in a visual way easily shows the complications of multiple systems trying to talk to each other and the difficulties of sharing information.



The visual diagrams of process mining tools allow analysts and decision makers to see where data and transactions are deviating from standard procedures. This enables quicker fixes and improved business processes.

## #delawaredifference

With delaware's SAP knowledge and experience, as well as our partnership with process mining vendors, we can extract and analyze data in your existing SAP ECC or S/4HANA systems. This could help you build and quantify a business case for improvement initiatives.

We can also help you identify (in dollar value) the effectiveness or weaknesses of business process improvements by visualizing the who, what, when and how of process inefficiencies.

This is especially useful to monitor user adoption and process performance issues.



# SAP Integrated Business Planning (IBP)

**A cloud-based solution applying powerful supply chain analytics, 'what-if' simulations and alerts, keeping you ahead of change and improving your responsiveness. It combines sales and operations planning, forecasting and demand, response and supply, demand-driven replenishment, and inventory planning.**

## **Your challenge:**

Your organization's view of your supply chain network is scattered. Data, including inventory, inbound and outbound shipments and manufacturing WIP, is not available in real-time. This leads to misinformation and an inability to make informed decisions to respond to supply chain issues and customer demands in a timely manner. Planners are spending time on manual, instead of strategic high-value, tasks.

## **Business benefits:**

- Real-time view of what's happening in the supply chain resulting in better forecasts, fewer errors and improved customer responsiveness
- Lower safety stocks and working capital
- Increased planner capacity & improved decision making

## **Typical users:**

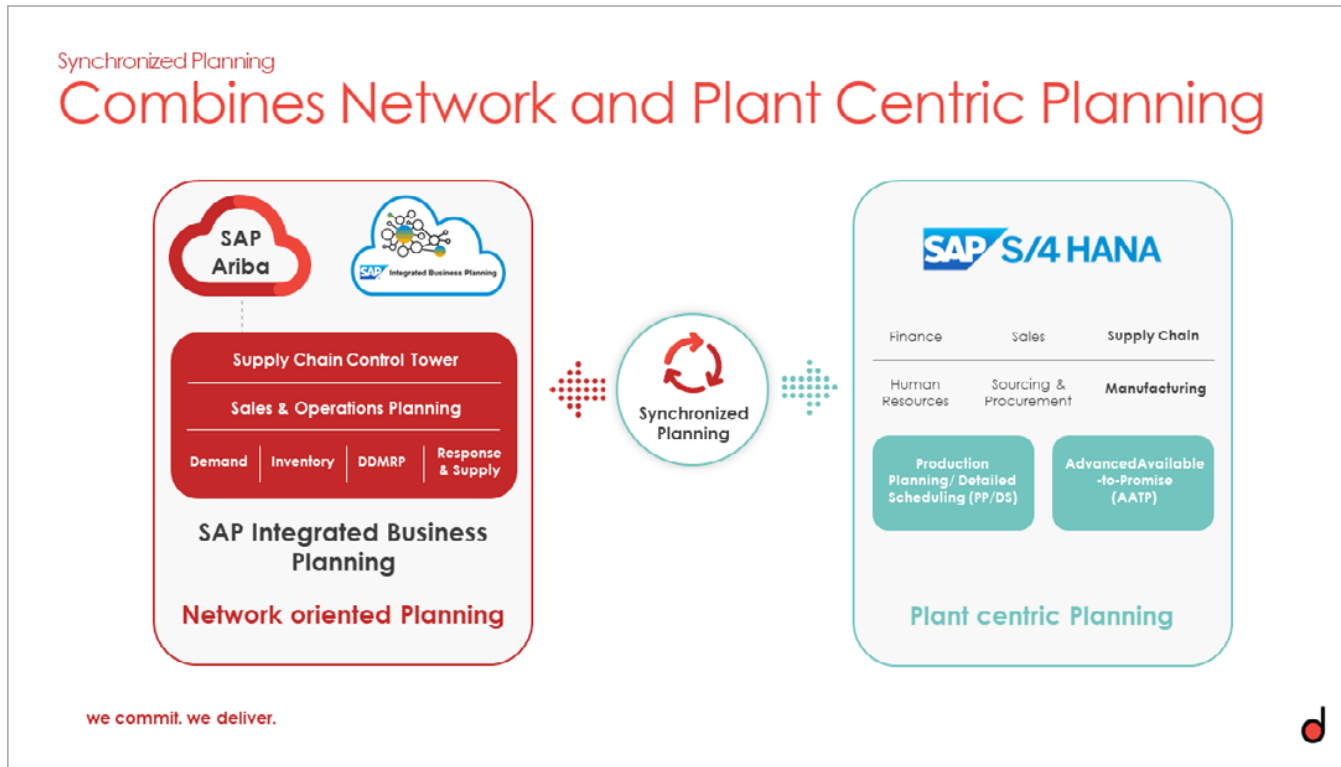
- Planners (Central Planner, Demand Planner, Supply Planner, Inventory Planner, S&OP Coordinators, Schedulers, etc.)
- Senior leadership

## **Key features:**

- Optimal business planning to drive revenue growth and increase market share
- What-if analysis of actual or hypothetical changes in demand or supply
- Constrained optimization and priority rules-driven algorithms
- Plan production resources considering finite capacity and material availability constraints
- Automated and intelligent selection of substitutable products from alternative locations during stock outage



# SAP Integrated Business Planning (IBP)



## #delawaredifference

Delaware has developed a FAST packaged solution for Sales & Operations Planning (S&OP) that covers demand planning and tactical supply chain planning. Our best practice model combines the industry insights of our consultants with our proven experience implementing SAP IBP.

With the combined power of SAP IBP and SAP S/4HANA, integrated and consistent supply chain planning is possible from customer demand to deployment.



# SAP Extended Warehouse Management (EWM)

**A comprehensive solution to digitize warehouse processes to ensure they are visible in real time. A system-guided model that makes paper-driven processes obsolete. Provides on-demand resource management and operational reporting, giving management an overview of workload progress and availability of resources.**

## **Your challenge:**

Your warehouse operations are mostly manual, tracked with spreadsheets or tedious processes. Warehouse information is outdated or inaccurate. Other departments have difficulty finding the availability of parts or stock in the warehouse.

## **Business benefits:**

- Increased efficiency, stock accuracy and throughput
- Lowered operating costs and improved working capital
- Increased productivity, sales and revenue
- More responsive and faster warehouse operations
- Simpler, more user-friendly interfaces and solutions

## **Typical users:**

- Warehouse operators
- Shipping and receiving personnel
- Departments that need to access warehouse data

## **Key features:**

- Drives up productivity through more effective management and use of resources and labor
- Determines the best storage bins and rearranges to move products to the correct bins
- Improves queue management, assigning work to users to optimize travel efficiency
- System guided solutions or tasks executed by equipment such as sorters
- Improved ergonomics for warehouse operators





# SAP Extended Warehouse Management (EWM)



Delaware's Fiori app will optimize your goods issue and receipt process. It's easy to use, allows for quick scanning of parts and fast updates. Other departments can look up parts availability and stock quantities from their own systems without tedious communications with the warehouse(s).

## #delawaredifference

Offering you a quick solution with best practice warehouse processes, delaware's FAST EWM is a pre-configured template with built-in content, tools and methodologies, offering 'out-of-the-box' flexibility.

The package is a scalable solution for midsize to large national and international companies across multiple industry sectors. We are one of SAP's go-to SAP S/4HANA partners, have clients in over 20 industries and are a development partner for SAP S/4HANA Cloud EWM.

Our FAST EWM Training Academy provides hands-on experience in EWM, identifies key change impacts, and speeds up the rollout phase.



# SAP Transportation Management (TM)

**An end-to-end multi-modal, multi-level solution that helps organizations, shippers, carriers, and forwarding agents to better track, plan, and optimize your transportation processes.**

## **Your challenge:**

A lot of organizations have different tools to manage their transportation processes depending on the transportation modes. Some processes are still being done on spreadsheets or systems that are not integrated. It can also be difficult for shippers to communicate with their carriers.

## **Business benefits:**

- Increased productivity
- Provides greater visibility into the status of all shipments end-to-end of a company
- Helps companies reduce the cost of ownership

## **Typical users:**

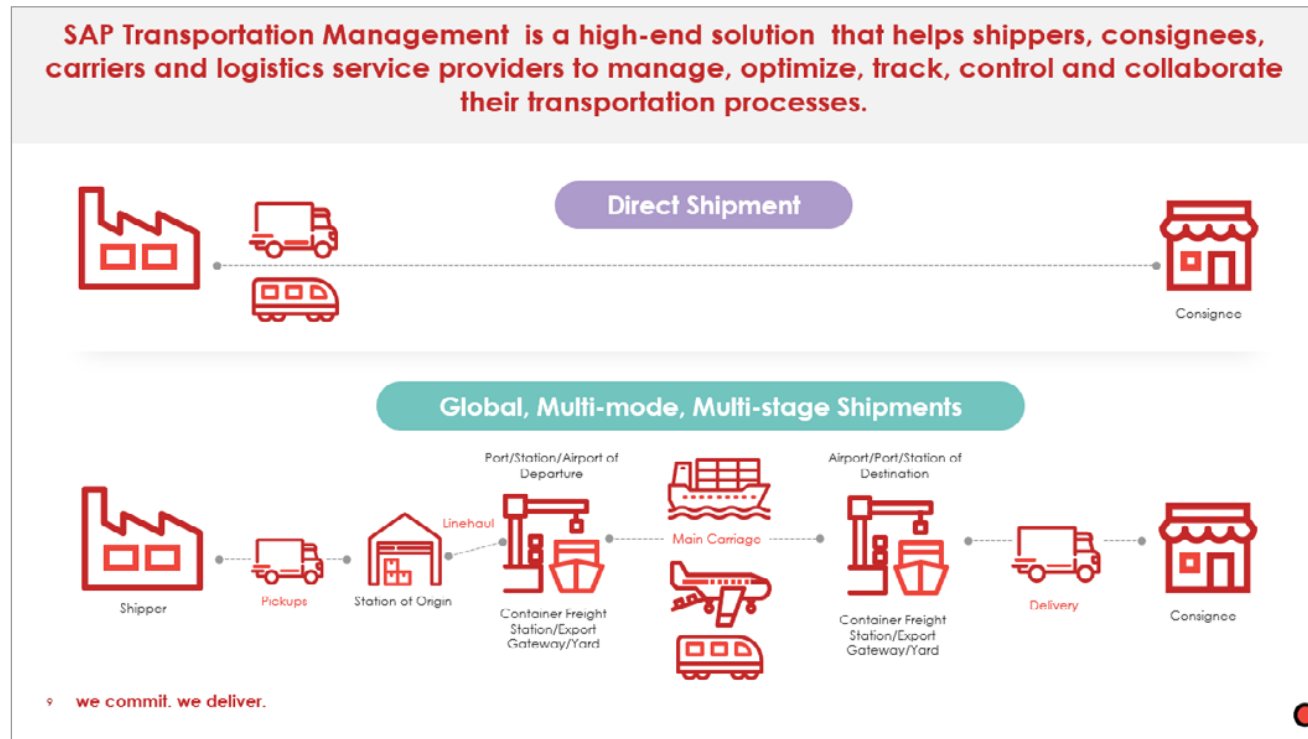
- Shipping/receiving personnel
- Planners

## **Key features:**

- The SAP Transportation Management comes with the shipping cockpit, a one-stop location that enables shippers and forwarding agents to plan, optimize, collaborate multi-mode and multi-stage shipments
- Provides seamless integration with enterprise resource planning (ERP) solution enabling seamless transportation planning and execution
- Charge calculation components for accurate freight costs, and reduced invoice discrepancies
- Freight cost settlement and cost distribution for better visibility on freight costs, revenue, and profitability
- Analytics tools to help planners manage expectations, and ensure deliveries are on-time



# SAP Transportation Management (TM)



Overview of SAP TM functionalities and its integration and connectivity.



# SAP Advanced Available-To-Promise (aATP)

**Intelligent order promising system empowering you to give your customers more accurate lead time and delivery information or change orders as their own demand fluctuates. Allows you to simply prioritize product allocations for select customers to ensure that they receive inventory more quickly.**

## **Your challenge:**

Almost all customers placing orders in ecommerce websites or via call centers need real time order confirmation dates. Existing systems may be outdated or provide inaccurate order promise dates. These existing systems can be tedious and manual with little visibility across departments and locations. Order promising is not just about product availability. It needs to integrate with supply chain constraints like transportation, production and procurement in real time. Most existing systems don't have the capacity for this integration.

## **Business benefits:**

- Greater visibility into your supply chain
- Better understanding of order timing before providing customers with delivery timing
- Reduces the complexity of day-to-day supply and sales planner operations
- Easy to adapt, configure and integrate
- Provides visibility of supply chain challenges caused by external factors (eg resource shortages or port traffic) allowing you to devise real solutions and manage consumer expectations

## **Typical users:**

- Customer service representatives
- Sales representatives


## **Key features:**

- Allows for 'planning out' allocations based on certain types of materials or material groups
- Enables multiple methods of prioritizing inventory
- More customizable and flexible compared to the previous basic ATP solutions
- Highly configurable apps for background processing, monitoring and rescheduling, allowing users to define the criteria for reconfirming orders
- Supports mass order confirmations with specific criteria




# SAP Advanced Available-To-Promise (aATP)

## SAP S/4HANA advanced ATP Solution Strategy




**Simple**

- Intuitive and user friendly interfaces
- Easy set-up and maintenance




**Fast**

- Built natively in S/4HANA Enterprise
- Use the master and transaction data of S/4HANA core
- Uses latest HANA technologies




**Flexible**

- Available in all four deployment options: On Premises, Essential Edition, Extended Edition, Private Cloud Edition and HEC



**Intelligent**

- Next generation order promising functions
- Automated exception handling
- Dynamic selection of alternatives



**Integrated**

- Integral part of End-to End business processes
- Integration to Planning, Manufacturing, Procurement, Logistics\*

Simplified User Experience & Automation

Flexibility, Agility & Innovation

Efficient, Intelligent and Integrated

we commit. we deliver.



SAP S/4HANA advanced ATP solution has multiple features.

The integrated order promising solution benefits numerous areas including sales and distribution, manufacturing, supply chain planning and logistics execution.



# SAP Analytics for Supply Chain

**Various analytical tools (Business Warehouse, SAP Analytics Cloud and HANA) to help you design your own analytical solutions in supply chain.**

## **Your challenge:**

Too often, supply chain organizations are managing multiple reporting tools, so losing time to tedious and manual tasks when creating reports. Sharing information and data can also be difficult due to a lack of system integration across your warehouse, planning, reporting and decision-making functions.

## **Business benefits:**

- Real-time monitoring of your supply chain processes
- Intelligent insights to help with strategic decision making
- Ability to prioritize and identify opportunities, making the supply chain processes more efficient
- Reduction in project time
- Personalized customer experience

## **Typical users:**

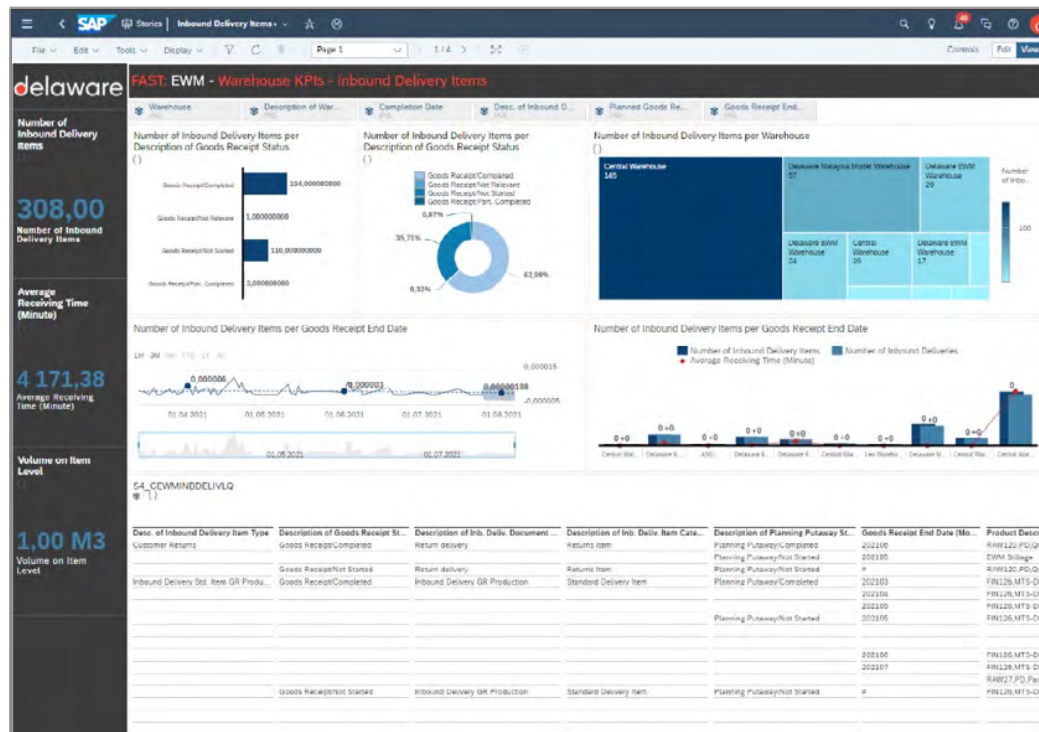
- Reporting & Analytics Lead/Manager / Analyst

## **Key features:**

- Dashboards ready to use with relevant Supply Chain KPIs at a glance
- For S/4HANA users, SAP also provides some standard Embedded Analytics out of the box
- Standard extractors to accelerate the data extraction from the source system
- Fast and pre-configured installation
- Easy to connect to several different type of data sources
- Operational reports to support production for planners to see quantities of POs and PRs
- Analytical reports to provide overall view of your organization for C-level executives for their decision making
- Measure on-time in full delivery



# SAP Analytics for Supply Chain



Sample screenshot of Warehouse Key Performance Indicators (KPIs)

## #delawaredifference

With delaware's FAST-BI: EWM you will be able to monitor in real time the main smart indicators related to Extended Warehouse Management, such as the total number of Inbound Delivery items, broken by status, by warehouse, by goods receipt status, among others.

It is also possible to monitor the main indicators related to Warehouse orders, such as the total number of warehouse orders, the WO planned duration, the number of WO per Activity area, etc.

The solution is fully integrated with S/4HANA, using standard features, not needing to copy data to another system and can be accessed through SAP Analytics Cloud or S/4HANA itself, combining the best features of both tools.

With FAST-BI: EWM your organization will not only optimize the warehouse management, but also optimize the supply chain management as a whole.





delaware

[www.delawareconsulting.com](http://www.delawareconsulting.com)