

Categorizing Consumers' Buying Behavior: A Factor Analysis in Consumer Durable Market

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Abstract

Consumers' buying behavior is divergent and situational. For durable products, such behavior got different dimensions again. To make the study simple and informative, color television is used to represent the consumer durable markets. Television, as a product, is getting the status of essential commodity all over the world. The potential of TV market is indeed quite enormous. The Indian consumers were indifferent in choosing the brand since a lot of close substitutes were available in the market. However, they have changed ever since the India liberalized its economy. Choosing the right brand of television is difficult enough when there were half a dozen brands and all of these claimed to give excellent picture quality. Marketing managers are interested not only in the product but also the behavior of the consumers because it gives them the right orientations for product development and positioning. The level of consumer's satisfaction provides the scope for repeated purchases and brand loyalty that lead to optimum profitability. This research finds that consumers' perception on buying color television is mostly affected by the factors, such as, structural add-ons, words of mouth, technical features, durability, ground reality etc.

Keywords: Buying behavior, Factor analysis, Consumer durable market

1. Introduction

In today's competitive scenario, business organizations in India are most worried about the future uncertainty. An increasing number of market planners are finding that growing complexity and uncertainty of the environment are difficult to cope up. Behavioral dimension added new complexity to marketing people. Still, there is no other alternative but to face this situation. Organizations are continuously facing new equations in their operating environment in every direction (Bettis & Hitt, 1995). Complex competitive status, vulnerable demand forecast, varying consumer preference, existence of too many brands, changing attitude of channel intermediaries, shortening of the product lifecycle, (Hammer, 1997) are making marketing decisions extremely difficult and risky. And here comes the role of multidimensional analysis of a particular field.

In television market, situation is no way better. Television, as a product, is getting the status of essential commodity inviting complications and uncertainties. TV market has also one unique problem. It is on a developing phase. A shift from rural to urban sector is continuously going on. Residential areas in metros, mini metros, cities, towns and

small towns are growing at faster rate. Industrialization, infrastructure development, and extension of areas under amusement and entertainment are creating huge scope for further market growth. Social developments of community and upcoming upper middle class with increasing purchasing power have marked this field as an area of additional complications and uncertainties. As a result, the TV market has been an ideal selection for strategic analysis. In view of the growing importance and market (Porter, 1980) it is proposed to carry out a study covering factors affecting the consumer buying behavior for television. In order to motivate our esteemed readers we have discussed different aspects of TV industry. A total of fifteen aspects have been identified and reduced to six through the use of factor analysis. These six factors influence the buying behavior of customers in CTV market. The method as used here can be easily replicated for other products in consumer durable market.

2. Consumer Durables Market in India with special reference to TV

Although the consumer durables sector does not count among the core sectors of the economy, it is immensely significant being a near precise indicator of the nation's economic well-being, especially as a pointer to the distribution of prosperity among different income segments. Excluding computers and communications products, the annual market share for consumer durables in India is currently valued at Rs.25, 000 crore. This is relatively small compared to total market for goods and groceries, which is estimated to be at Rs. 8,00,000 crores per year.

During the recent times, market growth in consumer durables has primarily in terms of quantity, but not in terms of value. The Table 1 indicates that during 2004-05, the sale of consumer durables increased by 9.9% in quantitative terms over its previous year. However, growth rate in terms of value is in between 1-2% only. This is primarily due to fall in prices as a result of increased competition. The table further states that the growth in numbers varies widely across product categories. For example, the annual increase in the sales of CTVs is 12.1%, and that of black and white TV suffers de-growth of 16.7% reducing the overall growth rate to 4.4% only. This growth rate is much below the average growth rate of consumer durables, which stands at 9.9% for 2004-05. The low growth rate of TV suggests that its demand has already reached at saturation point. In addition high manufacturing costs and taxes coupled with comparatively lower purchasing power, limit the growth rate of sales of TV sets.

(Insert Table 1 Here)

In spite of low growth rate, the penetration level of television sets in India is low as compared to the rest of the world. If we go by statistics, it is only 24% in India as compared to 98% in China, 235% in France, 250% in Japan and 333% in the US. This suggests that the potential of TV market for further growth is indeed quite enormous.

3. Leading Players in Indian Color Television Market

The Color TV market in India has seen a gamut of changes in the past one decade as liberalization set in the Indian subcontinent making its market highly competitive and consumer driven. Once badly fragmented, it is now witnessing a phase of market consolidation. Over the last 2 years, the top four players (LG, Samsung, Videocon group and Onida) have consolidated their position. Today, they account for 69 percent of the market (Table – 2), up from 43 percent a couple of years ago. Experts feel that the top four could well account for 85 percent of the industry in 3 – 4 years. Two or three factors have caused this change. BPL, once a leader with over 20 percent market share, has dropped to 5.2 percent. Second, multinational brands like Sony, Panasonic, Thomson, Grundig and Sharp have almost lost their ground. Third, regional brands like Oscar, Texla, Weston, and Beltek have lost market share. "They have been unable to keep pace with changes in technology," says Ravinder Zutshi, (Director of sales, Samsung). While the market is shifting to flats and plasma, they are still selling conventional TVs.

The Indian Color Television market is quite small (less than 6mn units) in size, as compared to other countries such as China (30mn units) and the US market (22mn units). Although the Color Television population is of 30mn sets in the country, it is still smaller than the Black and White television population of 59mn. However, this situation is fast changing with demand for Color Televisions registering double digit growth, while B&W TV sales are witnessing a de-growth.

(Insert Table 2 Here)

Further, out of 192 million urban and rural households those who have access to television, only 42% of them own a TV set. Furthermore, the positive sign is that the rural market is growing at much faster rate than its urban counterpart. All these indicate a huge potential market for color TVs in India. Under these circumstances, we feel our attempt to analyze the factors that influence the buying decision of the consumer in choosing the color TV set is fairly logical.

4. Selection of Brands

In general, the Indian consumers were indifferent in choosing the brand, since a lot of close substitutes were available in the market. Due to technological and knowledge up-gradation, today's customers prefer to opt for

branded product. This is because of an urge for getting proper value against payments made (Sheth, Newman and Gross, 1991). In the Indian color TV market LG, Samsung, Videocon Sansui, Akai, Toshiba, Sony, Panasonic, Thomson, Onida, BPL, Grundig, Sharp, Oscar, Texla, Weston, and Beltek are the leading players. All these brands as we know have one thing in common that they are established in the TV market very seriously. Each manufacturer has spent fortunes ensuring their brand is recognized worldwide as an exemplary product. If any one of these manufacturers had produced TV sets that were clearly inferior, it would be the death of a brand they have worked hard to establish. According to Upshaw (1995), building a brand identity is the foremost task of a seller to reduce the searching cost of the potential customers. The consumer's product preference is influenced by the brand services that go with it. It is difficult to imagine that in a normal situation, a consumer will make a purchase without paying enough attention to his needs and desires. But when several brands of a particular product, which are similar in quality of performance and external appearance, are available to the consumers; the quality, style or pattern of the article, availability of discount and durability, previous advertising information and retailers' recommendations create a preference in the minds of consumers. This is the reason that prompted us to make a study on branded CTVs only.

5. Types of TVs

CTVs are mainly two types, namely Flat-panel TVs and Front Projection TVs. On the basis of display mode, they are classified into LCD, Plasma, DLP, and SXRD or LCoS. The 14", 20" and 21" televisions are the most widely used which accounts for about 90% of the market in India. Flat screen television is the fastest growing segment. Keeping this in view we have restricted our study to these Flat-panel TVs only as Front-projection TVs are not televisions in the most obvious sense. The vital features that are considered by a consumer before buying a Flat-panel TV set includes: sound quality, DVD connection, remote control facility, discount availability, durability, built in stabilizer, foreign collaboration, proximity of dealers, price, picture quality etc. When more than a dozen brands are aggressively pushing for a larger chunk of the market claiming that they go well beyond picture quality and sound clarity; going for the right model is all the more tough.

Keeping this in view, the most important objective of this paper is to identify the consumer preferences and priorities for buying a CTV by analyzing the responses of the owners of CTV sets.

6. Factors Affecting the Choice of a right TV

Choosing the right CTV is difficult enough when there are half a dozen brands and all of these claims to give excellent picture quality. Nowadays the problem is to choose the kind of TV we want to watch it with. There is just a huge variety available in the market today—not just brands, but also product categories. Choosing the right CTV involves many different factors. These include, of course, the budget, picture quality, sound quality, remote control, facility for DVD connection etc. Here are some things to consider as we make our choice.

6.1 Price: The choice of TV mostly depends on the price of the TV. The more we pay; the better would be the facilities in the TV.

6.2 Picture Quality: To have a good view from any angle, the picture quality of the TV also matters. Direct-View televisions have amazing picture quality, while still being less expensive than flat panel types.

6.3 Sound Quality: While watching television we often forget about the quality of the sound, because we are concentrating on visual experience. With more and more consumers integrating televisions into their stereo and home theater systems, the ability for a TV to provide more in the audio area is becoming more important.

6.4 Remote Control Facility: When shopping for a television, we have to make sure that the remote control is easy to use. If we need to control several items with the same remote, it is compatible with at least some of the other components we have at home. Most TVs come with remotes that may be partial function or full function types. Partial function types are equipped with only simple features such as; channel up/down, volume up/down, auto search, auto tuning, sound mute, etc. Full function remotes, in addition to providing essential functions provide advanced functions such as, picture quality control, component control etc – not just the TV.

6.5 Add on Facilities: The TV, nowadays, is getting more attractive by some add-ons such as DVD players. The price of DVD players has dropped dramatically in the last couple of years. These entry-level players rival some of the best DVD players from only a few years ago in terms of both picture and sound quality.

6.6 Emotional Consideration: Often we are influenced by emotional considerations such as friends and neighbors. At the same time we cannot ignore the importance of the recognised dealers in this regard.

There are several units in the market that can be analyzed. Our main thrust in this study is the consumer and their perception towards choosing Television. Keeping all these aspects in view, we have analyzed the attitude of the

consumers on the basis of the attributes, preferable brand, sound quality, durability, recommendations, price, advertisement etc.

7. Methodology

Keeping objectives of the research in mind, 80 consumers were selected at random by using simple random sampling technique from the Balasore town of Orissa called as Sand City of India. In order to measure the perception of the consumers about the criteria of choosing a CTV and its underlying factors, a questionnaire on different items related to the attributes of preferring a CTV was constructed on 5-point Likert scale for all fifteen attributes (Table - 3). The statements were measured on the 5-point Likert scale where 5, indicates strongly disagree and 1 indicates, strongly agree. The maximum focus was given on quality, durability, advertisement, recommendations of friends and dealers. The questionnaire was pre-tested on a set of 10 respondents to assess its validity and reliability. The sampling size includes both male and female users from different occupation, age, and income groups. The data collected in the month of March 2007 was classified, tabulated and processed mainly to identify the group of determinants. However, the study has few limitations and that needs to be taken care of. As we have taken relatively smaller sample size of 80 and the respondents have been selected from Balasore town only, there is a risk of generalizing the results so obtained. However, it is seen that consumer behavior does not differ much with respect to the area on such topic under consideration.

8. Tools and Techniques used

Factor analysis is a general name denoting a class of procedures used for data-reduction and summarizing. It is a multivariate technique and is employed in our study for the purpose of analyzing the data. The Principal Component Method is considered appropriate, as the primary purpose is to determine the minimum number of factors that would account for the maximum variance in the data collected. The data is analyzed by using SPSS, version – 11. For this reason the results of the factor analysis using Principal Component Method are found out. Results of six factors being extracted from the data collected. Only factors with Eigenvalue(s) greater than 1 were retained and others were ignored. By comparing the Varimax Rotated Factor Matrix with Un-rotated Factor Matrix (entitled as component matrix), rotation has provided simplicity and has enhanced interpretability. From the rotated factor matrix in the Table-8, six factors have been extracted and listed in Table-10.

To supplement our analysis, *Scree Plot*, a graph of the eigenvalues against all the factors was constructed for determining the number of factors to be retained. The point of interest is where the curve starts to flatten (Figure 1).

9. Data Analysis

The factor analysis reveals that the consumers consider various aspects of Television which include Physical structure, Technical aspects, Quality, Price etc.

Communalities shows how much of the variance in the variables has been accounted for by the extracted factors. By analyzing communalities (Table-5), it is found that the factor loading for Discount Offer (X_{10}) is comparatively low to the tune of 53.6% of the total variance. However, the remaining fourteen services were explained reasonably well as evidenced by the high factor loadings of above 0.6. The services like Remote Control Facility (X_{14}) and the Recommendation of Dealers (X_{15}) have the factor loadings of 81% and 87.1% respectively.

Table-6 explains the extraction statistics and the number of factors to be extracted in the succeeding level. By using the cutoff initial Eigenvalue of 1.00, six factors have been identified. The factor loadings pattern and percentage of variance for each of the factors have been derived by using 'Orthogonal Varimax Rotation'. The first factor is accounted for 20.343% of the variance explained as compared to 15.6% in the rotated matrix.

To supplement the above, it can be seen from the *Scree plot* (Figure 1) that the curve begins to flatten between the factors 6 and 7. Moreover, Factor 7 has an eigenvalue of less than 1 (Table-6). Hence only six factors have been retained.

Table 7 and table 8 simplify the data by grouping those under six factors. The factor solution was derived from the 'Component Analysis' with 'Orthogonal Varimax Rotation' of the fifteen variables listed for the purpose of the study. The idea of rotation is to reduce the number of factors on which the variables under investigation have high loadings. Rotation does not actually change anything but makes the interpretation of the analysis easier. Looking at the table 8, it can be noticed that Factor 1 (F_1) has four significant loadings, while only one variable is included under F_3 and F_6 , two variables are included under F_4 and three variables are included under F_5 , F_2 . These factors can be used as variables for further analysis.

The six factors extracted are labeled as *Structural Add-Ons*, *Word of Mouth*, *Durability*, *Technical Features*, *Ground Reality*, and *Recommendation of Dealers* (Table-10). The factors extracted not only reveal the important dimensions associated with a television but also reveal the sequence of their importance for the consumers.

9.1 Key Findings of the Study

The first factor extracted indicates that the consumers prefer to buy a CTV with the satisfactory sound quality, facility for the remote control, good advertisement and the technology with DVD connection. As the mean score for the variable 'Sound quality' is low (Table-3), it is clear that the consumers give much emphasis on the sound quality followed by the variable 'Remote Control Facility'.

The second extracted factor indicates that, although the consumers' general tendency is to collect the information from the friends or neighbors about the product, but they prefer to buy a television with a good brand image, having the lowest mean score (Table-3) among the group of variables such as Brand image, External appearance and Discount offer. It is interesting to quote here that the consumers are not attracted much by the discount offered by the dealers of the television.

The third factor signifies only the durability with a lower degree of mean score indicating the significance of TV with higher durability. The fourth factor indicates the importance of Stabilizer and the foreign collaboration while using TV, emphasizing the built in stabilizer the most.

The fifth factor pays attention on proximity of the dealers, the price and the picture quality of the TV. Similarly the sixth factor indicates that the consumers' choice is based on the recommendation of a dealer but to a lesser extent having a high mean score.

10. Conclusion

Everyday, consumers and households make decisions about the goods and the services they purchase. The factors that influence this buying decision are commonly price, quality, advertisement, recommendation from near and dears etc. This research work finds that the consumers' perception on buying color television is mostly affected by the factors such as "structural add-ons, Word of mouth, Technical features, Durability and Ground reality."

The above results have far reaching implications for the Television marketers, dealers and advertising agencies as it gives insight into the minds of consumers and how they view their televisions. There are many dimensions associated with Television and their usage which need to be explored and understood. In view of this, a research study like this can serve as an ideal guideline and precedent for further research in any product in consumer durable markets. The factor analysis conducted in the study has important implications for further research which will be useful for marketing personnel to customize their products and services for the general people not only in Balasore, but also in the other parts of India.

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Table 1. Sale of Some Selected Consumer Durables in India (in Lakhs of units)

ITEMs	2003-04	2004-05	% Growth
Color Television (CTV)	82.5	92.5	12.1
B&W TV	30.0	25.0	-16.7
Televisions	112.5	117.5	4.4
VCD/DVD Players	72.0	8.4	16.7
Refrigerators	37.0	38.9	5.0
Air-conditioners	9.8	12.3	25.1
Washing Machines	13.6	16.0	18.1
Micro-Ovens	2.8	3.5	27.3
TOTAL	247.6	272.1	9.9
Source: FICCI 'consumer durable goods survey' October 2005			

Table 2. CTV Players' Market Share (%)

Brands	00-01	01-02	02-03	03-04
MIRC Group (Onida & Igo)	11.3	12.2	12.5	13.1
LG	6.4	5.6	14.9	19.0
Samsung	8.1	6.0	12.3	14.5
V'con Group (Sansui, Akai, Videocon & Toshiba)	20.5	19.4	19.4	22.1
TOTAL	46.3	43.2	59.1	68.7
BPL	18.4	16.5	10.8	5.2
Phillips	3.7	5.6	5.7	5.8
Panasonic	2.1	1.3	1.4	0.8
Sharp	3.7	2.1	2.1	2.0
Sony	3.1	1.8	2.8	2.9
Thomson	2.6	1.8	2.5	2.3
Others	20.1	27.7	15.6	12.3
TOTAL	53.7	56.8	40.9	31.3

Table 3. Descriptive Statistics

Attributes	Description	N	Mean
X₁	Picture quality	80	1.1500
X₂	Higher durability	80	1.6750
X₃	Sound quality	80	1.2500
X₄	Price	80	2.1750
X₅	Built in stabilizer	80	2.1500
X₆	Brand image	80	1.9750
X₇	Recommendation of friends and neighbors	80	3.1500
X₈	External appearances	80	2.5750
X₉	DVD connection	80	2.1000
X₁₀	Discount offer	80	2.4750
X₁₁	Proximity to a dealer	80	2.2750
X₁₂	Foreign collaboration	80	3.6750
X₁₃	Advertisement	80	2.3500
X₁₄	Remote control facility	80	1.6000
X₁₅	Recommendation of dealer	80	3.0250
Valid N (list wise)		80	

Table 4. Attributes Correlation Matrix

Correlation between	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀	X ₁₁	X ₁₂	X ₁₃	X ₁₄	X ₁₅
X ₁	1.000	.306	.243	.292	.145	-.117	.236	-.090	.025	-.047	-.214	-.063	-.064	-.051	.197
X ₂	.306	1.000	.271	.388	.026	.042	.249	.255	-.216	.222	.018	-.088	-.080	.160	.091
X ₃	.243	.271	1.000	.321	-.085	.117	.024	.495	.363	.148	.017	-.087	.507	.487	-.071
X ₄	.292	.388	.321	1.000	.390	-.235	.347	.014	-.088	.307	-.211	.202	.256	-.070	.048
X ₅	.145	.026	-.085	.390	1.000	-.064	.225	-.201	-.213	.061	-.132	.473	-.105	-.137	.386
X ₆	-.117	.042	.117	-.235	-.064	1.000	-.462	.126	.144	-.045	.059	-.143	.252	.424	-.089
X ₇	.236	.249	.024	.347	.225	-.462	1.000	-.189	-.011	.230	.080	.293	-.053	-.213	.261
X ₈	-.090	.255	.495	.014	-.201	.126	-.189	1.000	.233	.063	.330	-.151	.165	.527	-.021
X ₉	.025	-.216	.363	-.088	-.213	.144	-.011	.233	1.000	-.069	.231	-.124	.406	.341	-.002
X ₁₀	-.047	.222	.148	.307	.061	-.045	.230	.063	-.069	1.000	.018	.155	.006	.276	.342
X ₁₁	-.214	.018	.017	-.211	-.132	.059	.080	.330	.231	.018	1.000	-.054	.028	-.021	.049
X ₁₂	-.063	-.088	-.087	.202	.473	-.143	.293	-.151	-.124	.155	-.054	1.000	-.165	-.109	.046
X ₁₃	-.064	-.080	.507	.256	-.105	.252	-.053	.165	.406	.006	.028	-.165	1.000	.393	-.193
X ₁₄	-.051	.160	.487	-.070	-.137	.424	-.213	.527	.341	.276	-.021	-.109	.393	1.000	.190
X ₁₅	.197	.091	-.071	.048	.386	-.089	.261	-.021	-.002	.342	.049	.046	-.193	.190	1.000

Table 5. Communalities

Attributes	Description	Initial	Extraction
X ₁	Picture quality	1.000	.779
X ₂	Higher durability	1.000	.784
X ₃	Sound quality	1.000	.768
X ₄	Price	1.000	.795
X ₅	Built in stabilizer	1.000	.667
X ₆	Brand image	1.000	.639
X ₇	Recommendation of friends and neighbors	1.000	.730
X ₈	External appearances	1.000	.672
X ₉	DVD connection	1.000	.792
X ₁₀	Discount offer	1.000	.536
X ₁₁	Proximity to a dealer	1.000	.683
X ₁₂	Foreign collaboration	1.000	.663
X ₁₃	Advertisement	1.000	.739
X ₁₄	Remote control facility	1.000	.810
X ₁₅	Recommendation of dealer	1.000	.871

Extraction Method: Principal Component Analysis.

Table 6. Total Variance Explained

Attributes	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.051	20.343	20.343	3.051	20.343	20.343	2.340	15.602	15.602
2	2.602	17.347	37.690	2.602	17.347	37.690	1.934	12.892	28.494
3	1.477	9.845	47.535	1.477	9.845	47.535	1.892	12.615	41.110
4	1.359	9.058	56.593	1.359	9.058	56.593	1.727	11.514	52.624
5	1.330	8.865	65.458	1.330	8.865	65.458	1.594	10.626	63.250
6	1.109	7.397	72.855	1.109	7.397	72.855	1.441	9.605	72.855
7	0.937	6.246	79.101						
8	0.755	5.037	84.137						
9	0.652	4.349	88.487						
10	0.488	3.256	91.742						
11	0.388	2.590	94.332						
12	0.281	1.871	96.203						
13	0.231	1.540	97.743						
14	0.203	1.350	99.093						
15	0.136	0.907	100.000						

Extraction Method: Principal Component Analysis.

Table 7. Component Matrix

Attributes	Components					
	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆
X ₁	-.164	.458	-.419	-.254	-9.636E-02	.542
X ₂	2.492E-02	.582	-6.834E-02	-.589	-.211	-.221
X ₃	.593	.587	-.244	5.381E-02	8.968E-02	-3.750E-02
X ₄	-.208	.742	-.336	.140	8.735E-03	-.263
X ₅	-.501	.377	.168	.439	-.220	6.343E-02
X ₆	.532	-.152	.129	.178	-.533	2.158E-02
X ₇	-.455	.516	4.006E-02	-5.060E-02	.498	7.007E-02
X ₈	.644	.258	.231	-.275	9.487E-02	-.232
X ₉	.564	7.288E-02	1.261E-03	.303	.457	.410
X ₁₀	-2.912E-02	.525	.457	-9.747E-03	-.104	-.197
X ₁₁	.248	-8.357E-02	.481	-.214	.572	-9.950E-02
X ₁₂	-.439	.218	.242	.511	6.310E-02	-.314
X ₁₃	.587	.248	-.314	.459	.145	-4.658E-02
X ₁₄	.712	.333	.290	.110	-.298	8.803E-02
X ₁₅	-.220	.391	.585	-3.720E-02	-.134	.555

Table 8. Rotated Component Matrix

Attributes	Factor interpretation Component					
	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆
X ₁	.154	.341	.233	-.299	-.606	.359
X ₂	-5.528E-02	9.827E-02	.863	-.111	-9.160E-02	7.368E-02
X ₃	.760	-4.258E-02	.428	-6.196E-02	-3.419E-02	-2.876E-02
X ₄	.298	.359	.496	.433	-.364	-.109
X ₅	-7.853E-02	9.857E-02	-2.756E-02	.664	-.327	.319
X ₆	.161	-.779	-8.595E-03	-5.751E-02	-3.300E-02	3.418E-02
X ₇	6.619E-02	.757	.160	.255	3.339E-02	.245
X ₈	.357	-.232	.474	-.183	.482	3.482E-03
X ₉	.741	3.167E-02	-.333	-.207	.226	.193
X ₁₀	3.016E-02	-4.113E-02	.455	.422	.209	.323
X ₁₁	7.623E-02	.174	-1.225E-02	-.129	.788	9.787E-02
X ₁₂	-7.078E-02	.164	-8.526E-02	.789	3.395E-02	-1.217E-02
X ₁₃	.809	-.151	-3.515E-02	7.162E-02	-5.262E-02	-.230
X ₁₄	.511	-.591	.287	-5.888E-03	.154	.307
X ₁₅	-8.776E-02	4.131E-02	5.954E-02	.158	2.686E-03	.913

Extraction Method: Principal Component Analysis. 6 components extracted

Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 11 iterations.

Table 9. Component Transformation Matrix

Component	1	2	3	4	5	6
1	.659	-.537	.124	-.388	.319	-.096
2	.447	.279	.665	.343	-.188	.356
3	-.255	-.245	-.005	.315	.670	.572
4	.420	-.180	-.559	.668	-.163	-.071
5	.313	.731	-.254	-.096	.530	-.118
6	.162	.087	-.406	-.421	-.326	.720

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Table 10. Factors Influencing The Consumers Perception Towards Television

Factors	Factor interpretation	Variables included in the factors
F ₁	Structural add-ons	Sound quality, DVD Connection, Remote control facility, Advertisement.
F ₂	Word of mouth	Recommendation of friends and neighbors, Brand image, External appearance, Discount offer.
F ₃	Durability	Higher durability
F ₄	Technical features	Built in stabilizer, Foreign collaboration.
F ₅	Ground reality	Proximity of Dealers, Price, Picture quality.
F ₆	Recommendation of dealers	Recommendation of the dealers

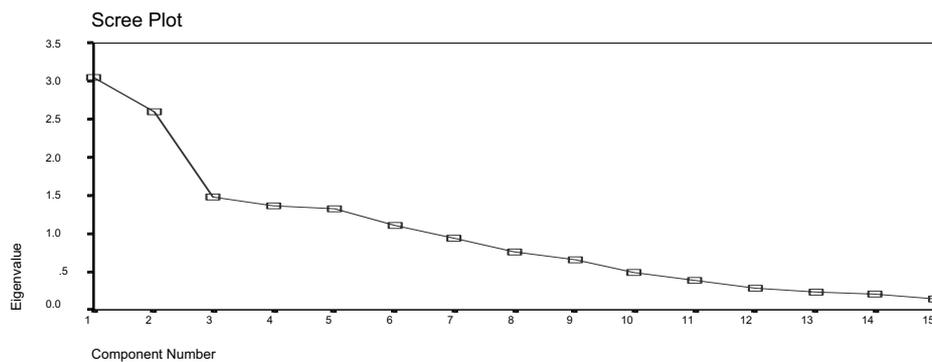


Figure 1. Scree Plot