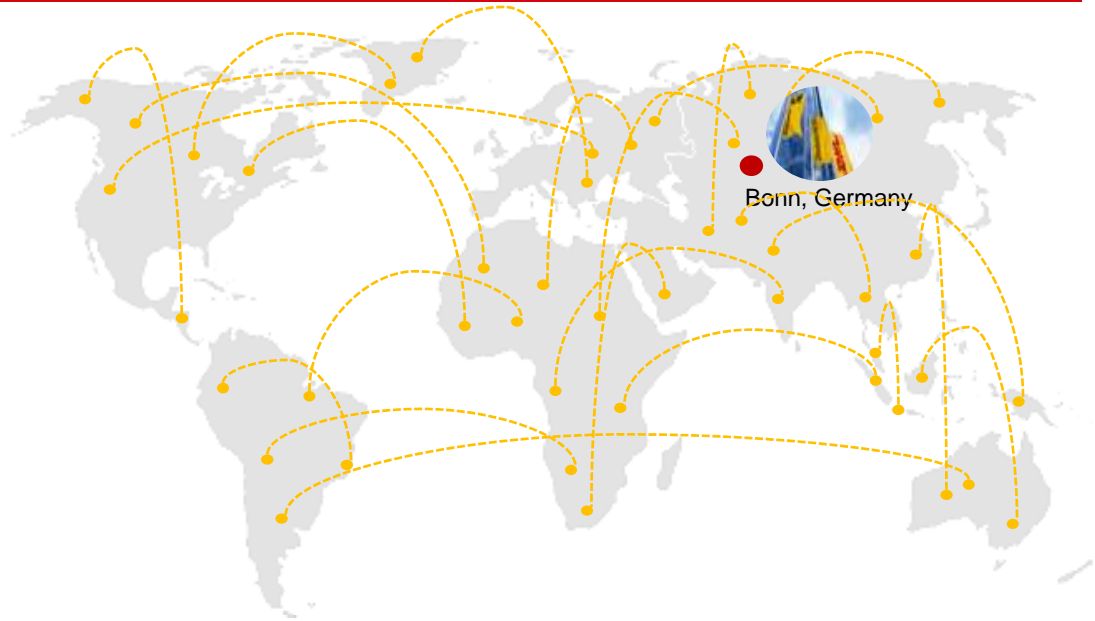
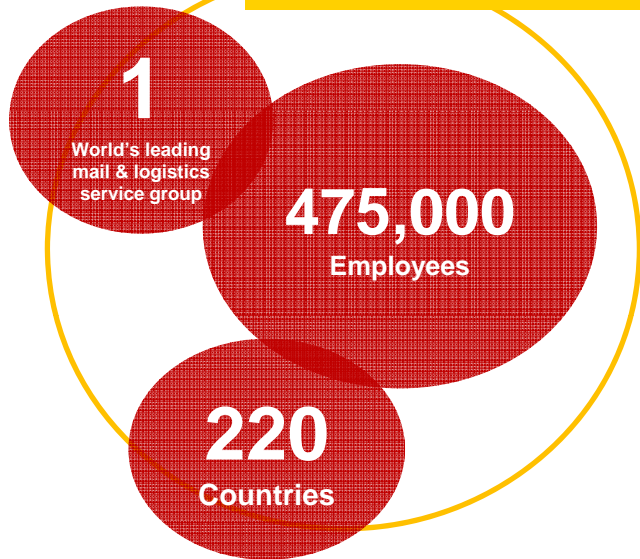







DHL SUPPLY CHAIN - INDIA



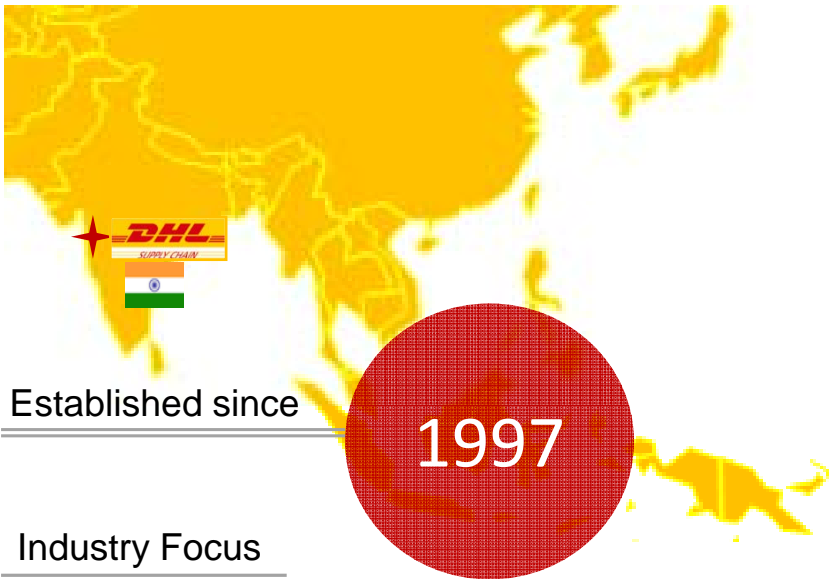
DEUTSCHE POST DHL – CORPORATE DIVISIONS

Deutsche Post DHL



 		 	
<ul style="list-style-type: none"> ▪ Mail Communication ▪ Dialogue Marketing ▪ Press Service ▪ Value-Added Service ▪ Parcel Germany ▪ Retail Outlets ▪ Global Mail ▪ Pension Service 	<ul style="list-style-type: none"> ▪ Courier, Express and Parcel Service ▪ Regions: <ul style="list-style-type: none"> ✓ Europe ✓ America ✓ Asia Pacific ✓ MEA (Middle East & Africa) 	<ul style="list-style-type: none"> ▪ International Air and Ocean Freight as well as Overland Transportation Services 	<ul style="list-style-type: none"> ▪ Tailor-made Contract Logistics Service ▪ Warehouse Management ▪ Transport Management

DHL SUPPLY CHAIN (DSC) INDIA



Established since

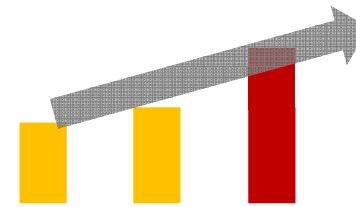
1997

Industry Focus

Retail & E-comm	Consumer	Auto & Eng.	Technology	LSHC
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Solutions	Warehousing	Distribution	
	Spare Parts	Technical Services	Consultancy
	E-Commerce	Logistic Process Outsourcing	
	Packaging	FTL Transportation	

One of the largest Supply Chain companies in India



2011 2012 2013

Exponential growth since 2011

6 m + SQ-FT of warehousing space



7000+ employees
Incl. contracted staff



Over 2500 contracted vehicles



Suite of Warehouse Management & Transport System TM300i

**PACKAGING CHALLENGES FOR A COMPLEX
MARKETING AND DISTRIBUTION
ENVIRONMENT**



THE IRONY.....

Amount of focus on packaging seems to be driven by what consumers see in their ...



Yet it is as precious as the product inside



**IT'S AN INEVITABLE AND NECESSARY
FEATURE OF MODERN LIVING !!**

IMPACT OF CONSUMERISM

NINETIES

- Shopping was a daily exercise
- Almost no supermarkets
- Queues
- Range/choice was limited
- Fresh food seasonal



TEENIES

- Increased Consumption
- Supermarkets are everywhere and Shopping is mostly a weekly excursion
- Huge range and choice are huge
- Products available all year round

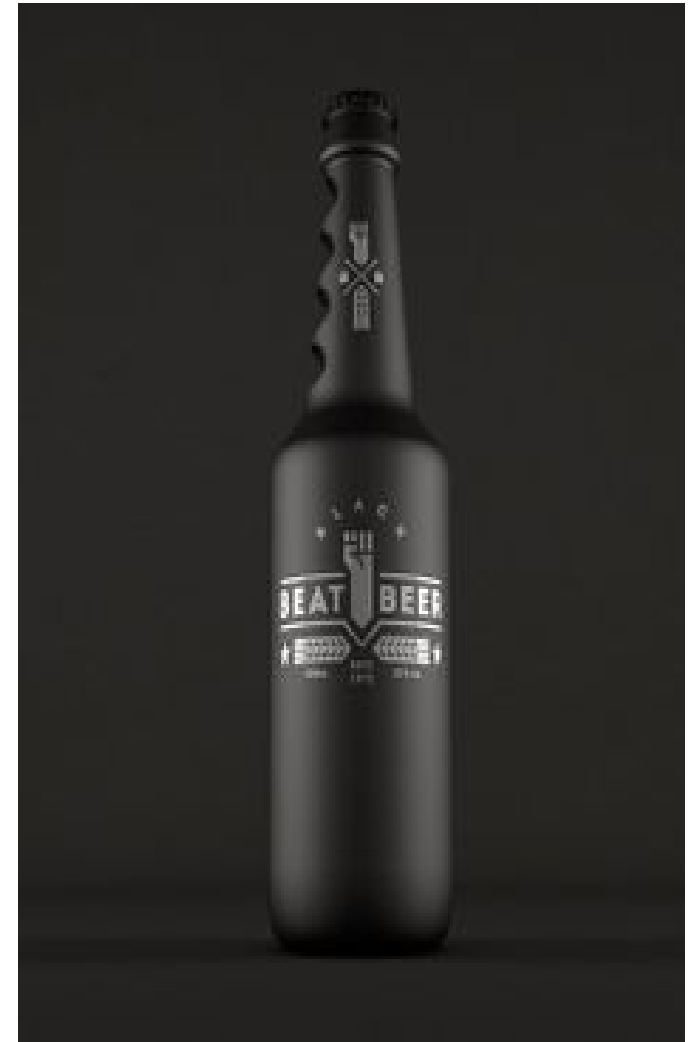


PACKAGING?

Broad and well-established definition of packaging in the three following statements:

- (1) Packaging is a coordinated system of preparing goods for transport, distribution, storage, retailing, and end use*
- (2) Packaging is the means of ensuring safe delivery to the ultimate consumer in sound condition at minimum cost*
- (3) Packaging is a techno-economic function aimed at minimizing costs of delivery while maximizing sales (and hence profits)*

ART OR SCIENCE ??



MARKETING

Determining Factors

- Pack Size
- Language
- Colours
- Culture/ Customs
- Aesthetic
- Placement / MOQ

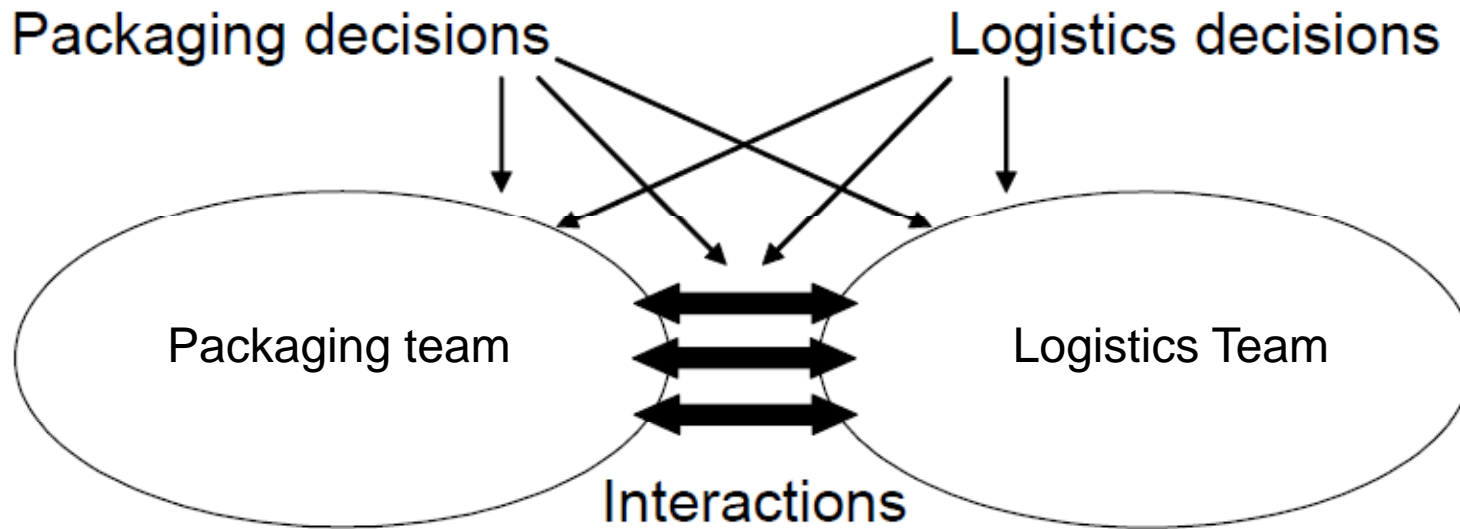


Challenges

- Centralized Sourcing
- Counterfeits : Tamper proof (one time use)
- Statutory Requirement & placement of information

OPTIMAL PACKAGING

Understanding packaging decisions impact on logistics and how logistics decisions impact on packaging and role of Planning and Technology in bridging gaps.



BRIDGING THE GAP..

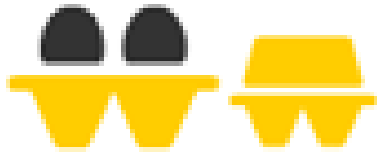
Identify, structure and describe interactions between packaging and logistics in the supply chain.

Develop a tool / model of the impact of packaging and logistics decisions on each other and mechanism to bridge the gap

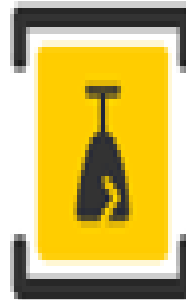
Identify and analyze potential trade-offs between standardized and differentiated packaging solutions to provide a basis on which decisions regarding packaging and logistics design and development and made.

To describe and investigate benefits, cost and the process of implementing technology (like RFID) to manage packaging and logistics development.

KEY DRIVERS



Transportation
(Mode, Geography)



Product Protection
(Toughness, Temperature/Season)



Warehouse Handling
(Distribution Channels)

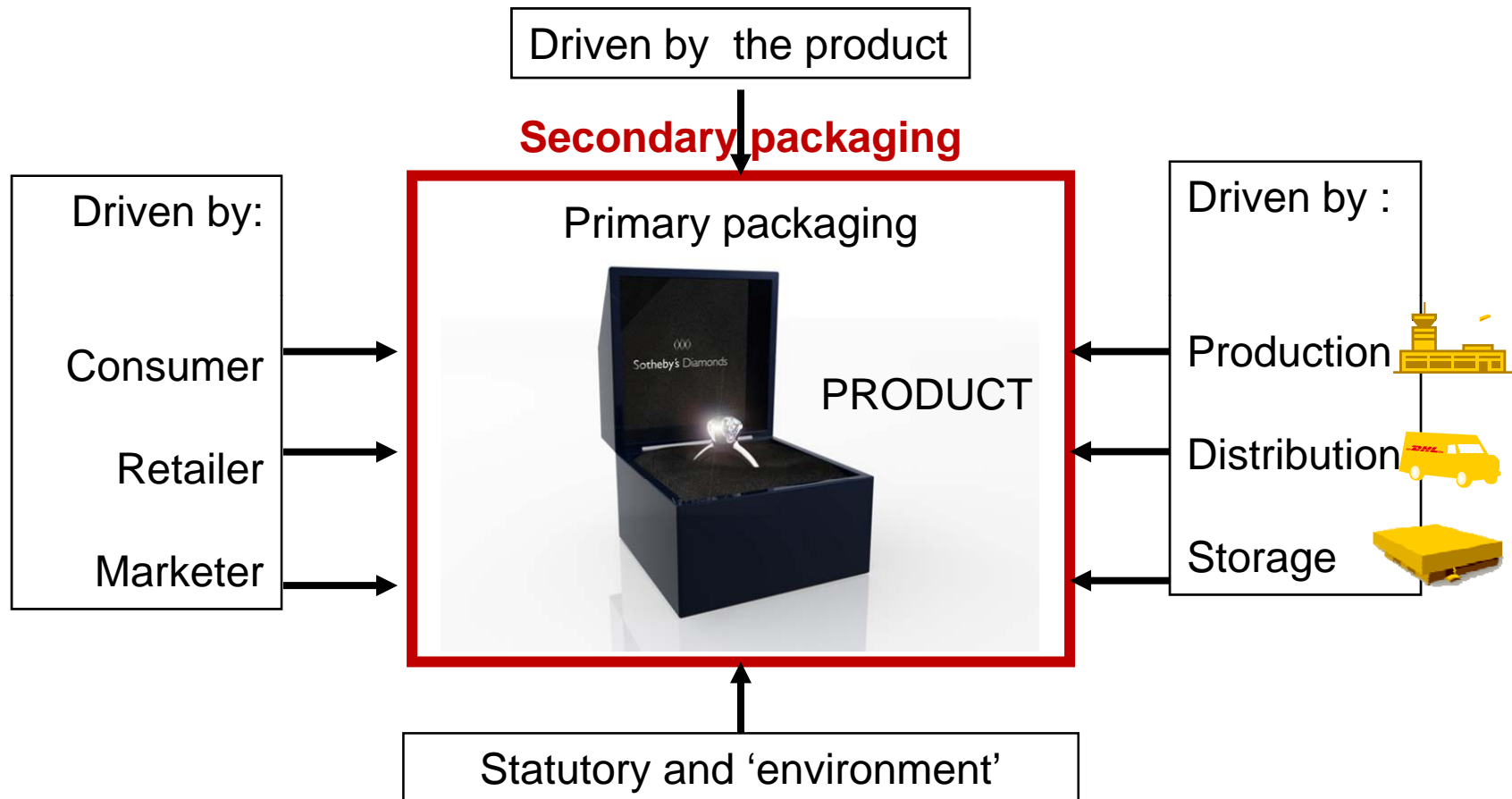


Handling



Information
(Product and Statutory)

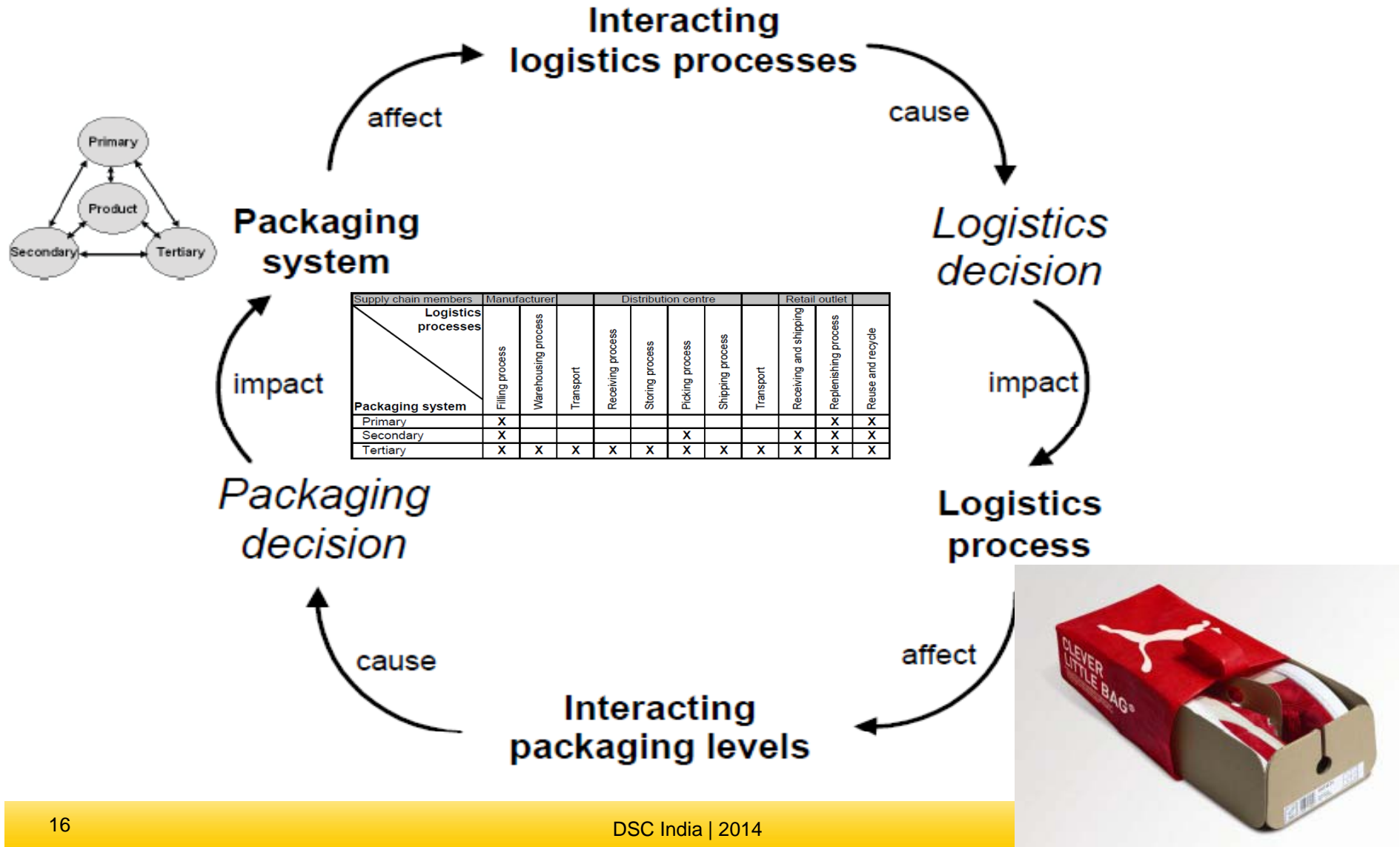
“DRIVERS” FOR PACKAGING



REQUIREMENT MATRIX.....DECISION

Supply chain members	Manufacturer			Distribution centre					Retail outlet		
Logistics processes	Filling process	Warehousing process	Transport	Receiving process	Storing process	Picking process	Shipping process	Transport	Receiving and shipping	Replenishing process	Reuse and recycle
Packaging system											
Primary	Packing line efficiency Filling speed Label application Closing & sealing technology Flexibility									Handling efficiency Promoting sale Shelf adaptation Product identification	Handling efficiency Material
Secondary	Handling efficiency Packing line efficiency					Handling efficiency Identification Ergonomics Protection Stability			Handling efficiency Identification	Handling efficiency Identification Protection Shelf adaptation Ergonomics	Handling efficiency Material
Tertiary	Handling efficiency Stackability	Handling efficiency Stackability Protection Stability	Cube utilisation Stackability Weight & height Stability	Handling efficiency Stability Identification	Cube utilisation Weight & height	Handling efficiency Material	Handling efficiency Weight & height Stability	Cube utilisation Weight & height Stability Stackability	Handling efficiency Material Stability	Handling efficiency Store concept adaptation Product identification Promoting sale	Handling efficiency Material

CAUSE AND AFFECT LOOP : LOGISTICS AND PACKAGING



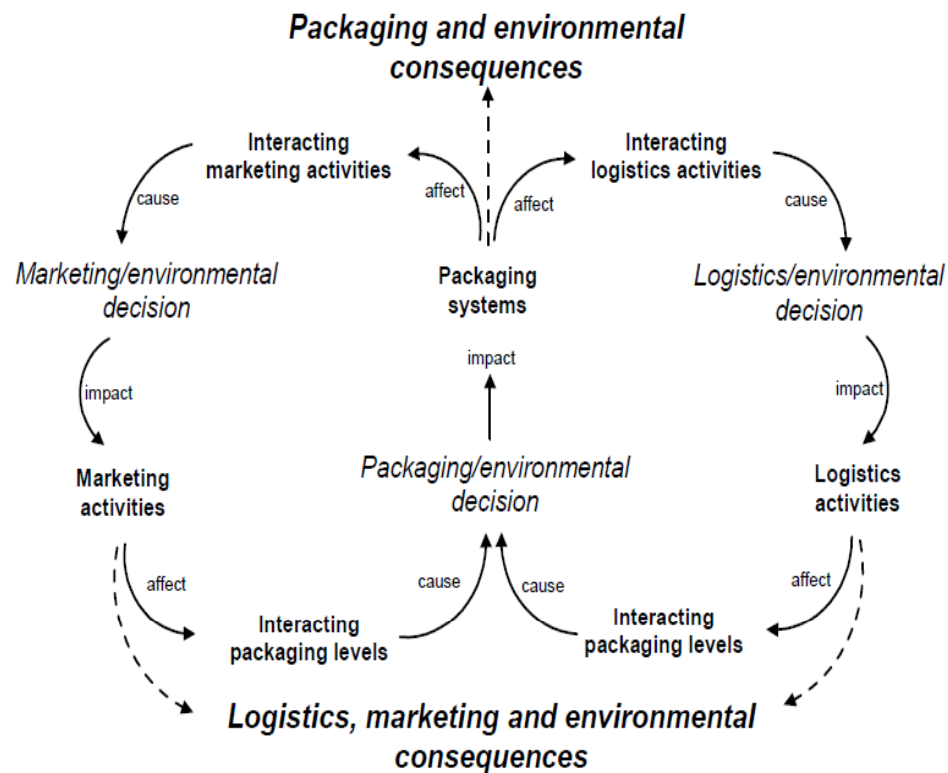
CASE STUDY 1



CASE STUDY 2



ENVIRONMENT



- Lightweighting materials
- Optimising structural and material design
- Eliminating unnecessary packaging
- Reuse (Reusable packs)
- Recycle our packaging by using materials that best fit the end-of-life treatment facilities available in the countries.

PACKAGING DRIVES BUSINESS.....

BUSINESS DRIVES PACKAGING....