# A Study On Brand Equity Dimensions In Marketing For Air Conditioner With Reference To Electronic And Appliance Industry In Chennai City

## Mr. A. Appu, Mr. Mohammed Yousuf khan A

MEASI Institute of Management, Chennai-600014

*Abstract:* **India's Electronics and Appliance Industry is going through an exciting phase due to revolutionary changes in technology, the launch of innovative products and the challenge of global competition. This means electronic product and component manufacturers must focus on continuously improving their products. The Consumer Electronics and Appliances Industry in India is expected to become the fifth largest in the world by 2025. Its projected to grow to US $ 400 billion by 2020 and the production is expected to reach US $ 104 billion .The Government is supporting the Indian Electronics Industry by setting up Electronic Hardware Technology Parks, Special Economic Zones and a bought about a favourable climate for foreign direct investment. With relaxed tariffs and an increasing liberalization in general it is promoting growth in the sector further. In addition, the Government gave its green signal to the Modified Special Incentive Package Scheme (MSIPS) under which the central government will be offering up to US $ 1.7 billion in benefits to the Indian Electronics Industry in next five years. Brand equity refers to a value premium that a company generates from a product with a recognizable name, when compared to a generic equivalent. Companies can create brand equity for their products by making them memorable, easily recognizable, and superior in quality and reliability. Brand Equity has been empirically demonstrated that brand equity plays an important role in the determination of price structure and, in particular, firms are able to charge price premiums that derive from brand equity after controlling for observed product differentiation. The objective of the research paper to identify the brand equity dimensions in marketing for air conditioner with reference to electronic industry in Chennai city.**

*Keywords:* **Brand value, Brand awareness, Brand Components, Brand Preference, Perceived quality.**

## I. INTRODUCTION

The Indian appliance and consumer electronics (ACE) market reached Rs 2.05 trillion (US$ 31.48 billion) in 2017. It is expected to increase at a 9 per cent CAGR to reach Rs 3.15 trillion (US$ 48.37 billion) in 2022. Electronics hardware production in the country reached Rs 3.88 trillion (US$ 60.13 billion) in FY18, growing at a CAGR of 26.7 per cent between FY14-18. Demand for electronics hardware in India is expected to reach US$ 400 billion by FY24.overall consumer durable exports reached US$ 0.78 billion in 2017. Consumer electronics exports from India reached US$ 362.12 million in FY18 and US$ 267.15 million between Apr-Nov 2018. Also demand for durables like refrigerators as well as consumer electronic goods are likely to witness growing demand in the coming years in the rural markets as the government plans to invest significantly in rural electrification. The S&P BSE Consumer Durables Index has grown at 16 per cent CAGR between 2010-18. The consumer durables sector in India is expected to grow 8.5 per cent in 2018-19. Consumer durables index under the Index of Industrial Production (IIP) has grown 5.0 per cent year-on-year between Apr-Nov 2018.The government of India has allowed 100% Foreign Direct Investment (FDI) in the consumer electronics and home appliances manufacturing sector through the automatic route and 51% of FDI in multi-brand retail. This has become a key attraction for foreign investors. Moreover, the National Policy on Electronics (NPE) that was drafted in 2011 to boost the Electronic System Design & Manufacturing (ESDM) industry plays a vital role in the growth and upscaling of the consumer electronics and home appliances market in India. Moreover, with the help of the Make in India drive, India is on the path of becoming a hi-tech manufacturing hub of electronic products. The aim of the researcher paper is to study Impact of brand equity dimensions on consumer responses in purchasing air conditioner and to identify the factors of effective Brand and its role in building Brand Equity of Air Conditioner.

## II. LITERATURE REVIEW

**Kambiz et al. (2015)** have investigated the effect of brand equity on brand preference and purchase intentions. The research selected on sporting goods consumers in Tehran city,

and sampling was done randomly. The data were collected using an appropriate questionnaire. That study was based on the methodology used and the method of implementation and was data collection descriptive survey. The sample included 390 people in that study, four kinds of validity (Face Validity, Content Validity, Convergent Validity, Discriminate Validity) and two kinds of reliability (internal consistency reliability and test-retest reliability) in the description of the research were compared with a similar study has gone a step ahead. The study of those three variables (brand equity, brand preference and purchase intent) together on sporting goods in the world, for the first time and original aspects of the innovation. For testing data analysis and confirmative factor analysis used path analysis software of LISREL. They also recognized that significant relationship among brand equity, brand preference, and purchase intentions could be seen, but no relation important brand awareness and brand equity in sports products did not see in Iran.

**Ruchan et al. (2016)** have highlighted interrelations of the four brand equity components; brand awareness, brand loyalty, perceived quality and brand image in hotel industry and improve the conceptualization of customer-based hotel brand equity. They discussed the three-dimensional model of customer-based brand equity in hotel industry. Brand awareness dimension was not found significant in the tested model for hotels and they also discussed that several components of perceived quality have a significant and direct effect on brand loyalty, while some of them have an indirect and significant impact on brand image. In this paper hotel managers and executives should try to influence; perceived quality, brand loyalty, brand image and brand awareness in their organizations and design their service delivery process by considering relations between customer based brand equity components.

**Hao Liaogang et al. (2017)** have advocated that brand equity practically boils down to the word of mouth and purchase behaviours of customers. Brand-knowledge structures in the minds of customers are the source or foundation of brand equity. Customer-level brand equity can be captured by five aspects: awareness, associations, attitude, attachment, and activity. In this article, we measure the brand equity of six major mobile phone brands in the Chinese market which include four foreign and two local ones. A total of 174 respondents from one major university in Beijing were surveyed for data collection. They were conducted to obtain insights on how consumers form attitudes towards different mobile phone brands. The data analysis results show that international brands outperform local brands in terms of customer based brand equity in the Chinese market.

## III. NEED FOR THE STUDY

The Electronic and Home appliance industry is riding the crest of the country's economic boon with a lot of Indian brands dominating the market scenario. But over the years, multinational players have made significant inroads into the market. The consumers taste changes rapidly. Consumers want newer models with the latest features. The competition is on features differentiation, time to market, price, and promotion, basically on every front. The dealer push and brand pull both plays an important role. The changing dynamics of consumer behavior are now being perceived as necessities with higher disposable income. There is a drastic shift in the consumers' preference towards brand in favor of high ended technologically superior branded products, the demand being boosted by increasing consumer awareness and preference for new models. This shift is also determined by the growing trend of products being manufactured in the organized sector of the economy and the narrowing down of the price of branded Air Conditioner Electronic product. No research has been undertaken to understand and analyze this in detail. The present study attempts to bridge this research gap by analyzing significant changes in the perception towards brand equity of Chennai home appliance buyers, as the proposed research work may help them to improve the brand equity of home appliances in Chennai city.

## IV. STATEMENT OF THE PROBLEM

Brand equity offers strategic benefits to companies in the marketing decisions. It is vital factor for adding line extension of the product. When a particular product category has entered the decline stage of the product life cycle, strong brand equity of the product can help a brand to survive longer than its competitors. Likewise, in periods of economic downturn, brand equity provides a platform that keeps the brand afloat at a profit against competing products without strong brand identification begin to struggle. The need of brand equity is highly essential in international marketing. Global brands have international presence and visibility, and this "equity" makes it easier for them to expand their business throughout the globe. Brand equity enables branded products or services to charge premium prices. The producers of household appliances have positioned their brands as quality products in the competitive market of consumer durable industry. Hence on the basis of extensive review of literatures certain questions arise such as: How companies build brand equity of household appliances? How to enhance companies continuously their brand equity? How intensively marketing mix elements affect the building of brand equity? This study has emerged to find solutions for the above questions.

## V. OBJECTIVE OF THE STUDY
- To identify the importance of Brand Equity Dimensions with reference to Marketing Mix Element
- To examine the relationship between Brand Equity Dimensions for Air Conditioner
- To analyze the impact of Demographic variable and Consumer purchase decision towards different brands of Air Conditioner.
- To identify the factors of effective Brand and its role in building Brand Equity of Air Conditioner.

- To study the level of awareness towards various Dimensions of Branded Air Conditioner services.

## VI. SCOPE OF THE STUDY

This research is confined to the brand equity of household appliances, particularly branded air conditioners. The data for this study is collected from consumers using air conditioners for the domestic purpose and showrooms selling air conditioners in Chennai city. This study will help the marketers identify the dimensions of Consumer Based Brand Equity which are affected by Sales Promotions and specifically what type of Sales Promotions, whether Price Promotion or Premium Promotion is suitable for a given market. The Study will also help the marketer to explore a different area of customers and consumer durable segment in the air conditioner which also facilitate to understand their purchasing choice, needs, awareness level, association and various constituents of brand equity.

## VII. RESEARCH METHODOLOGY

**RESEARCH DESIGN**

A research design is purely and simply the framework or plan for a study that guides the collection and analysis of data. It is a blue print that is followed in completing a study. The major purpose of Descriptive research is description of state of affairs, as it exists at present.

**SAMPLING METHODOLOGY**

Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 15 | 100.0 |
| | Excluded[a] | 0 | .0 |
| | Total | 15 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

| Cronbach's Alpha | N of Items |
|---|---|
| .939 | 95 |

The Cronbach's alpha coefficient for 95 items is 0.939 suggesting that the items have high level of internal consistency.

**Population**

The study of various characteristics relating to items \ individual belong to a particular group is called as population. The population of the study consists of the different consumers like employed, business man, and professional and government employee. A total of 119 respondents were chosen for the study. In this research, we have taken E-survey from consumer purchasing Air Conditioner through decision in various choices were consider in Chennai City.

**Sampling Method**

The sampling technique used was non-probability sampling method is adopted in this study. It refers to the technique where the probability of each cases being selected from the total population is known. The sampling technique used was Convenience sampling in which samples are drawn from the buying consumers.

**Data Collection Method**

The present study has employed both the primary and secondary data. Data was collected only through primary source. Primary data are generated by a study specifically designed to accommodate the needs of the problem at hand. The methods used were direct survey from consumers buying Air Conditioner from Electronic Industry.

## VIII. DATA ANALYSIS

### RELIABILITY TEST

### CHI SQUARE ANALYSIS

Null hypothesis (Ho): There is no association between the awareness level towards air conditioner services and age group of the consumer.

Alternate hypothesis (H₁): There is association between the awareness level towards air conditioner services and age group of the consumer.

**Chi-Square Tests**

|  | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 13.350ᵃ | 4 | .010 |
| Likelihood Ratio | 19.001 | 4 | .001 |
| Linear-by-Linear Association | .062 | 1 | .004 |
| N of Valid Cases | 119 |  |  |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.08.

Inference:

The Pearson chi square significant value is 0.000 which is less than 0.05. Hence Reject Null hypothesis. There is association between the awareness level towards air conditioner services and age group of the consumers.

Null hypothesis (Ho): There is no association between the awareness of point of purchase towards Air Conditioner and Occupation group of the Consumer.
Alternate hypothesis (H₁): There is association between the awareness of point of purchase towards Air Conditioner and Occupation group of the Consumer.

**CHI SQUARE ANALYSIS**
**Chi-Square Tests**

|  | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 101.245ᵃ | 12 | .000 |
| Likelihood Ratio | 116.633 | 12 | .000 |
| Linear-by-Linear Association | 4.340 | 1 | .037 |
| N of Valid Cases | 119 |  |  |

a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is 1.08.

Inference:

The Pearson chi square significant value is 0.000 which is less than 0.05. Hence Reject Null hypothesis. There is association between the awareness of point of purchase towards Air Conditioner and Occupation group of the Consumer.

**FRIEDMAN TEST**
Null hypothesis (H₀): There is no significant difference between mean ranks towards the factors for purchasing the Branded Air Conditioner
Alternate hypothesis (H₁): There is significant difference between mean ranks towards the factors for purchasing the Branded Air Conditioner

**Ranks**

| | Mean Rank |
|---|---|
| Purchase Decisions Media Advertisement | 4.19 |
| Purchase Decisions Competitive price | 4.61 |
| Purchase Decisions Parents, relatives and friends | 3.98 |
| Purchase Decisions Service of the product | 3.95 |
| Purchase Decisions Less power consumption | 3.89 |
| Purchase Decisions Cooling performance | 3.61 |
| Purchase Decisions Convenience | 3.78 |

**Test Statistics[a]**

| N | 119 |
|---|---|
| Chi-Square | 18.596 |
| df | 6 |
| Asymp. Sig. | .005 |

a. Friedman Test

Inference:

It reveals that since p value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence it is concluded that there is significant difference between mean ranks towards the factors for purchasing the Branded Air Conditioner.

**ONE WAY ANOVA ANALYSIS**

Null hypothesis ($H_0$): There is no significant difference between the age group of the consumer and their purchasing decision towards Branded Air Conditioner.

Alternate hypothesis ($H_1$): There is significant difference between the age group of the consumer and their purchasing decision towards Branded Air Conditioner

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Purchase Decisions Media Advertisement | Between Groups | 121.705 | 3 | 40.568 | 55.445 | .000 |
| | Within Groups | 84.144 | 115 | .732 | | |
| | Total | 205.849 | 118 | | | |
| Purchase Decisions Parents, relatives and friends | Between Groups | 34.889 | 3 | 11.630 | 7.910 | .000 |
| | Within Groups | 169.077 | 115 | 1.470 | | |
| | Total | 203.966 | 118 | | | |
| Purchase Decisions Competitive price | Between Groups | 58.350 | 3 | 19.450 | 19.491 | .000 |
| | Within Groups | 114.759 | 115 | .998 | | |
| | Total | 173.109 | 118 | | | |
| Purchase Decisions Dealers brand loyalty | Between Groups | 100.813 | 3 | 33.604 | 43.404 | .000 |
| | Within Groups | 89.036 | 115 | .774 | | |
| | Total | 189.849 | 118 | | | |
| Purchase Decisions Less power consumption | Between Groups | 139.251 | 3 | 46.417 | 88.754 | .000 |
| | Within Groups | 60.144 | 115 | .523 | | |
| | Total | 199.395 | 118 | | | |

Inference:

Here p values is lesser than 0.05. Hence reject null hypothesis. Therefore there is significant difference between the age group of the consumer and their purchasing decision towards Branded Air Conditioner.

**IX.    FINDINGS OF THE STUDY**

- The Cronbach's alpha coefficient for 95 items is 0.939 suggesting that the items have high level of internal consistency
- Using The Pearson chi square significant value is 0.000 which is less than 0.05. Hence Reject Null hypothesis. There is association between the awareness level towards air conditioner services and age group of the consumers.

- Using the Pearson chi square significant value is 0.000 which is less than 0.05. Hence Reject Null hypothesis. There is association between the awareness of point of purchase towards Air Conditioner and Occupation group of the Consumer
- Using the Friedman test it reveals that since p value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance. Hence it is concluded that there is significant difference between mean ranks towards the factors for purchasing the Branded Air Conditioner.
- Using the one way anova it reveals that the p values is lesser than 0.05. Hence reject null hypothesis. Therefore there is significant difference between the age group of the consumer and their purchasing decision towards Branded Air Conditioner.

## X. SUGGESTIONS

After analyzing the findings, the following suggestions have been made and great care has been taken in making these suggestions for improvement of consumer response to brand equity schemes through different choices

- It is suggested that the marketers/companies must focus and adopt a comprehensive vision of marketing decisions. The marketing activities of companies for a brand can make the worth of brand by potentially improving customer ability to remember or distinguish the brand.
- It is suggested that the marketers/companies are supposed to classify the knowledge structure that they would like to build in the mind of customers by specifying the desired level of awareness, strength, and uniqueness of product, functional and symbolic benefit. The marketer must have focused on the core wants and needs of customers to be fulfilled by the brand.
- It is suggested that the marketers/companies should focus on the association inviting quality, brand consciousness creating ability, need-satisfying capacity, value-creating ability and uniqueness that is the crucial source of brand equity in the air conditioner in Chennai city.
- It is suggested that the marketers/companies should focus on price, durability, knowledge about the product, adequate services, the promise of quality and features, value for money and consistency in performance because these play a significant role to selecting the air conditioner brand. Furthermore, the attributes advertisement of the product, past experience, use of latest technology, product image, value-added services, free trial and discount, country origin, a logo to differentiate the offerings, acceptance & goodwill in the society and uniqueness are also important to select the branded air conditioner.

## XI. CONCLUSION

This study is led to gauge the brand equity in the consumer durable segment with specific reference to the Air Conditioner. The brand equity alludes to intangible value to an organization which occurs because of its fruitful endeavors to set up a reliable brand. The consumer durable segment has been the witness of significant growth in recent years; it estimated that India is going to become 5th prime consumer durable market by 2025. India is a multi-differentiated nation with different culture and values which make it a unique market in the global. The Indian market with large populace driven by youths' which open a new door for various businesses. Nowadays, the purchasing power of different consumers has improved, and spending capabilities on different segments have extensively increased. The consumer durables industry has been one of the significant segments or sector which plays an imperative role in Indian GDP. In the modern life, shoppers incline toward durable products as basic to family and to meet family necessities. The fundamental purposes of this research are to know the consumer perception towards the brand image, brand personality, brand loyalty, and brand equity of Air Conditioner and the various constituents of brand equity in the Air Conditioner and the role of marketing media and the promotional activities in building the brand equity of Air Conditioner.

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