

## ECR directions

## Supply Chain Management

By Mr. Polpiya Thitivesa November 4, 2002





## Scope of the Supply Chain & Logistics Management

This is the a FMCG industry common approach in managing Supply Chain and Logistics between factories and customers. Scope of this session will focus on the foundation and for academic purposes only.

Although, it is not suggested that there is only one way to perform Supply Chain & Logistics management, the approach outlined here is supported by the ECR.





### Agenda

- Supply Chain & Logistics Management Overview
- Update 5<sup>th</sup> ECR Conference Singapore
- Nestle way of managing Supply Chain & Logistics
- Knowledge Sharing (Q & A )





# Supply Chain & Logistics Management Overview



### **FMCG Industry Challenge**

The prevailing forces of change with an increasing level of consumer sophistication ...



High Competition

Price pressure

Cost pressure

...has led to the development of ECR



### Efficient Consumer Response (ECR)

45

"WORKING
TOGETHER TO
FULFIL CONSUMER
WISHES BETTER,
FASTER AND AT
LESS COST"

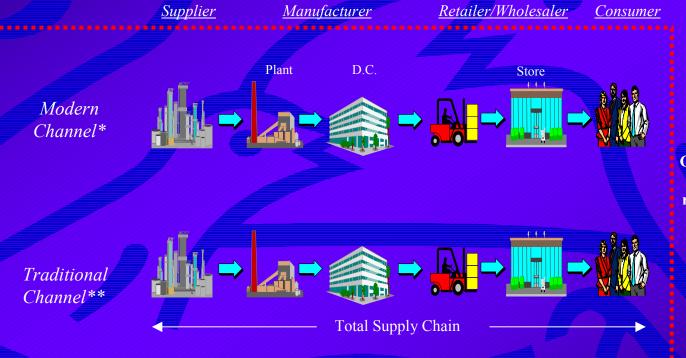
"GCI"

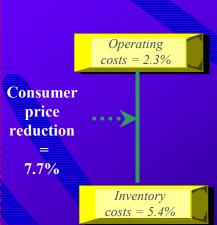
Global Commercial Initiative



## Supply Chain & Logistics Management Benefits

Through the adoption of ECR in Thailand for all channels, it is expected to reduce consumer price by 7.7%, which is equivalent to **Baht 38 billion** saving across the industry





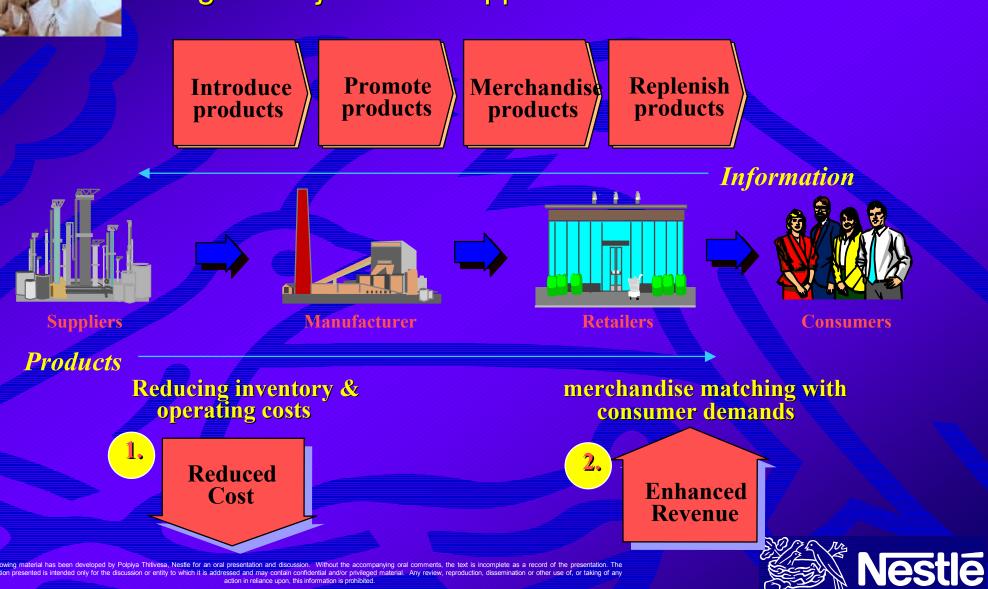
\*Modern Trade: Supermarket chains, hypermarket chains, convenience stores,

\*\*Traditional: Mom & Pop Store, independent Supermarket



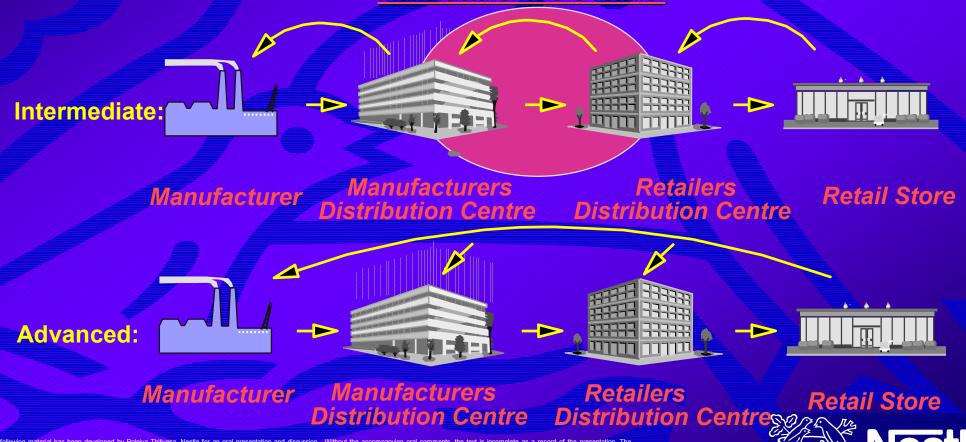


### Efficient Consumer Response (ECR) Original Objectives & Approaches



## Efficient Consumer Response (ECR) Challenge on Conventional Replenishment

Which can in turn drive Continuous Replenishment, which is the process of using consumer sales data, combined with joint forecasting for promotions, launches and re-launches, to drive the replenishment of product from the manufacturer to the retailer





## Supply Chain & Logistics Management What is it?



### Flow of goods

... is concerned with the strategy and management of the movement and storage of materials and products from suppliers, through the Manufacture, firms' distribution systems to retail outlets and customers





## Supply Chain & Logistics Management What wrong?

#### A Constrained Supply Chain

- Capital intensive plant
- Seasonal raw materials
- Supplier capacity constraints
- Limited labour flexibility
- Large batch sizes
- Trade capacity constraints

Potential for poor use of resources

#### **Demanding Market Place**

- Dominant competition
- •Consumer and trade promotions
- Short product life cycles
- Price changes
- Customer forward buying & diversion

High inventory levels
Idle and imprisoned capacity
High logistics cost
Poor service

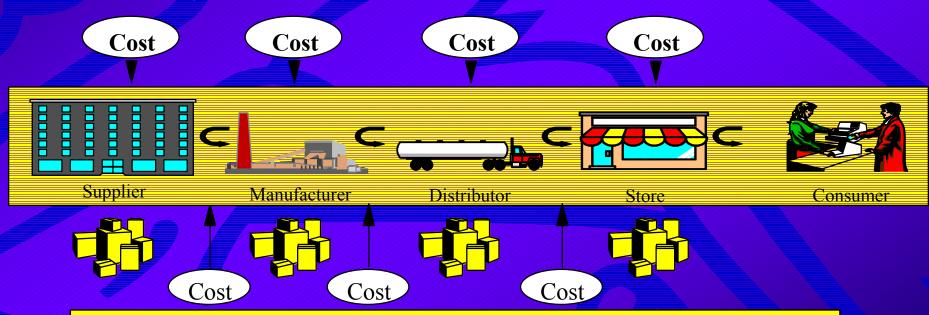




## Supply Chain & Logistics Management What are the Challenges in FMCG industry?

#### Minimise Total Cost (while maintaining or improving service)

Costs can be minimised by reducing the time that product spends in the supply chain and by increasing the efficiency with which resources are utilised



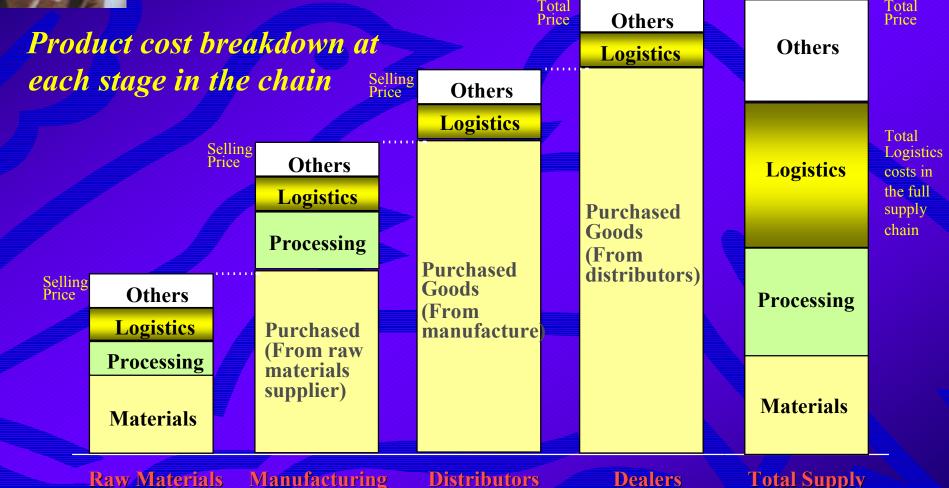
It is now recognised that optimisation of a single part of the supply chain may lead to a greater total cost





Supply

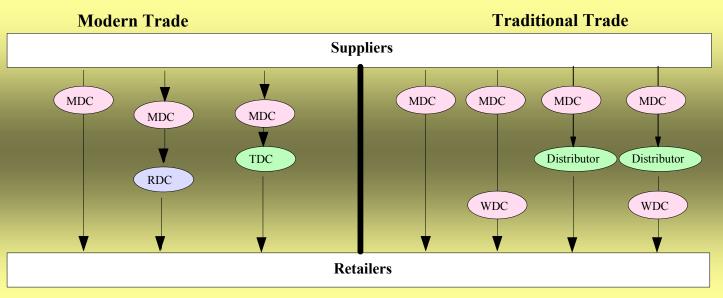
## Supply Chain & Logistics Management Shifting of Supply chain cost to the end consumer



Total Supply Chain Nestle



## Supply Chain & Logistics Management Complexity of FMCG Logistics flow in Thailand



MDC = Manufacturer's distribution centre

RDC = Retailer's distribution centre

WDC = Wholesale distribution centre

TDC = Third party distribution centre

Distributor = Exclusive distributor carrying limited range





## Supply Chain & Logistics Management Why FMCG needs to have inventory?

Inventory is required when a process and its inputs cannot directly satisfy the requirement placed on it

Input

**Process Mismatch** 

Requirement

- Big batches/Truck sizes
- Inflexibility
- Poor reliability
- Infrequent deliveries
- Poor forecasting





### Supply Chain & Logistics Management Types of Inventory we are working on...



#### **Stock Type**

Held due to product maturing requirements

Held as a result of time spent in transit (National campaign)

Held to buffer against **Safety Stock** unpredictable demand and supply variability

**Cycle Stock** (Production size)

Seasonal or **Strategic Stock**  Held as a result of the type of manufacturing regime in place

Held to cover anticipated shortages in capacity

#### Calculation/Dependents

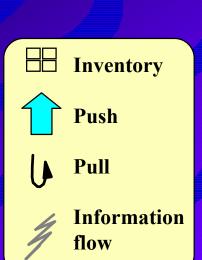
- Average weekly demand x length of incubation period (weeks)
- Average weekly demand
- Pipeline length (weeks)
- Cycle length
- Demand variability %
- Average demand
- Planning lead-time

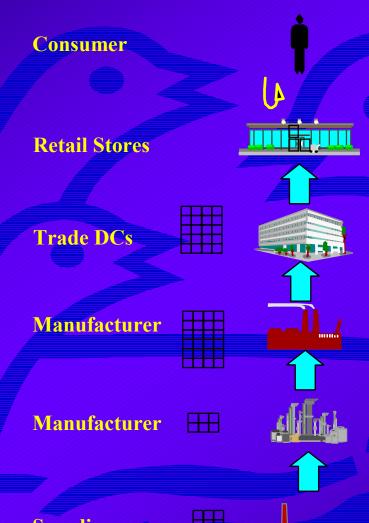
1/2 x Cycle Length (in weeks stock) or 1/2 x Batch Quantity





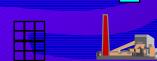
### Supply Chain & Logistics Management Response to Consumer Demand - "Push" System





Modern inventory management technique should move away from "pushing" products into the holding areas to ......

**Suppliers** 



**SUPPLY DRIVEN** 





### Supply Chain & Logistics Management Response to Consumer Demand - "Pull" System











Information flow

**Retail Stores** 

Trade DCs

Manufacturer







"pulling" products onto the grocery shelves in response to actual consumer demand







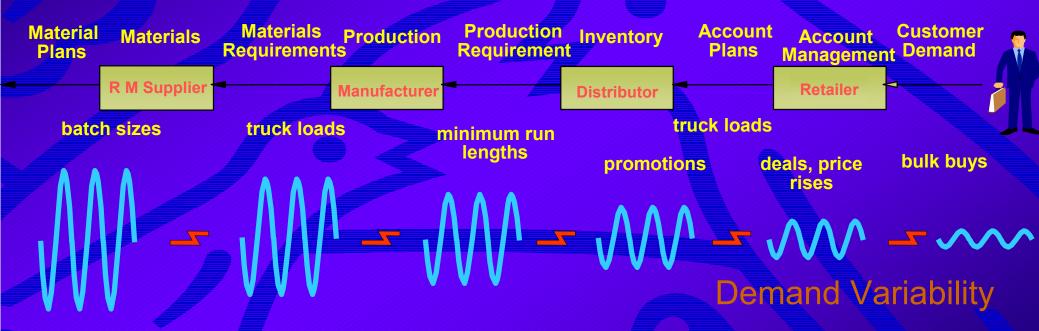
**DEMAND DRIVEN** 



### Supply Chain & Logistics Management

Synchronised Prodution - a pull based manufacturing system

Lack of synchronisation in the supply chain tends to amplify small changes in consumer demand. But what causes lack of synchronisation?

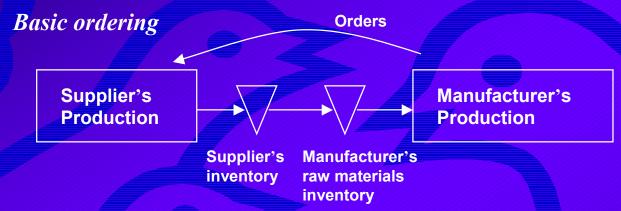


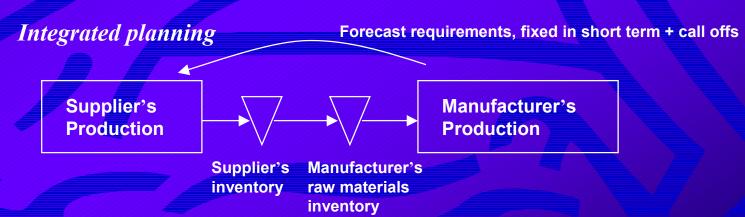
Variability increases cost and reduces customer service performance





## Supply Chain & Logistics Management Alternative methods of synchronisation

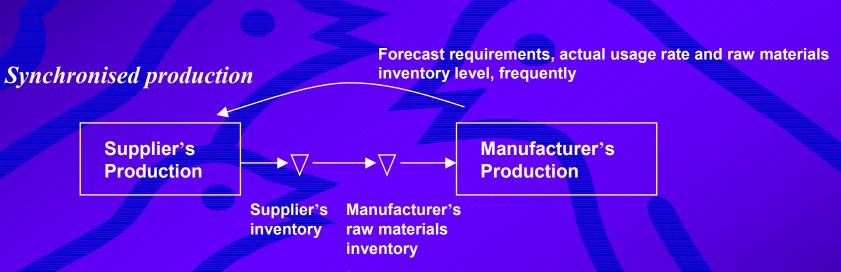








## Supply Chain & Logistics Management Alternative methods of synchronisation



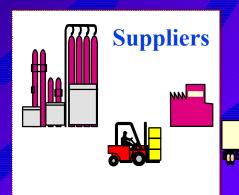
Supplier attempts to synchronise production to manufacturers so as to minimise inventory levels within capacity limits, based on actual production levels in manufacturer. Supplier replenishes to agreed inventory levels. Requires agreement on variability limits or forecast of demand spikes outside those variability limits

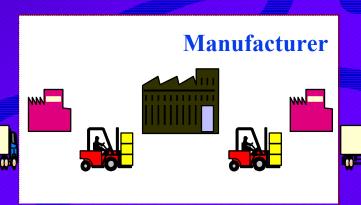


### Supply Chain & Logistics Management

### **Demand Planning**

...is an appropriate technique for trying to predict consumer demand, not to second guess retailers' or manufacturers' inventory policy and production schedules







Material schedules to meet production plans

Production plans to meet demand plans

Consumer demand forecasts

In this way mis-matches between predicted demand and predicted capacity can be managed





## Update 5th ECR Asia in Singapore



The 5th Annual Efficient Consumer Response (ECR) **Asia Conference** Singapore Swissotel The Stamford (former Westin Stamford) 22<sup>nd</sup> to 25<sup>th</sup> October 2002

50:50 **ECR Business Transformation** 50% less out-of-stock 50% less inventory

#### Sponsored by

































## Update 5th ECR Asia in Singapore

#### Create consumer value

- New frontier on Integrated Planning, Forecasting and Replenishment
- Take the real demand, process on Category Management (not a project)
- Focus on consumer, creating need to 'Solution' Center

#### Continuous Replenishment

- Simple replenishment to VMI to integrated ordering to CPFR
- Joint supply strategy, OOS Survey

#### Standard industry

- Standard pallet (1 x 1.2m)
- Promote pallet pool and control mechanism

#### IT as an Enabler tools

- Focus on track and tracibility (GTIN numbers)
- Promote EDI, Electronic communication and B2B
- Benchmarking the performance to Global Scorecard

**CATEGORY DEFINITION CATEGORY ROLE CATEGORY ASSESSMENT CATEGORY SCORECARD** Category Reviews **CATEGORY STRATEGIES CATEGORY TACTICS** PLAN IMPLEMENTATION Category Management 8 steps

The following material has been developed by Polpiya Thitivesa, Nestle for an oral presentation and discussion. Without the accompanying oral comments, the text is incomplete as a record of the presentation. The information presented is intended only for the discussion or entity to which it is addressed and may contain confidential and/or privileged material. Any review, reproduction, dissemination or other use of, or taking of an action in reflance upon, this information is prohibited. c

## Update 5th ECR Asia in Singapore

#### Create consumer value

- New frontier on Integrated Planning, Forecasting and Replenishment
- Take the real demand, process on Category Management (not a project)
- Focus on consumer, creating need to 'Solution' Center.

#### Continuous Replenishment

- Simple replenishment to VMI to integrated ordering to CPFR.
- Joint supply strategy, OOS Survey

#### Standard inclustry

- Standard pallet (1 x 1.2m)
- Promote pallet pool and control mechanism

#### IT as an Enabler tools

- Focus on track and tracibility (GTIN numbers)
- Promote EDI, Electronic communication and B2B
- Benchmarking the performance to Global Scorecard



