



to envision the future with us



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The future of collaboration within the supply chain

Flnest and the FI PPP are shaping the future of logistics for a better green world; improving productivity and customer satisfaction for all trading partners. Flnest provides the logistics industry with a Future Internet enabled collaboration platform to manage all their transportation activities.

Vision: The Supply Chain in 2020...

Imagine the Cargo Supply Chain in the year 2020 for shipments similar to these:

• Valuable pharmaceutical products need to be transported from Xiamen, China via Amsterdam to Berlin. Before the products can begin their international movement they need to be transported from the production factory to Xiamen.

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• At the same time, new laptops need to be shipped from Xiamen, via Amsterdam, to several destinations in Europe.

• The producers of the laptops and the pharmaceutical products ask the same freight forwarder to arrange their shipments, including final distribution.

• The forwarder arranges for a trucking company to pick up the goods and for an airline to transport the goods to Amsterdam.

• In Xiamen all shipments are consolidated for air transport.

Shippers, Consignees and Logistic Service Providers with transport needs like those above, meet each other in a collaboration space similar to Linked In or Face book to find potential logistics partners. Operational performance of the service providers is visible to everybody, and different parties can decide if and how they want to do business with each other.

All the necessary operational shipment information (e.g., time planning, specific handling conditions, contact persons, etc.), as contractually agreed to, is immediately available to all authorized partners at the same time. The freight forwarder and airline also have real time production information available from their suppliers in order to make optimal (asset) plans, and assure a predictable, on time delivery, conforming to the wishes of the customer as stated in the contract. While trucking to Xiamen a roadblock is encountered. With this new technology, information can automatically be transferred to the planning department of the forwarder and airline, without a need for phone calls and feedback from the person in the field. The forwarder and airline can use the integrated planning services provided through the collaboration space to create a new plan based on this event and optimize their flows while still meeting customer contract obligations.

This is an example of what collaboration could look like in the future. All parties involved benefiting in a "win-win" fashion.

Supply Chain Management today, what are the challenges?

An efficient international transport and logistics network is critical for sustainable growth in global trade.

Current problems, such as limited visibility of transport processes and events, closed supply chains and highly manual processes, cause inefficiency, shipment delays and raise trading costs.

Since transport and logistics activities account for between 10% and 20% of a country's Gross Domestic Product, an efficiency increase in these activities can improve a country's competitiveness.

The transport and logistic industry has made great strides improving its efficiency. However, limitations in technology, transport infrastructure and regulations have created significant barriers to future improvements.

Project Goals & Support

Overcoming these barriers requires further developments in **collaboration between all supply chain partners.** New **information and communication tools are needed** to support the supply chain partners and to rapidly assemble collaborative logistic networks that can efficiently and effectively prepare and execute international trading activities.

Under the European Union's 7th research and development funding program and the Future Internet Public Private Partnership (FI PPP) element of that program, a consortium of supply chain service providers and users have taken up these challenges. **The Finest project has taken as its challenge the design of a next generation collaboration and integration platform for supply chain operations.**

The Collaboration and Integration Platform

The main goal of Flnest is to create a platform that supports collaboration between organizations. This platform, with relevant data and collaboration software (e.g., planning software to support all players in a shipment process), will be available via "the cloud" over the Internet. Finest uses collaboration and service models that allow the demand and supply sides of logistic services to determine together which applications they want (and need) to use. By facilitating this type of collaboration, the service providers can build a configuration of collaboration services from cloud based tools that best fits their needs.



The features of the Finest platform are:

• Data and information availability via the collaboration hub, facilitating communication and collaboration between supply chain partners

• Contract Management functionality, which supports service provider selection, contract negotiation & agreements, as well as online operational monitoring of contractual aspects.

• Event Monitoring: Determining critical milestones in the supply chain process, monitoring them via actual status information, and sending signals when deviations occur.

• A transport (re-)planning module that helps to ease and improve the creation of supply chains and the modification of plans when deviations occur (e.g. traffic jams, thunderstorms, etc.)

The supply chain partners will experience the following benefits:

• Better alignment between partners due to an end-to-end view of the supply chain instead of only a part of it. This reduces cost and improves reliability.

• Better decision making due to better data availability and real time information.

• Higher transport asset utilization by better planning, due to more transparency.

• A reduced environmental footprint due to better asset utilization.

• Improved service to all parties in the supply chain by better anticipating deviations.

• Fulfillment of business contracts by better sharing of operational contract information and monitoring.

• Easy access to the data and tools via a cloud solution. Partners do not need to run an IT infrastructure because Flnest uses a cloud solution (Software as a Service – SaaS).

• More flexibility and scalability in necessary applications for supply chain partners.

Who is involved?

To assure a solid solution, partners from business as well as from IT are involved.

Kuehne + Nagel, Tyrholm & Farstad, NCL Shipping, AF-KLM Cargo, Arçelik and the Port of Alesund are involved in generating the business requirements for the project and validating the value of the solutions for the industry.

KOC Sistem, Marintek, SAP, IBM and the University of Duisburg-

Essen are involved in developing the right technological solution.



Adoption of the Flnest concept: We invite you to think with us

Besides creating the technical solutions, the adoption of this concept within the transport and logistics domain is very important. During the entire project ideas and draft solutions will be validated by organizations other than the project partners to create a basis for adoption by the industry.



About Finest

The efficient operation of international transport and logistics networks is a critical success factor for sustainable growth in global trade. Inefficient operation creates barriers to trade by causing shipment delays and raising trading costs. Since transport and logistics activities account for 10% to 20% of a country's Gross Domestic Product, increases in the efficiency of these activities can dramatically improve a country's competitiveness. In addition, environmental impacts resulting from the operation of transport and logistics activities are significant, so any improvement in efficiency within a logistics network positively contributes to sustainability objectives.

While the transport and logistics industry has made great strides in attempting to improve its efficiency, limitations in technology, transport infrastructure and regulatory regime incompatibilities have created significant barriers to future improvements. Overcoming these barriers requires new information and communication technologies and tools that allow organizations to rapidly assemble collaborative logistics networks that can efficiently and effectively execute international trading activities. The Future Internet, with its promise of ubiquitous operation and information access, provides a potential platform for overcoming the limitations of current ICTs.

Building on the proposed capabilities of the Future Internet being developed under the European Union's Future Internet Public Private Partnership program (FI PPP), the Flnest Use Case project is designing a collaboration and integration platform for the transport and logistics industry.

We invite you to engage in the development of this concept and share your thoughts with us. To contact us please contact **Rod Franklin, the project coordinator of Finest,** at **rod.franklin@kuehne-nagel.com**

