

FUTURE LOGISTICS PLATFORMS Tends in logistic optimization

25th Anniversary of Europlatforms – May 10th 2017

Challenges

- 1. DIGITALIZACION
- 2. NEW ANALISYS OF LOGISTIC CHAIN. OPTIMIZATION
- 3. SEA PORT EVOLUTION. INLAND CONTAINER TERMINALS

The European Commission defined a strategy of digitalization of transport services.

Digital Transport and Logistic Forum (DTLF), where Europlatforms is member.

Objectives:

- Standardization of digital documents in transport
- Create a clime of trust
- Recognition of e-documents
- Access to data
- Infrastructure
- New Business Opportunities

PRESENT SITUATION

- Defining information and documents: What information is needed to have?
- Defining standards of interchange of data:

 Using existing technologies and projects
- Optimization of cargo flows:

How to integrate the data information and the cargo flows over all different transport means?

- Future of transport. Opportunities to Logistics Platforms
 - Truck Platooning
 - Syncromodality



TRUCK PLATOONING

- Platoon of trucks following the first truck
- Constant speed
- Costs savings (truck drivers, less consumption, less emissions, etc)
- At present, under investigation, done several tests From Sweden to Germany



TRUCK PLATOONING - OPPORTUNITIES

- First testing offers challenges and opportunities
- Related with Logistic Business the detected blind spot of this project is the needed of haul length haul to diversion/detours to/from platooning.

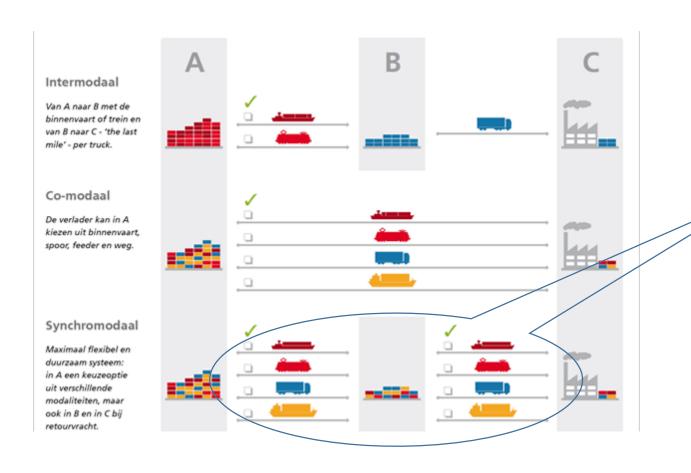
LOGISTICS BUSINESS	
Challenges and open questions	Identifying and guiding trucks that could meet-up together to dynamically form an ad-hoc platoon System cost and business case for SAE Level 1 or 2 platooning Platooning service provider to execute platoon formation from differing fleet-owners and brands Certification of trucking companies and drivers to promote confidence Logistics process integration to adapt to platooning (routing, inventory management, warehouse operations) Promote business benefits: explain the value of platooning Decide on the best method of platoon formation: scheduled or ad-hoc platooning (or a combination of both)
Blind spots detected	Minimal haul length required to efficiently allow diversion/detours to form platoons Use real-time data logistics control towers for ad-hoc platoon formation Urge shippers and carriers to make platooning more attractive by consolidating more loads in the same direction

Logistic Platforms can offer a solution to this blind spot





SYNCROMODALITY



- Select the best transport mean in any moment
- Need means interchange areas
- Logistics Platforms can be a solution of the needed infrastructure

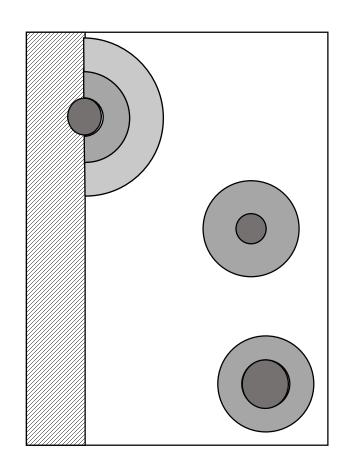
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EVOLUTION OF LOGISTIC CHAIN ANALYSIS (I)

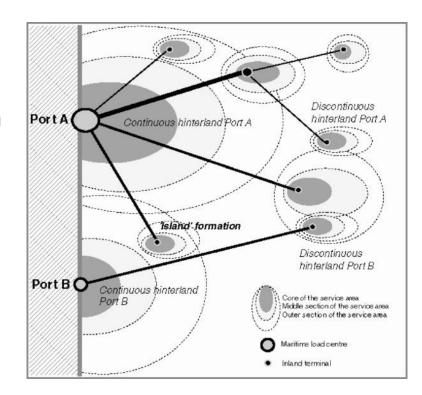
- In 20TH Century factories and sellers contract this part of the production to external logistic operator.
- Don't analyze the logistic chain, only the contract compliant
- Infrastructure are managed for isolated organism:
 - Sea Port Authorities
 - Private/Public rail ways companies
 - Private/Public development of Logistic Platforms
- Hinterland of any of this organism is analyzed independently



EVOLUTION OF LOGISTIC CHAIN ANALYSIS (II)

- In 2005, Noteboom and Rodrigue present a study finding the evolution of the hinterland, making, for first time the relationship between the hinterland of ports and inland areas.
- Organism start to think in expansions in other parts of logistic chain, specially sea ports, starting to:
 - Developing logistics areas
 - Developing road and rail infrastructures

- The transport infrastructure start to configure a spider web.





WROPLATFORMS New analysis of logistic chain

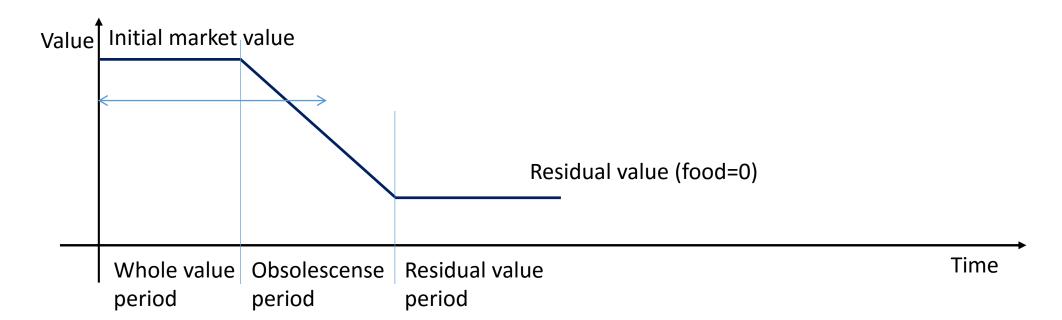
EVOLUTION OF LOGISTIC CHAIN ANALYSIS (III)

- Last years and trending
 - Factories and sellers realize logistic transport is a very important part of the fabrication process because it is an IMPORTANT COST of final product
 - Adapt the logistic process to the product identity means an important advantage in front to their competitors
 - Examples:
 - Amazon: cheap, fast and flexibility from home
 - Inditex: fashion is a perishable product
 - Aldi / Lidl: fresh products to gain new customers
 - Understand the value of the time means a great advantage!!!



EVOLUTION OF LOGISTIC CHAIN ANALYSIS (III)

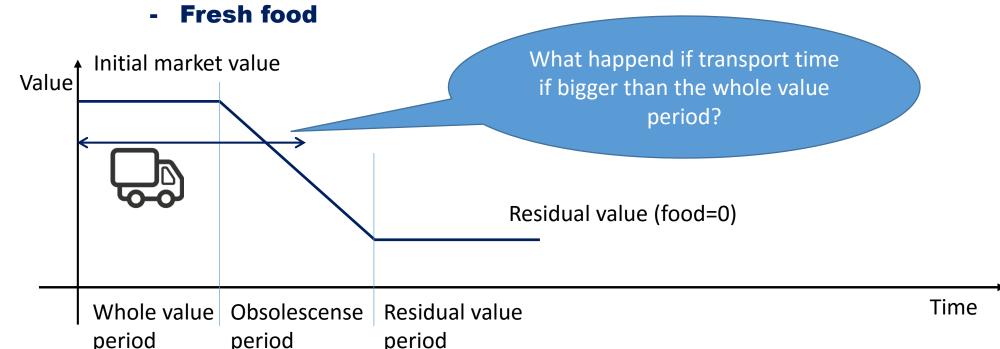
- What is the value of the time?
 - Perishable goods: Goods which its market value depends on the time. For example:
 - Fashion
 - Technology (but not all!)
 - Fresh food





EVOLUTION OF LOGISTIC CHAIN ANALYSIS (III)

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EVOLUTION OF LOGISTIC CHAIN ANALYSIS (III)

NEW LOGISTIC

- The new logistic is defined by companies related to their market strategy and their products.
- New technologies (traceability) and time are critical
- Flexibility in investments is very important in order to adapt to the continuous market change.

LOGISTIC PLATFORMS ARE A KEY ACTOR IN THIS NEW POINT OF VIEW:

- Reduce needed investments
- Reduce operative costs
- But... future customers are not logistic operators...

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Seaports

United Nations Conference on Trade and Development (UNCTAD) defined the Seaports as:

"Interfaces between several modes of transport, and thus they are centers for combined transport."

In 2004 in the document called "Assessment of a seaport land interface: an analytical framework", the UNCTAD described the importance of the logistics and the cost of logistics, including

"Impact of Modern Logistics on Port Operations Management"

PORTS ARE (AN IMPORTANT) PART OF THE LOGISTIC CHAIN



Evolution of ports

1st Generation:

- Before 60's
- Loading and Unloading services
- Connection between maritime and terrestrial
- Small integration and independents activities

3rd Generation:

- From 80's
- Container traffic
- Commercial Platforms
- Logistics and distribution services

2nd **Generation:**

- From 60's to 80's
- Loading, Unloading and warehousing services
- Conection between maritime and terrestrial
- Cargo transformation services
- Commercial and industrial services

4rd Generation:

- Last years
- Network ports
- Multimodal activity
- Logistics platforms
- Commercial and Management units
- New technologies,
- Inland expansion strategy



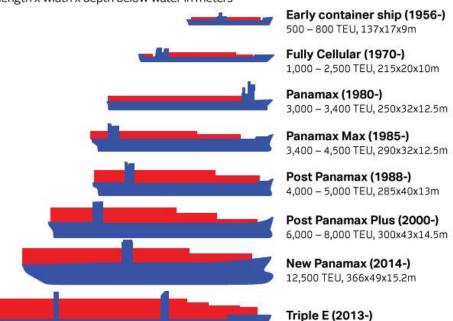
Key Changes in last years

18,000 TEU, 400x59x15.5m

GIGANTISM

Evolution of Container Ships

TEU: twenty-foot equivalent units, length x width x depth below water in meters



ADAPTED WITH PERMISSION FROM THE GEOGRAPHY OF TRANSPORT SYSTEMS, JEAN-PAUL RODRIGUE

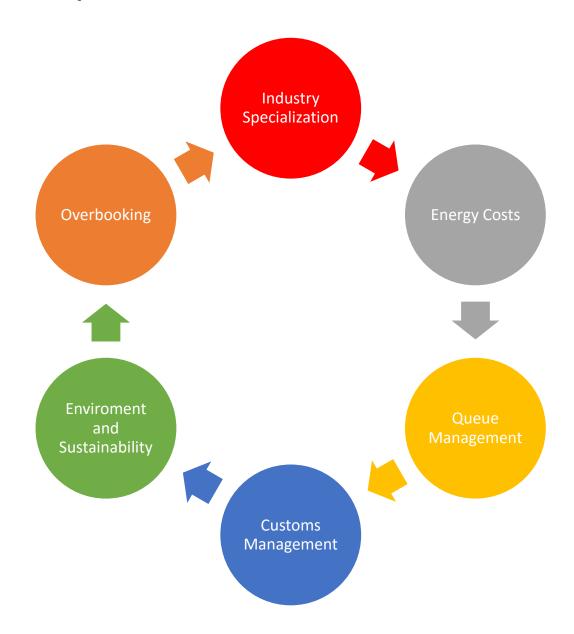


- Reducing the Numbers of Ports
- Enlarging the last mile
- Appearance of new concepts:
 - Motorways of the sea
 - Multimodality
 - Dry Ports
 - Syncromodality





Risk in port terminals



Trends

Maersk: Stronger integrated container, logistics and port business

Transport & Logistics

A stronger and more integrated container, logistics and port business that can deliver profitable growth, improved products and a much better customer experience driven by digital



 New growth initiatives – building on combined strength of Transport & Logistics - will be launched



- APM Terminals to focus on implementation of new terminals currently under construction
- Focus on cost, utilisation, productivity and driving synergies with Maersk Line.
- Win new profitable third party business



- Maersk Line to grow market share organically on a consistent basis
- Accelerate growth and drive consolidation through acquisitions if the opportunity arises
- Significant investment in digitisation



- Damco to continue to execute its turnaround plan
- Pursue renewed growth in 3PL/4PL business
- Collaborate closer with Maersk Line driving sales leads and volume to each other

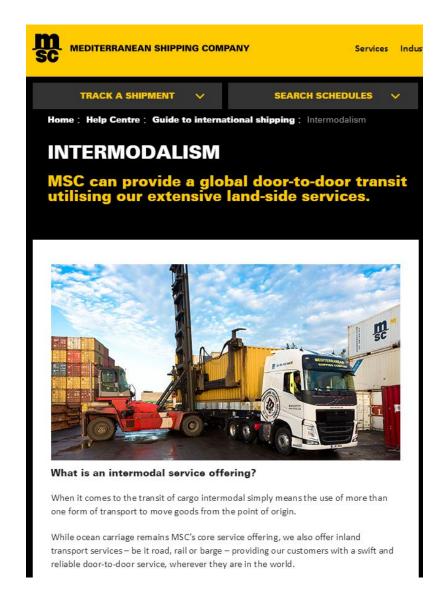


- Svitzer to pursue opportunities in cooperation with APM Terminals and MaerskLine
- MCI and Maersk Line to jointly optimise container production planning, and development of new technology

Combined operational networks, IT and functions will drive synergies expected to generate ~2pp additional ROIC



MSC: Intermodalism.





Trends

CMA-CGM: Intermodal & Greenmodal. - New INLAND TERMINALS

CMA CGM Intermodal services and transports

A worldwide inland network for a global solution



To create an efficient inland network, CMA CGM has significantly invested all around the world in **own** barges, land based infrastructures, ports and inland terminals and intermodal transport.

By combining all the inland transport chain with CMA CGM maritime services, the Group guarantees transcontinental and regional connections without any break. This wide coverage provides a global solution, as well as a green and sustainable service.

3.0 million TEUs (not including APL)

54% inland transport on ecological mode (Rail & Barge traffic - not including APL)

140,000 inland points (not including APL)

97%
service level
best quality of inland service in
Europe (not including APL)



TUROPLATFORMS Inland Terminals



So, the way is defined... concentration in the sea and inland operations.
Winner mix







ROPLATFORMS Inland Terminals

There is a wide bandwidth to the definition of a "marine inland terminal", but

"Inland terminal is a location connected physically and technologically with a sea port, to help in the import, export, inspections and add value services offered by the sea terminals"

Developing an Inland Port changes the playing field

- > Infrastructure responsibility goes beyond the traditional port location
- > This can in some cases cause "some heartburn"
- However, it is also an opportunity for traditional "non-port" supporters to recognize the strategic importance of a port

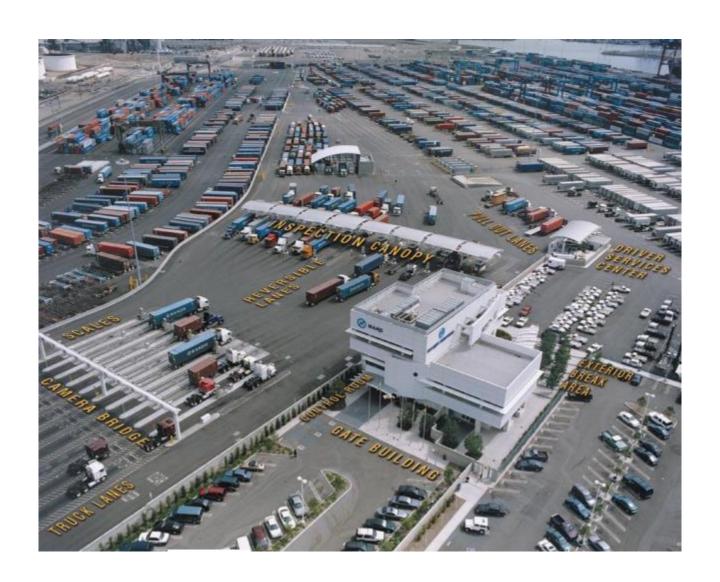
An inland port is "ripe" for P3 opportunities

- > "Skin in the Game".....if done in a comprehensive fashion, many of the industry stakeholders "want the fame"
- > And the \$\$\$\$

American Association of Port Authorities



Inland Terminals



Advantages:

- Velocity
- Capacity
- Dwell
- Throughput
- Appointments
- Customer Requirements
- Profitability

Where?

Logistics Platforms:

"Centre in a defined area within which all activities relating to the transport, logistics and distribution of goods, both for national and international transit, are carried out by various operators on a commercial basis."





What's the way to follow?



Q: What is the best choice for the logistic?

A: It depends



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