



Table of contents

Current challenges in supply chain management	3
Information is the key	4
Measurement Services - data analysis and proper presentation	4
Advantages of Measurement Services in SAP	7
Sii's approach to supply chain management	8
SAP EWM - Sii's new warehouse management solution	8
Sii Poland's full offer within SAP solutions	9
Benefits from cooperation with Sii	11

Current challenges in supply chain management

Modern logistics faces many challenges. To meet the demands of the global village, the supply chain must be efficient, reliable, and adaptable to dynamically changing conditions.

To be competitive, a company must pay great attention to this area. Many risks and challenges arise at different stages and points in the supply chain. Both on the side of inbound supplies and ensuring the continuity of production processes, and on the side of outbound supplies so that everything reaches the customer on time and in good quality. In between, we have the area of internal logistics, or in a nutshell, warehousing. In all of these areas, to remain efficient, one must constantly react to changes in the environment and look for opportunities to optimize processes.

In each of the above-mentioned cases, we can detail several common challenges specific to Supply Chain Management. These include bottlenecks. What is a bottleneck? Nothing more than a place in a process that, for various reasons, slows down the preceding and following tasks, e.g. due to hardware limitations.

As an example, we can mention here specialized forklifts, which can take goods from or put them

on high-bay racks. With too little such equipment, our processes will be limited. On the inbound side, this could mean material piling up while waiting to be deployed. This, in turn, can lead to potentially dangerous incidents and increase process times. On the outbound side, on the other hand, picking time is also increased due to limited options for collecting materials for shipment. The consequences of this are loading delays, which can lead to delays in delivery to the customer.

On the other hand, an oversupply of resources is not a good solution either. For modern logistics, the right balance is important. When there are too few resources – we waste time and processes are inefficient. On the other hand, having too many of them, we incur costs, in other words – we waste money. It is important to remember that resources are not only equipment but also people.

Therefore, a continuous review of processes, and subsequent optimization, is essential for the supply chain to meet the challenges it faces and to be competitive and profitable. One can use the analogy of a chain on a bicycle here – to move without problems, it must be well greased, and every link should do its job – be strong and efficient.



Information is the key

There is one thing that is essential to be able to keep an eye on the processes in SCM and react to what is happening in the environment. It is information, along with being able to get it quickly and present it in the right way. So that managers can make quick decisions that optimize and improve processes, and above all – prevent deviations from the model process. The more accurate the information we receive in the shortest possible time, the

faster and better the answer we can give.

This is why KPI factors are becoming increasingly important in day-to-day business operations. It is extremely important to be able to get tailored reports that allow us to see what is happening in the warehouse. Many companies struggle with choosing the best way to build, prepare and present KPIs. There are many ways to do this, and the choice is not easy.

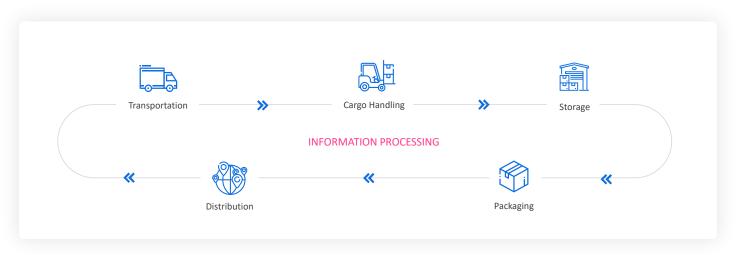


Fig. 1. Information processing in Supply Chain Management

Measurement Services – data analysis and proper presentation

One of the best ways to do this is via Measurement Services, a part of SAP Extended Warehouse Management, which allows us to create, view, and analyze key warehouse figures. This gives us the ability to prepare the required customized measurement. The KPI itself is not enough, it still needs to be presented properly – for this purpose we can use the Warehouse Cockpit. This function also allows us to easily create customized measurements and present them in an appealing graphic form.



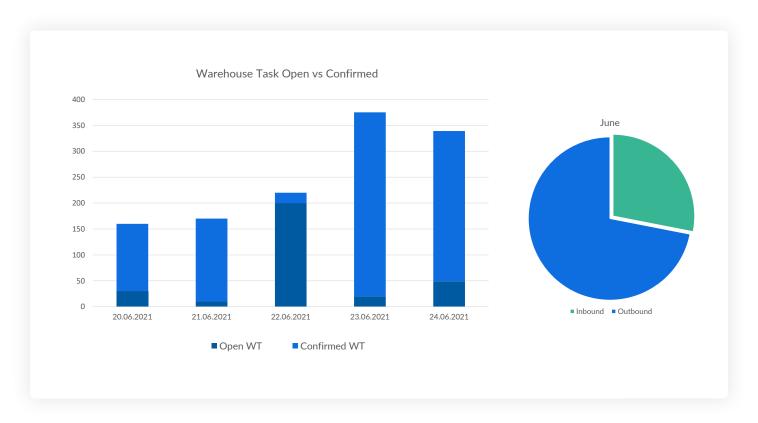


Fig. 2. Graphic data interpretation in SAP EWM Measurement Services

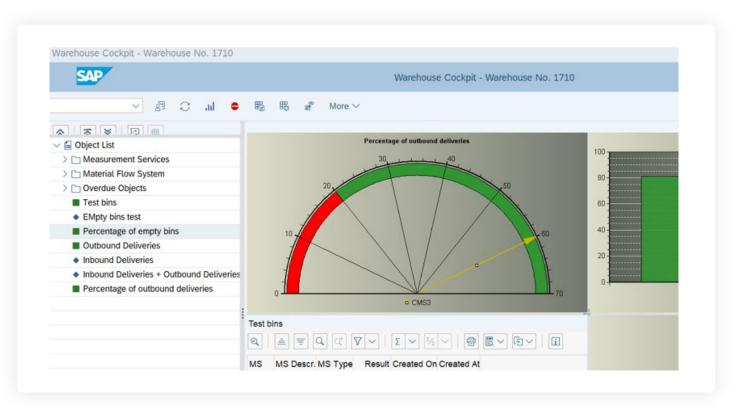


Fig. 3. Warehouse Cockpit - graphic demonstration of key data

There are 2 types of measurement services:



Tailored Measurement Services

Created based on predefined basic measurement services in SAP selected by the user, as when building a query. This is the easiest and fastest way to create KPIs. Here we can choose from predefined factors and perform ad hoc analysis.

The KPIs presented are of the simple kind and do not contain sophisticated data. But on the other hand, the use of predefined factors allows us to easily and instantly create KPIs that interest us at the moment.



Calculated Measurement Services

Combination of one or more Tailored Measurement Services, Calculated Measurement Services, and a mathematic function. Here the process of creating KPI is a little bit more complicated and requires more attention than in TMS, but we can create a more complex analysis that fits more complex requirements. There is a possibility to use math formulas to combine earlier created TMS. This is the way that allows us to fulfill more advanced customer requirements regarding KPIs.

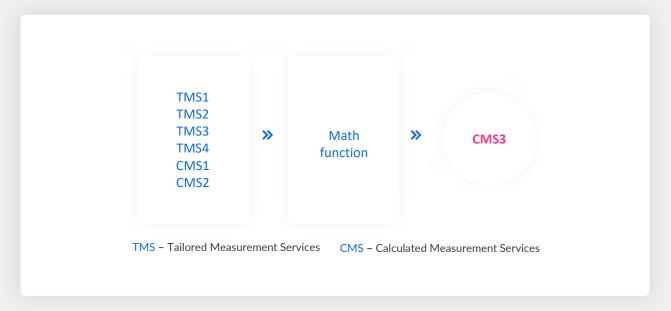


Fig. 4. Creating Calculated Measurement Services

Advantages of Measurement Services in SAP

The use of key data in the daily operation of the warehouse allows companies to monitor all critical logistics processes. Reviewing the data gives the user the chance to react quickly to any occurring disruptions. Furthermore, using Measurement Services in SAP EWM for supply chain management provides a complete picture of warehouse operations.

Managers can see KPI results in a graphical form, such as a chart, using the Easy Graphic Framework. EGF is a versatile tool that can be used to simply configure cockpits in applications such as EWM. Its advantage is that multiple users can have

simultaneous access to the EGF cockpit, and permissions can be configured to allow a given user to view only information relevant to him or her.

SAP users can create simple and complex queries and decide what data is critical to the company, and then monitor and analyze it.

The variety of metrics that can be tracked allows businesses to build an early response system to any recorded process disruptions. This creates an opportunity to mitigate and resolve problems in a very short time.

- SAP Extended Warehouse Management allows us to design and optimize end-to-end logistics processes taking into account resources, space, and the resulting requirements and constraints says Andrzej Andrzejewski, SAP EWM Consultant at Sii Poland.
- At the same time, it enables integration with other applications to utilize the entire available potential of the logistics chain and thus be able to meet the

requirements of today's logistics. Among the numerous benefits of having EWM, one should also mention the Measurement Services tool available here. It allows you to present basic key data to a Business Owner simply and intuitively. With this tool, we can show the client how to measure and monitor processes in a fairly simple way. The Business Owner can more easily notice potential bottlenecks or other places that require improvements or waste removal. And this, in turn, is the key to success – he explains.



Sii's approach to supply chain management

For years, Sii Poland has been providing its clients with top-notch services – we are the largest and fastest growing technology, consulting, digital transformation, BPO, and engineering services company in Poland.

The long experience of Sii specialists in cooperation with clients from many industries, allows us to offer a comprehensive and flexible approach also in the field of supply chain management.

Building on our experience in logistics, we provide:

- Analysis and monitoring of processes occurring in the company
- ✓ Identification of bottlenecks
- Optimization of current processes in logistics management
- Assistance in the selection and design of key KPIs

- Minimizing empty runs and wasted resources
- Proper utilization of human resources
- Reducing response time to emerging deviations and potential problems
- Mitigating critical errors that can causesecurity incidents

SAP EWM – Sii's new warehouse management solution

The most recent part of Sii Poland's offer within the scope of SAP solutions is warehouse management via the SAP Extended Warehouse Management.

Our experts have vast experience gained through the implementation of multiple projects. Based on

the knowledge of Sii consultants both in the area of logistics and the EWM itself, we can carry out extensive implementations of SAP EWM in your company, as well as provide you with the appropriate support after the completion of the implementation.



Sii's experienced consultants can offer your company, among other things:

- Designing the structure of the warehouse
- Designing the resource flow from the receipt into the warehouse, through storage, to the release for shipment
- Implementation and maintenance of the SAP EWM
- Comprehensive analysis of selected business-relevant KPIs
- Development of a methodology for calculating key indicators
- Graphical presentation of KPIs through personalized TMS and CMS calculations
- Customized dashboards with reports assigned to the customer
- Prediction of declining/increasing warehouse traffic
- Integration of warehouse processes with production
- Warehouse automation support
- Voice picking voice commands for the loading/unloading process
- Support of complex warehouse flows
- Creation of effective warehouse strategies related to placement and retrieval of materials
- Optimization of resource loading and the way warehouse tasks are created
- Yard management managing trucks/containers in front of the warehouse

Sii Poland's full offer within SAP solutions

We provide SAP ERP services, including system configuration and development, ABAP, Fiori/UI5, and S4HANA, personalization, tests, integration, upgrade and migration to the HANA platform, and maintenance.



End-to-end SAP implementations

- S/4 HANA, EWM, HCM implementations
- Deployments on local and foreign markets





Development & optimization

- Custom development (ABAP/JAVA, FIORI/UI5)
- SAP system extensions



Support & maintenance

- Local customizations
- Application support
- SAP BASIS maintenance



Rollout

- Fit/Gap analysis
- Country-specific requirements



Experts outsourcing

- Nearshoring
- Offshoring
- Extended Delivery Team



Upgrades & migrations

- ECC and S/4Hana upgrades
- Database conversions (Hana)
- Migrations to S/4Hana (Greenfield/Brownfield)



Integrations & interfaces

- Solution development based on SAP PI/PO and BTP
- Monitoring interfaces in SAP solutions



Benefits from cooperation with Sii



One-stop shop solutions -

from engineering, software development, and testing, to BI data analysis, ERP systems, and more



Nearshoring and offshoring -

cost-effectiveness, top IT competence, excellent English language skills, geographical and cultural proximity



Flexible collaboration models -

whether dedicated consultants, teams, or agile projects and managed services



Reliable partner at your service -

16 years of experience in providing top-quality solutions and services



Tailored services for your sector,

including automotive, healthcare, retail, and, public & utilities



Knowledge and experienc

in all SAP modules and technologies

Looking for support? Contact Sii!

Find out how to benefit from our SAP experience and get to know Sii Poland's one-stop shop offer suited to your company's needs.

Contact us!

With 7 500+ specialists, Sii is the largest technology consulting, digital transformation, BPO and engineering services vendor in Poland. Sii experts carry out projects for leading companies operating in the automotive, banking and financial, hi-tech, healthcare, retail, logistics and utilities sectors. Sii Poland has 15 offices in Warsaw, Gdansk, Wroclaw, Poznan, Cracow, Lodz, Lublin, Katowice, Rzeszow, Bydgoszcz, Czestochowa, Pila, Bialystok, Gliwice and Szczecin.

