

# **Factors Involved in Retailer's Decision to Allocate Shelf Space to Private and National Brand and its Impact on Sales**

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## **Abstract**

Shelf space is a very important asset of the retailer. Shelf space is used by retailers for multiple purpose e.g. placing products, enhancing displays, visibility, making comparison easy among the products etc. Shelf space allocation decision to private & national brands is largely influenced by multiple factors. This paper helps to understand the retailer's factors decision of shelf allocation to private and national brands and its impact on sales. This paper also identified that image building and private label shelf space majorly contributing which bargaining power is least contributing factor. Further, image building of each selected city is different from each other. Bargaining power is also not same in all cities.

**Keywords:** shelf space, private brand, national brand, sales etc.

## **1. Introduction**

Shelf space is a room which is allocated to different products in shelf. Shelf space is a precious asset for the retailer. Meanwhile it is a very challenging job for the retailer to allocate proper space to the products. Shelf space allocation directly impacts the retailer's profit. Retailer allocates more space to those brands which contributes more to his profit. Purpose of this research is to find out factors which more or less impact the retailer shelf space decision to private & national brands. For this purpose, retailers of five cities are selected. Retailers are taken as respondents. Shelf space allocation is serious issue in retail business. It is an important tool to attract the customers' attention. Retailers manage the shelf space in such a way which

builds strong suppliers relationships and increases the customer's satisfaction level. With the passage of time, issue of placing products in shelves is becoming crucial, because of increased competition between private and national brands. Retailer sells private as well as national brand (Zaccour, 2008). Retailer wants to give more shelves to private brands, while the manufacturer also wants the proper shelf. If retailer does not give the appropriate shelf space to national brand then it does not give the too good image of retailer. The reason is that, customers are more aware of national brands, if they do not see national brands in the retail outlet, and then customers perceive the retailer is of low quality. Retail industry of Pakistan is supposed as important industry of Pakistan. The concentration of retailers increasing day by day which is pretty good contributing to the GDP.

The objective of this research is to find out factors which retailer considers for allocation of shelf space to private & national brands. Its impact on sales is also analyzed in this dissertation. Data is collected through questionnaires and interviews, and their results show that image building and private label shelf space are important factors for retailer's decision while bargaining power is not that important. As the shelf space is important for the retailer, in the same way, shelf space is important for the manufacturers of national brands. To sell out the national brand, manufacturer needs retailer's shelf space. Manufacturer gives premium amount to the retailer to get the appropriate shelf space for its brands.

Retailers consider five factors for the allocation of shelf space which increase the financial performance of the store. These factors include the location of fixture, location of product category, location of items in a category, off shelf display and point of sales materials (F. Buttle, 1984).

Sales productivity method and build up methods are commonly used techniques for the shelf space allocation (F. Buttle, 1984). Space elasticity is another method to allocate shelf space to different brands.  $\text{Space elasticity} = \frac{\text{relative change in unit sales}}{\text{relative change in shelf space}}$  (Curhan, 1973).

## **2. Literature Review**

As much as shelf is allocated to brands, it raises market share equally, "share of shelf = share of market" (Norm Borin, n.d.). Due to the introduction of PL, manufacturer is dependent on retailer for shelf space (Natalia Rubio, 2008). Inverse relationship has found between PL market share and its profitability. The reason is that, manufacturer has limited resources in which he has to establish the terms of trade with the retailer. If manufacturer is unable to fulfill the requirements and demands of the retailer then retailer allocates less space to NB. This results, in giving more prominent proportion to the PL, and will get huge market share from the NB (Wilcox, 1998). Space elasticity is greater for PL as compared to national brands. Negative relationship has been found between market share and space elasticity (Curhan, 1972). Manufacturers suppose that retailers support unequal competition by giving more space to the

PL as compared to NB. PLs are sited at more profitable place than NBs. PLs occupy more space disproportioned to their market share. PLs imitate the features and appearance of NBs, in this way PLs look like the NBs and customers are motivated to buy PLs. When retailer introduces the PL, then it removes the NBs from the shelves and gives maximum possible space to its own brands (Fernandez Nogales and Gomez Suarez, 2005). Manufacturers invest huge amount in packaging of NBs to communicate its benefits. To further increase the performance of shelf, they usually boost brand's image through marketing and advertisements. Hence the packaging of PL should be, or at least match with NB's packaging. Sales of a particular product and range of assortment identify the amount of shelf space allocated to that brand. Perishable goods receive less shelf space in comparison to storable goods. Sales and variety are positively related to each other. But if the retailer has certain successful shelf space management strategy, he can get high sales through less product variety (Chiang and Wilcox, 1997).

Price promotion, featuring and shelf displays increase the sales of a brand within a store. Among these three activities, price promotion has more positive effect on the store sales, then featuring and displays respectively (Kumar and Leone, 1988). Consumers buy PL due to in-store promotion and national brand due to out store promotion (Ailawadi, Neslin et al., 2001). Shelf space not only impacts the retailer's profit but also affects the manufacturer's profit. So a manufacturer fights for scarce shelf space (Wang and Zhao, n.d.). Demand is a function of inventory displayed and placement of brand in a shelf. Retailers can boost up sales by reducing cost through appropriate management of products in shelves (Hwang, Choi et al., 2005). National brand is more dominant than the PL. National brands are rich in brand equity comparative to PL (Kristof De Wulf, 2005). Shelf space allocated to PLs mainly depends upon its quality. And quality of PL is measured in terms of price positioning, brand substitution and brand equity (Nawel Amrouche, 2007). With the introduction of PL, the power of retailer increases. The reason for increase in power is that, number of brands and trade promotions are increasing day by day but shelf space remains same (Monoca Gomez, 2007).

### **3. Methodologies**

For research purpose the questionnaires are developed for primary data collection and secondary is collected through books, journals and net surfing.

#### *3.1 Sample Size*

Sample size consists of 350 retailers of 2 big cities e.g. Lahore and Multan, and three small cities e.g. Sahiwal, Okara, Chicahwatni. The detail of each city with sample size is given in table 3.1. The questionnaires are distributed to the retailers. Further, the objective to select the sample size of retailers is to identify the factors which are more considerable for shelf space allocation decision.

**Table: 3.1 (Cities & sample size)**

City	Sample
Lahore	100
Multan	100
Sahiwal	50
Okara	50
Chichawatni	50
Total	350

### 3.2 Tools

Questionnaire is developed based on 5 likert scale. It is divided into three sections. First section describes the retailers profile information. Second section is constructed on the variables used to analyze the retailer's factor decision. 5 likert scale refers to 1 as "strongly disagree" and 5 as "strongly agree". Third section based on open end questions, for getting the more flexible view of the retailer.

Basically, data is collected from both the sources, primary and secondary source.

#### 3.2.1 Primary Data

Primary data is collected from retailers through observation, interviews and questionnaires. One reason for choosing the questionnaire as a data collection tool is that, it is a quick source of information. Through the interviews, more in-depth information is gathered from retailers.

#### 3.2.2 Secondary Data

While secondary data is gathered by net surfing for the literature review, books, and journal.

#### 3.2.3 Tests

The data which was collected by questionnaires is processed through SPSS. For the analysis of data many statistical tests were applied e.g. factors analysis, ANOVA post hocks, AHP, regression and correlation etc. descriptive statistics presents mean level and frequencies. All these test are applied on collected data to get the results of the research.

#### 3.2.4 Analysis

The objective of this research is to identify factors which contribute to retailer shelf space decision to private and national brands and also to see its impact on sales. Furthermore, to

obtain most suitable and accurate results the SPSS software, MS Excel software and Internet to global weights index for AHP (Analytic Hierarchy Process) are used. Data is quantitative and simultaneously qualitative in nature. Analysis and interpretation of different test is discussed in detail.

### 3.2.5 ANOVA-Post hoc Test

ANOVA post hoc is used to identify either relationship exists between the variables or not. It is also used to see the difference in mean level of constructs of private label and national brand shelf space between the groups like city, retail category and retail experience. Simply, analysis of variance shows which factor has significant impact on dependent variable. Moreover, in ANOVA-post-hoc test, least significance difference (LSD) test is applied to compare means. By Fisher's LSD test, means of one group are analyzed with other group. In short, LSD test allow multiple comparison of different groups used in this dissertation. Image building of Lahore, Multan, Sahiwal, Chichawatni and Okara is different from each other. Private label shelf space of Lahore is different from Chichawatni. Bargaining power is not same in different cities. Retailers in Multan and Lahore possess more bargaining power than the retailers in other cities. There is no difference in the image building of retailers with different retail experiences. Bargaining power of retailers increase with the retail experience e.g. bargaining power of retailer of 15 and more years is much more than the retailer of 0 to 5 year or 5 to 10 years. In the same way, image building is different across different retail categories.

### 3.2.6 Factor Analysis

Factor analysis is statistical method used to reduce the data by extracting the unobserved, uncorrelated variables from the observed and correlated variables. In this, all the related variables are put under the common factor. Three factors are extracted like image building, private label shelf space and retailer's bargaining power which show 68% variation. These factors have impact on the retailer's shelf space decision. Among all other variables price, promotion and market share are more significant for shelf space decision. Significant relationship is found between city, image building, private label shelf space and retailer's bargaining power. While the retail experience has not any association with these factors. Retail category has shown association just with image building.

The factors include variables as

- Image building (Price and promotion, demand, visibility, brand awareness, advertisement)
- Private label shelf space (Market share, quality, features, assortment)
- Retailer's bargaining power (Shelf space allowances, variety, in stock availability).

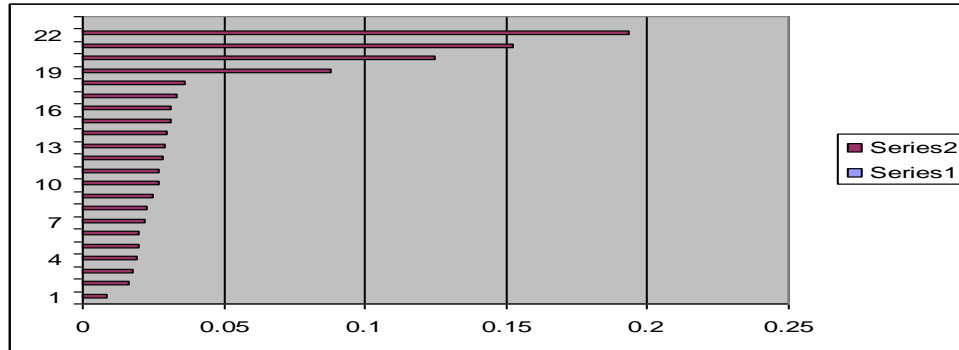
### 3.2.7 AHP (Analytic hierarchy process)

AHP is applied to see the importance of different factors. The global weights are presented in figure 1.

**Table (2.4.3 a) Global weights**

When there is number of National brands then the profits are high.	0.008460153
More shelf space is allocated to the brands either Private brand or National brand with the high in stock availability.	0.016043351
Bargaining power of retailers increases with the introduction of private label.	0.0175565
Demand for the products increases when more shelf space is allocated.	0.01908812
When the price competition between Private and National is high, then profit raises.	0.019576972
More shelf space is allocated to the National brands with the high brand image.	0.019814767
Shelf space allowances to the retailer increases the shelf space to the National brands.	0.021664518
Brand awareness of National brands is higher than Private brands.	0.022473619
Less shelf space is allocated to the National brands when the private brands are of high quality.	0.02502678
Greater the features in National brands, lesser the shelf space is allocate to Private brands.	0.026760486
Private brands are placed in shelves disproportion to sales.	0.026856642
More shelf space is allocated to the brand either Private or National with the high advertising.	0.028674978
The greater the prices gap between store brand and national brands, the lower the space occupied by store brand on the shelves.	0.028889809
Visibility of brands can be increased through giving more shelf space	0.029940959
The greater the number of promotions of National brand, the lower the space occupied by store brands on the shelves	0.030948363
Placement of Private label near National brand, increases the profit for the retailers.	0.030995822
The greater the depth of assortment (number of product variants) of National brand, the lower the space occupied by Private brands on the shelves.	0.03351242
When the Private brands are of low quality then, they are position close to National brands	0.03603608
Less shelf space is allocated to Private brand due to its low price.	0.087744266
Private brands are sold at less prices than National brands because of low	0.124744451

quality.	
The lower the store brand market share in the category, the lower the space occupied by store brand on the shelves.	0.152108156
Price and promotion has no impact on the shelf space allocation of private and national brands	0.193082432



**Figure 1 Global weights graphical presentation**

The factors 21-22, which are price & promotion and market share, these are the maintenance factors. These must remain same. There is no need to change or modify. The factors 19-20 e.g. price and quality, these are the support factors and retailer has to emphasize on them. While the factors range from 1-19, which includes shelf space allowances, brand image, features, promotions, assortment etc, are the critical factors and these need retailer’s attention.

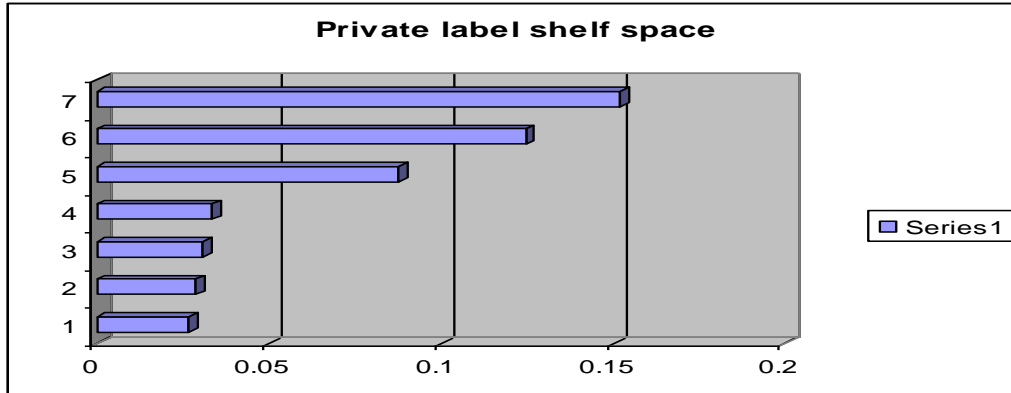
There are certain factors which are involved in retailers decision to allocate shelf space to private brands, these factors with their global weights are presented in table 2.4.3, and graphically presented in figure 2.

**Table (2.4.3.b) Private label shelf space global weight**

Greater the features in National brands, lesser the shelf space is allocate to Private brands.	0.02676
The greater the prices gap between store brand and national brands, the lower the space occupied by store brand on the shelves.	0.02889
The greater the number of promotions of National brand, the lower the space occupied by store brands on the shelves	0.030948
The greater the depth of assortment (number of product variants) of National brand, the lower the space occupied by Private brands on the shelves.	0.033512
Less shelf space is allocated to Private brand due to its low price.	0.087744
Private brands are sold at less prices than National brands because of low	0.124744



quality.	
The lower the store brand market share in the category, the lower the space occupied by store Brand on the shelves.	0.15210816



**Figure 2 Private label shelf space global weights**

Figure 2 shows that, market share and price are the maintenance factors for the retailer. While low price is a supporting factor. Critical factors are assortment, promotion, price gap and the features.

### **3.3 Descriptive Statistics**

#### **3.3.1 Frequencies**

60% respondents agree that profits for the retailers increase when PL is placed near the NB. 51% respondents agree that when the PL's market share is low then they are given less space. According to 51.1% respondents, retailer's bargaining power increases when he introduces the PL. 38.9% respondents disagree that, price and promotion has no impact on shelf space decision. 49.5% respondents agree that, PL is sold at low price, because they have low quality. 38.9% respondents agree that, shelf space allowances by manufacturer to retailer, increase the space for national brands. 69.9% respondents perceive PL as a substitute of NB. 77.7% customers prefer national brand over the private brand. 54% respondents view PL gives more revenue in Pakistan to the retailers. 98.6% respondents agree that, due to shelf space performance and total sales increase. 65.1% agree that national brand will expand in future.



### 3.3.2 Regression & Correlation

Image building and private label shelf space synergize each other. Private label shelf space and image building Marjory contribute to shelf space. While private label shelf space and bargaining power are negatively related. Image building, private label shelf space and bargaining power are positively related to overall index.

## 4. Conclusion

Shelf space is an important resource for the retailers. Retailers want to effectively allocate shelf space to its brands. Retailer places both types of brands in the shelf e.g. private and national. Allocation of shelf space is critical task for the retailer. Retailer places private labels in the shelves for gaining higher margins. While the purpose of placing national brand is to enhance the brand image of PL, and store. Retailer places PL near the national brands so that customers perceive it of high quality. Retailer allocates more shelf space to private as compared to national brand. Results reveal that about 20% shelf is more allocated to private brands in comparison to national brands. Enhances the performance and total sales of a retail outlet.

Shelf space allowances by the manufacturer increase NB space on shelf. PLs are place in shelf disproportion to their sales. If assortment and advertisement of national brand is greater than the PL, then NBs are allocated more space. Image building, private label shelf space and bargaining power are the factors which influence the shelf space decision.

PL is substitute of national brand and gives more revenue to the retailer. Most of the customers prefer national brand. Market trends show that national brand will expand in future.

## 5. Recommendations

- Researchers are directed to conduct research on retailers in different geographical area.
- Research should be extended to shelf space allocation to private, national, and international brands.
- Further research must focus on shelf strategies from the consumer's perspectives e.g. how consumers want the product to be displayed in shelf? How consumers want to see shelf decoration, shelf talkers etc?

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