

# **Hong Kong: A Logistics Hub**

## **Part I**

**Logistics Services**

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# Logistics (traditional)

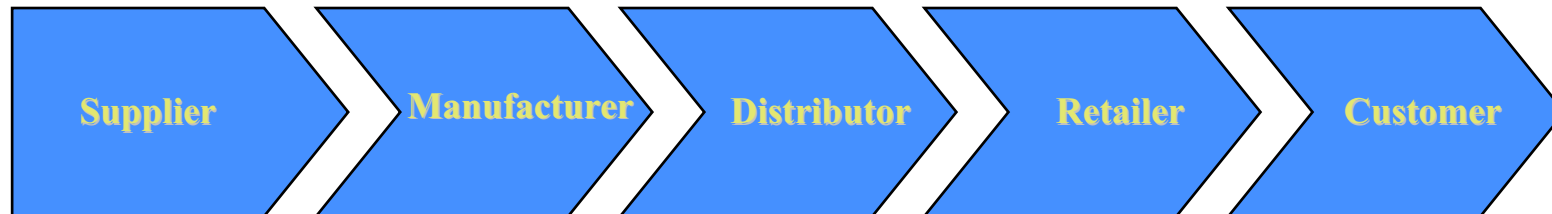
- **Supplier - deliver materials**
- **Producer - produce product**
- **Consumer - consumes product**

**Logistics is :**  
**physical movement of materials**  
**from suppliers to producers,**  
**and of products**  
**from producers to consumers**

# Logistics (traditional)

**Seller/Buyer Logistics:  
Warehousing  
Transportation**

## Supply Chain



**Pipeline Logistics**

**Distribution Logistics**

# Integrated Logistics Management

- **Global logistics**
- **Co-ordination of supply, production, distribution, sales, and customer location**
- **Supply Chain Management**

# Global Inventory Management

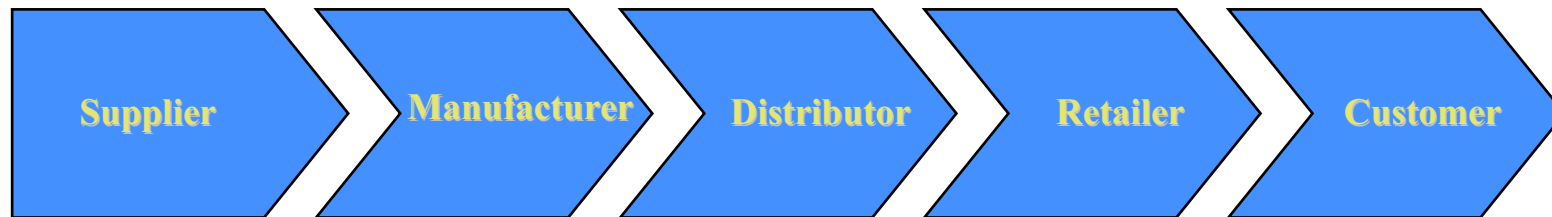
- **Just in time (JIT) for the raw materials**
- **Minimize inventory cost**
  - **at the stores**
  - **in transit**
  - **minimize travel time**
- **Inventory at the hub**
- **Easy consolidation**
- **Information intensive**

# Outsourcing

- **Not company's core competence**
- **Reliance on Suppliers**
- **Supplier's TQM**
- **Supplier's Process capability**
- **Supplier's financial capability and Forex**
- **Supplier's logistics: costs and reliability**
- **Joint Ventures**

# 3<sup>RD</sup> Party Logistics Services

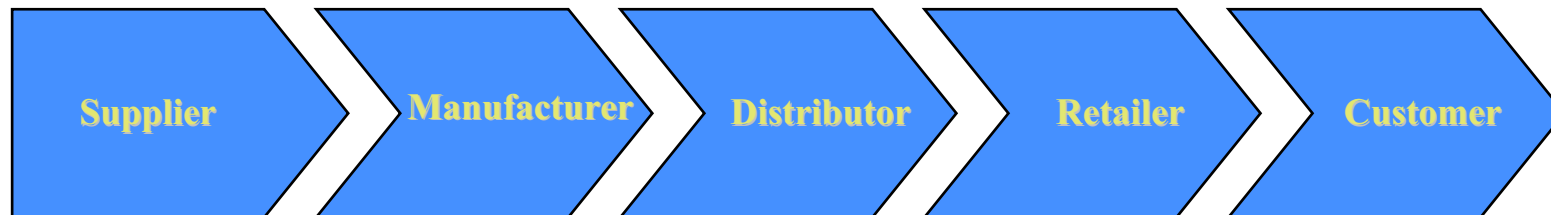
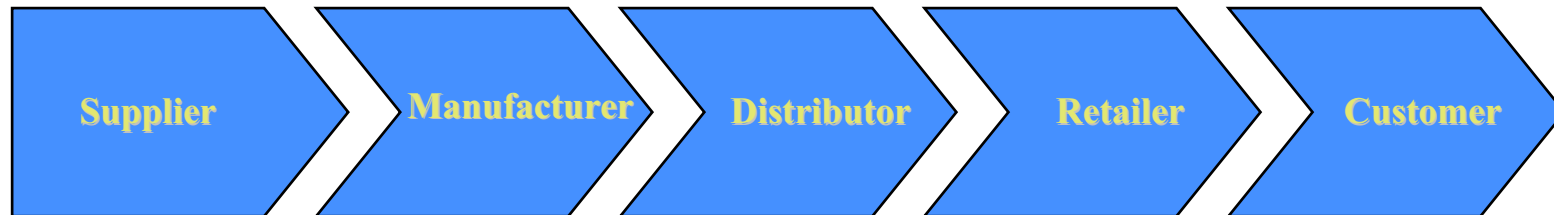
## Supply Chain



**by forwarders/integrators at the client sites**

# 3<sup>RD</sup> Party Logistics Center

## Supply Chain

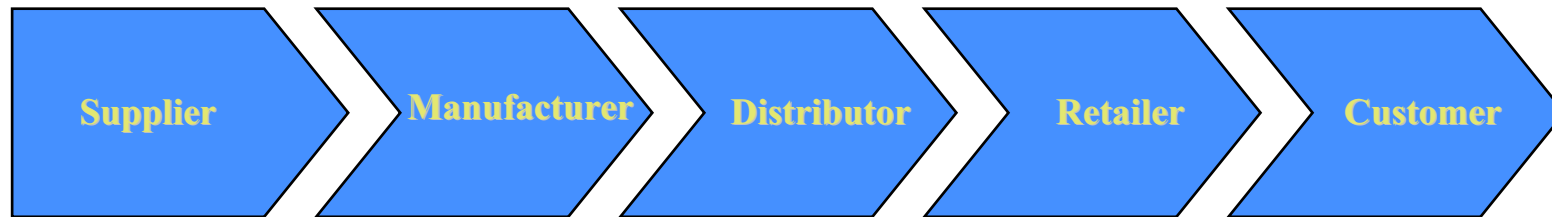


## Supply Chain

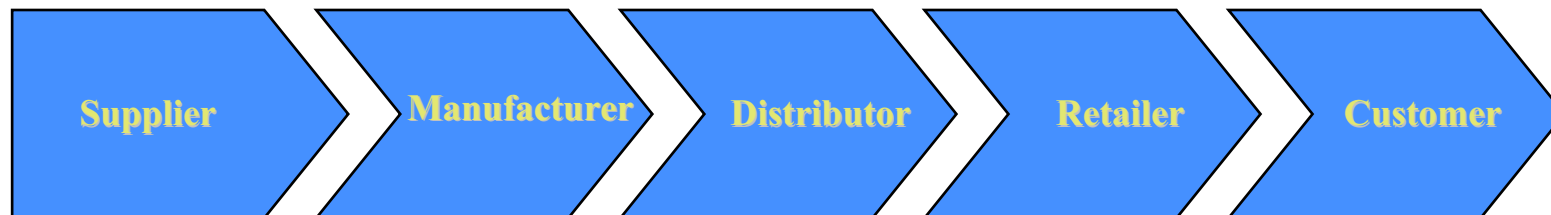


# 3<sup>RD</sup> Party Logistics Park

## Supply Chain



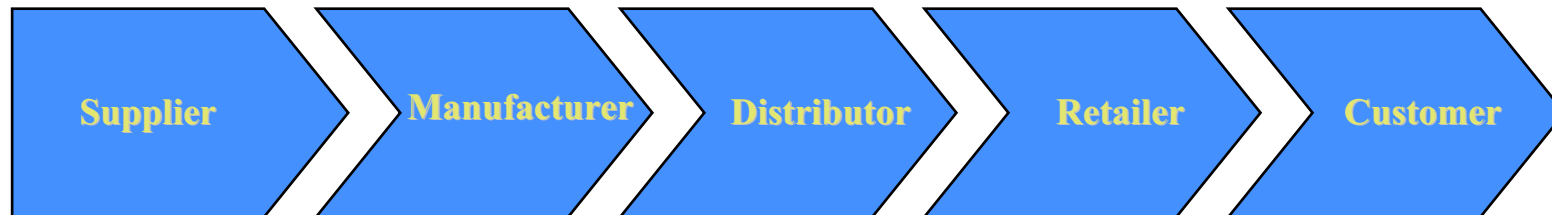
Customs, Banks, Insurance Companies, etc.



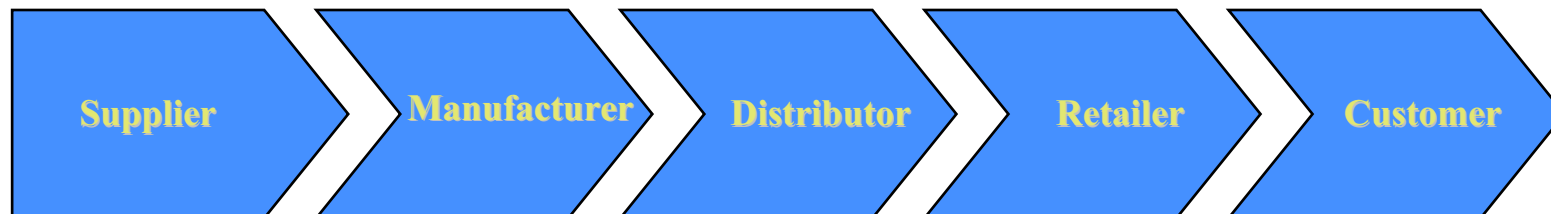
## Supply Chain

# 4<sup>TH</sup> Party Logistics Center

## Supply Chain



Customs, Banks, Insurance Companies, etc.



## Supply Chain

# Agents of Cargo Logistics

- **Shippers and Buyers**
- **Freight Forwarders**
- **Trucking and warehousing agents**
- **River Trade**
- **Seaport Terminal Operators**
- **Airport Terminal Operators**
- **Air-lines and Sea-liners**
- **Customs**
- **Air-express couriers (Integrators)**

# Modern Logistics Functions

- **consolidation and deconsolidation**
- **packing and repacking,**
- **transportation and handling,**
- **customs clearing,**
- **carrier bookings,**
- **warehousing, and**
- **inventory control**

# The Cost of Business Logistics

<b>Year</b>	<b>Inventory Costs</b>	<b>Transport. Costs</b>	<b>Admin. Costs</b>	<b>Total US Logistics Costs</b>	<b>% of GDP</b>
<b>1990</b>	<b>283</b>	<b>451</b>	<b>25</b>	<b>659</b>	<b>11.4</b>
<b>1995</b>	<b>302</b>	<b>441</b>	<b>30</b>	<b>773</b>	<b>10.4</b>
<b>2000</b>	<b>377</b>	<b>590</b>	<b>39</b>	<b>1006</b>	<b>10.1</b>

Source: Twelfth Annual State of Logistics Report, 2001

12% of the world's GDP

China's Logistics Cost is 20% of GDP

# Modern logistics support systems

## Included auxiliary functions:

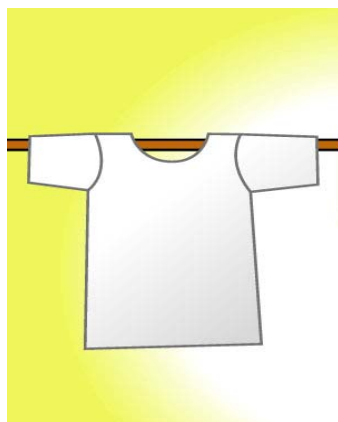
- tracking of shipments,
- simple assembly,
- labeling,
- inspection,
- kitting, and
- merchandising.

# Supply Chain Management



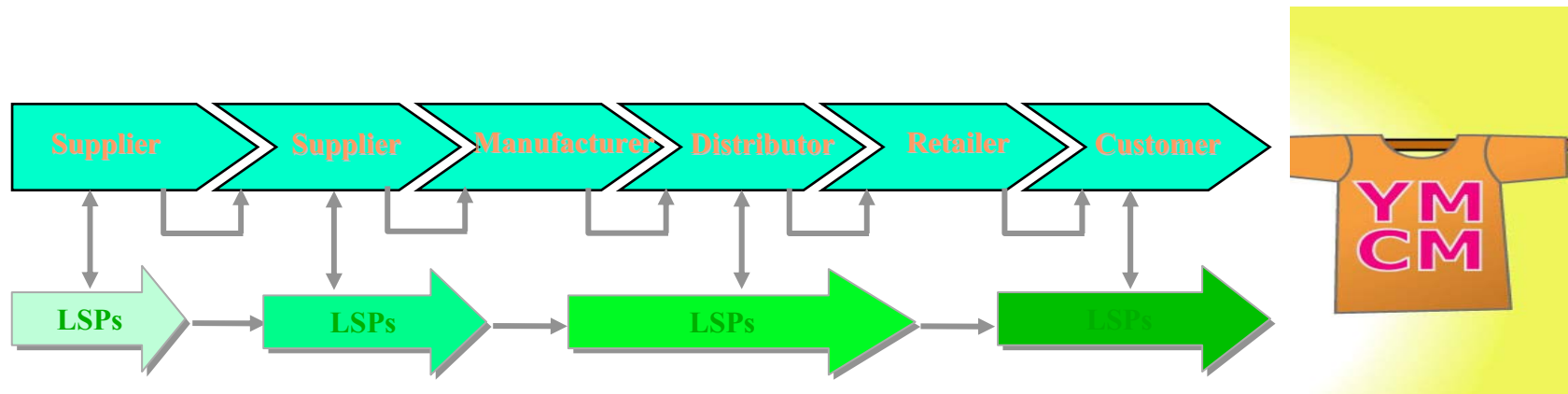
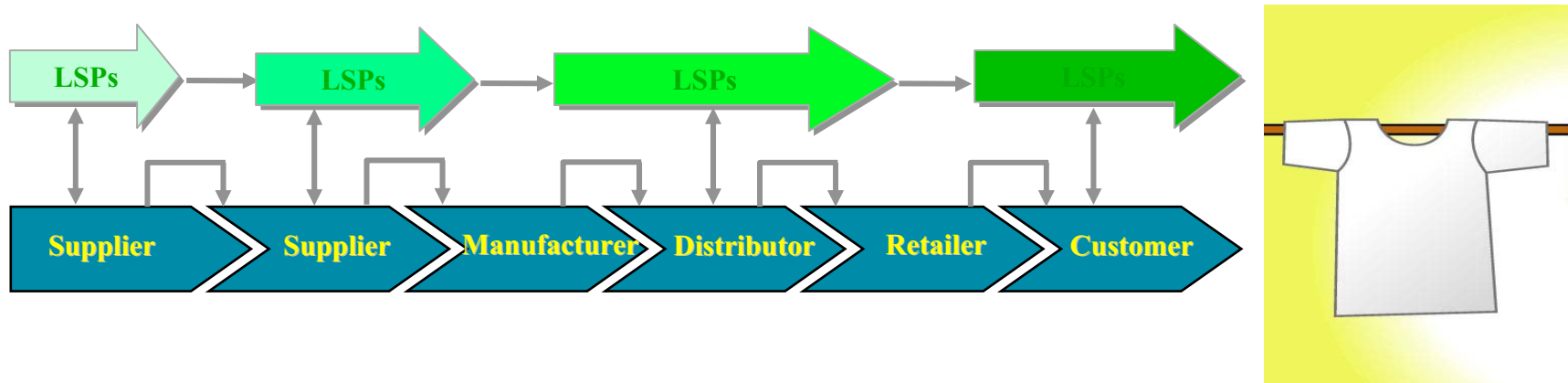
# Product vs. Product Competition

(in the old days)

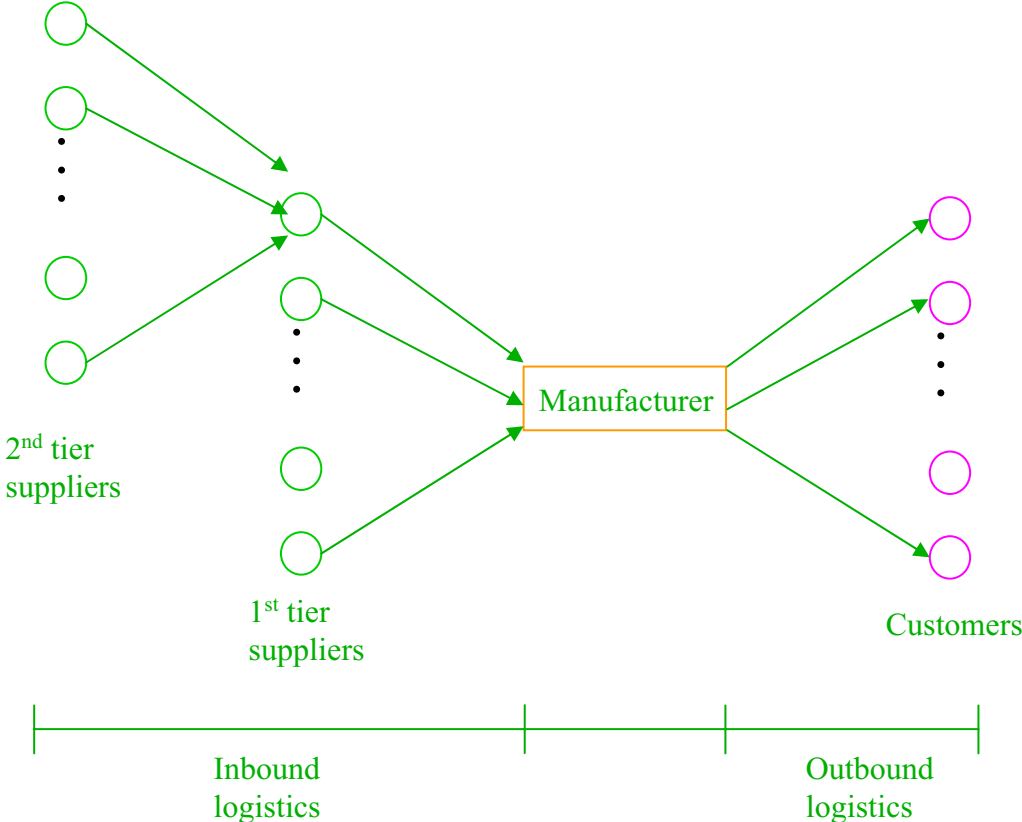




# Supply Chain vs. Supply Chain

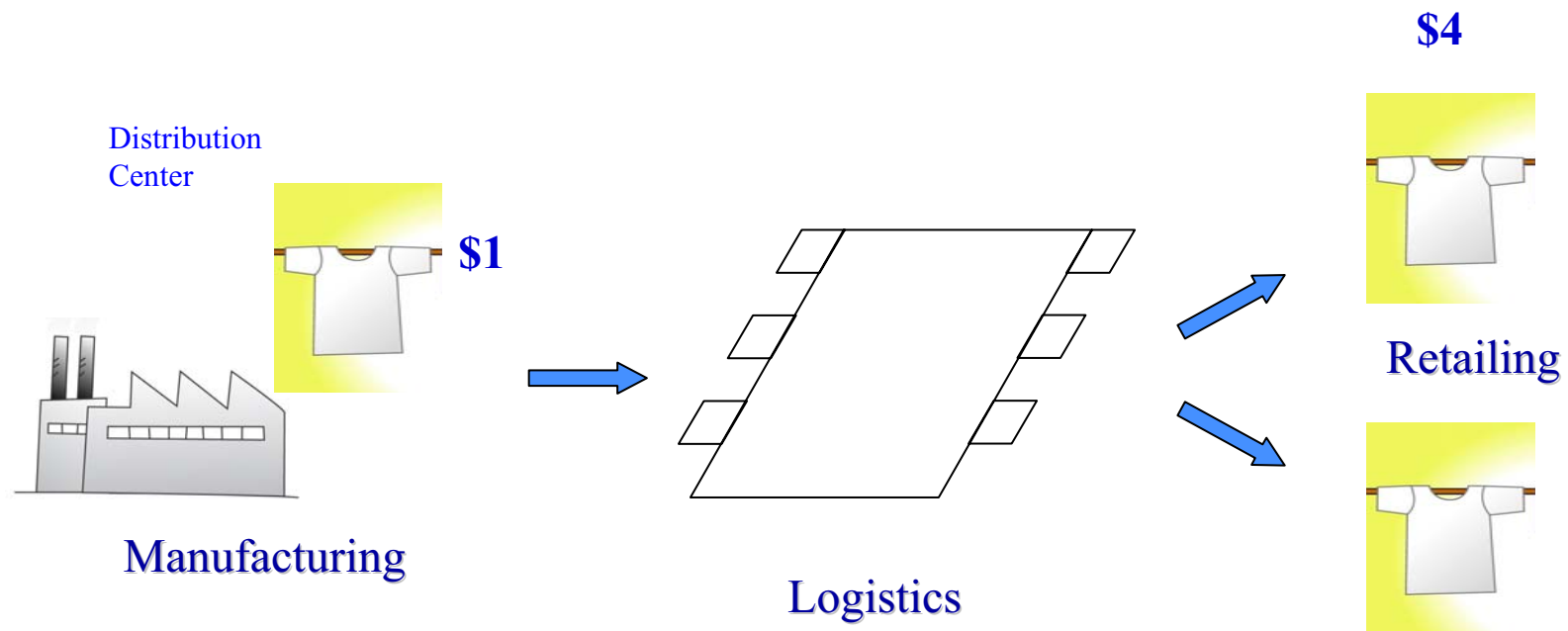


# Studying Supply Chain Structures

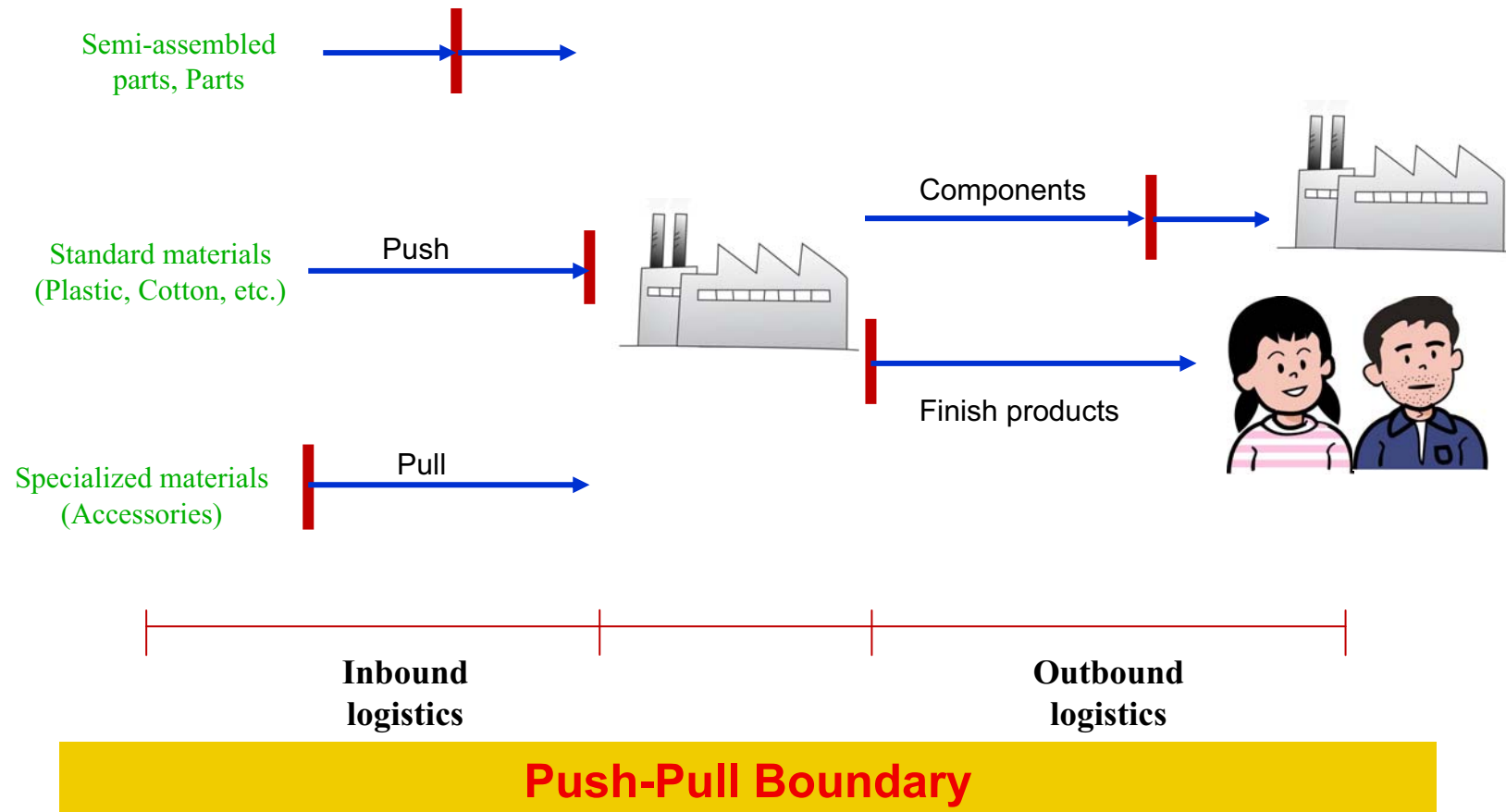


- 1. Physical flows
- 2. Information flows
- 3. Decisions
- 4. Financial arrangement

# Here is the Profit



**Results:** 95% is make-to-order. Few companies build inventory



# Ocean Cargo Logistics



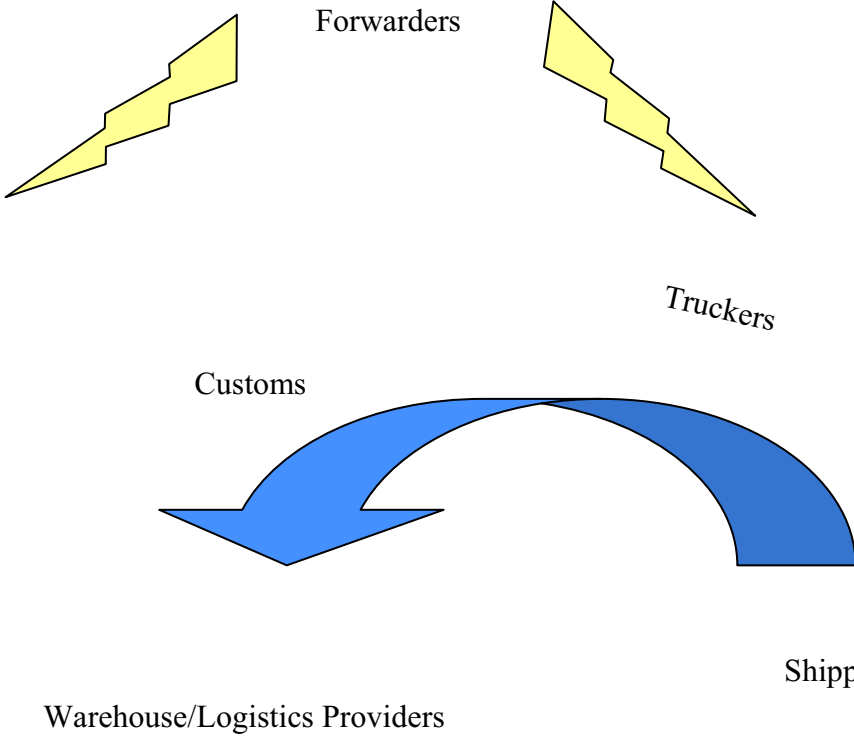
# Ocean Cargo Logistics



Ship liners



Terminal Operators



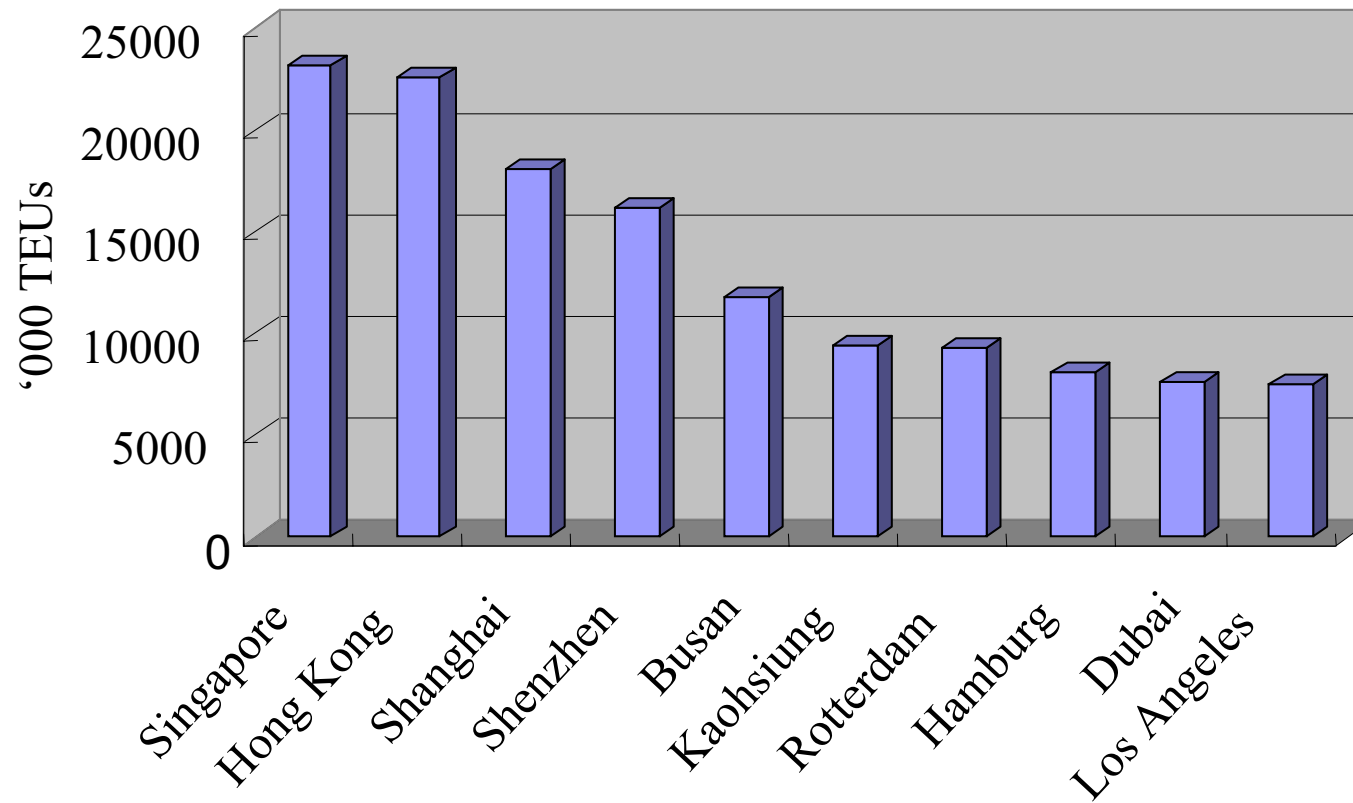
# Delivery & Security Checks

# Container Terminal Operations

KPI	Measures
Quay Crane Rate (move/hour)	33
Vessel Operation Rate (move/hour)	117
Truck Turnaround Time (mins)	37



# Ranking of Container Ports



# IT & Logistics



# **Integrators**

## **Network Integration and Information Technology**

- **Information Integration**
- **Physical Integration**

# **E-commerce**

**Aviation Logistics will  
evolve around E-commerce**

- **E-commerce  
Aviation Logistics**

- **Aviation Logistics  
E-commerce**

# Existing IT Infrastructure for Hong Kong Air Cargo Industry

## Myths:

- Plenty of software systems available for the players
- Internet-enabled online platforms and services are widely available

**Agents**

**Forwarders**

**Carriers**

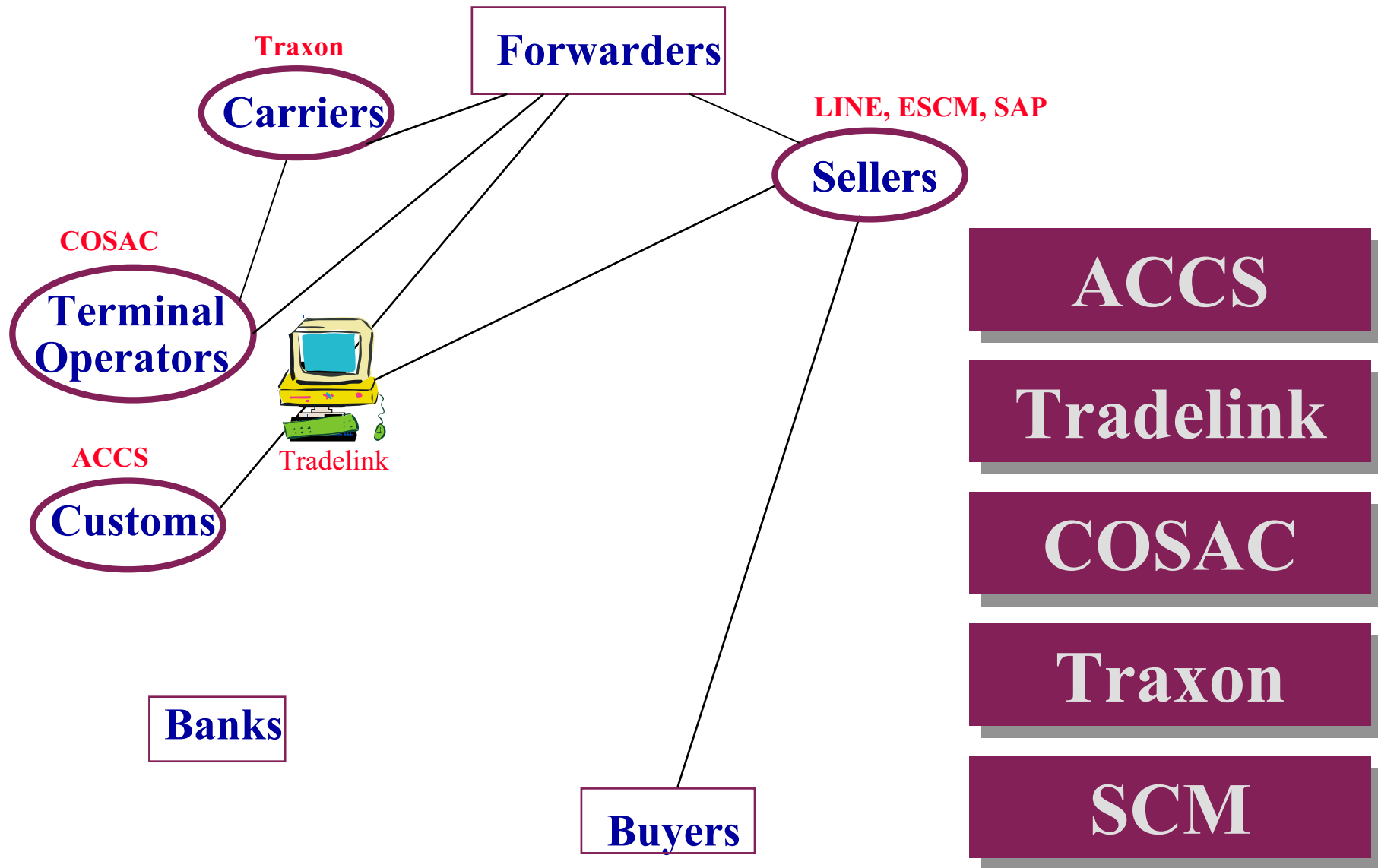
**Sellers**

**Terminal  
Operators**

**Customs**

**Banks**

**Buyers**

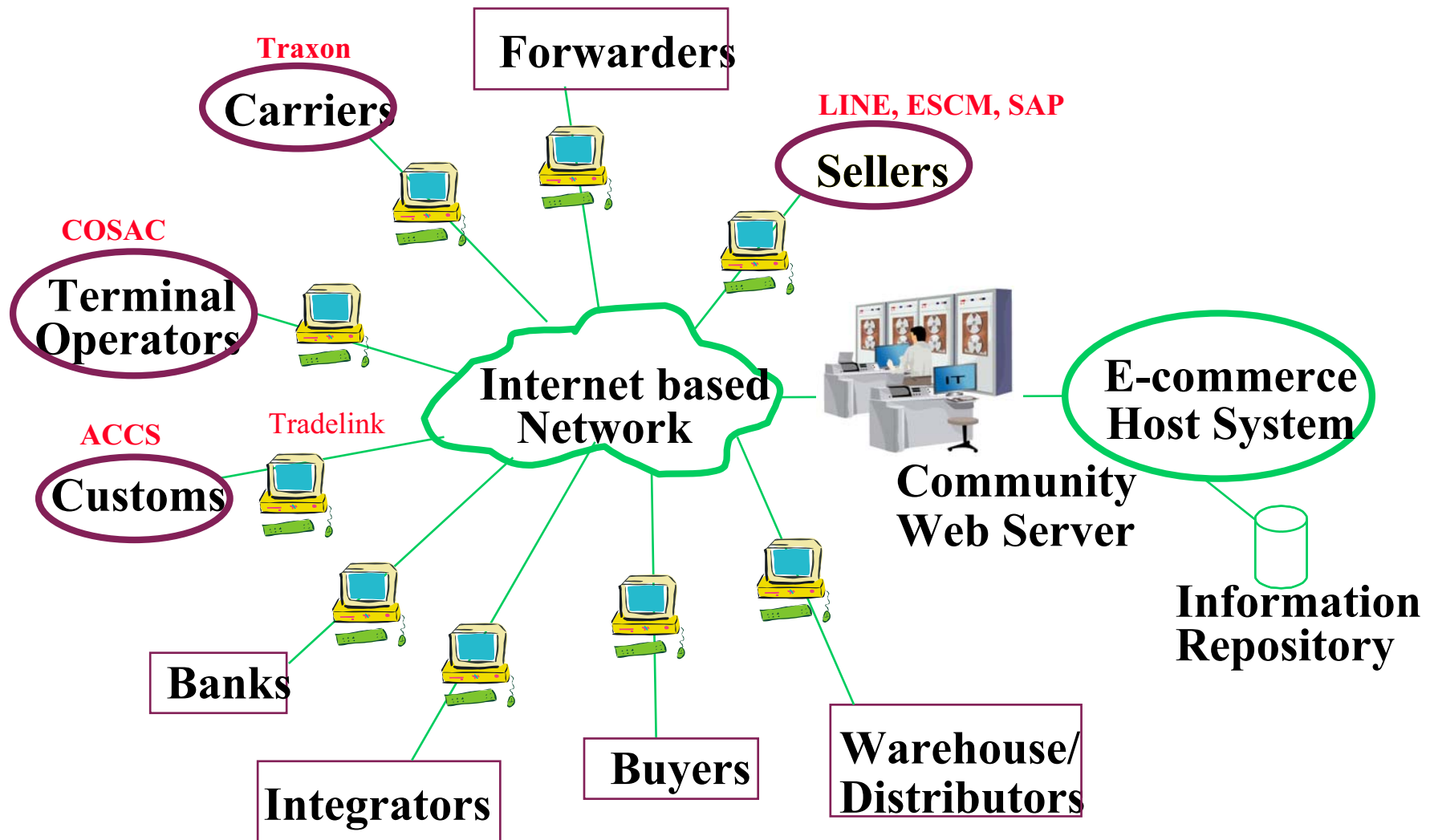


# Problems with the Existing Logistics IT Infrastructure

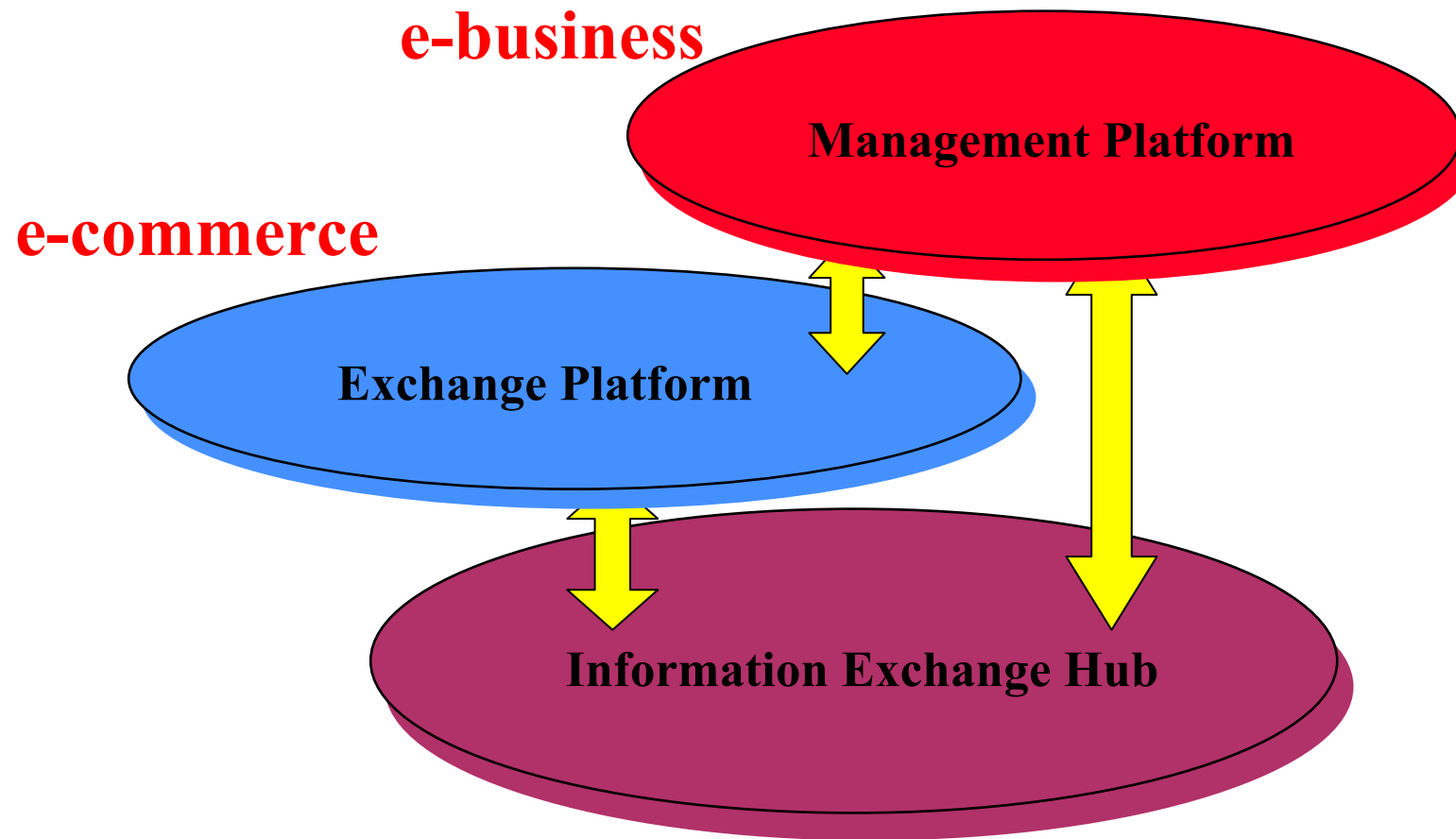
- **Systems don't talk to each others**
- **Heavy burden on freight forwarders**



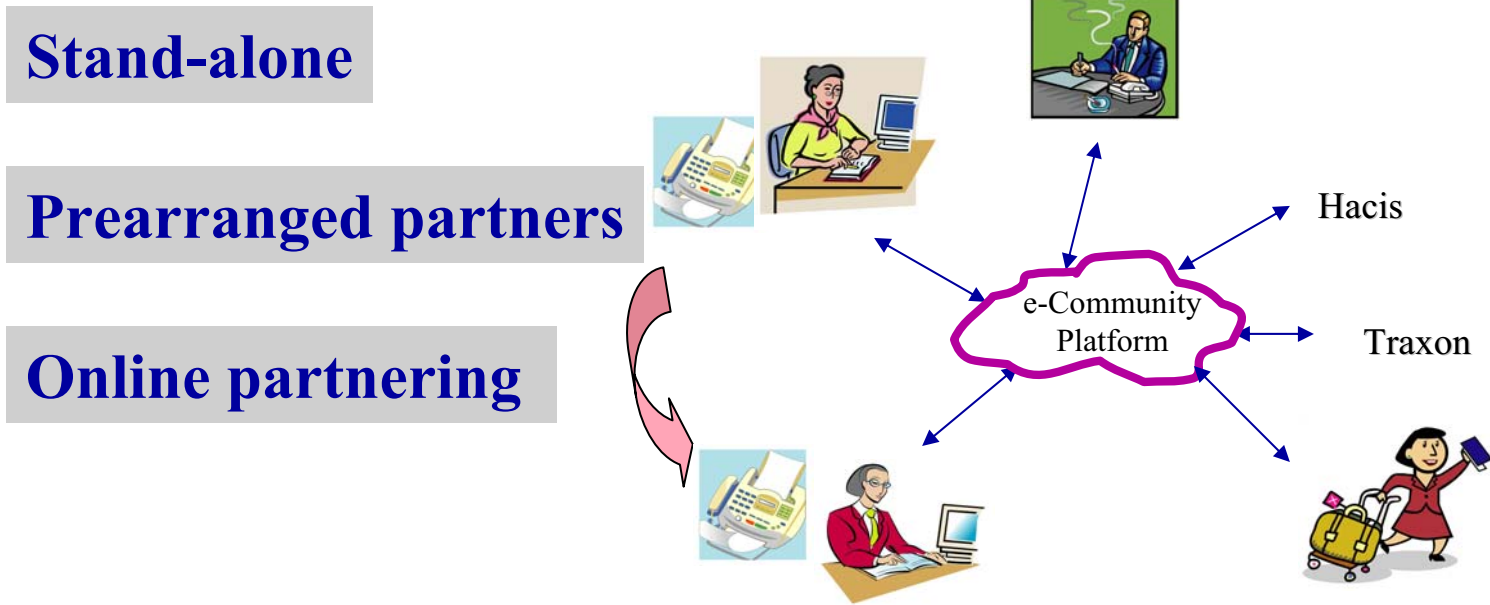
# Air Cargo Community Network



# A Three-tier Community Network



# Different Levels of e-Business



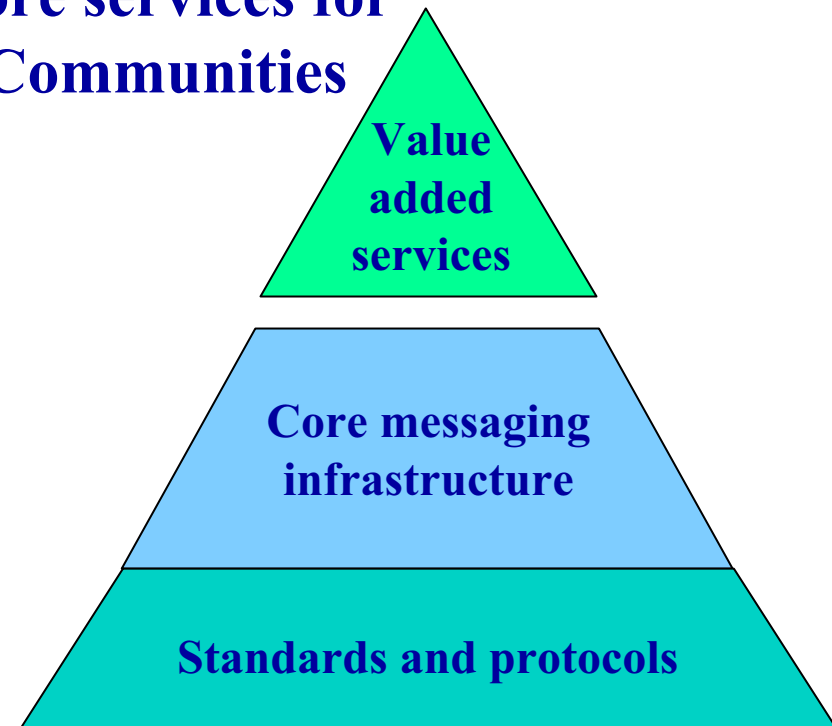
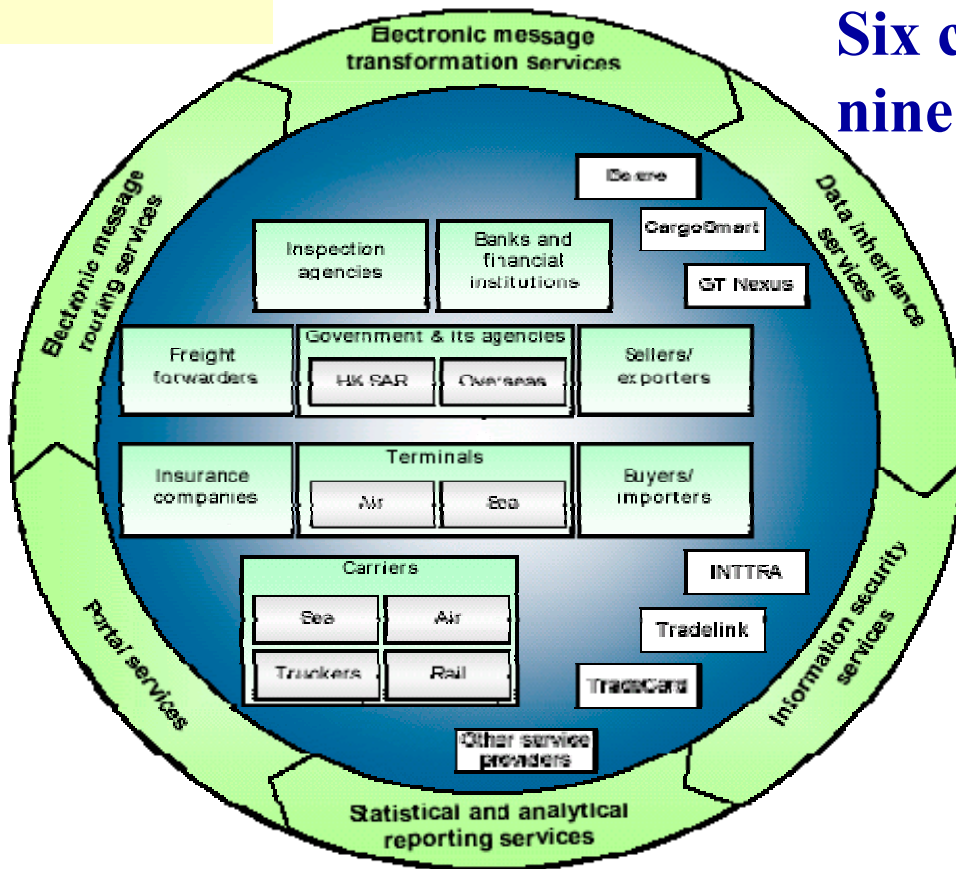
# Digital Trade & Transportation Network (DTTN) in Hong Kong

## A Platform that

- Provides interconnection among industry stakeholders
  - Facilitate information flow
- 
- Supports business process interconnect

# DTTN in Hong Kong

## Six core services for nine Communities



Source: [www.logisticshk.gov.hk/logisticshk/about/index.html](http://www.logisticshk.gov.hk/logisticshk/about/index.html)

# DTTN Example (Purchase to Delivery)

