

# Tapping the potential space-positioning of private labels

Private labels

Veenu Sharma

*Department of Retail and Marketing,  
Birla Institute of Management Technology, Noida, India*

Bhuvnesh Kedia and Vandana Yadav

*Department of Retail Management,  
Birla Institute of Management Technology (BIMTECH), Uttar Pradesh, India, and*

Shreya Mishra

*Department of Human Resource,  
Birla Institute of Management Technology (BIMTECH), Uttar Pradesh, India*

43

Received 6 September 2019  
Revised 13 December 2019  
7 January 2020  
7 January 2020  
Accepted 8 January 2020

## Abstract

**Purpose** – The purpose of this study is to analyze the current scenario of private labels from consumers and retailers' point of view and provide inputs to the retailers that will help them to increase their profitability. Profitability for retailers is a resultant of efficient inventory management in a limited space. This paper studies consumer's purchase behavior and facilitates retailers in their decision-making of the dilemma between the appropriate mix of national brands (NBs) and private labels to increase their profitability. Retailers will be able to do cross-merchandising of the categories of the goods having strong associations and will increase the shelf space of the products, which are preferred by customers.

**Design/methodology/approach** – Market basket analysis was done for 1,223 transactions including two or more product categories in each transaction. In total, 564 products were studied and these products were further divided into 23 categories. Lift analysis was done 4 times to find an association between the products of all the categories.

**Findings** – The results find a strong association between some categories and advocate the placement of these combinations together – one being a NB and another private label.

**Research limitations/implications** – Analysis of only a limited set of brands and their product categories for a value retailer cross-merchandising.

**Originality/value** – The analysis of sales transactions will help retailers in determining the associations between product categories. This association will be helpful in placing their private labels *vis-à-vis* NBs to do cross-merchandising and allocating judicial space to the product assortment to increase their profitability.

**Keywords** Associations, National brands, Private labels, Market basket analysis, Top line, Bottom line, Value chain stores, Shelf space

**Paper type** Research paper

## 1. Introduction

Retail is an intensely competitive sector with a huge focus on its customers as it is the last player in the supply chain, which has to be highly responsive and effective to meet its customer's needs. The chronicle of the Indian retail market in the near future will be completely influenced by the shift in consumer behavior. Favorable macroeconomic factors such as increasing disposable income, robust consumption patterns, relaxed foreign direct investment (FDI) norms [1] and so on creates an ideal environment for increasing competition and willingness to pay for goods and services (Pande and Narayan, 2018).



Private labels are the brands owned by a retailer, a supplier as against the brands owned by a manufacturer or a producer. These are also known as the name brand, retailer brand, store brand, own label, etc. In a private label, the retailer gets its products manufactured by a contract manufacturer under its name.

Over a period of time, the global market has witnessed an increase in market share and variety in private label consumer packaged goods (CPG). However, there exists a wide diversity among private label market share across market type, location and product category (Baltas and Argouslidis, 2007). In India, the private label came into existence around a decade ago with the increasing growth of organized retail and is still in its infancy period with a share of around 10 per cent in organized retail. The major problem being faced by Indian retailer in private label brands (PLBs) is the “double jeopardy effect” (Goodhardt *et al.*, 1984) in which the novice brand has to suffer twice, first, they have very few customers and second, the same customers also do not buy these brands frequently (Ehrenberg, 1990). This purchasing pattern of the customer has been observed in various markets at various conditions (different points of time and different lengths of time) and in various situations (Pare *et al.*, 2006). It is expected that the PLBs can reach 50 per cent of the total organized retail in the next decade by assuming the potential of organized retail to reach 30 per cent of the total retail industry by then, private labels could account for as much as 15 per cent of the total retail industry in India by 2025 (Wahi, 2017). Private labels represent an important part of the consumer goods market and have generated both academicians and commercial interest. Significant research has been done on various well-defined areas of private label such as the tactical role of own brands for retailers and manufacturers (Makoto, 1995; Horowitz, 2000; Burt, 2000); how store brands are performing, market penetration, etc. (Ailawadi *et al.*, 2001); competition and differences between national brands (NBs) and store brands (Richardson *et al.*, 1994; Baltas, 1997; Aggarwal and Cha, 1998; Ailawadi *et al.*, 2001; Ngobo, 2011) studies relationship between private label share relative to market share and store loyalty. Through this paper, we have tried to extend his research in France market to the Indian retail industry where the relationship between products and their sub-categories has been studied through market basket analysis (MBA). The study focuses on a value retailer that has its chain stores spread across Delhi-national capital region (NCR) and deals in both NBs and its private label[2]. With the store size of 6,000 square feet and 8 outlets in Delhi-NCR, the retailer gets an annual turnover of INR 19 crores. The association between categories is established and the positioning of private labels along with NBs on the basis of association is proposed.

Thus, centralized merchandising authority and store cooperation between merchandising and store divisions stimulate private labels merchandising, which strengthens the private label's competitiveness (Kim and Takashima, 2019). Based on some of the key findings of the research done by Ngobo (2011) on private labels' stock keeping unit (SKU), store loyalty in French market and by Nogales and Suarez (2005) on shelf space management of private labels in Spanish retail market; trade-offs between shelf space allocation, cannibalization and profits from PLBs from suppliers point of view in the USA and Western Europe by Langlois *et al.* (2019); through this paper, we would like to analyze the same in Indian retail market and understand:

*RQ1.* Which category products are being purchased by the customers and what is the association between different product categories.

This will help the retailers to use their shelf space optimally and determine the ideal merchandising of their private labels and NBs SKUs across categories[3].

---

## 2. Literature review

The penetration of PLBs across industries, countries and product categories has shifted the consumer brand choice and consumption patterns. PLBs are present in more than 90 per cent of the categories of consumer packaged goods (CPG) with a high level of visibility and product assortment in supermarkets, hypermarkets and online retailers (IRI, 2016). PLBs have witnessed transformation during the time, these are no longer professed as low-cost or low-quality products but are considered an appropriate alternative to NBs in terms of both quality and differentiation (Keller *et al.*, 2016). Marketers have been dependent on socio-demographics and realized that brand consumption patterns of customers are polarized, on one side, there are quality driven customers who are willing to pay a premium price for higher quality and status and on the other side, are the price driven customers who prefer to adjust quality as per the price. However, now, a hybrid pattern of brand choice is observed wherein a customer is buying a range of brands between or within the product categories (Ehrnrooth and Gronroos, 2013). Research has found and proved the situations where the same customer is buying brands from both the low-end and high-end of the market, that is, he is trading-up and trading-down between categories (Silverstein and Fiske, 2008). It is the product category that plays an important role in deciding the trading up and trading down of the goods, i.e. trading up is more common in goods that possess higher involvement both in terms of cost and time and personally important, whereas trading down is more common in less involvement and less personal categories. Product categories that interest more of customer involvement are the ones that are connected to financial, performance and social risks (Batra and Sinha, 2000). In search of best value, i.e. good products at good prices, consumers showcase hybrid choice and reflect their positive attitude of being a smart shopper and not a negative typecast of being a penny-pincher who pays less when they do not distinguish quality difference across brands. (Silverstein and Butman, 2006).

PLBs are witnessing quality improvement and increased demand because of the comparative quality to the NBs and are thus highlighting the concept of smart shopping to the best value-seeking customers (Ailawadi *et al.*, 2001; Nielsen, 2010). In addition to this, a high difference in price between private labels and manufactured brands also stimulates customers to select private labels. Thus, a value seeker customer will buy the goods, which suit his needs and will not go after the brands (Sethuraman, 2000; Steenkamp *et al.*, 2010). In the presence of NBs, it is difficult for a value or mass retailer to earn higher margins, and thus, the private label goods are introduced by him as a strategic tool in a particular category. The dual benefits of introducing private labels in a category are to gain profits directly from the private labels and to use them as a strategic weapon to stimulate discounts from the NB manufacturers (Narasimhan and Wilcox, 1998). In Paine Webber retailing conference in September 1993, grocery marketing illustrated that in addition to the advantage of higher margins on private labels, retailers planned “bargaining tool with branded manufacturers” as one of the principal benefits of introducing private labels in a particular category (Giblen, 1993).

There has been a lot of research done on private labels and the factors that determine the share of private labels in a particular category, as well as the reasons for retailers’ decision to carry the PLBs. Putsis and Dhar (1996) show that private labels are capable enough to expand their category expenditure rather than competing with NBs and stealing their shelf space. Bauner *et al.* (2019) show that a vast amount of feature differentiation drives NB manufacturers to increase their coupon value but the retaliating effort of the retailer leads to a price war as they decrease coupon value of their store brand product.

Private labels are a competitive threat to manufacturer brands at every level of the market and this fact is supported by various research. A study by Hoch and Lodish (1998)

states that consumers show their willingness to switch to private labels in the presence of Tier 2 brands. Thus, Tier 2 brand categories are more vulnerable to this competition and give way to the growth of private labels (Sayman *et al.*, 2002). Additionally, to tap the other market segments, most of the retailers have started using multi-tier strategies to develop the portfolios of their private labels such as specialist or premium segment (Retail, 2007). In this way, private labels are competing with NBs in each segment from mass to niche market. Private label goods development is a big threat to NBs if these private labels are capable of building their brand value or equity in different tiers and markets. One such example of this is the US market, where the presence of a strong private level has evolved over a period of time and within the premium segment, the growth of private labels is 33 per cent as against 11 per cent growth of branded products. Their private label is growing in the entire range of price spectrum from Tier 1 (discount) to Tier 2 (premium) (Group, 2019; Ailawadi *et al.*, 2008) find that substantial users of private labels are more focused on savings and are less likely to differentiate between private labels of different stores and chains as they are driven by the motive of saving money. National brand users, on the other hand, are loyal to a particular store because they have a time constraint and are less interested in exploring. Thus, if a store has a smaller share of private labels than that of its competitors, then big private label users are less likely to spend more in that store. This is because, the assortment of private labels is not high and customer is unable to shift their spending pattern (Ngobo, 2011). When relative private label share of a store increases, through more alternatives to national brands in terms of both quality and price, customer loyalty to the store decreases due to a reduction in choice for a national brand user (Ngobo, 2011). The contracted share of NB reduces the customer's motivation to shop because of the fear of potential future regret (Iyengar, 2000). This will lead to a loss for a retailer as the national brand user will be inclined toward his competitor in search of a better assortment mix. An extensive variety of private labels in the store may lead to an increase in confusion and higher cognitive costs and less variety will also reduce the probability for customers to find the products that can satisfy the different needs of their family members (Kahn and Lehmann, 1991). Increased share of private labels in the store also poses a problem to retailers in terms of accommodating the situational dependency of their customers' preferences (Simonson, 1999).

Private label branding also plays an important role in a customer's purchase decision. Branding is an important issue for retailers because customers associate risk with private brands despite a constant advancement in their attitudes (Ailawadi and Keller, 2004). Branding strategies can be classified into various possible ways (Rao *et al.*, 2004). Own-name branding and other name branding strategies are different (Dhar and Hoch, 1997). When a retailer uses its name fully or partially, it is known as own-name strategy. For a customer, the quality of the store product is associated with the retailer name (Erdem and Swait, 1998). Thus, the effect of increasing private label share by a retailer with its name may not be similar to the effect of increasing the share of brands without the retailer's own name. According to the balance theory by Heider (1958), consumers lookout for a balanced state and linking a positively valued object to a negatively valued object will lead to an unbalanced state. Therefore, a customer may associate high value to the private labels of a credible retailer, given the relative weakness of many store brands. The more credible the retailer, the more credible is its private label, lower is the risk for a private label user and higher is the possibility of customers visiting and purchasing his goods from the same store. However, the probability of a customer purchasing private label from the specific retailer is less when a retailer does not use its name in its branding, and customer is unable to recognize and associate with the quality of the product.

---

Small private label buyers are more susceptible to switch to private brands from the NB in case of the own-name retailer's SKU than the private brands without a retailer's name (Ngobo, 2011).

Shelf space is one of the most important factors affecting the performance of a brand. More visibility of the product implies more purchase of the product. However, there is a maximum shelf point for every product beyond, which no more sales are produced despite increasing shelf space (Calvo and Reinales, 1999). A retailer is a key decision-maker in case of private labels, from the distribution to the good shelf placement, whereas, in the case of NBs, the manufacturers who offer better services to distributors are given more shelf space (Mangold and Faulds, 1993). There has been some research on the shelf space allocation of the private brand *vis-à-vis* NB. When NBs and private labels are placed close to each other, then price becomes a determinant factor in customer's decision-making as he can easily compare the prices of both the products. To reduce the marketing resources to accurately position their private label relative to NBs, the retailers invariably places their products to the right of the leading brand with whom they are competing because 90 per cent of people are right-handed (Hoch, 1996).

### 3. Methodology

The data used in this research was obtained from a value retail store. A value retailer is a retail store format, which sells branded products and accessories at cheaper price and face competition from their category and midmarket retailers (Collins, 2019). These type of retailers do their store promotions by undertaking activities such as freebies, price-cuts, off-labels, extra discounts on big bill-sizes and so on (Fibre2Fashion.com, 2010). It contained the data of sales transactions being made in the store for three consecutive months. Out of various statistical tests available, MBA seems like the best tool to work on the research objective as it is a great technique for inductive theorizing. The importance of its inductive capability is highlighted by various researchers. According to Locke (2007), MBA can lead to important contributions as it allows researchers to implement an inductive approach to theory building.

MBA is a methodological approach in the field of management, which helps in identifying relationships between groups of products, items or categories. This is among one of the main techniques being used by researchers to uncover the non-obvious, hidden associations between items, products or categories to identify the set of items that co-occur on a regular basis and assess the extent of their occurrence (Aguinis *et al.*, 2013). MBA was discovered in the area of marketing and was at first used to understand the association between items purchased together from the supermarket and from there it derived its name as MBA. This is a valuable tool for retailers as it helps in decision-making of cross-selling by grouping the co-occurred products together in a store's design layout; driving online recommendation like customers who purchased this product also viewed that product etc.; targeting marketing campaigns by sending exciting offers, promotional coupons to end customer for their desired or preferred products (McColl, 2011).

As the data available with us was a raw, unsorted data of 27,313 transactions, the data had to be filtered out for perusal. Out of the available data, we sorted and then selected those transactions, which have 2 or more product categories, with the transactional value of more than INR 1,000 for those customers who have made a purchase at least 2 times in a month from the store, which led to final 1,223 transactions to be studied. These transactions were then converted into attribute-relation file format (ARFF) (Roberts, 2005). As the Waikato environment for knowledge analysis (WEKA) expects data to be in ARFF format, it is necessary to be cognizant of the type of each attribute that cannot be inferred from the values of attributes automatically.

Within these 1,233 transactions, the purchase of only 564 products was made by the customers that were available in the value retail store during the mentioned period of time. These 564 products were the products of both private label and NBs. To segregate the data further, we divided 564 products into 23 broad categories as shown in [Table I](#). We have categorized the products on the basis of their combination of use, for example, one of the categories is baby care, which includes products related to baby such as baby food, baby creams and so on.

To conduct the analysis, historical transactional data of three months of the value chain store customers were processed using WEKA. WEKA is a suite of visualization tools and algorithms used for data analysis as it supports clustering, classification and reprocessing of data ([Witten et al., 2011](#)). By mining the data through WEKA, we were able to find the relationship between product categories from customer shopping behavior, which shows the combinations of different products purchased by them in the store concurrently. On the basis of the finding of the analysis, planogram and merchandising mix of the store can be designed, which can help the retailers in increasing the bottom and top line of their store. \*Detailed product category is in [Appendix 1](#).

To find the association rule between the sets of studied items from the transactional database, we have used MBA by applying the Apriori algorithm. Apriori Algorithm often finds individual items in the database and extends them to larger item sets until the set of items becomes sufficient in a database ([Agrawal and Srikant, 1994](#)). Finding the association between the items is a prerequisite to know the correlation between the products purchased, whether it is of PLBs with the NBs or both private labels or both NBs. For example, 90 per cent of the customers who purchased tea of any NB also purchased sugar of PLBs and their purchase could be derived from any of the reasons being a lucrative offer, packaging, type, etc.

To work with the analysis further, the set of all the transactions done in the store is denoted as:

Let  $P = \{P_1, P_2, P_3, \dots, P_m\}$  set of all the products, which are being sold by the retailer in his store.

$T = \{T_1, T_2, T_3, \dots, T_n\}$ , where T denotes all the transactions that were made at the store during the mentioned period of three months.

$TP = \{P_1, P_5, P_9\}$  shows the purchase transactions made by the customers, comprising the bundle of different products.

Each transaction is the subset of the transaction database of the store and represents a group of items or products that have been bought together in a single transaction. These are also known as “item set” ([McColl, 2011](#); [Venkatachari, 2016](#)).

Let’s suppose A is a set of all the NB products like  $A = \{X \text{ Brand Butter, } Y \text{ Brand Tea}\}$  transaction  $T_p$  has a product set A if A is a subset of  $T_p$ . An association rule can be expressed in the form of  $A \rightarrow B$ , where A and B are two disjoint sets.

Rice-flour-sugar	Kitchenware	Toiletries	Sanitizers	Apparels
Personal care	Instant food	Accessories such as wallets, socks and so on	Spices	Footwear
Add on (seasonings and pickles)	Milk and milk products	Healthcare	Stationery	Toys
Fruits and vegetables	Baby care	Electronics	General merchandising	Detergents
Non-vegetarian (meat, etc.)	Beverages	Home décor		

**Table I.**  
Product category\*

B is a set of all private NBs like  $B = \{\text{Breads, Bed sheets}\}$ . A and B are the disjoint product sets.

To know the relation between variables in the database, we used association rule mining (ARM) or association rule learning. Association rule was introduced by [Agrawal et al. \(1993\)](#) to discover regularity between items or products in the huge transaction data recorded by point-of-sale systems in supermarkets.

The strength of a rule is calculated by three metrics-support, confidence and lift. As entire information available in the database is not required to derive the outcome, we check the beneficial outcome of data by applying ARM to our database to bring out the useful information from it.

To analyze our data, and measure the strength of rule, we have taken support as 10 per cent and confidence as 80 per cent.

Support is the percentage of the transactions that contain all of the items in an item set ([McColl, 2011](#)). In our case, it includes both sets A (NB) and B (private label). Higher the support, the more frequent is the chance of occurrence of item set. In our research, we have extracted the transactions with a support of 10 per cent or more than 10 per cent in the database.

Support does not count the number of quantities purchased by the customer, but it counts the transaction as 1 only. For example, if the customer has purchased 3 quantities of the NB butter and 1 quantity of a private label bread, then it is reflected as count 1 in the calculation of support:

Support can be calculated by the following formula:

$$\text{Support} = \frac{\text{Support count of AB}}{\text{Total number of transactions in the database}}$$

For our reference, we have selected those product associations, which are 10 per cent or more than 10 per cent in the database.

Confidence is the percentage that shows the frequency of the occurrence of the rule head among all the groups containing rule body ([IBM, 2019](#)) i.e. the number of transactions, which contain AUB to the total number of transactions that contain A. In other words, confidence shows how frequently product set B (private label) appears in the transaction, which also contains products from set A (NBs).

Confidence can be calculated as:

$$\text{Confidance(AB)} = \frac{\text{Support (AB)}}{\text{Support (A)}}$$

#### 4. Results

On the analysis of the 1,223 transactions using the WEKA method, the association between 8 categories of the products was calculated by taking support as 0.1 and confidence as 0.8.

Support of 0.1 shows that the transaction is present in at least 10 per cent of the transactions and the confidence of 0.8 shows the number of transaction, which contains AUB (A and B) to the total number of transactions that contains A.

For example, the first association in [Table II](#) shows 100 per cent association between toiletries and detergents, it can be inferred that if a customer purchases a product from the category “toiletries,” then he is also purchasing a product from the category “detergent”.

To gain more knowledge about the product, the above-mentioned associations were analyzed with the help of the lift.

Lift is probably the most commonly used tool in the MBA. The lift enables the analyst in identifying the combination of items that tend to be purchased together. It is the probability of all of the products present in a rule taking place together divided by the product of the probabilities of the products on rule head and rule tail occurring as if there was no association between them. It shows the strength of association between the products available on both sides of the rule i.e. larger the value of the lift, stronger is the association between products (McColl, 2011).

Lift for a combination of purchased items and/or day of the week is defined by the equation:

$$\frac{\text{Actual no. of items combination occurs}}{\text{Predicted no. of times combination occurs if items in combination where independent}}$$

Two-way lifts – it is simply a lift involving two products indicates the efficiency of a rule in finding the consequence. It is calculated as:

$(\text{Actual no. of transaction where products were purchased together}) / \{(\text{total no. of transaction}) \times (\text{fractions of times 1st was purchased}) \times (\text{fraction of time 2nd was purchased})\}$ .

To know the association between the products of NBs and PLBs available in the retail store across all categories, lift analysis was done 4 times.

*4.1 General association between 16 categories*

First association analysis was done in general for all the extracted 16 categories, without distinguishing them as NBs and PLBs. As per this analysis, there are 8 associations with the lift value greater than 1 (Table III).

**Table II.**  
Category  
associations

Antecedent	Antecedent support (*1/1,223)	Consequent	Consequent support (*1/1,223)	Confidence
Toiletries	297	Detergents	297	1
Stationary	243	Toys	243	1
Instant food	456	Add on (seasonings)	456	1
Food and vegetables	914	Milk	859	0.94
Footwear	354	Accessories	322	0.91
Baby care	194	Sanitizers	172	0.89
Home décor	423	General merchandising	351	0.83
Apparels	523	Footwear	418	0.8

**Table III.**  
Lift value by  
considering both NBs  
and PLBs

Particulars	Particulars	Lift value	Relation
Toiletries	Detergents	4.11	Positive
Stationery	Toys	5.032	Positive
Instant food	Add on (seasonings)	2.682	Positive
Food and vegetables	Milk	1.325	Positive
Footwear	Accessories	3.453	Positive
Baby care	Sanitizers	6.321	Positive
Home décor	General merchandising	2.891	Positive
Apparels	Footwear	24.46	Positive



A lift value greater than 1 indicates a positive dependency i.e. these goods are inferred as complementary goods by customers. So, it can be concluded that all these categories are positively related and the purchase of the antecedent is followed by the consequent:

For the remaining 8 categories, lift value is less than 1, which implies that there exists a negative association between them i.e. purchase of a product is not followed by another product, these products are considered as a substitute.

#### 4.2 Association between national brands

To strengthen our finding, the second analysis of association was done among 16 categories with the products of NBs only i.e. association rule was applied to the NB products across 16 categories.

As per the findings of this analysis, there are 9 associations in which lift value came much greater than 1, i.e. these categories have a strong positive association implying the complementary effect. Remaining 7 categories are negatively related i.e. they have the dominance of the substitution effect as their lift value is smaller than 1 (Table IV).

We could see from Table IV that the associated categories are repeated (same 8 categories have association) from Table III, but their lift value differs. This is because the confidence level for this association is very high in the case of both products being NBs.

#### 4.3 Association between private labels

To extend the association analysis, the third analysis of association was done for private label products of 16 categories.

This association analysis brought out 10 positive associations out of a total of 16 associations. For all these 10 associations, lift value is much greater than 1 showing the prominence of private label acceptance. There are 6 categories that have lift value smaller than 1, which means that customers do not treat them as complementary purchases. They would like to substitute private label products of these categories with any NB (Table V).

Out of 10 positive associations between PLBs across categories, 8 associations are repeated from the first two analyses (Tables III and IV) but their value differs because of different confidence levels.

Comparing the association between the first analysis (general) and third analysis (Private labels) it could be seen that the lift value is very high in the latter case because of a higher confidence level. This makes the association between private labels very strong.

Particulars	Particulars	Lift value	Relation
Toiletries	Detergents	17.471	Positive
Stationery	Toys	21.456	Positive
Instant food	Add on (seasonings)	11.873	Positive
Food and vegetables	Milk	5.936	Positive
Footwear	Accessories	14.559	Positive
Baby care	Sanitizers	23.075	Positive
Home décor	General merchandising	8.319	Positive
Apparels	Footwear	10.728	Positive
Detergents	Sanitizers	1.918	Positive

**Table IV.**  
Lift value by  
considering NBs  
with NBs

4.4 Association between national brands and private labels

To work on the focal point of research, the final association analysis was done between the products of private labels and NBs for 16 categories.

Through this analysis, it was found that there are 11 associations in which the lift value was much greater than 1. This implies that all these 11 categories are positively related and customers favor a combination of private labels and NBs within these categories.

For the remaining 5 categories, lift value came less than 1 implying negative (substitute) association between them (Table VI).

It can be seen from Table VI that the first 8 associations of the first analysis are being repeated in the further analysis but with different lift values demonstrating their different confidence levels. The confidence level in the case of the fourth analysis is also very high, and thus, there exists a very strong association between these categories.

From all the above 4 association analyses, it can be seen that there are 8 associations, which are common in all but they have different values in each case of analysis. The main reason behind these 8 associations, which came common in all the 4 analyses is their confidence level. Though the association between categories is the same across all the four analysis the different lift value gives an idea of the variety of the association between products. Higher the lift value, stronger is the association and higher the chances of the picking up of antecedent followed by the consequent product. Derived lift value will help the retailers in designing their store layout on the basis of their association, which can help him in improving both lines i.e. the top line and bottom line.

**Table V.**  
Lift value by  
considering PLBs  
with PLBs

Particulars	Particulars	Lift value	Relation
Toiletries	Detergents	24.46	Positive
Stationery	Toys	16.092	Positive
Instant food	Add on (seasonings)	9.943	Positive
Food and vegetables	Milk	3.504	Positive
Footwear	Accessories	19.109	Positive
Baby care	Sanitizers	19.725	Positive
Home décor	General merchandising	11.873	Positive
Apparels	Footwear	7.069	Positive
Instant food	Food and vegetables	5.401	Positive
Apparels	Accessories	8.901	Positive

**Table VI.**  
Lift value by  
considering NBs with  
PLBs

Particulars	Particulars	Lift value	Relation
Toiletries	Detergents	6.909	Positive
Stationery	Toys	11.118	Positive
Instant food	Add on (seasonings)	5.317	Positive
Food and vegetables	Milk	3.406	Positive
Footwear	Accessories	6.239	Positive
Baby care	Sanitizers	15.481	Positive
Home décor	General merchandising	7.069	Positive
Apparels	Footwear	5.182	Positive
Instant food	Food and vegetables	2.311	Positive
Apparels	Accessories	6.902	Positive
Toiletries	Sanitizers	3.214	Positive

The value retail store is currently having a grid store layout, which is the best for his store as he can display the various variety and an assortment of the products through that (Levy and Weitz, 2001).

In Figure 1, we have designed a new layout, which shows the cross-merchandising of private label products and NBs that will help the retailer in improving both his top line and bottom line. The design of a new layout by analyzing the past shopping pattern of the customers is illustrated below (Figure 1).

### 5. Discussions

The present research presented a study that demonstrates the placement of different SKU categories in the retail store with the help of the above-mentioned association analysis. Through this, it has also been tried to put in practical use the association rule for the product categories, which should be a private label in the given product portfolio. Taking the example of product categories – baby care and sanitizers; they have a strong association with lift value 15.481 illustrating the fact of the strong connection between antecedents and consequent, by placing both categories in the same gondola. This is because when it comes to baby care products, people are more conscious about brands because of their legacy, and thus, it can be advised to the retailers not to launch private label products in the baby care category. The introduction of sanitizers as a private label can be promoted because people are purchasing sanitizers with baby care products and do not give importance to brand value in them.

For subsequent analysis and deriving the objective of the study, the cost-profit analysis of the retailer’s product was also done in which the profit of the retailer from NBs and PLBs of the same category and subcategories were compared and studied. The product category, which was common to both NBs and the private label was studied. From the data, it was

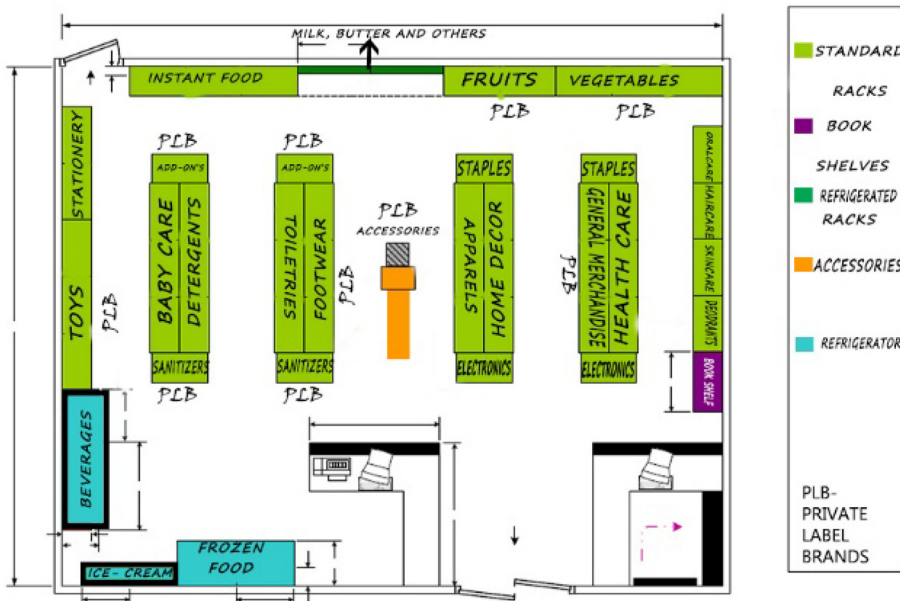


Figure 1. New layout of the store

found that there exists a difference between the gross profit of retailers from both NB products and private label products because of different selling prices of NBs and PLBs. Even though private labels are not only giving better margins to the retailer but also there are various offers and discounts being given in these private labels across seasons to lure the price-conscious customers (Tsafarakis *et al.*, 2016). If the retailer is able to penetrate and position its private-label well in the market, then it is a win-win situation for both the retailer (in terms of high margin) and the customer (increased relative share of goods under the same expenditure bracket).

According to (Mills, 1995) model, retailers have the ability to earn higher gross margins on NBs by keeping a high share of the store brand. As per his study, with the increase in the share of store brands or private labels, the wholesale and retail prices of NBs fall but the fall in wholesale price is higher than the fall in the retail price, and thus, leads to increased profit margins for the retailers. Customers want to purchase NBs because of their brand name, services and quality but these NBs do not provide retailers a sustainable growth, and thus, in search of a good margin, retailers move in the direction of private label or store brands (Ailawadi, 2001).

It is claimed that 30 per cent of the retailer is growing their fervor for premium and a high-quality segment of private label products to compete with the NBs in terms of quality and brand image, and not on the basis of pricing. Positioning a PLB as a premium brand has an impact on the quality perception of the customer about the private label product and brand image. Statistics released by private label association in conjunction with Gallup organization shows that 75 per cent of respondents believe that their supermarkets offer premium private label (Brookman, 1996) and 85 per cent in the conjunction polled that premium private label can compete with NBs (Corstjens and Rajiv, 2000).

## 6. Theoretical contributions

The advent of the private labels was observed during the 1980s when the intentional rise of products' price was done by the NB's players to increase their profit and not because of the increased raw material cost (Kahn and McAlister, 1997). As then, the private label has witnessed an exponential growth and are now present across all categories in every region. These are no longer professed as low-cost or low-quality products but are considered an appropriate alternative to NBs in terms of both quality and differentiation (Keller *et al.*, 2016). Private labels are a strategic weapon that can be used by retailers to increase their profit by positioning their private labels in the same segment as NBs by making them a close substitute to the NBs (Singh and Singh, 2015).

This finding could enable the retailer to do cross-merchandising of the products and design his store layout and shelf space in such a way that he is able to maintain sustainable growth. By using this analysis, he can maintain a balance between private labels and NBs to attract and retain profitable customers who buy some private labels and some NBs. This view is supported by the research done by Farris and Ailawadi (1992) and Johnson (1994) that retailers cannot push their private labels at the expense of NBs. This is because NBs are still the major traffic builders and cutting down on NBs could make the retailer less attractive to its most shoppers. This analysis is also consistent with the result of Corstjens and Rajiv (2000) finding that there should be enough customers to buy NBs to make a quality and sound profitable strategy for a value retailer. This balance of private labels and NBs will also be in the interest of the consumers as it will provide them a broad choice at a low price (Kumar, 2007) The strength of the private labels will compel the manufacturers to offer competitive wholesale prices on NBs (Ailawadi, 2001).

---

Thus, the MBA with the use of support, confidence and lift index has helped in finding associations between categories and will help retailers in taking their managerial decision for optimal number of SKUs, ratio between SKUs of private labels and NBs, cross-merchandising of the products and layout, which will help him to achieve a sustainable growth by increasing both top line and bottom line.

## 7. Managerial implications

This study focus on how to increase the profitability of the store by improving the store layout and by evaluating how to place PLBs with the NBs. Through this study, first, we came to know about different associations between different product categories. These associations vary according to the store location, product variety and assortments and store size. If we place products according to the associations between them that will lead to impulse purchase and increase customer's store experience and store loyalty. An advantageous method to support the association between the NB display and PLB display the retailer's shelves could be a proper move to reinforce the relationship (Pérez-Santamaría *et al.*, 2019).

Second, we came to know about the placement of private label products with NBs with the help of MBA. Through these placements as per the association between product categories, we can increase the top-line of PLBs, which will result in increasing the bottom-line of the store (Hariharan, 2016). The cost and quality differentials that generally recognized this store brand from NBs will reduce and numerous retailers can create expanded PL portfolios with particular offers (Pérez-Santamaría *et al.*, 2019).

This study of the layout not only leads to increased top-line and bottom-line of the store but also helps in reducing transportation cost and lead time. If all product categories are arranged and available according to the associations, it will help the retailers to manage their inventory and reduced lead time for their products at the store.

## 8. Limitation and future research

This study is not exempt from limitations and several limitations of our study offer opportunities for additional research. This is not a universal solution for all the stores as purchase behavior changes according to store locations, product variety and assortment, store type and store size. This study has analyzed a limited set of brands and their product categories for a value retailer cross-merchandising. Despite the fact that research for private label is developing, there is as yet a huge gap in the accessibility of information about the attributes of PLB retailers and the NB producers.

This study provides a methodology through which a retailer can design its store layout using past sales data of particular stores. This study can be useful for only a multi-brand outlet and cannot be implemented on a single brand outlet. Another limitation of this study is that it does not describe the impact of the suggested layout on inventory holding and distribution. Fewer research studies have conducted a comprehensive profitability analysis to recognize the negative conclusions about PL profitability *vis-à-vis* manufacturer brands.

## 9. Conclusion

By analyzing the historical transactional data of the customers in a value retail store through MBA, we are able to discover 8 associations between different categories through consumer shopping patterns. After extracting 16 categories, a lift was used to find the associations between the categories. To strengthen our objective finding, we performed association analysis four times association between 16 categories irrespective of their product type (national or private label); an association between 16 categories for national products only; an association between 16 categories for private

products only; and an association between 16 categories for national and private labels. For all 4 associations using a lift, we were able to find 8 categories association that was common in all the analyses being done. Though the resultant 8 categories are common across all their lift value was different because of different confidence levels and the number of transactions. As per our analysis, we could find that the maximum number of associations between 16 categories is the highest between the NB and private label products with 10 such associations, which have the lift value greater than 1 implying stronger association and the stronger probability of complementary effect. These 11 positive associations reflect customers' shopping behavior where they prefer a combination of both private labels and NBs across categories.

### Notes

1. FDI.
2. NCR.
3. SKUs.

### References

- Aggarwal, P. and Cha, T. (1998), "Asymmetric price competition and store vs national brand choice", *Journal of Product and Brand Management*, Vol. 7 No. 3, pp. 244-253.
- Agrawal, R. and Srikant, R. (1994), "Fast algorithms for mining association rules", in *Proc. 20th Int. Conf. Very Large Data bases, VLDB*, Vol. 1215 (September), pp. 487-499.
- Agrawal, R., Imieliński, T. and Swami, A. (1993), *Mining Association Rules between Sets of Items in Large Databases*, IBM Almaden Research Center, San Jose.
- Aguinis, H., Forcum, L.E. and Joo, H. (2013), "Using market basket analysis in management research", *Journal of Management*, Vol. 39 No. 7, pp. 1799-1824.
- Ailawadi, K. (2001), "The retail power performance conundrum: what have we learned?", *Journal of Retailing*, Vol. 77 No. 3, pp. 299-318.
- Ailawadi, K. and Keller, K. (2004), "Understanding retail branding: conceptual insights and research priorities", *Journal of Retailing*, Vol. 80 No. 4, pp. 331-342.
- Ailawadi, K., Neslin, S. and Gedenk, K. (2001), "Pursuing the value-conscious consumer: store brands versus national brand promotions", *Journal of Marketing*, Vol. 65 No. 1, pp. 71-89.
- Ailawadi, K., Pauwels, K. and Steenkamp, J. (2008), "Private label use and store loyalty", *Journal of Marketing*, Vol. 72 No. 6, pp. 19-30.
- Baltas, G. (1997), "Determinants of store brand choice: a behavioural analysis", *Journal of Product and Brand Management*, Vol. 6 No. 5, pp. 315-324.
- Baltas, G. and Argouslidis, P. (2007), "Consumer characteristics and demand for store brands", *International Journal of Retail and Distribution Management*, Vol. 35 No. 5, pp. 328-341.
- Batra, R. and Sinha, I. (2000), "Consumer-level factors moderating the success of private label brands", *Journal of Retailing*, Vol. 76 No. 2, pp. 175-191.
- Bauner, C., Jaenicke, E., Wang, E. and Wu, P. (2019), "Couponing strategies in competition between a national brand and a private label product", *Journal of Retailing*, Vol. 95 No. 1, pp. 57-66.
- Brookman, F. (1996), "Going upscale", *Supermarket Business*, Vol. 51 No. 5, p. S17.
- Burt, S. (2000), "The strategic role of retail brands in British grocery retailing", *European Journal of Marketing*, Vol. 34 No. 8, pp. 875-890.
- Calvo, S. and Reinares, P. (1999), *Gestión de la Comunicación Comercial*, McGraw-Hill, Madrid.

- Collins (2019), "Collinsdictionary", available at: [www.collinsdictionary.com/dictionary/english/value-retailer](http://www.collinsdictionary.com/dictionary/english/value-retailer) (accessed 11 November 2019).
- Corstjens, M. and Rajiv, L. (2000), "Building store loyalty through store brands", *Journal of Marketing Research*, Vol. 37 No. 3, pp. 281-291.
- Dhar, S. and Hoch, S. (1997), "Why store brand penetration varies by retailer", *Marketing Science*, Vol. 16 No. 3, pp. 208-227.
- Ehrenberg, A.S.C.G.G.J.B.T.P. (1990), "Double Jeopardy revisited", *Journal of Marketing*, Vol. 54 No. 3, pp. 82-91.
- Ehrnrooth, H. and Gronroos, C. (2013), "The hybrid consumer: exploring hybrid consumption", *Management Decision*, Vol. 51 No. 9, pp. 1793-1830.
- Erdem, T. and Swait, J. (1998), "Brand equity as a signaling phenomenon", *Journal of Consumer Psychology*, Vol. 7 No. 2, pp. 131-157.
- Farris, P. and Ailawadi, K. (1992), "Retail power: monster or mouse?", *Journal of Retailing*, Vol. 68 No. 4, pp. 351-369.
- Fibre2Fashion.com (2010), "Fibre2Fashion.com", available at: [www.fibre2fashion.com/industry-article/5129/value-retailing-are-brands-losing-their-luster](http://www.fibre2fashion.com/industry-article/5129/value-retailing-are-brands-losing-their-luster) (accessed 11 November 2019).
- Giblen, G.M. (1993), "Summit conference defines future", s.l., s.n., pp. 32-37.
- Goodhardt, G., Ehrenberg, A. and Chatfield, C. (1984), "The Dirichlet: a comprehensive model of buying behaviour", *Journal of the Royal Statistical Society*, Vol. 147 No. 5, pp. 621-655.
- Group, N.A.S. (2019), *Changing Consumer Prosperity, the Impact of Wealth Fragmentation on the Consumer Environment*, The Nielsen Company (US), LLC.
- Hariharan, G. (2016), "Retail touchpoints", available at: [www.retailtouchpoints.com/features/executive-viewpoints/private-label-for-profitability-six-things-to-consider](http://www.retailtouchpoints.com/features/executive-viewpoints/private-label-for-profitability-six-things-to-consider) (accessed 8 June 2019).
- Heider, F. (1958), *The Psychology of Interpersonal Relations*, John Wiley and Sons, New York, NY.
- Hoch, S. (1996), "How should national brands think about private labels", 15 January, pp. 89-102.
- Hoch, S. and Lodish, L. (1998), "Store brands and category management", Working Paper, The Wharton School.
- Horowitz, I. (2000), "An option-pricing look at the introduction of private labels", *The Journal of the Operational Research Society*, Vol. 51 No. 2, pp. 221-230.
- IBM (2019), "IBM knowledge Centre, confidence in an association rule", available at: [www.ibm.com/support/knowledgecenter/SSEPGG\\_11.1.0/com.ibm.im.model.doc/c\\_confidence\\_in\\_an\\_association\\_rule.html](http://www.ibm.com/support/knowledgecenter/SSEPGG_11.1.0/com.ibm.im.model.doc/c_confidence_in_an_association_rule.html) (accessed 13 May 2019).
- IRI (2016), *Private Label: The Journey to Growth along Roads Less Traveled: In Times and Trends*, s.l., Information Resources Inc. (IRI).
- Iyengar, S.L.M. (2000), "When choice is demotivating: can one desire too", *Journal of Personality and Social Psychology*, Vol. 79 No. 6, pp. 995-1006.
- Johnson, J.L. (1994), "Private labels: How high is up?", *Discount Merchandiser*, Vol. 34 No. 10, pp. 30-37.
- Kahn, B. and Lehmann, D. (1991), "Modeling choice among assortments", *Journal of Retailing*, Vol. 67 No. 3, pp. 274-299.
- Kahn, B. and McAlister, L. (1997), *Grocery Revolution: The New Focus on the Consumer*, Addison-Wesley Educational Publishers Ltd, Reading.
- Keller, K., Dekimpe, M. and Geyskens, I. (2016), "Let your banner wave? Antecedents and performance implications of retailers' private-label branding", *Journal of Marketing*, Vol. 80 No. 4, pp. 1-19.
- Kim, C. and Takashima, K. (2019), "Effects of retail organisation design on improving private label merchandising", *European Journal of Marketing*, Vol. 53 No. 12.
- Kumar, N. (2007), *Private Label Strategy: How to Meet the Store Brand Challenge*, Harvard Business Review Press.

- Langlois, C., Milberg, S. and Cuneo, A. (2019), "Should leading brand manufacturers supply private label brands to retailers: the TRADE-OFFS between manufacturer brand and the amount of profit", *Industrial Marketing Management*, Vol. 76, pp. 192-202.
- Levy, M. and Weitz, B. (2001), *Retailing Management*, McGraw-Hill, New York, NY.
- Locke, E.A. (2007), "The case for inductive theory building", *Journal of Management*, Vol. 33 No. 6, pp. 867-890.
- McColl, L. (2011), "Select statistical services limited", available at: <https://select-statistics.co.uk/blog/market-basket-analysis-understanding-customer-behaviour/> (accessed 13 June 2019).
- Makoto, A. (1995), "Price and advertising strategy of a national brand against its private-label clone", *Journal of Business Research*, Vol. 33 No. 3, pp. 241-250.
- Mangold, W. and Faulds, D. (1993), "Service quality in a retail channel", *Journal of Services Marketing*, Vol. 7 No. 4, pp. 4-10.
- Mills, D.E. (1995), "Why retailers sell private labels", *Journal of Economics Management Strategy*, Vol. 4 No. 3, pp. 509-528.
- Narasimhan, C. and Wilcox, T.R. (1998), "Private labels and the channel relationship: a cross-category analysis", *The Journal of Business*, Vol. 71 No. 4, pp. 573-600.
- Ngobo, P.V. (2011), "Private label share, branding strategy and store loyalty", *Journal of Retailing and Consumer Services*, Vol. 18 No. 4, pp. 259-270.
- Nielsen (2010), "The rise of the value conscious shopper: a Nielsen global private label report", Nielsen.
- Nogales, A.F. and Suarez, M.G. (2005), "Shelf space management of private labels: a case study in Spanish retailing", *Journal of Retailing and Consumer Services*, Vol. 12, pp. 205-216.
- Pande, S. and Narayan, A. (2018), "Evaluating emerging Indian retail scenario: consumer preferences, perceived risks, and uncertainties-store brands vs. National brands", in Nayak, A.B.A.S. (Ed.), *Maintaining Financial Stability in Times of Risk and Uncertainty*, IGI Global, p. 377.
- Pare, V., Dawes, J. and Drisener, C. (2006), *Double Jeopardy Deviations for Small and Medium Share Brands – How Frequent and How Persistent?*, Australian and New Zealand Marketing Academy, Brisbane.
- Pérez-Santamaría, S., Martos-Parta, M. and Garrido-Morgado, Á. (2019), "Identifying a private-label supplier on national brand", *Journal of Product and Brand Management*, Vol. 28 No. 3, pp. 432-443.
- Putsis, W. and Dhar, R. (1996), "Category expenditure and promotion: can private-labels expand the pie?", Working paper, Yale University, New Haven, CT.
- Rao, V., Agarwal, M. and Dahlhoff, D. (2004), "How is manifest branding strategy related to the intangible value of a corporation?", *Journal of Marketing*, Vol. 68 No. 4, pp. 126-141.
- Retail, P. (2007), "Private label trends worldwide", February, pp. 1-47.
- Richardson, P., Dick, A. and Jain, A. (1994), "Extrinsic and intrinsic cue effects on perceptions of store brand quality", *Journal of Marketing*, Vol. 58 No. 4, pp. 28-36.
- Roberts, A. (2005), "A guide to WEKA", available at: [www.comp.leads.ac.uk/andyr,2005](http://www.comp.leads.ac.uk/andyr,2005) (accessed 28 May 2019).
- Sayman, S., Hoch, S. and Raju, J. (2002), "Positioning of store brands", *Marketing Science*, Vol. 21 No. 4, pp. 378-397.
- Sethuraman, R. (2000), "What makes consumers pay more for national brands than for store brands: Image or quality?", Marketing science institute paper series, pp. 00-110.
- Silverstein, M. and Butman, J. (2006), *Treasure Hunt. Inside the Mind of the New Consumer*, Penguin Group, New York, NY.
- Silverstein, M. and Fiske, N. (2008), *Trading Up: Why Consumers Want New Luxury Goods and How Companies Create Them*, Penguin Group, New York, NY.
- Simonson, I. (1999), "The effect of product assortment on consumer preferences", *Journal of Retailing*, Vol. 75 No. 3, pp. 347-370.



- 
- Singh, R.B. and Singh, S. (2015), "The effect of perceived risk dimensions on purchase intention: an empirical evidence from Indian private labels market", *American Journal of Business*, Vol. 30 No. 4, pp. 218-230.
- Steenkamp, J., Heerde, V., J., H. and Geyskens, I. (2010), "What makes consumers willing to pay a price premium for national brands over private labels?", *Journal of Marketing Research*, Vol. 47 No. 6, pp. 1011-1024.
- Tsafarakis, S., Saridakis, C., Matsatsinis, N. and Baltas, G. (2016), "Private labels and retail assortment planning: a differential evolution approach", *Annals of Operations Research*, Vol. 247 No. 2, pp. 677-692.
- Venkatachari, P.K. (2016), "Market basket analysis: understanding Indian consumer buying behaviour of Spain market", *Journal of Management Research*, Vol. 8 No. 1, pp. 49-55.
- Wahi, R. (2017), "The rise of private label brands", *ReTales*, 22 March, p. 3.
- Witten, I.H., Frank, E. and Hall, M.A. (2011), *Data Mining: Practical Machine Learning Tools and Techniques*, 3rd ed., Morgan Kaufmann, San Francisco.

### Further reading

- Agrawal, R. and Ramakrishnan, S. (1994), *Fast Algorithms for Mining Association Rules*, IBM Almaden Research Center, San Jose.
- Hoch, S.J. (1993), "When do private labels succeed", *Sloan Management Review*, Vol. 34, pp. 57-67.
- Roach, L. (1995), "Mapping the future of private labels", *Discount Merchandiser*, Vol. 35 No. 11, p. 65.
- Sethuraman, R. (1992), "The effect of marketplace factors on private-label penetration in grocery products", *Marketing Science*, Working Paper no. 92-128.

Category	Products in this category
Rice-flour-sugar	It includes all the staples such as rice, wheat, dal, oats, maize and so on
Kitchenware	All Utensils, kitchen accessories such as pan, cooker, knives, sieve, peeler and so on are included in this
Toiletries	Toilet cleaners, zipper bags, paper towels, bathroom mirrors, toilet papers, etc
Sanitizers	It includes hand sanitizers, room fresheners, cleaners, hand wash, etc
Apparels	Apparels includes regular affordable T-shirts, lowers, under garments, pyjamas, etc
Beverages	Soft drinks, fruit juices (Real, RAW, Tropicana, Minute maid, etc.) and energy drinks (Red bull, etc.)
Instant food	Ready to eat food by MTR, Kohinoor, Ruchi, etc
Accessories	Wallets, leather accessories, socks, tie, etc
Spices	Coriander, red chilli, black pepper, peppercorns, green cardamom, turmeric, etc
Footwear	Slippers, sandals, loafers, flip flop, casual shoes, etc
Add on (seasonings and pickles)	Salt and pepper, herbs and spices, seasoning blends, basil, oregano, marjoram, parsley, rosemary, thyme and dill. Common culinary spices include cinnamon, paprika (another pepper), ginger, saffron and cumin
Milk and milk products	Milk, paneer, butter, curd, buttermilk, ghee and other milk products
Healthcare	Pain relief gel and spray, crap bandages, ENO, antiseptics, vaporubs, etc
Stationery	Notebooks, pens, pencils, colors, envelops, cards and greetings, etc
Toys	Card games, camping and trekking goods, chess set, dolls house and miniatures, dolls, baby, educational games and toys, etc
Fruits and vegetables	All type of fruits and vegetables
Baby care	Baby soaps, baby shampoo, moisturizers, wipes, etc
Electronics	Hand grinders, mixer and juicers, mobile accessories, etc
General merchandise	It includes glass products, crockery, lunch boxes, bottles, etc
Detergents	Laundry detergent, disinfectant, oxygen bleach, etc
Non-veg	Non-vegetarian category includes all non-vegetarian food such as fish, chicken and so on whether packaged or non-packaged
Personal care	Shampoo, soaps, toothpaste, perfumes, conditioners, etc
Home and décor	Pillows, pillow covers, curtains, bed sheets, towels, floor mats, etc

**Table AI.**  
List of product categories

### About the authors

Veenu Sharma earned her Fellow from Birla Institute of Management Technology, Greater Noida. She is a recipient of BIMTECH–STOUGH, Young Scholar Award by BIMTECH in the year 2014. She has won Best Case Award by The Case Center, the UK, in 2017 and achieved BIMTECH – G D Sardana Young Scholar Award in the Year 2018. She has also earned SAGE Best Case Award in 2019. She is the Editor of the book *Cases in Operations and Strategic Management* published by Bloomsbury Publishing India Pvt. Ltd. She has more than 14 years of industry and academics experience. She has also been mentoring and developing students in the area of developing research papers and reports. Veenu Sharma is the corresponding author and can be contacted at: [veenu.sharma@bimtech.ac.in](mailto:veenu.sharma@bimtech.ac.in)

Bhuvnesh Kedia is a management student at Birla Institute of Management Technology, Greater Noida. He is pursuing his master's in retail management from there and has a keen interest in

---

studying in retail sector and is more inclined toward analytics.

Vandana Yadav is a management student at Birla Institute of Management Technology, Greater Noida. She is pursuing her master's in retail management from there and has a keen interest in studying the trends in retail sector.

Bhuvnesh Kedia and Vandana Yadav have written their paper "Tapping the potential space-Positioning of Private Labels" under the guidance of their professor, Veenu Sharma.

Dr Shreya Mishra is a Fellow from BIMTECH. Her area of interest includes workplace behavior, CSR marketing and qualitative research. She has won Young Scholar Award 2017 for paper "Workplace bullying in top management: a qualitative study", Young Scholar Award 2018 for paper "Understanding workplace bullying through multidimensional power disparities" and Sage Best Award for "Provoking religious harmony through "woke advertisement": a critical discourse study".