

International Logistics Management



- dr Marian Krupa

AGENDA:

1. **Introduction to the International Logistics Management**
2. **International Supply Chain Management (SCM)**
3. **IT and International Logistics Management – ERP software overview**
4. **International transportation systems**
5. **International logistics structures and networks management**
6. **Strategic and operational information management in Logistics - towards Global Business Intelligence.**
7. **International Logistics Management – case study**

1. Logistics Management concept

logistics – management – logistics management



Logistics ?

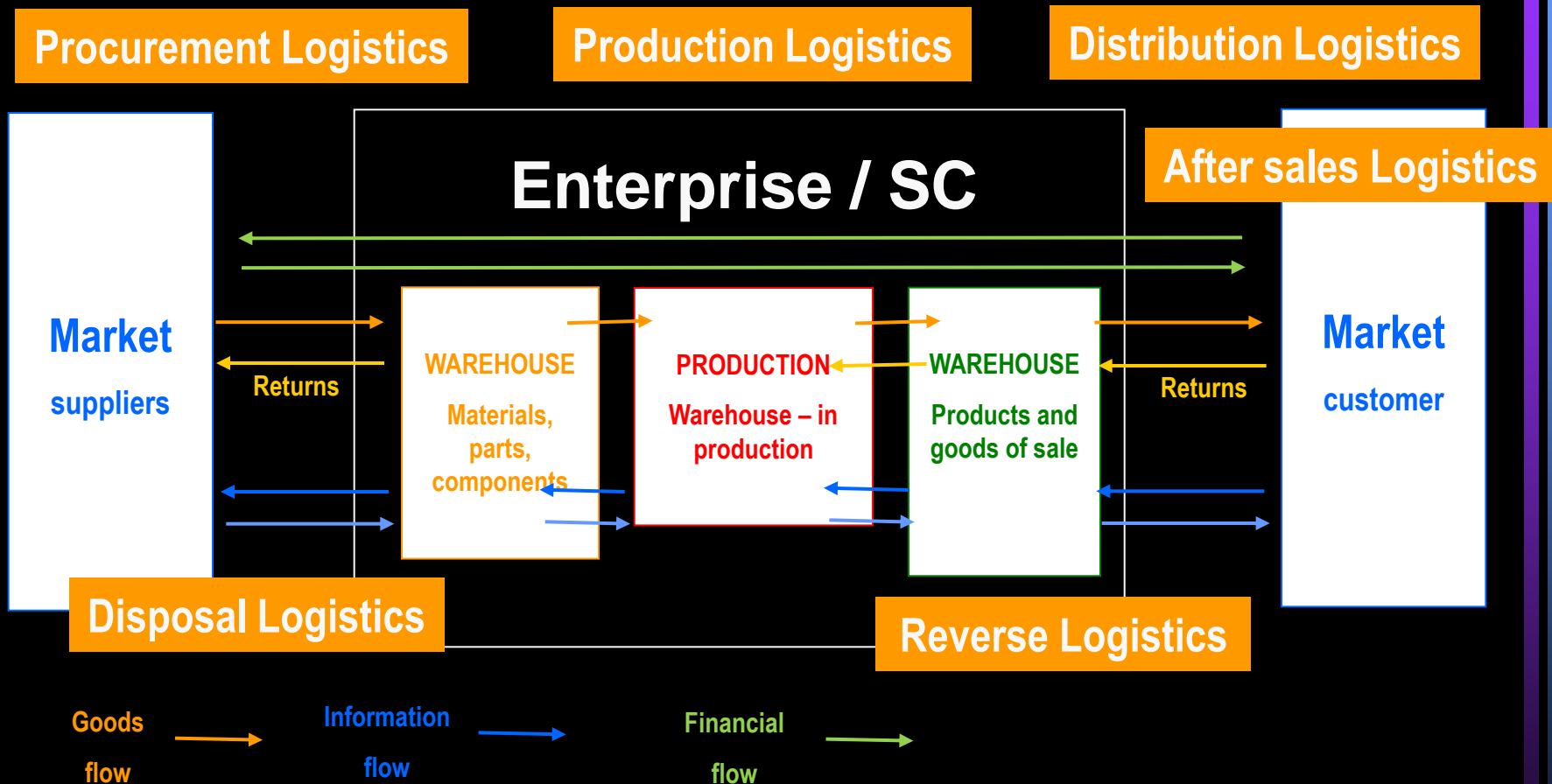
Logistics: origin



- ✓ The term logistics comes from the beginning of 19th century, from French word „logistique”.
- ✓ The first time **the term** „logistique” is used in the military literature it is in 1830, what it meant *major-général de logis*.
- ✓ The **first logistic group** in military was developed during the so called the First Polish War (1807) in Ostróda by Napoleon Bonaparte.
- ✓ Logistics was a military term – **the organisation of moving, lodging and supplying troops and equipment.**



Logistics: road map



Source.: P. Blaik, *Logistyka*, PWE, Warszawa 1996, s. 45.

Logistics fields

Logistics – 8R (right) Rule, getting

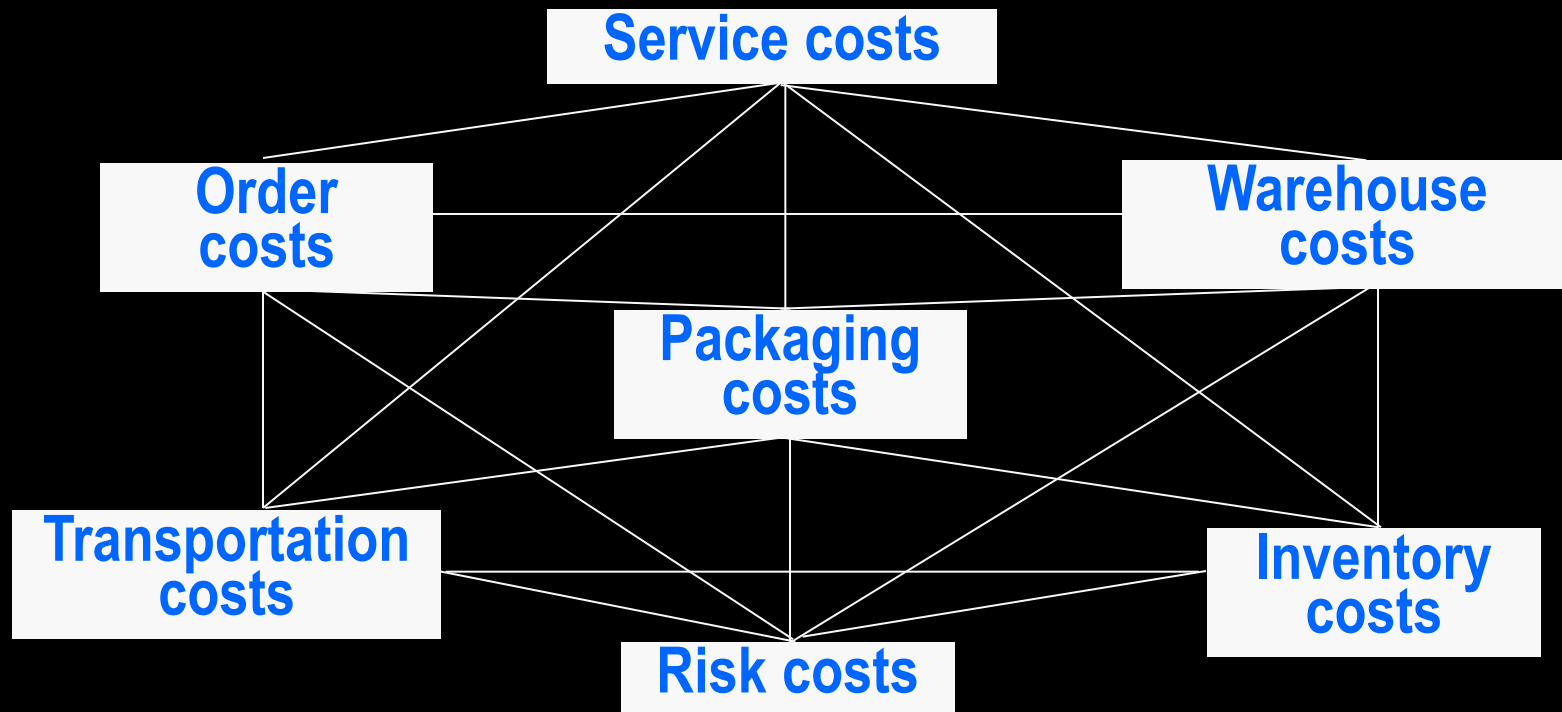


1. the right product
2. in the right quantity
3. at the right quality,
4. in the right place,
5. at the right time
6. for the right customer
7. at the right cost
8. **in the right way** (to cause as a little damage do the environment as possible.
9. ?

Logistics: **total cost model**



Optimization dilemma:



Logistics: **total cost model**



Optimization dilemma:

When you decrease the costs in one area of business activity:



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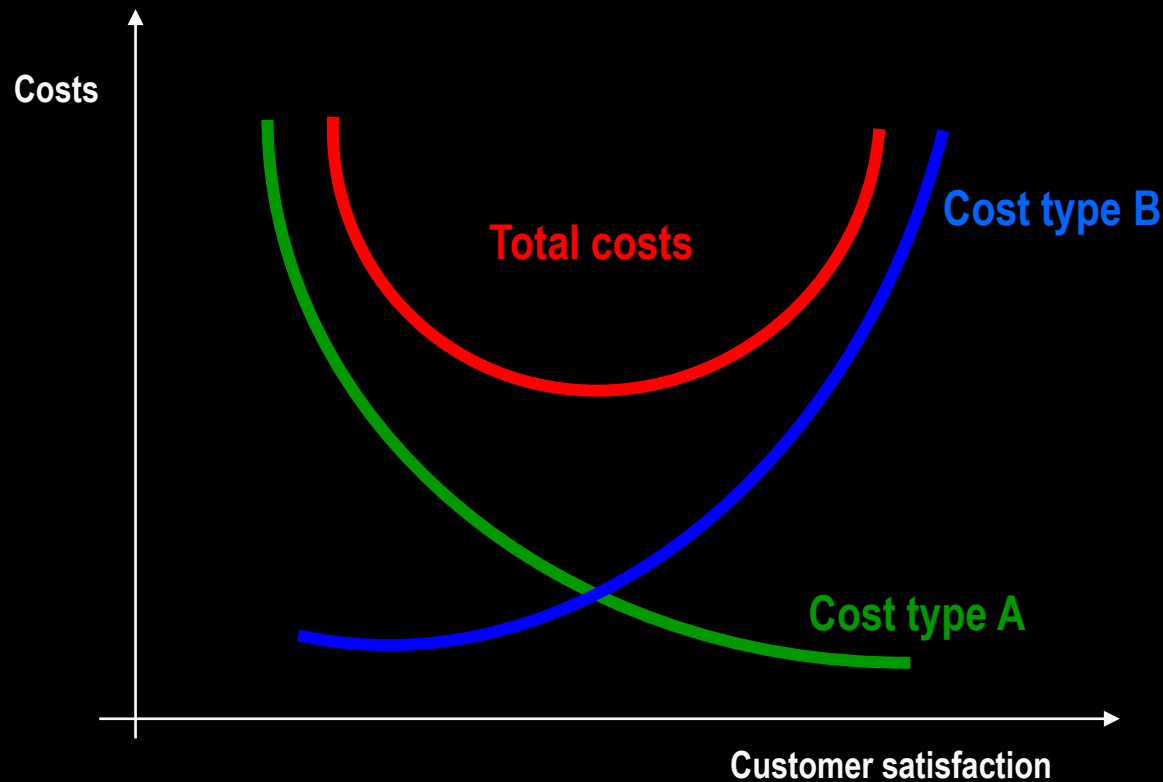
You create extra costs in another:



Logistics: **total cost model**



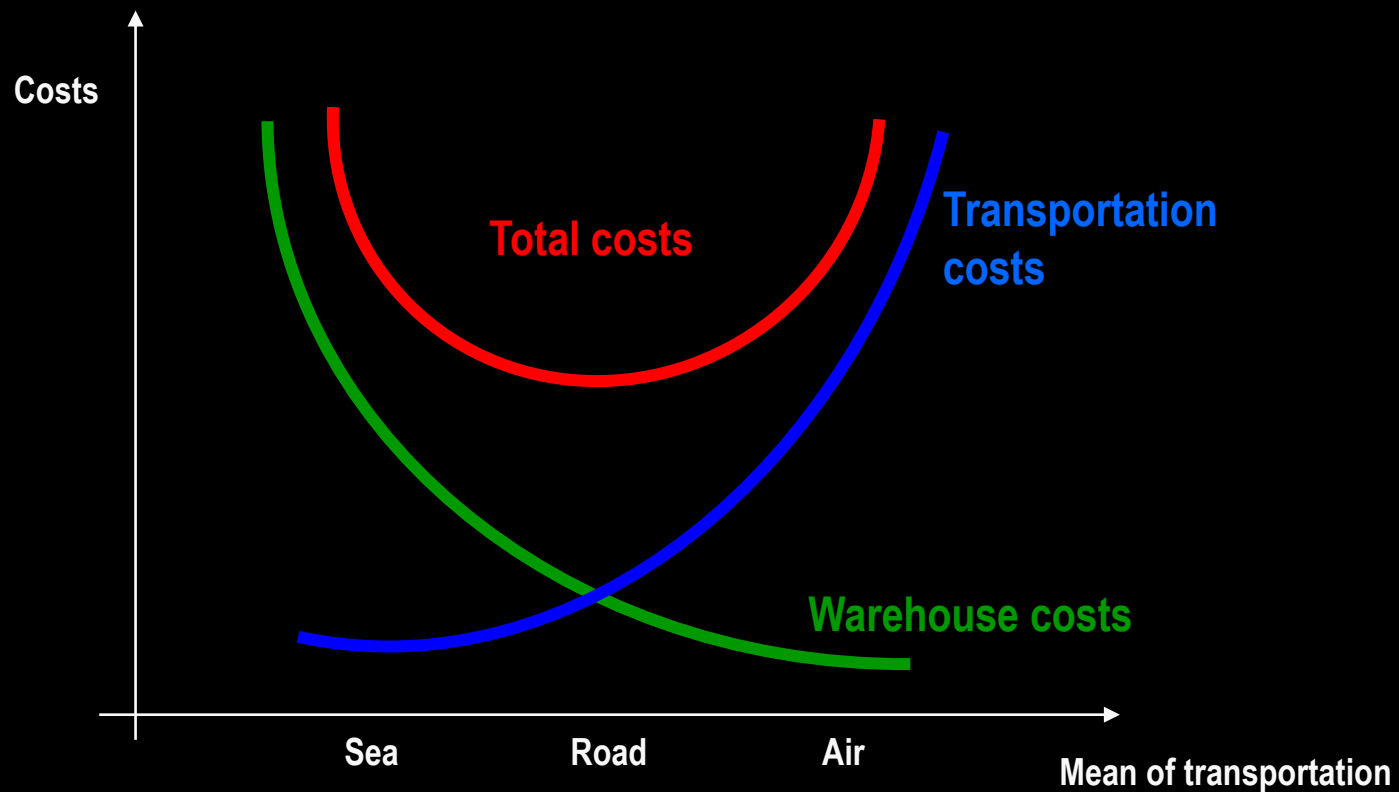
Optimization model: cost A and cost B



Logistics: **total cost model**



Optimization model: transportation vs. warehouse costs and mean of transportation



[W. Szczepankiewicz, Logistyka marketingowa, AE w Krakowie, Kraków 1996, s. 14].

Logistics: **definition**



What is logistics? (1/2)

- ✓ The detailed coordination of a complex operation involving many 1) people, 2) facilities, or 3) supplies
[Oxford Dictionary].
- ✓ **The management of the flow** of resources, between the point of origin and the point of destination in order to meet some requirements, for example of customers or corporations
[Wikipedia].
- ✓ **The coordination and optimazation of 1) physical goods (people), 2) financial flow and 3) information flow**
[M. Krupa].

Logistics: **definition**



What is logistics? (2/2)

- ✓ Logistics is concerned with the **organization, movement and storage** of material and people.
- ✓ The domain of logistics activities **is providing customers with the right product, int the right place, at the right time (8R Rule).**
- ✓ The fundamental characteristics of contemporary logistics is its **holistic, integrated view** of all the activities that it encompasses.

Management ?

Management: **key questions**



- ✓ What is (logistics) management?
- ✓ Who are (logistics) managers?
- ✓ What do (logistics) managers do?
- ✓ What is a (logistics) organization?



Management: key questions



✓ **What is management?**

✓ **Coordinating** work activities so that they are completed **efficiently** and **effectively** with and through other **people**.

Robbins, Coulter, Management, Pearson/Prentice Hall, USA 2005, p. 7.

✓ **Wealth** creating activity.

✓ The **art** of using **human** and **material** resources to **produce and market** (sales and distribution) goods and **services**.

Archer, An Introduction to Canadian Business, McGraw-Hill Ryerson Ltd, Canada 1982, p. 450.

Management: key questions



✓ Efficiency and effectiveness in logistics?

✓ **Efficiency** is „doing things right” (economize, costs efficiency).

✓ **Effectiveness** is „doing the right think” (goal achievement).

✓ **Efficiency** – a measurable concept, quantitatively determined by the ratio of useful output to total input.

✓ **Effectiveness** – being able to achieve a desired result.

Management: key questions



- ✓ Who are managers?
- ✓ Someone who works with people through people for people.
- ✓ A person who is effective and efficient.
- ✓ A professional man/woman who knows the **methods and techniques** of management.
- ✓ Everyone...



Management: **key questions**



✓ **What do general managers do (1/2)?**

- ✓ **Make decisions – solve problems**
- ✓ **Take risk – create value**
- ✓ **Learn and teach others**
- ✓ **Deliver customers / stakeholders satisfaction**
- ✓ **Work and communicate with people**
- ✓ **Create visions and implement business strategies**
- ✓ **Plan, organize, direct & control day-to-day activities**



Management: **key questions**



✓ **Who do logistics managers do (2/2)?**

- ✓ **Sourcing and purchasing inputs**
- ✓ **Managing inventory**
- ✓ **Maintaining warehouses**
- ✓ **Arranging transportation and delivery**
- ✓ **Optimizing logistics infrastructure and resources**
- ✓ **Planning and developing IT infrastructure**
- ✓ **Preparing strategies, searching for new visions**
- ✓ **Developing business intelligence tools**



Management: key questions



- ✓ Who are logistics managers?
- ✓ A professional working in the field of logistics management is called a **logistician**.



Management: **key questions**



✓ Who do **logistics managers** do (job description)?

Logistics Manager

Logistics Manager
Wolverhampton
6 Month Contract
£20-£25ph

Position Purpose/Objective

The Logistics Manager will be responsible for all material movement to and from the production line including Goods Inwards, Kitting, Transportation and Shipping activities across the Wolverhampton site

Management: key questions



✓ Who do **logistics managers** do (job description)?

Essential Responsibilities

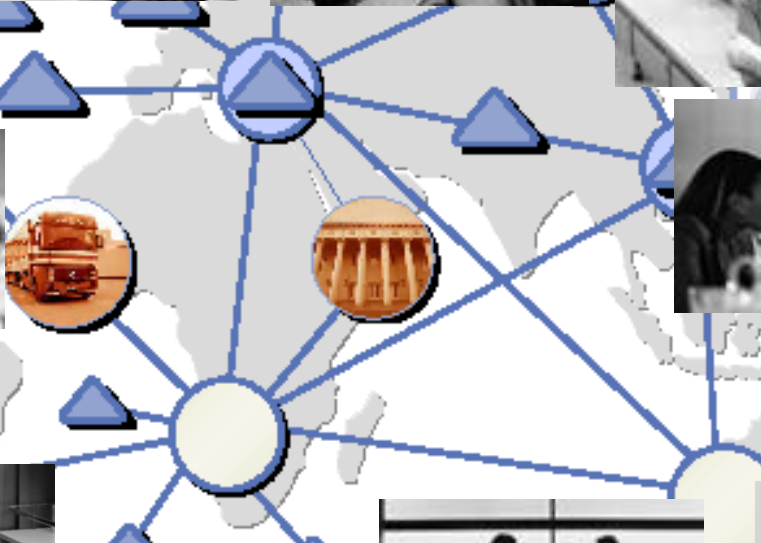
- *Establish and develop a team to drive and improve Logistics performance at the Wolverhampton site
- *Drive and improve common processes for Logistics management (Minimising required space, ensuring EH&S requirements are achieved, Bar coding etc)
- *Work with Operations and ACE teams to ensure Logistics processes are optimised to support Lean production, Kitting, TAKT time etc
- *Work with Inventory Team to Project Manage major Inventory reduction initiatives (i.e. VMI, Kanban implementation.)
- *Manage shipping and Freight forwarding contractors and drive for minimum cost solutions in-conjunction with supply chain
- *Lead logistics activities / initiatives associated with implementing the Porsche 'Line Back' concept
- *Work with export team to ensure that all shipments comply to regulations
- *Optimise / manage a strategic drop shipment process between Actuation Systems locations
- *Work with the SI&OP Director to continuously improve processes to increase performance
- *Manage sub contract logistics support staff (OCS)

Logistics Manager

Knowledge



A black and white photograph of a man in profile, looking down at a laptop screen. He is wearing a dark, patterned shirt. The background is blurred, showing what appears to be an office or classroom setting with other people and equipment.



Logistics Management

Logistics Management:



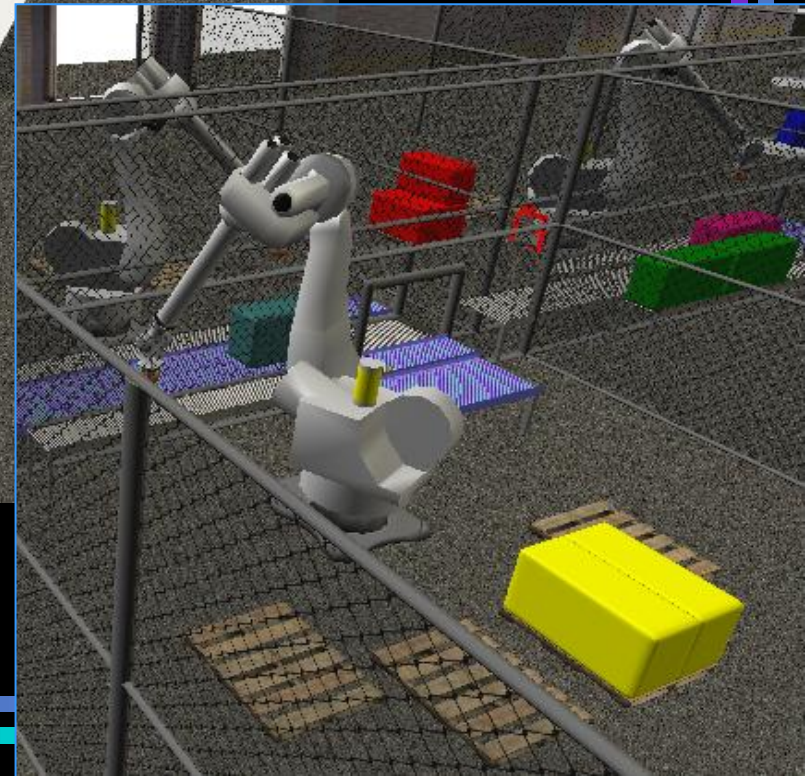
- ✓ **Logistics management** - the governance of supply chain functions (see Supply Chain Management).
- ✓ **Logistics management activities** typically include:
 - inbound and outbound transportation management,
 - fleet management,
 - warehousing management,
 - materials handling,
 - order fulfillment,
 - logistics network design,
 - inventory management,
 - supply/demand planning.



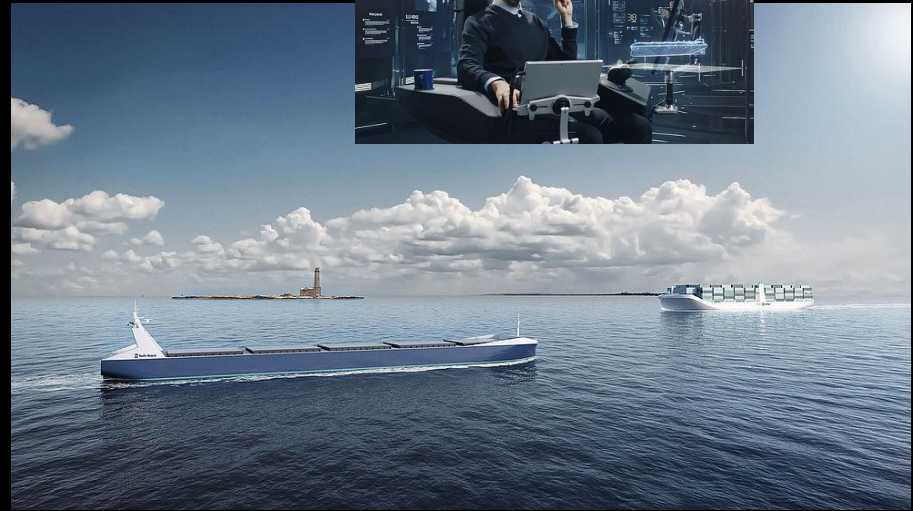
<http://searchmanufacturingerp.techtarget.com/definition/logistics-management>

Contemporary Logistics Management

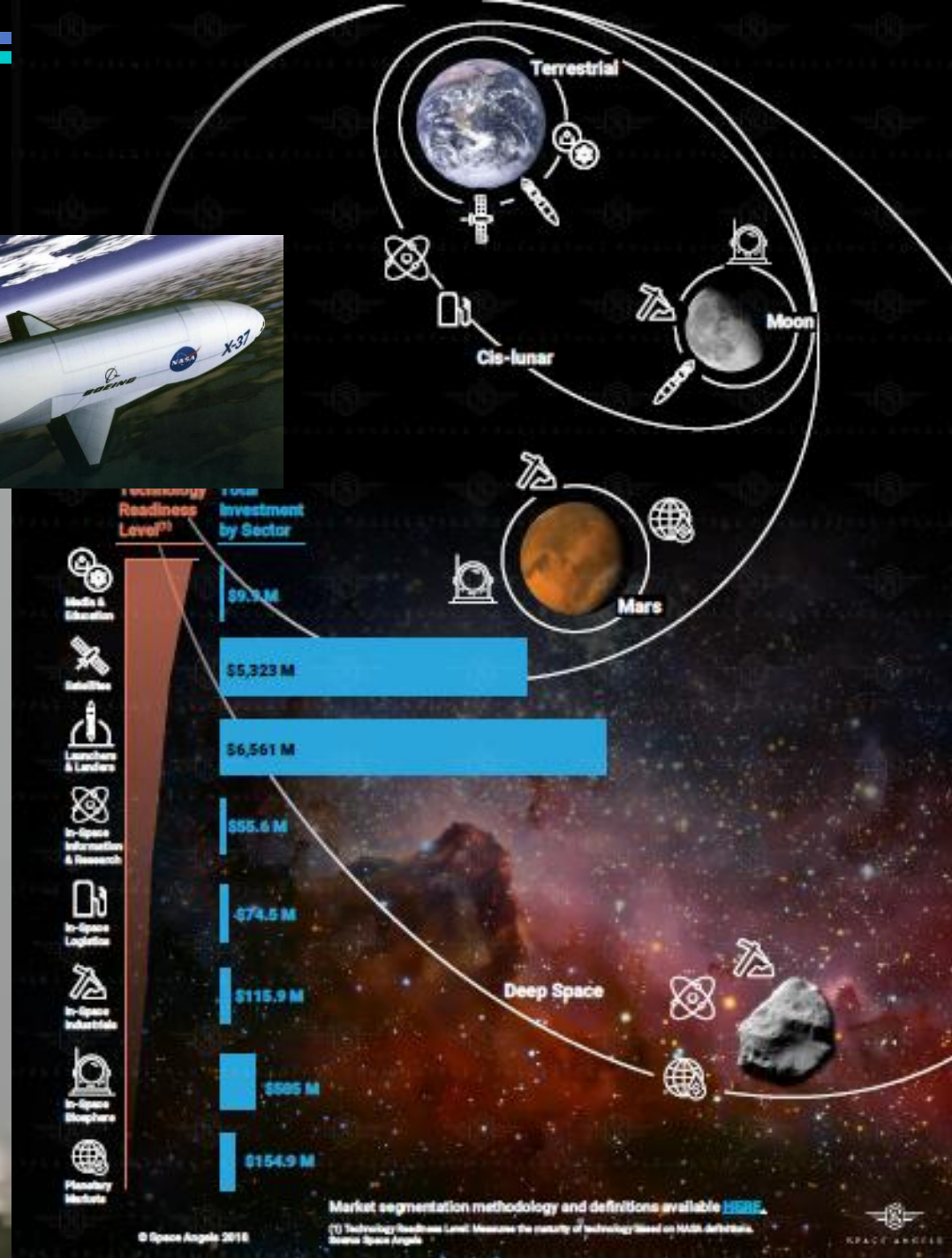
Simulation Software Solutions:



Self-driving / Autonomous transportation systems:



Space Logistics:



Questions ?



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Exam Questions (1):



- ✓ Explain origin and define term logistics.
- ✓ Why logistics concept is of an interest to manufacturers?
- ✓ Define best practices in area of logistics performance (KLPI).
- ✓ What are the benefits of deregulation of transport markets?