

Understanding Supply Chain Costs Study

Foreword

Under the auspices of the ECR Hong Kong Board, the GS1 Hong Kong has set up the Understanding Supply Chain Costs Task Force in 1999 with 12 leading industry players as members and Mr. Keith Bartlett from Park'n'Shop as the Chairman. The objective of the Task Force is to encourage local industries to understand the “true cost to serve”. To realize this goal, the task force commissioned Deloitte Consulting as an independent consultant to conduct an understanding Supply Chain Cost Study. The study was supported by 26 leading local retailers, manufacturers, distributors, service providers and consultant. Thanks to their contribution, the study was completed successfully giving valuable insight to the industry on attainable improvement areas. Special thanks should also go to the Park'n'Shop and GE Capital for their contribution in putting together two integral parts of the study.

The ECR Hong Kong Board was set up by the GS1 Hong Kong in 1997 to facilitate the development of SCM/ECR initiatives in Hong Kong and to provide links to other regional and international SCM/ECR bodies. The Board has gained support from key players from the FMCG industry, including retailers, distributors, traders, manufacturers, and supporting organizations. Under the Work Plan 2000, the Board has established two task forces:

- 1) Vendor Managed Inventory/Collaborative Planning, Forecasting and Replenishment (VMI/CPFR) Task Force to propagate and standardize the implementation of vendor managed inventory practice in Hong Kong so as to achieve widespread benefits on efficient product replenishment along the supply chain.
- 2) Understanding Supply Chain Cost Task Force to spot inefficient trade practices in the industry and make practical recommendations.

This study serves for two main objectives:

- looks for inefficient trade practices in selective areas of the Supply Chain.
- recommends key improvement areas to reduce non-value adding activities.

Covering 6 main scope of areas:

- Handling of Return Goods
- Unloading Delays at Retailers Warehouse
- Container Off-loading and Opportunities for Slip Sheet
- Inventory Holding Costs
- Free Stock Deals (conducted by Park’N Shop)
- Opportunities for Pallet Height Standardization (conducted by GE Capital)

Supported by a wide industry participants from the Supply Chain:

Retailers

- ◆ Dairy Farm
- ◆ Park’N Shop
- ◆ Watson’s The Chemist

Manufacturers/Suppliers

- ◆ Bristol Myers Squibb
- ◆ Campbell Soup
- ◆ Carlsberg
- ◆ CPC/AJI
- ◆ Johnson & Johnson
- ◆ Kao
- ◆ Nibong Tebal Paper Mill
- ◆ Procter & Gamble
- ◆ Swire Coca-Cola
- ◆ United Soft Drinks
- ◆ Vitasoy
- ◆ Winner Food
- ◆ Yeo Hiap Seng

Wholesalers/Distributors

- ◆ Dah Fat
- ◆ Edward Keller
- ◆ Getz Bros
- ◆ Hip Shing Cheong
- ◆ Huro
- ◆ JDH
- ◆ Sims Trading

- ◆ Yuet Kai

Other Parties

- ◆ Deloitte Consulting
- ◆ GE Capital
- ◆ GS1 Hong Kong

Handling of Return Goods

- 2.6% of all goods delivered to supermarkets and drug store chains are later returned to the supplier for such causes as product damage (25%), seasonal products (21%), bonus pack promotions (19%), delivery errors (16%), expired products (7%).
- The handling cost of physically returning these goods is estimated at HK\$24 m per year, or 4.56% of value of the goods involved.
- 40% of the goods returned are expired, damaged or generally unsaleable after sorting, leads to a loss of over HK\$200m.

Recommendation:

- Improve sales forecast accuracy on promotions and seasonal items.
- Reduce delivery error by adopting paperless online ordering such as EDI/Internet.

Unloading Delays at Retailers Warehouse

- At peak period, average unloading time and queuing time in retailer warehouse can be as long as 66 minutes and 80 minutes respectively.
- To avoid missing their slot, suppliers even spend unproductive time by arriving 58 minutes earlier than appointment time.
- The cost of an average delivery is increased by \$1,240 by the downtime and unloading delays may be costing the industry on the scale of HK\$150m-200m per year.

Recommendation:

- Free up more unloading bays to reduce time wasted in queuing for unloading

- Reduce the early arrival time by better delivery plans and more realistic appointment schedule.
- Pallet Pooling and mechanical unloading

Container Off-loading and Opportunities for Slip Sheet

- Pallet takes shortest time and lowest labour cost to unload but it has very low container space utilization and high material cost.
- Slip sheet is the most cost effective but it involves investment in special types of forklift equipment.
- Manual Mixed Products has the highest container space utilization rate with no additional material cost.

Recommendation:

- Pallet pooling on a cross-border basis should offer opportunity to reduce costs.

Inventory Holding Costs

- The rental cost varies from 1.6% to 4.3% of the value of goods depending on the stockholding levels, capital and holding costs involved.
- Stockholding costs range from 0.5% to 0.8% of cost per week cover of inventory held.
- Most Distribution Centres are being used as warehouses.

Recommendation:

Efficiently use the space through increasing inventory turns and reducing inventory days by:

- increasing sales forecast accuracy
- reducing inventory for slow moving items
- encouraging Vendor Managed Inventory
- working on optimising delivery loads between retailers and suppliers

Free Stock Deals

- It is a common practice for Hong Kong suppliers to give discount in the form of “1 in 10 cases free”.
- In a Park’N Shop study, the process costs of free stock deals, in terms of

pallet ordering, invoice queries and unloading delays, may be costing the industry HK\$9 m per year.

- The average cost of giving free stock has 0.9% increase in transaction cost (0.4% for suppliers and 0.5% for retailers)

Recommendation:

- All free stock discounts should be converted to a simple discount to reduce costs for the industry.

Opportunities for Pallet Height Standardization

- 50% of the products delivered on pallets involve different pallet heights, which results in additional manual handling on delivery.

Recommendation:

- Retailers should standardize pallet patterns wherever possible by using pallet pool providers as intermediaries.