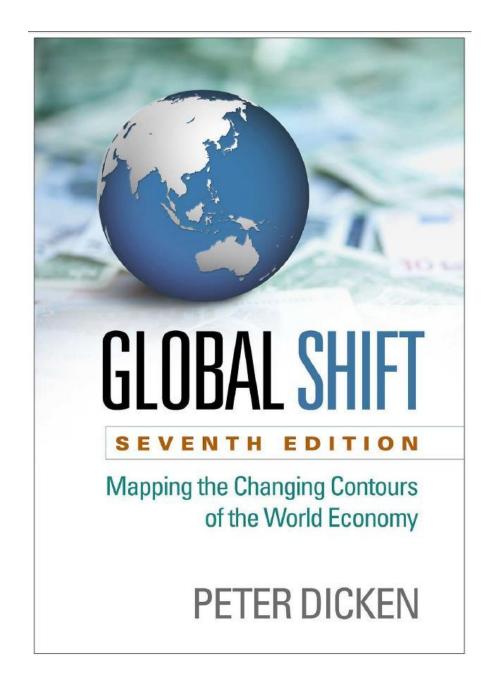
**Chapter Seventeen** 















### Technological Innovation and Logistics and Distribution Services

EDI – Eletronic Data Interchange:

transmission of large quantitities of data, like product specification, purchase orders etc., without paper.

Bar Code System and Radio Frequency Identificantion Technology: Allows a unique identity to each item Send instantaneous information from de point of sale to the warel Allows tracking goods



## Technological Innovation and Logistics and Distribution Services

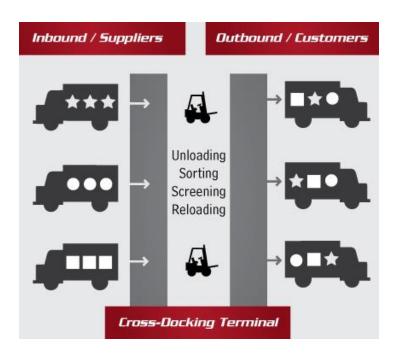
#### **Distribution Centers:**

Bar codes and associated software systems

High-speed conveyers with advanced routing and switching controls

Reliability and accuracy of laser scanning of incoming containers

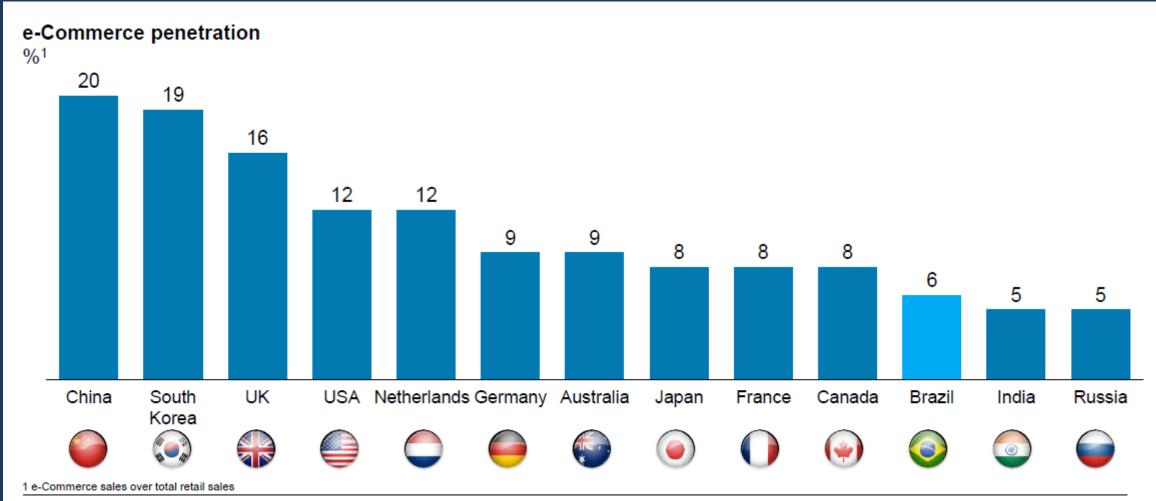
Increased computing capacities







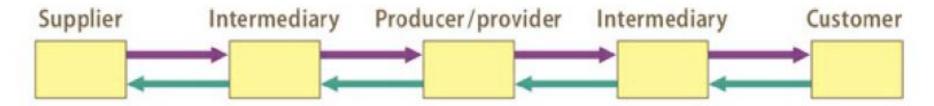
## E-commerce: a logistics revolution

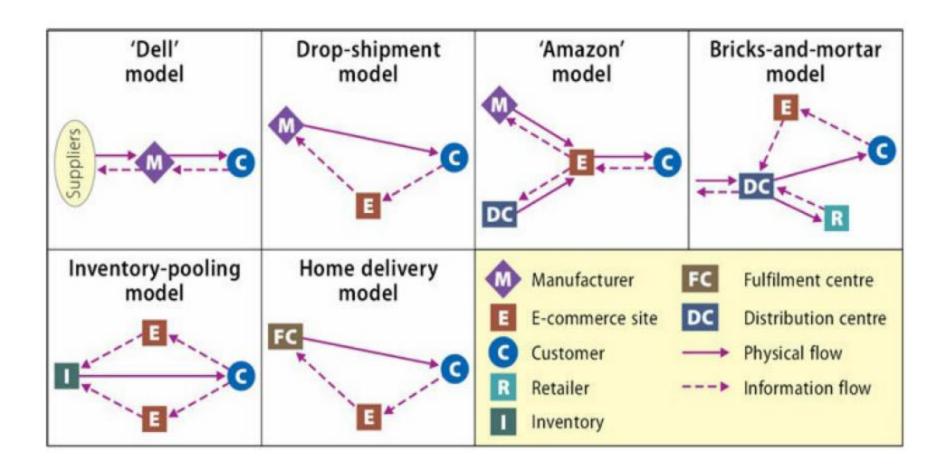


Source: Euromonitor (2017)

## E-commerce: a logistics revolution

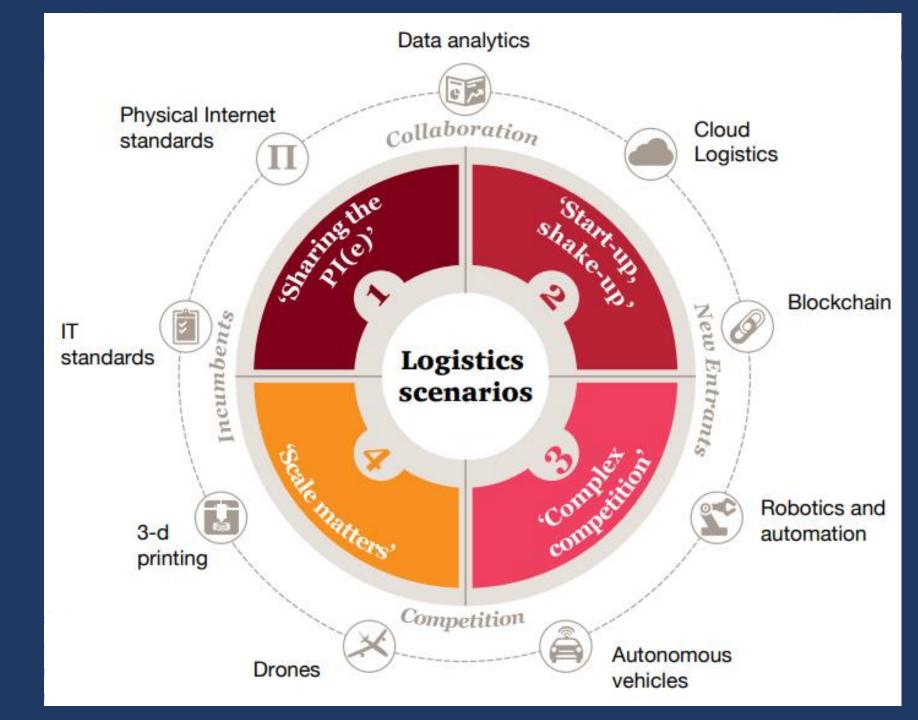
Conventional system







# What's next?



# The role of Estate: regulation and deregulation of logistics and distribution services

Until the earliest 1980s telecom and air transportation was very regulated and monopolized

For instance, in the 1970s, USA and UK had restricted landings between them

After globalization, things started to change

# The role of Estate: regulation and deregulation of logistics and distribution services

Late 1970s – US-UK bilateral agreement 1984 – end of AT&T monopoly (US)

Deregulation in telecom in Europe

1984 - NAFTA

1993 – Single European market

## Global logistics companies, Global trading companies, Global retailers

Asset-based logistics providers	Skill-based logistics providers	
<ul> <li>Major functions</li> <li>Warehousing</li> <li>Transportation</li> <li>Inventory management</li> <li>Postponed manufacturing</li> </ul>	<ul> <li>Major functions</li> <li>Management consultancy</li> <li>Information services</li> <li>Financial services</li> <li>Supply chain management</li> <li>Solutions</li> </ul>	
Traditional transportation and forwarding companies	Network-based logistics providers	
<ul> <li>Major functions</li> <li>Transportation</li> <li>Warehousing</li> <li>Export documentation</li> <li>Customs clearance</li> </ul>	Major functions  Express shipments  Track and trace  Electronic proof-of-delivery  JIT deliveries	



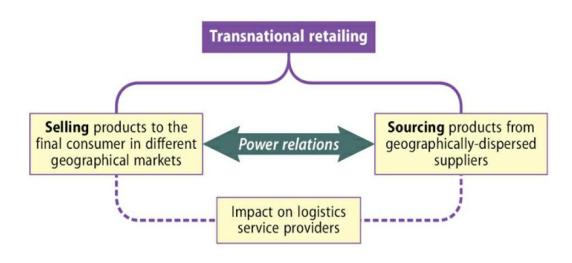




Management services →

## Global logistics companies, Global trading companies, Global retailers









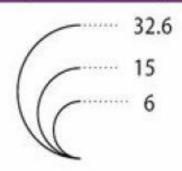
## TOP 50 WORLD CONTAINER PORTS

	Rank	Port	Volume 2016 (Million TEU)	
	1	Shanghai, China	37.13	
	2	SIngapore	30.90	
d	3	Shenzhen, China	23.97	
9	4	Ningbo-Zhoushan, China	21.60	
	5	Busan, South Korea	19.85	
	6	Hong Kong, S.A.R., China	19.81	
	7	Guangzhou Harbor, China	18.85	
ŀ	8	Qingdao, China	18.01	
	9	Jebel Ali, Dubai, United Arab Emirates	15.73	
١	10	Tianjin, China	14.49	
	12	Rotterdam, Netherlands	12.38	
	44	Santos, Brazil	3.60	
	source: world shipping council			

Singapore

Top 20 container ports, 2012 (million TEUs)

Angeles

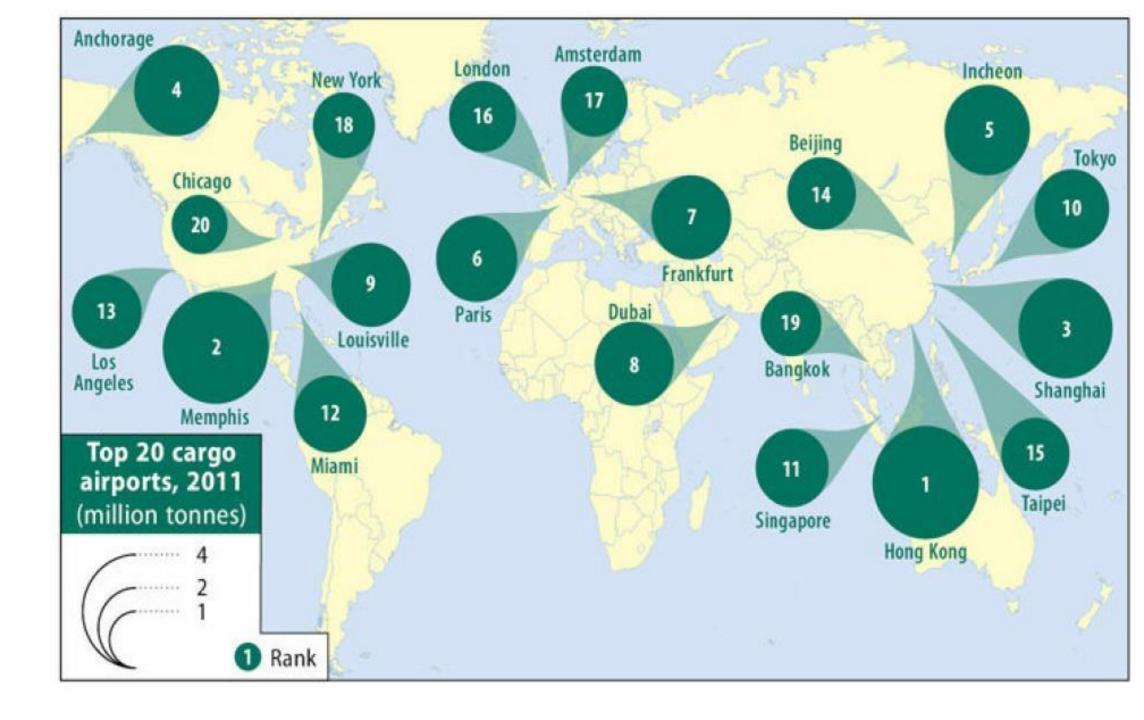


Rank 1 TEU = 1 20-foot container

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#### **Arthur Vieira de Moraes**

Professor de Finanças, Consultor e Apresentador do programa Fundo...



## Thank you!