SELIS

Towards a Shared European Logistics Intelligent Information Space

SELIS recently held its annual General Assembly in Athens with around 50 representatives from the Consortium and the Advisory Board.
Takis Katsoulakos opened the meeting with a strong message
"We want to make sure SELIS has value for Europe - not just another project"
This is an innovative research project and this newsletter will describe one of the living labs – Living Lab 2 – Port of Rotterdam – see below.

SELIS LIVING LAB 2 - PORT OF ROTTERDAM - Inland Reliability

- The subject of inland reliability is highly relevant and actively discussed within the Port of Rotterdam community, targeting nearly 4 million TEU.

- Common understanding of process and standards for measuring are first steps towards improvement.
- Dashboards have been created showing data on performance and reliability
- Successful implementation on one major inland corridor (RTM-West Brabant:750k TEU/y).
- Several additional companies have indicated their interest in starting Supply Chain Optimization projects based on the method developed (measure/improve/promote).
- Use case gives impulse to new innovations: Launched Mobile OCR as sensor device for inland locations to collect data.

Inland container shipping partnership along West-Brabant–Rotterdam route

Barge Terminal Tilburg, Combined Cargo Terminals, Moerdijk Container Terminals and Danser Group have joined forces, agreeing to combine cargo along the route between Tilburg, Moerdijk and the port of Rotterdam. This allows them to cut back on the number of vessels required – resulting in less congestion during handling in the port of Rotterdam. The collaboration between these private parties and Rotterdam's deep sea terminals in the 'West-Brabant Corridor' is the first concrete initiative supported by the Port of Rotterdam Authority within the incentive scheme and sector consultation programme launched in 2017.

Main Learnings

- Awareness about inland reliability is rising.
- Trust between partners is vital and creating it takes time.
- Unlocking necessary data is not easy (willing & able)
  - Technical: legacy systems makes it sometimes difficult
  - Financial: costs for system adjustments & creating connections.
  - Legal: not always allowed to share required data.
  - Priority: lots of request for data sharing and IT adjustments, not always on top of agenda.
- Once insight is created it attracts positive attention and new solutions are enabled
- Combination of university and business works.

- Involvement of shipper and/or forwarder is essential.
- Europe-wide project cooperation needs quite some effort and time, especially when developing software in a 'new' domain.
- Need for standards (to measure performance) to scale up.
- Port Community Systems (could) play important role in this.
- Public data sources on use of infrastructure could help as well.

TEUBOOKER/WAYZ - Improve the performance visibility of barge transport

The goal of this use case is to improve the performance visibility of barges that sail between Rotterdam and inland terminals (NL). Inland Barge visibility can be improved by retrospective analysis, predictive modelling and decision support.

The first steps towards more barge visibility have taken place. The retrospective analysis is integrated in dashboard version 1. This dashboard contains 3 levels: meta level, inland term level and individual barge level.
By keeping only the relevant information, it dramatically reduces the data set to only a few records per day per barge.
Using the reduced data set allows this use case to make fast calculations for interesting metrics.
The method and source code produced to address this use case are re-useable for every other use case where AIS data is involved.
It is important to reduce the time a barge spends at the terminal, as money is only being made when barges are sailing.
- Track and trace for containers needs to be developed more

- Some business concepts need to be further developed
- A web app and API are being developed
- Working with use cases is so important for learning from each other

NEXT STEPS

- Develop version 2 and 3 of the dashboard using prediction and decision support
- Track and trace container
- "Translate simple business concepts into code"
- Provide predictive analytics using historic data
- Integrate live data sources using the SELIS pub/sub
- Integrate the developed solution into SELIS core technologies – i.e. create a re-useable recipe

For more information look at our website or if you would like to participate in the commercialisation process please contact carentomkins@elupeg.com

SELIS Partners