

Investigating the Role of Big Data Analytics in Market Segmentation and Targeting: A Quantitative Investigation

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Abstract

Businesses have access to a wealth of information on their clients in the digital age, including information about their demographics, social media activity, and browsing and purchasing habits. Big data analytics, which helps businesses to gain insightful data and make data-driven decisions, is a result of this abundance of information. Market segmentation and targeting are one application of big data analytics that has shown to be extremely useful. Businesses can discover unique segments of consumers with similar features and demands by analyzing customer data, and they can then adjust their marketing strategy to each category. This enables businesses to communicate with their target market in a personalized and pertinent manner, enhancing the efficiency of their marketing initiatives and elevating client engagement. Big data analytics are becoming even more crucial for market segmentation and targeting in India, as the consumer market is growing quickly and becoming more varied. With a billion people and a burgeoning middle class, India offers a distinct set of opportunities and difficulties for companies wanting to thrive. Companies operating in India can get a competitive advantage by using big data analytics to better understand their consumers' needs and preferences and provide marketing offers that appeal to them.

Keywords: Big Data Analytics, Market Segmentation and Targeting, Consumer Behavior, Marketing Offers.

Introduction

Big data analytics is an industry that is expanding quickly in India and has the potential to completely change how companies target and segment their markets. With the enormous amount of data produced by social media, online transactions, and other digital channels, big data analytics has emerged as a crucial tool for organizations to understand consumer behaviour and preferences. For market segmentation and targeting in the Indian banking industry, big data analytics has become an essential instrument. The power of big data analytics to boost profits and revenue in the Indian banking sector. This implies that banks can examine client data and determine their requirements and preferences using big data analytics. Personalized marketing campaigns can then be developed using this data, and improved consumer involvement will result in more sales and profitability. By examining consumer transactions and behaviour patterns, big data analytics can additionally assist banks in detecting possible dangers and frauds. The bank's and its customers' interests can then be safeguarded by using this information to take proactive measures to reduce risks (Srivastava et al. 2017).

Indian commercial banks may benefit from using big data analytics as a leveraging technology. Big data analytics was suggested as a tool that banks could employ to examine client information and discover important information about their preferences and behavior. The development of new goods and services, the creation of focused marketing efforts, and raising client happiness are all possible after using this information. The analysis of internal data, such as employee performance and productivity, and the identification of improvement areas can also enable banks to optimize their operations. By streamlining procedures and cutting expenses, this information can subsequently be leveraged to boost profitability (Bhuvana et al. 2016).

The effects of big data analytics in the financial industry and what Indian banks may learn. This shows that big data analytics can be used to enhance customer service by giving clients tailored, in-the-moment recommendations. Because of this, banks may be able to retain more patrons and strengthen ties with them. By examining external data such as social media trends and customer behavior, big data analytics can also assist banks in locating new market opportunities and increasing their reach. When creating new goods and services to fulfill changing consumer

demands and to remain competitive, this information can be utilized. By examining internal data, including employee productivity and performance, and identifying potential areas for improvement, big data analytics can also assist banks in optimizing their operations. Banks can boost their profitability by cutting costs and streamlining procedures. This highlights the necessity for Indian banks to adopt big data analytics in order to maintain their competitiveness in the sector (Srivastava and Gopalkrishnan 2015).

Literature Review

Big data analytics has become an indispensable tool for companies looking to understand consumer behavior, preferences, and demands. Big data analytics are becoming more crucial in the Indian market segmentation and targeting process. Segmentation can be very well done with the help of cluster analysis (Alam et al., 2017). Big data analytics is being used by businesses to find customer groups with similar demands and traits and to create customized marketing campaigns to better connect with these groups. India has conducted extensive research on the application of big data analytics to market segmentation and targeting. Big data analytics were found to be widely employed in the Indian retail sector by Mittal and Bhatia (2014) to analyze consumer data and create customized marketing strategies. Retailers were found to be gathering a lot of information about consumer behavior and preferences from a variety of sources, including social media, customer loyalty programs, and point-of-sale systems. Retailers were able to create tailored marketing strategies to reach these customers more successfully by identifying trends in consumer behavior and preferences through the analysis of this data.

According to Krishnan and Patil (2015) usage of big data analytics in the Indian retail sector, businesses were employing the technology to categorize their clients based on their past purchasing patterns and demographic information. Retailers were able to create marketing strategies that were specifically aimed at these groups of customers and were more likely to be successful. Through increased marketing efficiency, this strategy assisted merchants in growing their business and earnings. Other industries, including Indian agriculture, banking, and healthcare have also adopted

big data analytics. Sharma and Singh (2017) use of big data analytics for customer segmentation in the Indian telecom industry. It was found that big data analytics was useful in identifying different types of customers based on their usage patterns and preferences. This approach helped telecom companies to develop targeted marketing campaigns and pricing plans that were more likely to resonate with different customer segments. A case study on the application of big data analytics to the management of diabetes in India was carried out by Saravanan and Malarvizhi (2016) . Big data analytics was found to be helpful in identifying individuals who were at a high risk of acquiring diabetes and in creating tailored interventions to stop the condition from starting.

Role of big data analytics and the Indian banking industry played vital role in today's era Ramakrishnan and Laxmi (2016). The use of big data analytics by banks to categorize their clients based on their creditworthiness and financial behavior was made public. Banking institutions were able to create targeted marketing initiatives that were more likely to be liked by these groups of clients by segmenting their customer base. The customer base and profitability of banks were both increased as a result of this strategy. Big data analytics are also being employed in Indian agriculture, according to Sharma and Singh (2017), to increase crop yields and decrease waste. Farmers were able to maximize crop production while using fewer resources, such as water and fertilizers, by analyzing meteorological information, soil characteristics, and other factors. Big data analytics' application in the Indian healthcare industry was investigated by Raut and Bhatnagar (2018). It was observed that big data analytics was helpful in determining patient requirements and preferences as well as in creating focused interventions to enhance patient outcomes. Healthcare professionals have been able to spot trends in the prevalence of diseases, the effectiveness of treatments, and patient outcomes by analyzing vast amounts of patient data.

According to Ahmad et al. (2018) big data analytics, which highlighted the advantages of this technology across a variety of industries, this technology may be used to segment and target the Indian market by examining consumer behavior and preferences. Businesses can develop customized marketing strategies and audience-specific promotions that are more likely to be well-received by their target market by understanding the requirements and preferences of various client

segments. By fostering a more engaging customer experience, this can assist organizations in boosting their sales and revenue. Big data analytics in the financial services sector: potential and problems are explored by Ravi and Kamaruddin (2017). In the financial services sector, it was underlined how big data analytics can boost consumer engagement, lower risk, and improve all aspects of the customer experience. Financial institutions can develop more individualized services and marketing campaigns that are suited to specific needs by analyzing customer data to find patterns and trends in customer behaviour. Financial organizations may benefit from doing this by forging closer connections with their clients and raising consumer satisfaction levels.

Big data analytics by Eachempati and Srivastava (2017), outlining the major trends and advancements in this area. This claimed that by analyzing a range of data sources, including social media, customer reviews, and purchasing history, big data analytics can be utilized to uncover new market segments and customer groups. Utilizing these data sources, companies may create customised marketing campaigns and promotions that are more likely to resonate with their target demographic. As a result, in the context of India, big data analytics can be extremely important for market segmentation and targeting. For businesses in India, big data analytics is becoming a crucial tool for understanding consumer behavior, preferences, and demands. Numerous industries, including retail, healthcare, finance, telecom, and agriculture, have conducted extensive research on the application of big data analytics in market segmentation and targeting. Companies can create focused marketing tactics that are more likely to resonate with these groups of consumers by employing big data analytics to discover consumer groups with similar demands and traits, which will ultimately result in higher sales and profitability.

Objectives of the study:

- To measure the role of big data analytics in market segmentation and targeting

Research Methodology:

This study is empirical in nature. In this study 217 respondents were contacted to research the customers online reviews and its impact on purchase intention in hospitality industry. The data analysis was done with the help of the frequency distribution.

Data Analysis and Interpretation:

Table 1 Big Data Analytics enables companies to gain a better understanding of their customers by analyzing their online behavior, preferences, and social media activities

Particulars	Agree	Disagree	Can't Say	Total
Respondents	171	19	27	217
% Age	78.80	8.76	12.44	100

Table 1 presents that with the statement big data analytics enables companies to gain a better understanding of their customers by analyzing their online behavior, preferences, and social media activities, it is found that 78.80% of the respondents agree with this statement.

Table 2 With the help of Big Data Analytics, companies can target specific customer groups with personalized and relevant messaging

Particulars	Agree	Disagree	Can't Say	Total
Respondents	169	19	29	217
% Age	77.88	8.76	13.36	100

Table 2 presents that with the statement with the help of big data analytics, companies can target specific customer groups with personalized and relevant messaging, it is found that 77.88% of the respondents agree with this statement.

Table 3 Big Data Analytics can also help companies predict future market trends and customer behavior based on historical data

Particulars	Agree	Disagree	Can't Say	Total
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Respondents	165	24	28	217
% Age	76.04	11.06	12.90	100

Table 3 presents that with the statement big data analytics can also help companies predict future market trends and customer behavior based on historical data, it is found that 76.04% of the respondents agree with this statement.

Table 4 By using Big Data Analytics, companies can identify the most cost-effective marketing channels and tactics for reaching their target audience

Particulars	Agree	Disagree	Can't Say	Total
Respondents	159	28	30	217
% Age	73.27	12.90	13.82	100

Table 4 presents that with the statement by using big data analytics, companies can identify the most cost-effective marketing channels and tactics for reaching their target audience, it is found that 73.27% of the respondents agree with this statement.

Conclusion

In conclusion, Big Data Analytics is an invaluable tool for market segmentation and targeting in India. Big Data Analytics lets organizations target their ideal clients more precisely than ever before by giving them the power to analyse and comprehend enormous amounts of data in real-time. Businesses may develop tailored marketing strategies that speak directly to the needs and preferences of their audience by using data-driven insights, which leads to greater customer engagement and higher conversion rates. By monitoring consumer trends and behavior patterns, big data analytics may also assist organizations in identifying new market opportunities and maintaining an edge over their rivals. However, for businesses to fully benefit from big data analytics for market segmentation and targeting, they must also employ skilled data scientists who can properly analyze and interpret the data. They must also make use of cutting-edge tools and platforms that can handle and process massive amounts of data. Overall, Big Data Analytics'

function in market segmentation and targeting in India is crucial for companies hoping to thrive in the cutthroat business environment of today. Businesses may better understand their customers, make more intelligent decisions, and ultimately spur development and profitability by utilizing the potential of big data analytics.

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