

## The case for Australian investment in RFID

Many information sources that can be evaluated from web sites, articles and vendors

But competitive advantage is not achieved over night.....

How do we best analyse and debate the realistic possibilities?

# Recognising the realities



**Dock Door RFID Portal**



**RFID Enabled Rack**



**Garment On Hanger RFID Portal**



**RFID Enhanced  
Stretch Wrap Machine**



**RFID Enabled  
Bulk & Staging Areas**



**Fork-lift Mounted RFID**

# RFID knowledge base

- 76 countries
  - 2300 case studies
  - Doubling year to year
  - Japan, Korea, China
  - Australia – 7<sup>th</sup> : 85 case studies
- 
- [www.rfidbase.com](http://www.rfidbase.com)

# Automated Data Capture Technology Suite

**Linear Bar Code**



**2D Symbol**



**OMC**  
Optical Memory Card



**STS**  
Satellite-Tracking Systems



**Smart Card**



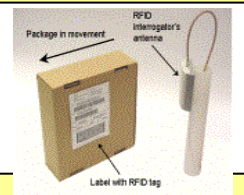
**CMB**  
Contact Memory Button



**RFID - Active**  
Radio Frequency ID

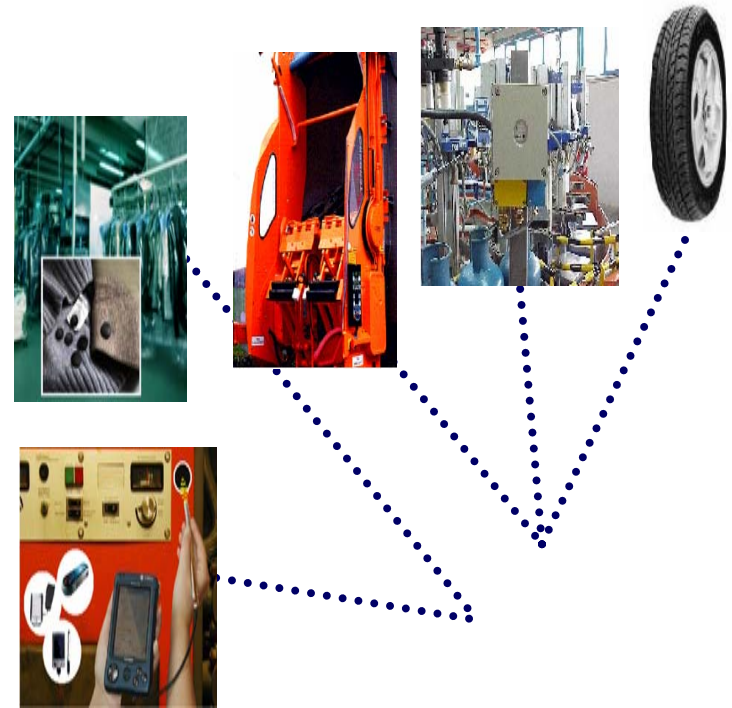


**RFID- Passive**  
Radio Frequency ID



## ROI in RFID: Aberdeen Group Sept. 2006

Automate manual processes  
Reduce production time  
Assure product integrity  
Locate critical assets  
Identify critical assets  
Track chain of custody  
Reduce cost of transactions  
Reduce errors



average 30 months  
and falling

# The ROI of RFID in the Supply Chain: Alinean Research August 2006

## Manufacturing Case Study

Productivity Improvements	18% productivity improvement
Reduce exceptions	21% reduction
Reduce PO processing costs	30% productivity
Inventory savings	10% inventory reduction
Reduce inventory scrap	45% write-off avoidance
Reduce DSO	8% DSO improvement
Reduce AR disputes	40% dispute avoidance
Improve net fixed asset utilisation	2-3% NFA improvement
Lost asset recovery	40% reduction
Improve plant asset maintenance	48% cost avoidance
Improve customer satisfaction	1.5% improvement in retention

## The Influence of Communications Technology

### Characteristics of disruptive competition

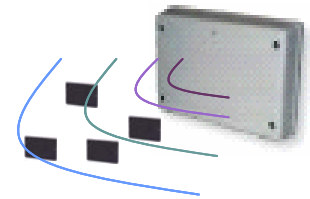
- Speed of new market entrants
- Sourcing, substitution, copying
- Automating production costs
- Access to global buyers
- Total product cost
  - Quality
  - Warranty
  - Demand
  - Logistics



**IP Networks**



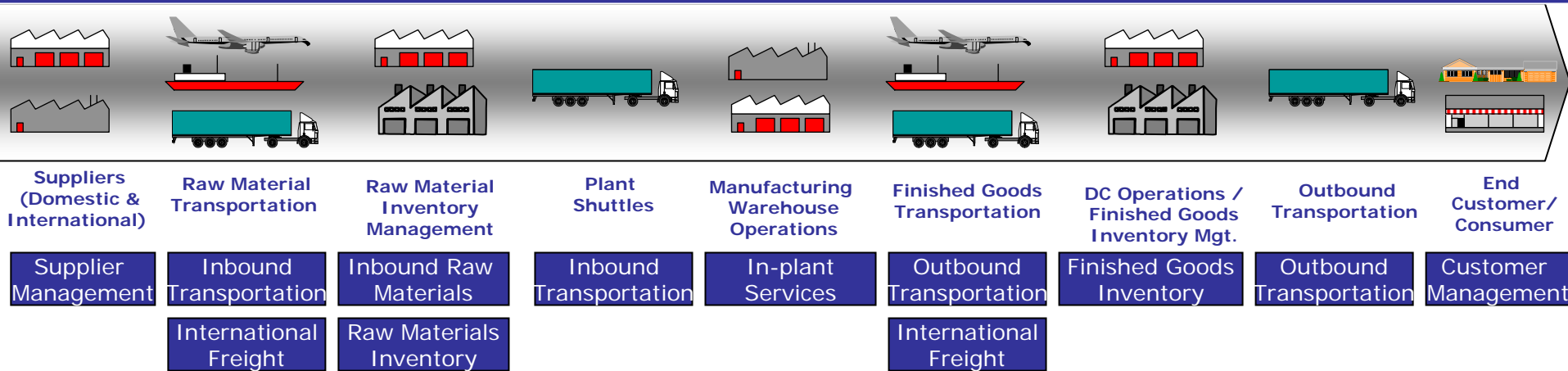
**Internet**



**RFID**

# Dramatic Change to Global Logistics

## Supply Chain Management



**Floating Warehouses**

**Distribution Way Points**

**Mobile Distribution Centres**

**Automatic identification and data collection technologies using RFID enable real time visibility from source to consumer**

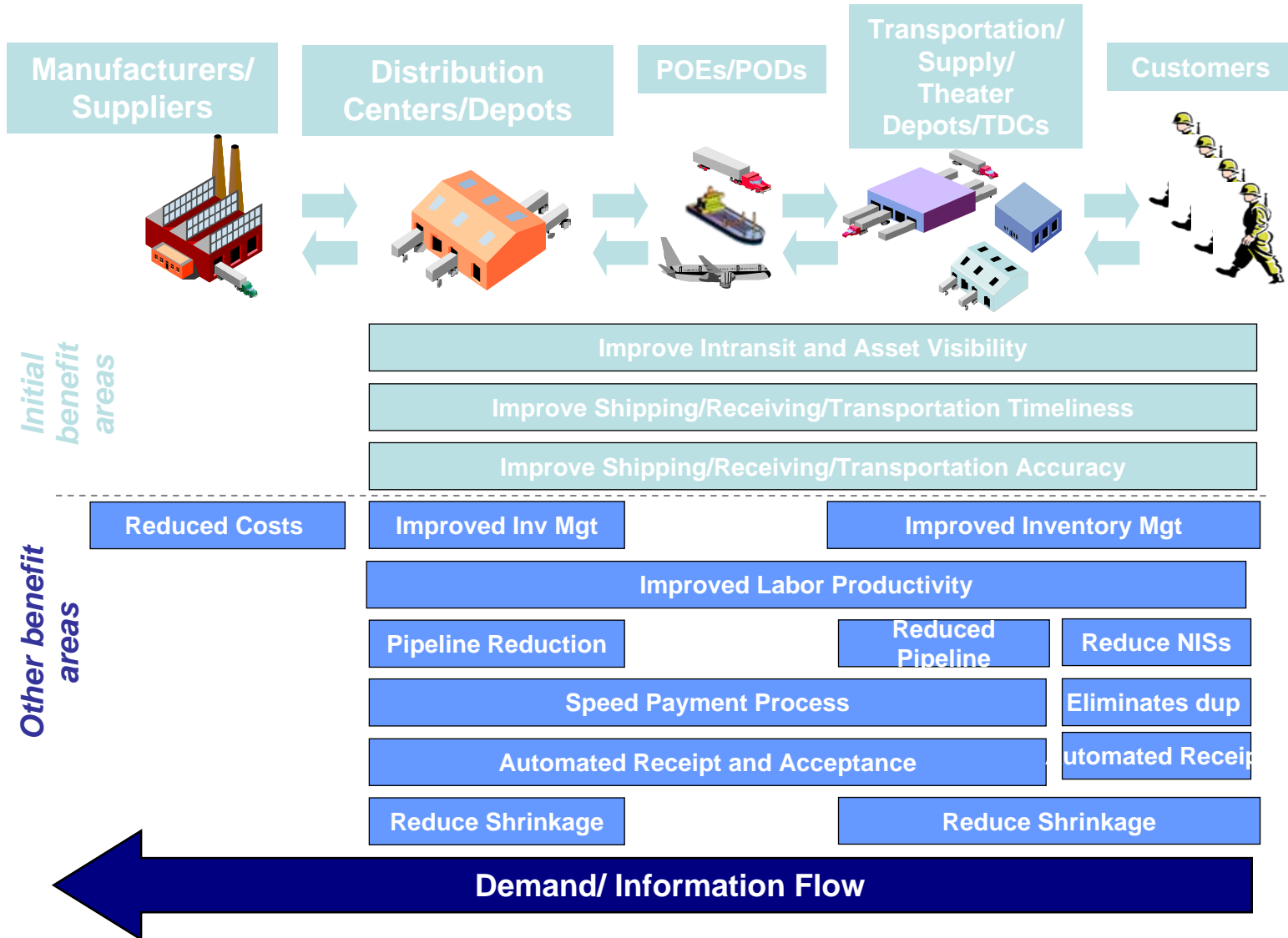
*creating **new** value in the supply chain*

## RFID Value Potential Throughout The Supply Chain

- **Manufacturing** - discretely identify products, the facility in which it was produced and the date of manufacture
- **Distribution Centers** - accurate inventory control and order fulfillment activities
- **Retailers** - track shelf activity, trigger automated fulfillment, improve customer checkout, billing and shrinkage
- **Reverse Logistics** - evaluate merchandise return speed to DCs, disposition of returned products, financials
- **Container/Yard Management** - Real-Time Locating Systems (RTLS) triangulate the relative position of tagged items. Useful also for specialized Kanban systems (requires expensive RFID Tags)
- **Asset Tracking** – tracking items such as returnable containers and high value products

**Infrastructure/ Standards / Collaboration and Understanding Required**

# Benefit potential: short and long term



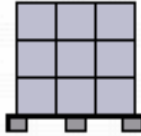

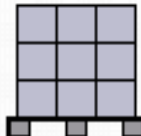

## European Union

# Building RFID for the Global Environment (Bridge)

- £ 7.5m
- 3 year initiative for business based research
- Capture the advantages
- Policy development
- Solid framework for the 'internet of things'
- Harmonisation of standards

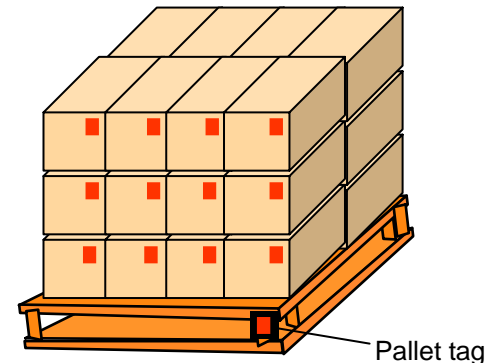
# Metro Group Case Study

## Time savings from RFID

	In-warehouse processes		In-store processes	
	Goods receipt	Verify DESADV	Goods receipt	Verify DESADV
				
Before	90 sec	15 min	80 sec	8 min
After	70 sec	3 min	60 sec	2 min
Time saved	<b>22%</b>	<b>80%</b>	<b>25%</b>	<b>75%</b>

# ROI Model for RFID

- Today: ranges from 18 to 48 months
- Just beginning to appreciate the influence of benefits in improved decision making/  
information integrity
- RFID will be remember for it's dramatic impact  
on efficiency and productivity
- Who 'owns' ensuring  
Australian business benefits?



## What if?

Independent source of clarity associated with:

Australian standards

Industry based models and pilots

Independent facilitation

Fast track learning and experience

Leverage of the global R&D investment

**Thank you for your support**