

NTT DATA

DIGITAL SUPPLY CHAIN EXECUTION WITH SAP YARD LOGISTICS

**BOOST YARD EFFICIENCY
AND SAVE COSTS**



WHAT IS IT?

NTT DATA **Digital SCE with Yard Logistics** has been developed as an end-to-end supply chain execution platform for businesses that need to save costs and boost supply chain agility and resilience by optimizing their yard operations. It leverages NTT DATA's expertise in creating advanced SAP-based solutions for manufacturers and is particularly relevant to automotive companies with JIT/JIS supply chains.



THE BUSINESS CASE

Automotive companies and other manufacturers with extended supply chains know the benefits of investing in supply chain execution technologies such as vehicle tracking and warehouse automation to optimize their transportation and warehousing operations and so keep supply chains running smoothly.

However, they often overlook a small but important element in the extended supply chain, namely the yard. Irrespective of whether the yard services a manufacturing plant or a distribution center, it plays an essential role in expediting shipments, receiving raw materials and components, and keeping supply chains running efficiently.

Transportation usually accounts for the lion's share of distribution costs so by improving the efficiency of yard operations, the cost savings obtained will have a significant benefit to the bottom line, as well as improving the responsiveness and agility of the overall supply chain.



ADDRESSING THE CHALLENGE

One of the commonest supply chain execution problems affecting manufacturers, particularly those using JIT/JIS models, is late deliveries. This can oblige manufacturers to slow or even halt production, leading perhaps to financial loss, penalty fees, customer dissatisfaction and reputational damage.

When the problem of late deliveries is analysed, it may be that the root cause is not external factors such as traffic jams or problems that can be traced back to the carrier, but rather inefficient loading and unloading processes in the yard.

The aim of every yard should be to ensure that materials and goods get to the right place at the right time.

But if it takes too long to unload a truck, or the truck is not in the expected bay, or the yard simply does not have enough capacity to unload a truck at a particular time, the consequences can ripple through the supply chain.

Such hold-ups can be costly to the manufacturer in terms of disruption to its downstream production line, and may lead to financial penalties imposed by the carrier for detention and demurrage.

Yard processes are complex to optimize and operational and planning activities are often performed manually in a uncoordinated fashion using simple spreadsheets. When a carrier arrives, the driver typically has to fill out papers, taken them to an office and wait for the information to be entered into the system before the truck can be unloaded.

In a closed-loop supply chain, the carrier may then have to wait to be allocated another bay to load returnable transport items that need to be returned to a supplier.

Coordinating all these movements is labor-intensive and error-prone, making it difficult to optimize the operations in the yard and handle unexpected events such as an unplanned arrival.

Planning and executing the various processes of yard management in a manual and disjointed way not only adds costs but reduces business agility, which is particularly important at times of supply chain disruption, as experienced recently during the Covid pandemic.

For this reason, NTT DATA has developed its **Digital SCE with SAP Yard Logistics** solution.



NTT DATA DIGITAL SCE WITH SAP YARD LOGISTICS ACCELERATOR

The solution created by NTT DATA uses SAP Yard Logistics to streamline and simplify yard processes and integrates them in an end-to-end logistics fulfilment platform with transportation planning, yard management and warehouse execution capabilities, which are provided by the embedded Transportation Management and SAP Extended Warehouse Management functionalities in S/4HANA.

As an integrated and comprehensive yard management solution, SAP Yard Logistics also supports IoT scenarios, such as the use of self-billing and check-out terminals, display panel control, driver-assisted communication, etc.



Main Features

Visual workloads

The intuitive user interface highlights all upcoming movements in the yard, planned or not, on a graphical cockpit and allows all yard actions to be executed.

Seamless integration

This solution integrates seamlessly with SAP S/4HANA or SAP ERP, as well as with SAP EWM and SAP TM.

Real time connectivity

Real time connectivity ensures that changes such as delayed arrival are communicated instantly to all interested parties allowing tasks to be rescheduled if required.

Dock scheduling

Dock appointments can be planned collaboratively with carrier and an overview of the scheduled workload for each load point obtained.

How It Works

1. The **Planning Process** covers every mode of transport and enables the efficient usage of yard resources. The dock appointment scheduling functionality allows the carriers to enroll their transportation unit for the yard and book particular time slots for execution of all yard activities for the business.

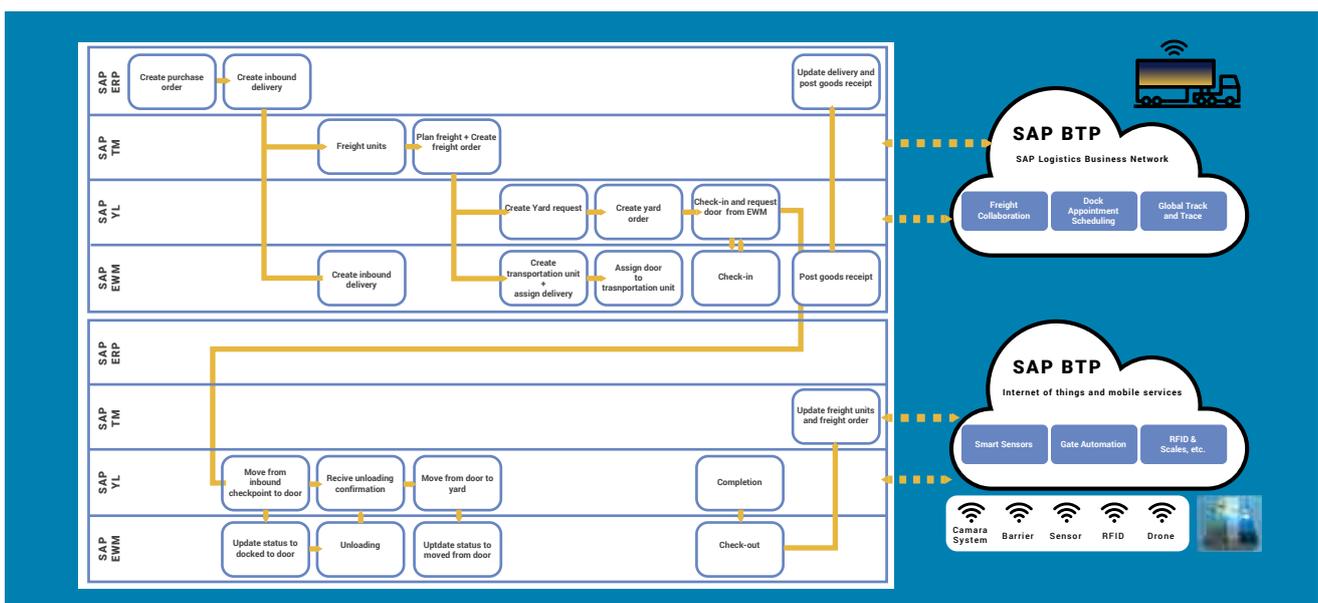
2. On completion of planning, the transportation unit arrives at the yard for the **Check-In Process**. SAP Yard Logistics offers the possibility of using a manual check-in at the gate, or a completely digitized and contactless self-check-in functionality, with a guided click-through check-in scenario, developed using SAP Fiori and available on mobile devices.

3. After the successful check-in, the transportation unit enters the yard, and the **Execution Process** starts, where multiple yard tasks are executed. All these yard tasks can be documented using time stamps and the system provides real time overview of processes to enable process accuracy and meet service level agreements with the customers.

4. The last step is the **Check-Out Process**, which is done after completing yard activities and can be executed manually or automatically. During the check-out, security checks including outbound weight of the transportation unit, can be documented in the system and an internal questionnaire can be created for the gate agent.

An **Alert Management** alerts all interested parties about overdue transport or unplanned downtimes in the yard and so helps remedial actions to be quickly taken.

More advanced functionalities like cross process planning, pick-up planning, cross docking, location determination, dangerous goods handling and IoT scenarios can also be implemented with SAP Yard Logistics.



End-to-End Digital Supply Chain Execution with SAP Yard Logistics

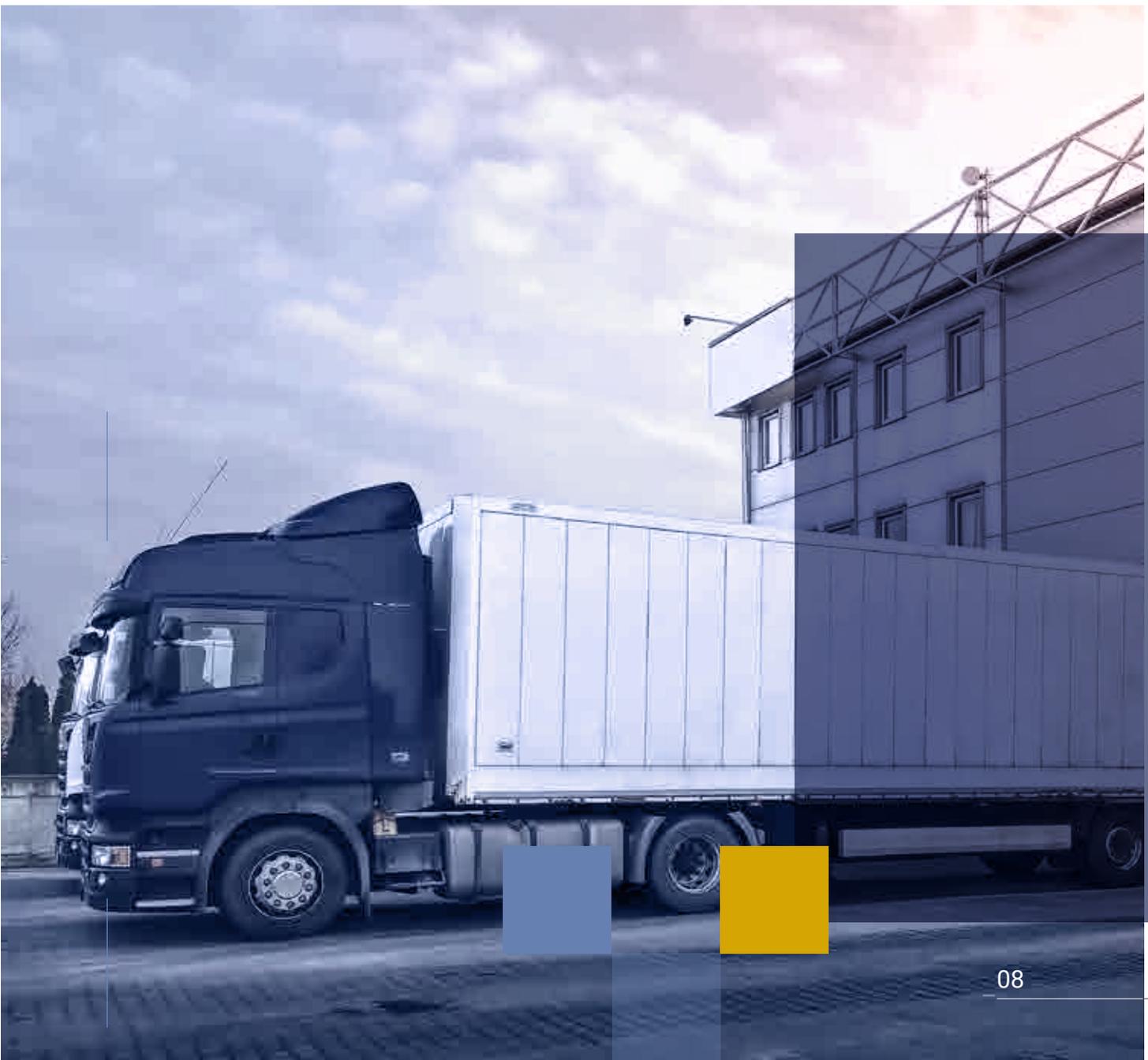
BENEFITS

- Minimizes turnaround times by accurately monitoring and controlling trucks and yard movements in real time.
- Reduces supply chain costs and possible penalties.
- Improves on-time delivery performance by integrating appointment planning with warehouse activities via Dock Appointment Scheduling.
- Maximizes utilization of yard area and loading/unloading equipment by maintaining constant flow.
- Reduces check-in and check-out times using IoT (OCR cameras) at gate-in barriers.
- Eliminates paperwork with app and device-based processes for yard employees and drivers.
- Ensures correct documentation is presented at check-in.
- Repairs and necessary cleaning tasks are properly recorded and planned.



SYSTEM REQUIREMENTS

- S/4HANA Core
- Embedded Transportation Management
- Embedded Extended Warehouse Management
- SAP Dock Appointment Scheduling



WHY CHOOSE NTT DATA FOR YOUR SAP AUTOMOTIVE PROJECT

We are experts in automotive

NTT DATA has worked with the automotive industry for 45 years and we currently serve more than 85 OEMs, suppliers and dealerships. We understand the challenges and the needs of enterprises in this sector and we have considerable experience creating innovative solutions that deliver sustainable business value for automotive companies, so helping them achieve a competitive advantage.

To accompany automotive companies on their S/4HANA journey, NTT DATA has a team dedicated to S/4HANA transformation and an S/4HANA Center of Excellence that establishes the most appropriate evolution strategy for companies that want to evolve to S/4HANA and other SAP solutions, platforms and technologies.

NTT DATA has developed a SAP Automotive template for S/4HANA and accelerators to help automotive companies overcome specific challenges and reduce time to value.



SAP GLOBAL STRATEGIC PARTNER

NTT DATA is a formidable force in SAP services with more than 20,000 SAP professionals, 2,700 SAP clients worldwide, 21 delivery centers and operations in 41 countries. It is a truly global organization committed to seamlessly working together with its clients to deliver SAP-centric projects that can be delivered at scale and across multiple locations.

Our solutions leverage our business-specific expertise and skillsets in SAP technologies but also in other digital technologies, such as AI and IoT, for example. NTT DATA has achieved the highest accolade awarded by SAP, Global Strategic Partner, which recognizes its ability to offer a wide range of best-in-class business consulting and solution implementation services in support of SAP technology.

THE NTT DATA DIFFERENCE

NTT DATA SAP automovile template

- Fully customized SAP S/4HANA system including all core areas such as finance, procurement, sales, logistics and production
- Includes new SAP modules such as EWM, IBP, TM, VMS, etc.
- SAP Business Technology Platform and BTP Integrations

NTT DATA SAP automovile accelerators

- SAP JIT/JIS
- Supply Chain Control Tower
- Edge Computing Integration via Cloud Platform
- Smart EWM High-Bay Racks
- Individualized Production
- Digital Supply Chain Execution with SAP Yard Logistics



ABOUT NTT DATA

NTT DATA – a part of NTT Group – is a trusted global innovator of IT and business services headquartered in Tokyo. We help clients transform through consulting, industry solutions, business process services, IT modernization and managed services. NTT DATA enables clients, as well as society, to move confidently into the digital future. We are committed to our clients' long-term success and combine global reach with local client attention to serve them in over 50 countries. Visit us at [nttdata.com](https://www.nttdata.com).





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