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Articles



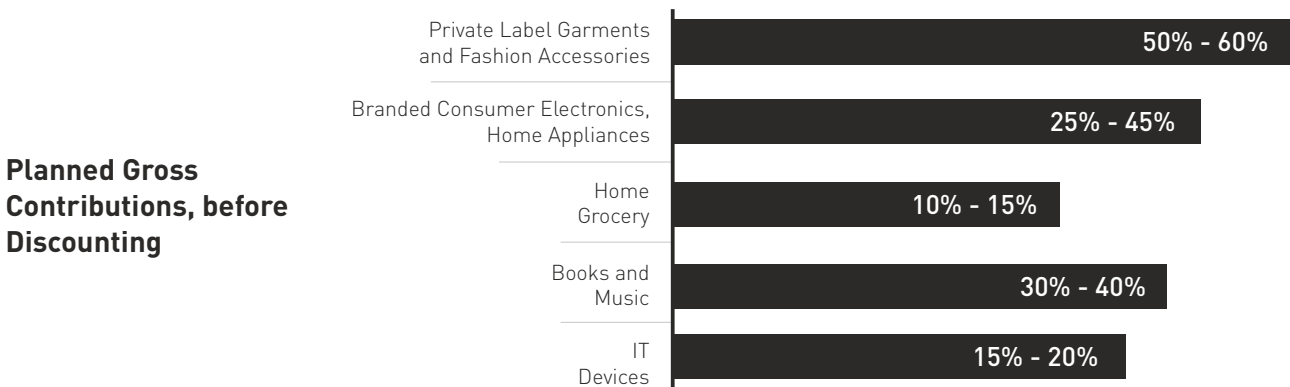
Retailer's Dilemma

by **Vector Consulting Group**



It is not uncommon for a manufacturing company to enjoy a profitability of around eight percent when the gross contribution is about thirty percent. However, it is rare for a retail chain enjoying a gross contribution of forty percent to have a consistent profitability of three percent (if they manage to make a profit at all).

It is relatively easier for retail chains to show rapid sales growth by opening new stores, however if there is no profit then continuing on this path of growth jeopardizes the very existence of the company.



Source: Vector Research Cell

As per a study by Harvard University professors, retailers with consistent high inventory turns have high profitability, resulting in higher share prices and vice versa.

Deciphering the correlation

Factors that affect inventory turns negatively are surplus and shortages, a reality for retailers across categories. It is not uncommon for stores to be stocked out of popular items while they hold slow moving stock of other items.

The impact of these factors on profitability is as follows:

Excess Inventory

- Money is blocked in excess inventory, thus preventing buying of required fast-moving items (due to OTB controls) resulting in lost sales.
- Surplus and slow-moving inventory occupy precious shelf space meant for fast-movers.
- Slow-moving items often require discounts resulting in loss of profitability.
- Write-off due to obsolescence or deterioration of inventory.

Stock Outs

- Stock outs may result in loss of sales as customers may not buy alternative items.

- Even when stock outs are addressed through expedited supplies, it disrupts normal operations and increases costs.
- Repeated experience of stock outs can lead to buying in excess which in turn can impact inventory.
- Both excesses and shortages have a negative impact. Each factor can result in a future instance of the other! The only way to improve inventory turns, consistently, is to eliminate shortages and surplus.

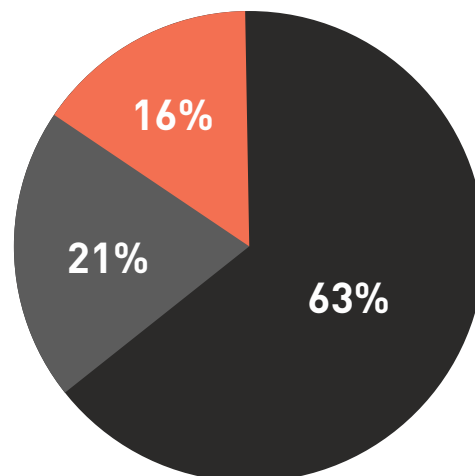
Improving Inventory Turns – The Challenge

The real challenge for improving inventory turns for a retail chain, consistently, is managing wide variety of products, and dealing with unpredictable movement of products in their life cycle.

Based on the current performance, products across retail categories can be classified as:

Profitability of Modern Retail Chains in 2011

- Loss making retail chains
- Profitability less than 4%
- Profitability above 5%



Source: CMIE Data Base

- **Hits:** Products in the 'peak' sales phase of their lifecycle.
- **Laggards:** Products whose sales are tapering off.
- **Deads:** Those at the end of their lifecycle
- **Niche:** Products with low but a consistent sale rate.

This classification means nothing to the end customer. But the understanding is critical for controlling sourcing and making store distribution decisions for improving inventory turns without jeopardising availability. The decisions become more complex when products move across classifications in a time much shorter than the supply chain lead-time. (For example, a garment style may become a 'hit' within three weeks of launch while the lead time to source it could be six months).

This environment forces buyers to forecast for a longer horizon resulting in surplus and stockouts. The inventory turns of such retail chains often go haywire, and are only brought under temporary control by discounted sales.

The mistake most retail chains are making is trying to manage the environment by improving forecast accuracy. A flop or hit looks obvious in hindsight; one assumes that with more information, knowledge or experience, one can predict this in future. However, the environment remains unpredictable while discounted sales promotions stay a regular affair.

The only way for retailers to achieve higher inventory turns without jeopardizing sales is to move away from forecasting to processes and systems for 'fast reaction' to changing trends.

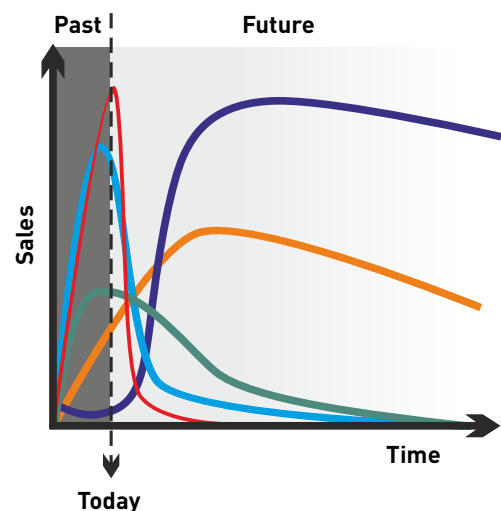
Fast reaction ability is required in the following areas:

- Supply Chain
- Decisions to Change Stock Levels
- Managing New Introductions
- "Killing" of Products

1. Supply Chain

The speed of supply chain is determined by the speed at which supplies are made to stores i.e., the speed at which the correct item in the correct quantity is made available. This speed varies based on each vendor's supply lead time to the stores. Improving all vendors' lead time is a herculean task. Typically, retailers protect sales by ensuring that inventory is sufficient to meet forecasted sales during the long lead time of vendors. In addition, the vendors' minimum order restrictions force stores to buy excess quantities. These rules reduce the ability to react quickly to changing demand.

Lead time to stores can be reduced if a retailer sets up a central warehouse to hold inventory, and then supplies the stores an assortment of SKUs (sourced from different vendors), based on daily consumption. This eliminates the need for minimum order on vendors for each store. With a central warehouse, the forecasting of product quantities would be at an aggregated location which can then absorb the variations in sales across stores, thus reducing the total inventory required in the chain. Higher the variability in demand and higher the number of stores to be supplied to, lower is the central warehouse inventory. Inventories at stores will come down due to reduced lead time, which is now the delivery time from the central warehouse. The supply of inventory based on consumption based pull replenishment will ensure that the store's inventory stays low. The consumption based pull system, as opposed to a reorder point system, also ensures lower slow-moving inventory in stores as supplies are made as per sales rate, not minimum order quantities. Resultant impact is improved availability of items, and reduced stock outs.



It is difficult to predict how and when the classification will change in the future.

Product Life Cycle of various SKUs

For vendors, a central warehouse provides significant benefits – high volume and uniform transactions to a single location. Also, better sales in stores translate into higher sales for the vendors.

The level of inventory retailers maintain at the warehouse is dependent on vendors' lead time. If vendors are dedicated to the retailer, then one can implement the principles of Theory of Constraints (TOC) in the vendors' shop floors to reduce lead time. However, if the vendor supplies the same brand to multiple retailers, then one can move to a system of replenishment from the finished goods warehouse of vendors to the warehouse of the retailer. This will deduct production lead time from the replenishment lead times. Also, with the vendor's warehouse in place, the frequency of supplies to the retailer can be increased. This frequent consumption based replenishment system helps reduce lead time.

The central warehouse and pull replenishment model have a huge impact on 'niche' items which sell at a low rate. When such inventory is pushed to stores, the overall inventory goes up as sludge is created. The best approach is to have low inventory (one piece) and keep the rest in the warehouse for frequent pull replenishment.

2. Changing Stock Norms

A system that analyses sale rate daily, helps pick up trends. When supply chain lead time is reduced, and there is a daily check on sales trend, a retail chain has the ability to change inventory norms and correct its buying decisions as soon as the trend is recognized.

3. Managing uncertainty of new product introductions

The current paradigm of buying relies on the judgment of buyers on potential hits or flops. Inventory of new products is placed at stores with the same assumptions and accepting reality when the performance is different from the initial judgment. A better way of managing new products is to accept the inherent uncertainty of the sales of their products. The central warehouse provides a capability to react immediately to sales in stores. When all quantities of new products are placed at the stores, the capability to react is lost. The way out is to place minimum quantity at stores, and have more in the central warehouse.

In some cases, it makes sense to limit introductions in few stores, and observe how they fare. The information can be used to decide on how they will be introduced in other stores and when to make a product continuous replenishment item.

4. "Killing" the SKUs

When new items are continuously introduced, they cannibalise the sales of some existing items in the category. This creates a long tail of SKUs with slow inventory movement. The normal practice is to declare an item dead, when it stops selling. The way to avoid dead inventory is to stop purchasing the SKU while it is still selling.

The company has to define a policy of range limit for each category. Once an item is introduced, another has to be removed from the range. The one which is the new item is substituting or the one with the lowest sale rate. If the discontinued item prevents the new one from being introduced occupying shelf space, (such as furniture) it should be removed within a targeted period with aggressive discounts.

These changes will help a retail chain enjoy consistent high inventory turns without compromising on availability, thus enabling it to exploit sales opportunity in current stores and earn a high return on investment. A high ROI model enables a chain to expand rapidly without facing roadblocks of low profitability and working capital issues.

Vector Consulting Group (www.vectorconsulting.in), is the largest Theory of Constraints (TOC) consulting firm in Asia. The firm has been working closely with well-known companies across industries to help them build unique operations and supply chain capabilities that can be leveraged as a competitive edge in the market. Vector now has the highest number of success stories in Theory of Constraints Consulting and has also won several national and international awards for their work.