

## **6. Conclusion**

The concluding chapter aims to present the research findings on few aspects related to how this research adds value of originality to the existing literature, the managerial implication of the research and how this research could be directed for further developments. The conclusion is presented as accordance with the objective of the research so as to prove this research fill and addresses the gap in the literature.

### **a) Bringing out a viable alternate methodology for developing a typology of shopper based on behavior patter toward various retail store images.**

The study has been successful in achieving two objectives. Firstly, demonstrating that behaviour is a good basis of segmentation of shoppers and second, showing that observation as a methodology can be successfully utilised for this purpose. It is evident from the study that shoppers do not portray similar kinds of behaviour at every store. If it is assumed that the behavioural attitude of shoppers would not change significantly, the different behaviour could be attributed to the influence of store variables that may be more controllable than the factors that affect attitude. In addition, this study throws up several new paradigms for academic research especially for scale development and research design. The study has brought out a basis of segmentation that can be used to understand shops without disturbing them. It can be evident from the study that shoppers do not portray all kinds of behaviour at every store. Every retailer would need to find out its major set of buyers and develop its strategies accordingly. The study becomes useful also to

establish an association between the behaviour and the attitude of the shoppers, as many of the behaviours are a reflection of the attitudes of the shoppers. It also states that a retailer may not be able to influence the behaviour of the shoppers in many cases. Cues that are purely behavioural are easy to manage. For others the store would have to draw a plan that has a longer horizon. Changing attitude would take time. The retailers would have to ensure that the shoppers keep visiting the store and slowly change their attitude based on the consistently pleasurable encounter with the store. A store may use one or a combination of the ingredients of its retail mix as indicated. It would have to keep improving on the offer so that the shoppers find the visits better than the previous visits. The retailer would have to build flexibility in its operation so that each shopper visiting the store finds the service personalised.

It is evident that observation of the shoppers while they are in the store can help in understanding them better. However, this research was exploratory in nature and hence no hypothesis has been formulated and validated. This methodology can be extended to measure the results of experiments at the store. A store may manipulate its retail mix variables and test out the impact on shopping behaviour. In the current study, a shopping tourism retail shopper has been observed for its complete shopping cycle. A store could identify its critical areas, such as the new arrival displays in books and music stores or some blind spots, and develop strategies to increase its productivity. It is also felt that the current model as depicted and it can be tested empirically to establish a casual relationship between the orientation of the shoppers and their behaviour at the store.

## **b) Develops a measurement scale based on the shopper typology**

The store image scale developed in this research offers an actionable, cost effective and minimal effort approach to determining and altering, if necessary, individual store image. It is limited to those aspects of image a manager can modify and utilize as a competitive tool. The scale provides a sufficient instrument that enables determination of the store are appealing to clientele and which ones generated negative reasons. As such, the scale provides a technique that is actionable by the individual store manager, unlike more global store image scales. The scale will be more useful than scales that fail to specify what about the image is faulty or that have elements such as location or reputation that are beyond the control of the store manager. Four major aspects or constructs were identified in the purified model. These constructs, viewed as being under the control of the store managers, are merchandise, atmosphere, value, service level, clientele and convenience. Retailers are under increasingly tight budget constraints. The scale can be implemented within parameters which are cost effective and require minimal time and effort, therefore meeting budget constraints. The scale is operationalized through a questionnaire that can be added to any customer survey or be administrated at the point of purchase in a short time. This provides a cost effective, minimal effort technique for use in a variety of types of retail operations. It also allows continuous monitoring and examination of store image without conducting extensive research for iteration.

Store image is of critical concern in a wide variety of retail store, though the testing of the image scale involved in few retail store types but major store kinds in the country, it is applicable for a broad category of different types of retailers in different geographical location in the country. Therefore, the scale can be used in broad range of retailing to tailor image to effectively reach targeted customer in a variety of geographical and retail settings. This characteristic of generalizability, combined with actionable, affords the retail manager with a dynamic scaling technique which can be applied at the individual store level.

The store image scale that was developed is not without limitations. It suffers the same limitations of other multi-attribute scales that measure global constructs. Specifically, this scale may fail to capture the fullness of the store image constructs, As mentioned earlier, image variables were limited to behavioural aspects and actionable by the manager. It may be that the items omitted can, in some case, affect store image. The scale was shortened for ease of use by managers.

It is incumbent upon academics who have the ability and tools to focus on the issue of applied scale development. Not only does the manager need scale to be developed for use, but also the underlying theory of applied scale development needs to be further addressed. This research provides a starting point and suggestions for developing applied scales. However, it is just that: a starting point. Research needs to be concentrate effort on further developing the methods and norms for improvement of this type scale. After this, the work begins in earnest. A

few of the areas in desperate need of applied scale related to retail settings include: customer satisfaction, merchandize collection, shopper evaluation and general images.

The development of the behavioural based applied store image scale differed from what would have been undertaken for scientific research. As compared to traditional store image scales, developed for scientific research, the applied scale is much shorter and the items measures are more actionable for store managers. The applied store image scale allows managers to determine, with some precision, exactly what characteristics of the store are appealing to clientele and which ones generate negative reactions. Testing indicated the scale is useful for determining customer's perception of their behaviour towards store image across a broad range of retail settings and store types in different geographical location of the country. In addition, a more rigorous test of scale validity and reliability has been provided.

**c) Influence of tourists Shopping behavioral attitude on Store formats & Type Choice.**

The study has shown some evidence that there is merit in building a favourable consumer behavioural attitude towards the different store types as attitude is a strong antecedent of the behaviour and their relationship is well mediated through intention. The key finding is that the affective and cognitive components of attitude have differential impact on the store type. The affective component of the behavioural attitude in general is a stronger predictor of intention than the

cognitive component indicating that the shoppers primarily do a global assessment of the store type proposition rather than a detailed evaluative assessment. It may however be a result of the stage of format evolution and familiarity with it, as the recent store types like food and grocery supermarkets, hypermarkets, malls has shown the highest cognitive evaluation while the oldest format like food and grocery kirana shops that has shown the highest affective component. It may therefore be possible to conjecture that consumer's format evaluation basis undergoes a transition from cognitive to affective with the increased familiarity and evolution of format. As a result, it becomes important for the store types to know the behavioural attitude profiles of their target group from time to time as it may form the basis of the retail format's communication decisions and business proposition changes.

A largely affective target group may be approached primarily with affective cues while cognitive cues may be communicated sporadically. On the other hand, a cognitive profile heavy target group, as in the case of food and grocery stores, durable stores and medical stores, may be targeted primarily with evaluative or utilitarian cues like value for money positioning or discounts or savings made in a shopping trip or a loyalty promotion.

A key contribution of this thesis has been the development and testing of a comprehensive framework for understanding the store type choice through attitude behaviour linkage. The importance of including involvement and net valence in the framework gets well illustrated in this study. The research looks at type level

choices instead of store level choices as mostly reported in the literature and also integrates physical and virtual store formats in a single study. The study shows good relevance for the early stage retail evolution in emerging economies like countries like India.

Store type was found to be significant in differentiating behaviour. Shoppers exhibited varied behaviour in the new store types and format as compared to other old format stores. The book, music and gift shops stores seemed to have provided a „stage“ for the shoppers to express themselves, that suggested that shoppers also seek non-monetary value out of shopping. However, the impact of format on behaviour does

not seem to have been studied in the past. In a market that is evolving and characterised by small stores, retailers could use types as a major differentiator and help in setting newer and higher expectations for the shopper as well as create barriers for competition. As store types and formats determine the deliverables of a store, it could well be used for designing the processes at the store. The type of product that the store dealt in was another significant variable in distinguishing behavioural segments. However, it was found that while this finding was correct at the overall level, some products did not show such differences. The results could be used to develop new positioning strategies for stores in different product categories, as in the case of books and music, there are no effort in targeting the „cosmetics and fancy store“ and its segment.

The behavioural patterns of shoppers found in this study have serious implications for retail mix strategy. The insight would enlighten retail stores' policy on merchandising, level and quality of ambience, services and price as well as format decisions. The study indicates that in many cases a retailer might not be able to influence the behaviour of shoppers, especially with the Pre-determined segment. This is a large segment that derives more value out of brands bought than the retailer (food and grocery, durables and medical stores and formats). This gives the brand owners more power than the retailers. Since these shoppers would decide their purchases away from the store, an established brand has more chances of being bought. However, it also indicates that there could be an opportunity for private brands in a country like India where the geographical spread of the market and the level of infrastructure support affect availability of a brand to a large extent. With good point of purchase displays and communication, a store may be able to create a franchise for its own brands.

The decision of various store types and the merchandise carried by the retailer seems to be crucial for influencing shopper behaviour. In order to provide the right kind of value sought by the shopper's group in a particular shop, the retailer would need to fix the weighting between merchandising, ambience, services and price according to the behavioural segment of shoppers it most wishes to attract.

#### **d) Validation the fuzziness and optimization for number of cluster**

In this research utilizes the following (Xie and Beni's function, the compactness and separation validity,  $S_v$  function, the Partition Index  $SC$ , Dunn's Index (DI)



and Alternative Dunn Index (ADI)) algorithms that can efficiently determine a reasonable number of clusters/segments to return from any non- hierarchical clustering/segmentation algorithm. In order to identify the correct number of clusters to return from a non-hierarchical clustering/segmentation algorithm, this research utilizes the above mentioned cluster validity function. This research has used the above mentioned cluster validity function, and the mentioned cluster validity functions are usually used for image processing analysis where the data is images in nature. But such validity functions are rarely used in social science research. So, utilizing such validity function in social science research and finding its merit and value in social science research is reasonable value addition to the literature.

Moreover, Since effective validation could not be performed in “Jim Bezdek”s FCM” algorithm to measure the range of fuzziness, we add a separate validity function called “Dunn”s partition normalization coefficient” to determine the fuzziness of the cluster. The result of Dunn”s Partition normalized coefficient indicates the existence of greater amount of fuzziness in the resulted segments. This proves that members in each segment often have multiple preferences and the stability of each segment is always a question mark. This leads to go into the process of measuring the stability of the segments.

#### **e) Measuring the stability of the segments**

The stability of the segments has been measured by adopting the following procedure by considering the mean value of various dimensions of the cluster

results based on FCM and K-Means are similar. This denotes that the clusters are well separated and defined. But, the cluster size we obtained from the K-Means (Hard segmentation) is different from those in FCM (Soft Segmentation) which reflects the situation of the real world. By comparing the soft and hard segments, the managers can judge the market stability of each segment. Based on the research, it is found that, based on the percentage of fuzziness, the familiar segment (0.13 %) and variety seeking segments (1.23 %) are considered to be more stable segment; pre-determined segment (1.36 %) and economic segment (1.82 %) have greater fuzziness. Hence, these segments are considered to be unstable segments. The overall fuzziness of all the segments is estimated as 1.13 percent.

This research appraises various approaches to market segmentation. It is argued that fuzzy segmentation method is potentially useful to assess the stability of different segments. To substantiate the argument it is proved that the fuzzy clustering analytical method has the following advantages: i) FCM uses membership grade to do cluster numbering which helps the marketer to understand the real market situation. ii) The FCM sketches membership value of every sample, which supports marketers to visualize individual's level of multiple preferences. One must to remember that the extent to which market segment is reached depends on the extent to which they can be profiled with consumer descriptors. The grade value of each member will facilitate marketers to profile individuals who lie in different segments. This enables the marketer to establish new strategies to the development process. (iii) The results of soft segmentation

solutions are adjusted for comparing with hard cluster solutions. So the manager will find it easy to assess the stability of segments.

However this research is not without its limitations, which will be taken up in future research. (i) The FCM involves computation in the choices of fuzziness weight exponent and the maximum termination tolerance. Further research might investigate the viability of developing valid thumb rule value for fuzziness weight exponent as well as for the maximum termination tolerance. (ii) This study concentrates on the shopping behavior of tourists based on the influence of store images but, it has not considered the other usual segmentation variables like demographics and lifestyle.

#### **f) Developing predictive model to discriminate among group and to grid the market**

To build a predictive model of group members based on the variables that provide the best discrimination between the groups, multi-group discriminant analysis has been performed. The model is developed with the assumption of k-means cluster analysis a priori approach for future prediction. It is found that the “variety seeker” is differing from other segments based on the high value in stress on product category, seek value for money, seeks depth of merchandize, self service.

But, the “Economic segment” is differing from the other segments based on the high value for price, seeks discounts, price display. The “familiar segment” is differing from other segments based on the high value of influences of store

images, friendly attitude with sales person. The “pre-determined” segment mostly gives importance to priori information, specific product, variety, The estimated discriminate model so helps managers predict easily the new unknown prospective customers.

The answer tree model rightly identifies the best predictor variable for pre-determined segment. Instead of segmenting the market, market managers can easily grid the market to reach the target market. Thus, the rule and prediction of demographic variables on the pre-determined segment has been attained. The first best level of prediction is “store type” followed by “gender” and “current working status”. If “pre-determined” segment is targeted, marketers can easily griddle the market based on variables like “store type”, “gender” and “current working status” as well.

Overall, the research utilizes various concepts, methods, tools and techniques in an integrated manner for developing an enhanced method of segmenting shopping tourism retail market based on behavioral pattern of shoppers.

#### **g) Relationship between the store images attribute segmentation and store type choice**

The chi-square statistical test proves that there is a significant and strong relationship exists between them. To further validate, Monte Carlo exact test is also performed and further it stress the same if the sample size is increased.

### **Direction for further research**

This research is however not without any limitation, the first limitation is at the response rate that is the entire retail market in the country is under transition period. Every retail chain in the country is upgrading the retail formats. In this situation, the study on store image has achieved the response rate of only 67.57 percent against the standard 80 percent. The next limitation is that, the indent of the research. According to the CII and McKinsey research on “Retailing in India”, the food and grocery market size in the country has about 12 million outlets, where 96 percent of outlets are largely unorganized and only the remaining 4 percentage of the market is organized and the market does not have any clear base. So the samples (retail outlets) taken for the study cannot be claimed to have been from an organized sector as compared to developed countries.

The scope of the research can further be widened by applying the approaches of the latest methods of segmentation like ANFIS and ANN which can be used to predict and classify the market. The algorithms derived out of these methods may enable to perform clusters with natural thinking rule, to further lead to good pattern recognitions.