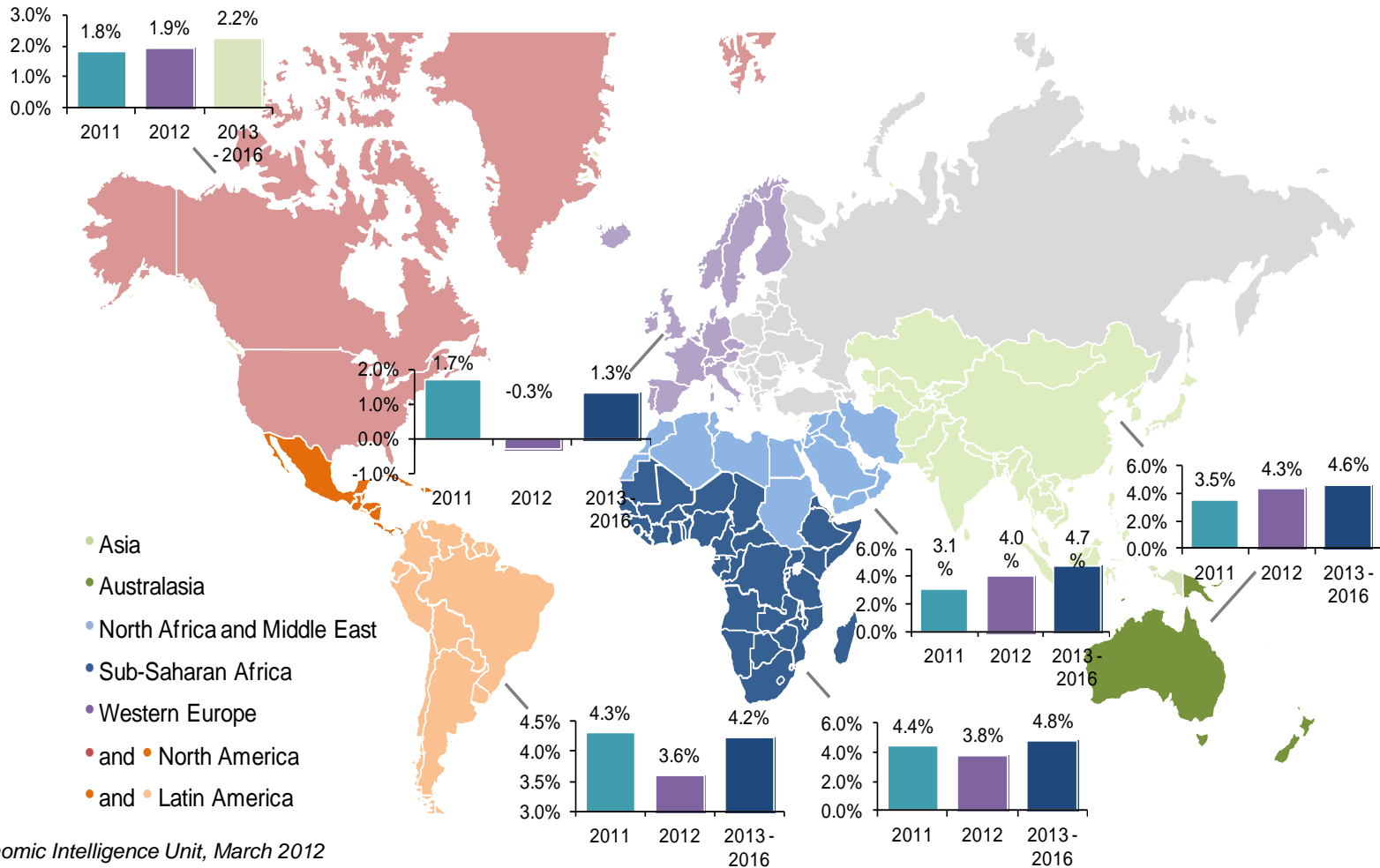


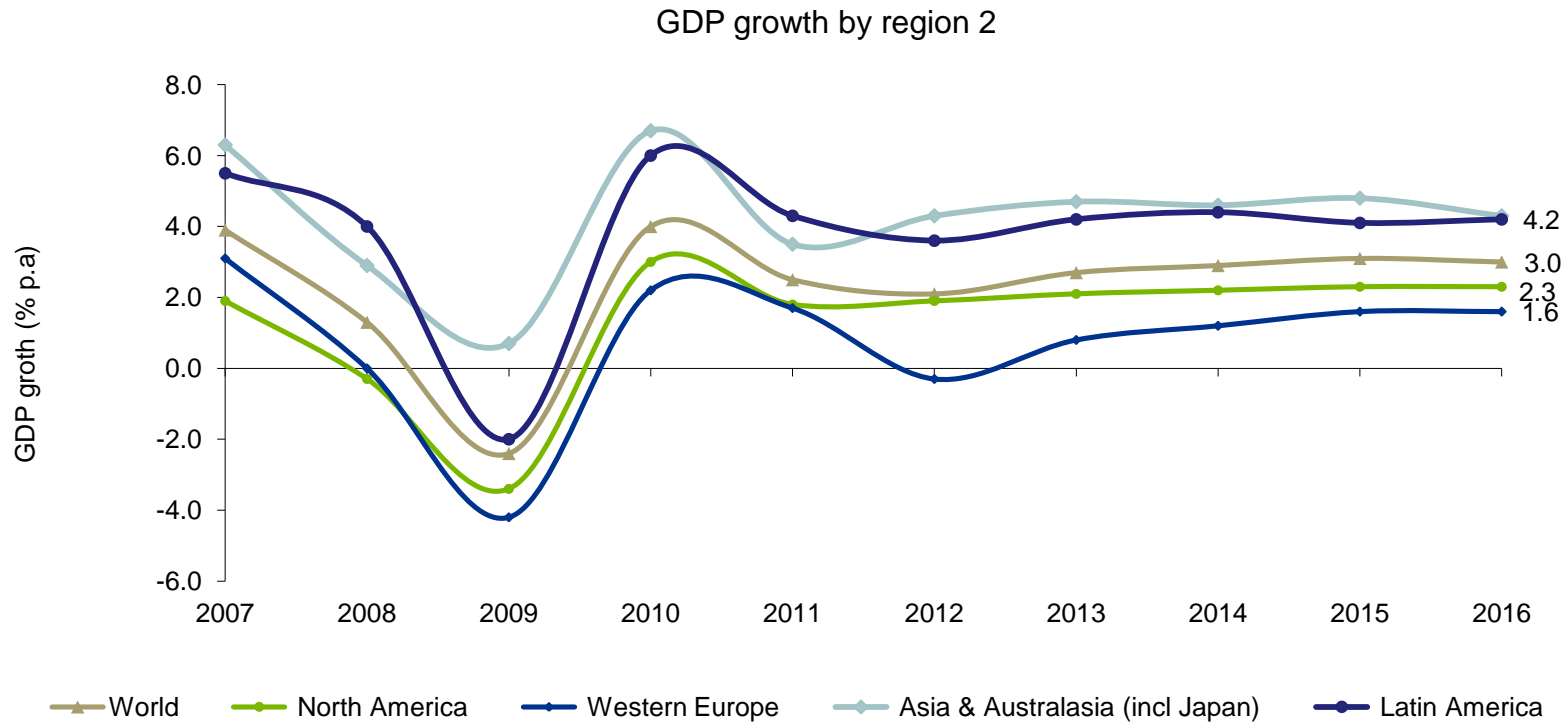
Economic Growth, Globalisation,
International trade Intermodal
transport containerisation dry ports .

Global outlook



Source: Economic Intelligence Unit, March 2012

Global outlook

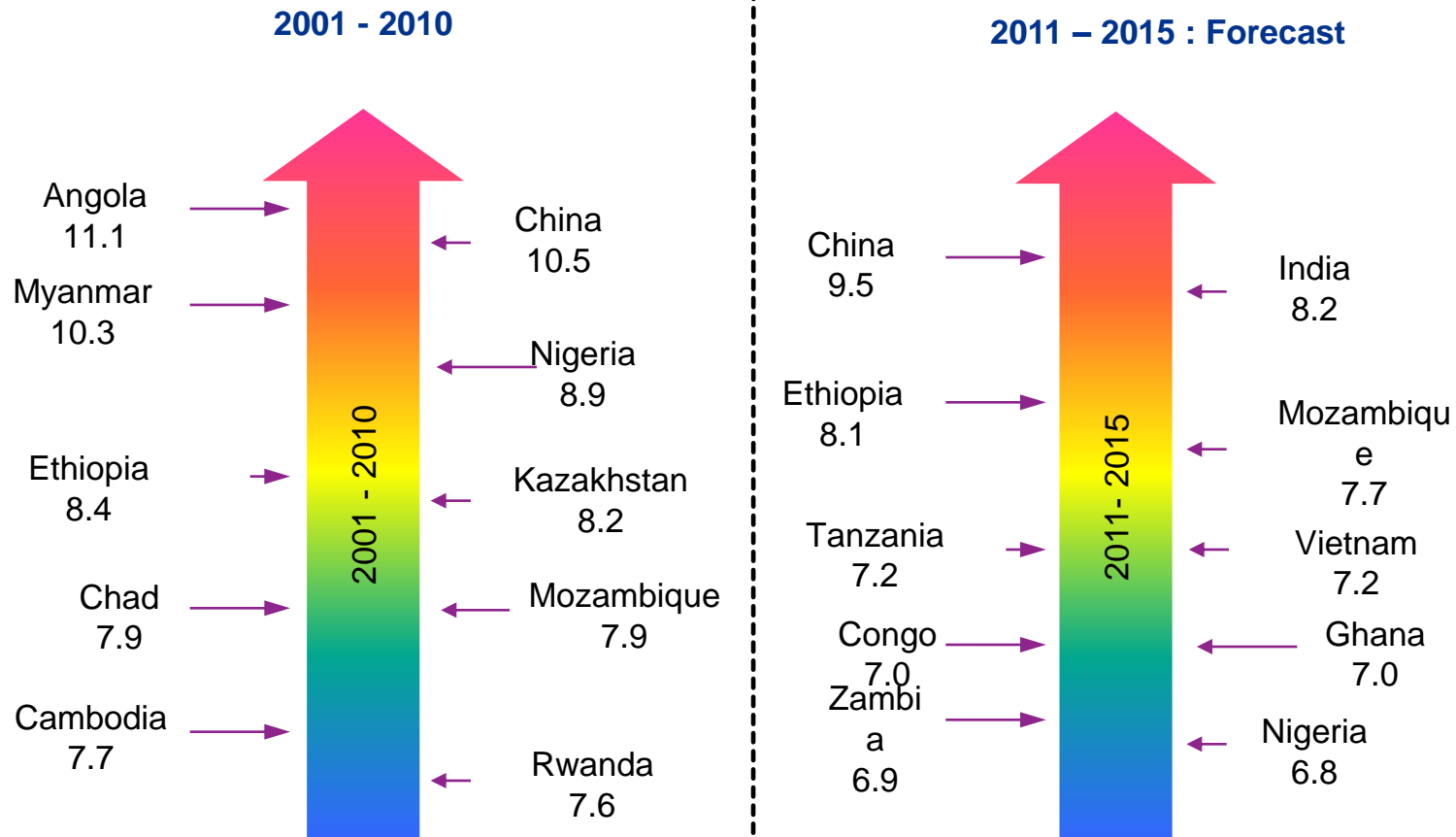


Source: Economic Intelligence Unit, March 2012

According to the Economist Intelligence Unit's (EIU) March economic outlook, world GDP is expected to grow by 2.1% on a market exchange rates basis in 2012, slowing down markedly from the previous two years.

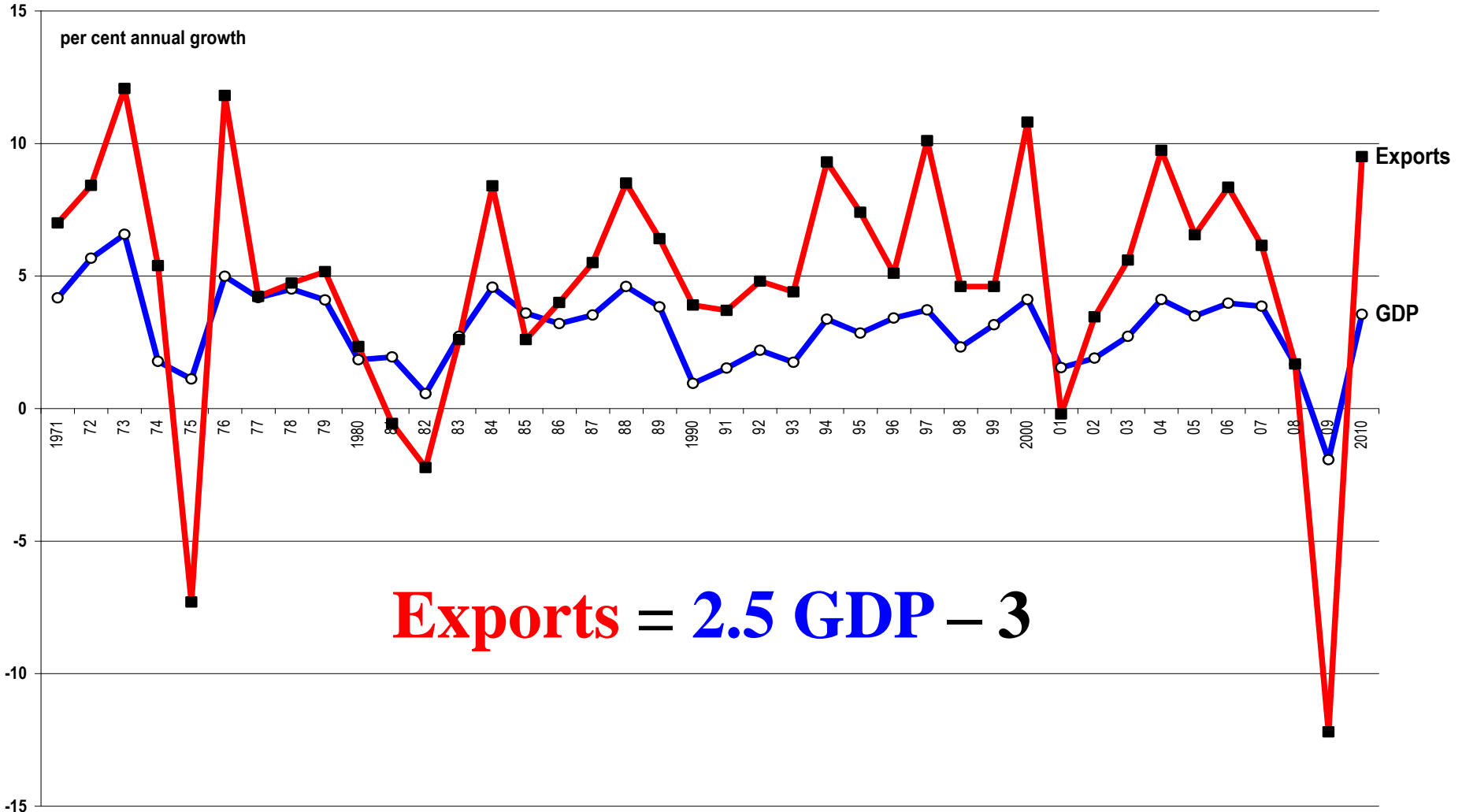
Where are we now?

Most of the fastest developing economies are in Asia and Africa

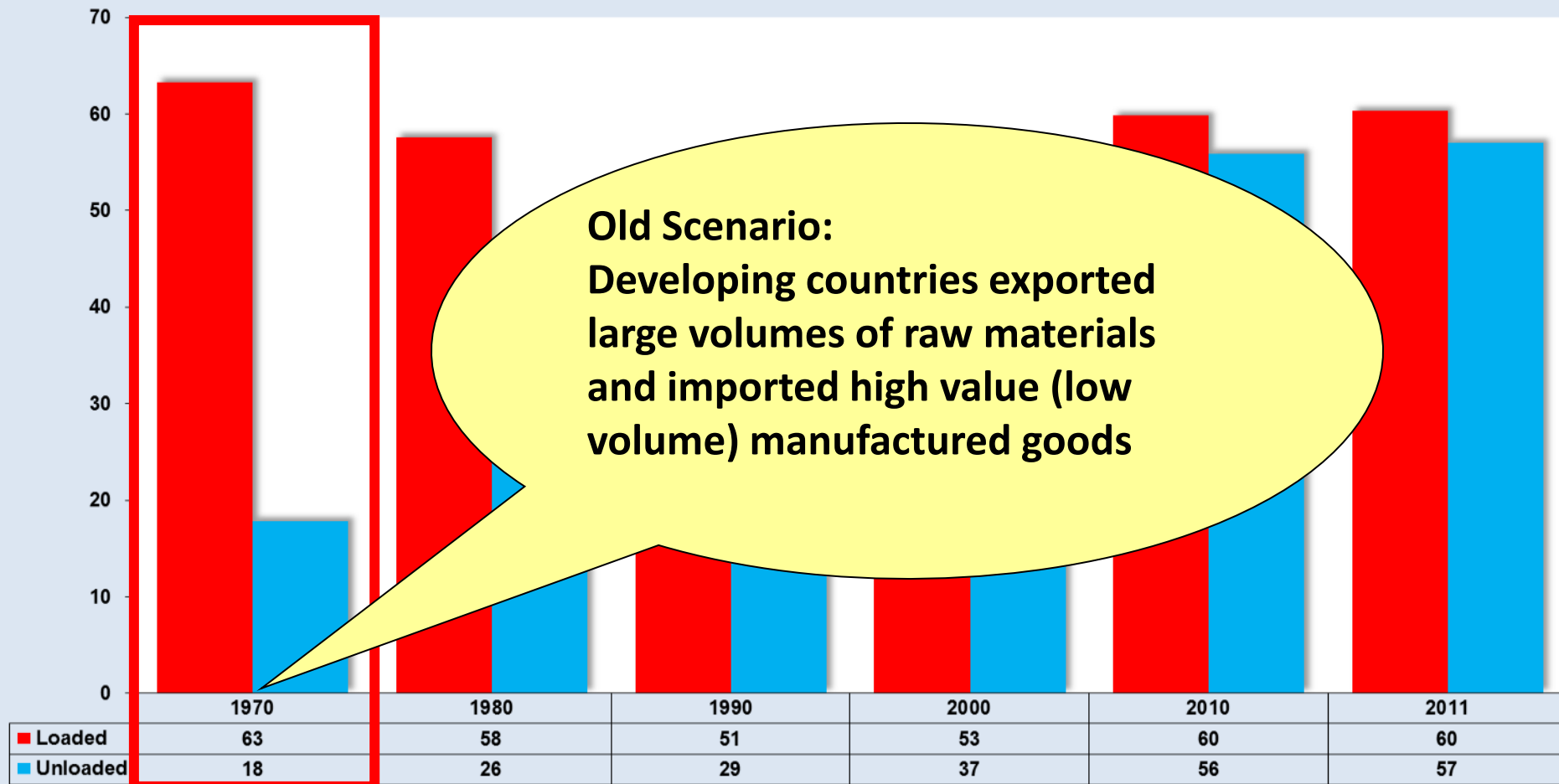


Source: IMF World Economic Outlook, February 2012

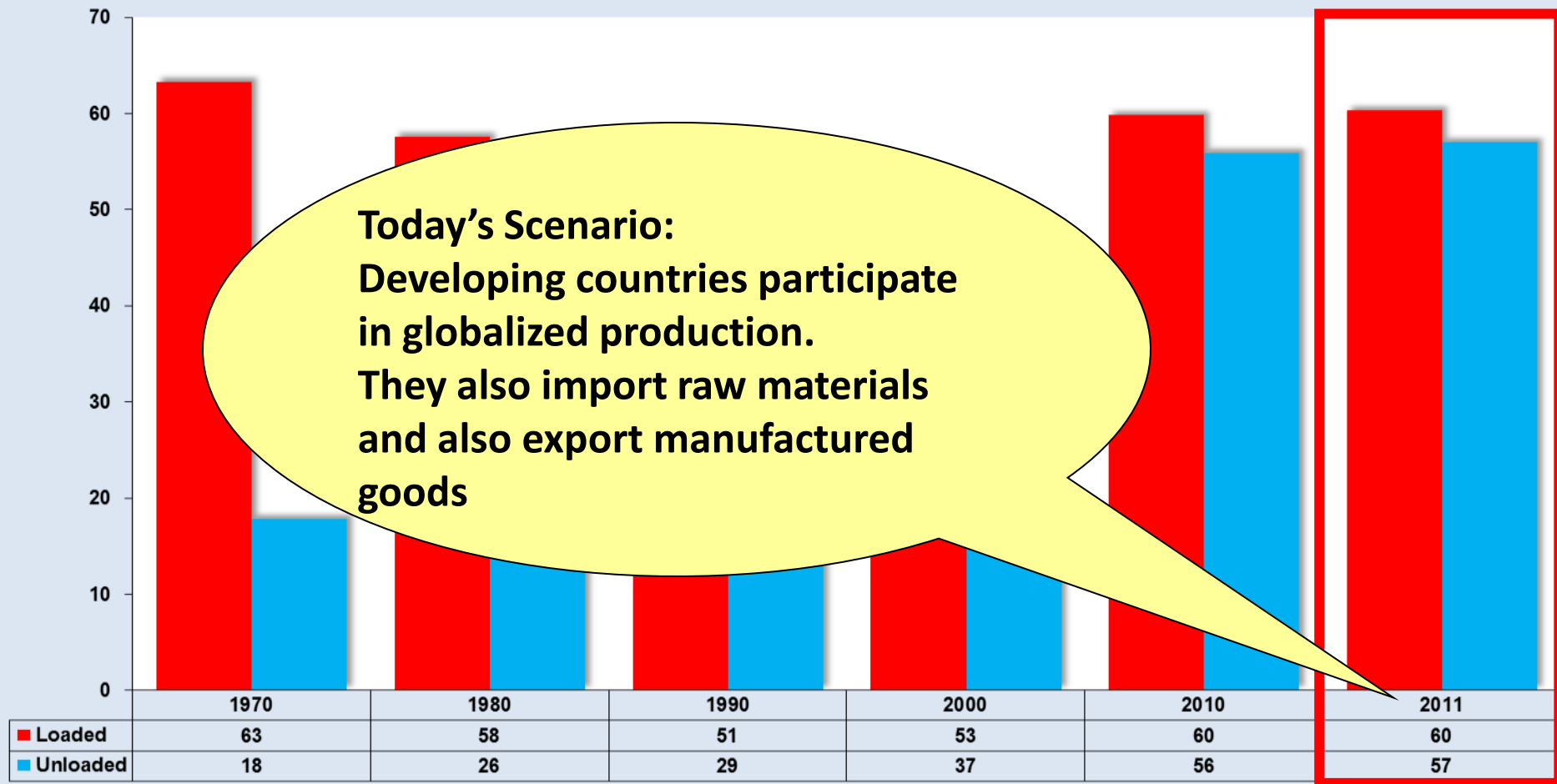
Elasticity Trade/GDP



The emergence of the emerging economies



The emergence of the emerging economies





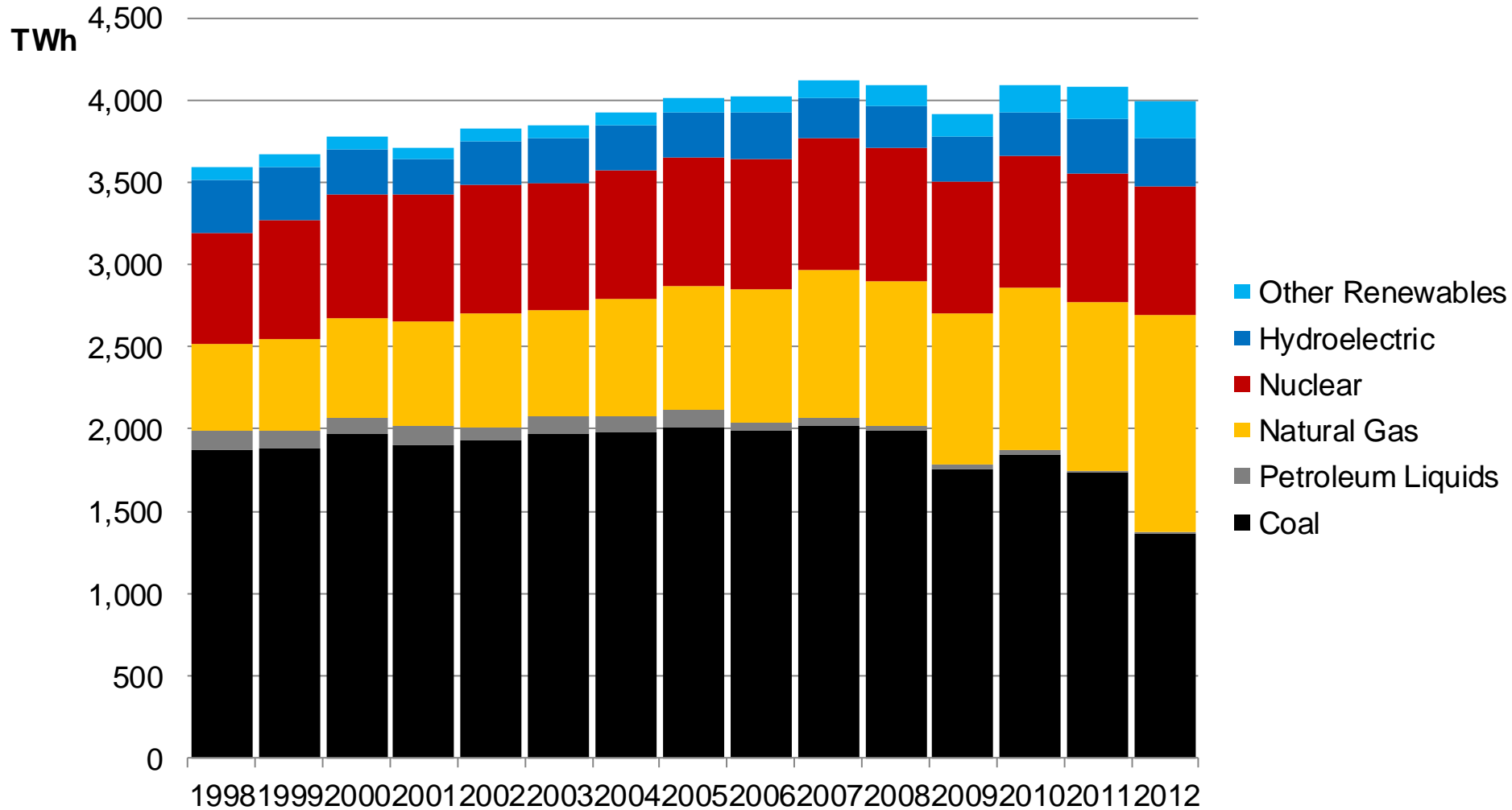
Megatrends/MajorShifts

- **From Nation-States to Networks**
- **From Traditions to Options**
- **From Export-Led to Consumer-Driven**
- **From Government-Controlled to Market-Driven**
- **From Farms to Supercities**
- **From Labor-Intensive to High Technology**
- **From Male Dominance to the Emergence of Women**
- **From West to East**

* *Megatrends Asia*, John Naisbitt, 1996

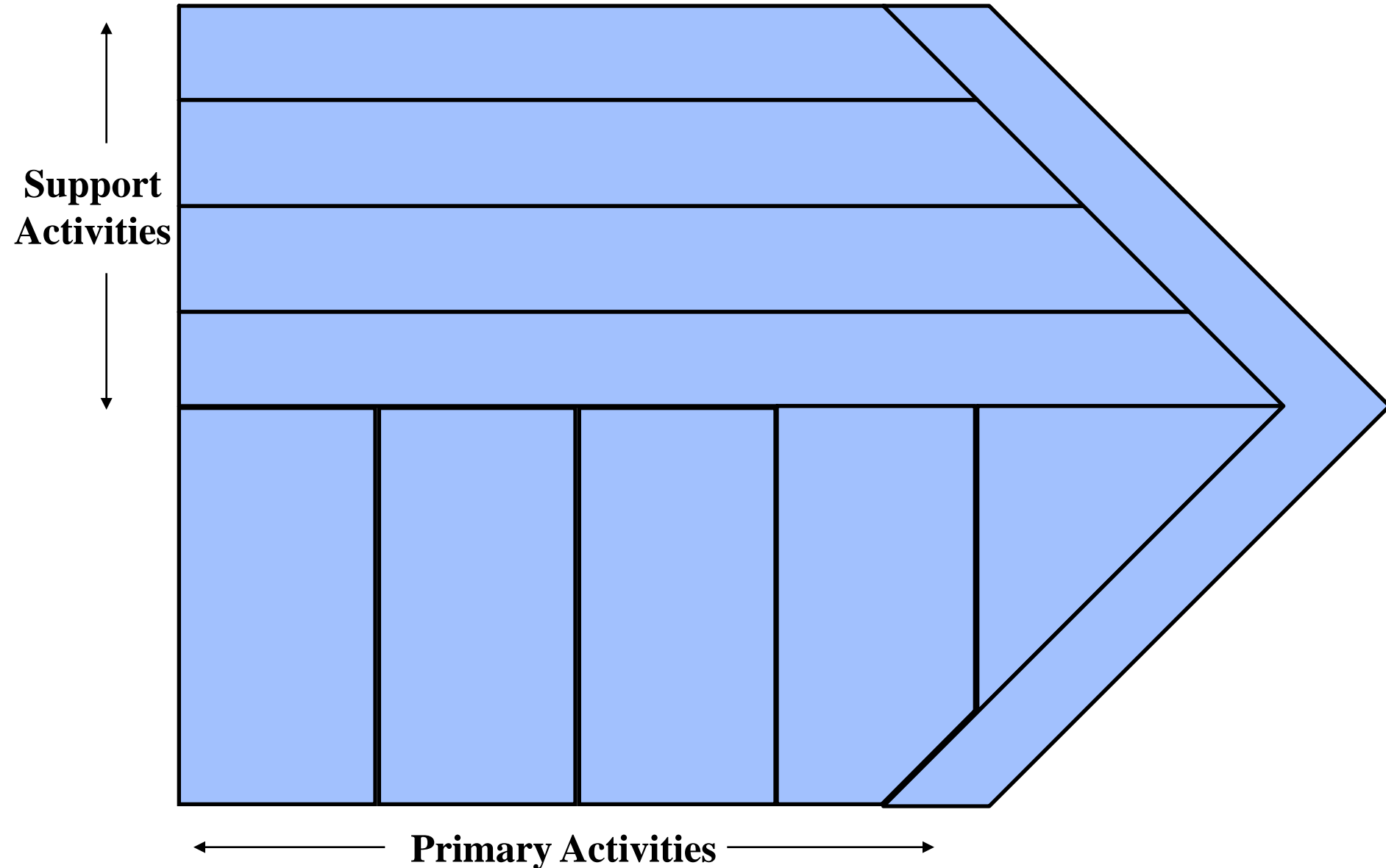
Gas and Renewables squeeze King Coal

US Power Generation by source

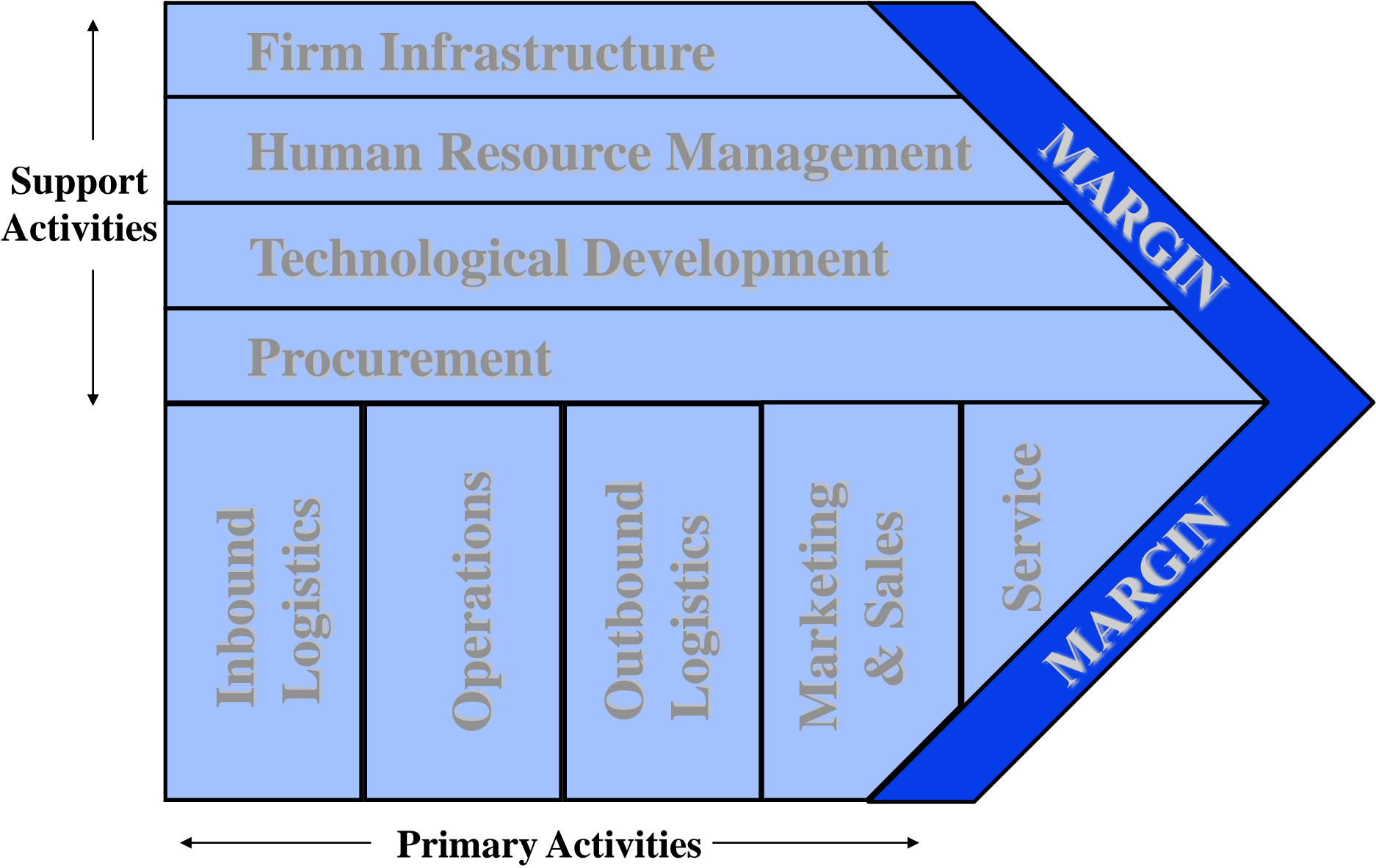


Value Chain Analysis

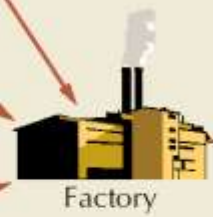
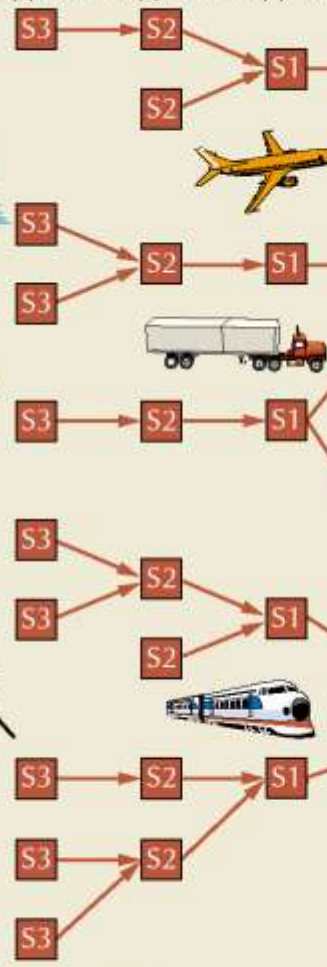
Identifying Resources and Capabilities That Can Add Value



COMPONENTS OF VALUE CHAIN



Tier 3 Suppliers
Tier 2 Suppliers
Tier 1 Suppliers

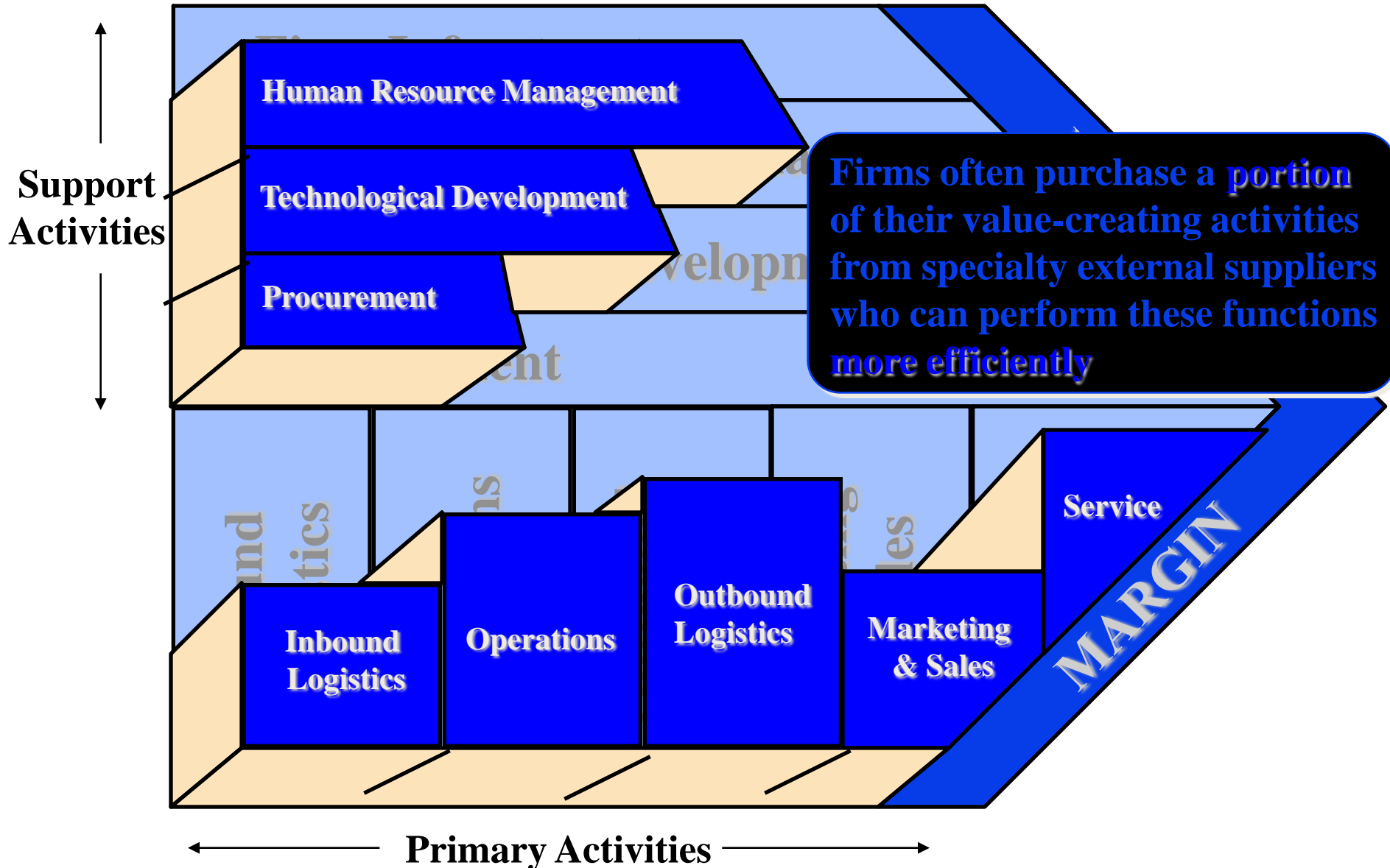


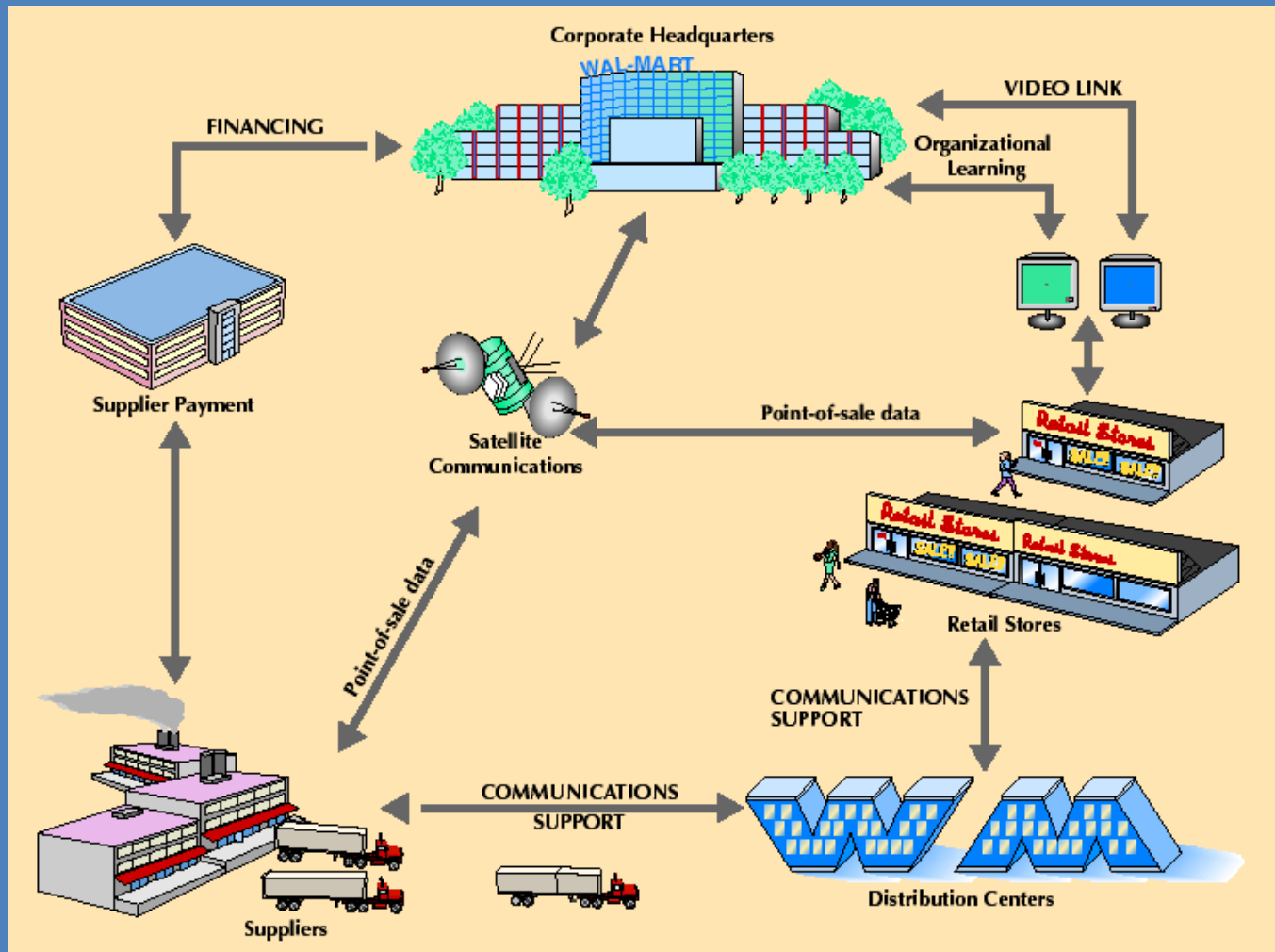
Customers



SUPPLY CHAIN

Strategic Choice to Purchase Some Activities From Outside Suppliers



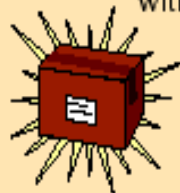


Source: Adapted from Garrison Wieland for "Wal-Mart's Supply Chain," *Harvard Business Review* 70(2; March–April 1992), pp. 60–71.

Customer places order—assigned to closest of seven Amazon U.S. distribution centers



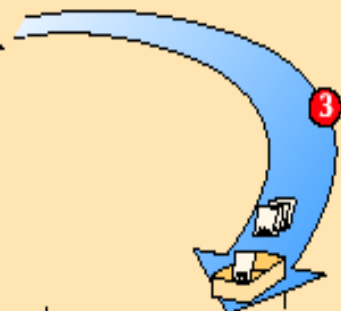
Order arrives within 1 to 7 days



Red lights show worker which products are ordered—bar codes matched with order—product placed in crates on conveyor



Crates ride conveyors through DC



Items sorted by bar codes

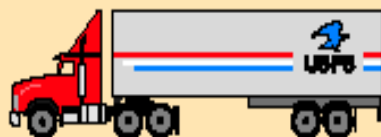


Crates arrive at central point and bar codes of products matched with orders. Items sorted automatically into one of several thousand chutes, into a box

Bar code identifies customer order



Boxes shipped by US Postal Service and United Parcel Service



Boxes are packed, taped and weighed





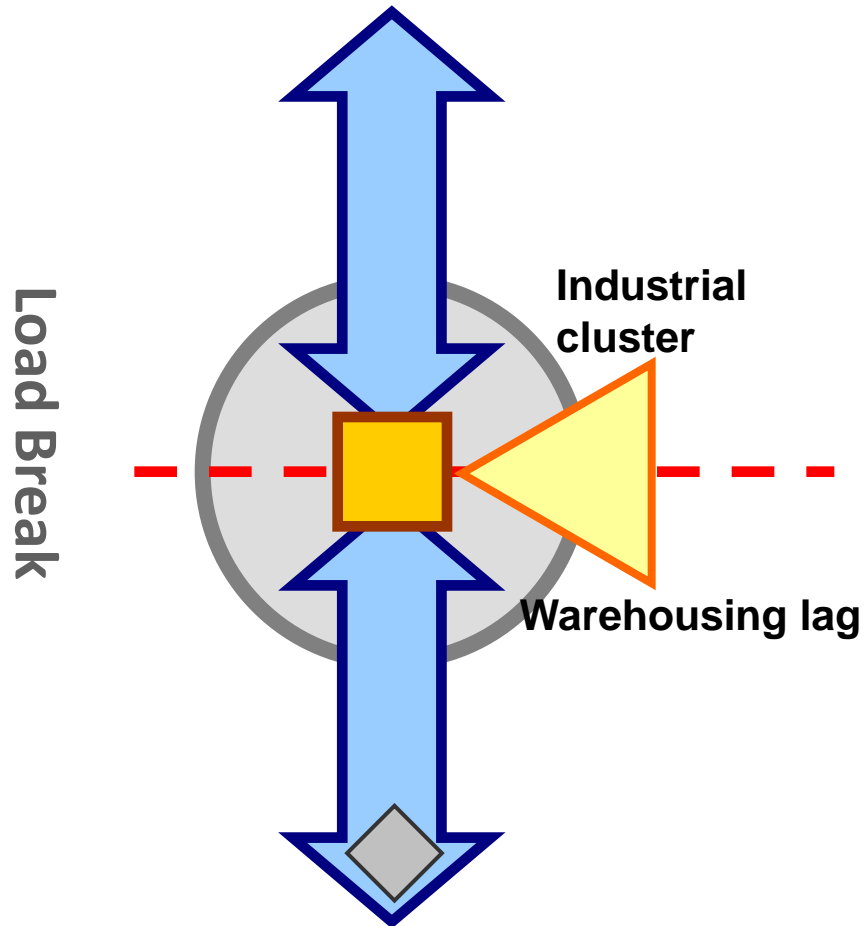
April 26, 1956, the official “birth” of containerization

Spaces, Networks and Flows in a Global Economy



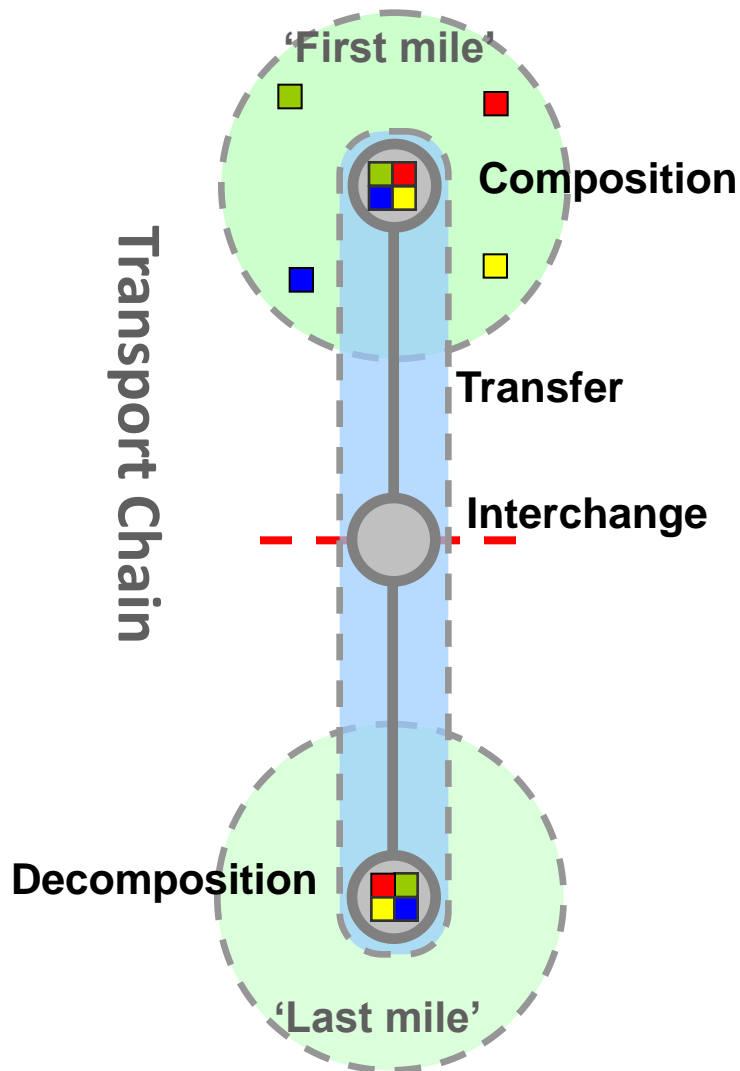
- Globalization; a clustered and spatially diffused process
 - In terms of production and consumption.
 - Distribution is reconciling spatially diverse demands for raw materials, parts and finished goods.
- The backbone of globalization
 - Networks are established to support distribution.
 - Nodes are regulating the flows within networks.
 - As international trade increases, nodes have become strategic locations.

The Emergence of a Nodal Space:



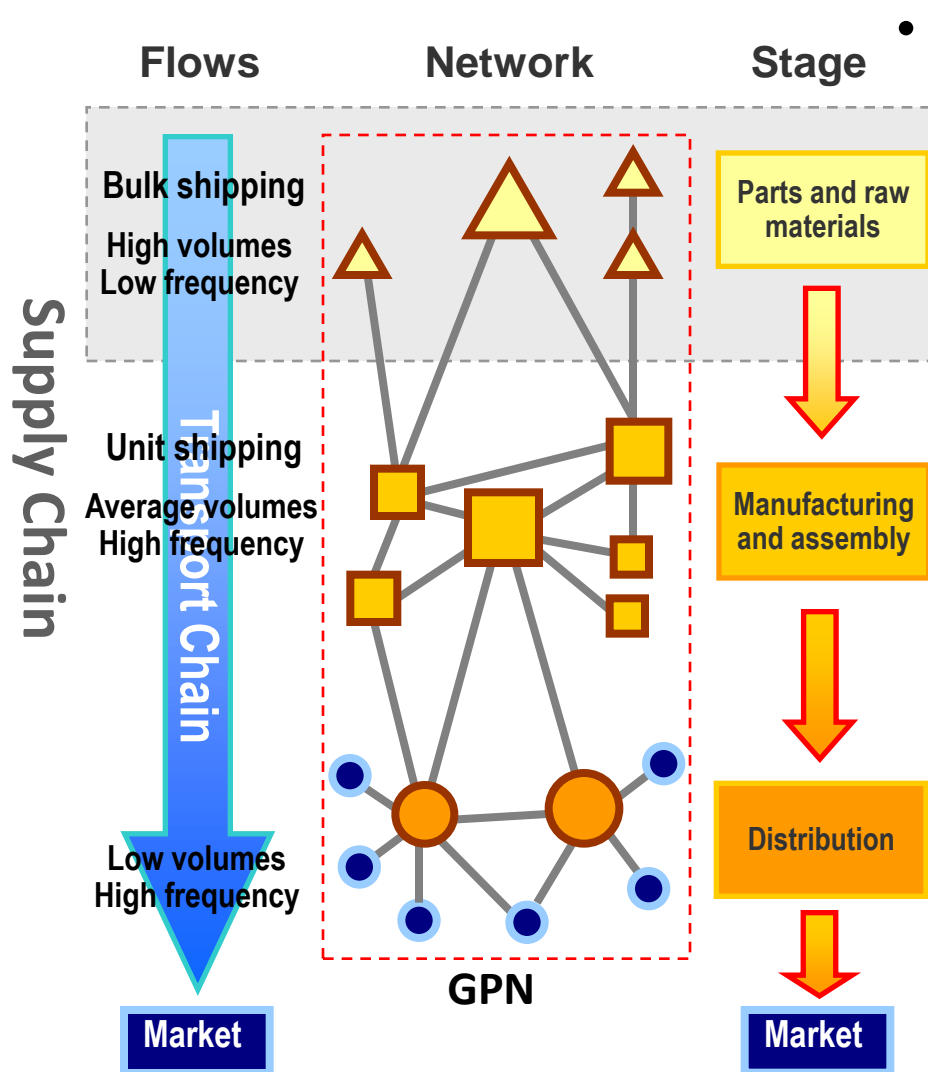
- The Transshipment Node
 - Conventional international trade environment.
 - Some mobility of raw materials, parts and finished goods.
 - Many impediments (tariffs and regulations).
 - Trade as an attempt to cope with scarcity.
 - **Nodes as constrained locations for transshipment.**
 - Load break functions.
 - Industrial clusters next to rail yards.
 - Port industrial complexes.

The Emergence of a Nodal Space: Second Phase



- The Intermodal Node
 - Higher mobility of the factors of production (particularly capital).
 - Better realization of comparative advantages (mainly labor).
 - Strengthening of the transactional and legal setting.
 - Emergence of intermodal transportation, mainly containerization.
 - **Nodes as locations promoting the efficiency of different transport networks.**
 - New terminals and new locations.
 - Increased velocity of the flows.

The Emergence of a Nodal Space:



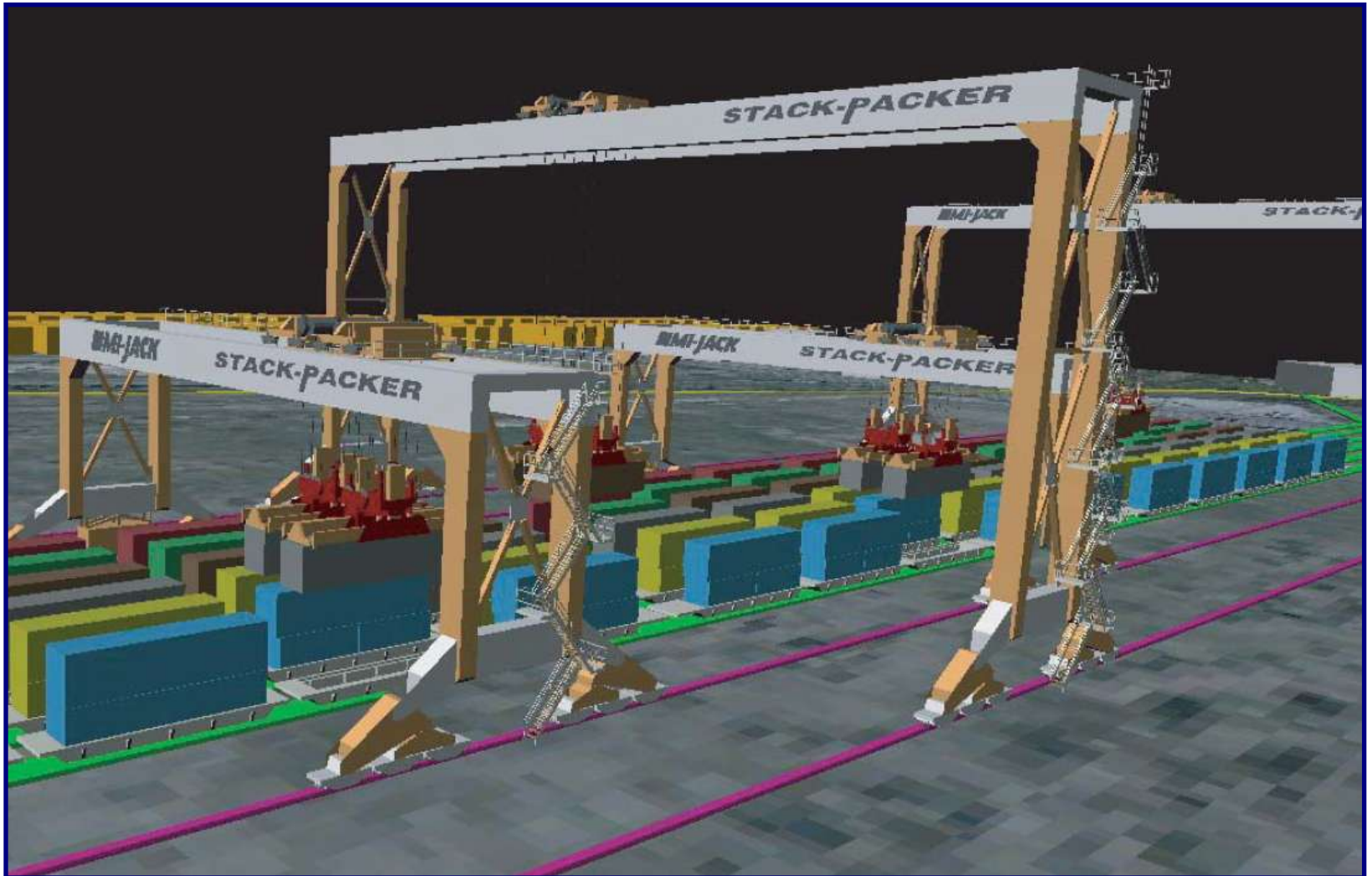
• The Logistical Node

- Fast growth of international trade with the full realization of comparative advantages.
- Geographical and functional integration of production, distribution and consumption.
- Commodity / Supply Chains.
- Transportation integrated in the production / retailing process.
- Global Production Networks (GPN).
- **Nodes as logistical poles where value added activities are performed.**
- Entirely new nodal locations.

UPS Willow Springs Distribution Center, Chicago



Mi-Jack Stack-Packer (Thruport Terminal)



Global Port Operators: Using Nodes to Control Global Flows

- A change in emphasis
 - Conventional perspective based on geostrategy:
 - “Whosoever commands the sea commands trade; whosoever commands the trade of the world commands the riches of the world, and consequently the world itself”. Sir Walter Raleigh (c1610).
 - An emerging perspective based on accessibility, flows and commercial interests.
 - Controlling terminals and the major gateways of the global economy:
 - Through alliances and investments.
 - Deriving wealth through added value extracted from global flows.
 - A “nodal strategy” where stake holding is based on locations along major commodity chains.





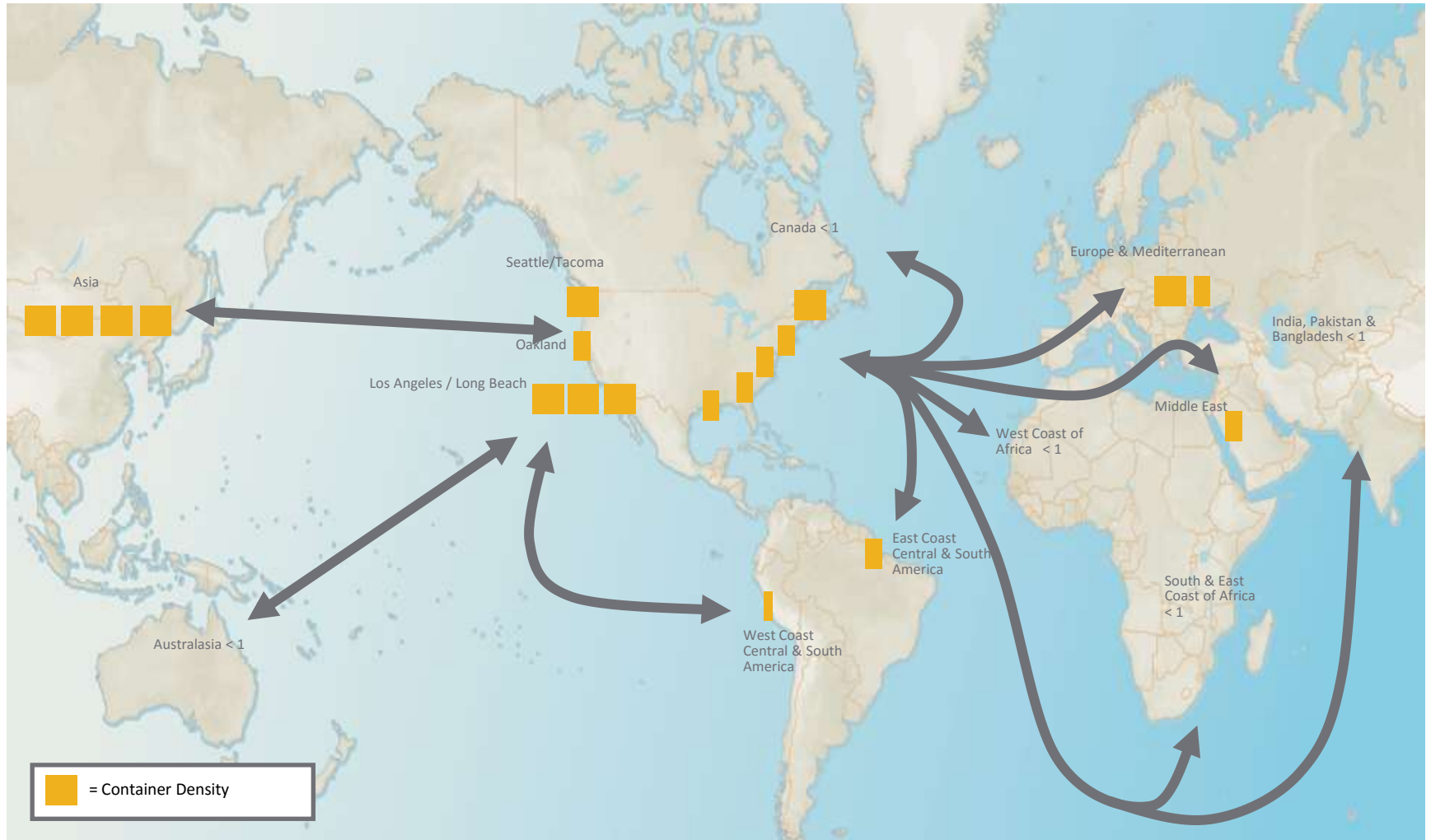
Intermodal Transportation and Terminal Operations

What is Intermodal Transportation?

A seamless form of transportation via two or more modes, with authority under a single bill of lading.



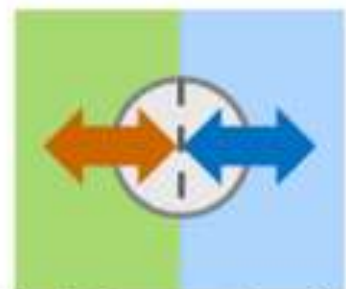
Globalization of Intermodal transport



Intermodal Containers



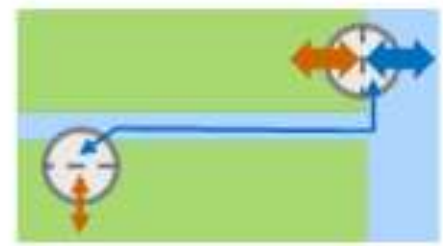
Port Terminals



Container sea terminal

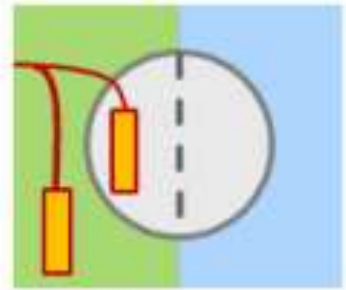


Offshore hub

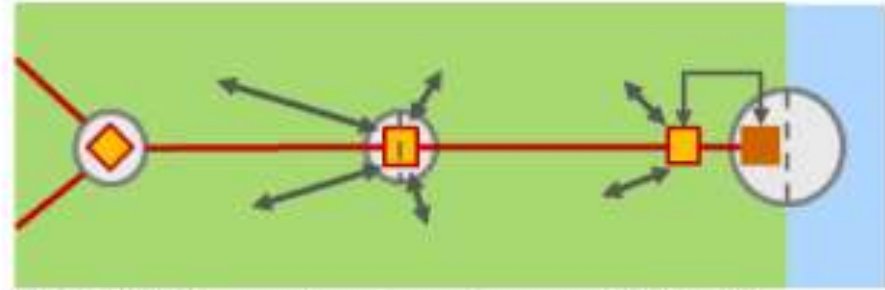


Barge terminal

Rail Terminals



On-dock and near dock

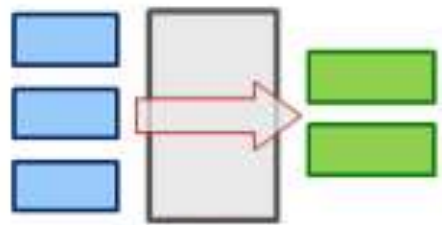


Transmodal terminal

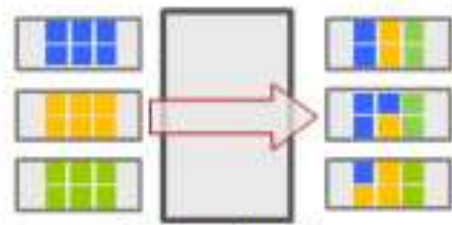
Load center

Satellite terminal

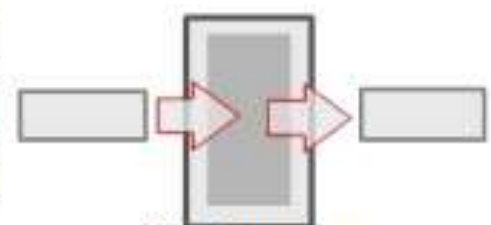
Distribution Centers



Transloading



Cross-docking

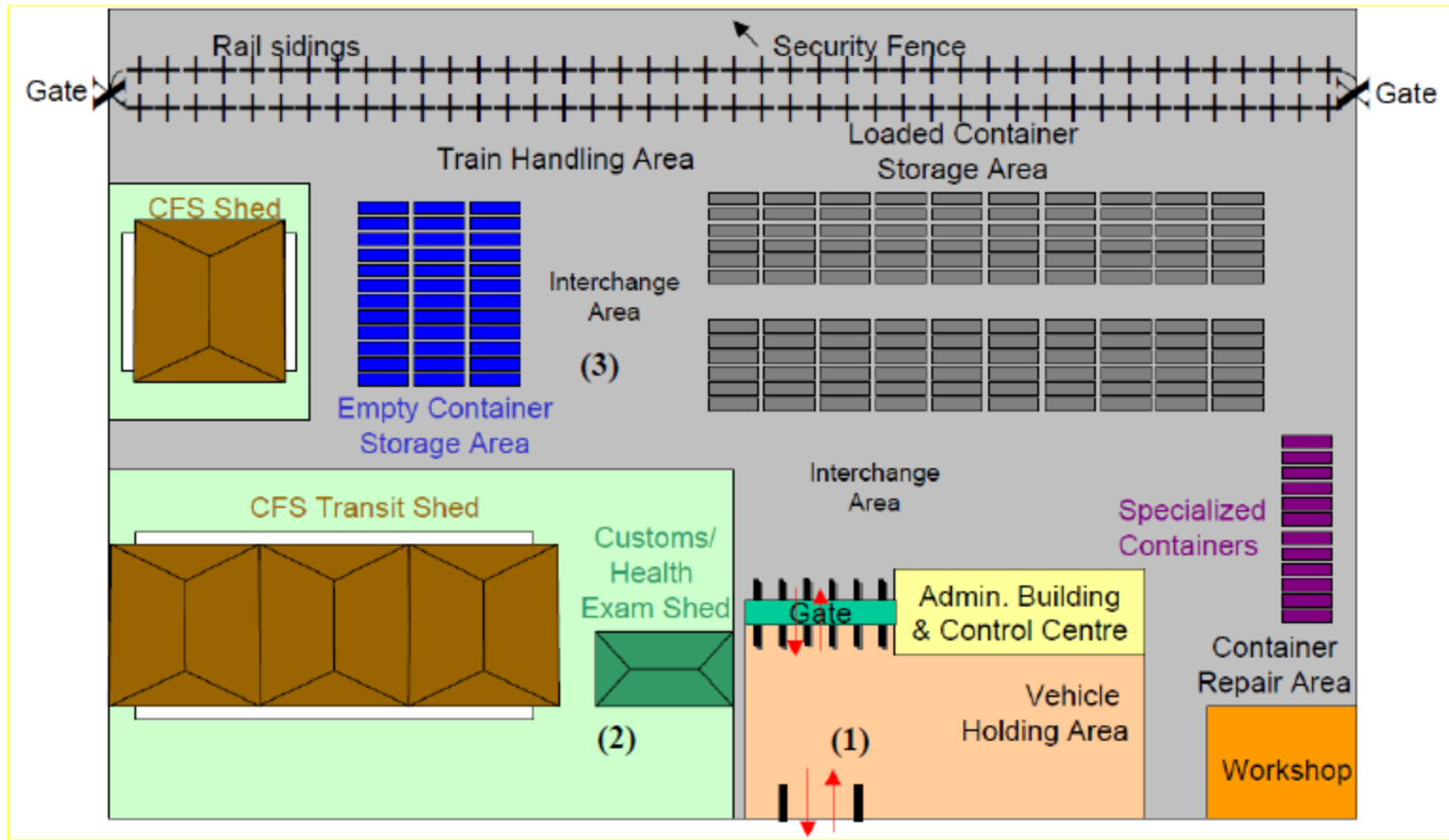


Warehousing

Characteristics of Freight Terminals

Core	Infrastructure	Modal access (dock, siding, road), unloading areas
	Equipment	Intermodal lifting equipment, storing equipment
	Storage	Yard for empty and loaded containers
	Management	Administration, maintenance, access (gates), information systems
Ancillary	Trade facilitation	Free trade zone, logistical services
	Distribution centers	Transloading, cross-docking, warehousing, temperature controlled (cold chain)
	Storage depot	Container depot, bulk storage
	Container services	Washing, preparation, repair

An example of layout of a dry port



The Service Profit Chain

Internal
(Employee)

Service
Concept

External
(Customer)

Financial
Outcomes



Concept of Leverage

Leverage value to customers over cost to provider



Strategic window of Opportunity

Thank You