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RESEARCH ARTICLE

Return on Shelf Space- Case of organized retail in India

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Abstract

Shelf space is the place allocated to the products on the retail shelves. Shelf space is very limited to the retailers, due to which retailers are very selective to stock items. Hence, allocating space on the shelf is amajor concern to them. 5 Organized retail stores based in Pune, India were studied to get details on shelf space planning, allocation and using the retail formulas for ROSS their respective return on shelf space (ROSS) and shelf space profitability (SSP) was calculated to get more insights on the importance of Shelf space management. The findings of this case can be used by retailers for shelf space management and visual merchandising decisions..

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Shelf Space Management– Introduction

The shelf can be considered as the most crucial aspect in the consumer-retail value chain. In some categories, around 80 percent of all purchase decisions are made at the point of sale owing to their unplanned or partially planned nature. Irrespective of the fact that tremendous efforts, time and resources are employed for the product designing and promotion, the shelf (in the case of spot shopping and e-shelf in case of online shopping) is the only point where the consumer encounters the retailer, the brand and the product. The outcome of all consumer interactions and connections with the retailer or brand or product and his buying decision rests completely on what happens halfway down the shopping aisle during the purchase process. It is a paradox that even when the marketers realize the importance of the interactions at the shelf level yet little is known about such interactions. Retailers and manufacturers fail to investigate and answer many questions related to consumer behavior in the purchase process regarding visibility, profitability and appeal of products and brands displayed on the shelf.

It is critical for the success of retailers to constantly work towards improving not only the efficiency of employees, but the productivity of the store's selling space and inventory as well. For individual stock keeping units SKUs, shelf space is an important factor in revenue generation, cost and eventually leading to the profit of the product category. Retailers focus on category management strategies in order to generate shopper enthusiasm for a product category. In this way, the retailer can mine the overall retail sales value potential of the product line by effective use of shelf space, promotional support and price competition where necessary. Shelf space is a scarce resource in any retail outlet. Retailers can save a lot by allocating proper space to different product categories on the shelf.

There are two main objectives while managing the shelf space. The first and most important objective is to achieve the optimum level of profitability on the cost incurred on the space. The second objective is to create such interface between consumers and the products so that consumers can feel free to interact among the shelves.The importance of shelf space and change in shelf space can affect any brand or product categories in two ways. Firstly, change in the shelf space could result in the consumer perception of stock outs. Secondly, change in the shelf space can change the consumer attention. There is chance that changing in the shelf position or shelf facing could change the consumer purchasing decision. Retailers can improve profits by shifting the consumers towards the high margin products or by increasing the number of unplanned purchases in a shopping trip with proper shelf space management. A well managed shelf space can not only decrease the inventory levels thereby reducing

stocking/carrying costs but can also build long term relationships with vendors and lead to higher customer satisfaction levels. Overstocking and under stocking can be avoided if the retailers know exactly which product/brand is highly demanded and which one is not.

ROSS – A study

Consumers use the different tactics in selecting among the different product categories. All of their decisions are not based on the premier shelf space and it is not possible for any retailer to provide the premier shelf space to all the product categories.

When major organized retail outlets were observed, it was found that consumers used different strategies in making the purchase decision between the different product categories. Some of their decisions were based on price, some were based on brands and some of them were based on availability, taste and performance.

Methodology

Primary data was collected on studying 5 organized retail stores of Pune, India, based on observation and interview of sales personnel. 1 month sales figures of 5 product categories viz. Tea, Health drinks, toothpaste, washing powders and deo sprays and brands of each product categories were recorded. The shelf space allotted to each of the categories and their brands was also observed. Using the formula of ROSS, the Average ROSS % of each category in the 5 outlets was calculated. The correlation between average Shelf space allotment and Average ROSS% for each product category was also calculated using MS Excel.

Theoretical background

Measuring Performance of Selling Space in retail

There is a display space for the brands in different product categories. Selling Space in retail is the area which is visible to the consumer. The optimal shelf space allocation was assumed to be based on the gross profit margin (or the gross margin per square foot), however, there can be many other ways of calculating it.

Sales per Square Foot: The sales per square foot data is most commonly used for planning inventory purchases. It can also roughly calculate return on investment and it is used to determine rent on a retail location. When measuring sales per square foot, keep in mind that selling space does not include the stock room or any area where products are not displayed.

Total Net Sales ÷ Square Feet of Selling Space = Sales per Square Foot of Selling Space

Sales per Linear Foot of Shelf Space: A retail store with wall units and other shelf space may want to use sales per linear foot of shelf space to determine a product or product category's allotment of space.

Total Net Sales ÷ Linear Feet of Shelving = Sales per Linear Foot

Now there will be some sales of these brands in that outlet so we will get a variable ROSS.

Return on Shelf Space: ROSS= (Sales in a month)/Sq. Feet on shelf

Measuring Shelf Space Profitability (SSP)

The concept of calculating return on shelf space is not new in retail. However, organized retail being at its initial growth years in India, the prospects of measuring ROSS and applying the results is not a widely employed methodology in shelf- space planning among organized retailers. If retailers consider shelf space profitability to be an important objective in retailing, they could craft better decisions about which products to stock, how to make best use of available space, how to display the products on the shelves and which products/brands to truncate from the assortment. In short, they would know which products to carry and which brands to push. Manufacturers would know which promotions are fruitful and which products are underperforming.A number of companies have tried to identify and formulate ways to measure shelf space profitability but have never been able to create a solution simple enough to make the measurement useful. Technological methods to determining shelf profitability such as the use of data from RFID tags are too expensive and complex to serve the purpose. There are simple ways to measure shelf-space profitability (SSP) as given below:

Step 1: Calculate the cost per linear foot of space in the store network, including all product-related costs: for instance, total store costs, internally funded marketing support, distribution, and servicing and repairs.

Step 2: apply these total costs to the space allocated to the product in a store to understand the overall costs associated with selling a particular product across the store network

Step 3: Apply this shelf-space cost to the net cash margin that the product or brand generates across the network to find the SSP for a given manufacturer, category, brand, or set of products and thus better understand growth and profit contribution.

With the above methodology retailers can learn which items are most profitable as well as which are not given the amount of space allotted to each item. Better information about product performance assists retailers to make better stocking decisions. Better stocking decisions, in turn, make it easier to build a strong relationship with manufacturers and consumers. Shelving the right products in the right places is an effective way to ensure consumer loyalty toward both the store and the brand. It leads to a Win –Win if good shelf-space profitability measuring techniques are employed by the retailer. The store earns a reputation for carrying a strong assortment of goods that are always available, and the manufacturer can focus on stocking product lines that are recognized as winners and the consumers gain maximum benefit by getting the right amounts of products, in right quantities at right places when they shop, avoiding hassles of stock-outs and difficulty in locating their favorite brands or products.
All the aforesaid viewpoints emphasize the need of shelf space management so that products get proper visibility on the shelf leading to maximum impact on the minds of the consumers which in turn provides stability and appeal to the brand. This is known as the VISA effect, where V stands for Visibility of the product/brand, I stands for Impact on the consumer's mind leading to purchase decision, S stands for stability and A for appeal of the brand or product.

Findings
The study revealed that consumers rate the importance of shelf space differently against the different product categories. Shelf space planning is effective only if the product has competitive price, appealing taste and high performance. For toothpastes, people are brand loyal and they always purchase the same brand, whatever be the placing on the shelf. People were almost neutral for the importance of shelf space for such product categories.

Using the above measuring techniques when product categories of Tea, Health drinks, Washing Powders, Toothpastes and Deo sprays were studied in 5 organized retail stores in Pune, India, for the self space allotted and corresponding ROSS, it was found that on an average, tea being given 20% of shelf space (of the total space allotted to the said 5 categories) contributed 14% to the returns. Health drinks was allotted 15.42% of the self space generating 14% returns. Washing powders were allotted 30% space on the shelf which contributed 21% to the ROSS. On the other hand, tooth paste were allotted only 7% of the shelf space but contributed 42% to the ROSS and Deo sprays with a shelf space of 26% gave only 9% ROSS.

On studying individual product categories, it was found that Red Label contributed 50% to the ROSS in tea with only 15% of visibility on the shelf allotted to tea brands also Society tea with 5% of shelf space of the total allotted to tea, contributes 19% to the total ROSS whereas Taaza, Royal, Tata tea and Nestea with space allocation of 10%, 15%, 10% and 10% respectively contribute less than 1%. Bournvita generates 67% of the ROSS with only 20% of the visibility on the shelves in the health drinks category, however Horlicks and Boost with a visibility of 40% and 27% respectively contribute only 9% and 5% to ROSS of the category. Surf contributes the most, around 83% to the total ROSS of Washing Powder category with only 30% of the shelf space to its credit with Tide, Rin Ariel, Wheel and Henko contributing in the range of 0%-6% to ROSS with shelf space ranging between 10%-20% of the space allocated to washing powders. Toothpaste being the highest contributor to ROSS (42%) out the 5 categories was allotted only 7% of the total space for the 5 categories out of which Colgate with a visibility of 22% of the space for toothpastes contributes 50% to the ROSS however, Amar and Babool brands with a visibility of 11.11% each contribute only 0.1% and 3% to the category ROSS. In deo sprays, with 11 brands to be displayed in the assortment, the shelf space allocation is quite equitable. All the brands are allocated space ranging from 2-3 sq. ft on the shelf, with the highest contribution of Axe 23% to category ROSS. However, the space allocated to Spinz, Zatak, Rexona, Eva and Set Wet were poor contributors to the category ROSS. (See Annexure)

Correlation between Avg. Shelf Space % and Avg ROSS % were calculated using MS Excel and it was observed that in the Tea category, the value of correlation coefficient was 0.18257 showing a feeble positive correlation. In the health drink category, the value of correlation coefficient was -0.4388 showing relative

negative correlation. In case of washing powder, the correlation coefficient was found to be 0.8216 which means a considerable positive correlation exists between shelf space visibility and associated returns in this category. Toothpastes also show considerable positive correlation between shelf space allocation and ROSS with a correlation coefficient of 0.747. Deosprays show negligible correlation between Avg Shelf space % and Avg ROSS % with a

correlation coefficient of 0.250. Thus it means that ROSS of toothpastes and washing powder can be increased considerably by increasing their visibility on the shelf.

Proper shelf allocation is significant in product sale. It was also seen that those products which were on the lower shelf usually got less consumer attention than those which were on the upper shelves. So the products placed at the lower shelves in turn led to lower sales and gave lower returns on promotions/schemes associated with them.

Conclusion

Retailers in India are yet to reap benefits from shelf space allocation and visual merchandising. There lies a lot of scope for identifying areas where prudent shelving decisions based on VISA effect are applied for gaining advantage in the form of return on the shelf space. Keeping these findings in mind, the retailer can manage the shelf spaces giving maximum visibility to brands and categories that generate higher ROSS and reduce (if not eliminate) the visibility of brands that are poor ROSS contributors. The retailer then has a tough choice to make. He has to trade off between profitable brands, offering variety to shoppers and trade promotion schemes provided by manufacturers and distributors so as to attain maximum returns on the assortment that he merchandises and displays.

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Annexure

Table 1: ROSS of Products and Brands

Product	Brand	Avg. Shelf space of brand (sqft)	Avg. Sales in 1 month of brand (Rs)	Avg. ROSS of brand (Rs)	Avg. Total shelf space of products (sq. ft)	Avg. Total sales in 1 month of products (Rs.)	Avg. ROSS of product (Rs)	Avg. % Shelf Space	Avg. % ROSS
TEA					**20**	**98,877.30**	**4,943.87**	**20.21%**	**13.74%**
	Red Label	3	62,767	20,922.3				15	50.3999
	TajMahal	2	14,030.9	7,015.45				10	16.8995
	Taaza	2	379.33	189.665				10	0.45688
	Lipton	3	8,228.41	2,742.80				15	6.60716
	Royal	3	62.83	20.9433				15	0.05045
	Tata tea	2	245.41	122.705				10	0.29558
	Society	1	7,833.90	7,833.90				5	18.8711
	Waghbakri	2	4,943.30	2,471.65				10	5.95397
	Nestea	2	386.25	193.125				10	0.46522
Healthy					**15**	**75,741**	**5,049.40**	**15.42**	**14.028**

malt drinks	Bournvita	3	49,080.9	16,360.3				20	67.0557
	Horlicks	6	12,404.6	2,067.43				40	8.47376
	Complan	2	9,625.80	4,812.90				13.3333	19.7265
	Boost	4	4,629.70	1,157.43				26.6666	4.74392
Washing Powder					**30**	**225,175.1**	**7,505.84**	**30.85**	**20.852**
	Surf	9	107,146	119,051				30	82.7114
	Tide	6	45,526.8	7,587.80				20	5.27165
	Rin	6	41,224.1	6,870.68				20	4.77343
	Ariel	3	24,972.1	8,324.02				10	5.78314
	Wheel	3	6,081	2,027				10	1.40826
	Henko	3	224.91	74.97				10	0.05208
Tooth paste					**6.75**	**102,987.4**	**15,257.4**	**6.94**	**42.386**
	Amar	0.75	34.75	46.3333				11.11	0.063662
	Colgate	1.5	54,528	36,352				22.22	49.9477
	Pepsodent	1.5	29,755.1	19,836.7				22.22	27.2557
	Close up	1.5	12,521.5	8,347.67				22.22	11.4697
	Dabur	0.75	4,774.75	6,366.33				11.11	8.74734
	Babool	0.75	1,373.30	1,831.07				11.11	2.51588
Deo					**25.5**	**82,605.58**	**3,239.43**	**26.22**	**8.999**
	Set Wet	2.5	3,261.90	1,304.76				9.8	3.78272
	Spinz	2	1,675.70	837.85				7.84	2.42907
	Rexona	2	1,388.50	694.25				7.84	2.01275
	Zatak	2	524.5	262.25				7.84	0.76030
	Axe	2	16,001.5	8,000.75				7.84	23.1955
	Yardley	3	15,567.1	5,189.03				11.76	15.0438
	Wild Stone	3	13,322.5	4,440.83				11.76	12.8747
	Adidas	2	12,373.1	6,186.55				7.84	17.9358
	Park Avenue	2.5	10,493.9	4,197.56				9.8	12.1694
	Fogg	2.5	6196.9	2,478.76				9.8	7.18635
	Eva	2	1800	900				7.84	2.60925

Table 2: ROSS % of tea brands

BRAND	AvgROSS	AvgROSS %
a. Red Label	20,922.33	50.39%
b.TajMahal	7,015.45	16.89%
c.Taaza	189.665	0.456%
d.Lipton	2,742.8033	6.607%
e.Royal	20.9433	0.050%
f.Tata tea	122.705	0.295%
g.Society	7,833.9	18.87%
h.Waghbakri	2,471.65	5.95%
i.Nestea	193.125	0.46%

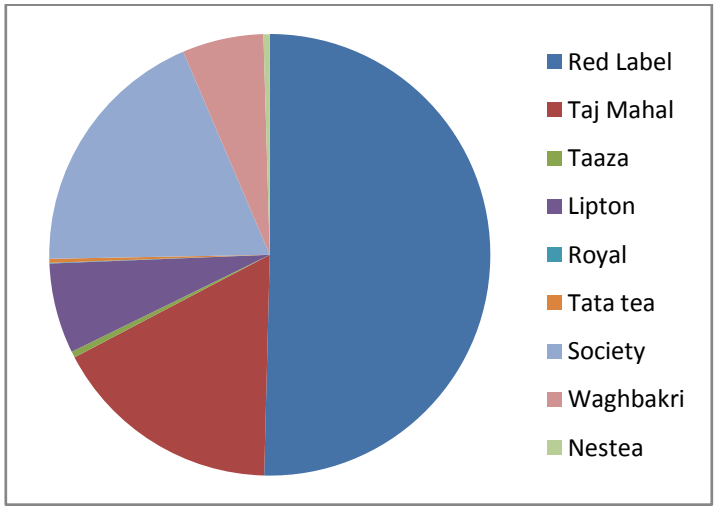

Table 3: ROSS % of health drink brands

BRAND	AvgROSS	AvgROSS %
a.Bournvita	16,360.3	67.05%
b.Horlicks	2,067.433	8.47%
c.Complan	4,812.9	19.72%
d.Boost	1,157.425	4.74%

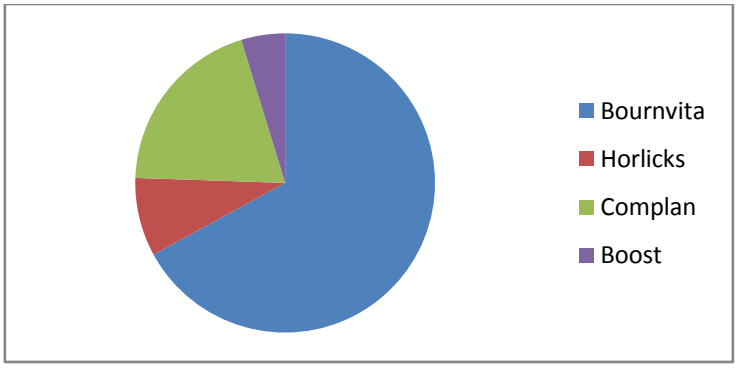

Table 4: ROSS % of washing powder brands

BRAND	AvgROSS	AvgROSS %
a.Surf	119,051.4	82.71%
b.Horlicks	2,067.433	8.47%
c.Complan	4,812.9	19.72%
d.Boost	1,157.425	4.74%
b.Tide	7,587.8	5.27%
c.Rin	6,870.68	4.773%
d.Ariel	8,324.02	5.78%
e.Wheel	2,027	1.408%
f.Henko	74.97	0.052%

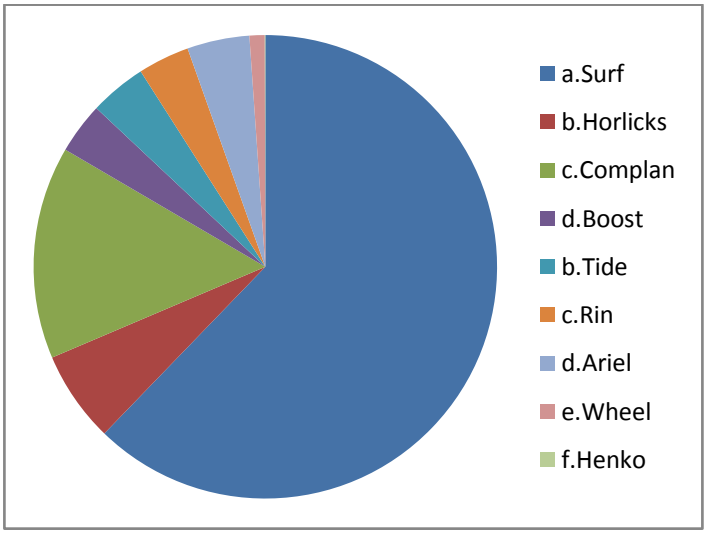

Table 5: ROSS % of toothpaste brands

BRAND	AvgROSS	AvgROSS %
a.Amar	46.3333	0.063%
b.Colgate	36,352	49.94%
c.Pepsodent	19,836.733	27.25%
d.Close up	8,347.666	11.469%
e.Dabur	6,366.33	8.7473%
f.Babool	1,831.066	2.515%

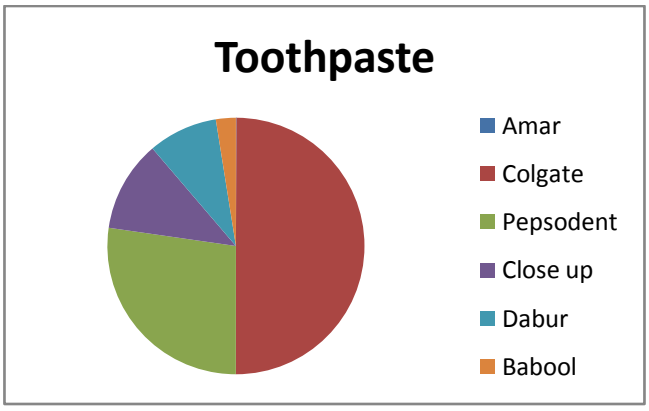

Table 6: ROSS % of deo brands

BRAND	AvgROSS	AvgROSS%
a.Set Wet	1,304.76	3.782%
b.Spinz	837.85	2.429%
c.Rexona	694.25	2.012%
d.Zatak	262.25	0.760%
e.Axe	8,000.75	23.195%
f.Yardley	5,189.026	15.043%
g.Wild Stone	4,440.833	12.87%
h.Adidas	6,186.55	17.935%
i.Park Avenue	4,197.56	12.169%
j.Fogg	2,478.76	7.186%
k.Eva	900	2.609%