

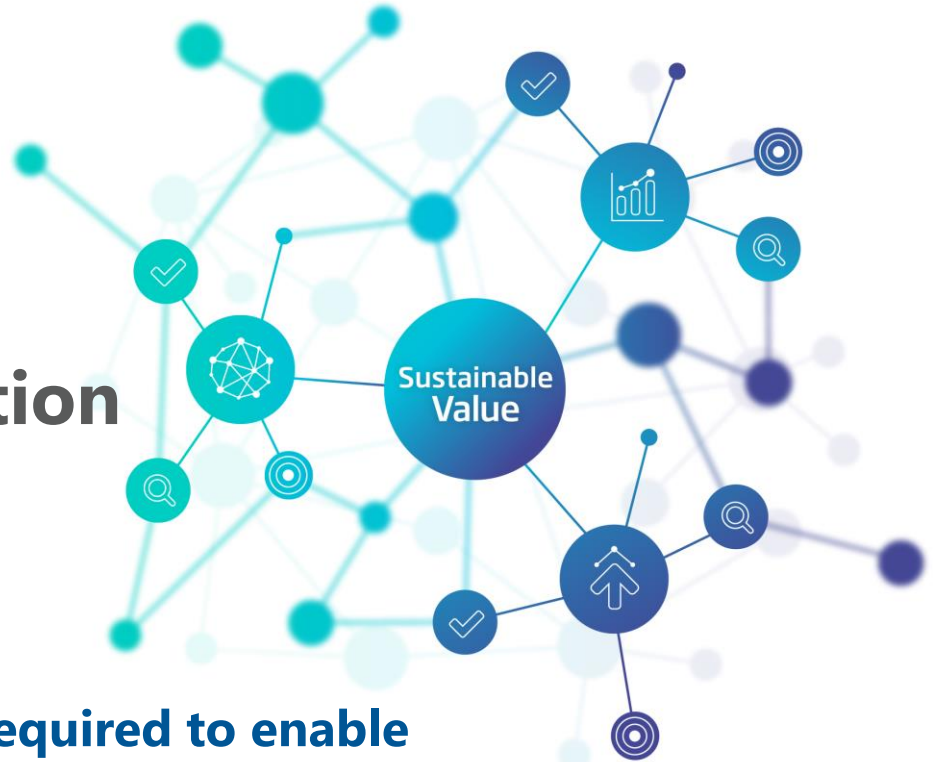
# Brambles

## Enabling the Physical Internet via collaboration and innovation

November 2016

**A perspective on the networks required to enable the Physical Internet**

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# The World is Changing

## Principles of the New Economy



# The World is Changing

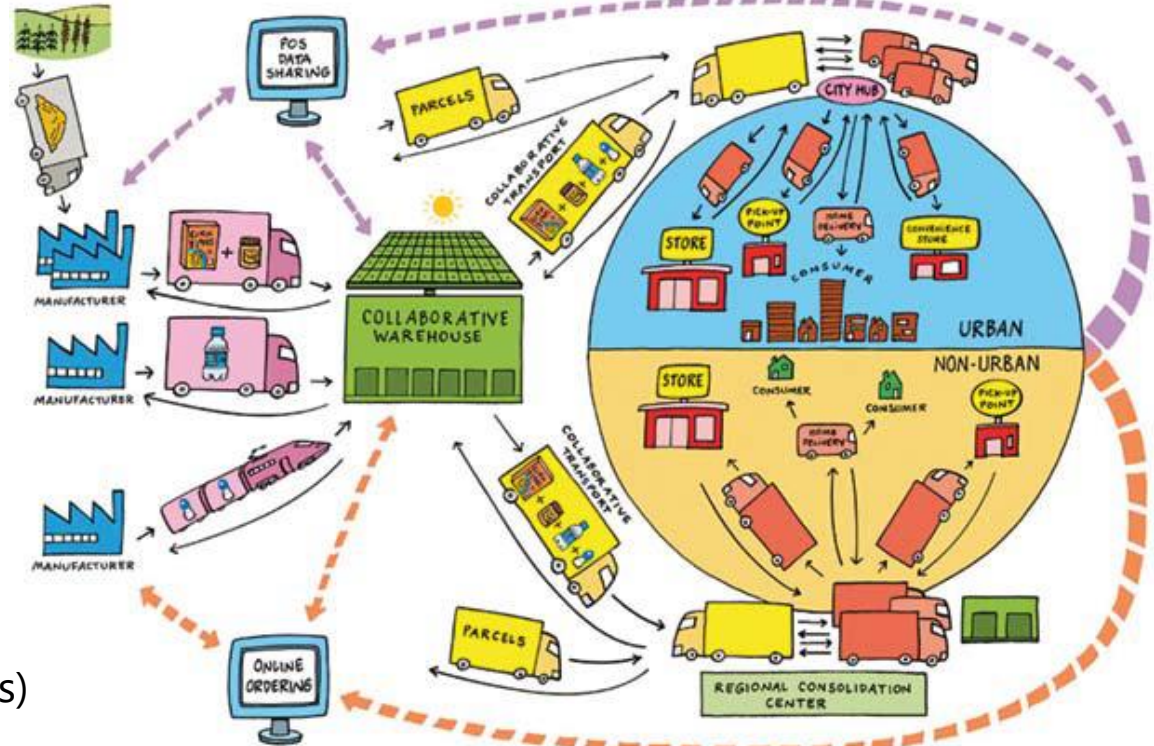
## Principles of the New Economy

Four key principles emerge:

1. Access
2. Sharing
3. Network Advantage
4. Standards

# GCI: 2016 Value Chain\*

- Multi-partner information sharing
- Collaborative warehousing & transport
- Urban hubs for city delivery
- Focus on in-store logistics, collaborative physical logistics, reverse logistics (recycling & returnable assets)



\*Global Commerce Initiative

Source: "2016 Future Supply Chain" by GCI and Capgemini. [www.cgi-net.org](http://www.cgi-net.org)

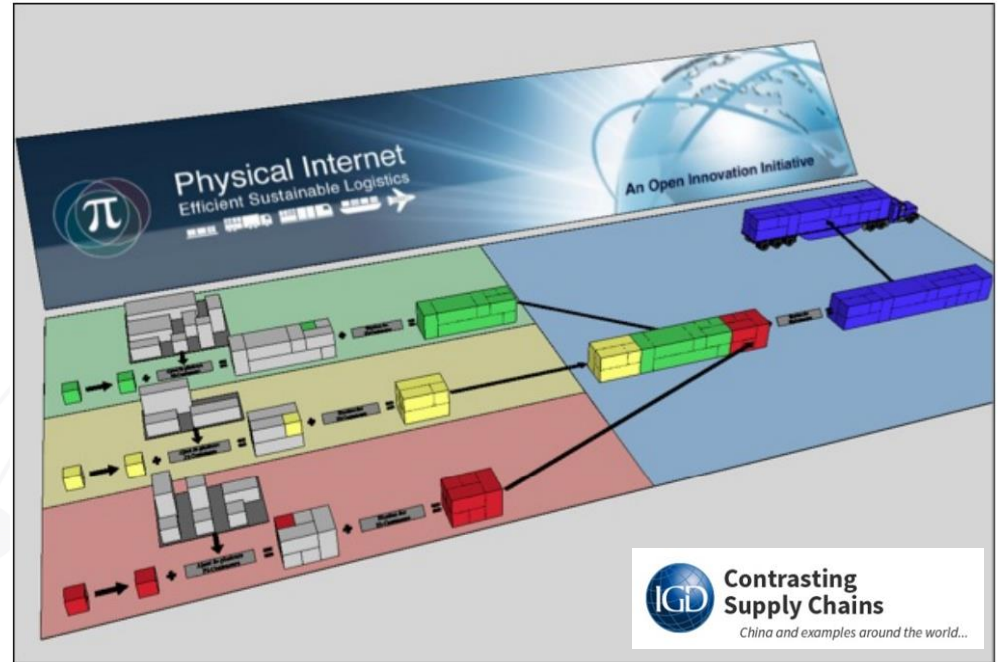
# The Physical Internet

## Dynamic flows

“Open global logistics system founded on physical, digital and operational interconnectivity through encapsulation, interfaces and protocols”

- Open market for logistics
- The network effect of users
- Shared networks
- Community
- Modular Containers

Source: Physical Internet Manifesto, Prof. Benoit Montreuil CIRRELT, Université Laval, <http://physicalinternetinitiative.org/>



# Brambles' perspective

## End-to-end involvement in the world's supply chains



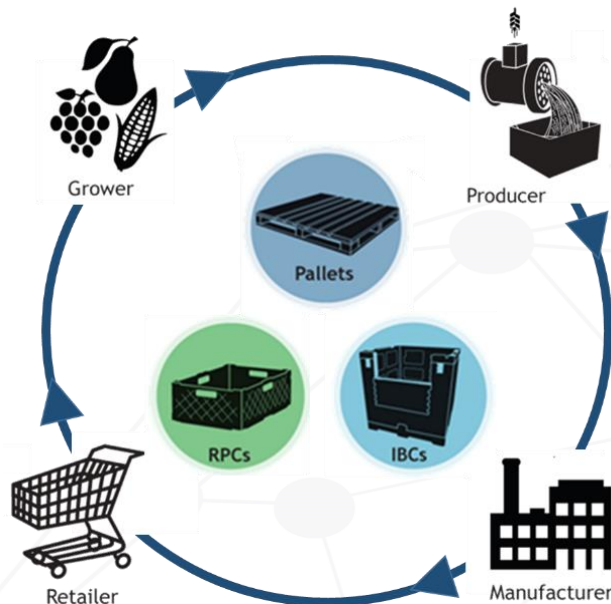
**60+**  
COUNTRIES



**14,500**  
EMPLOYEES



**+550 million**  
PALLETS, CRATES,  
CONTAINERS



**REUSE**

**SHARE**

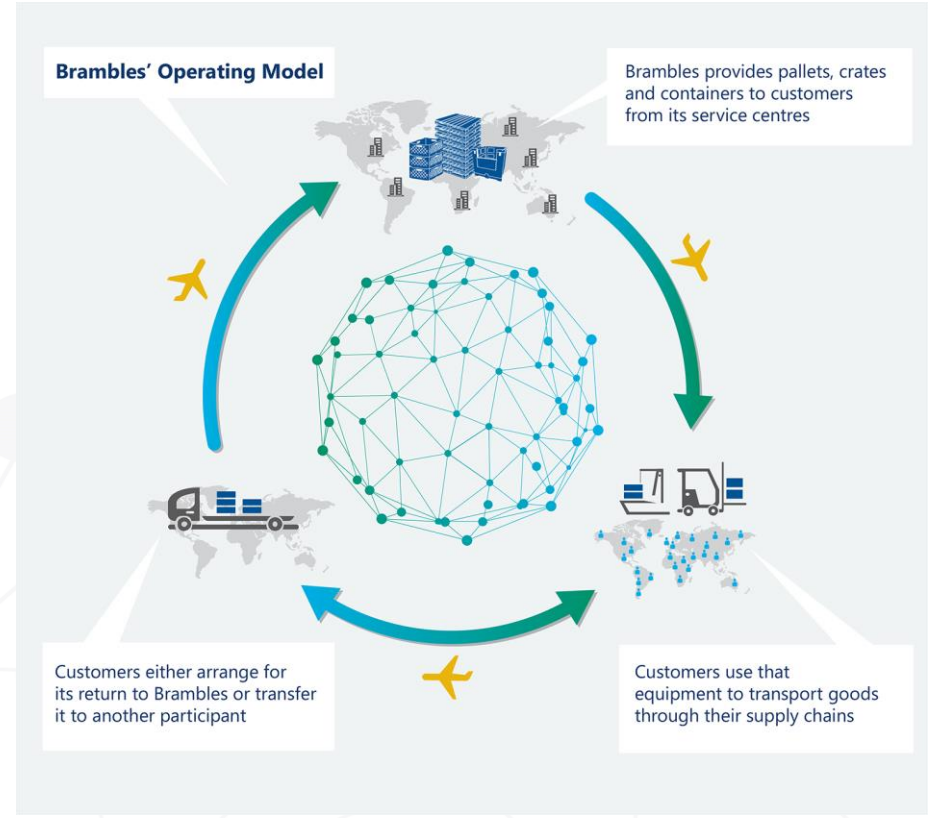
**SERVICE**

# Brambles Model

## Shared flows

Pallets, crates and containers are the industry standard means by which products, fresh produce and materials are moved between locations.

An invisible network that supports and enables the operation of millions of businesses in both national and international markets, from local stores to almost all of the globally recognised corporate brands



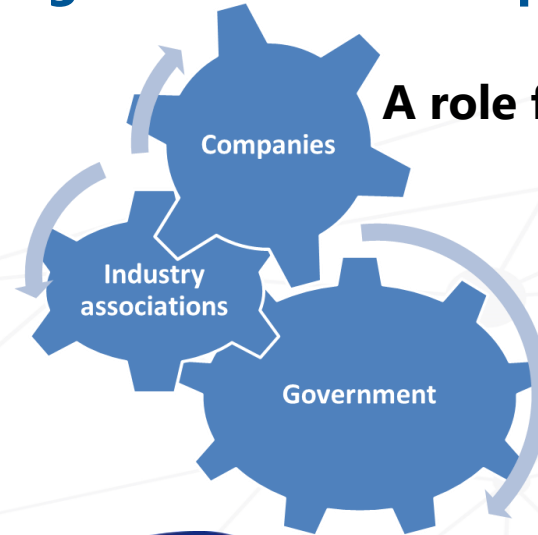
# CHEP - CAITEC logistics research

**CHEP**

A Brambles Company

## “China FMCG Industry Supply-Chain Logistics Research Report”

- Independent cost analysis showed clear efficiency gains are enabled by **palletisation**, to increase materially over the next 5 to 10 years
- Environmental and safety benefits
- The challenge of standardisation, collaboration, education, innovation



**A role for everybody**



商务部国际贸易经济合作研究院  
Ministry of Commerce The People's Republic of China  
Chinese Academy of International Trade and Economic Cooperation

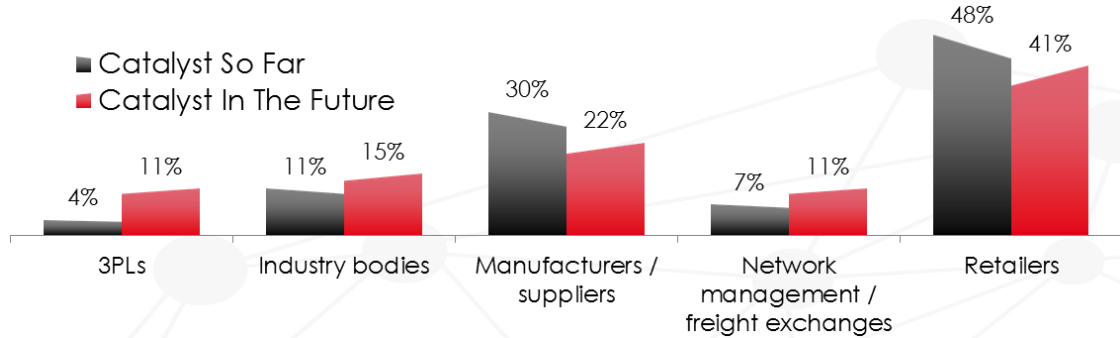
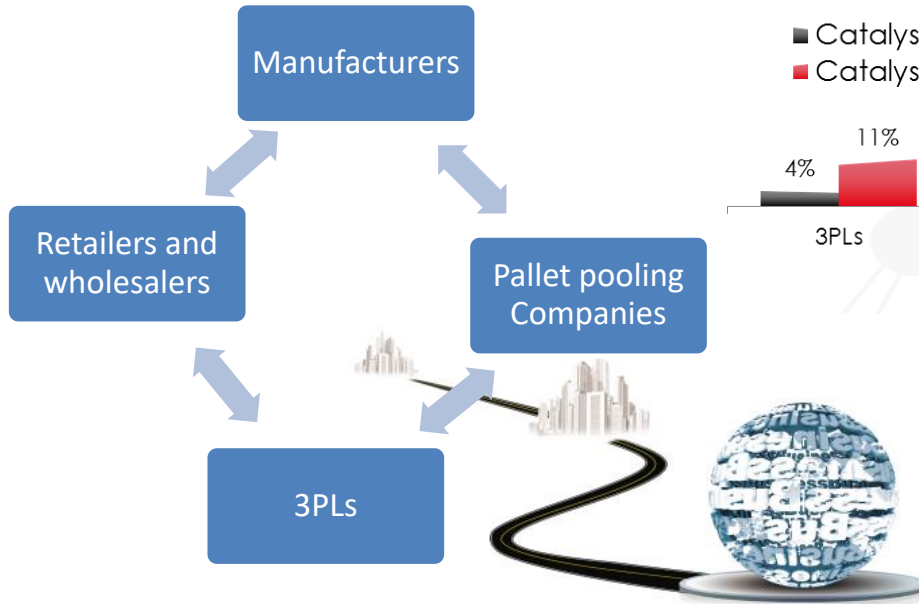


# Collaboration / harmonisation

**CHEP**

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All players benefit from working in harmony in the physical internet

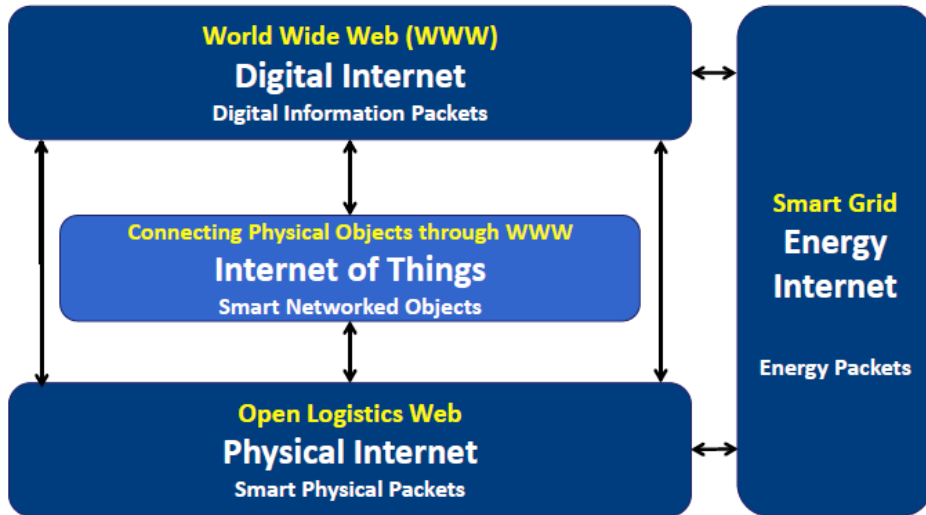


**Biggest catalyst for a collaborative approach to logistics**

Source: 

# Innovation: data & logistics web

## Combining Physical and Digital for Greater Customer Value



### Brambles established BXB Digital in Silicon Valley

- to accelerate innovation in digital supply chain solutions for our customers
- Make 550 million assets smarter

Original schematics from Benoit Montreuil, 2010, Physical Internet Manifesto, [www.physicalinternetinitiative.org](http://www.physicalinternetinitiative.org)

# A Final Thought

## Opportunities in Malaysia?

Malaysia employs 1 standard shared pallet for every 10 people

Australia employs 7 standard shared pallets for every 10 people

What efficiencies could the Malaysian Supply Chain generate by moving further along the sharing journey?