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Influence of Marketing Strategies on Buying Behaviour of Customers

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Abstract

This study analyzes the influence of marketing strategies on customer buying behaviour with reference to Voltas Limited. It focuses on key elements such as product quality, pricing, promotion, and distribution. The study highlights how Voltas' customer-centric approach, strong brand image, and wide product availability impact consumer decisions. The findings provide insights into how effective marketing strategies help Voltas attract, satisfy, and retain customers in a competitive market.This study examines the need to understand customer buying behaviour in the competitive consumer durables market with reference to Voltas Limited. It evaluates the effectiveness of marketing strategies such as pricing, branding, advertising, and digital promotion. The study also analyzes the influence of demographic factors, brand image, and sales promotions on customer decisions. This study adopts a descriptive research design to analyze customer buying behaviour and the effectiveness of marketing strategies. Data is collected using questionnaires through Google Forms, supported by both primary and secondary sources. A convenience sampling method under non-probability sampling is used, with a sample size of 137 respondents determined through a pilot study.

Keywords: Smart Air Conditioners, Sustainability, Energy Efficiency, Customer Value, Green Technology
Traditional air conditioners, while effective in providing comfort, often consume large amounts of energy and rely on refrigerants that can harm the environment. This has created an urgent need for more sustainable.

1.0 Introduction

Voltas Limited, a leading Indian multinational company and a part of the Tata Group, operates primarily in air conditioning, refrigeration, and engineering solutions. Over the years, Voltas has established a strong brand presence in the Indian market through innovative products, competitive pricing, extensive distribution networks, and impactful advertising campaigns. The company's focus on quality, energy efficiency, after-sales service, and customer satisfaction has significantly influenced consumer preferences, especially in the cooling solutions segment.

This study aims to analyze the marketing strategies adopted by Voltas Limited and examine their impact on customer buying behaviour. By understanding the relationship between marketing practices and consumer decision-making, the study provides insights into how Voltas attracts, retains, and satisfies its customers in a dynamic market environment.

Voltas Limited, a part of the Tata Group, has established itself as India's largest air conditioning company with a strong presence in both domestic and international markets. Founded in 1954 and headquartered in Mumbai, the company offers a wide range of products including air conditioners, air coolers, refrigerators, washing machines, and other home appliances. Its long-standing reputation for quality, reliability, and value for money has made it a trusted brand among Indian consumers.

Promotion is also a key driver of consumer behaviour, and Voltas effectively uses both traditional and digital marketing channels to communicate with its target audience. The company invests in television advertisements, print media, social media campaigns, and online marketing to create brand awareness and influence consumer perceptions.

Additionally, the strong association with the Tata Group enhances brand credibility and trust, which are critical factors in the decision-making process of customers.

Consumer buying behaviour is influenced by a combination of psychological, social, cultural, and economic factors. Marketing strategies interact with these factors to shape consumer attitudes, preferences, and intentions. For instance, promotional offers, discounts, and seasonal campaigns can encourage customers to make purchases, while product quality and brand image can foster long-term loyalty. In the case of Voltas, its focus on energy-efficient products and innovative technologies appeals to environmentally conscious consumers, thereby impacting their buying decisions.

2.0 Problem Statement and Research objectives

2.1 Problem Statement

The rapid increase in the use of air conditioners, particularly in countries like India, has raised serious concerns about energy consumption and environmental sustainability, as traditional AC systems consume high electricity and contribute to carbon emissions and environmental degradation. Although smart air conditioners with advanced features such as inverter technology, automation, and IoT connectivity are designed to reduce energy usage and promote eco-friendly practices, there is still limited consumer awareness and understanding of their long-term sustainability benefits. In the case of Voltas Limited, while the company has introduced energy-efficient and environmentally responsible smart ACs, it remains unclear how effectively these products contribute to sustainability in real-world usage and whether consumers fully recognize and adopt these benefits. Therefore, the key problem lies in assessing the actual impact of smart air conditioners on sustainability at Voltas and identifying the gaps in consumer perception, awareness, and adoption that may hinder their effectiveness. Additionally, factors such as high initial cost, lack of proper knowledge about smart features, and limited accessibility in certain markets may restrict widespread adoption. There is also a need to evaluate whether the energy-saving claims made by manufacturers translate into measurable environmental benefits. Furthermore, consumer behaviour and usage patterns may influence the actual efficiency of these systems, while the absence of clear communication and effective marketing strategies can reduce customer trust and interest in sustainable products. Hence, understanding these challenges is essential to bridge the gap between technological innovation and practical sustainability outcomes.

In addition, the lack of personalized user guidance and inadequate product demonstration at the point of sale can lead to confusion and underutilization of smart features. Many consumers may not fully understand how to optimize settings for maximum energy efficiency, which reduces the expected sustainability benefits. The influence of socio-economic factors such as income level, education, and digital literacy also plays a crucial role in adoption and effective usage. Moreover, inconsistent after-sales service and limited technical support in certain regions can negatively affect customer satisfaction and long-term usage. There is also a need to study the environmental impact across the entire product lifecycle, including manufacturing, transportation, and disposal stages. The absence of real-time feedback systems that clearly show energy savings may further limit user motivation. Additionally, external factors such as fluctuating electricity prices and varying climatic conditions can affect both usage patterns and perceived value. Addressing these issues is essential to ensure that smart air conditioners deliver consistent, measurable, and meaningful sustainability outcomes in practical scenarios.

Research objectives

- To identify the influence of demographic variables that influence customers preference for Voltas products.
- To analyze the impact of brand image and pricing strategies on customer buying behaviour towards Voltas products.
- To know the impact of advertising and sales promotional activities of Voltas on customer purchase decisions and

loyalty.

- To study the role of digital marketing strategies on buying behaviour of customers.

3.0 Review of literature

1. EDMOND CHEWANI BAWAH (2025) This research explored how public institutions in Ghana communicate with citizens, using VRA/NEDCO in Techiman as the case. It examined interactions among VRA/NEDCO, PURC, and community consumers, focusing on channels used, PR models applied, and customer perceptions. Using interviews and focus groups, the study found communication relied mainly on one-way public information rather than two-way symmetrical dialogue, limiting service improvement and participatory engagement.

2. MOHAMMED MAJEED , ANNAS ISSAH,DAVID INUSA (2023) Public procurement is vital for government service delivery. Study examined how ICT affects procurement performance using quantitative data from 350 purposively selected respondents via self administered questionnaires, analyzed in SPSS 25 and AMOS
24. IoT, RPA, AI blockchain significantly improved efficiency buyer–supplier interactions, though impact at VRA and NEDCo remained limited.

3. MAAME ESI ESHUN, JOE AMOAKO – TUFFOUR(2019)Ghana's power sector evolved from diesel and isolated systems to hydropower after the Akosombo Dam and now thermal plants using gas or oil. Persistent power crises—marked by rationing, industrial slowdown, and social disruption—threaten growth. Despite universal access goals, demand–supply gaps, regulatory weaknesses, and institutional constraints hinder reliable, adequate electricity provision.

4. DAVID ESHUN YAWSON, FRED A YAMOAH (2018) Driven by expanding middle-class populations and technologies like RFID, emerging economies are entering a new era of marketing. However, marketing education has not kept pace with retail innovation. In countries such as Ghana, loyalty card systems are reshaping competition, data-driven strategies, and retail development, marking the early stage of modern supermarket marketing.

4.0 Research Methodology 4.1 Research design

The rapid increase in the use of air conditioners, particularly in countries like India, has raised serious concerns about energy consumption and environmental sustainability, as traditional AC systems consume high electricity and contribute to carbon emissions and environmental degradation. Although smart air conditioners with advanced features such as inverter technology, automation, and IoT connectivity are designed to reduce energy usage and promote eco-friendly practices, there is still limited consumer awareness and understanding of their long-term sustainability benefits. In the case of Voltas Limited, while the company has introduced energy-efficient and environmentally responsible smart ACs, it remains unclear how effectively these products contribute to sustainability in real-world usage and whether consumers fully recognize and adopt these benefits. The key issue lies in evaluating the actual impact of these systems and identifying gaps in consumer perception, awareness, and adoption that may limit their effectiveness. Factors such as high initial cost, lack of knowledge about smart features, limited accessibility, and differences in income and climate conditions further influence adoption. In addition, consumer behaviour and usage patterns can affect the actual efficiency of smart ACs, while the absence of clear communication and effective marketing strategies may reduce customer trust and interest. There is also a lack of standardized measures to assess sustainability performance and limited research on long-term usage, maintenance challenges, and after-sales support. Moreover, the gap between technological advancement and user adaptability, along with price sensitivity and low awareness at the practical level, continues to restrict the widespread acceptance of these products, making it essential to address these issues to ensure that smart air conditioners deliver meaningful and measurable sustainability outcomes.Furthermore, external factors such as inconsistent power supply, rising electricity tariffs, and regional climate variations can significantly influence the actual performance and perceived value of smart ACs. The role of installation quality and proper maintenance practices is also critical, as inefficient setup can reduce energy-saving benefits. In many cases, consumers may purchase smart ACs for comfort and convenience rather than sustainability, which weakens the intended environmental impact. There is also a need to examine the credibility of energy ratings and labels from the consumer's perspective, as confusion lack.

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4.2 Empirical validation

This paper adopts a descriptive and analytical approach to examine how smart air conditioners support sustainability, with special reference to Voltas Limited. A quantitative method is used, where primary data is collected through structured questionnaires from 100–150 respondents selected using convenience sampling, along with support from secondary sources such as journals and company reports. Statistical tools like percentage analysis, mean, Chi-square test, and correlation are applied using IBM SPSS to analysis the data effectively. The empirical validation is carried out by testing the relationship between smart AC usage and sustainability outcomes, and the findings reveal a positive association between awareness of smart features and energy-efficient behaviour. It is observed that users of smart air conditioners tend to reduce electricity consumption and environmental impact, although differences across demographic groups highlight the need for greater awareness and accessibility to strengthen sustainable practices. IN addition, the study highlights that consumers who actively use smart features such as scheduling and remote control tend to achieve higher energy savings compared to those who use basic functions only. The results also indicate that education level and digital familiarity play an important role in the effective utilization of smart AC features. It is further observed that many users are not fully aware of all available functions, leading to underutilization of the product's sustainability potential. The findings suggest that improved customer education and product demonstrations can significantly enhance sustainable usage behaviour. Moreover, the study emphasizes the importance of user-friendly design and simplified interfaces in encouraging wider adoption. Finally, the research indicates that continuous innovation and effective communication strategies by companies like Voltas Limited can further strengthen the link between smart technology and sustainability outcomes.

Results and Discussion

5.0 Correlation Analysis

Table 5.1: Correlation Analysis of Returns

		Gender	
12. sustainability Correla2on ini2a2ves influence your decision to purchase its smart AC?	Pearson	1	.261**
	Sig. (2-tailed)		.001
	N	153	153
Gender	Pearson Correla2on	.261**	1
	Sig. (2-tailed)	.001	
	N	153	153

Inference:

The correlation result shows a positive and significant relationship, as the p-value (0.001) is less than 0.05. This indicates that gender has a meaningful influence on how sustainability initiatives affect purchase decisions. Overall, respondents' buying decisions toward Voltas smart ACs are influenced by sustainability factors, with slight variation across gender

Discussion: The correlation analysis reveals a positive and significant relationship between gender and the influence of sustainability initiatives on purchase decisions. This indicates that gender plays an important role in shaping consumer responses toward sustainability features. Since the relationship is statistically significant, it can be understood that sustainability initiatives do influence purchasing behaviour. However, the variation across gender is moderate, suggesting that while both groups are influenced, their perceptions differ slightly. Overall, sustainability remains an

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important factor affecting consumer decisions toward smart air conditioners.

5.1 : Chi-square Analysis of Returns

Chi square analysis

	Value	df	Asympto/c Significance (2sided)
Pearson Chi-Square	157.563[a]	15	.000
Likelihood Ra/o	16.645	15	.341
N of Valid Cases	153		

Inference:

The Chi-Square test shows that the significance value (0.000) is less than 0.05, so the null hypothesis is rejected. This indicates that there is a meaningful relationship between gender and awareness of sustainability features of Voltas Smart ACs. However, since many expected values are low, the results should be interpreted carefully

Discussion: Chi-Square analysis indicates a statistically significant relationship between gender and awareness of sustainability features of smart air conditioners. Since the significance level is lower than the standard threshold, the null hypothesis is rejected. This suggests that awareness of sustainability initiatives varies across gender groups. However, the presence of low expected frequencies in some cells implies that the results should be interpreted with caution. Overall, while a relationship exists, the strength and reliability of the association may be slightly affected by data distribution limitations.

6.0 Implications of Future Research

The findings of this study open several meaningful directions for future research on how smart air conditioners support sustainability, particularly with reference to Voltas Limited. Future studies can expand the sample size and include respondents from different geographic regions to improve the generalizability of results and capture diverse consumer behaviours. Longitudinal research can be conducted to understand how smart AC usage impacts energy consumption and environmental sustainability over time rather than at a single point. Researchers can also explore the integration of advanced technologies such as artificial intelligence, machine learning, and IoT in enhancing the efficiency and performance of smart air conditioners.Further research can focus on comparative analysis between different brands to identify best practices and competitive advantages in sustainable cooling solutions. The role of pricing strategies, affordability, and financing options in influencing adoption of smart ACs can also be examined in detail. Another important area is to study the effectiveness of awareness campaigns and marketing communication in shaping consumer perception and encouraging eco-friendly purchasing behaviour.

In addition, future studies can evaluate the impact of government policies and regulatory frameworks, especially initiatives led by the Bureau of Energy Efficiency, in promoting energy-efficient appliances. Researchers can also investigate the lifecycle environmental impact of smart air conditioners, including manufacturing, usage, and disposal stages, to provide a more holistic view of sustainability. Behavioural studies can be conducted to understand psychological factors, habits, and resistance to adopting smart technologies, particularly in semi-urban and rural areas.

Moreover, future research can explore the role of smart ACs in smart homes and green buildings, linking them with broader sustainability ecosystems. The potential for renewable energy integration, such as solarpowered air conditioning systems, can also be studied. Finally, qualitative research methods like interviews and case studies can be used to gain deeper insights into consumer experiences, challenges, and expectations, thereby helping companies like Voltas Limited design more effective and sustainable solutions in the future.

Additionally, future research can examine the impact of after-sales service quality and maintenancesupport on long-term customer satisfaction and sustainable usage. The role of digital platforms and mobile applications in improving user engagement and energy monitoring can also be explored. Studies can further analysis the gap between perceived and actual energy savings to understand consumer trust in smart technologies. Research can also focus on the environmental awareness levels among different age groups and their influence on adoption decisions. Another area is to evaluate the effectiveness of training programs provided by companies to educate users about smart features. The influence of cultural and social factors on sustainable consumption behaviour can also be studied in depth. Finally, future studies can develop new models and frameworks to measure the overall sustainability performance of smart air conditioners more accurately

7.0 Conclusion

The study on the marketing strategies of Voltas Limited and their impact on customer buying behaviour highlights the significant role of effective marketing in influencing consumer decisions in the competitive consumer durables industry. Voltas, being a part of the reputed Tata Group, has successfully established a strong brand image through its focus on quality, innovation, energy efficiency, and customer satisfaction. The findings of the study reveal that factors such as price affordability, brand reputation, and promotional activities play a crucial role in shaping customer preferences. A majority of respondents are price-sensitive and follow budget-based purchasing decisions, indicating the importance of competitive pricing and value-for-money offerings. At the same time, brand image and trust significantly influence buying behaviour, which reflects the strength of Voltas as a reliable and recognized brand in the market. The study also shows that advertising and digital marketing have a moderate but growing impact on customer awareness and purchase decisions.

improve product design. There is also a growing opportunity to integrate smart ACs with renewable energy sources for enhanced sustainability. Overall, a combined effort from companies, consumers, and policymakers is essential to maximize the sustainability benefits of smart air conditioners. The study also highlights that smart features and convenience are key factors influencing purchase decisions, while sustainability is gradually becoming an important consideration. This study concludes that smart air conditioners play an important role in promoting sustainability by reducing energy consumption and environmental impact, especially in a growing market like India. Voltas Limited has been effective in implementing its marketing strategies, but continuous innovation, improved customer service, and enhanced digital marketing efforts are essential to maintain and strengthen its competitive position. By aligning its strategies with evolving customer expectations, Voltas can achieve higher customer satisfaction, increased market share, and long-term business growth.

References

1. Suvarna Raj, B., & Venkatesh, S. N. (2024). A Study on Consumer Buying Behaviour in the Retail Sector. Journal of Informatics Education and Research.

2. Yadav, D., & Bathla, G. (2022). Impact of Marketing Strategies on Consumer Buying Behaviour. Research Review International Journal.

3. Pavithra, B., et al. (2025). Consumer Buying Behaviour towards Digital Marketing. International Journal of Advanced Research and Review.

4. Singh, R. P., & Sewal, K. C. (2023). Consumer Buying Behaviour & Marketing Strategy of Online Shopping. IJESAR.