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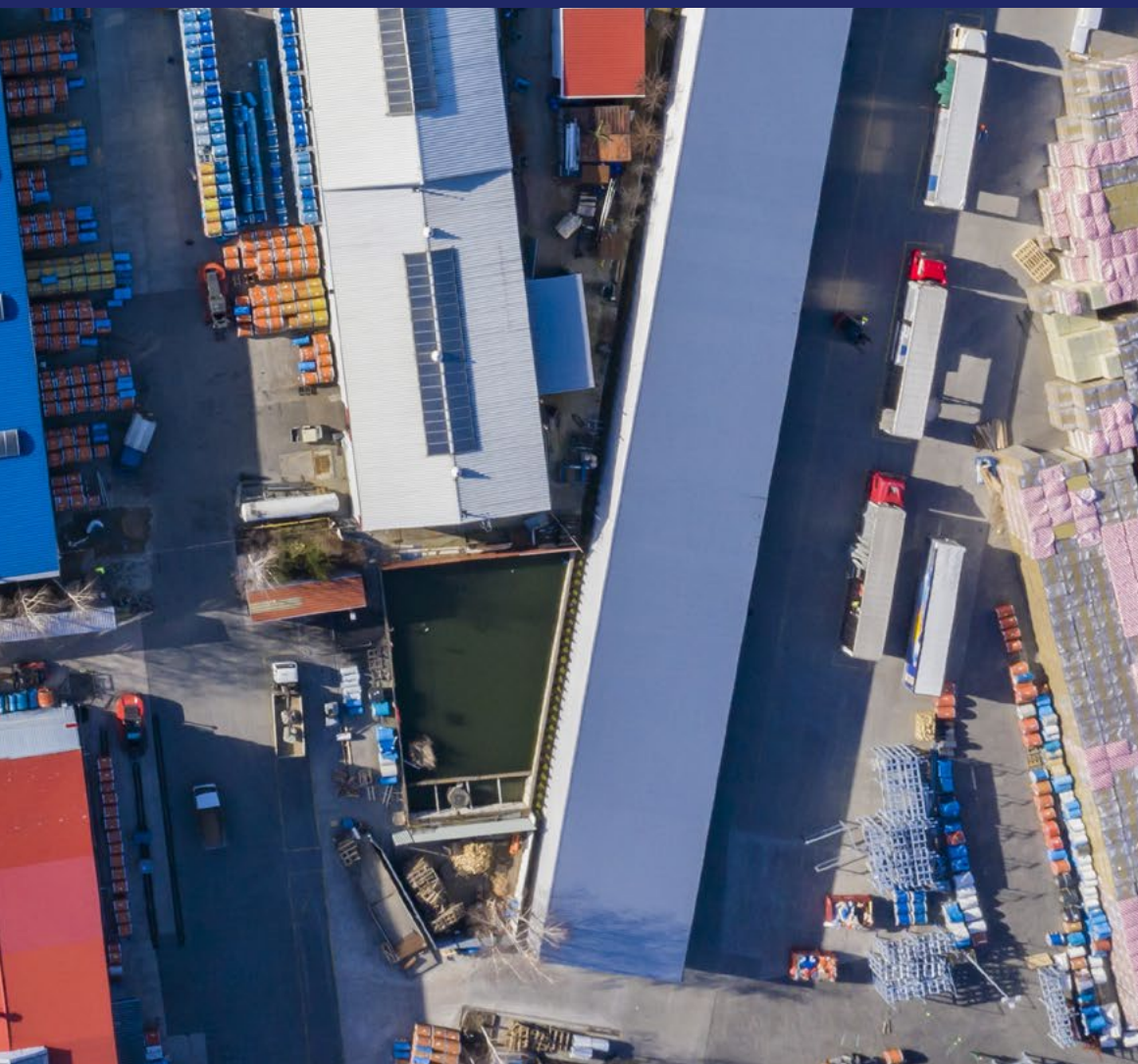
CARGO HUB SYSTEM FOR DSV

Online booking system

Traffic management

Communication with truck drivers

Open API for freight forwarders



DSV

Global Transport and Logistics

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The challenges

With more than 60,000 employees and many transshipment centers located all over the world, **DSV needed to automate key processes and integrate data sources for their transshipment centers.** Their main pains were:

- Freight forwarding services booked by phone (manual process, bookings handled manually and greater risk for errors)
- Lack of control over freight forwarders coming into and going out of the hub
- No visibility of vehicles moving around the hub
- Uncontrolled waiting time for truck drivers and no visibility about their upcoming service bookings.

DSV wanted to let freight forwarders book time slots themselves, know when trucks arrive, navigate the traffic at the sites and automate the check-in procedure.

Skyrise.tech came up with a brilliant solution.





Truck drivers in focus

Imagine for a moment that you are a truck driver and you are always in a hurry.

CARGO HUB does more than just book the time slots and give access to the hub. It becomes your best buddy while loading or unloading the cargo. It guides you through all the steps in the hub (points of service) or tells you where to park the truck when a point-of-service is busy and you need to wait for it to be free. Finally, it sends you a message when you can hit the road again.

Sounds good, right?

Well, the system boosted not only time management, but also improved the overall satisfaction of the hubs clients, truck drivers!





How does it work?

The DSV Cargo Hub software is developed with an open REST API allowing freight forwarders to connect to the system.



Freight forwarders can **see schedules and book time slots** for loading, unloading and customs clearance. Everything without having to involve DSV.



Admins of the system have a **complete overview** of when trucks arrive, who is on the site, where the trucks are on the site and who has been on the site.



An **SMS gateway integration** enables the system to send automated SMS' to truck drivers about actions to take, e.g. go to gate number, go to truck waiting area, enter the facility, leave the facility, etc.



Controlling and managing the traffic flow. Truck drivers can see where to go in the hub and when they can go there.



Easy and automated check-in and check out from the facility via **LPR camera integration** lower entry and exit time considerably.



DSV managers has a complete overview of trucks and their loads. The managers can **assign workers to each point-of-service** well in advance.



With **smart sensors**, the system can verify if a Point-of-Service is ready to take another service.







Services request Bookings in conflict

List of services requests

Filters ▾

Add new services request Add rangering service

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Ref No	Transport number	Trailer number	Est. arrival	Est. departure	Status	
 1307NB5I	KG99210-1	PCK4392	2013-04-22 15:00:00	2013-04-22 16:00:00	In progress	Edit View Logs
 1303RSNT			2013-04-19 02:00:00	2013-04-19 22:00:00	Rejected	View Logs
 1302HXZT			2013-04-19 02:00:00	2013-04-19 23:00:00	Confirmed	Edit View Logs
 1305JW00			2013-04-19 01:00:00	2013-04-19 21:00:00	In progress	Edit View Logs
 1304361B			2013-04-19 00:00:00	2013-04-19 22:00:00	Completed	View Logs
 1306EAAK	TRP-12331S	DB00213	2013-04-17 18:00:00	2013-04-17 19:00:00	Delayed	Edit View Logs

1 Go to page: >> 1 - 6 / 6

Schedules HUB Status

HUB Status

Refresh time: 2013-04-19 14:59:06




















 Refresh

[Show the meaning of the icons](#)

Status Service request details

Current service

Previous service

 <p>1297YMX3 (edit) +● 2013-04-18 14:35:11 ?→ 2013-04-18 22:00:00</p>	<p>Unloading - 17-meters (Booked) </p> <p> BB  Outside the HUB</p>	
 <p>130110CR (edit) +● 2013-04-18 15:57:36 ?→ 2013-04-18 19:00:00</p>	<p>Unloading - 17-meters (Awaits For Handling) </p> <p> LU Zone  andbay</p>	
 <p>1306EAAK (edit)  TRP-12331S  DB00213 +● 2013-04-19 14:50:02 ?→ 2013-04-17 19:00:00</p>	<p>Drop-off - 17-meters (Awaits For Handling)</p> <p> #Dock2  #WaitingZoneEarly</p>	
 <p>1307NB5I (edit) </p> <p> KG99210-1  PCK4392 +● 2013-04-19 14:52:21 ?→ 2013-04-22 16:00:00</p>	<p>Unloading - 17-meters (Ready To Handling) </p> <p> Long term park</p>	



The benefits

The Cargo Hub software saves DSV, freight forwarders and truck drivers a lot of time. In 2019 in Landskrona there were over 48 000 visits, meaning that the hub serves over 4 000 visits monthly.

The key benefits of the solution are:

- **Freight forwarders get a much better service** and save a lot of time when booking time slots.
- Truck **drivers don't waste their time** in waiting areas or in the facility.
- **Everything is planned** in advance so the truck driver spends as little time as possible at the facility.
- Truck drivers are **notified by SMS** about actions they should take or if changes occur.
- The time spent on checking in and checking out of the facility has been brought down considerably due to **smooth integration with LPR cameras**.
- DSV gets a **complete overview** of truck traffic at the facility.
- DSV needs fewer personnel working with freight forwarders and truck drivers. The system manages most of the tasks automatically.
- Improved safety on the facility thanks to the visibility of the vehicles and assets at the facility.
- Open to all freight forwarders who wants to connect to the OPEN API.



System integrations and tech stack

Key integration points:

- Exposed endpoints: Integration with driver service terminals (ACI), enabling service reservations in the warehouse (Open API)
- Integration with external Bravida (alarm systems) and Crawford (docking systems) OPC and ModBus protocols
- Open REST API for freight forwarders
- Position occupancy system (IoT units)
- LPR cameras
- SMS gateway

Tech stack:

- SQL Server
- .NET Framework





Thinking outside the... hub

The success was possible due to a close cooperation with the client where project management and the communication flow was highly prioritized by both parties.

As always, the most important thing was determining and polishing the requirements.

The web client's business processes were very complicated – there were different types of cargo loading, unloading, one freight forwarder can perform several services during a visit and so on. Thus, our task was to reflect them in the best possible way in the CARGO HUB system.

„Working hand-in-hand with the client, who patiently answered our questions, made us able to design the system architecture according to the exact requirements. In 2019, we upgraded and implemented CARGO HUB in another DSV transshipment center in Jönköping, Sweden. It shows how well we did the work.”

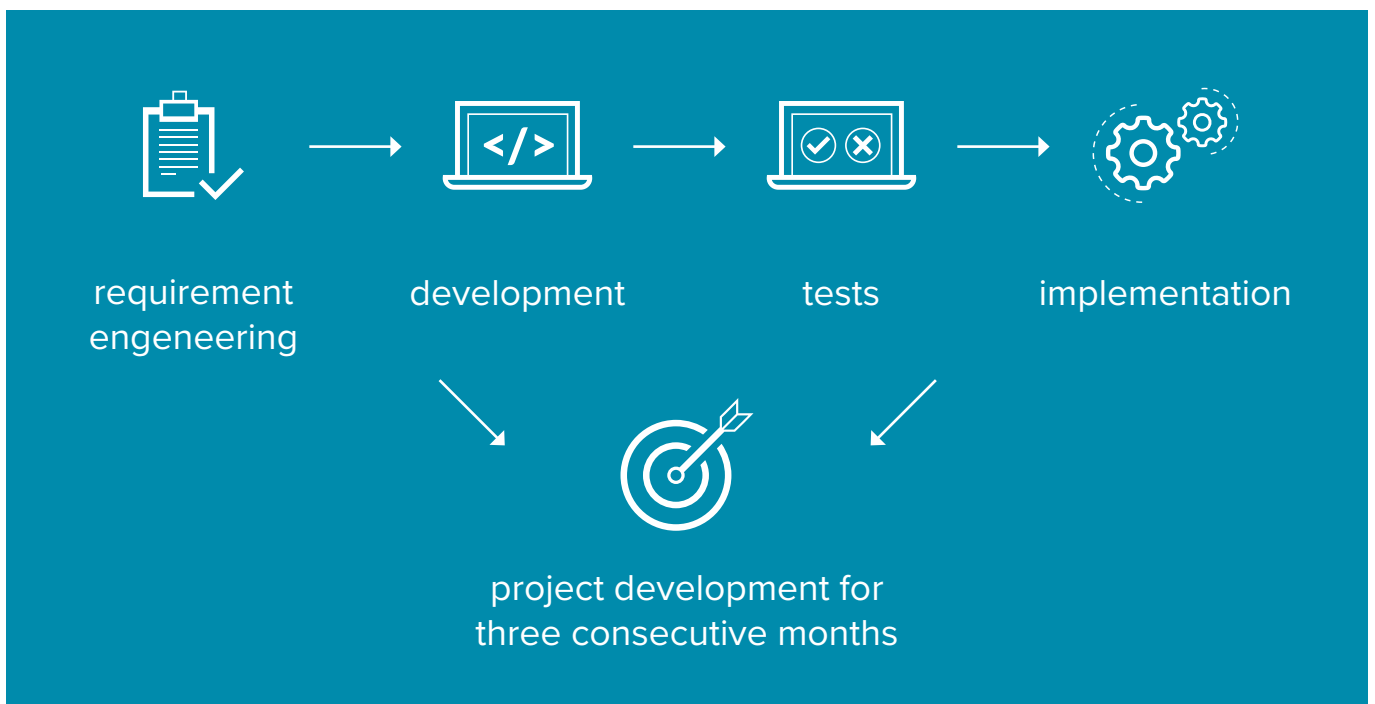


Przemysław Machlowski / Business Analyst



How did we develop the CARGO HUB for DSV?

- ✓ **re-thought the model for new solutions to deliver tailored features**
- ✓ **designed the information architecture**
- ✓ **delivered hi-tech solutions and lots of system integrations**
- ✓ **tested it all in every phase of the project**
- ✓ **implemented the solutions**
- ✓ **and supported the client after the implementation**



skyrise.tech

At Skyrise.tech we accelerate digital transformation by developing custom software and system integrations that shape the future of the transport & logistics industry.

If you are looking to increase visibility across various business areas, or to optimize your processes and costs, then our solutions would fit you perfectly.

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Sobieskiego 2
40-082 Katowice
Poland

Grunwaldzka 472
80-309 Gdańsk
Poland

Saltværksvej 151
2770 Kastrup,
Denmark

Sandviksbodene 5
5035 Bergen
Norway

Did you find the case study interesting? Let's have a chat about **YOUR CHALLENGE.**

Book a call with Jakob



Jakob Ohlsen Baagø

VP of Sales and Marketing

Responsible for accelerating digital transformation of the transport & logistics industry.

+45 40 62 68 13

jakob.ohlsen@skyrise.tech



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