Customer Perceptions about Lighting Products: A Study of Havells Retail Lighting Products in the National Capital Region

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Abstract
The Indian electrical equipment industry is one of the most flourishing and extremely diversified sectors. This sector has been growing at a rapid pace during the last few years with the invention of innovative technologies and an ever increasing customer inclination towards more sophisticated and safe electrical products.

Havells India Ltd. is one of India’s leading retail lighting equipment manufacturers and owns some of the most prestigious brands with the aim of providing the best lighting solutions throughout the country.

This project consists of a detailed study undertaken to understand the perception of customers towards Havells’ lighting products. Also included in the study is the comparative analysis of perception of customers towards the products of Havells’ competitors, namely Philips and Wipro.

For the purpose of the research, a questionnaire has been constructed for capturing the perception of customers towards Havells lighting products and the products of its competitors. The collected data has been analyzed using various statistical tools and a
perception map has been plotted.

The findings indicate that customers perceive Havells lighting products to be of high quality and provide excellent after sales service. On the other hand, customers rate Philips products high in terms of price and availability. Wipro lighting products are not rated high in any of the attributes.

The conclusion drawn from the study was that Havells need to shift its focus towards the dealers & consultants to ensure long – term sustainability and launch major advertisement campaigns to promote its lighting products. Also it should fine tune its distribution system to avoid delays in availability and delivery.

*Keywords: Consumer Perception; Perceptual Mapping; Electrical Equipments;*

**INTRODUCTION**

The worldwide electric power industry provides a vital service essential to modern life. It provides the nation with the most prevalent energy form known in history—electricity.

Lighting products and Havells go hand in hand. Havells is a leading lighting equipment manufacturer in India. It owns some of the most prestigious global brands. The main aim of Havells is to provide best electrical & lighting solutions and to be a globally recognized firm.

This project has been undertaken to understand the customers’ perception about Havells retail lighting products in comparison with the products of its competitors. With high market competition in the lighting equipment industry, most of the companies compete with each other through price, heavy advertising, superior product quality and enhanced customer service to ensure consumers satisfaction towards their lighting equipment. Characteristics such as durability, serviceability, performance, usability etc. also significantly affect how customers view the primary product. This study attempts to focus on how customers perceive Havells equipment on the basis of the above mentioned product attributes.

It is important to underscore the word perception. The customer’s perception is what counts, not what we think it is. To understand this point it helps to consider perception categorized into 4 quadrants:

<table>
<thead>
<tr>
<th>1</th>
<th>How a Company views itself</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>How the Customer views the company</td>
</tr>
<tr>
<td>3</td>
<td>How a company thinks the customer views the company</td>
</tr>
<tr>
<td>4</td>
<td>The real view of the company</td>
</tr>
</tbody>
</table>

*Figure 1.1*
**Perception Quadrant (adopted from Albrecht, 2003)**

The first quadrant has value, but includes obvious blind-spots. The second quadrant is the one that counts the most and the goal of assessing customer perception is to develop as accurate a picture of the customer’s view as possible. The third quadrant is a company's perception of how its customers perceive it. Bias creeps into this quadrant as well. The fourth quadrant accounts for the real picture of the company.

In practice, a company’s profile of customer perception resides in the third quadrant because its ability to vision, listen, and interpret is in itself a perception which carries filters. A quick review of concepts related to perception helps attain higher degrees of accuracy when assessing customer perception because it is wise to remember that “beauty is in the eyes of the beholder”.

**REVIEW OF LITERATURE**

The art of marketing is the ability of the marketer to realize the importance of the word perception. In the words of Albrecht (2003), Perception “is the act of discerning, realizing, and becoming aware of through the senses”. The customers’ perception is what counts, not what we think it is. Customer perception is an important component of our relationship with our customers. Customer satisfaction is a mental state which results from the customers’ comparison of expectations prior to a purchase with performance perceptions after a purchase (Kailash, 2011).

A favourable customer perception should allow the company to establish its position within its market segment, protecting it from competition, thus allowing them to build upon this with market share growth (Park et al, 1986). Moreover, establishment of the brand in the eyes of the customer is significant so as to ascertain a strong brand position, help create a barrier to entry for potential competitors and thus raise the brands performance in the market.

There are three approaches as to how a customer perceives a brand: Subjective, Objective and Literal. The first type, a subjective image, is when a potential customer hears or sees the brand name/logo and feels obliged to purchase the product or service despite a lack of understanding as to why this is the case. The case simply relates to how the brand is perceived as significant to an individual’s self-consciousness. The second type is the objective form which is the attempt to generate an emotional need for the product, leaving you with the feeling that you need to purchase the product so as to satisfy this need. The third is literal image, i.e. a logo which represents a company. This implies that upon seeing this picture/logo, the name of the company does not need to be uttered as the picture tells the consumer the whole story.

Customer perception is one of the most precious assets and needs to be managed with care and deliberation. According to Keller & Sanjay (2003), one of the most significant advantages of a strong and positive customer perception is the fact that it makes it easier for customers to accept a brand extension. This is majorly important in case of the electrical industry because of the wide range of product verticals. If the customer has a favourable perception about the brand, he is sure to buy all products from
the same brand rather than choose specific products from specific brands. Another advantage lies in the fact that it diminishes the risk regarding consumers and decreases the costs associated with marketing and promotion.

Several product attributes have been measured in relation to customer perception in great depths and all have been well documented in the literature. Some of these attributes include product quality (Mitra and Golder, 2005), price (Chang, 2009), advertisement (Hamilton, 2009), service quality (Jiang et al, 2009) and even the product documentation (Smart, 1996). But with the high market competition in the retail lighting industry, most of the lighting manufacturing companies compete with each other through all attributes including price, heavy advertising on the brand name, service quality etc. to ensure an immaculate customer perception with the aim to offer greater value to customers. Hence no specific attribute can be linked to customer’s perception about retail lighting products. Instead, a more holistic approach is required.

Customer information collection is the most significant step to accurately obtain customer perception. The collection should be completely correct, which contains the subjective perception of customers and the objective information used by customers. In terms of the collection rule, the evaluation process of CP can take the impact of objective condition on the subjective perception into account (Liu et al, 2008).

An integrated approach is essential for accurate evaluation of customer perception. Several customer perception evaluation models have been developed in the past. Lasswell’s 5W theory can easily be modeled into customer perception extraction. Also, a modified Quality Function Deployment method to improve customer perception has been proposed by Iranmanesh et al (2005).

**OBJECTIVES OF THE STUDY**

The study intends to achieve the following objectives:

- To understand customers’ perception about Havells retail lighting products.
- To compare different retail lighting equipment manufacturing brands based on specific attributes.

**RESEARCH METHODOLOGY**

**Research Design**

The framework for conducting this research project is based on descriptive research. This type of research describes data and characteristics about the population being studied – which in this case is the study of perception of customers towards retail lighting products. The main purpose of conducting this descriptive research is to analyze the customers’ perception as it exists today.

**Participants**

The participants in this study include the customers of retail lighting products. The
customers comprise of the dealers and consultants etc. who procure the lighting products for their clients and are not the actual end users.

**Data Collection**

For the purpose of this study, both Primary as well as Secondary data has been collected although major emphasis has been put on gathering primary data.

Primary data has been collected through survey of 20 dealers & consultants of retail lighting products based on cross-sectional design. Secondary data has been collected through various websites, business journals, newspapers etc.

**Research Instrument**

The research instrument used in this study is ‘structured questionnaire’. To analyze the perception of customers, a questionnaire has been constructed. The questions are presented with exactly the same wording and in the same order to all the respondents.

In the questionnaire, the respondents have been asked to rate three major retail lighting product manufacturers on five attributes (Price, Quality, Availability, Service and Design) so as to accurately capture their perception.

**Data Analysis**

The next important step after collection of data is to analyze the data so as to obtain meaningful results. In this study, the collected data has been analyzed using the statistical software Microsoft Excel and Statistical Package for Social Sciences (SPSS) 17.

The perception of customers has been analyzed by drawing attribute based perceptual maps using discriminant analysis.

**DATA ANALYSIS AND FINDINGS**

SPSS procedure ‘discriminant’ analysis was used to produce the tables below and Fig. 2.1. Vectors that represent the original attributes can be located on this map. As the output tables below show, two discriminant functions were obtained by using the brand name as the grouping variable. Both functions were used to map the group centroids on a 2-dimensional plot (Fig. 2.1).

Fig. 2.2 was obtained by plotting the standardized discriminant functions coefficients (Table 2.4) for function 1 and function 2 for each of the 5 brand attributes. Thus, a combination plot of Fig. 2.1 and the standardized coefficients resulted in Fig 2.2. For information on Group Statistics, Eigen Values, Wilks’ Lambda, Standardized Discriminant Function Coefficients and Functions at Group Centroids, the reader can refer to annexure.
**Fig 2.1 Plot of the three Brands on Discriminant Functions 1 and 2**

Figure 2.2 represents the vectors for each of the attributes – Price, Quality, Availability, Service and Design. To plot these vectors for each of the attributes on the map, we use the standardized coefficients of the original variables in the discriminant function. The length of the arrow represents its effect in discriminating on each dimension. Longer arrows pointing more closely towards a given group centroid (Brand on the map) represent variables most strongly associated with the group. Vectors pointing in opposite direction from a given group centroid represent lower association with a group.

Variables with longer vectors in a given dimension and those closer to a given axis (dimension represented by discriminant function) are contributing more to the interpretation of that dimension. Looking at all variables that contribute to a given axis, we can label the dimension as a combination of those variables.
In this case, the interpretation in terms of the variables and their correlation to dimension 1 and 2 can be found from Figure 2.2. As seen from the figure, Philips, Havells and Wipro have their unique positions on the map. In addition, on the same map, we have now plotted the values of the attributes on the same two dimensions (each discriminant function represents a dimension). As we can see, Dimension 1 seems to be a combination of Service and Quality (closest to the x-axis). This is also evident from the standardized discriminant coefficients for Service and Quality (0.920 and 0.904 respectively) on dimension 1, from output Table 2.4.

Dimension 2 seems to comprise Availability and Price, the two vectors that are closest to the vertical axis. This is also evident from the standardized coefficients of 0.968 and 0.755 respectively, for Availability and Price on Dimension 2, from the output Table 2.4.

Design is not useful in defining any of the two dimensions, as its arrow is not close to either of the two dimensions.

Thus we see that Havells seems to be stronger on Dimension 1 which comprises of Service and Quality and Philips seems to be stronger on Dimension 2 which comprises of Availability and Price. Wipro on the other hand scores low on both the dimensions as compared to its competitors.
RECOMMENDATIONS

Based on the interpretation drawn from the aforementioned data analysis and also on basis of the informal feedback received from the respondents, the following suggestions are recommended for Havells.

As the study reveals, Havell’s biggest problem areas are communication flows and marketing intelligence. It translates into multiple problems like - miscommunication, communication gaps and delayed communication and therefore, resentment, dealers not stocking and pushing Havells products etc.

It is hence, recommended that the Havells sales team should figure out a better contact program including a better route map which is used by the sales team. This should be aimed at minimizing the aforementioned communication problems. This would also help in solving another problem which is dealers not stocking Havells products because they are not informed properly about the launches, prices and features. As a result of this, dealers are unable to give satisfactory answers to customers’ queries. Having a proper communication system in place will handle this as well.

Secondly, information flows should be redesigned for real time information dispersion to and from the channel members. This will aid in clarity about issues like dealer discounts, undercuts etc. and both parties will gain.

Thirdly, Sales team must be encouraged to send in marketing intelligence reports. It should be one of their KRA (Key Result Area). When this is done, Havells will get regular and timely information about the practices of competitors and other relevant information of what is happening in the market. Accordingly, Havells can then form a strategy to deal with them.

Finally, one of the concerns that surfaced was that of ‘product quality’. Although there is a ‘quality check’ program in place that checks the products before they leave for the market. However, it has to be made more robust but more importantly, by the time this is done, it should be slightly lenient in replacing the products if there are any complaints. This will not only pacify the dealers but also help in gaining their faith in the company.

REFERENCES

Control, and Management


Annexure

Table 2.1 Group Statistics

<table>
<thead>
<tr>
<th>BRAND</th>
<th>Valid N (listwise)</th>
<th>Unweighted</th>
<th>Weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAVELLS</td>
<td>DESIGN</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>SERVICE</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>AVAILABILITY</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>QUALITY</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>PRICE</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td>PHILIPS</td>
<td>DESIGN</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>SERVICE</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>AVAILABILITY</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>QUALITY</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>PRICE</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td>WIPRO</td>
<td>DESIGN</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
<td></td>
<td>SERVICE</td>
<td>20</td>
<td>20.000</td>
</tr>
<tr>
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<td>AVAILABILITY</td>
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<td>20.000</td>
</tr>
<tr>
<td></td>
<td>QUALITY</td>
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<td>20.000</td>
</tr>
<tr>
<td></td>
<td>PRICE</td>
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<tr>
<td>Total</td>
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<td>60.000</td>
</tr>
<tr>
<td></td>
<td>AVAILABILITY</td>
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<td>60.000</td>
</tr>
<tr>
<td></td>
<td>QUALITY</td>
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<td>60.000</td>
</tr>
<tr>
<td></td>
<td>PRICE</td>
<td>60</td>
<td>60.000</td>
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</table>
Table 2.2 Eigen Values

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
<th>Cumulative %</th>
<th>Canonical Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.517å</td>
<td>76.8</td>
<td>76.8</td>
<td>.846</td>
</tr>
<tr>
<td>2</td>
<td>.762å</td>
<td>23.2</td>
<td>100.0</td>
<td>.658</td>
</tr>
</tbody>
</table>

Table 2.3 Wilks’ Lambda

<table>
<thead>
<tr>
<th>Test of Function(s)</th>
<th>Wilks’ Lambda</th>
<th>Chi-square</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 through 2</td>
<td>.161</td>
<td>100.327</td>
<td>10</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.567</td>
<td>31.164</td>
<td>4</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 2.4 Standardized Discriminant Function Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Function 1</th>
<th>Function 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUALITY</td>
<td>0.904</td>
<td>-.391</td>
</tr>
<tr>
<td>DESIGN</td>
<td>-0.459</td>
<td>-0.443</td>
</tr>
<tr>
<td>AVAILABILITY</td>
<td>-.175</td>
<td>0.968</td>
</tr>
<tr>
<td>SERVICE</td>
<td>.920</td>
<td>.111</td>
</tr>
<tr>
<td>PRICE</td>
<td>.218</td>
<td>.755</td>
</tr>
</tbody>
</table>

Table 2.5 Functions at Group Centroid

<table>
<thead>
<tr>
<th>BRAND</th>
<th>Function</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAVELLS</td>
<td>1.790</td>
<td>-.691</td>
</tr>
<tr>
<td>PHILIPS</td>
<td>.193</td>
<td>1.199</td>
</tr>
<tr>
<td>WIPRO</td>
<td>-1.983</td>
<td>-.507</td>
</tr>
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</table>