

## A STUDY ON BRAND PREFERENCE OF AIR CONDITIONER IN KAYALPATTINAM

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#### Abstract

The market situation and its outcome are becoming increasingly uncertain. In the light of this scenario, the organizations are becoming more and more desperate to hold the customers, to retain the market share and to survive. The scenario in the Air-Conditioner industry is equally challenging. The leading companies like Samsung, Videocon, Sony, LG and others by introducing brands at various price points have effectively segmented the market which has resulted in faster market expansion and penetration. Product differentiation and innovative marketing efforts have resulted in attracting more and more customers to their brands. In fact the competition in the rural market has assumed a battle field dimension and struggles for the survival of the fittest. Therefore in the light of the scenario where the marketing environment is changing at a very fast pace and the heightened aggression of the players in the home appliances in India, it is most appropriate to conduct a study on various dimensions influencing consumer's purchase decisions regarding Air-Conditioner.

#### Key Words: Brand Preference of Air Conditioner, Consumer S Purchased Decisions, Brands.

#### Introduction

Air conditioning refers to the cooling and dehumidification of indoor air for thermal comfort. In a broader sense, the term can refer to any form of cooling, heating, ventilation or disinfection that modifies the condition of air. An air conditioner (often referred to as Ac or air conditioning) is an appliance, system or mechanism designed to stabilize the air temperature and humidity within an area (used for cooling as well as eating depending on the air properties at a given time), typically using a refrigeration cycle but sometimes using evaporation, most commonly for comfort cooling in buildings and motor-cars.

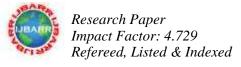
The concept of air conditioning is known to have been applied in Ancient Rome, where aqueduct water was circulated through the walls of certain houses to cool them. Similar techniques in medieval Persia involved the use of cisterns and wind towers to cool buildings during the hot season. Modern air conditioning emerged from advances in chemistry during the 19<sup>th</sup> century and the first large-scale electrical air conditioning was invented and used in 1902 by Wills Haviland.

Today the market situation in India is highly competitive across all the product segments. With the continuous evolution in the demographics and psychographics of the target consumer, the situation is becoming more and more complex. The ever changing customer preference, rising consumerism, new entrants in the market and continuously evolving technological innovations resulting in product differentiation in the short run which further resulting in shorter life cycles for durables particularly and also for other lifestyle products are adding new dimensions to already compel situation.

#### **Statement of The Problems**

The brand names of air conditioner play a major role in determining the air conditioners ultimate success or failure. Indian consumers have been found to become more and more brand loyal. Depending upon the nature of the product, basic necessities or luxuries, they have single or multi-brand loyalty. This brand loyalty has been found to be affected by their brand preference. The consumer attaches considerable importance to the brand image in the purchase of products. Hence a marketer needs to give adequate support to his product through advertisement and promotional efforts. That is advertising and brand preferences are very important in marketing the products. This is true in case of air conditioner industry also. Hence the researcher has decided to study the brand preferences of air conditioner.

The consumers in and around urban zones are leading their life under the principle of compartment family, which is very small, educated, unfortunately having less time for sleeping. They have to therefore, depend solely upon fans and air conditioners. Keeping these problems faced by consumers in mind, the researchers frames objectives for his study. So, the researcher has selected Kayalpattinam city for the present study.



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# Scope of Study

The scope of the study has been restricted to brand preference of air conditioner. An attempt is also made to trade the origin and history of air conditioner industry and brand preference. As marketing is a vast area comprising various aspects, the researcher has limited his study to kayalpattinam alone, in order to study the problem in depth.

# **Objectives of Study**

The study has been carried out with the objectives to examine the following

- 1. To know the history and various forms of air conditioner available.
- 2. To know the socio demographic characters of air conditioner customer.
- 3. To analyze the factors that's influence the consumer in particular brand of the air conditioner.
- 4. To study the levels of satisfaction of air conditioner; and.
- 5. To give suggestions based on the findings of the study.

# Hypotheses of The Study

The present study attempts to test the following hypotheses in line with the objectives mentioned above.

- 1. There exists no relationship between the age of the respondents and the impact of advertisement on air conditioner brand selection.
- 2. There exists no relationship between the educational level of the respondents and the impact of advertisement on air conditioner brand selection.
- 3. There exists no relationship between the occupation of the respondents and the impact of advertisement on air conditioner brand selection.
- 4. There exists no relationship between the income level of the respondents and the impact of advertisement on air conditioner brand selection.
- 5. There exists no relationship between the marital status of the respondents and the impact of advertisement on air conditioner brand selection.

Area of The Study: The area selected for this study is Kayalpattinam in Thoothukudi District.

# **Research Design And Sampling Design**

# **Collection of Data**

The data required for the study have been collected from the both primary and secondary sources. Primary data have been collected through direct personal interviews. With the air conditioner in the study area, using a well-designed schedule which was finalized after careful testing through a pilot study.

Secondary data were collected from published and unpublished sources. The former include standardized books, Journals, magazines, periodicals and the reports and manuals of the Government departments having control directly or indirectly over air conditioner in kayalpattinam.

**Sample Design:** There is no need for a sampling design as the primary data needed for the present study. It had been collected by the researcher from all the 150 customer there by marketing it is a census survey.

Tools Collection of Data: Interview schedule in this study has been structured by the researcher herself.

# **Tool For Analysis**

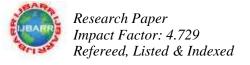
The collected data are analysed by using

- 1. simple percentages.
- 2. chi-square test.
- 3. F test and.
- 4. T test.

# Limitations of The Study

The present study has the following constraint and limitations:

- 1. The present study has limited its scope to the study of air conditioner only;
- 2. Most of the air conditioner customers seem to be a little hesitant to provide the researcher.



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# **Data Analysis And Interpretation**

#### **Education Wise Classification of Sample Respondents**

Educational Qualification provides a better awareness of the brand, only literate people are aware of brand and only such consumers make the best use of their brand. Hence the profile of sample respondents in terms of educational qualification has been highlighted in Table.

Sl. No	Education	No. of Respondents	Percentage
1.	Read and Write	28	18.7
2.	Up to Hr. Sec	47	31.3
3.	Under Graduation	61	40.7
4.	Post Graduate	14	9.3
	Total	150	100

Source: Primary data

Among the total respondents, 61 respondents (40.7 per cent) are qualified with under graduation, 47 respondents (31.3 per cent) are qualified upto Higher Secondary, 28 respondents (18.7 per cent) can read and write and only 14 respondents (9.3 per cent) are qualified with post graduate. It is clear that majority of the respondents are qualified with under graduation.

Sl. No	Occupation	No. of Respondents	Percentage
1.	Agriculturist	07	4.7
2.	Teacher	27	18.0
3.	Business	36	24.0
4.	Private employee	18	12.0
5.	Govt. Employee	57	38.0
6.	Others	05	3.3
	Total	150	100

# **Occupation Wise Classification of Sample Respondents**

Source: Primary data

It clearly shows that 57 respondents (38 per cent) are government employees, 36 respondents (24 per cent) are businessmen, 27 respondents (18 per cent) are teachers, 18 respondents (12 per cent) are private employees, 7 respondents (4.7 per cent) are agriculturists and 5 respondents (3.3 per cent) are others namely daily wage earners and unemployed.

Sl. No	Family members	No. of Respondents	Percentage
1.	Upto 3 members	18	12.0
2.	3-6 members	89	59.3
3.	More than 6 members	43	28.7
	Total	150	100

#### Family Members Wise Classification of Sample Respondents

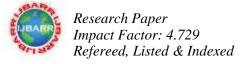
Source: Primary data

It brings into limelight that 89 respondents (59.3 per cent) fall in the size 4 to 7 members in the family, 43 respondents (28.7 per cent) belong to the size of more than 6 members in the family and 18 respondents (12 per cent) had upto 3 members in the family.

Sl. No	Monthly income	No. of Respondents	Percentage
1.	Below Rs.20000	13	8.7
2.	Rs.20000 - Rs.40000	37	24.7
3.	Rs.40000 - Rs.60000	58	38.6
4.	Rs.60000 -Rs.80000	29	19.3
5.	Rs.80000 - Rs.100000	07	4.7
6.	Above Rs.100000	06	4.0
	Total	150	100

### Monthly Income Wise Classification of Sample Respondents

Source: Primary data



Above table clearly exhibits that out of the total 150 respondents, 58 respondents (38.6 per cent) earning monthly income of Rs.40000 to 60000, 37 respondents (24.7 per cent) earning monthly income of Rs.20000 to 40000, about 29 respondents (19.3 per cent) earning monthly income between Rs.60000 to 80000, 13 respondents (8.7 per cent) earning monthly income of below Rs.20000, 7 respondents (4.7 per cent) earning monthly income between Rs.80000 - Rs.100000 and the remaining 6 respondents (4 per cent) earning monthly income of above Rs.100000.

War ital Status Wise Classification of Sample Respondents				
Sl. No	<b>Marital Status</b>	No. of Respondents	Percentage	
1.	Married	135	90	
2.	Unmarried	15	10	
	Total	150	100	

# Marital Status Wise Classification of Sample Respondents

Source: Primary data

From the table, it is evident that out of 150 respondents, 135 respondents (90 per cent) are married and 15 respondents (10 per cent) are unmarried. It is inferred from the above analysis that the majority of the respondents are married.

Г	Factors influenced for for buy the Farticular Air Conditioner				
Sl. No	Factors	No. of Respondents	Percentage		
1.	Television	24	16.0		
2.	Mechanic advice	9	6.0		
3.	News item	10	6.7		
4.	Shown shops	13	8.7		
5.	Friends and relatives	69	46.0		
6.	News Papers and Magazine	25	16.7		
	Total	150	100		

# Factors Influenced You To Buy The Particular Air Conditioner

Source: Primary data

Above table shows that majority (46 per cent) of the respondents are influenced by friends and relatives to buy the particular air conditioner, 16.7 per cent of the respondents are influenced by news papers and magazine to buy the particular air conditioner, 16 per cent of the respondents are influenced by television to buy the particular air conditioner, 8.7 per cent of the respondents are influenced by shown shops, 6.7 per cent of the respondents are influenced by news item and 6 per cent of the respondents are influenced by mechanic advice.

Sl. No	Persons influence on purchase decision	No. of Respondents	Percentage
1.	Self	22	14.7
2.	Spouse	68	45.3
3.	Children	24	16.0
4.	Collectively	36	24.0
	Total	150	100

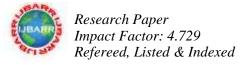
**Persons Influence On Purchase Decision** 

Source: Primary data

From the table shows that among the respondents, 45.3 per cent are influenced by spouse on purchase decision of air conditioner, 24 per cent of the respondents are influenced by collectively on purchase decision of air conditioner, 16 per cent of the respondents are influenced by children on purchase decision of air conditioner and 14.7 per cent of the respondents are influenced by self on purchase decision of air conditioner.

#### **Reasons For Purchase The Air Conditioner**

Sl. No	Reasons	No. of Respondents	Percentage
1.	Prestige	26	17.3
2.	Business	24	16.0
3.	Summer use	59	39.3
4.	Family safety	28	18.7
5.	Comfort and convenience	13	8.7
	Total	150	100



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It reveals that 39.3 per cent of the respondents purchase the air conditioner for summer use, 18.7 per cent of the respondents purchase the air conditioner for family safety, 17.3 per cent of the respondents purchase the air conditioner for prestige, 16 per cent of the respondents purchase the air conditioner for business and 8.7 per cent of the respondents purchase the air conditioner for comfort and convenience.

Sl. No	Brands of Air Conditioner	No. of Respondents	Percentage
1.	LG	38	25.3
2.	Samsung	31	20.7
3.	Oneida	19	12.7
4.	O General	12	8.0
5.	National	33	22.0
6.	Carrier	17	11.3
	Total	150	100

Source: Primary data

It reveals that 25.3 per cent of the respondents owned LG brand of air conditioner, 22 per cent of the respondents owned National brand of air conditioner, 20.7 per cent of the respondents owned Samsung brand of air conditioner, 12.7 per cent of the respondents owned Oneida brand of air conditioner, 11.3 per cent of the respondents owned Carrier brand of air conditioner and 8 per cent of the respondents owned O General brand of air conditioner.

Sl. No	Know various types of air conditioners	No. of Respondents	Percentage
1.	Yes	113	75.3
2.	No	37	24.7
	Total	150	100

# ....

Source: Primary data

From the above table shows that 75.3 per cent of the respondents know the various types of air conditioners and 24.7 per cent of the respondents do not know the various types of air conditioners.

	Types of An Conditioner Turchased				
Sl. No	Types of air conditioner purchased	No. of Respondents	Percentage		
1.	Split air conditioner	62	41.3		
2.	Window air conditioner	68	45.3		
3.	Cassette Air Conditioner	20	13.4		
	Total	150	100		

Source: Primary data

Its shows that out of 150 respondents, 45.3 per cent of the respondents purchased window air conditioner, 41.3 per cent of the respondents purchased split air conditioner and 13.4 per cent of the respondents purchased cassette air conditioner.

	Reason For Buying A New Air Conditioner				
Sl. No	Reasons	No. of Respondents	Percentage		
1.	Less maintenance	78	54.9		
2.	More facilities	23	16.2		
3.	Low power consumption	19	13.4		
4.	Prestige	22	15.5		
	Total	142	100		

Source: Primary data

Its shows that 54.9 per cent of the respondents are buying a new air conditioner for less maintenance, 16.2 per cent of the respondents are buying a new air conditioner for more facilities, 15.5 per cent of the respondents are buying a new air conditioner for prestige and 13.4 per cent of the respondents are buying a new air conditioner for low power consumption.



Sl. No	Amount Spent For Monthly Maintenance	No. of Respondents	Percentage
1.	Rs.500 - Rs.1000	39	26.0
2.	Rs.1001 - Rs.1500	59	39.3
3.	Rs.1501-Rs.2000	32	21.3
4.	Above Rs.2000	20	13.4
	Total	150	100

Amount Spent For Monthly Maintenance

Source: Primary data

From this table shows that 39.3 per cent of the respondents spent between Rs.1001 - Rs.1500 for monthly maintenance of air conditioners, 26 per cent of the respondents spent between Rs.500 - Rs.1000 for monthly maintenance of air conditioners, 21.3 per cent of the respondents spent between Rs.1501 - Rs.2000 for monthly maintenance of air conditioners and 13.4 per cent of the respondents spent above Rs.2000 for monthly maintenance of air conditioners.

Sl. No	Factors	No. of Respondents	Percentage
1.	General quality	15	10.0
2.	Price	12	8.0
3.	Lower power consumption	11	7.3
4.	Comfort & Convenience	27	18.0
5.	Advertisement	17	11.3
6.	Resale value	09	6.0
7.	Better services	24	16.0
8.	Attractiveness	18	12.0
9.	Brand image	15	10.0
10.	Others	02	1.3
	Total	150	100

Factors Influenced To Buy The Particular Air Conditioner

The above table shows that 18 per cent of the respondents are influenced by comfort & convenience, 16 per cent of the respondents are influenced by better services, 12 per cent of the respondents are influenced by attractiveness, 11.3 per cent of the respondents are influenced by advertisement, 10 per cent of the respondents are influenced by brand image, another 10 per cent of the respondents are influenced by general quality, 8 per cent of the respondents are influenced by price, 7.3 per cent of the respondents are influenced by lower power consumption, 6 per cent of the respondents are influenced by resale value and 1.3 per cent of the respondents are influenced by other factors.

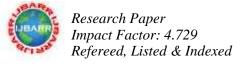
Sl. No	Advertisement Motivates To Purchase The Air Conditioners	No. of Respondents	Percentage
1.	Yes	85	56.7
2.	No	65	43.3
	Total	150	100

Advertisement Motivates To Purchase The Air Conditioners

Source: Primary data

Above table reveals that 56.7 per cent of the respondents have motivated by advertisement to purchase the air conditioners and the remaining 43.3 per cent of the respondents have not motivated by advertisement to purchase the air conditioners.

Sl. No	Opinion about price of air conditioner	No. of Respondents	Percentage
1.	Very High	60	40.0
2.	High	39	26.0
3.	Reasonable	19	12.7
4.	Low	21	14.0
5.	Very Low	11	7.3
	Total	150	100
Sour	ce: Primary data		



The above table shows that 40 per cent of the respondents opined that the price of air conditioner is very high, 26 per cent of the respondents opined that the price of air conditioner is high, 14 per cent of the respondents opined that the price of air conditioner is low, 12.7 per cent of the respondents opined that the price of air conditioner is reasonable and 7.3 per cent of the respondents opined that the price of air conditioner is very low.

In order to test whether there is any significant relationship between education of respondents and opinion about the price of air conditioner, Chi-square test was applied with the null hypothesis as "there is no significant relationship between opinion about the price of air conditioner and education of respondents". The below Table reveals the working of Chi-square test for opinion about the price of air conditioner and education of respondents.

Price of Air Conditioner And Education of Respondents			
Particulars	Value	df	p Value
Pearson Chi-Square	101.003	12	0.000
Likelihood Ratio	80.906	12	0.000
Linear-by-Linear Association	0.518	1	0.472
N of Valid Cases	150		
Source: Computed Data			

# **Opinion About The Price of Air Conditioner And Education of Respondents – Chi-Square Test**

Source: Computed Data

It discloses that the calculated chi square value for opinion about the price of air conditioner among different education of respondents is 101.003 which is significant at the 'p' value of 0.000. Since the 'p' value is less than 0.05, the null hypothesis is rejected. It is concluded that there is a significant relationship between opinion about the price of air conditioner and education of respondents.

# **Major Findings**

The findings of the study are as follows

- 1. Majority of the air conditioner customers are under the age group of 31-40 years.
- 2. 46 percentages of the respondents influences by the friends and relatives.
- 3. 45.3 percentages of the respondents were purchased by spouse.
- 4. 39.3 percentages of the respondents were reasons for summer use.
- 5. 25.3 percentages of the respondents were used by the LG brand.
- 6. 75.3 percentages of the respondents said to yes for various types of users.
- 7. 45,3 percentages of the respondents were purchased by window air conditioner.
- 8. 32 percentages of the respondents were using the 4-6 years.
- 9. 94.7percentages of the respondents were buy the new one.
- 10. 54.9 percentages of the respondents were buying a new air conditioner for less maintenance.
- 11. 62.5 percentages of the respondents were buying a pre-owned air conditioner for less price.
- 12. 39.3 percentages of the respondents were the amount of spend for monthly maintenance for Rs.1001 Rs.1500.
- 13. 43.3 percentages of the respondents were opinion about the maintenance cost was very high.
- 14. 63.3 percentages of the respondents were consider for the essentials.
- 15. 71.3 percentages of the respondents were paid by the cash.
- 16. 36 percentages of the respondents were finance sources through commercial bank.
- 17. 18 percentages of the respondents were factors influences by the comfort and convenience.
- 18. The application of **chi-square test**, it was found that opinion about the maintenance cost air conditioner. The level of perception is independent of age. The hypothesis was accepted.
- 19. 56.7 percentages of the respondents said to yes motivate by the advertisement.
- 20. 40 percentages of the respondents were opinion about the price for very high.
- 21. The application of chi-square test, it was found that opinion about the price of air conditioner. The level of perception is dependants of education. The hypothesis was rejected.
- 22. 32 percentage of the respondents were opinion about general quality is good.
- 23. The application of chi-square test, it was found that opinion about general quality of air conditioner. The level of dependents of monthly income. The hypothesis was rejected.
- 24. 52.7 percentage of the respondents said to yes recommend to others.
- 25. 56 percentages of the respondents said to yes by the satisfied with in air conditioners.
- 26. The level of satisfaction in purchase of air conditioner among different age groups of respondents is highly satisfied in LG and Voltas brands. It was proved by the results of "F" test.



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- 27. The level of satisfaction in purchases of air conditioner among different education of respondents is highly satisfied in O General and Blue Star brands. It was proved by the results of "F" test.
- 28. The level of satisfaction in purchases of air conditioner among different occupation of respondents is highly satisfied in Blue star brands. It was proved by the results of "F" test.
- 29. The level of satisfaction in purchases of air conditioner among different family members of respondents is highly satisfied in Blue star brands. It was proved by the results of "T" test.
- 30. The level of satisfaction in purchases of air conditioner among different monthly income of respondents is highly satisfied in Voltas brands. It was proved by the results of "F" test.
- 31. The level of satisfaction in purchases of air conditioner among different marital status of respondents is highly satisfied in carrier and whirlpool. It was proved by the results of "T" test.
- 32. The level of reasons for satisfaction about the air conditioner among different age of respondents is low price and comfort and convenience. It was proved by the results of "F" test.
- 33. The level of reasons for satisfaction about the air conditioner among different education of respondents is low power consumption and attractiveness. It was proved by the results of "F" test.
- 34. The level of reasons for satisfaction about the air conditioner among different age of respondents is low price and comfort and convenience. It was proved by the results of "F" test.
- 35. The level of reasons for satisfaction about the air conditioner among different occupation of respondents is low price, comfort and convenience, better service and general quality. It was proved by the results of "F" test.
- 36. The level of reasons for satisfaction about the air conditioner among different family members of respondents is low price and comfort and convenience. It was proved by the results of "F" test.
- 37. The level of reasons for satisfaction about the air conditioner among different monthly income of respondents is low price, comfort and convenience, attractiveness and general quality. It was proved by the results of "F" test.
- 38. The level of reasons for satisfaction about the air conditioner among different marital status of respondents is low power and general quality. It was proved by the results of "T" test.

## Recommendations

- 1. .Consumers are much concerned about less maintenance. So it is suggested that the manufacturer may spend enough money on research and development to improve the less maintenance of the air conditioner.
- 2. Advertisement may bring out the superiority of the products over other brands and the uniqueness of their brands. Advertisements may be attractive and influencing. In addition, they may be more informative to buyers.
- 3. It is also suggested that commercial bank loan facilities may be arranged on reasonable interest rate and minimum legal formalities to attract more customers to buy air conditioner.
- 4. Manufacturers may take care of the significant factors like price, maintenance etc., during product designing as well as product promotions.
- 5. It is suggested that brand image and brand loyalty could be boosted by selling quality air conditioner at reasonable price.

# Conclusion

Most of the respondents of kayalpattinam city are aware of many popular brands of air conditioner. They feel that brand name tells them something about product quality, utility, technology and the like. The manufacturer's pursuit for excellence has brought competing designs and models into the world of air conditioner in different brands. Their ventures in the field of file efficiency have strongly influenced the customers regarding the excellence of various brands. Thus the researcher concludes that advertisement and low power consumption have played a vital in motivating the respondents of various strata.

# Reference

- 1. Lilly.J (2010) "Customer Perception and Preference towards Branded Products with special references to Television Sets", Indian Journal of Marketing, Vol-5, No-10, p.84.
- 2. Selvakumar, M and Jegatheesan, K (2012) "Brand Preference: A Study with Reference To Washing Machines", Journal of Asian Research Consortium, Vol.1, Issue.5, pp.25-35.
- 3. Azamat Maksudunov (2012) "Family Influence on Consumer Home Appliances Purchasing Behavior: An Empirical Study in Kyrgyzstan", Journal of Consumer Psychology, Vol.12, Issue.2, pp.163–176.



Research Paper Impact Factor: 4.729 Refereed, Listed & Indexed

- Lhotakova, M and Olsanova, K (2012) "The Role of Positioning in Strategic Brand Management Case of Home Appliance Market", Global Journal of Commerce and Management Perspective, Vol.2, Issue.1, pp.71-81.
- 5. Ratika Rastogia and Sonia Chaudhary (2012) "Psychology and Buying Behaviour of Rural Consumers with Special Reference to Television, Washing Machine and Refrigerator in the Rural Areas of Meerut Region", International Journal of Trade and Commerce-IIARTC, Vol. 1, No.2, pp. 249-259.
- 6. Fatimah Furaiji, MałgorzataLatuszynska, Agata Wawrzyniak (2012) "An Empirical Study of the Factors influencing Consumer Behaviour in the Electric Appliances Market", Contemporary Economics, Vol.6, Issue.3, 2012, pp.76-86.
- ArashShahin, Ali Kazemi and HamzehKazemiMahyari (2012) "How Consumer's Perception of Country of Origin Affects Brand Equity: A Case Study in Iran", Middle-East Journal of Scientific Research, Vol.12, Issue.6, pp.878-885.
- 8. Padmaja K.Manoharan, R.Vijayalakshmi (2012) "Role of Family Members in the Purchase of Television", ZENITH International Journal of Multidisciplinary Research, Vol.2, Issue 5, pp.99-123.
- 9. Seyed Fathollah Amiri Aghdaie (2012) "An Analysis of Impact of Brand Credibility and PerceivedQuality on Consumers' Evaluations of Brand Alliance", International Journal of Marketing Studies, Vol.4, No.2, 93-102.
- Rajendraprasad, K. Hanagandi, Filipe Roduguese Melo and Shrinivas Patil (2012) "A Relative Analysis on Customers' Satisfaction of Microwave Oven: Study on Select Companies", International Journal of Multidisciplinary Research, Vol.2, Issue.2, pp. 343-356.
- 11. Mohammad Hussein Askariazad and Maria Yousefian (2012) "A Comparative Study of Consumer Attitudes in Iran and Dubai towards Marketing Mix Elements for Small Home Appliances", Global Journal of Management and Business Research, Volume 12 Issue 8, pp.99-105.
- 12. Janaki, P and Premila, S (2012) "A Study on Customer Involvement in Purchase of Home Appliance", International Journal of Marketing and Technology, Vol.2, Issue.1, pp.170-180.
- Janaki, P and Shanthi, P (2013) "Marketing Stimuli In Purchase Of Home Appliances From Customer Perspectives", International Journal of Sales & Marketing Management Research and Development (IJSMMRD), Vol. 3, Issue 2, pp. 23-30.
- 14. Shahram Jenabi, Seyed Yahya Seyed Danesh and Minoo Yousefi (2013) "Examining the effect of Brand dimension (trademark) on home appliances consumers' behavior Case study: LG brand in Rasht city", International Research Journal of Applied and Basic Sciences, Vol.4, Issue.7, pp.1894-1900.
- 15. Senthil Kumar, M.J and Sadeesh Kumar, K and Nagarajan, N.R (2013) "A Study on Consumer's Attitudes towards Washing Machine", IJEMR, Vol.3, Issue.1, pp.22-28
- 16. Rajarajan, M and Priyanga, T (2013) "Consumer Behaviour Towards Selected Household Appliances in Ramanathapuram District", Primax International Journal of Commerce and Management Research, Vol. 1, Issue No. 1, pp.1-10.
- Vijayalakshmi, S And Mahalakshmi, V (2013) "An Impact Of Consumer Buying Behavior In Decision Making Process In Purchase Of Electronic Home Appliances In Chennai (India): An Empirical Study", Elixir Marketing Management, Pp.15267-15273.
- 18. Srinivasa Rao Kasisomayajula (2013) "A Study on Customer Preference of LG Lap-Top",
- 19. International Journal of Computational Engineering Research (ijceronline.com) Vol. 3 Issue. 3, pp.234-237.
- 20. Kalaiselvi, K.T and Muruganandam, D (2013) "Consumer Attitude Towards Promotional Schemes and Influence of Brand On Purchasing Home Appliances", International Journal Of Scientific Research, Vol.2, Issue. 6, pp.337-339.
- 21. Qianyu Dong and Tohru Futawatari (2013) "The Study of Low-Carbon Policy Influence on Consumers' Energy Efficiency Household Appliance Purchase Behavior", International Journal of Chem Tech Research, Vol.5, No.2, pp 849-857.
- 22. Paramanand Dasar, Hundekar, S.G. and Mallikarjun Maradi (2013) "Consumer Behaviour on Consumer Durables With Reference To Bijapur District", Global Journal of Commerce and Management Perspective, Vol. 2, No.1, pp.36-46.
- 23. Aamir Hasan (2014) "Consumer Brand Preference for Consumer Durable Goods With Reference to Lucknow District "International Journal of Economice & Management Sciences, Volume 4, Issue 1, Pp.1-7.

# Website

- 1. https://en.wikipedia.org/wiki/Air\_conditioning.
- 2. https://www.brighthubengineering.com/hvac/897-types-of-air-conditioning-systems/.
- 3. https://www.air-n-water.com/.