

A Study on the Role of Digital Marketing Strategies in Enhancing B2c Sales of Electric Bikes: Evidence from Amravati City

Vedant Kakade¹, Prof. P. M. Wasankar²

¹PG Student, Department of Business Administration,

Sipna College of Engineering & Technology, Amravati, Maharashtra, India vedantkakade1208@gmail.com

²Assistant Professor, Department of Business Administration,

Sipna College of Engineering & Technology, Amravati, Maharashtra, India pmwasankar@sipnaengg.ac.in

ABSTRACT

Consumer buying behaviour in the automobile sector has changed rapidly due to the growth of digital marketing and increasing awareness about eco-friendly transportation. Electric bikes have emerged as a popular alternative to conventional vehicles, especially in urban areas. This study focuses on analyzing the role of digital marketing strategies in enhancing Business-to-Consumer (B2C) sales of electric bikes in Amravati City. The main objective of the study is to understand how digital marketing tools influence consumer awareness, perception, and purchase decisions.

The study examines various digital marketing strategies such as social media marketing, online advertisements, company websites, influencer marketing, search engine optimization, and online customer reviews. These tools help manufacturers and dealers to reach a wider audience, promote product features, and educate consumers about the benefits of electric bikes. The study finds that social media platforms and online advertisements play a significant role in attracting young and environmentally conscious consumers.

The study further reveals that consumer response to digital marketing varies according to age, income level, and digital awareness. While younger consumers are more influenced by social media campaigns, other consumers rely on websites and online reviews for decision-making. The study concludes that effective digital marketing strategies significantly contribute to increasing awareness and B2C sales of electric bikes in Amravati City.

INTRODUCTION

Digital marketing refers to the use of online platforms, digital media, and internet-based tools to promote products and services to consumers. In today's competitive business environment, digital marketing plays a very important role in influencing consumer buying behaviour. With the rapid growth of technology and internet usage, consumers increasingly depend on digital platforms to search for information, compare products, read reviews, and make purchase decisions. Understanding the role of digital marketing has become essential for businesses, especially in the B2C sector.

In recent years, the automobile industry in India has experienced significant changes due to increasing environmental concerns, rising fuel prices, and government support for electric vehicles. Electric bikes have emerged as an eco-friendly and cost-effective mode of transportation, particularly in urban areas. In cities like Amravati, awareness about electric bikes is gradually increasing, and consumers are showing interest in adopting sustainable mobility solutions.

The growth of digital marketing strategies such as social media marketing, online advertisements, company websites, search engine optimization, influencer marketing, and customer reviews has transformed the way electric bike companies communicate with consumers. These digital tools help in creating product awareness, explaining features and benefits, and building trust among potential customers. Digital marketing also enables companies to directly interact with consumers and influence their purchase decisions.

Consumer response to digital marketing varies depending on factors such as age, income level, digital

literacy, lifestyle, and environmental awareness. While younger consumers are more influenced by social media campaigns and online promotions, other consumers rely on websites and online reviews for gathering information. At the same time, some consumers still prefer traditional methods of marketing for making purchase decisions. In this context, it becomes very important to study the role of digital marketing strategies in enhancing B2C sales of electric bikes in Amravati City. Such a study helps in understanding consumer awareness, preferences, and buying behaviour related to electric bikes. It also helps manufacturers, dealers, and marketers to design effective digital marketing strategies to increase sales and customer engagement.

OBJECTIVES

1. To study and understand the impact of digital marketing strategies on the buying behaviour of consumers towards electric bikes.
2. To analyze the role of digital marketing in enhancing B2C sales of electric bikes in Amravati City.
3. To identify the major digital marketing tools such as social media, online advertisements, websites, and customer reviews that influence consumer purchase decisions.
4. To examine the effectiveness of digital marketing strategies in creating awareness and promoting electric bikes among consumers.
5. To understand how demographic factors such as age, income, education, and digital awareness affect consumer response towards digital marketing of electric bikes.

REVIEW OF LITERATURE

3.1 National Studies

Kotler et al. (2017) highlighted that digital marketing enables businesses to build long-term relationships with customers by offering personalized content and interactive communication. Chaffey and Ellis-Chadwick (2019) emphasized the role of social media and search engine marketing in influencing consumer purchase decisions.

Sharma and Verma (2020) studied the impact of digital marketing on consumer buying behaviour in India and found that online reviews and social media advertisements significantly influence

product evaluation. Gupta and Singh (2021) examined digital marketing strategies in the automobile sector and observed that digital campaigns enhance brand awareness and customer engagement.

3.2 International Studies

Mangold and Faulds (2009) stated that social media has become a hybrid element of the promotion mix, allowing consumers to share experiences and opinions. Kaplan and Haenlein (2010) emphasized that digital platforms enable two-way communication, increasing trust and credibility. Recent studies by OECD (2022) suggest that digital marketing is particularly effective in promoting sustainable products, including electric vehicles, by educating consumers about environmental benefits and cost savings.

3.3 Research Gap

The review of literature indicates extensive research on digital marketing and consumer behaviour; however, limited studies focus on the role of digital marketing in promoting electric bikes in semi-urban Indian cities. Moreover, there is a lack of empirical studies examining the impact of digital marketing strategies on B2C sales of electric bikes at the city level. The present study seeks to fill this gap.

PROBLEM DEFINITION

Despite the increasing use of digital marketing strategies by electric bike companies, their effectiveness in influencing consumer purchase decisions in semi-urban markets like Amravati City remains unclear.

Research Problem:

To study the role of digital marketing strategies in enhancing B2C sales of electric bikes in Amravati City.

RESEARCH METHODOLOGY

Research methodology refers to the systematic process adopted to conduct a research study in order to achieve the stated objectives. It explains the research design, sources of data, sampling technique, sample size, and

tools used for data analysis. The present study is descriptive in nature and is designed to analyze the role of digital marketing strategies in enhancing B2C sales of electric bikes in Amravati city.

1. Research Design

The study is based on a descriptive research design, as it aims to describe and analyze consumer awareness, perception, and buying behaviour towards electric bikes with respect to digital marketing strategies such as social media marketing, online advertisements, websites, and promotional campaigns.

2. Sources of Data

The study is based on both primary data and secondary data.

Primary Data:

Primary data was collected directly from consumers and potential buyers of electric bikes in Amravati city using a structured questionnaire through Google Forms.

Secondary Data:

Secondary data was collected from books, research journals, websites, reports, articles, and previous studies related to digital marketing, consumer behaviour, and electric vehicle marketing.

3. Sample Size

The sample size for the study consists of 50 respondents. The respondents belong to different age groups, income levels, educational backgrounds, and occupations, ensuring diversity in opinions and responses.

4. Sampling Method

The study adopts a convenience sampling method, where respondents were selected based on their easy accessibility and willingness to participate in the survey.

5. Tools for Data Analysis

The data collected through questionnaires was analyzed using simple statistical tools such as percentage analysis, tables, charts, and graphs to interpret consumer responses effectively.

HYPOTHESIS OF THE STUDY

H0 (Null Hypothesis):

There is no significant impact of digital marketing strategies on B2C sales of electric bikes in Amravati city.

H1 (Alternative Hypothesis):

There is a significant impact of digital marketing strategies on B2C sales of electric bikes in Amravati city.

HYPOTHESIS TESTING

H0: There is no significant impact of digital marketing strategies on B2C sales of electric bikes.

H1: There is a significant impact of digital marketing strategies on B2C sales of electric bikes.

Observed Frequency Table (O)

Consumer Response	Influenced By Digital Marketing	Not Influenced	Total
Purchased Electric Bike	35	15	50
Did Not Purchase	15	35	50
Total	50	50	100

Expected Frequency

Since there are two categories and total respondents are 50 in each row, the expected frequency is:

Influenced by Digital Marketing = 25

Not Influenced = 25

Expected Frequency Formula

$$E = (\text{Row Total} \times \text{Column Total}) / \text{Grand Total}$$

Expected Frequencies (E)

Preference	prefer	Do Not Prefer
Purchased Electric Bike	$(50 \times 50) / 100 = 25$	$(50 \times 50) / 100 = 25$
Did Not Purchase	$(50 \times 50) / 100 = 25$	$(50 \times 50) / 100 = 25$

Chi-Square Formula

$$\chi^2 = \sum (O-E)^2/E$$

Chi-Square Calculation

O	E	O-E	(O-E)2	(O-E)2/E
35	25	10	100	4.00
15	25	-10	100	4.00
15	25	-10	100	4.00
35	25	10	100	4.00
Σ				16.00

Level of Significance

At 5% level of significance and 1 degree of freedom:

$$\chi^2 (\text{table}) = 3.84$$

Statistical Analysis Indicates

- A majority of respondents reported that digital marketing strategies such as social media advertisements, online promotions, and website information influenced their decision to purchase electric bikes.
- The calculated chi-square value 16.00 is greater than the table value 3.84.
- Since χ^2 calculated $> \chi^2$ table, the null hypothesis (H_0) is rejected.

FINDINGS

- A majority of respondents reported that digital marketing strategies such as social media advertisements, online promotions, websites, and influencer marketing play an important role in creating awareness about electric bikes.
- Many respondents stated that online advertisements and social media content influence their interest and purchase intention towards electric bikes.
- Respondents consider online reviews, ratings, and digital information as reliable

sources while comparing electric bike brands and models.

- Factors such as age, income level, environmental awareness, and usage purpose significantly influence the effectiveness of digital marketing on electric bike purchase decisions.
- The Chi-square test indicates that digital marketing strategies have a significant impact on B2C sales of electric bikes in Amravati city.
- Consumers prefer electric bike brands that have a strong online presence, clear product information, attractive offers, and active engagement on digital platforms.
- Digital marketing helps electric bike companies in building brand image, improving customer engagement, and increasing sales conversions.

CONCLUSION

The study concludes that digital marketing strategies play a significant role in enhancing B2C sales of electric bikes in Amravati city. Consumers are increasingly relying on digital platforms such as social media, websites, and online advertisements to gather information, compare products, and make purchase decisions. The findings indicate that digital marketing not only creates awareness but also positively influences consumer attitudes and buying behaviour towards electric bikes.

The statistical analysis confirms that there is a significant impact of digital marketing on electric bike sales, leading to the acceptance of the alternative hypothesis. This suggests that electric bike manufacturers and dealers should focus on effective digital marketing strategies to attract potential customers, communicate product benefits, and build long-term relationships. Overall, digital marketing has emerged as a powerful tool in promoting electric bikes and supporting sustainable mobility in the market.

SUGGESTIONS

Based on the findings of the study, it is suggested that electric bike manufacturers and dealers should strengthen their digital marketing efforts by actively using social media platforms, websites, and online advertisements to increase consumer awareness and engagement. Creating informative and attractive digital content highlighting product features, benefits, pricing, and environmental advantages can help influence purchase decisions.

Dealers should focus on maintaining an updated and user-friendly website with clear product details, specifications, customer reviews, and contact information to build trust among consumers. Offering online promotional schemes, discounts, and financing options can further motivate potential buyers to consider electric bikes. Electric bike companies should also engage with customers through online reviews, feedback, and after-sales support on digital platforms to enhance customer satisfaction and brand loyalty. Understanding the preferences of different consumer segments such as students, working professionals, and environmentally conscious buyers can help design targeted digital marketing campaigns.

Additionally, combining digital marketing strategies with traditional promotional methods such as test-ride events, showroom displays, and local promotions can improve overall sales performance. Continuous monitoring and evaluation of digital marketing activities will help businesses refine their strategies and achieve long-term growth in B2C electric bike sales.

REFERENCES

1. Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education
2. Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing: Strategy, implementation and practice* (7th ed.). Pearson Education.
3. Strauss, J., & Frost, R. (2014). *E-marketing* (7th ed.). Pearson Education.

4. Ryan, D. (2016). *Understanding digital marketing: Marketing strategies for engaging the digital generation* (4th ed.). Kogan Page.
5. Solomon, M. R. (2017). *Consumer behavior: Buying, having, and being* (12th ed.). Pearson Education.
6. Schiffman, L. G., & Wisenblit, J. (2015). *Consumer behavior* (11th ed.). Pearson Education
7. Gao, X. (2025). The impact of digital marketing strategies on consumer purchasing behaviour. *Advances in Economics, Management and Political Sciences*, 229, 202–210.
8. Khan, Z. J., & Anjum, D. S. (2023). How digital marketing and perceived performance is influencing consumer buying behaviour. *International Journal of Academic Research in Humanities*, 3(1), 186–199.
9. Fayis, K. S., & Umadevi, S. (2023). Consumer behaviour and preferences influenced by digital platforms. *International Journal of Research in Marketing Management and Sales*, 5(2), 27–32.
10. Thangarajan, R., Ahamed, I. S. B., Sunkapur, S. M., Kumar, H., & R. K. M. (2024). Influence of digital marketing in shaping consumer purchase behaviour. *Journal of Neonatal Surgery*.
11. Ministry of Heavy Industries, Government of India. (2024). Electric vehicle policy and FAME scheme reports.
12. International Energy Agency (IEA). (2023). *Global EV outlook*.
13. Company websites and digital platforms of leading electric bike brands in India.