Improving Inventory Turnover Performance: Conceptual Framework for Retailers

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ABSTRACT

Rising inflation in the Indian economy has raised the fear of dip in consumption and has resulted in slowdown in the growth of organized retailers. At a time when customers are spending cautiously, they tend to congregate around outlets that offer higher value. Shifting patterns make it necessary for retailers to re-organize their merchandise mix and put emphasis on inventories. The paper seeks to identify various factors which contribute towards effective merchandise management and enhance inventory turnover performance. Paper encompasses determinants of inventory turnover discussing alternative merchandise assortment strategies.

Key words : Organized Retailing, Merchandise Assortment, Inventory Turnover, Category Management.

A. Contemporary Retail Scenario in India:

Indian organized retail is a recent phenomenon. Most of the first generation organized retailers have made an entry only in last three to five years since 2002. However rising inflation in the Indian economy has raised the fear of dip in consumption and has resulted in slowdown in the growth of organized retailers. High inflation, mounting interest costs and rising rentals have hit growth of the Indian retail sector. Retailers are seeing a slowdown, which is thumping margins and facing a slowdown in expansion plans. Macro-environmental factors are putting a downward pressure on margins of Indian retailers. The March quarter (Q4) of 2008 registered a sharp slowdown in the sector's sales on a quarter-on-quarter basis, with sales slipping to 5.3%, vis-à-vis 12.4% in 2007 quarter[1.] Despite the impediments the pace of organized sector is expected to increase its share in total retail trade by 16% by 2012[2].

High inflation period is characterized by an increase in money supply and credit in relation to the volume of goods. Although households may not be able to prevent a fall in total expenditure, they do adjust the basket of goods purchased giving priori space to expenditure on essential commodities. At a time when customers are spending cautiously, they tend to congregate around outlets that offer higher value. Outlets that offer not-so-essential items are the foremost victims of inflationary environment as customers tend to shift the consumption towards essentials rather than luxury and high-end products. Clearly, the much-celebrated middle class, till recently lauded for its rising purchasing power and aspirations, is being most vigilant. Switching over to cheaper brands or just eliminating some of the more expensive regular items of consumption will be the order of the day.

Current inflationary period may be a business opportunity for some retailers if they make selective changes in category & inventory management and forge their vendor relationships. Shifting consumption patterns make it necessary for retailers to re-organize their merchandise mix and put emphasis on inventory management. This paper seeks to identify various factors which contribute towards effective merchandise management and enhance inventory turnover performance for organized retailers by maximizing returns on merchandise investment.

B. Improving Inventory Turnover:

The primary goal of a retailer is to sell merchandise. To decide, what to buy in bulk is a part of the activity of Merchandise planning. Developing efficient merchandise plan is often decisive for a retailer. It is an ongoing challenge before a retailer to select the right goods, location, time and price to

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sell. In today's competitive and inflationary environment it is desirable for retailers to maintain a right mix of merchandise that offers value.

The major cost incurred by the retailers involves the resource trinity space, labor and stock (Lush 1986, Larson and Lush 1990). Product proliferation and increasing demand has made inventory as one of the significant cost center for the retailers. Improving profitability of retailers calls for efficient merchandise activities (Sweeney J. Daniel 1973) because markup contributes to profits when merchandise is sold. A good merchandising plan helps in optimizing the utilization of scarce shelf space (Orenstine, 1999) and is an important determinant of store choice (Arnoloum & Tigert 1993). Thus maximizing the return on merchandising investment is imperative for retailers.

Inventory Turnover measures how a retailer can manage to sell its inventory or how efficiently the inventory is converted into sales. It measures the number of times inventory has been turned over i.e. sold and replaced, during the year. Inventory turnover is an effective indicator of inventory quality, efficient buying practices, and inventory management. This ratio is important because gross profit is earned each time inventory is turned over. If a retailer can quickly sell its inventory, then the Inventory Turnover will be higher. Conversely, if the company cannot sell its inventory very well, then the Inventory Turnover will be low. Higher inventory ratio may result into lost sales due to unavailability of merchandise at the right time. Inventory Turnover can be calculated as;

$$\text{Inventory Turn Over} = \frac{\text{Annual Sales}}{\text{Average Inventory}}$$

Managing efficient Inventory turnover in retail business is a challenging task due to an array of different merchandise categories offered. A separate inventory plan has to be adopted considering the product lifecycle and nature of the merchandise. The length of product lifecycle has a similar effect on gross margin and inventory turnover as product variety. A shorter product lifecycle implies rapid changes to products to better match consumer requirements, and thus, increased consumer utility (Pashigian 1988). Daniel J Sweeny (1973) has argued that merchandising is an investment decision and return on inventory can be measured in terms of Gross Margin Return on Inventory Investment (GMROI). Lawrene J (2002) in his paper on strategic resource model identified a positive relationship between GMROI and inventory turn over. According to Bajaj and Tuli (2006), higher inventory turn over leads to higher GMROI.

C. Contributing Factors to Inventory Turnover Performance:

Modern retailing is characterized by low margin high inventory turnovers focusing on the volume efficiencies of the retail shop. It is crucial for a retailer to identify the factors which contribute towards improving inventory turnover as it is directly related to Gross Margin Return on Inventory Investment. Determinants of Inventory Turnover ratio can be described as a store's efficiency in managing the inventory and customer services by way of breadth and depth of merchandise offered. Andrew (2007) argued that inventory turnover reflects effectiveness of retail shop in terms of customer service. According to (Bajaj (et al) 2002) customers evaluate services of a retail firm on the basis of the merchandise mix offered. Merchandise mix is the plan which details out the complete mix of products that will be made available to the customers (Radhan Swapan, 2006). Taking into consideration the limited space available to the retailers merchandise mix has to be optimized in terms of Breadth and depth of merchandise line. Both the breadth and depth of merchandise mix are said to be positively related to customers service vis- a-vis inventory turnover (Lamba, A. J 2007).

a. Gross Margin Return On Inventory Investment:

Gross margin return on inventory investment is defined as return produced from inventory investment (Bates 2007). It is a tool for planning and controlling merchandising investment and evaluates the returns being earned by the products purchased as compared to the investment in inventory required to generate those returns. GMROI reflects the movement of inventory relative to profitability rather then sales. According to Panda(2005) retailers profitability, measured in terms of GMROI, is based on Inventory turn over. Thus managing inventory turn over is imperative for improving GMROI. Besides, GMROI is helpful for the retailers in assessing performance dimensions like major assets under the control of a retail manager or comparing the performance of various categories having different sales volume.

Gross Margin Return on Investment can be calculated with the help of formula as follows :

$$\text{GMROI} = \frac{\text{Gross Margin}}{\text{Net Sales}} \times \frac{\text{Net Sales}}{\text{Inventory}}$$

Alternatively:

GMROI= Gross Margin % X Inventory turn over

b. Breadth and Depth of Merchandise Mix: Breadth and Depth of merchandise mix is positively related to inventory turnover. Breadth of merchandise refers to the number of merchandise brands available in merchandise line (Ramaswamy, 2005). The wider merchandise line reflects better customer service by appealing to different customer needs, adding to time, place and convenience utility for the customers, thereby increasing the turnover.

Depth of merchandise mix is the comprehensive selection of number of versions of a brand in terms of size, style, color and price within a particular product category. (Bajaj 2006) Increased product depth is directly related to increased turnover, it brings specialization in retail shop which when applied to the given target market increases turnover. Breadth and depth of merchandise represent the service output of the retail shop. The composition of merchandise category and its effective management will help the retailers to improve GMROI and Inventory turn over.

D. Category Management, An Effective Merchandise Activity:

In the quest to offer a right balance retailers may adopt to category management. Category Management can be defined as the process by which a retailer manages a single or related product categories as independent strategic business unit. The focused attention on a product category rather than the performance of an individual brand leads to delivering enhanced consumer value. It is an emerging technique for managing retail business. Selecting and deciding on individual category is crucial, as every category is made up of a group of products and brands that are closely related to each other. It is convenient to take decisions relating to various products in terms of inventory, promotion, display, stocking space and reorder, for a particular category rather than individual brands. (Refer fig 1)

A large number of retailers all over the world have adopted category management and consider it for the success of operations. Although it is difficult to make an exact assessment of the additional profit generated by the Category Management across the Mega Retailing but few benefits may be underlined as under:-

a. Increased Sales: Since category management implies a greater thrust in each category, the chances of stock-outs are few. Individual category teams also have a better understanding of their categories and are able to plan more accurate assessment. Increase in sale enhances the profitability of the retailer and leads to a better margin.

b. Improved Decision-making: Retailers suffer from the common phenomenon of data over load. If a retailer is provided with the data generated within the company without any sorting there would be a chaotic situation. Category management helps the retailer to leverage the ever-growing data code from all the points of operation in a classified manner. In turn, helps a store to make meaningful and appropriate decision.

c. Efficient Inventory Management: When a category manager is equipped with accurate and meaningful information relating to his category, would have a clear idea of the movement pattern of each of the items. Along with the adoption of category management techniques in logistics, the retailer would reduce inventory level substantially, perhaps to even just-in-time level.

d. Lower Investment Required: Better Inventory Management also implies that the retailer would require lesser working capital for his inventory. Even the interest costs are lowered for the retailer leading to reduced consolidated overheads.

e. Better Space Management: As is often said, 'Retail is Detail' with meaningful data, sorted out in a classified manner, it is apparent that every retailer would like to ideally allot shelf space to each category based on the sales and profitability of that category. Hence, a retailer may decide to allot more space to a product category that generates greater revenue while may decide to reduce the space of a product category that does not deserve the space allotted to it.

f. Improved Service Level: With increased focus on every individual category, retailer is also able to provide higher level of services. The category management helps the retailer to understand customers in a profound manner, there by enabling to meet their needs.

g. Better Coordination with Vendors: Provides the retailer with a high level of perfection there by, enhance the level of coordination with the vendors. Improved relationship between the vendor and the retailer increases the possibility of bringing in added benefits.

h. Better Accountability of Staff: Involves greater focus with wider authority and responsibilities for the entire team of a given category. The performance of the team as a whole and of individual performance can further be assessed. This performance is related respective category and of the staff involved.

E. Alternative Merchandise Assortment Plans:

A retailer's most important decision concerns the target market. Until the target market is defined and profiled, the retailer can not make consistent decisions on merchandise assortment, store décor, advertising messages & media, price, service levels, merchandise assortment and procurement. Retailer's merchandise assortment must match the target market's shopping expectations. Merchandise assortment plan is a combination of GMROI, inventory turnover, sales forecasting and assortment planning. The assortment plan provides the merchandise planner with a view of what the composition of a specific category of merchandise should be. Retailers may adopt different assortment plans to strike a balance between economies of scale and customer expectations in the dynamic retail environment. Decision to choose alternative plans depends upon the specific segments a retailer wants to cater. It helps in optimizing the return on inventory viz a viz customer services. For a retailer segments can be built up out of preferences of customers. Homogeneous preference reflect a market where all the customers have roughly same preferences and the market shows no natural segments, as true in case of food and grocery retailers. Diffused Preference replicate a scattered preference across the market. Variety, convenience or value driven customers fall into this segment. In clustered preferences the market may reveal distinct preference clusters. Specialty retailers offering exclusive merchandise come under this category. A retailer may adopt a strategy considering the preferential segmentation and market coverage. (Refer figure 2)

a. Wide and Deep Assortments: The strategy is aimed at broader market coverage to offer full selection of product categories augmenting customer traffic. The retailer follows the philosophy of 'one-stop-shopping'. This strategy aims at capitalizing the opportunities of the local market by adjusting the shelf space responding to the need. Retailers following this strategy can broaden their product line by stocking more and more regional and private brands priced lower than the national brands. This improves the margins of the retailers both in terms of increased turnover and profits on account of low prices. Hyper markets like Big Bazar of Future group, Spencer's of RPG group adapt to the strategy of offering multiple brands across the categories mixed with the private labels.

b. Narrow and Deep Assortments: Retailers offer few products in a specific product category and offer a larger assortment, creating a specialist image. This strategy aims at capitalizing the opportunities of more focused market by adjusting the shelf space responding to the need. Specialty Retailers like Nike', Adidas, Bata, or certain exclusive showrooms follow this strategy.

c. Narrow and Shallow Assortments: It is aimed at the convenience of customers in a small trading area. Their assortments are narrow and shallow in breadth. This strategy aims at high inventory turn over by targeting only to the specific needs of the customers. Neighborhood shops placed near residential areas follow this strategy.

Conclusion

Since inflationary trends are expected to continue in the near future, retailers are finding new ways of luring customers. Offering merchandise that offers value is one of the prime avenues retailers may resort to. Retailers may infuse information technology for the management of inventory leading to better allocation of the inventory to the stores, shorter ordering lead times, smaller batch sizes, and a lower cost of processing orders. This will allow a retailer to identify inventories which are not providing an adequate return on investment. To improve inventory turnover, a retailer may consider reducing the quantity normally bought from the supplier as inventory turns improve when one buys less of product, more often. Retailers may adopt to cross merchandising by carrying complementary goods and services to encourage shoppers to buy more. It could be aimed at merchandising the product lines as and when they are used thus improving the turn over of the retail shop by targeting to the impulsive behavior of the customers. An effective merchandise plan inventory system should be accurate; it should be dynamic in that it should conform to factors affecting sales (e.g., seasonality, marketing campaigns); and it should reflect the specific needs of the industry segment. It is important for a retailer to judiciously manage the space for increasing product variety or increasing inventory levels, in order to make them visible to the customers and to refrain from lost sales.

Footnotes

1. The impact of organised retailing on the unorganised sector by the Indian Council for Research in International Economic Relations (ICRIER), 2008.

2. (Retail industry has enough headroom to grow, 7 Jul, 2008, 0515 hrs IST, Supriya Verma, ET Bureau.).

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Figure 1 Category Management in retail

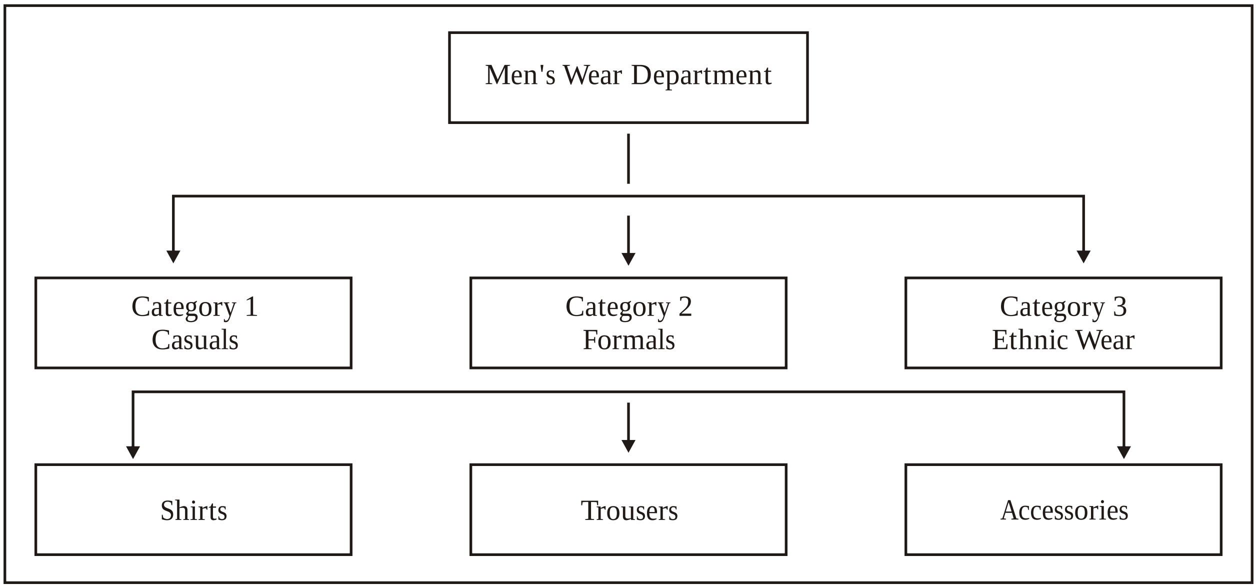

Figure 2 Selecting Alternative Assortment Strategies