Strategic Retail Assets

- Store locations ➔ customer convenience, loyalty
- Human resource ➔ customer service, operating efficiencies, desired merchandise
- Information and distribution systems, know-how ➔ lower cost, improves in-stock
- Information about customers ➔ personalization, loyalty
- Brand image/reputation – Private label merchandise ➔ customer loyalty

Interest in Improving Supply Chain Efficiency

- Supermarket – Consumer Package Goods Venders
- Department Store – Apparel Manufacturers
Packaged Goods Manufacturers Shift Marketing Focus

- Promotions > Advertising
  - consumer promotions – coupons, trade deals
- Supermarkets Reaction
  - Trade Promotions ==> Forward Buying ==> Extremely Uneven Production
- Response by Manufacturers
  - P&G - Reduce Consumer Promotion - Every Day Wholesale Price - No Trade Promotions – prisoner’s dilemma
  - Finally enter into cooperation in supply chain management

Motivation for Efficient Consumer Response

- Motivation for Packaged Goods Mfrg
  - Stop Price Promotion, Forward Buying
  - Level Out Demand
- Motivation for Supermarkets
  - Rise of Warehouse Clubs/Discount Store/Wal-Mart
    - Use of EDLP Pricing
  - Need to Become More Efficient
  - Excessive Inventory - $30 Billion

Mfg-Distributor/Retailer Fashion, Clothing–Quick Response Consumer

- Inherently Unpredictable Demand
- Old Solution - Over Buy and Markdown
- Quick Response (JIT inventory control system)
  - Provide Initial Assortment
  - Forecast Sales for Intermediate Form
  - Monitor Early Sales
  - Make Final Assortment
Strategic Importance of Supply Chain Management

- Opportunity to Reduce Costs
  - Transportation Costs
  - Inventory Holding Costs
- Provide Value to Customers by Making the Right Merchandise is in the Right Place at the Right Time
  - Fewer Stockouts
  - Greater Assortment with Less Inventory
- Improved ROI

Improve Return on Investment

Return on assets = \( \frac{\text{Net profit}}{\text{Total assets}} \times \frac{\text{Net sales}}{\text{Total assets}} \)

Efficient Supply Chain Management \( \rightarrow \) Higher Asset Turnover

Same Sales Using Less Inventory

Strategic Advantage: Wal-Mart

- Wal-Mart's success is from its information and supply chain management systems
- Why are competitor's lagging behind?
  - Made a substantial investment in developing its systems and has the scale economies
  - Through experience and learning, changes are always made to improve the system
  - Coordinated effort of employees and functional areas throughout the company
Fast Fashion Enabled by Efficient and Effective Supply Chain Management

Fast Fashion:

a retail business strategy that uses a supply chain management process to rapidly introduce fashionable merchandise and quickly respond to customer demand for the merchandise

ZARA

- Timely information from store managers with handheld devices to the corporate office
- Shorter cycle time from design to production to delivery to stores
- Shorter lead time – own production, small quantity production in close proximity, efficient logistics, premium transportation, frequent delivery
- No discounts necessary

H & M

- Improve channel performance by owning key components of SC
- Private label – designed by design teams, manufactured by subcontractors
- More efficient SC, shorter lead time (3 weeks to 60 days)

Minimize reaction time to market trend & customer feedback
- cost advantage – production time & inventory are reduced
- reduce the fashion risk, avoiding overstocks and markdown
- product characterized by high exclusivity ‘climate of scarcity’
Why are coordinated efforts important?
Example: A task of keeping stores in stock

- Stock stores with adequate shelf space
- Forecast accurately
- Stock stores with appropriate frequency
- Buyers place accurate, timely orders with vendors and distribution centers
- Distribution Centers need to send right quantities when the stores need it
- Buyers and marketing managers coordinate merchandise delivery with special sales and promotions
- Managers need to provide enough lead time for deliveries

Bull-Whip Effect – Uncoordinated Channel

The built up inventory in an uncoordinated channel where retailers and vendors do not coordinate their supply chain activities

What Causes a Bull-Whip Effect?

- Delays in transmitting orders and receiving merchandise
- Over-reacting to shortages and excess inventory
- Ordering in batches rather than generating a number of small orders
Retailers and Vendors Work Together

Four approaches for coordinating supply chain activities to reduce the level of inventory in the chain and reduce the number of stock-outs (in order of the level of collaboration)

- Use EDI
- Exchange information to reduce need for backup inventory, improve sales forecasts and production efficiency
- Vendor manage inventory (VMI)
- Collaborative planning, forecasting and replacement (CPFR)

Electronic Data Interchange Method for Exchanging Information

- EDI is the computer-to-computer exchange of business documents between retailers and vendors
  - Merchandise sales – store to DC, vendor
  - Inventory On Hand – store to DC, vendor
  - Orders – buyer to vendor
  - Advanced shipping notices – vendor to DC, store, buyer
  - Receipt of merchandise – dc, store to buyer, vendor
  - Invoices for payment – vendor to retail accounting
  - Access to retailers data warehouse - Sales history

Vendor Managed Inventory (VMI)

The vendor is responsible for maintaining the retailer’s inventory levels in each of its stores
VMI Logistics

- Make
- Pack
- Ship
- Factory

- Decide
- Buy
- Store
- POS

- Order
- Receive
- Sell
- Store

VMI—What it Lacked

- The vendor does not know what other actions (e.g., promotion) the retailer is taking that might affect the sales of its products in the future
- Focused on replenishment activity only
- Static-model based (assumed fixed reorder points to trigger replenishment)
- Often only moved inventory ownership rather than removing it
- Incomplete information for decision making
- Vendor and retailers use different systems and data bases

CPFR (Collaborative Planning, Forecasting, and Replenishment)

- Developed by VICS and adopted by ECR Europe
- The sharing of forecast and related business information and collaborative planning between retailers and vendors to improve supply chain efficiency and product replenishment
- The most advanced form of retailer-vendor collaboration that involves sharing proprietary information, such as business strategies, promotion plans, new product developments and introductions, production schedules, and lead time information.
CPFR

- Common goals
- A single demand forecast developed collaboratively
- Collaborative Promotional planning & execution
- A single, shared data source
- Improved inventory management across entire Supply Chain
- Optimized replenishment strategies with joint ownership
- Process simplicity creates optimal framework for success

Illustration of Supply Chain – Role of DC

Activities Performed by Distribution Center

- Managing inbound transportation
- Receiving and checking merchandise
- Storing or cross docking merchandise
- Getting merchandise floor ready
  - Ticketing and marking
  - Putting on hangers
- Preparing to ship merchandise to a store
- Managing outbound transportation
Advantages of Using a Distribution Center

- More accurate sales forecasts are possible when retailers combine forecasts for many stores serviced by one distributor.
- Enables retailers to carry less merchandise in the store.
- Easier to avoid running out of stock.
- Retail store space is more expensive than space at the distribution center.

Advantages of Direct Store Delivery

- Gets merchandise faster, and is thus used for perishable goods (meat and produce).
- Helps the retailer's image of being the first to sell the latest product (video games) or fads.
- Some vendors provide direct store delivery for retailers to ensure that their products are on the store's shelves, properly displayed, and fresh.

Who Can Use DC's?

- Retailers selling non-perishable merchandise.
- Retailers offering merchandise that has highly uncertain demand like apparel.
- Retailers selling merchandise that needs to be replenished frequently.
- Retailers that carry a large number of items shipped in broken case quantities like drug stores.
- Retailers with many outlets.
Logistics for Fulfilling Catalog and Internet orders

- When fulfilling orders from individual consumers, retailers ship small packages with one or two items to a large number of different places
  - Distribution centers for picking and packing orders for consumers
- Reverse Logistics

Radio Frequency Identification (RFID)

Radio Frequency Identification (RFID) allows an object or a person to be identified at a distance using radio waves.

- Reduces warehouse and distribution labor costs
- Reduces point of sale labor costs
- Inventory savings by reducing inventory errors
- Reduces theft – products can be tracked
- Reduces out of stock conditions

Why the Hesitation with RFID?

- RFID is expensive – the return on investment is low
- It still only makes sense to put tags on pallets, cartons, expensive merchandise or high theft items
- RFID generates more data than what can be currently processed
- Consumers worry about privacy invasion
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Customer Loyalty

- Committed to purchasing merchandise and services from a retailer
- Resist efforts of competitors to attract the loyal customer
- Emotional attachment to retailer
  - Personal attention
  - Memorable positive experiences
  - Brand building communications programs

Customer Relationship Management (CRM)

- A business philosophy and set of strategies, programs, and systems that focus on identifying and building loyalty with a retailer’s most valuable customers.
All customers are not equally profitable, and more or less profitable customers need to be treated differently.

Retailers now concentrate on providing more value to their best customers using targeted promotions and services to increase their share of wallet – the percentage of the customers’ purchases made from the retailer.

**Collecting Customer Data: Identifying Information**

Approaches that store-based retailers use:
- Asking for identifying information
  - Telephone number, name and address
- Offering frequent shopper cards
  - Loyalty programs that identify and provide rewards to customers who patronize a retailer
  - Private label credit card (that has the store’s name on it)
- Connecting Internet purchasing data with the stores
Privacy Concerns

■ Control over Collection
  - Do customers know what information is being collected?
  - Do customers feel they can decide upon the amount and type of information collected by retailers?

■ Control over Use
  - Do customers know how the information will be used by the retailer?
  - Will the retailer share the information with third parties?

Market Basket Analysis

Data analysis focusing upon the composition of the customer's market basket – what items are bought during a single shopping occasion

Uses:
  ■ Adjacencies for displaying merchandise
  ■ Joint promotions
    - Bananas in the cereal aisle as well as in the produce section
    - Beer with baby dippers
    - Tissues with cold medicine

Market Basket Analysis Taught Wal-Mart to Change!

<table>
<thead>
<tr>
<th>Product</th>
<th>Placed Near</th>
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<tbody>
<tr>
<td>Bananas</td>
<td>cornflakes, produce</td>
</tr>
<tr>
<td>Kleenex</td>
<td>paper goods, cold medicine</td>
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<tr>
<td>Measuring spoons</td>
<td>housewares, Crisco shortening</td>
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<tr>
<td>Flashlights</td>
<td>hardware, Halloween costumes</td>
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<tr>
<td>Little Debbie snack cakes</td>
<td>coffee</td>
</tr>
<tr>
<td>Bug spray</td>
<td>hunting gear</td>
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Identifying Best Customers

- Estimating Lifetime Value (LTV)
  - The expected contribution from the customer to the retailer’s profits over his or her entire relationship with the retailer
- Use past behaviors to forecast future purchases, the gross margin from these purchases, and the costs associated with serving the customers
- Classifying Customers by recency, frequency, and monetary value of purchases (RFM Analysis)

Which Customer Probably Has the Greatest Lifetime Value

Purchases Over Last 10 Weeks

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Customer Pyramid

Platinum
Best
Most loyal
Least price sensitive

80-20 rule: 80% of sales or profits come from 20% of the customers
Dealing with Unprofitable Customers

- Offer less approaches for dealing with these customers
- Charge customers for extra services demanded

Illustration of RFM Application

- A catalog retailer is deciding which group of customers to send a catalog. Based on experience and an RFM analysis of customer database:
  - Average order size for customers in cell - $40
  - Contribution margin – 50%
  - Response rate – 5%
  - Cost of catalog and mailing -$.75
- Will the retailer make a profit mailing to this RFM segment?