A Study On Consumer Preference Towards Purchasing Air-Condition In Surat City

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Abstract
For hot climate of India, air conditioners have become the need of the modern-day life in contrast to the earlier perception is a luxury product. Buyers search a lot of information on the available brands in the market during their purchase. During selection of any brand and purchase a lot of factors are influenced by the consumer in this activity. The main objective of this study was to identify most important factors consumers were looking for while purchasing A.C. With the help of literature review, eight factors were identified. The research was conducted in Surat City with Sample size of 150 respondents. Non Probability convenience sampling was used and a structured questionnaire was used to collect data.

Key-Words: Air-Condition, hot & humid

Introduction to Air-Condition

History
Air conditioning actually has roots in second century China, where an inventor named Ding Huane crafted a manually powered rotary fan. The concept of air cooling also intrigued the great American inventor and statesman Benjamin Franklin, who in 1758 conducted experiments with evaporation and alcohol to attain freezing temperatures.

The first modern air conditioner was invented in 1902 Havillard Carrier, a skilled engineer who began experimenting with the laws of humidity control to solve an application problem at a printing plant in Brooklyn, NY.

Air conditioning is a system used to cool down the temperature in an inside space by removing the existing heat and moisture from the room. Essentially, they work by taking warm air into a system and dispersing cold air but there is much more to this process. The air conditioner in a central heating and cooling system provides cool
air through ductwork inside your home, by providing a process that draws out the warm air inside, removing its heat.

India is one of the fastest growing economies in the world having GDP growth rate above 7%. It is also having hot tropical climate where the temperature easily rises up to 45 degrees Celsius in summer. So, people manage this weather condition by 2 options– air conditioners and air coolers. Constantly rising temperature along with the increasing purchasing power, all households is helping to increase the growth of air conditioner market. The pre-liberalization era of Indian economy have major Indian companies like Godrej, Videocon, Voltas have the major market share but after liberalization, many foreign players such as LG, whirlpool, Samsung, IFB, Daikin, Mitsubishi, Hitachi entered into the Indian market and create a dramatic change in the Indian market. Now Indian AC market is highly competitive with the coming of domestic, international and unorganized market participant.

Consumer preferences are defined as the subjective (individual) tastes, as measured by utility, of various bundles of goods. They permit the consumer to rank these bundles of goods according to the levels of utility they give the consumer. Consumer preference is defined as the subjective tastes of individual consumers, measured by their satisfaction with those items after they’ve purchased them. This satisfaction is often referred to as utility. Consumer value can be determined by how consumer utility compares between different items. Consumer preferences can be measured by their satisfaction with a specific item, compared to the opportunity cost of that item since whenever you buy one item; you forfeit the opportunity to buy a competing item.

**Literature Review**

One of the research studies conducted on consumer preference towards purchasing air-conditioners focus to analyze the factors influencing consumer decision making in this specific product category (Chang et al., 2005). The study examined various factors such as brand reputation, price, energy efficiency, functionality, and aesthetics. The findings of the study showed that consumers considered energy efficiency and functionality as the most important factors when purchasing an air-conditioner. Additionally, brand reputation was also found to have a significant impact on consumer preference. Another study focused on understanding the relationship between design attributes, specific emotions, and consumers' willingness to pay for air-conditioners. The study found that design attributes such as aesthetics and environmental sustainability have a positive effect on consumers' willingness to pay for air-conditioners (Chitturi, 2018). Furthermore, the study highlighted the importance of firms developing expertise in understanding and leveraging these relationships to maximize profit margins (Chitturi, 2018). These findings suggest that consumers place a great emphasis on the energy efficiency, functionality, and brand reputation when making a purchase decision for air-conditioners. The research also found that aesthetics and environmental sustainability are important design attributes that can influence consumers' willingness to pay for air-conditioners. Overall, the literature review suggests that factors such as energy efficiency, functionality, brand reputation, aesthetics, and environmental sustainability play a significant role in shaping consumers' preferences and decision-making process when purchasing air-conditioners. In the
In the consumer durable industry, companies should prioritize factors such as energy efficiency, functionality, brand reputation, aesthetics, and environmental sustainability to cater to consumer preferences and gain a competitive edge (Schönsleben et al., 2010). In summary, in the consumer durable industry, companies should prioritize factors such as energy efficiency, functionality, brand reputation, aesthetics, and environmental sustainability to cater to consumer preferences and gain a competitive edge in the market (Mariadoss et al., 2011). In summary, in the consumer durable industry, companies should prioritize factors such as energy efficiency, functionality, brand reputation, aesthetics, and environmental sustainability to cater to consumer preferences and gain a competitive edge in the market (Kushwaha & Sharma, 2016). In summary, in the consumer durable industry, companies should prioritize factors such as energy efficiency, functionality, brand reputation, aesthetics, and environmental sustainability to cater to consumer preferences and gain a competitive edge in the market. In summary, in the consumer durable industry, companies should prioritize factors such as energy efficiency, functionality, brand reputation, aesthetics, and environmental sustainability to cater to consumer preferences and gain a competitive edge in the market. In summary, in the consumer durable industry, companies should prioritize factors such as energy efficiency, functionality, brand reputation, aesthetics, and environmental sustainability to cater to consumer preferences and gain a competitive edge in the market.

From the literature review, factors such as looks, price, cooling speed, better service, maintenance cost, company image, status and pride, energy efficiency rating have been taken into study.

RESEARCH METHODOLOGY

Objectives of Study

- To study impact of Price, Brand Name, Quality and after sales Service while taking decision to purchase Air-Condition.
- To Study impact of Demographic Factors on Purchase of Air-Condition
- To examine the impact of various types of air conditioners, including split, cassette, and window, on consumer buying preferences.
- To identify the most popular air conditioner brands among consumers and the factors that influence their brand preference.
- To evaluate the importance of different features, such as inverter technology, star ratings, and ISEER ratings, in the purchasing decision of air conditioners.
HYPOTHESIS TESTING

H₀: Preference of AC is independent of Age.

H₀: Preference of AC is independent of Income.

H₀: Preference of AC is independent of Gender.

H₀: Preference of AC is independent of Occupation

For the present study descriptive research design has been used. Both Primary and Secondary data has been used to conduct present study. Primary data has been collected through a structured Questionnaire. The first section of questionnaire was related to demographic profile of respondents. Second section was related to questions regarding preference of brand of A.C, type of A.C, preference related to capacity of A.C, preference related to various features of A.C and so on. The researcher has used non-probability convenience sampling method to collect data. The responses were collected from Surat city. Initially pilot testing of 30 respondents was done and on the basis of pilot testing necessary changes have been made in questionnaire and data of 150 respondents were collected through online survey. Appropriate data analysis tools were used to analyze the data.

Findings:

- Out of total respondents 65 percent of respondents were male in Surat City.
- 54 percent of respondents were from age group of 29 to 39 years in Surat City.
- 26 percent of respondents were housewives in Surat City.
- 13 percent of respondents having annual income above Rs.5 lakh in Surat City.
- 34 percent of respondents prefer to have Split A.C followed by window A.C (33.33 percent) in Surat City
- Respondents preferred to purchase LG as a brand to purchase AC in Surat City.
- 48% of the respondents choose the range between 35000 to 50000 in Surat City.
- 55 percent of respondents prefer to purchase inverter AC in Surat City.
- 52 percent of user prefers to purchase AC as it is necessary for them in Surat City.
- 83 percent of respondents prefer to buy 4 star of more AC in Surat City.
- 36 percent of respondents prefer to purchase 1.5–ton AC capacity in Surat City.
- 80 percent respondents prefer to get their Air Conditioner serviced from Authorized technicians in Surat City.

HYPOTHESIS TESTING

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<th>Factor</th>
<th>p-value at 95 percent Confidence level</th>
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<td>Gender</td>
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**Conclusion**

- Purchase of A.C is independent of Age, Occupation and gender in Surat City.
- Consumers of Surat City having income of above Rs. 50,000 per month prefer to purchase AC compare to other income group.
- Energy efficiency, low maintenance and better service are most important factors which contribute to purchase of Air-condition from consumer of Surat City.
- Consumers prefer to service Air Condition from Authorized technician compare to local technician.
- Consumers of Surat City prefer to purchase 1.5 to 2 ton capacity of Air Condition.
- Approx.15 percent of consumers of Surat City don’t have knowledge of ISEER.
- LG is the most preferred Air Condition Brand among consumers of Surat City.

**Bibliography**
