Impact of Visual Merchandising on Consumer Buying Behavior : A Study on Retail Outlets

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ABSTRACT

Retail in India has a very good growth potential, but the bottleneck here is to differentiate one retail business from the other through customer's perception. In order to grab the attention of the customer's buying decision retail businesses must focus on visual merchandising. As there are various players in the retail business and more or less every player in the retail industry offers the same thing, thus every retail business needs to be distinguishable from its industry competitors. A successful retailing business needs a good image to be created in the minds of the customers. In order to enable brand image of a retail business to be absorbed by the customers mind, can be achieved through product and service offerings. The means of increasing the footfalls and sales of a retail store, they need to concentrate on visual merchandising of products and service offerings.

Visual Merchandising is new business etiquette which is growing popular nowadays. Visual Merchandising in simple terms can be expressed as the presentation of any and all merchandises at its best using color synchronization, light coordination, accessorized displays and self-explanatory props. While setting up a retail store in a consumer market, visual merchandising plays a vital, attractive and appealing role. Visual Merchandising is not just about presenting the merchandise in an attractive manner to give a visual appeal to customers but it also encourages impulse buying by the customers. The application of Visual Merchandising Techniques is used by retailers to convert ordinary visitors into potential customers. Visual Merchandising is an important strategy formulating effective marketing decision to increase the sales of the retail stores. Customer satisfaction is greatly influenced by store environment, shopping comfort and merchandise assortment. Various element of Visual Merchandising helps in achieving customer satisfaction and its impact on customer buying decisions. The business outcomes transfigured from the assessments include customer satisfaction, repurchase intention, cross purchase tendency, store loyalty and recommendation of the retail store to others.

This study will help retail store managers and supervisors to improvise on the weak dimension of their particular store and simultaneously drive the store towards increased sales and customer satisfaction.

Introduction

Retail Industry has seen significant amount of development in the past few decades. Retail development coupled with product distinction has caught the attention of consumers. There has been an explosion of products being characterized and produced exponentially in the past decade, which has helped people in connecting to the right choice of product from among the many visually displayed products arranged in the retail store shelves. Moreover, with an increase in the number of retail stores emerging in metropolitan cities, retail industry is getting competitive as each day passes. Rise of different players in the retail industry delivering more or less the same brands and products need to discern the consumer behavior strongly. Retail Stores utilize many marketing techniques to enable the millions of users to follow the brand image. Marketing techniques act as references from friends, acquaintances and loved ones from any part of the world.

Retailing in India is one the pillars of its economy which accounts for 15% Gross Domestic Product (GDP). The Indian retail market is estimated to be $500 billion and one of the top five retail markets in the world by economic value. It is the fastest growing retail markets in the world, with 1.26 billion customers. When retail networking began its operations in Indian economy, it was in the late 90's. The first impressions of Retail Industry took place in 1997 allowing foreign direct investment (FDI) in cash and carry wholesale. The government of India approved through relaxation in terms and conditions of retail operations. Ultimately permission was granted in 2006, wherein Indian retail industry attracted about $1.8 billion in foreign direct investment representing a very small 1.5% of the total investment flow in India.

Visual Merchandising as it is practiced today gained existence at the dawn of departmental store era in the early to mid-1800's. Demand is created through diverse target markets and promotional tactics, satisfying consumer's wants and needs through a lean supply chain. In the 2000s, an increasing amount of retailing is done online using electronic payment and delivery via a courier or postal mail. Retailing includes subordinated services, such as delivery. The term "retailer" is also applied where a service provider services the needs of a large number of individuals, such as for the public. Shops may be on residential streets, streets with few or no houses, or in a shopping mall. Shopping streets may be for pedestrians only. Sometimes a shopping street has a partial or full roof to protect customers from precipitation. Nowadays, retail outlets are taking leverage of huge mall spaces spanning over thousands of square feet of retail products at display to drive sales. Online retailing, a type of electronic commerce used for business-to-consumer (B2C) transactions and mail purchase orders, are forms of non-shop retailing and not face-to-face selling.

Visual merchandising is the presentation of a store and its merchandise in such a manner that will attract the attention of potential customers into buying buyers. It involves decorating the store, keeping the interior presentation of layouts and planograms the same as what is promised on the outside.

The end purpose of visual merchandising is to aid in making a sale and make shopping fun. Visual merchandise presents an image of whom or what the shopper can be when using the merchandise is displayed. It enables in converting a walk by shopper into a walk-in buyer. Visual merchandise requires a combination of skills including creativity, artistic knowledge and understanding of store layout/design to be more specific, the planogram. Color is a big attraction point in converting potential shoppers into ultimate buyers. Through visual merchandising, retailers make shopping experience enjoyable and bring in a sense of discovery about their stores, and find out the reasons behind effective and efficient sales drives.

Milestones exists even to the visual merchandiser who usually wants to discover new and better ways to create a lifetime buyer. Visual Merchandising being an integral part of the store design has grown to embody sensory elements such as sound, smell, touch and mood – sometimes called as retailtainment. As the contemporary retail industry work through is seen evident with all amenities being provided under one roof. The concept of shopping has changed and thus ushering the revolution of visual

merchandising during shopping has been an evident player. Retail Industry has seen innovation with Visual Merchandising and became the most adorable game in retailing. Nowadays, retailers are staying ahead of their strategies to make the customer have unique in-store experiences inspiring shoppers through social lifestyle.

From an academic point of view, a plethora of knowledge has been accumulated in understanding the evolution and dynamics of a visual merchandising that in turn will help in understanding how a specific consumer behaves, or rather how visual merchandising can influence one consumer, or even how the perception of a visual merchandiser may change with respect to the change in behavior of distinct consumers within the retail stores. The data available to us allows us in identifying the key relationships that play a significant role in influencing a consumer.

Literature Survey
Visual Merchandising is defined as the presentation of any and all merchandise at its best: (1) colour coordinated (synchronized colours); (2) accessorized (related products/props); and (3) self-explanatory (descriptive/illustrative). The world of visual merchandising is all about fascinating tools of display which help transform shoppers into stoppers, walk-bys into walk-ins and passers-by into passers who buy!

Visual Merchandising is one of the final stages in the process of setting up a retail store which customers would then find attractive and appealing. The way a store is presented should follow and reflect the principles underpin the store's image. A visual merchandiser sets the store and its merchandise in such a manner as to reflect the store's image. Visual Merchandising is the way in which to display 'goods for sale' in the most attractive manner, with the end purpose of making sale. If does not sell it is not visual merchandising.

Retail is the process of selling consumer goods and/or services to customers through multiple channels of distribution to earn a profit. The best way to know what the customer wants when he/she walks into the customer is to tend to their needs so that they could be fully satiated with their arrival in the retail store. Identifying what the customer wants when he/she lands into the retail store can be analyzed through a suggestions box or might as well be a questionnaire. The retail analyst collect the buyer-specific information which is critical to the business process of the retail outlet. The result which comes out of the questionnaire analysis determines the inclination of the customer towards the store and what all changes the retail store manager must persuade the supervisor to perform in order to meet the expectation of the customer to provide them sheer satisfaction.

Cluster Analysis on Retail Stores would suggest a definitive outcome to tend to the varied needs of individual customers falling into different clusters based upon their attributes of liking/disliking. Cluster Analysis is a multivariate process best suited to segmentation applications in marketing research activities. Cluster, by definition is a group of similar objects. Segmentation involves identifying clusters/groups of target customers who are similar in buying habits, demographic characteristics or psychological behavior. Moreover, it is necessary that a cluster should be only of customers or potential customers. For example, there could be clusters of brands, which are similar to each other and different from other clusters as well. Data Mining is the non-trivial process of identifying valid, novel, potentially useful, and ultimately understandable patterns in data. Cluster Analysis enable retailers to obtain information from data acquired through the questionnaire. The various clustering techniques available are as follows:

Hierarchical Clustering or Linkage Methods.
Non-Hierarchical Clustering or Nodal Networks (K-means).
The information is obtained by identifying a common feature or a property, which may be responsible for establishing a connection/relation between two objects. A distance measure has to be calculated for distance between two objects being clustered. A choice of distance also called similarity or proximity or dissimilarity measures can be determined to cluster the objects. One of the most common distance measures used while clustering is Squared Euclidean Distance.

Need and Importance of Study
Cluster Analysis helps retailers in effective and efficient management of their retail outlets to achieve their goal of driving sales. The rapid increase of population in India has opened up new retailing avenues for retailers.

The retail outlets or malls have become an attractive shopping experience for the common man. But the need is to enable them to effectively and efficiently manage their customer preferences or choices in order to keep maximum sales with minimum inventory. Hence this study on Visual Merchandising is to examine the role, process and merits of effective Retail management and retailing decisions. Visual Merchandising is a tool to achieve sales and targets to enhance merchandise on the floor, and a mechanism to communicate to a customer to and influence the decision to buy. The biggest challenges faced by retail stores is the rising cost of materials, staffing of attractive talent, developing meaningful content for the digital medium and properly trained personnel to leverage visual merchandising.

Scope of Study
This study covers Cluster Analysis on the group respondents who have answered the questionnaire. The study covers classifying the customers through questionnaire answers. Although there are a lot of features which are to be considered while clustering the customers based on their buying behavior. Correlations between different buying behaviors with taste in different features of the retail store help to find out at what cluster prefers what features of the retail store. Different visual merchandising features should be extrapolated from the retail outlets that help retailers drive their sales. Also, the study includes Agglomeration schedule, Initial Cluster Centres, Case Listing of Cluster Membership, and Vertical Icicle Plot using average linkage (between groups) and leading to final cluster centres. This helps in allocating the different respondents into various clusters.

Objectives
- To study the shoppers perception in terms of visual merchandising at a Retail Outlet in the city of Hyderabad.

- To study the impact of visual merchandising on the sales potential.

- To find whether visual merchandising helps in improving the overall image of the retail store in the minds of the customer.

- To study the behavior of buyers and product selection while shopping at a Retail Outlet.

Research Methodology
This study is conducted on a sample size of 100 at a Retail Outlet in the city of Hyderabad during a 60 day period. The information is gathered from interacting with customers visiting the store who come to shop.

Table 1.1 Research Methodology

Sample Size	100	
Technique of Sampling	Stratified Random Sampling	
Sampling Units	Divided into units of –	
	Age (in years)	Units
	Less than 12	6
	12-18	13
	19-29	31
	30-39	32
	40-50	13
	>50	5
Data Collection	Primary - Questionnaire Containing Dichotomous and Open-Ended Questions	
	Secondary – Interviewing retail store managers & viewing company records	
Data Analysis	Hierarchical Cluster Analysis	
Schematic Presentation	Bar Graphs & Pie Charts	

Limitations of Study
The study has limitations because for any market study to give accurate results there are many hurdles in data collection and computation of data. Some limitations of the study are listed below:

The sampling frame to conduct the study has been restricted to Retail Outlets in the city of Hyderabad.

Respondents hesitate towards providing correct information.

Findings of the study are based on the assumptions that respondents have disclosed in the questionnaire.

Detailed study of the topic was not possible due to limited size of the project.

The sample was limited to customers who shop at Retail Outlets.

Besides the questionnaire, Information was gathered from different research journals, magazines, books, newspaper and through internet as well.

Sample size : 100 respondents

Analysis & Interpretation
Cluster analysis is a very useful method of reducing data complexity and grouping the customers with similar tastes into one cluster. Brands/objects have large number of different features that define them. Each feature may or may not be correlated to each other. Also, certain features may exist in combinations or underlying dimensions and some may be unique. These combinations or underlying dimensions help in identifying the clusters.

Cluster Analysis helps the researcher to determine the important features that affect the consumer buying behavior. Also, it reduces the complexity of the attributes by correlating or grouping them into clusters. The distinguishing attributes identified are grouped under the cluster and the dendrogram map is drawn. A cluster center is selected and all objects within a pre-specified threshold value from the center are grouped together. Then a new cluster center or seed is selected, and the process is repeated for the unclustered points. There are two methods one

is called Parallel Threshold Method and the other is Optimizing Threshold Method.

In marketing, we need to know the exact reasons why a consumer buys the product. The consumers' purchasing criteria varies in number from 1 to 5. We need to understand the underlying significant drivers of buying behavior for a particular product. Cluster Analysis reduces the complexity of the features into relevant clusters. Clusters are thus created to provide insight into relevant psychographics of target customer.

3.1 Data Interpretation
Cluster Analysis in SPSS
The basic problem is identified and the attributes that define the problem are obtained through Questionnaire and Focus Group Discussions. The identified variables are then converted into questionnaire using questionnaire design techniques. The questionnaire was in the form of statements and the respondents are asked to rate them in a Likert scale ranging from 1 to 5 where 1-Strongly Disagree and 5-Strongly Agree.

The responses are loaded into SPSS and the variables that significantly affect the behavior are recorded.

Hierarchical Cluster Analysis SPSS Interpretation
The output is derived by Hierarchical Cluster Analysis to find the number of clusters that exists in the data. The purpose of tables 2.1, 2.2, the agglomeration schedule helps us to identify the large differences in the coefficient that is the 4th column. We should look at the figures from last row to the first row. To identify the clusters the lowest possible of clusters for ease of interpretation. A large difference in the coefficient values (**Cluster 1** 79.408-63.742 = 15.666 is the highest, **Cluster 2** 63.742–61.185 = 2.557 &**Cluster 3** 61.185-57.667 = 3.518) between any two rows indicates a solution pertaining to the number of clusters which the lower row represents.

When we look at the dendrogram for information as to which cases link up in what sequence to form clusters. The numbers in column 2 and 3 of the agglomeration schedule also gives the same information. The dendrogram additionally provides a rescaled distance measure between various cluster combines at various stages. The case membership of each cluster is also much clearer in the dendrogram.

Table 2.1 Case Processing Summary[a,b]

Cases					
Valid		Missing		Total	
N	Percent	N	Percent	N	Percent
100	100.0	0	.0	100	100.0
a. Squared Euclidean Distance used					
b. Average Linkage (Between Groups)					

Table 2.2 Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	41	43	13.000	0	0	28
2	98	100	16.000	0	0	15
3	67	79	16.000	0	0	26
4	75	77	17.000	0	0	22
5	23	39	17.000	0	0	28
6	66	70	18.000	0	0	35
7	15	60	18.000	0	0	38
8	40	42	18.000	0	0	35

Stage	Cluster Combined Cluster 1	Cluster 2	Coefficients	Stage Cluster First Appears Cluster 1	Cluster 2	Next Stage
9	32	96	19.000	0	0	23
10	88	90	19.000	0	0	63
11	65	69	19.000	0	0	43
12	36	81	20.000	0	0	18
13	17	63	20.000	0	0	57
14	29	30	20.000	0	0	73
15	64	98	21.000	0	2	24
16	91	97	21.000	0	0	38
17	55	74	21.000	0	0	49
18	36	51	22.000	12	0	30
19	48	94	23.000	0	0	39
20	26	72	23.000	0	0	34
21	34	47	23.000	0	0	65
22	73	75	23.500	0	4	34
23	32	33	23.500	9	0	41
24	64	78	23.667	15	0	39
25	54	93	24.000	0	0	49
26	67	86	24.000	3	0	51
27	24	57	24.000	0	0	62
28	23	41	24.000	5	1	44
29	20	37	24.000	0	0	60
30	36	49	24.667	18	0	45
31	18	92	25.000	0	0	48
32	31	84	25.000	0	0	55
33	16	38	25.000	0	0	59
34	26	73	25.833	20	22	67
35	40	66	26.000	8	6	54
36	58	59	26.000	0	0	56
37	7	56	26.000	0	0	80
38	15	91	26.500	7	16	45
39	48	64	26.500	19	24	48
40	50	53	27.000	0	0	70
41	4	32	27.000	0	23	78
42	22	25	27.000	0	0	50
43	52	65	27.500	0	11	51
44	23	62	27.500	28	0	54
45	15	36	27.750	38	30	58
46	95	99	28.000	0	0	52
47	21	71	28.000	0	0	77
48	18	48	29.167	31	39	63
49	54	55	29.500	25	17	64
50	22	28	29.500	42	0	60
51	52	67	29.556	43	26	61
52	3	95	30.000	0	46	81
53	1	44	30.000	0	0	62
54	23	40	30.100	44	35	61
55	31	85	30.500	32	0	87
56	58	61	31.000	36	0	69
57	17	35	31.000	13	0	72

Stage	Cluster Combined Cluster 1	Cluster 2	Coefficients	Stage Cluster First Appears Cluster 1	Cluster 2	Next Stage
58	15	76	31.375	45	0	64
59	16	19	31.500	33	0	72
60	20	22	32.333	29	50	69
61	23	52	32.704	54	51	66
62	1	24	33.000	53	27	78
63	18	88	34.125	48	10	67
64	15	54	34.306	58	49	66
65	34	46	34.500	21	0	75
66	15	23	34.969	64	61	70
67	18	26	35.520	63	34	74
68	82	87	36.000	0	0	84
69	20	58	36.333	60	56	77
70	15	50	36.679	66	40	75
71	6	45	37.000	0	0	80
72	16	17	37.222	59	57	86
73	5	29	38.000	0	14	85
74	18	68	38.400	67	0	76
75	15	34	38.778	70	65	76
76	15	18	39.686	75	74	81
77	20	21	40.250	69	47	83
78	1	4	40.625	62	41	82
79	8	83	41.000	0	0	94
80	6	7	41.000	71	37	89
81	3	15	41.048	52	76	82
82	1	3	41.380	78	81	83
83	1	20	43.730	82	77	86
84	82	89	44.000	68	0	94
85	5	14	44.000	73	0	87
86	1	16	45.048	83	72	89
87	5	31	46.667	85	55	91
88	9	11	47.000	0	0	96
89	1	6	47.349	86	80	90
90	1	27	47.750	89	0	91
91	1	5	48.818	90	87	92
92	1	10	52.977	91	0	93
93	1	80	56.067	92	0	96
94	8	82	56.500	79	84	98
95	12	13	57.000	0	0	99
96	1	9	57.667	93	88	97
97	1	2	61.185	96	0	98
98	1	8	63.742	97	94	99
99	1	12	79.408	98	95	0

Number of clusters

Case

Dendrogram using Average Linkage (Between Groups)

Rescaled Distance Cluster Combine
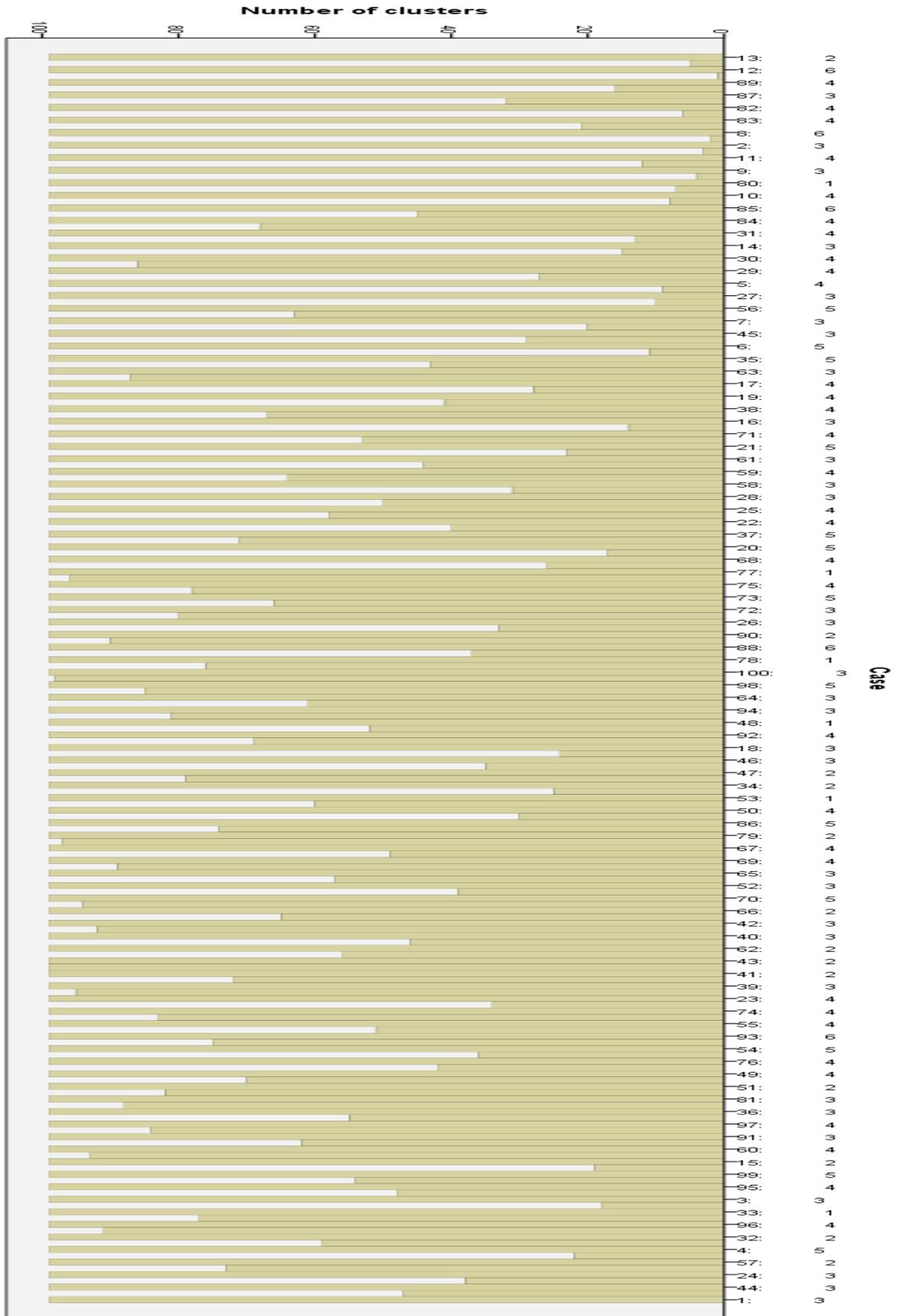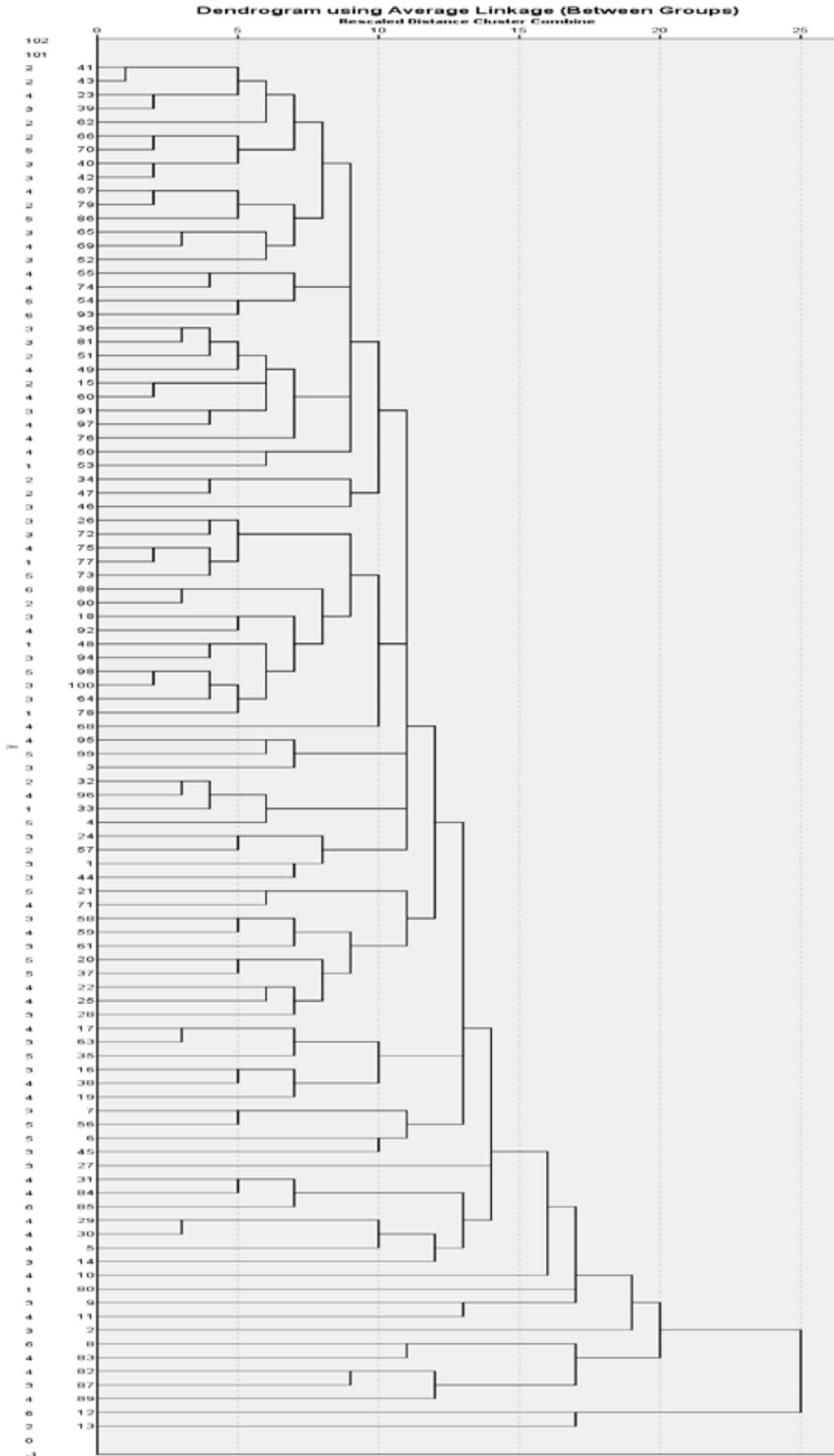
3.1.2 K-means Cluster Analysis SPSS Interpretation

K-means cluster analysis generally gives more stable clusters, since it is an interactive procedure compared with the single pass hierarchical methods. This method needs a pre-specified number of starting points, to get an initial position. Therefore it is best used in combination with Hierarchical method.

The given tables 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 indicate the outputs of k-mean clustering for a 3 - cluster solution. These outputs give us initial cluster centres, case listing of cluster membership (i.e., which case belongs to which cluster), final cluster centres (the solution), and the ANOVA table.

The final cluster centres describe the mean value of each feature for each of the 3 clusters. For example, cluster 1 is described by the mean values of features Interior = 4, Store Name = 4, Display = 4, Mannequin = 4, Music = 4. Similarly, cluster 2 is described by feature Design = 4, Display Windows = 4, Aroma = 4, Styling = 4, and so on. Finally, cluster 3 is described by feature Styling = 5.

Now we can interpret that the clusters in terms of the 20 features in the questionnaire. For example, cluster 1 consists of customers who give more importance to interior design and store name (which is equivalent to agree on a scale of 1 to 5). There are customers who don't give importance to Music being played at the store.

On these features cluster 2 shows customers who don't give importance to refreshment area in the store (i.e., mean value of refreshment area = 2) and customers give importance to the brand image of the store.

A brief description on these features cluster 3 shows customers who don't give importance to refreshment area, trial rooms in the store (i.e., mean value of refreshment area = 2) and customers give importance to styling the branded products at store.

Cluster 1

Interior design is excellent

Store Name is captivating

Display Products are eye catching

Mannequin display is fantastic

Prefer playing music suits the mood

Cluster 2

Design

Interior design is excellent

Store Name is captivating

Display Windows are creative

Pleasant smell and aroma

Theme is enticing

Signs are informational

Ambience is comfy

Mannequin display is fantastic.

Colors are appealing

Proper Lightning is necessary

Prefer playing music suits the mood

Prefer to buy products from the Endcaps

Fun & Enjoyment while shopping at More

Cluster 3
Styling gives better selection

Table 3.1 Initial Cluster Centers

	Cluster		
	1	2	3
Place	3	1	2
Frequency	2	4	1
Products	2	1	1
Spending	2	1	1
Why purchase	1	4	2
Source	1	4	3
Offers	4	1	1
Communication	4	4	1
Spacious	3	3	2
CRM	1	3	2
Thought	2	1	1
Visual Merchandising	4	3	1
Design	3	3	2
Interior	2	4	4
Name	5	4	3
Window	2	4	2
Aroma	4	3	1
Styling	2	4	5
Theme	2	5	2
Signs	2	4	3
Ambience	4	5	1
Display	4	5	3
Mannequin	3	4	2
Props/Fixtures	3	3	4
Colors	3	3	4
Lightning	4	5	5
Music	3	5	3
Banners	2	5	4
Endcaps	4	4	2
Enjoy	3	5	2
Refreshment Area	1	3	2
Trial Room	2	1	2
Creative	3	3	2

Table 3.2 Iteration History[a]

Iteration	Change in Cluster Centers		
	1	2	3
1	5.393	5.494	4.600
2	.367	.416	.000
3	.237	.238	.000
4	.144	.147	.000
5	.093	.091	.000
6	.000	.000	.000

a. Convergence achieved due to no or small change in clus-

ter centers. The maximum absolute coordinate change for any center is .000. The current iteration is 6. The minimum distance between initial centers is 9.592.

Table 3.3 Cluster Membership

Case Number	Age	Cluster	Distance
1	3	2	4.234
2	3	2	5.850
3	3	2	4.611
4	5	2	5.128
5	4	1	4.742
6	5	2	5.482
7	3	2	5.132
8	6	1	5.893
9	3	1	5.506
10	4	2	5.292
11	4	2	6.272
12	6	3	4.600
13	2	3	6.177
14	3	1	5.241
15	2	1	4.335
16	3	2	5.401
17	4	2	4.478
18	3	2	4.403
19	4	2	5.108
20	5	2	4.278
21	5	2	4.988
22	4	1	4.733
23	4	1	3.784
24	3	2	4.861
25	4	1	4.916
26	3	1	4.427
27	3	1	5.118
28	3	1	4.601
29	4	1	5.371
30	4	1	4.357
31	4	1	4.578
32	2	2	4.258
33	1	2	4.853
34	2	2	4.331
35	5	1	4.482
36	3	2	3.235
37	5	2	4.900
38	4	1	4.042
39	3	2	3.793
40	3	2	3.501
41	2	2	4.032
42	3	2	3.776
43	2	2	4.099
44	3	2	4.283
45	3	2	4.633
46	3	2	4.579
47	2	2	5.005
48	1	2	4.422
49	4	1	4.422
50	4	2	4.678
51	2	2	3.847
52	3	2	4.360
53	1	2	4.700
54	5	3	4.400

Case Number	Age	Cluster	Distance
55	4	2	4.445
56	5	2	4.229
57	2	1	4.432
58	3	1	4.853
59	4	1	4.724
60	4	1	4.280
61	3	2	5.253
62	2	2	4.302
63	3	2	4.482
64	3	2	4.204
65	3	2	3.495
66	2	2	4.164
67	4	1	4.000
68	4	1	4.968
69	4	1	4.149
70	5	2	3.554
71	4	1	4.310
72	3	2	4.189
73	5	1	5.231
74	4	1	3.909
75	4	1	4.873
76	4	1	4.809
77	1	1	4.335
78	1	1	4.408
79	2	1	3.702
80	1	3	5.095
81	3	1	3.795
82	4	1	5.367
83	4	1	5.707
84	4	1	4.686
85	6	1	5.754
86	5	1	4.327
87	3	1	5.776
88	6	1	4.711
89	4	1	6.405
90	2	1	3.989
91	3	2	4.384
92	4	2	4.011
93	6	3	4.069
94	3	1	4.283
95	4	1	4.718
96	4	2	3.459
97	4	1	3.928
98	5	1	3.226
99	5	2	4.478
100	3	1	2.702

Table 3.4 Final Cluster Centers

	Cluster		
	1	2	3
Place	3	3	3
Frequency	3	3	2
Products	2	2	1
Spending	3	2	3
Why purchase	2	2	2
Source	3	3	3
Offers	3	2	2

	Cluster		
	1	2	3
Communication	3	3	2
Spacious	3	3	3
CRM	2	2	2
Thought	1	2	1
Visual Merchandising	3	2	1
Design	3	4	3
Interior	4	4	3
Name	4	4	3
Window	3	4	2
Aroma	3	4	3
Styling	3	4	5
Theme	3	4	3
Signs	3	4	3
Ambience	3	4	3
Display	4	3	3
Mannequin	4	4	3
Props/Fixtures	3	3	3
Colors	3	4	4
Lightning	3	4	4
Music	4	4	3
Banners	3	3	3
Endcaps	3	4	3
Enjoy	3	4	3
Refreshment Area	1	2	2
Trial Room	3	3	2
Creative	3	3	2

Table 3.5 Distances between Final Cluster Centers

Cluster	1	2	3
1		2.354	3.667
2	2.354		4.174
3	3.667	4.174	

Table 3.6 ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Place	.084	2	.634	97	.132	.876
Frequency	2.274	2	.668	97	3.403	.037
Products	4.308	2	.751	97	5.738	.004
Spending	3.496	2	.740	97	4.726	.011
Why purchase	4.128	2	.601	97	6.867	.002
Source	8.837	2	1.044	97	8.467	.000
Offers	.218	2	1.057	97	.206	.814

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Communication	4.106	2	.608	97	6.756	.002
Spacious	1.071	2	.347	97	3.089	.050
CRM	.511	2	.378	97	1.351	.264
Thought	.765	2	.235	97	3.250	.043
Visual Merchandising	4.197	2	1.148	97	3.655	.029
Design	7.328	2	.791	97	9.264	.000
Interior	.209	2	.855	97	.245	.783
Name	.742	2	.538	97	1.379	.257
Window	6.777	2	.793	97	8.542	.000
Aroma	2.966	2	.658	97	4.506	.013
Styling	6.315	2	.772	97	8.175	.001
Theme	11.048	2	.628	97	17.599	.000
Signs	2.197	2	.686	97	3.203	.045
Ambience	1.072	2	.540	97	1.986	.143
Display	.254	2	.520	97	.489	.615
Mannequin	2.813	2	.812	97	3.466	.035
Props/Fixtures	.146	2	.487	97	.299	.742
Colors	1.354	2	.512	97	2.644	.076
Lightning	.397	2	.786	97	.505	.605
Music	.357	2	.784	97	.456	.635
Banners	.038	2	.702	97	.055	.947
Endcaps	2.720	2	.536	97	5.078	.008
Enjoy	1.829	2	.574	97	3.187	.046
Refreshment Area	10.836	2	.765	97	14.171	.000
Trial Room	1.264	2	.458	97	2.758	.068
Creative	4.559	2	.559	97	8.160	.001

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Table 3.7 Number of Cases in each Cluster

Cluster	1	47.000
	2	48.000
	3	5.000
Valid		100.000
Missing		.000

FINDINGS & SUGESSTIONS

Findings
The clusters are formed due to the preferences of the customers that prefer similar kind of features while visiting the retail store.

Cluster 1 – This group gives lot of importance to Design, Layout and the name of the store.

Cluster 2 – This group gives lot of importance to Design, Lay-out, Window Displays, Mannequin, Music played and color/texture of products at the store.

Cluster 3 – This group gives lot of importance to styling the products at the store.

In summary, cluster analysis of this sample of respondents tells us about the possible segments, which exists in the target customers.
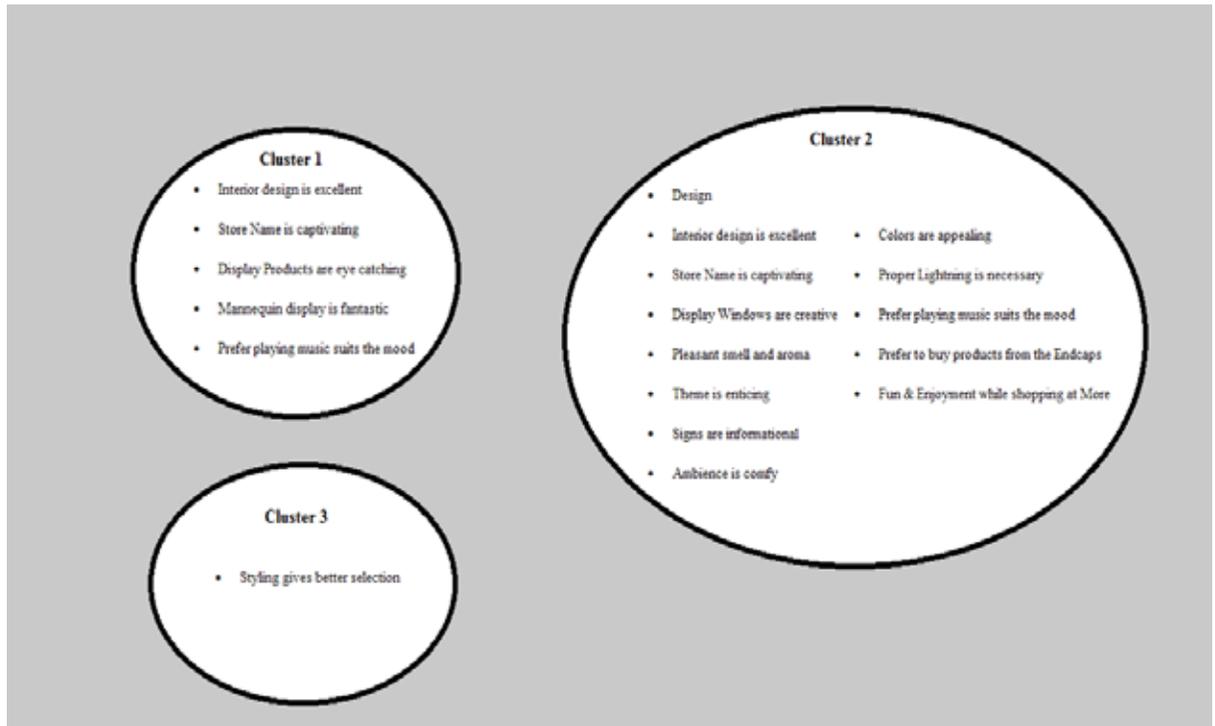
About 32% of the respondents belong to the age group of 30-39 yrs, 31% falls in the age group of 19-29yrs, 13% fall in the group of 40-50yrs, 19% falls in the age group of less than 18yrs and 5% of the respondents belong to the age group of more than 50yrs.

About 34% of the respondents are graduates, 29% are post-graduates, 19% are high school students and 18% are still in their schooling.

About 56% of the respondents are males and the other 44% are females. This shows the number of footfalls at retail outletshas majority of male shoppers who findvisiting a retail outletto do shopping.

About 20 percent of the sample respondents are students, 23 percent of respondents belong to household class, 21 percent of respondents are engineers, 22 percent of respondents are medical professionals and last but not the least 14 percent belong to different business sectors.

20 percent of the sample respondents income is less than 10000 per month, where as 28 percent of the respondents income is in the range of 10000-20000 per month, 26 percent of the respondents come from middle class background whose income is between 20000-50000 and 26percent of the respondents area above the middle class range.

Majority of the (55 percent) sample respondentsfeel comfortablewhen they do shopping at a retail outlet. 24 percent prefer malls as their place of shopping. About 13 percent consider online shopping to be their preference. Remaining 8 percent attend trade events such as exhibitions to perform multi-cultural shopping.

Suggestions
The best way to analyze and interpret data is through the K-means Clustering Classification. K-means is a quick cluster analysis when compared with the Hierarchical Clustering. The Visual Merchandising features can be easily grouped into clusters using K-means clustering algorithm based on the responses of the customers gathered in the questionnaire.

The Final Cluster Centre Table helps in grouping the features which are most suitable by customers while shopping at the retail outlet. The maximum mean value observed for a particular feature in an individual cluster describes the affinity or propensity of the customer towards that unique feature of the visual merchandising at the retail store. As the questionnaire is based on Likert's Scale, 1 - Strongly Disagree, 2 - Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree to the particular feature of Visual Merchandising at the retail outlet. Since the customer who chooses the feature Styling helps in better product selection the mean value would be 5 and the individual cluster is **Cluster 3**.

Similarly, **Cluster 1** customer's best prefer these feature which are Interior design is excellent, Store Name is captivating, Display Products are eye catching, Mannequin display is fantastic, and Prefer playing music suits the mood. **Cluster 2,** Pleasant smell and aroma, Theme is enticing, Signs are informational, Colors are appealing, Proper Lightning is necessary, and Prefer playing music suits the mood. Thus, this study suggest that knowing visual merchandising and its impact on consumer buy-

ing decisions can be well analyzed through K-Means Clustering, because K-means clustering gives more accurate and stable clusters, since it has an iterative approach with single pass hierarchical methods.

CONCLUSION

The study of visual merchandising and its impact on consumer buying behavior predicts that the retail store managers need to focus more, on the driving features of sales. These features help the customer as well as the retail store in meeting their needs. The customer will return happy after he/she gets the desired products from the retail store and on the other hand the retail store managers will be increasing their store revenues through driving sales. To magnify the in-store experience, retailers will try to reinvent the living experience of customers and retailing will host every consumable deemed necessary to the customer, for the customer and by the customer.

Further down the road, the real retailers will be those who transform themselves to the growing engagements of the customer, in order to provide the best customer experience. The retail industry should be prepared to adaptto these elevated perspectives on value when entertaining the customer.The best of the best retailer,will however make it a point to entertain and engage their customers to live a whole new experience of retailment.

The face of retail is constantly changing, and over the upcoming decades retailers will continue to entertain customers with the latest product innovations and in-store experiences. However, the main focus of the retailers will still be all about the customer.

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