

**MARKETING STRATEGY IN THE BANKING INDUSTRY SUPPORTED BY
BUSINESS ANALYSIS**

by

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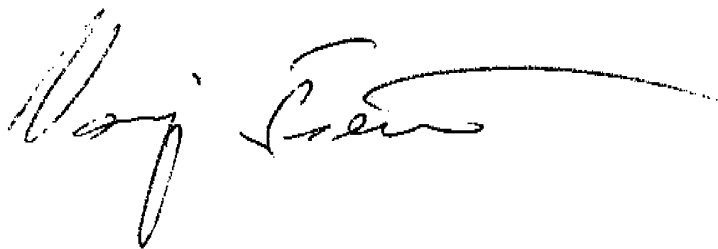
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Dedication

This work is dedicated to my beloved parents, whose unwavering belief in my potential and dreams for my future inspired every step of this journey. To my wife, Aneesha, who has been my constant source of motivation and strength, your support has been invaluable. Finally, I am deeply grateful to the State Bank of India, which has provided me with countless opportunities to grow and flourish.

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To each one of you, I express my sincerest appreciation. This accomplishment would not have been possible without your collective efforts and belief in my work.

ABSTRACT

**MARKETING STRATEGY IN THE BANKING INDUSTRY SUPPORTED BY
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2023

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This study investigates marketing strategies within India's public, private, and cooperative banks, with a focus on assessing awareness levels, evaluating effectiveness, and identifying success or failure factors. Conducted to address the competitive demands of the banking sector, the research aims to understand how different banks leverage various marketing strategies and the integral role of business analysis and strategic planning. Utilizing a descriptive and analytical research design, data was collected from 406 respondents across different managerial levels. The analysis employed a mix of descriptive and inferential statistical techniques to ensure robust and reliable findings.

The outcomes reveal significant differences in the awareness and effectiveness of marketing strategies across managerial levels and bank types. Private banks excel in using modern digital marketing techniques such as content marketing and influencer collaborations. Major reasons for marketing failures, particularly in public and cooperative banks, include a lack of clear strategy and poor market research. Additionally, private banks more frequently adopt advanced technologies like AI and big data analytics, enhancing their marketing precision and personalization. The study identifies strategic planning and business analysis as critical components for successful marketing campaigns, enabling informed decision-making, optimal resource allocation, and effective success measurement.

The study's implications highlight the necessity for regular training programs, comprehensive strategic planning, and advanced technology adoption to boost marketing effectiveness. Emphasizing the role of business analysis, these findings provide a roadmap for banks to optimize marketing strategies, improve customer engagement, and achieve better performance. By fostering a culture of data-driven decision-making and strategic foresight, banks can ensure sustained growth and competitiveness in the rapidly evolving banking sector.

Keywords: *Marketing Strategies, Banking Sector, Business Analysis, AI Adoption, Strategic Planning.*

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CHAPTER I: INTRODUCTION

1.1 Introduction

Over the past decade, the banking industry has experienced substantial changes due to technological breakthroughs, shifts in regulatory frameworks, and increasing consumer expectations (Anagnostopoulos, 2018; Gomber et al., 2018). Technological improvements have facilitated the adoption of novel methods for banks to engage with their clients, oversee their operations, and provide services (Hoehle, Scornavacca and Huff, 2012). The prevalence of digital platforms, online banking, smartphone apps, and customer service solutions driven by artificial intelligence has significantly transformed the traditional banking industry. These technological advancements have not only made banking operations more efficient but also raised client expectations for fast, smooth, and customised services. Regulatory developments have been crucial in moulding the banking industry. Following financial crises and changing economic situations, regulatory authorities have implemented strict measures to guarantee stability, transparency, and consumer protection. These restrictions force banks to implement more stringent compliance measures and enhance their operating standards, hence impacting their marketing strategy (Barth, Caprio and Levine, 2004). Currently, banks are placing a greater emphasis on openness and educating customers (Grassi, Figini and Fedeli, 2022). They are making sure that their marketing tactics align with the new regulatory standards and successfully convey their value propositions.

Consumer expectations have developed in parallel with these technological and legal changes. Modern banking consumers possess a higher level of knowledge, proficiency in technology, and have more expectations compared to previous times. Customers anticipate customised encounters, immediate availability of financial services, and smooth interactions across several platforms (Mele and Russo-Spena, 2022). Banks must implement marketing strategies that are both inventive and very customer-centric in response to this change in consumer behavior. In order to match the current demands of consumers, it is necessary to combine traditional marketing methods, which were previously successful, with digital marketing techniques. In an ever-changing climate, the significance of marketing tactics has become increasingly crucial in assisting banks to sustain

a competitive advantage. Efficient marketing methods are crucial for enticing new clients, maintaining current ones, and cultivating enduring loyalty (Berry, 1995). They assist banks in effectively conveying their distinct value propositions, distinguishing themselves from rivals, and establishing robust brand identities. Marketing strategies are essential for customer engagement since they equip banks with the means to effectively communicate with clients and establish enduring relationships (Kumar *et al.*, 2019).

In the evolving banking business, it is essential to comprehend and enhance marketing tactics as the focus shifts towards customer-centric and digitally enabled models (Gupta and Ramachandran, 2021). Banks must strategically manage a multifaceted assortment of marketing channels, encompassing both conventional media and digital platforms, in order to effectively reach their intended target consumers. Proficiency in client preferences and behaviours, together with the skill to utilise data analytics and insights, is necessary to customise marketing strategies effectively. Utilising advanced data analytics, banks can employ personalisation to develop focused marketing campaigns that effectively appeal to particular clients, hence improving the overall efficacy of their marketing strategy. Furthermore, the efficacy of marketing strategies lies not only on the acquisition of new clients but also in the preservation of existing ones (Berger and Nasr, 1998). Customer retention is an essential component of banking marketing since committed clients have a tendency to create increased income over a prolonged period (Ennew and Binks, 1996). Customer satisfaction and retention rates can be greatly improved by implementing marketing tactics that prioritise customer loyalty programmes, personalized communication, and superior customer service. Moreover, comprehending the underlying factors that contribute to the effectiveness or ineffectiveness of marketing initiatives can offer significant insights for banks. Through the analysis of influential aspects, banks may enhance their marketing tactics, tackle prospective challenges, and consistently enhance their strategies.

Previous research has thoroughly examined various aspects of marketing in the banking sector (Kumar, 2013; Chahal and Kaur, 2014; Csikósová, Čulková and Janošková, 2016; Shpak *et al.*, 2020), providing insights into both conventional and digital marketing tactics and their effects. Banks have historically utilised conventional marketing methods, including print ads, TV commercials, and direct mail campaigns, to effectively target a broad demographic and develop their brand identity. These strategies remain pertinent in the present day and continue to have a

vital impact on the whole marketing mix. Nevertheless, as digital technology emerges, banks are progressively integrating digital marketing strategies to enhance their traditional methods and effectively connect with the contemporary, technology-driven consumer base (Roudposhti, 2021; Stehniei, 2021). A prominent field of research in recent times has been the emergence and growth of social media marketing. Social media sites such as Facebook, Twitter, LinkedIn, and Instagram provide banks with the chance to engage with consumers on a deeper level, publish content, address inquiries, and collect vital feedback. Research has indicated that a robust presence on social media can greatly improve a bank's brand awareness and customer allegiance (Mitic and Kapoulas, 2012; Tsimonis and Dimitriadis, 2014). Banks can effectively inform their clients about new products, services, and promotions, as well as foster a sense of community around their brand, by producing and distributing captivating content.

Email marketing has become increasingly important in the banking industry as a digital strategy. Studies suggest that customised email campaigns can be quite successful in sustaining communication with clients, introducing new items, and fostering customer involvement (Holland and Menzel Baker, 2001). Banks can utilise email marketing to categorise their audience according to several factors, such as demographics, transaction history, and customer behaviour (Nath and Gupta, 2013). This enables them to customise communications to meet the specific requirements and preferences of individual customers. Such a degree of personalisation has the potential to result in increased open rates, click-through rates, and ultimately, improved customer relationships. Search engine optimisation (SEO) is an essential element of digital marketing for banks. Banks may enhance their online exposure and generate a larger volume of organic visitors by optimising their websites and content for search engines. Research has emphasised the significance of search engine optimisation (SEO) in driving website traffic, enhancing brand recognition, and creating potential customers (Spais, 2010). Efficient SEO tactics encompass the utilisation of pertinent keywords, production of superior content, and guaranteeing a smooth user experience on the website. In order to maintain competitiveness, banks must establish a robust search engine optimisation (SEO) strategy as clients increasingly rely on online search to locate banking services. Content marketing has become an essential tactic for banks seeking to offer added value to their clients beyond conventional advertising (Hollebeek and Macky, 2019). Banks can establish themselves as authoritative figures and reliable consultants by providing informative materials like blog posts, articles, videos, and infographics that tackle prevalent

financial inquiries and difficulties. This strategy not only aids in enticing new clientele but also in maintaining the loyalty of current ones by actively involving and informing them. Studies have identified influencer cooperation as advantageous for banks (Walzhofer, Riekeberg and Follert, 2022). Influencers have the ability to offer genuine endorsements and communicate their own firsthand encounters with a bank's products or services. Client loyalty programmes have been seen as a crucial factor in maintaining client loyalty and happiness (Berman, 2006). Studies indicate that loyalty programmes, which provide incentives to clients for their ongoing patronage, can enhance customer loyalty and promote recurring purchases. These programmes frequently incorporate advantages such as cashback, reductions, and exclusive deals, which offer additional value to consumers and motivate them to remain with the bank. Customised marketing initiatives are equally essential for customer retention and enhancing satisfaction (Coelho and Henseler, 2012). Research has indicated that customers value it when banks comprehend their specific requirements and preferences and provide customised products and services. Banks can utilise data analytics to analyse client data and get insights into their behaviour, so achieving personalisation. By utilising these valuable data, banks may provide customised experiences that cater to the unique requirements of each customers, ultimately augmenting customer satisfaction and loyalty (Sun *et al.*, 2014; Cohen, 2018; Indriasari, Gaol and Matsuo, 2019). Banks are undergoing a change in their understanding and engagement with clients through the deployment of artificial intelligence (AI), machine learning, and big data analytics (Mahalakshmi *et al.*, 2022). These technologies provide more accurate targeting, immediate data utilisation, and customised client experiences (Chung *et al.*, 2020; Bhattacharya and Sinha, 2022). Moreover, there is an increasing awareness of the need of business analysis in supporting marketing strategies. Research has emphasised its function in discovering market opportunities, comprehending client requirements, and evaluating the return on investment (ROI) of marketing endeavours. Nevertheless, there is an increasing acknowledgement of the difficulties and deficiencies in successfully executing these sophisticated tactics, especially in the setting of developing economies and varied financial landscapes (Marquis and Raynard, 2015).

Although there has been advancement in comprehending marketing techniques in the banking sector, there are still notable deficiencies in the existing literature that require attention. Existing research mostly examines particular marketing strategies or specific marketing components within the banking sector. However, there is a lack of comprehensive study that evaluates the success of

these methods across different types of banks, including public, private, and cooperative banks. Various types of banks function within distinct contexts and cater to diverse clientele, factors that might impact the perception and execution of marketing strategies (Gopalakrishnan and Damanpour, 2000). Public sector banks may possess distinct marketing aims and limitations in contrast to private or cooperative banks, owing to disparities in regulatory mandates, target demographics, and organizational frameworks. To comprehend the performance of marketing tactics in various circumstances, a thorough comparative analysis is required. Furthermore, the amount of awareness and opinions of marketing tactics might greatly range among various executive levels inside banks. Different levels of exposure and comprehension of various marketing campaigns may exist among senior management, middle managers, and frontline personnel. These disparities can impact the implementation of initiatives and their overall efficacy. Senior managers are primarily responsible for strategic planning in marketing, whilst intermediate managers and frontline personnel focus on implementing and executing marketing activities on a daily basis. Gaining insight into these fluctuations in consciousness and cognition is essential for formulating marketing tactics that are efficiently conveyed and executed at every echelon of the company. The exploration of gender variations in the awareness and perception of marketing techniques remains an underexplored field. The reception and interpretation of marketing messages can be influenced by gender, hence affecting the effectiveness of marketing campaigns. Male and female managers may possess divergent viewpoints regarding the efficacy of specific marketing methods, influenced by their individual encounters and engagements with clients. This study seeks to enhance the comprehension of marketing strategies in the banking industry by analysing gender-based disparities.

The purpose of this study is to address these gaps by conducting a comprehensive analysis of marketing strategies within the banking sector. This analysis will include examining awareness levels, effectiveness, and reasons for the success or failure of various marketing strategies. By assessing these factors, the study aims to identify best practices and provide actionable insights that can help banks optimize their marketing efforts. Additionally, the study will evaluate current industry practices and emerging research trends, offering a holistic view of the evolving landscape of marketing in the banking sector. The significance of this study lies in its comprehensive approach to evaluating marketing strategies. By integrating perspectives from different types of banks and managerial levels, the study offers a nuanced understanding of the factors that influence

marketing success and failure. This approach allows for a more detailed analysis of how various strategies perform in different contexts and under different conditions. The inclusion of gender-based analysis further enriches the study by highlighting potential disparities in perceptions and awareness that could impact the effectiveness of marketing efforts. The novelty of this research is its focus on the intersection of traditional and digital marketing strategies. While traditional marketing methods remain important, the integration of digital marketing techniques has become increasingly crucial in the modern banking environment. This study examines how these two approaches can complement each other and what role advanced technologies—such as artificial intelligence, big data analytics, and machine learning—play in enhancing marketing outcomes. Furthermore, the study emphasizes the importance of business analysis in supporting marketing strategies. By leveraging data and analytics, banks can make more informed decisions, identify market opportunities, and measure the return on investment of their marketing initiatives more effectively.

1.2 Research Problem

The banking sector is encountering progressively complex challenges that necessitate inventive and efficient marketing tactics to allure and keep clients, uphold a competitive edge, and cultivate enduring loyalty (Gomber et al., 2018; Yip and Bocken, 2018). Despite notable technological improvements and changes in customer behaviour, numerous banks face challenges in effectively optimising their marketing strategies to attain these objectives (Papasolomou and Vrontis, 2006). In order to cater to the needs of modern clients who are well-versed in technology, traditional marketing methods need to be seamlessly combined with digital marketing strategies like social media marketing, email marketing, search engine optimisation (SEO), and content marketing. Moreover, it is imperative for banks to utilise cutting-edge technology such as artificial intelligence (AI), machine learning, and big data analytics in order to improve the accuracy and customisation of their marketing endeavours (Qadiri, Shabir and Qadri, 2020; Mahapatra and Singh, 2021). Nevertheless, the use of these sophisticated technology and the incorporation of conventional and digital marketing approaches differ significantly among public, private, and cooperative banks, resulting in inconsistent results and overlooked possibilities. This study aims to tackle these difficulties by conducting a thorough examination of marketing strategies in the

banking sector, utilising business analysis techniques to identify the most effective practices, optimise the implementation of plans, and enhance overall marketing effectiveness.

The effectiveness of marketing strategies in the banking industry depends on how well-supported they are by thorough business analysis as well as the plans themselves. Business analysis is vital for comprehending market dynamics, client preferences, and competitive landscapes, all of which are necessary for formulating and implementing successful marketing strategies (Fleisher and Bensoussan, 2015). Nevertheless, there is a dearth of extensive study about the integration of business analysis into the creation and implementation of marketing strategies in the banking industry. Public sector banks, commercial banks, and cooperative banks have distinct problems and opportunities. Their capacity to properly utilise business research can greatly influence their marketing achievements. The failure of marketing strategy is typically attributed to factors such as inadequate budget allocation, insufficient market research, suboptimal utilisation of digital resources, and a lack of measurement and analysis of marketing performance (Malshe *et al.*, 2022). This study seeks to address this deficiency by investigating the function of business analysis in bolstering marketing strategies across various categories of banks. This study will give practical insights for banking professionals by evaluating existing industry practices, identifying upcoming trends, and analysing the determinants of marketing success or failure. These insights will assist banks in optimising their marketing strategies, improving client engagement, and attaining sustainable development in an increasingly competitive and technologically advanced environment.

1.3 Significance of the Study

This study is significant because it addresses critical gaps in the current understanding and implementation of marketing strategies in the banking industry, particularly the integration of traditional and digital marketing techniques supported by robust business analysis. As banks navigate a rapidly changing landscape characterized by technological advancements, evolving consumer behaviors, and increasing competition, it is essential to develop marketing strategies that are both innovative and effective. By providing a comprehensive analysis of how various marketing strategies are implemented and perceived across public, private, and cooperative banks, this study offers valuable insights that can help banks tailor their marketing efforts to better meet the needs of their diverse customer bases. Furthermore, the study emphasizes the importance of

leveraging advanced technologies such as artificial intelligence, machine learning, and big data analytics to enhance the precision and personalization of marketing initiatives. These insights will be crucial for banks aiming to optimize their marketing strategies, improve customer engagement, and achieve a competitive edge in the marketplace.

Moreover, the study's focus on the role of business analysis in supporting marketing strategies underscores the necessity of data-driven decision-making in the banking sector. Effective business analysis enables banks to understand market trends, customer preferences, and competitive dynamics, which are vital for developing successful marketing strategies. By examining the current industry practices and emerging research trends, the study provides a detailed understanding of how business analysis can be integrated into marketing strategy development and execution. This integration is particularly important for identifying market opportunities, optimizing resource allocation, and measuring the return on investment of marketing efforts. The findings of this study are expected to contribute significantly to the academic literature on banking marketing strategies and offer practical recommendations for banking professionals. By addressing the challenges and opportunities associated with marketing strategy implementation, the study aims to help banks enhance their marketing effectiveness, drive customer satisfaction, and achieve long-term growth and profitability in a technologically advanced and competitive environment.

1.4 Objectives of The Study

1. To assess the awareness level regarding marketing strategies in the banking industry.
2. To evaluate the effectiveness of marketing strategies in the banking industry.
3. To identify the reasons behind the failures of marketing strategies in the banking industry.
4. To assess the current industry practices and research advancements in marketing strategies in the banking industry.
5. To explore the role of business analysis in supporting the formulation and execution of marketing strategies in the banking industry.
6. To explore the role of technology adoption in enhancing marketing strategies in the banking industry.

Hypotheses:

1. Awareness Level Regarding Marketing Strategies:
 - a. Null Hypothesis (H0): There is no significant difference in the awareness level regarding marketing strategies among bank employees.
 - b. Alternative Hypothesis (H1): There is a significant difference in the awareness level regarding marketing strategies among bank employees.
2. Effectiveness of Marketing Strategies:
 - a. Null Hypothesis (H0): There is no significant difference in the effectiveness of marketing strategies among public, private, and cooperative banks.
 - b. Alternative Hypothesis (H1): There is a significant difference in the effectiveness of marketing strategies among public, private, and cooperative banks.
3. Reasons Behind Failures of Marketing Strategies:
 - a. Null Hypothesis (H0): There is no significant difference in perceived reasons for marketing strategy failures among public, private, and cooperative banks.
 - b. Alternative Hypothesis (H1): There is a significant difference in perceived reasons for marketing strategy failures among public, private, and cooperative banks.
4. Current Industry Practices and Research Advancements:
 - a. Null Hypothesis (H0): There is no significant difference in awareness of industry practices and research advancements among different designations within banks.
 - b. Alternative Hypothesis (H1): There is a significant difference in awareness of industry practices and research advancements among different designations within banks.
5. Role of Business Analysis:
 - a. Null Hypothesis (H0): There is no significant difference in the perceived role of business analysis in marketing strategies among different types of banks.
 - b. Alternative Hypothesis (H1): There is a significant difference in the perceived role of business analysis in marketing strategies among different types of banks.
6. Role of Technology Adoption:
 - a. Null Hypothesis (H0): There is no significant difference in perceptions of technology adoption in enhancing marketing strategies among different types of banks.

- b. Alternative Hypothesis (H1): There is a significant difference in perceptions of technology adoption in enhancing marketing strategies among different types of banks.

1.5 Scope of the Study

The scope of this study encompasses an in-depth analysis of marketing strategies within the banking industry, with a strong emphasis on the integration and impact of business analytics. The objective is to assess the levels of awareness, efficacy, and factors contributing to the success or failure of marketing strategies in various types of banks, such as public, private, and cooperative institutions. The study aims to discover disparities and commonalities in the perceptions and implementations of these tactics across senior managers, middle managers, and frontline personnel. By evaluating these differences and similarities, the study hopes to provide insights that might inform best practices. The geographical scope encompasses banks that operate inside a certain region or country, ensuring a comprehensive grasp of the local market dynamics, regulatory contexts, and consumer behaviours. This comprehensive approach enables a thorough evaluation of how banks can enhance their marketing endeavours to more effectively cater to the requirements and anticipations of their varied customer segments.

This study not only focuses on traditional and digital marketing techniques but also highlights the importance of business analytics in improving marketing results. Business analytics is the methodical analysis of data to generate practical insights that facilitate decision-making. This encompasses the examination of how cutting-edge technology like artificial intelligence, machine learning, and big data analytics are being employed to enhance the accuracy and customisation of marketing endeavours. The study aims to evaluate the existing practices in the sector regarding the use of business analytics, while also identifying any new trends and innovations that are emerging. The study attempts to provide a comprehensive understanding of the role of business analytics tools in achieving marketing strategy success by examining their usage across various managerial positions. The results are anticipated to provide practical suggestions for banking professionals on utilising business analytics to improve marketing efficiency, stimulate client involvement, and attain long-lasting expansion. The primary objective of this study is to make a substantial contribution to the academic literature on banking marketing strategies and business analytics. It intends to establish a strong basis for future research in this rapidly changing and developing topic.

Research Methodology

This study adopts a descriptive and analytical research design to thoroughly investigate marketing strategies within the banking industry in India. The primary objectives are to assess awareness levels, evaluate effectiveness, and identify the factors contributing to the success or failure of these strategies across public, private, and cooperative banks. A mixed-methods approach is employed, integrating quantitative data from structured questionnaires with qualitative insights from existing literature and industry reports. This ensures a comprehensive understanding of the current state and future potential of marketing strategies in the banking sector.

Data collection involves both primary and secondary sources. Primary data is gathered through structured questionnaires distributed to employees across various managerial levels, including senior managers, middle managers, and frontline employees in public, private, and cooperative banks. This method provides a robust and detailed understanding of the effectiveness of current marketing strategies and the factors influencing their success or failure. Secondary data is sourced from existing literature, industry reports, and previous research on marketing strategies and business analytics in the banking sector. By combining primary and secondary data, the study offers a well-rounded perspective on marketing practices within the industry, supported by both empirical evidence and established knowledge. The targeted population includes employees from various banks, ensuring a comprehensive view across different sectors.

Sample Size Determination

The sample size for this study is determined using Cochran's formula, which is widely used to calculate an ideal sample size given a desired level of precision, confidence level, and the estimated proportion of the attribute present in the population. The formula is expressed as:

$$n_0 = \frac{Z^2 p(1 - p)}{e^2}$$

Where:

- n_0 is the sample size,
- Z is the Z -value (e.g., 1.96 for a 95% confidence level),
- p is the estimated proportion of the population that has the attribute (since the exact value is unknown, 0.5 is often used as it provides the maximum sample size),

- e is the desired level of precision (margin of error).

Given these parameters, the calculated sample size is 384.5. To account for potential non-responses and incomplete data, the sample size is rounded up and increased. Thus, 450 questionnaires were distributed to ensure a sufficient number of responses.

Sampling Technique

A stratified random sampling technique is employed to ensure that all sub-groups within the population are adequately represented. The stratification is based on the type of bank (public, private, cooperative) and managerial levels (senior managers, middle managers, and frontline employees). This method enhances the reliability and generalizability of the study findings by ensuring a balanced representation across different categories.

Data Collection Process

The data collection process involves several steps to ensure the accuracy and completeness of the data: The questionnaire is designed to capture detailed information on awareness levels, effectiveness, reasons for success or failure of marketing strategies, current industry practices, and the role of business analysis and technology adoption. It includes a mix of closed-ended questions, Likert scale items, and open-ended questions to gather both quantitative and qualitative data. The questionnaires are distributed to 450 bank employees across various managerial levels within public, private, and cooperative banks. The distribution is carried out through both online and offline methods to maximize reach and response rates. Respondents are given a stipulated time frame to complete and return the questionnaires. Follow-up reminders are sent to encourage participation and minimize non-response rates. Once the responses are collected, the data is carefully reviewed and cleaned to ensure accuracy. Incomplete or inconsistent responses are excluded, resulting in a final sample size of 406 respondents. This final sample size provides a robust dataset for analysis.

Statistical Methods

The statistical methods utilized in this study are designed to rigorously analyze the data collected from both primary and secondary sources. By employing a combination of descriptive and inferential statistical techniques, this study aims to provide comprehensive insights into the

awareness, effectiveness, and factors influencing the success or failure of marketing strategies in the banking industry. The data analysis leverages advanced statistical tests to ensure the robustness and reliability of the findings.

Reliability and Validity Testing

To ensure the reliability and validity of the data collected through the questionnaires, the following tests are conducted:

Cronbach's Alpha: Measures the internal consistency of the questionnaire items. A high value (above 0.7) indicates reliable scales. This test is applied to various constructs such as the reasons for marketing strategy failures and awareness of industry practices.

Content Validity: Ensured through expert review of the questionnaire items to confirm comprehensive coverage of the concepts being measured.

Construct Validity: Assessed through factor analysis to ensure that the questionnaire items align with the theoretical constructs they are intended to measure.

Normality Testing

Before performing inferential statistical analyses, the normality of the data is assessed to determine the appropriate statistical tests. Normality is tested using Kolmogorov-Smirnov Test.

Shapiro-Wilk Test

Results from both tests consistently indicated that the data did not follow a normal distribution, thus justifying the use of non-parametric tests for further analysis.

Descriptive Statistics

Descriptive statistics are employed to summarize the main characteristics of the dataset, providing an overview of the data. These include measures such as the mean, which represents the average value of the responses, and the median, which is the middle value separating the higher half from the lower half of the dataset. The mode indicates the most frequently occurring value, while the standard deviation measures the amount of variation or dispersion in the data. Additionally,

frequency distribution counts the occurrences of each value in the dataset, helping to understand the distribution and prevalence of various responses.

Inferential Statistics

Inferential statistics are used to make inferences about the population based on the sample data. The following tests and analyses are performed:

Kruskal-Wallis H Test: Used to determine if there are statistically significant differences between the medians of three or more independent groups. This non-parametric test is suitable given the non-normal distribution of the data.

Mann-Whitney U Test: Used to compare differences between two independent groups when the dependent variable is either ordinal or continuous, but not normally distributed. This test was applied to compare the awareness levels of marketing strategies between different genders.

Jonckheere-Terpstra Test: Employed to test for ordered differences among categories, useful for detecting trends across multiple groups.

The statistical analysis is conducted using specialized software SPSS v29 (Statistical Package for the Social Sciences) – Licensed Version

Limitations of the Study

While this study offers valuable insights into marketing strategies in the banking industry, several limitations should be noted. The geographic scope is limited to a specific region in India, which may affect the generalizability of the findings to other areas with different regulatory environments and market conditions. Additionally, the data collection relies on self-reported questionnaires, which could introduce response biases. The use of a stratified random sampling technique helps ensure representation, but there may still be variations within each subgroup that are not fully captured. The cross-sectional design provides a snapshot at a single point in time, and may not reflect changes in marketing strategies and their effectiveness over time. Finally, while non-parametric tests are appropriate given the data distribution, they may limit the depth of inferential analysis. Future research could address these limitations by incorporating longitudinal approaches, expanding the geographic scope, and employing a mix of qualitative and quantitative methods for a more comprehensive understanding.

2 CHAPTER II: REVIEW OF LITERATURE

This chapter contains a comprehensive examination of the existing research on marketing strategies within the banking sector, focusing on the adoption of various marketing variables for analysis and hypothesis formation. The review synthesizes findings from a diverse array of studies, providing a thematic overview that highlights key trends, methodologies, and gaps in the current literature. By systematically organizing the literature around core themes, this chapter aims to build a solid theoretical foundation for the variables selected for analysis in this study and to support the development of robust hypotheses.

The review begins with an exploration of the different types of marketing strategies employed by public, private, and cooperative banks, highlighting their unique challenges and strengths. This thematic approach allows for a detailed comparison and contrast of the strategies used by different banking sectors, providing insights into their effectiveness and areas for improvement. Subsequently, the review delves into the impact of digital marketing tools and technologies, such as AI, big data analytics, and social media, on banking marketing strategies. This section examines how these technologies are implemented, their effectiveness, and their potential for customization to meet the specific needs of various types of banks.

The chapter also covers the critical role of business analysis in shaping marketing strategies, investigating how it can be integrated into marketing strategy development and execution to enhance decision-making and optimize resource allocation. Furthermore, the review emphasizes the importance of strategic planning practices and the need for regular training programs to keep bank employees updated on both traditional and digital marketing strategies. By identifying the most effective methods for delivering training and strategic planning, this literature review sets the stage for developing hypotheses that address these crucial aspects. Through this thematic literature review, the chapter not only highlights the current state of research in marketing strategies within the banking sector but also identifies significant gaps that this study aims to fill, paving the way for future research and practical advancements in the field.

2.1 THEMATIC REVIEW

2.1.(a) Structure and Evolution of the Indian Banking System

The evolution of India's banking system reflects the dynamic interplay between historical legacies, regulatory reforms, technological advancements, and changing economic imperatives. Since independence, the Indian banking sector has undergone significant transformations, transitioning from a tightly regulated environment to a more liberalized and competitive landscape.

Initially, the Indian banking system was characterized by a high degree of regulation and control, with the government playing a dominant role in its operations. This phase of financial repression was marked by the nationalization of major banks in 1969 and 1980, aimed at ensuring financial inclusion and stability (Kumar and Gulati, 2014; Kaushik, Srivastava and Tiwari, 2020). However, this period also saw inefficiencies and a lack of competitiveness within the sector (Kalyani, 2017). The liberalization wave of the early 1990s marked a turning point for the Indian banking industry. The economic reforms introduced during this period aimed to reduce state control and promote competition, leading to the entry of private and foreign banks (Mohan & Ray, 2018; Saini, 2014). These reforms were crucial in fostering a more efficient and productive banking environment, aligning with international best practices (Jayaraman, Srinivasan and Jeremic, 2013). The deregulation efforts included measures to enhance the asset quality of banks, introduce market-driven interest rates, and encourage technological adoption (Kumar and Gulati, 2014). Technological advancements have played a pivotal role in shaping the contemporary Indian banking system. The integration of information technology has revolutionized banking operations, enhancing speed, efficiency, and customer service. The rise of digital banking, mobile banking, and online financial services has significantly broadened the reach of banks, making financial services more accessible to a larger segment of the population (Khurana *et al.*, 2024; Sujatha and Chitra, 2024). Moreover, blockchain technology is emerging as a game-changer in the sector, offering enhanced transparency, security, and efficiency (Khurana *et al.*, 2024). Public sector banks, despite their pivotal role in the Indian economy, have faced numerous challenges post-liberalization. The increased competition from private and foreign banks has necessitated innovation and risk management strategies to maintain their market position (Sheopuri and Sheopuri, 2014). The privatization efforts and the focus on expanding services and enhancing

domestic liquidity are part of the ongoing reforms aimed at improving the efficiency and competitiveness of these banks (Müller and Singh, 2024).

Recent trends in the Indian banking sector highlight a significant focus on digitalization and the integration of artificial intelligence (AI). These advancements are driving operational efficiencies and enabling banks to offer more personalized services to customers (Sujatha and Chitra, 2024). The move towards a more digital banking ecosystem is also in line with the global trend of leveraging technology to meet the evolving needs of consumers. The structural changes in the Indian banking sector are also noteworthy. The sector comprises a diverse array of banks, including public sector banks, private sector banks, regional rural banks, and cooperative banks. This diversity has been crucial in catering to the varied financial needs of different segments of the population (Saini, 2014). Moreover, the geographical concentration and the size distribution of banks within the system have evolved to ensure optimal performance and financial stability (Bishnoi and Devi, 2017).

The role of regulatory reforms cannot be overstated in the evolution of the Indian banking sector. The phased implementation of these reforms has been instrumental in transforming the sector from a state of financial repression to one characterized by competitiveness and innovation (Mohan and Ray, 2018b). The focus has been on strengthening the financial system, improving asset quality, and aligning with international standards (Jayaraman, Srinivasan and Jeremic, 2013). Theoretical studies and empirical analyses underscore the crucial role of the Indian banking system in the country's economic development. The sector has been pivotal in aggregating deposits and supporting various economic sectors, thereby contributing significantly to the overall financial stability and growth of the economy (Khairullah and Rosita, 2022; Dongre and Gupta, 2024). The transformation of the banking system through financial reforms has been a key factor in this progress, highlighting the importance of a robust financial infrastructure in economic development.

In conclusion, the evolution of the Indian banking system is a testament to the sector's resilience and adaptability in the face of changing economic and technological landscapes. From its early days of regulation and control to the current phase of liberalization and technological integration, the sector has continuously evolved to meet the needs of a growing economy. The ongoing reforms, technological advancements, and strategic innovations are likely to shape the future of the Indian

banking system, ensuring its continued relevance and contribution to the country's economic development.

2.1.(b) Evolution of Marketing Strategies in the Banking Sector

The evolution of marketing strategies in the banking sector reflects a shift from traditional, product-centric approaches to innovative, customer-centric models. Historically, banks focused on promoting specific products and services. However, with advancements in digital technology and changing consumer behaviours, modern marketing strategies emphasize personalized customer experiences, digital engagement, and data-driven decision-making. This transformation aims to enhance customer satisfaction, loyalty, and competitive advantage in an increasingly dynamic financial landscape.

The evolution of marketing strategies in the banking sector reflects a significant shift from traditional product-focused methods to innovative approaches centered on customer engagement and digital interaction, as highlighted by Sharma et al., (2024). Moreover, Choudhury et al., (2023) emphasized the critical integration of digital channels and a customer-centric approach, essential for modern banking strategies to maintain competitiveness and relevance in a dynamic market. In addition, Oke, (2012) analysed how industry changes have prompted shifts towards more efficient and competitive marketing practices. Furthermore, Boot & Marinč,(2008) discussed broader sector transformations driven by technological advancements and regulatory shifts, prompting banks to adopt more customer-focused and innovative strategies. Finally, Durkin & Howcroft, (2003) underscores the transformative impact of new technologies on relationship marketing, enabling personalized customer interactions that foster loyalty and satisfaction.

2.1.(c) Marketing Strategies Prevailing in the Banking Sector

Understanding the marketing strategies utilized in the banking sector is crucial for grasping how banks establish their market positioning, convey their value propositions, and engage with their customers. This section will review literature that offers insights into a range of marketing strategies, including content marketing, social media marketing, email marketing, and others. It will provide a detailed examination of how these strategies help banks effectively communicate and connect with their target audiences.

The bank's content marketing efforts in attracting and engaging customers are well-supported by various studies. Pulizzi, (2012) highlights that storytelling is increasingly central to content marketing strategies, as it emotionally engages customers in a unique way. The study by Hollebeek et al., (2014) points out that consumer brand engagement on social media involves a complex interplay of cognitive, emotional, and behavioural factors. Moreover, Järvinen & Taiminen, (2016) emphasize the importance of marketing automation in B2B content marketing, noting that it enhances the efficiency and effectiveness of content marketing by delivering personalized content to the right audience at the right time. In addition to that, Weinberg & Pehlivan, (2011) stresses the importance of using a variety of social media content types informative, entertaining, and remunerative to keep customers interested and engaged. Similarly, Ashley & Tuten, (2015) examined creative social media strategies relevant to banks' content marketing, stating that branded content which is both entertaining and informative tends to achieve higher levels of consumer engagement. Furthermore, Kim & Drumwright, (2016) provide insights into how social relatedness significantly influences intrinsic consumer motivation and engagement. Research conducted by Brodie et al., (2013) suggested that consumer engagement in virtual brand communities is driven by interactive and value-creating experiences. Finally, industry reports from the Content Marketing Institute (2019) offer detailed insights into how various sectors, including banking, successfully implement content marketing strategies. The report underscores that effective content marketing strategies in the banking sector often comprise a mix of informative articles, customer testimonials, and interactive content that address customer needs and interests.

Social media marketing has significantly enhanced bank's customer outreach and engagement. Kaplan & Haentlein, (2010) argued that social media allows brands to engage with a wider audience in a more interactive and personalized manner, transforming customer interactions. Effective social media strategies enhance brand awareness and deepen customer engagement, critical for banks aiming to build lasting relationships (Tsimonis and Dimitriadis, 2014). The findings of Pereira et al., (2014) illustrate the effectiveness of platforms like Facebook in increasing customer interaction and loyalty through active engagement. Also, Sashi, (2012) explores how social media facilitates meaningful customer engagement, while Leeflang et al., (2014) advocates for social media's integral role in modern marketing strategies, particularly in enhancing

customer engagement for banks. Study by Rohm et al., (2013) provided empirical evidence that social media interactions drive higher levels of customer engagement and loyalty, underscoring its significant impact on improving customer outreach in the banking sector. Email marketing campaigns are highly effective in maintaining strong customer relationships and fostering loyalty through personalized communication and relevant content. Finally, Gupta et al., (2004) emphasize that effective communication strategies, including email marketing, enhance customer lifetime value and retention.

Implementing search engine optimization (SEO) strategies has been proven to significantly boost online visibility for banks. Chaffey et al., (2009) show that SEO efforts result in higher search engine rankings, increased web traffic, and enhanced customer acquisition rates. Findings of Järvinen & Karjaluoto, (2015) highlights that combining SEO with web analytics improves digital marketing performance, leading to better visibility and higher conversion rates for banks. Similarly, Farzindar & Inkpen, (2018) discuss how content optimization and natural language processing enhance search engine rankings and online presence. In addition, Berman & Katona, (2013) found that banks investing in SEO see significant improvements in search engine rankings, web traffic, and customer acquisition. SEO strategies are highly effective in increasing online visibility for banks, leading to more traffic, higher search engine rankings, and better customer engagement.

Customer loyalty programs, supported by Reichheld & Teal, (1996) and Sharp & Sharp, (1997), effectively increase profitability by improving customer retention and repeat purchasing. Lemon & Verhoef, (2016) highlight their influence on enhancing customer experiences across all touchpoints, while Nunes & Drèze, (2006) argued for personalized program structures to enhance engagement. Finally, Kumar & Shah, (2004) found their strategic significance in contemporary business, emphasizing the importance of customer-focused strategies to cultivate enduring loyalty and sustainable business expansion.

2.1.(d) Barriers to Successful Marketing Strategy Implementation

The failure of marketing initiatives in the banking sector, despite careful planning, can sometimes be ascribed to multiple issues. The literature has identified several common reasons for failure,

including the absence of a well-defined strategy, insufficient allocation of funds, inadequate market research, ineffective utilisation of digital tools, failure to measure performance, absence of customer segmentation, inadequate coordination between departments, inability to adapt to market changes, insufficient personnel training, and excessive reliance on traditional methods.

Businesses should adopt clear and coherent marketing strategies to achieve sustainable growth and market success. Research by Kourdi, (2015) highlights that ineffective marketing strategies result in wasted resources and missed opportunities. Kotler et al., (2018) argued that market fragmentation occurs when marketing efforts lack strategic coherence. Jobber & Ellis-Chadwick, (2019) illustrated how clear strategies guide effective tactical decisions aligned with organizational goals. Systematic planning and execution are crucial for sustaining competitive advantage and fostering customer loyalty. Insufficient budget allocation for marketing activities, as noted by Grewal et al., (2022), limits marketing effectiveness by hindering efforts to reach target audiences and achieve desired outcomes. The study by Armstrong et al., (2014) argued that inadequate budgets restrict marketing innovation and limit opportunities for market expansion and differentiation. While, De Pelsmacker et al., (2007) discussed challenges in maintaining consistent messaging across channels without sufficient resources, affecting brand coherence and customer perception.

Insufficient market research and a lack of understanding of customer needs, as highlighted by Malhotra, (2020), consistently lead to ineffective marketing strategies. Churchill & Iacobucci, (2006) emphasized the critical role of thorough market research in informing strategic decision-making and aligning marketing efforts with customer preferences and behaviors. According to Green & Tull, (1988), comprehensive market research is essential for identifying market opportunities and tailoring effective marketing strategies. While, Kotler et al., (2018) argued that without understanding customer needs, businesses risk failing to engage their target audience effectively, hindering sustainable growth and competitive advantage. The failure to effectively utilize digital marketing tools and platforms is a major factor in marketing failures. Moreover, Kingsnorth, (2022) highlights the need for an integrated digital strategy to enhance engagement. While Ryan, (2016) points out the risks of underutilizing digital platforms, such as reduced engagement and poor ROI. Additionally, Tiago & Veríssimo, (2014) show that neglecting digital marketing and social media hampers companies' ability to connect with modern consumers. The

study by Charlesworth, (2014) explains that insufficient use of digital tools results in inefficient campaigns and a loss of competitive advantage.

Failing to measure and analyze marketing performance metrics greatly leads to unsuccessful campaigns. Tracking key metrics is essential to optimizing strategies and enhancing ROI. Farris et al., (2010) indicated that neglecting these metrics can result in a lack of strategic direction. In addition to that, Grigsby, (2015) demonstrates that without proper analysis, companies lose chances to refine their strategies based on performance data. Similarly, Homburg et al., (2012) affirm that comprehensive measurement systems are vital for improving marketing performance and attaining optimal results. Lack of customer segmentation and targeting leads to ineffective marketing efforts. On the other hand, Piercy, (2016) emphasized the necessity of segmentation for resonant marketing strategies. Kotler et al., (2018) highlight cases where improper segmentation resulted in reduced engagement. Moreover, Wedel & Kamakura, (2000) illustrate how inadequate segmentation causes low conversion rates and wasted resources. Furthermore, Leisch et al., (2018) underscored the negative impact of not applying segmentation, leading to ineffective communication and low satisfaction. Dibb, (2010) showed that broad, untargeted marketing messages fail to address diverse customer needs, underscoring the importance of effective segmentation and targeting.

Poor coordination between marketing and other departments impedes the success of marketing strategies. Kotler et al., (2018) highlighted the importance of cross-departmental collaboration to align goals and ensure effective campaigns. poor interaction leads to fragmented strategies (Moorman and Rust, 1999) ,lack of integration between marketing and R&D can result in product failures (Griffin and Hauser, 1996). Le Meunier-FitzHugh & Piercy, (2007) observed that inadequate collaboration between sales and marketing causes conflicts and suboptimal performance, and poor coordination negatively affects market performance (Ramaswami, Bhargava and Srivastava, 2004)

The inability to adapt to changing market trends and customer preferences leads to marketing failures, Kotler et al., (2018) emphasized the need for continuous monitoring and adaptation to avoid failures. There is a risk of ignoring disruptive technologies (Christensen, 2013). Moreover, Day & Schoemaker, (2006) underlines the importance of detecting weak signals in the market. Tellis

et al., (2009) shown that a culture of innovation aids in responding to changes. Furthermore, Jaworski & Kohli, (1993) and Narver & Slater, (1990) found that market-oriented firms achieve better success. Sheth & Sisodia, (2002) and McKee et al., (1989) underscored strategic adaptability for competitive performance. Inadequate training and skills of marketing personnel significantly contribute to the failure of marketing strategies, Clow, (2013) emphasized the necessity of well-trained personnel for successful campaign execution. Skilled marketers are essential for effective strategy implementation (Homburg, Workman Jr and Krohmer, 1999). Furthermore, Schultz, (2003) indicated that without proper training, integrated campaigns fail, while Webster Jr et al., (2005) linked declining marketing competence to inadequate training.

Over-reliance on traditional marketing methods instead of embracing digital marketing leads to ineffective results, Chaffey et al., (2009) emphasize the need for digital strategies in the modern market. Moreover, Kingsnorth, (2022) and Ryan, (2016) highlight the missed opportunities and poor ROI from neglecting digital platforms. Tiago & Veríssimo, (2014) and Charlesworth, (2014) discussed the competitive disadvantages and reduced engagement from traditional-only approaches. In addition, Kartajaya et al., (2019) and Leeflang et al., (2014) underlines the enhanced customer engagement and analytics of digital marketing. Studies by Wymbbs, (2011) illustrate the growing importance of digital methods over traditional practices.

2.1.(e) Current Industry Practices and Research Advancements

As the banking sector continues to evolve, so do the marketing strategies used within it. This section examines the latest industry practices and recent research developments that have introduced more refined and successful marketing methods. These advancements encompass advanced data analytics, machine learning algorithms, CRM systems, personalized marketing techniques, social media analytics, predictive analytics, big data technologies, omni-channel marketing strategies, real-time data application, and the significance of keeping abreast of research insights. This review aims to highlight how these innovations are shaping and improving marketing strategies in today's dynamic banking environment.

Employing advanced data analytics to model and optimize marketing strategies is crucial for modern businesses. Studies by Fader et al., (2010) and Provost & Fawcett, (2013) highlighted how data-driven insights improve customer retention and personalized marketing efforts. Verhoef,

(2003) demonstrates the role of CRM integrated with analytics in boosting customer loyalty and overall firm performance. Moreover, Hair Jr et al., (2019) and Chaffey & Patron, (2012) support the strategic advantage of leveraging data analytics to optimize marketing strategies and drive business success. Machine learning algorithms are pivotal in predicting customer behavior and tailoring marketing efforts. Studies by Neslin, Gupta, et al., (2006) and Buckinx & Van den Poel, (2005) demonstrate the use of these algorithms to predict churn and maintain loyalty. Furthermore, Ngai et al., (2009) highlight data mining techniques in CRM for effective customer engagement. Research by V. Kumar & Shah, (2004) and Verbeke et al., (2011) confirm the importance of predictive models for retention and segmentation. Ascarza et al., (2018) and (Huang, Kechadi and Buckley, 2012) illustrates how machine learning enhances customer retention strategies and targeted marketing, optimizing overall marketing success.

Integrating CRM systems is crucial for managing and analyzing customer interactions and data, Buttle & Maklan, (2019) emphasizes the strategic importance of CRM, while Reinartz et al., (2004) highlight its impact on performance. While, Payne & Frow, (2005) discuss CRM's role in enhancing relationship management through data analysis. In addition to that, J. Kim et al., (2003) and Xu et al., (2002) demonstrated the benefits of CRM technology in decision-making and customer satisfaction. Moreover, Coltman, (2007) and Ryals & Payne, (2001) shown improved performance and relationship marketing through CRM. Finally, Becker et al., (2009) and Keramati et al., (2010) CRM's role in customer acquisition, maintenance, and retention are vital.

Personalization techniques significantly enhance customer engagement in marketing, Venkatesan & Farris, (2012) demonstrated improved engagement through personalized coupon campaigns. (Ansari and Mela, 2003) emphasize the impact of e-customization on satisfaction and loyalty. Furthermore, Arora et al., (2008) show the effectiveness of one-to-one marketing. Similarly, Zhang & Wedel, (2009) confirms the benefits of personalized promotions. Tam & Ho, (2006) highlighted web personalization's persuasive power. While, Montgomery & Smith, (2009) discussed internet personalization's potential. In addition to that, V. Kumar & Shah, (2004) linked personalization to loyalty. The study by Vesanen, (2007) provides a comprehensive personalization framework, while O. Pappas et al., (2014) reveal its positive effects on satisfaction and repurchase intentions.

Using social media analytics significantly enhances marketing strategies, Chaffey et al., (2009) emphasize its role in engaging customers effectively. The findings of He et al., (2013) demonstrated its utility in competitive analysis. Moreover, Stieglitz et al., (2014) highlight its interdisciplinary benefits for marketing improvements. Fan & Gordon, (2014) illustrated the power of social media analytics in understanding consumer behavior. Furthermore, Hoffman & Fodor, (2010) explains methods to measure the ROI of social media marketing, emphasizing the importance of analytics in this process. Predictive analytics also plays a crucial role in marketing strategy modeling. The study conducted by Fader & Hardie, (2009) demonstrates its use in analyzing customer behavior, while the research of Neslin, Grewal, et al., (2006) highlights its importance in multichannel customer management. Moreover, Venkatesan et al., (2007) show its application in optimizing CRM efforts. Furthermore, Pauwels et al., (2002) used predictive models to understand the impact of price promotions, and Gupta et al., (2004) emphasized its role in estimating customer lifetime value. Finally, Rust et al., (2004) discuss using customer equity models for strategic focus, underscoring predictive analytics' essential role in enhancing marketing effectiveness

Leveraging big data technologies provides critical insights into customer preferences and trends. The study of H. Chen et al., (2012) emphasize that big data analytics can extract valuable insights for strategic decision-making. Findings of Gandomi & Haider, (2015) note that these technologies are essential for uncovering trends and consumer insights. Davenport & Dyché, (2013) illustrate how companies use big data to understand customer behavior. Moreover, Wamba et al., (2015) highlights its impact on business performance through enhanced customer insights. Implementing omni-channel marketing strategies enhances customer experience across various platforms. Study by Verhoef et al., (2015) highlight the positive impact of transitioning to omni-channel retailing. (Brynjolfsson, Hu and Rahman, 2013) show how retailers can gain a competitive edge with omni-channel approaches. (Piotrowicz and Cuthbertson, 2014) emphasize the critical role of IT in supporting omni-channel strategies. Furthermore, Bell et al., (2014) outlines strategies for success in an omnichannel world, while Frazer & Stiehler, (2014) discuss merging online and offline environments. Rigby, (2011) explores future shopping trends driven by omnichannel strategies. While, Zhang et al., (2010) focus on the benefits of integrated multi-channel strategies. In addition to that, Herhausen et al., (2015) and Huré et al., (2017) underlined the advantages of

channel integration. Finally, N. Beck & Rygl, (2015) categorized retailing strategies and examine their effects on customer experience.

2.1.(f) Role of Advanced Technologies in Transforming Bank Marketing

Advanced technologies are reshaping bank marketing practices, revolutionizing how financial institutions engage with customers. From artificial intelligence and big data analytics enhancing personalized marketing to information technology streamlining operations and improving service delivery, these innovations are pivotal. They enable banks to adopt more targeted, efficient, and customer-centric approaches, driving innovation in product offerings and customer interactions. This transformation is essential as banks seek to stay competitive in a rapidly evolving digital landscape, where effective use of technology can differentiate them and enhance customer loyalty and satisfaction.

Advanced technologies are revolutionizing marketing strategies within the banking sector by enabling more targeted, efficient, and customer-centric approaches. Tapp & Hughes, (2004) highlights how these technologies fundamentally change how banks interact with and serve their customers. AI and big data analytics significantly enhance customer segmentation, personalized marketing, and predictive analysis, leading to improved customer engagement and loyalty (Provost & Fawcett, 2013). Study by Kamel, (2005) discusses the pivotal role of IT in revolutionizing banking services, noting that information technology enables banks in developing nations to enhance service delivery, streamline operations, and create innovative marketing strategies. ICT tools have revolutionized the promotion of bank products, enabling more effective targeting and personalized customer engagement (Manoj, 2016). Technological innovations have fundamentally changed how banks operate and deliver services, leading to more efficient and customer-focused banking experiences (Franke, 1998). Information technology is pivotal in revolutionizing bank marketing by enabling data-driven strategies, enhancing customer experiences, and fostering innovation in product offerings (Jaksic and Marinc, 2015). Advanced AI techniques significantly boost digital banking capabilities, enabling more precise customer segmentation and personalized marketing strategies (Yalamati, 2023). Financial technologies drive significant changes in banking business models, enabling innovative marketing strategies and enhancing customer engagement through digital channels (Nichksova & Shmarlouskaya,2020).

2.1.(g) Cross-Functional Collaboration for Marketing Excellence

Cross-functional collaboration for marketing excellence involves integrating expertise from diverse departments like marketing, sales, product development, and customer service to achieve unified marketing goals. By breaking down silos and fostering teamwork, organizations can innovate faster, deliver cohesive customer experiences, and respond swiftly to market changes. This approach enhances alignment with organizational objectives, optimizes resource utilization, and enables the creation of impactful marketing campaigns that resonate with customers, ultimately driving sustainable growth and competitive advantage in dynamic business landscapes.

Integrated collaboration across departments enhances innovation and accelerates product development (Lin, Wang and Kung, 2015). This integration streamlines processes, improves communication, and aligns marketing strategies with operational capabilities (Darian and Coopersmith, 2001). Organisations can boost strategy alignment, customer-centricity, and innovation by promoting collaboration between different departments (Krohmer, Homburg and Workman, 2002). Banks benefit from integrating functions, leveraging data-driven insights to personalize marketing efforts, enhance digital services, and innovate customer-centric solutions (Askoul, Khan and Lalitha, 2016). There is strategic importance in cross-functional collaboration for achieving marketing excellence, optimizing resource allocation, enhancing customer satisfaction, and sustaining competitive advantage (Madhani, 2011).

2.1.(h) Customer-Centric Marketing Strategies in Banking

Customer-centric marketing strategies in banking prioritize understanding and fulfilling the evolving needs of customers to enhance satisfaction, loyalty, and profitability. By leveraging data-driven insights and personalized approaches, banks aim to create seamless and tailored experiences across all touchpoints—from digital channels to in-person interactions. These strategies focus on building long-term relationships, optimizing customer lifetime value, and differentiating services based on individual preferences and behaviors. In a competitive financial landscape, customer-centricity in banking not only drives growth but also strengthens brand reputation and customer retention through proactive and responsive engagement strategies.

By adopting customer-centric practices, banks can enhance satisfaction, loyalty, and long-term profitability in the corporate banking segment (Andaleeb, Rashid and Rahman, 2016). Customer-centric processes allow banks to stand out from competitors by providing superior and tailored customer experiences (Heckl and Moormann, 2007). Emphasizing user-friendly interfaces, personalized services, and seamless interactions helps banks improve customer satisfaction and loyalty (Komulainen and Saraniemi, 2019). Customer-centric marketing strategies not only boost customer satisfaction and loyalty but also strengthen the bank's reputation and commitment to ethical efficiency (Rashid *et al.*, 2013). Focusing on understanding and meeting the unique demands of retail banking customers through tailored, efficient, and responsive service delivery aligns with customer-centric marketing strategies (Mishra and Tandon, 2011). Emphasizing customer-centric innovation enables banks to stay ahead of market trends, enhance service delivery, and create value-added offerings that resonate with customers (Zengin, 2019). Prioritizing the customer perspective enhances satisfaction, adoption rates, and loyalty through personalized and efficient online services (Sciglimpaglia and Ely, 2002). These customer-centric practices help banks better meet client expectations, differentiate themselves in a competitive market, and drive long-term growth (Bapat, 2014).

2.1.(i) Emerging Trends in Marketing Strategies

The incorporation of technology has initiated a profound transformation in banking industry marketing. Ranging from digital banking platforms to advanced customer relationship management systems, technology enables banks to broaden their outreach, provide personalized services, and enrich customer interaction. This section explores the ways in which technology adoption enhances marketing strategies, examining innovations like AI integration, chatbot implementation, use of data analytics tools, adoption of blockchain technology, development of mobile banking applications, utilization of cloud computing, CRM system integration, deployment of social media monitoring tools, adoption of AR and VR technologies, and implementation of strong cybersecurity measures. Through this exploration, the review aims to illustrate how technology is revolutionizing and optimizing marketing practices in the dynamic banking sector.

The qualitative findings highlight AI's critical role in fraud detection and risk prevention, while also presenting disruptive opportunities in FinTech for data collection, analysis, and process optimization (Rahman *et al.*, 2023), alongside challenges for traditional banks. AI-driven strategies

are reshaping banking ecosystems (Yalamati, 2023), especially in regions with rapid economic and technological advancement, enhancing consumer engagement metrics. AI technologies further enhance customer service quality and overall revenue generation (Sheshadri *et al.*, 2024). Marketers benefit from AI tools that boost efficiency, personalize interactions, and support data-driven decision-making (Noreen *et al.*, 2023), leading to improved marketing performance and ROI.

Chatbots have emerged as a powerful tool in digital marketing, significantly enhancing customer engagement (Thompson, 2018). Their impact on consumer engagement outcomes is mediated by perceived parasocial interaction and dialogue, highlighting their role in social presence communication (Tsai, Liu and Chuan, 2021). Businesses benefit from chatbots by efficiently managing customer inquiries and reducing dependency on additional staff, while also facilitating internal operations such as employee support (Huseynov, 2023). Moreover, chatbots streamline lead qualification processes, accelerate data collection, and improve overall customer experience (Kaushal and Yadav, 2023). They contribute to enhancing service performance and meeting customer expectations across various sectors (Misischia, Poecze and Strauss, 2022). These findings underscore the effectiveness of chatbots as a versatile tool for both customer engagement and operational efficiency in contemporary business environments.

Utilizing mobile banking apps has significantly enhanced the effectiveness of marketing campaigns. (Lee and Chung, 2009) found that mobile banking apps build customer trust and satisfaction, which in turn boosts the success of marketing campaigns through increased user engagement. The study by (Laukkanen, 2007) highlighted that the convenience and accessibility of mobile banking apps significantly improve customer engagement and marketing outcomes. While, Shaikh & Karjaluoto, (2015) provided comprehensive insights into how mobile banking adoption drives customer interaction and engagement, leading to more effective marketing campaigns. Similarly, Koenig-Lewis *et al.*, (2010) demonstrated that young consumers' adoption of mobile banking services increases marketing campaign effectiveness through higher engagement rates. Additionally, Baptista & Oliveira, (2015) explored factors influencing mobile banking adoption and its positive effects on marketing strategies, emphasizing cultural differences and technological acceptance.

Blockchain technology adoption has positively impacted our bank's trust and transparency in marketing. The findings of (Morkunas, Paschen and Boon, 2019) highlights that blockchain enhances business models by providing transparency and fostering trust among stakeholders, including marketing contexts. Moreover, R. Beck et al., (2017) discussed blockchain's potential to revolutionize business operations by increasing transparency and trust in transactions and interactions, which is crucial for effective marketing. While, Pilkington, (2016) elaborates on blockchain principles and applications, noting how transparency features can enhance trust in business processes, including marketing. Kshetri, (2017) explores blockchain's role in improving transparency and reducing corruption, translating into enhanced trust and transparency in marketing practices, especially in developing regions. Furthermore, Casino et al., (2019) provided a systematic review of blockchain applications, emphasizing its role in increasing transparency and trust in business operations, positively affecting marketing strategies.

Cloud computing has facilitated better data management and execution of marketing strategies. Marston et al., (2011) highlighted how cloud computing offers scalable resources that enhance data management and execution of business strategies, including marketing, by providing flexible and efficient computing resources. While, Hashem et al., (2015) emphasize the integration of big data and cloud computing, showing how this combination enhances data management capabilities and supports more effective marketing strategies through better data analytics. Moreover, Armbrust et al., (2010) outlined the benefits of cloud computing, including improved data management and operational efficiency, which directly impact the execution and success of marketing strategies. Similarly, Sultan, (2013) discusses how cloud computing facilitates better data management, operational agility, and cost-effective execution of business strategies, including marketing campaigns, by enabling real-time data access and analysis. Furthermore, Zhan et al., (2015) explored how cloud computing impacts business processes, emphasizing the opportunities it creates for enhancing marketing strategies through improved data management and analytics.

Integrating Customer Relationship Management (CRM) systems has significantly improved the personalization of marketing efforts. I. J. Chen & Popovich, (2003) explained that CRM systems integrate various business processes and technology, enhancing customer relationships and personalizing marketing strategies. Moreover, Nguyen & Mutum, (2012) reviewed advancements in CRM, demonstrating that successful implementation leads to better understanding of customer

needs and behaviours, thus enabling more personalized marketing. In addition to that, V. Kumar & Reinartz, (2018) emphasized that CRM systems provide detailed customer insights and facilitate targeted marketing strategies, enhancing personalization. Furthermore, Rahimi & Gunlu, (2016) showcase a case study in the hotel industry where CRM systems improved marketing personalization by leveraging customer data to tailor services and messages to individual preferences.

Social media monitoring tools play a crucial role in shaping marketing strategies by leveraging customer feedback and trends. He et al., (2013) highlights the importance of social media competitive analysis and text mining, showing how businesses can use these tools to inform their marketing strategies based on real-time customer feedback. The study conducted by Gensler et al., (2013) discuss the significance of social media monitoring for brand management, demonstrating how it helps in adjusting marketing strategies by analyzing real-time feedback and trends. In addition, Chae, (2015) illustrates the valuable insights gained from social media analytics, particularly through platforms like Twitter, which help businesses adapt their marketing strategies based on customer feedback and emerging trends. Moreover, Fan & Gordon, (2014) emphasizes the power of social media analytics in extracting actionable insights, underscoring its importance for shaping effective marketing strategies. While, Rapp et al., (2013) explore the effects of social media interactions among sellers, retailers, and consumers, highlighting how monitoring these interactions can inform marketing strategies and enhance customer engagement.

Adopting augmented reality (AR) and virtual reality (VR) has significantly enhanced customer engagement in marketing campaigns. The findings of Poushneh & Vasquez-Parraga, (2017) demonstrated that AR enhances the retail customer experience, increasing satisfaction and willingness to buy. Javornik, (2016) explored how AR's unique media characteristics influence consumer behavior, highlighting its potential to engage customers effectively. While, Scholz & Smith, (2016) focused on designing AR experiences that maximize consumer engagement, providing evidence of AR's effectiveness in creating immersive marketing campaigns. Pantano & Servidio, (2012) discussed how virtual and immersive technologies, including VR, can create innovative retail environments, further enhancing customer engagement and experience. Cybersecurity measures are integral to maintaining customer trust and the effectiveness of digital marketing strategies. The research by Gordon et al., (2011) analyses the financial impact of

security breaches and underscore the importance of robust cybersecurity measures in protecting a company's reputation, essential for effective digital marketing. Cavusoglu et al., (2004) highlight the market repercussions of security breaches, illustrating the necessity of cybersecurity in maintaining customer trust and digital marketing success. Moreover, Bulgurcu et al., (2010) demonstrated how employee compliance with information security policies enhances cybersecurity posture, crucial for sustaining customer trust and supporting marketing strategies. Finally, Ng et al., (2009) emphasized the role of user behavior in computer security, underscoring that strong cybersecurity measures are essential for building customer trust and ensuring effective digital marketing campaigns.

2.2 FORMULATION OF HYPOTHESES

1. Awareness Level Regarding Marketing Strategies

Null Hypothesis (H0):

There is no significant difference in the awareness level regarding marketing strategies among bank employees.

Alternative Hypothesis (H1):

There is a significant difference in the awareness level regarding marketing strategies among bank employees.

The awareness of marketing strategies among bank employees is crucial for the effective implementation and success of these strategies. Studies have shown that the level of awareness can vary significantly based on factors such as employee training, exposure to marketing initiatives, and hierarchical position within the bank (Schneider, Parkington and Buxton, 1980; Kumar, Singh and Patel, 2019). For instance, senior employees who are involved in strategic decision-making processes may have a higher awareness of marketing strategies compared to their junior counterparts (Vecchio-Sadus and Griffiths, 2004). This discrepancy can lead to variations in how marketing strategies are perceived and implemented across different levels within the

organization. Therefore, investigating whether a significant difference exists in awareness levels among bank employees can provide valuable insights for enhancing marketing effectiveness.

2. Effectiveness of Marketing Strategies

Null Hypothesis (H0):

There is no significant difference in the effectiveness of marketing strategies among public, private, and cooperative banks.

Alternative Hypothesis (H1):

There is a significant difference in the effectiveness of marketing strategies among public, private, and cooperative banks.

The effectiveness of marketing strategies can vary widely among different types of banks due to their distinct operational models, customer bases, and regulatory environments. Public sector banks often face more bureaucratic hurdles and may have less flexibility in implementing innovative marketing strategies compared to private and cooperative banks (Faerman, McCaffrey and Slyke, 2001; Pires, 2011). Private banks, with their focus on profitability and competition, might employ more aggressive and customer-centric marketing approaches (Llewellyn, 2005). Cooperative banks, on the other hand, often emphasize community-oriented and trust-based marketing strategies (Hesse and Čihák, 2007; Fiordelisi and Mare, 2014). Understanding these differences is essential for developing tailored marketing approaches that align with each bank's unique characteristics and objectives.

3. Reasons Behind Failures of Marketing Strategies

Null Hypothesis (H0):

There is no significant difference in perceived reasons for marketing strategy failures among public, private, and cooperative banks.

Alternative Hypothesis (H1):

There is a significant difference in perceived reasons for marketing strategy failures among public, private, and cooperative banks.

Marketing strategy failures in banks can be attributed to various factors, including inadequate market research, poor implementation, and misalignment with customer needs. Public banks may struggle with rigid structures and slow decision-making processes, leading to ineffective marketing strategies (Zahariadis and Allen, 2003; Marois, 2022). Private banks might encounter failures due to overemphasis on short-term gains and neglect of long-term customer relationships (Singh & Agarwal, 2018). Cooperative banks, with their limited resources and focus on community values, may face challenges in scaling their marketing efforts (Fonteyne, 2007; Bocken, Fil and Prabhu, 2016). Exploring these differences can help in identifying specific issues and formulating more effective marketing strategies.

4. Current Industry Practices and Research Advancements

Null Hypothesis (H0):

There is no significant difference in awareness of industry practices and research advancements among different designations within banks.

Alternative Hypothesis (H1):

There is a significant difference in awareness of industry practices and research advancements

Awareness of current industry practices and research advancements is crucial for the continuous improvement and competitiveness of banks. Higher-level executives are likely to be more informed about industry trends and advancements due to their involvement in strategic planning and external networking (Poister, 2010). In contrast, lower-level employees might have limited exposure to such information, focusing more on operational tasks (Parker, Van den Broeck and Holman, 2016). This disparity in awareness can lead to inconsistencies in the application of best practices across the organization, highlighting the need to bridge knowledge gaps through targeted training and communication strategies.

5. Role of Business Analysis

Null Hypothesis (H0):

There is no significant difference in the perceived role of business analysis in marketing strategies among different types of banks.

Alternative Hypothesis (H1):

There is a significant difference in the perceived role of business analysis in marketing strategies among different types of banks.

Business analysis plays a critical role in the development and refinement of marketing strategies by providing insights into market trends, customer behavior, and competitive dynamics (Palepu *et al.*, 2020). The extent to which business analysis is integrated into marketing strategies can vary among different types of banks. Private banks, with their focus on profitability and market share, are likely to leverage business analysis more extensively compared to public and cooperative banks, which might face resource constraints and operational rigidities (Migliorelli, 2018; Davis-Adeseqha, 2024). Investigating these differences can help in understanding the strategic value of business analysis across various banking sectors.

6. Role of Technology Adoption**Null Hypothesis (H0):**

There is no significant difference in perceptions of technology adoption in enhancing marketing strategies among different types of banks.

Alternative Hypothesis (H1):

There is a significant difference in perceptions of technology adoption in enhancing marketing strategies among different types of banks.

Technology adoption is a key driver of innovation and efficiency in marketing strategies. The adoption and integration of technologies such as data analytics, artificial intelligence, and digital platforms can significantly enhance the effectiveness of marketing initiatives (Omarova, 2020; Newman, Mintrom and O'Neill, 2022). Public sector banks might be slower in adopting new technologies due to regulatory and bureaucratic challenges, whereas private banks are generally more agile and quicker to implement technological solutions (Omarova, 2020; Newman, Mintrom and O'Neill, 2022). Cooperative banks, with their community-focused approach, may adopt technology at a different pace and for different purposes (Chavan, Kumbhar

and Mundhe, 2019). Understanding these perceptions can provide valuable insights into the strategic deployment of technology in enhancing marketing efforts.

2.3 RESEARCH GAP

The comprehensive literature review on marketing strategies in the banking sector highlights several key areas where current research falls short, thereby identifying significant research gaps. Firstly, there is a notable lack of comparative studies that analyze the differences in marketing strategies between public, private, and cooperative banks. Most existing research tends to focus on one type of bank without offering a comparative perspective that could reveal unique challenges and strengths across these sectors.

Secondly, while the impact of digital marketing tools and technologies such as AI, big data analytics, and social media on banking marketing strategies is acknowledged, there is insufficient empirical evidence detailing their implementation processes and effectiveness. The literature does not adequately explore how these technologies can be customized to meet the unique needs of different types of banks or how they impact long-term customer engagement and satisfaction. Thirdly, the role of business analysis in shaping marketing strategies is often mentioned but not deeply examined. There is a need for detailed studies that investigate how business analysis can be integrated into marketing strategy development and execution to enhance decision-making, optimize resource allocation, and improve overall marketing performance.

This study addresses these research gaps by providing a comparative analysis of public, private, and cooperative banks, shedding light on the unique challenges and strengths of each sector. It empirically examines the implementation and effectiveness of digital marketing tools and technologies, such as AI and big data analytics, tailored to the specific needs of different types of banks. The research also delves into the integration of business analysis into marketing strategy development and execution, offering insights into how this can enhance decision-making, resource allocation, and overall marketing performance. Additionally, the study explores strategic planning practices and evaluates the effectiveness of various training approaches to bridge the knowledge gap among different managerial levels. By filling these gaps, this study paves the way for future research and provides a comprehensive roadmap for optimizing marketing strategies in the banking industry.

3 CHAPTER III: METHODOLOGY

This research methodology chapter details the systematic approach employed to investigate marketing strategies within the banking industry, focusing on public, private, and cooperative banks in India. The study adopts a descriptive and analytical research design, integrating both quantitative and qualitative data to comprehensively assess awareness levels, evaluate effectiveness, and identify factors contributing to the success or failure of marketing strategies. By combining data from structured questionnaires with insights from existing literature, the study aims to provide a holistic understanding of current marketing practices and their future potential. The mixed-methods approach ensures a robust analysis, capturing diverse perspectives from various managerial levels through meticulously designed questionnaires. Additionally, secondary data from industry reports and previous research further enriches the analysis, making the findings both comprehensive and insightful.

The sampling methodology is critical to the study's reliability and generalizability. A stratified random sampling technique is employed to ensure adequate representation of all sub-groups within the population. The sample size, determined using Cochran's formula and augmented for potential non-responses, results in a robust dataset for analysis. To analyze the data, a combination of descriptive and inferential statistical methods is utilized. Reliability and validity are tested through Cronbach's alpha, content validity, and construct validity, while normality tests guide the choice of appropriate statistical techniques. Given the non-normal distribution of the data, non-parametric tests such as the Kolmogorov-Smirnov test, Kruskal-Wallis H test, Mann-Whitney U test, and Jonckheere-Terpstra test are applied. This chapter provides a detailed account of the methodologies applied, ensuring transparency and rigor in the research process. This rigorous methodological framework is crucial for understanding the complexities of marketing strategies in the banking sector, aiming to deliver actionable insights that can enhance strategic decision-making and marketing effectiveness.

3.1 Data Collection and Sampling

This study utilizes both primary and secondary data to provide a comprehensive analysis of marketing strategies within the banking industry. Primary data is collected through structured

questionnaires distributed to employees of public, private, and cooperative banks in India, covering various managerial levels including senior managers, middle managers, and top-level executives. This data collection method ensures a robust and detailed understanding of the current marketing strategies, their effectiveness, and the factors influencing their success or failure. Secondary data is sourced from existing literature, industry reports, and previous research studies on marketing strategies and business analytics in the banking sector. By integrating primary data with secondary sources, the study aims to offer a well-rounded perspective on the marketing practices within the industry, supported by both empirical evidence and established knowledge.

1.1. Sampling and Population

The study is designed to target employees from various sectors within the banking industry in India, including public, private, and cooperative banks. The objective is to capture a comprehensive and representative view of marketing strategies implemented across these different banking sectors. The population of interest for this study includes individuals at multiple managerial levels within these banks. This encompasses senior managers who are responsible for strategic decision-making and oversight, middle managers who play a crucial role in executing and managing marketing strategies, and top-tier employees who may not hold managerial positions but are directly involved in the formulation, execution, or evaluation of marketing initiatives.

By including a diverse range of managerial levels, the study aims to gather a holistic understanding of how marketing strategies are perceived, implemented, and assessed across different organizational hierarchies. Senior managers provide insights into the strategic planning and high-level decision-making processes, while middle managers offer perspectives on the operational challenges and effectiveness of these strategies. Top-tier employees, often at the frontline, can provide valuable feedback on the practical aspects and day-to-day execution of marketing initiatives. This approach ensures that the study captures a wide array of experiences and viewpoints, leading to a more nuanced and thorough analysis of marketing practices within the banking sector in India.

1.2. Sample Size Determination

The sample size for this study is determined using Cochran's formula (Cochran, 1943; Woolson, Bean and Rojas, 1986), which is widely used to calculate an ideal sample size given a desired

level of precision, confidence level, and the estimated proportion of the attribute present in the population. The formula is expressed as:

$$n_0 = \frac{Z^2 p(1 - p)}{e^2}$$

Where:

- n_0 is the sample size,
- Z is the Z -value (e.g., 1.96 for a 95% confidence level),
- p is the estimated proportion of the population that has the attribute (since the exact value is unknown, 0.5 is often used as it provides the maximum sample size),
- e is the desired level of precision (margin of error).

Given these parameters, the calculated sample size is 384.5. To account for potential non-responses and incomplete data, the sample size is rounded up and increased. Thus, 450 questionnaires were distributed to ensure a sufficient number of responses.

1.3. Sampling Technique

A stratified random sampling technique (Parsons, 2017) is utilized to ensure that all sub-groups within the population are adequately represented. The stratification is based on the type of bank (public, private, cooperative) and different managerial levels (senior managers, middle managers, and frontline employees). This approach enhances the reliability and generalizability of the study findings by ensuring a balanced representation across various categories.

1.4. Data Collection Process

The data collection process involves several steps to ensure the accuracy and completeness of the data. A questionnaire was designed to capture detailed information on awareness levels, effectiveness, reasons for success or failure of marketing strategies, current industry practices, and the role of business analysis and technology adoption. It includes a mix of closed-ended questions, Likert scale items, and open-ended questions to gather both quantitative and qualitative data. The questionnaire was distributed to 500 bank employees across various managerial levels within

public, private, and cooperative banks. The distribution is carried out through both online and offline methods to maximize reach and response rates. Respondents are given a stipulated time frame to complete and return the questionnaires. Follow-up reminders are sent to encourage participation and minimize non-response rates. Once the responses are collected, the data was carefully reviewed and cleaned to ensure accuracy. Incomplete or inconsistent responses are excluded, resulting in a final sample size of 406 respondents. This final sample size provides a robust dataset for analysis.

3.2 Statistical Methods

The statistical methods utilized in this study are designed to rigorously analyze the data collected from both primary and secondary sources. These methods include a combination of descriptive and inferential statistical techniques, each serving a specific purpose in the analysis. Descriptive statistics provide a detailed summary of the data, including measures such as mean, median, mode, and standard deviation, which help in understanding the central tendencies and dispersions within the dataset. Inferential statistics, on the other hand, are used to draw conclusions and make inferences about the larger population based on the sample data, employing tests that help identify significant differences and trends across different groups.

1.5. Reliability and Validity Testing

To ensure the reliability and validity of the data collected through the questionnaires, the following tests are conducted:

1.5.1. Cronbach's Alpha: Internal Consistency Measurement

Cronbach's Alpha (α) is a measure of internal consistency, which assesses the reliability of a set of scale or test items (Christmann and Van Aelst, 2006). It evaluates how closely related a set of items are as a group, providing an indication of the extent to which they measure the same underlying construct. A high value of Cronbach's Alpha (typically above 0.7) suggests that the items have relatively high internal consistency.

Cronbach's Alpha is calculated using the formula:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

where:

- N is the number of items.
- \bar{c} is the average covariance between item pairs.
- \bar{v} is the average variance of each item.

Derivation

and

Explanation

To derive Cronbach's Alpha, consider a test composed of N items. Let X_i be the score of the i -th item, and let $X = \sum_{i=1}^N X_i$ be the total score across all items.

The total variance of the test score X is:

$$\text{Var}(X) = \sum_{i=1}^N \text{Var}(X_i) + 2 \sum_{i < j} \text{Cov}(X_i, X_j)$$

The average variance of each item is:

$$\bar{v} = \frac{1}{N} \sum_{i=1}^N \text{Var}(X_i)$$

The average covariance between items is:

$$\bar{c} = \frac{2}{N(N-1)} \sum_{i < j} \text{Cov}(X_i, X_j)$$

Substituting these into the total variance expression, we get:

$$\text{Var}(X) = N \cdot \bar{v} + N(N-1) \cdot \bar{c}$$

Cronbach's Alpha can be expressed as the ratio of the sum of covariances to the total variance of the test score. Using the expressions for \bar{v} and \bar{c} , Cronbach's Alpha is:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Interpretation

- High Alpha ($\alpha \geq 0.7$): Indicates good internal consistency, meaning that the items measure the same underlying construct reliably.
- Low Alpha ($\alpha < 0.7$): Suggests poor internal consistency, indicating that the items may not be well-correlated or may measure different constructs.

Application

In this study, Cronbach's Alpha is applied to various constructs such as the reasons for marketing strategy failures and awareness of industry practices. For example, to assess the reliability of items measuring "reasons for marketing strategy failures," each questionnaire item related to this construct is evaluated using Cronbach's Alpha. A high Alpha value would confirm that the items consistently measure the intended construct, ensuring the reliability of the collected data.

By ensuring high internal consistency through Cronbach's Alpha, the study provides reliable and robust findings (Davenport *et al.*, 2015; Hajjar, 2018), which are essential for drawing valid conclusions and making informed strategic decisions in the banking industry.

1.5.2. Content Validity

Content validity is crucial in ensuring that a measurement instrument, such as a questionnaire, adequately covers the domain of content it intends to measure (Kimberlin and Winterstein, 2008). This form of validity ensures that the instrument includes all necessary items representing the construct being studied and excludes irrelevant items (Geranpayeh and Taylor, 2013). In the context of this study, content validity is essential to ensure that all aspects of marketing strategies, from awareness to effectiveness and reasons for failure, are thoroughly covered. To achieve this, a detailed process is followed, starting with a clear definition of the construct and followed by a comprehensive literature review to identify relevant dimensions and elements.

The next step involves assembling a panel of experts with substantial knowledge and experience in marketing and banking. These experts review the initial set of items to evaluate their relevance

and comprehensiveness. Each item is assessed for its relevance to the construct and clarity. Feedback from the experts includes suggestions for adding, modifying, or deleting items to improve the questionnaire. Based on this feedback, the items are refined to ensure that all aspects of the construct are adequately covered.

Following expert review and refinement, a pilot test is conducted with a small sample from the target population. This step further refines the items based on the responses, ensuring the questionnaire's clarity and comprehensiveness. Feedback from the experts is collected and used to refine the items, ensuring no critical component is missing and that each item is clear and concise. By meticulously following these steps, the study ensures that the questionnaire items comprehensively cover the intended constructs. This process enhances the validity of the data collected and ensures that the study's findings are robust and reliable, providing a solid foundation for conclusions and recommendations. Content validity, therefore, is a critical step in the development of the questionnaire, ensuring that the instrument effectively measures what it is intended to measure, leading to more accurate and meaningful research outcomes.

1.5.3. Construct validity

Construct validity is a fundamental aspect of ensuring that a measurement instrument, such as a questionnaire, accurately reflects the theoretical constructs it is intended to measure (Malhotra and Grover, 1998). This validity ensures that the instrument measures the intended concept and not some other variable. In this study, construct validity is assessed through factor analysis, a statistical technique used to examine the relationships among multiple variables and to determine whether they form coherent subsets that correspond to the theoretical constructs (Malhotra and Grover, 1998; Hamann *et al.*, 2013). The process begins with the collection of data using the questionnaire. Once the data is collected, exploratory factor analysis (EFA) is conducted to identify the underlying structure of the data. EFA helps in determining the number of factors that best represent the data and in understanding which items load on which factors (Sürücü, Yıkılmaz and Maşlakçı, 2024).

Exploratory factor analysis (EFA) plays a crucial role in the initial phase of assessing construct validity. It helps in identifying items that strongly correlate with each other but weakly with others, suggesting they measure the same construct. This phase is essential for refining the questionnaire

by pinpointing items that do not fit well with any factor, indicating they may not be measuring the intended construct accurately. By grouping related items together, EFA provides a preliminary understanding of the constructs being measured and guides the development of a more coherent and focused measurement instrument (Schmitt, 2011).

After the exploratory phase, confirmatory factor analysis (CFA) is performed to test the hypothesis that the items are associated with specific constructs as theorized. CFA allows the researcher to test the fit of the model by specifying the number of factors and the relationships between observed variables and their underlying latent constructs (Marsh *et al.*, 2020). Various fit indices, such as the Chi-square statistic (Rao, 2002; Turhan, 2020), Root Mean Square Error of Approximation (RMSEA) (Yin, Shi and Fairchild, 2023), and Comparative Fit Index (CFI) (Rigdon, 1996; Smith and McMillan, 2001), are used to assess how well the model fits the data. A good fit indicates that the questionnaire items align well with the theoretical constructs, confirming their validity. This rigorous approach ensures that the constructs of awareness of marketing strategies, effectiveness, and reasons for failure are accurately measured, leading to reliable and meaningful results. By aligning the questionnaire items with the constructs through rigorous statistical validation, the study ensures the robustness and reliability of its findings, providing a strong foundation for drawing meaningful conclusions and making informed recommendations.

1.6. Normality Testing

Before performing inferential statistical analyses, the normality of the data is assessed to determine the appropriate statistical tests (Marshall and Jonker, 2011). Ensuring data normality is crucial because many statistical methods assume that the data follows a normal distribution, influencing the robustness and validity of the study's conclusions. Two primary tests are employed: the Kolmogorov-Smirnov test (Massey, 1951) and the Shapiro-Wilk test (Monter-Pozos and González-Estrada, 2024). The Kolmogorov-Smirnov test compares the sample distribution with a normal distribution, while the Shapiro-Wilk test evaluates whether a sample comes from a normally distributed population, often preferred for its higher power in detecting deviations from normality. Results from both tests consistently indicated that the data did not follow a normal distribution, justifying the use of non-parametric tests for further analysis. This careful assessment ensures that the analysis remains robust and reliable, even when the data deviates from a normal

distribution, underscoring the importance of selecting appropriate statistical methods to accurately interpret the data and draw valid conclusions.

1.6.1. Kolmogorov-Smirnov Test:

The Kolmogorov-Smirnov (K-S) test is a non-parametric test used to determine whether a sample comes from a specified distribution, typically a normal distribution (Massey, 1951). The test compares the empirical distribution function of the sample data with the cumulative distribution function of the reference distribution.

The K-S test statistic is defined as:

$$D_n = \sup_x |F_n(x) - F(x)|$$

where:

- D_n is the Kolmogorov-Smirnov statistic.
- \sup denotes the supremum of the set of distances.
- $F_n(x)$ is the empirical distribution function of the sample.
- $F(x)$ is the cumulative distribution function of the reference distribution.

For a sample of size n , the empirical distribution function $F_n(x)$ is defined as:

$$F_n(x) = \frac{1}{n} \sum_{i=1}^n I_{[-\infty, x]}(X_i)$$

where:

- $I_{[-\infty, x]}(X_i)$ is an indicator function that equals 1 if $X_i \leq x$ and 0 otherwise.
- X_i are the sample data points.

The test involves calculating the maximum absolute difference between the empirical distribution function and the cumulative distribution function of the normal distribution.

Steps:

- 1 Calculate the Empirical Distribution Function (EDF):
The EDF $F_n(x)$ represents the proportion of sample points less than or equal to x .
- 2 Determine the Theoretical Cumulative Distribution Function (CDF):
For normality testing, $F(x)$ is the CDF of the normal distribution, given by:

$$F(x) = \frac{1}{2} \left[1 + \operatorname{erf} \left(\frac{x - \mu}{\sigma\sqrt{2}} \right) \right]$$

where:

- μ is the mean of the normal distribution.
- σ is the standard deviation of the normal distribution.
- erf is the error function.

- 3 Compute the K-S Statistic:

Calculate the maximum difference D_n between $F_n(x)$ and $F(x)$:

$$D_n = \max(|F_n(x) - F(x)|)$$

- 4 Compare Against Critical Values:

The calculated D_n is compared to the critical value from the K-S distribution. If D_n exceeds the critical value, the null hypothesis that the sample comes from the specified distribution is rejected.

Application in the study

The Kolmogorov-Smirnov (K-S) test is applied in this study to assess the normality of the data distributions of various variables involved in analyzing marketing strategies within the banking sector. Specifically, the K-S test helps determine whether the empirical distribution of collected data, such as awareness levels and effectiveness ratings of marketing strategies, conforms to a normal distribution. By comparing the empirical distribution function (EDF) of the sample data with the cumulative distribution function (CDF) of a normal distribution, the test calculates the maximum absolute difference between the two functions (Li *et al.*, 2023). If the calculated K-S

statistic exceeds the critical value, it indicates a significant deviation from normality, thereby justifying the use of non-parametric statistical tests for further analysis. This rigorous approach ensures that the study's statistical analyses are based on appropriate assumptions, enhancing the reliability and validity of the findings related to the factors influencing the success or failure of marketing strategies across different types of banks and managerial levels.

1.6.2. Shapiro-Wilk Test:

The Shapiro-Wilk test is a statistical test that assesses whether a sample comes from a normally distributed population (Monter-Pozos and González-Estrada, 2024). It is particularly powerful for small sample sizes and is widely used due to its sensitivity to departures from normality.

The Shapiro-Wilk test statistic W is calculated as follows:

$$W = \frac{(\sum_{i=1}^n a_i x_{(i)})^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

where:

- $x_{(i)}$ are the ordered sample values (i.e., $x_{(1)}$ is the smallest value, $x_{(2)}$ is the second smallest, etc.).
- \bar{x} is the sample mean.
- a_i are constants generated from the means, variances, and covariances of the order statistics of a sample from a normal distribution.

Steps:

1 Order the Sample Data:

Arrange the sample data in ascending order to obtain $x_{(1)}, x_{(2)}, \dots, x_{(n)}$.

2 Calculate the Sample Mean:

Compute the mean of the sample values:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

3 Determine the Coefficients a_i :

The coefficients a_i are derived from the expected values of the order statistics of a standard normal distribution. These coefficients can be precomputed for different sample sizes or obtained from statistical tables.

4 Compute the Numerator:

Calculate the sum of the weighted ordered sample values:

$$\left(\sum_{i=1}^n a_i x_{(i)} \right)^2$$

5 Compute the Denominator:

Calculate the total variance of the sample values:

$$\sum_{i=1}^n (x_i - \bar{x})^2$$

6 Calculate the Shapiro-Wilk Statistic:

Combine the numerator and the denominator to obtain the Shapiro-Wilk statistic W :

$$W = \frac{\left(\sum_{i=1}^n a_i x_{ij} \right)^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

7 Compare Against Critical Values:

The calculated W is compared to critical values from the Shapiro-Wilk distribution. If the W value is significantly lower than the critical value, the null hypothesis that the data is normally distributed is rejected.

8 Determine the Coefficients a_i :

The coefficients a_i are derived from the expected values of the order statistics of a standard normal distribution. These coefficients can be precomputed for different sample sizes or obtained from statistical tables.

9 Compute the Numerator:

Calculate the sum of the weighted ordered sample values:

$$\left(\sum_{i=1}^n a_i x_{(i)} \right)^2$$

10 Compute the Denominator:

Calculate the total variance of the sample values:

$$\sum_{i=1}^n (x_i - \bar{x})^2$$

11 Calculate the Shapiro-Wilk Statistic:

Combine the numerator and the denominator to obtain the Shapiro-Wilk statistic W :

$$W = \frac{(\sum_{i=1}^n a_i x_{ij})^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

12 Compare Against Critical Values:

The calculated W is compared to critical values from the Shapiro-Wilk distribution. If the W value is significantly lower than the critical value, the null hypothesis that the data is normally distributed is rejected.

Application in the Study

In our study, the Shapiro-Wilk test is used to assess the normality of the data distributions for various variables related to marketing strategies in the banking sector (Opoku, Appiah-Gyimah and Kwapong, 2014). The test's results are crucial for determining the appropriate statistical methods to be applied. Given that the test indicated a departure from normality, it justifies the use of non-parametric tests for further analysis. This ensures that our inferential statistics are robust and reliable, accounting for the non-normal nature of the data. By accurately assessing normality (González-Estrada and Cosmes, 2019), we can make informed decisions about the statistical techniques used, enhancing the validity of our findings on the awareness, effectiveness, and factors influencing the success or failure of marketing strategies in public, private, and cooperative banks in India.

Results from both tests consistently indicated that the data did not follow a normal distribution, thus justifying the use of non-parametric tests for further analysis.

1.7. Descriptive Statistics

In this study, four key descriptive statistics are used to summarize the main characteristics of the dataset: Minimum, Maximum, Mean, and Standard Deviation. These statistics provide a comprehensive overview of the data, enabling us to understand the central tendency and variability within the dataset.

1.7.1. Minimum:

The minimum value in a dataset is the smallest data point observed (Hahs-Vaughn, 2023). It provides a baseline measure of the lowest value recorded and is useful for identifying the lower boundary of the data range. In the context of this study, the minimum value helps to understand the lowest level of awareness or effectiveness of marketing strategies among bank employees.

1.7.2. Maximum:

The maximum value is the highest data point observed in the dataset. It indicates the upper boundary of the data range (Hahs-Vaughn, 2023). By identifying the maximum value, we can understand the highest level of awareness or effectiveness of marketing strategies within the

surveyed banks. The maximum value, along with the minimum, provides insights into the range and spread of the data.

1.7.3. Mean:

The mean, or average, represents the central value of the dataset. It is calculated by summing all the data points and dividing by the number of observations (Hahs-Vaughn, 2023). The mean provides a single value that summarizes the overall level of awareness or effectiveness of marketing strategies across all respondents. It is a useful measure for understanding the general trend or central tendency in the data.

1.7.4. Standard Deviation:

The standard deviation measures the amount of variation or dispersion around the mean (Gries, 2022). A low standard deviation indicates that the data points are close to the mean, suggesting consistency in responses. Conversely, a high standard deviation indicates greater variability, showing that responses are spread out over a wider range. In this study, the standard deviation helps to assess the consistency or variability in the awareness and effectiveness of marketing strategies among different respondents.

By using these descriptive statistics, we can interpret the central tendency and spread of the data related to marketing strategies in the banking sector. The minimum and maximum values provide insights into the range of responses, while the mean offers an average measure of awareness and effectiveness. The standard deviation reveals the degree of variation among responses, which is critical for understanding how uniformly or diversely the marketing strategies are perceived and implemented within the banking industry.

1.8. Inferential Statistics

Inferential statistics are used to make inferences about the population based on the sample data (Somekh and Lewin, 2004; Trafimow and MacDonald, 2016; Fincher and Robins, 2019). The following tests and analyses are performed:

1.8.1. Kruskal-Wallis H Test:

The Kruskal-Wallis H test is a non-parametric statistical test used to determine if there are statistically significant differences between the medians of three or more independent groups (Ostertagová, Ostertag and Kováč, 2014). It is particularly useful when the assumptions of normality and homogeneity of variances are not met, making it an appropriate choice for analyzing ordinal data or non-normally distributed interval data (Vargha and Delaney, 1998).

The Kruskal-Wallis H test is based on ranks rather than raw data. The test statistic H is calculated using the following steps:

Combine and Rank the Data:

Combine all the data from the groups being compared and assign ranks to the combined data. If there are N total observations, each observation is assigned a rank from 1 to N .

Calculate the Rank Sums:

For each group, sum the ranks. Let R_i be the sum of the ranks for group i , and let n_i be the number of observations in group i .

Compute the Kruskal-Wallis H Statistic:

The test statistic H is calculated using the formula:

$$H = \left(\frac{12}{N(N+1)} \sum_{i=1}^k \frac{R_i^2}{n_i} \right) - 3(N+1)$$

where k is the number of groups, R_i is the sum of ranks for the i -th group, n_i is the number of observations in the i -th group, and N is the total number of observations across all groups.

Adjust for Ties:

If there are tied ranks, an adjustment factor is applied to the test statistic to account for the ties.

The adjustment factor T is calculated as:

$$T = 1 - \frac{\sum (t_j^3 - t_j)}{N^3 - N}$$

where t_j is the number of tied ranks for the j -th group of ties. The adjusted test statistic H' is then:

$$H' = \frac{H}{T}$$

Determine the p -Value:

The distribution of H approximates a chi-square distribution with $k - 1$ degrees of freedom. The p -value is obtained by comparing the calculated H value to the chi-square distribution table.

Application in the Study

In the context of this study, the Kruskal-Wallis H test is employed to assess whether there are significant differences in the awareness and effectiveness of marketing strategies among employees from different types of banks (public, private, and cooperative) (Ostertagová, Ostertag and Kováč, 2014; Jar and Reyad, 2019). Given that the data does not follow a normal distribution, the Kruskal-Wallis H test is appropriate for comparing the medians across these groups.

For example, the test can be applied to compare the awareness levels of marketing strategies among senior managers, middle managers, and frontline employees across the different types of banks. By ranking the awareness scores and calculating the test statistic H , we can determine if there are statistically significant differences in median awareness levels between the groups. If the p-value is below a chosen significance level (e.g., 0.05), we can conclude that there are significant differences in awareness levels across the groups.

For example, the test can be applied to compare the awareness levels of marketing strategies among senior managers, middle managers, and frontline employees across the different types of banks. By ranking the awareness scores and calculating the test statistic H , we can determine if there are statistically significant differences in median awareness levels between the groups. If the p-value is below a chosen significance level (e.g., 0.05), we can conclude that there are significant differences in awareness levels across the groups.

Similarly, the Kruskal-Wallis H test can be used to compare the effectiveness of various marketing strategies (e.g., content marketing, influencer collaborations) between the different types of banks. This analysis helps to identify whether certain types of banks perceive and implement these strategies more effectively than others, providing valuable insights for tailoring marketing approaches to different banking sectors.

1.8.2. Mann-Whitney U Test:

The Mann-Whitney U test, also known as the Wilcoxon rank-sum test, is a non-parametric statistical test used to compare differences between two independent groups (Sedgwick, 2015; Jar and Reyad, 2019). It is particularly useful when the dependent variable is either ordinal or continuous, but not normally distributed. This test ranks all the values from both groups together and then compares the ranks to determine if there is a significant difference between the two groups.

The Mann-Whitney U test involves the following steps:

Combine and Rank the Data:

Combine the data from the two groups and assign ranks to the combined data. If there are ties, assign the average rank to the tied values.

Calculate the Rank Sums:

Let R_1 and R_2 be the sum of ranks for the two groups, and let n_1 and n_2 be the number of observations in each group, respectively.

Compute the U Statistics:

Calculate the U statistic for each group using the formulas:

$$U_1 = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - R_1$$

$$U_2 = n_1 n_2 + \frac{n_2(n_2 + 1)}{2} - R_2$$

The smaller of U_1 and U_2 is used as the test statistic U .

Determine the p -Value:

The distribution of U approximates a normal distribution for large sample sizes. The test statistic can be standardized using the following formula to obtain a z -score:

$$z = \frac{U - \mu_U}{\sigma_U}$$

Where,

$$\mu_U = \frac{n_1 n_2}{2}$$

$$\sigma_U = \sqrt{\frac{n_1 n_2 (n_1 + n_2 + 1)}{12}}$$

The z -score is then compared to the standard normal distribution to obtain the p -value.

Application in the Study

In this study, the Mann-Whitney U test is applied to compare the awareness levels of marketing strategies between different genders. Given that the data does not follow a normal distribution, the Mann-Whitney U test is appropriate for analyzing the differences in awareness levels.

For example, if we have two independent groups, males and females, we rank the awareness scores from both groups together and calculate the rank sums for each group. Using these rank sums, we compute the U statistics and determine if there is a significant difference in awareness levels between the genders. If the p -value obtained from the test is below a chosen significance level (e.g., 0.05), we can conclude that there is a statistically significant difference in the awareness levels of marketing strategies between males and females.

By using the Mann-Whitney U test, the study provides insights into whether gender influences the awareness of marketing strategies in the banking industry (Yousafzai and Yani-de-Soriano, 2012). This information can help tailor training programs and awareness campaigns to address any disparities identified between male and female employees, ensuring more effective dissemination of marketing knowledge across the organization.

1.8.3. Jonckheere-Terpstra Test:

The Jonckheere-Terpstra test is a non-parametric statistical test used to determine if there are ordered differences among several independent groups (Ali *et al.*, 2015). It is particularly useful for detecting trends across multiple groups, especially when the data does not meet the assumptions of normality required for parametric tests.

The Jonckheere-Terpstra test involves the following steps:

Formulate Hypotheses:

- Null Hypothesis (H_0) : There is no trend in the ordered categories.
- Alternative Hypothesis (H_1) : There is a trend in the ordered categories.

Rank the Data:

Combine the data from all groups and rank them in ascending order.

Calculate the Jonckheere Statistic (J):

The test statistic J is calculated based on the number of pairwise comparisons that are in the same order as the hypothesized trend.

$$J = \sum_{i < j} T_{ij}$$

where T_{ij} is the count of pairs where the value in group i is less than the value in group j .

Determine the Expected Value and Variance:

For large samples, the Jonckheere-Terpstra statistic approximates a normal distribution. The expected value ($E(J)$) and variance ($\text{Var}(J)$) are given by:

$$E(J) = \frac{n(n-1)}{4}$$

$$\text{Var}(J) = \frac{n(n-1)(2n+5)}{72}$$

where n is the total number of observations.

Compute the Standardized Test Statistic:

The standardized test statistic Z is calculated as follows:

$$Z = \frac{J - E(J)}{\sqrt{\text{Var}(J)}}$$

Application in the Study

In this study, the Jonckheere-Terpstra test is used to detect trends across multiple managerial levels and types of banks regarding awareness and effectiveness of marketing strategies. For example, the test can help determine if there is an increasing or decreasing trend in the effectiveness of marketing strategies from frontline employees to middle managers to senior managers.

By ranking the awareness scores and effectiveness ratings across these groups, the Jonckheere-Terpstra test can identify significant ordered differences, indicating whether higher managerial levels consistently report greater awareness and effectiveness (Mat Roni *et al.*, 2021). This information is crucial for understanding how marketing strategies are perceived and implemented at different organizational levels.

The application of the Jonckheere-Terpstra test in this context provides a robust method for detecting trends and ordered differences, helping to validate the study's findings and ensure that the conclusions drawn are based on statistically significant patterns. This, in turn, supports the development of targeted training programs and strategic planning initiatives to enhance marketing outcomes across the banking sector.

1.9. Analytical Package Used:

The statistical analysis in this study is conducted using the specialized software SPSS (Statistical Package for the Social Sciences) – Licensed Version. SPSS is widely recognized for its powerful data analysis capabilities, providing a comprehensive suite of statistical tools that facilitate both descriptive and inferential statistical analyses.

3.3 METHODOLOGY CONSTRUCTS, VARIABLES AND STATEMENTS

Objective 1: To assess the awareness level regarding marketing strategies in the banking industry.

Construct	Item	Statement	Variable
Awareness of Marketing Strategies	1	I am well-informed about our bank's content marketing strategies.	Awareness of Content Marketing
	2	I understand the objectives and methods of our bank's social media marketing campaigns.	Awareness of Social Media Marketing
	3	I am aware of how our bank utilizes email marketing to engage with customers.	Awareness of Email Marketing
	4	I have a good understanding of our bank's search engine optimization (SEO) practices.	Awareness of SEO
	5	I am familiar with our bank's approach to pay-per-click (PPC) advertising.	Awareness of PPC Advertising
	6	I know how our bank collaborates with influencers to enhance brand recognition.	Awareness of Influencer Collaboration
	7	I am aware of the details and benefits of our customer loyalty programs.	Awareness of Customer Loyalty Programs
	8	I understand the role of personalized marketing in our bank's marketing strategy.	Awareness of Personalized Marketing
	9	I am knowledgeable about our bank's public relations (PR) activities and their objectives.	Awareness of PR Activities
	10	I have a clear understanding of the event marketing strategies implemented by our bank.	Awareness of Event Marketing

[Source: Created by the author]

Objective 2: To evaluate the effectiveness of marketing strategies in the banking industry.

Construct	Item	Statement	Variable
Effectiveness of Marketing Strategies	1	Our bank's content marketing efforts effectively attract and engage customers.	Content Marketing Effectiveness
	2	Social media marketing has significantly improved our bank's customer outreach and engagement.	Social Media Marketing Effectiveness
	3	Email marketing campaigns are effective in maintaining strong relationships with our customers.	Email Marketing Effectiveness
	4	Search engine optimization (SEO) strategies have successfully increased our bank's online visibility.	SEO Effectiveness
	5	Pay-per-click (PPC) advertising has effectively driven traffic to our bank's website and generated leads.	PPC Advertising Effectiveness
	6	Collaborating with influencers has enhanced our bank's brand recognition and customer trust.	Influencer Collaboration Effectiveness
	7	Our customer loyalty programs are effective in retaining customers and encouraging repeat business.	Customer Loyalty Programs Effectiveness
	8	Personalized marketing efforts have improved customer satisfaction and loyalty in our bank.	Personalized Marketing Effectiveness

[Source: Created by the author]

Objective 3: To identify the reasons behind the failures of marketing strategies in the banking industry.

Construct	Item	Statement	Variable
Reasons for Marketing Strategy Failures	1	Lack of a clear and coherent marketing strategy leads to the failure of our marketing efforts.	Lack of Clear Strategy
	2	Insufficient budget allocation for marketing activities is a major reason for our marketing failures.	Insufficient Budget Allocation
	3	Poor market research and understanding of customer needs result in ineffective marketing strategies.	Poor Market Research
	4	Inadequate use of digital marketing tools and platforms contributes to our marketing failures.	Inadequate Use of Digital Tools
	5	Failure to measure and analyze marketing performance metrics leads to unsuccessful marketing campaigns.	Failure to Measure Performance
	6	Lack of customer segmentation and targeting results in ineffective marketing efforts.	Lack of Customer Segmentation
	7	Poor coordination between marketing and other departments hampers the success of our marketing strategies.	Poor Interdepartmental Coordination
	8	Inability to adapt to changing market trends and customer preferences leads to marketing failures.	Inability to Adapt to Market Changes
	9	Inadequate training and skills of marketing personnel contribute to the failure of marketing strategies.	Inadequate Training of Personnel
	10	Over-reliance on traditional marketing methods instead of embracing digital marketing leads to ineffective results.	Over-Reliance on Traditional Methods

[Source: Created by the author]

Objective 4: To assess the current industry practices and research advancements in marketing strategies in the banking industry

Construct	Item	Statement	Variable
Industry Practices and Research	1	Our bank employs advanced data analytics to model and optimize marketing strategies.	Advanced Data Analytics
	2	Machine learning algorithms are used to predict customer behavior and tailor marketing efforts accordingly.	Machine Learning Algorithms
	3	We integrate customer relationship management (CRM) systems to manage and analyze customer interactions.	CRM Systems
	4	Personalization techniques are widely adopted in our bank to enhance customer engagement through marketing.	Personalization Techniques
	5	Our bank uses social media analytics to monitor and improve our marketing strategies.	Social Media Analytics
	6	Predictive analytics is a key component in our marketing strategy modeling process.	Predictive Analytics
	7	Big data technologies are leveraged to gain insights into customer preferences and trends.	Big Data Technologies
	8	Omni-channel marketing strategies are implemented to provide a seamless customer experience across platforms.	Omni-Channel Marketing Strategies
	9	We utilize real-time data to adjust our marketing strategies promptly based on current market conditions.	Real-Time Data Utilization
	10	Our marketing team stays updated with latest research advancements in marketing strategy modeling.	Staying Updated with Research

[Source: Created by the author]

Objective 5: To explore the role of business analysis in supporting the formulation and execution of marketing strategies in the banking industry.

Construct	Item	Statement	Variable
Role of Business Analysis in Marketing Strategies	1	Business analysis helps in identifying market opportunities for new marketing strategies.	Identifying Market Opportunities
	2	Using business analysis, we can better understand customer needs and preferences to tailor marketing.	Understanding Customer Needs
	3	Business analysis provides insights into competitor strategies that inform our marketing plans.	Insights into Competitor Strategies
	4	Data-driven decision making supported by business analysis improves the effectiveness of our marketing.	Data-Driven Decision Making
	5	Business analysis assists in identifying target segments more accurately for marketing campaigns.	Identifying Target Segments
	6	Performance metrics and KPIs identified through business analysis are crucial for monitoring success.	Identifying Performance Metrics
	7	Business analysis supports resource allocation for different marketing initiatives, ensuring optimal budget use.	Resource Allocation Support
	8	Risk assessment performed through business analysis helps in mitigating potential pitfalls in strategies.	Risk Assessment
	9	Business analysis enhances the ability to track and measure the ROI of marketing activities.	Tracking and Measuring ROI
	10	Scenario analysis facilitated by business analysis aids in preparing for various market conditions.	Scenario Analysis

[Source: Created by the author]

Objective 6: To explore the role of technology adoption in enhancing marketing strategies in the banking industry.

Construct	Item	Statement	Variable
Technology Adoption in Marketing	1	Adoption of artificial intelligence (AI) has significantly improved our bank's marketing strategies.	AI Adoption
	2	Implementing chatbots for customer service has enhanced our marketing efforts by improving engagement.	Chatbots Implementation
	3	Data analytics tools are essential for understanding customer behavior and tailoring strategies.	Data Analytics Tools
	4	Blockchain technology adoption has positively impacted our bank's trust and transparency in marketing.	Blockchain Technology Adoption
	5	Utilizing mobile banking apps has enhanced the effectiveness of our marketing campaigns.	Mobile Banking Apps
	6	Cloud computing has facilitated better data management and execution of marketing strategies.	Cloud Computing
	7	Integrating customer relationship management (CRM) systems has improved personalization efforts.	CRM Systems Integration
	8	Social media monitoring tools are crucial for shaping strategies based on customer feedback and trends.	Social Media Monitoring Tools
	9	Adoption of augmented reality (AR) and virtual reality (VR) has enhanced customer engagement.	AR and VR Adoption
	10	Cybersecurity measures are integral to maintaining customer trust and effectiveness of digital marketing.	Cybersecurity Measures

[Source: Created by the author]

4 CHAPTER IV: RESULTS

Introduction

This chapter presents a comprehensive analysis of the data collected to evaluate the marketing strategies within the banking industry. The findings are structured to address each research objective, starting with the awareness and effectiveness of various marketing strategies, followed by the identification of reasons behind marketing strategy failures in loss-making banks, and an assessment of current industry practices and research advancements. Additionally, the role of business analysis and technology adoption in enhancing marketing strategies is examined. To ensure a thorough analysis, both parametric and non-parametric statistical tools, including descriptive statistics, regression analysis, and hypothesis testing, were utilized. These methods provide a robust framework for understanding the data and drawing meaningful conclusions.

The discussion section interprets the results in the context of the research objectives and hypotheses, offering insights into the implications for the banking sector. Key findings are elaborated upon, highlighting significant trends and patterns observed in the data. The chapter concludes with a hypothesis validation table, summarizing the outcomes of the statistical tests and confirming the validity of the proposed hypotheses. This structured approach ensures clarity and coherence in presenting the research findings, making it easier to comprehend the impact and effectiveness of marketing strategies in the banking industry.

4.1 DATA ANALYSIS

Test of Normality

The normality tests conducted for all objectives aimed to determine if the data related to various variables followed a normal distribution. The Kolmogorov-Smirnov and Shapiro-Wilk tests were used for this purpose. Both tests consistently rejected the null hypothesis that the data was normally distributed for all variables.

Table 1 Test of Normality – Objective 1- variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Awareness of Content Marketing	0.208	406	0.000	0.908	406	0.000
Awareness of Social Media Marketing	0.202	406	0.000	0.905	406	0.000
Awareness of Email Marketing	0.194	406	0.000	0.903	406	0.000
Awareness of SEO	0.227	406	0.000	0.899	406	0.000
Awareness of PPC Advertising	0.216	406	0.000	0.903	406	0.000
Awareness of Influencer Collaboration	0.219	406	0.000	0.907	406	0.000
Awareness of Customer Loyalty Programs	0.196	406	0.000	0.901	406	0.000
Awareness of Personalized Marketing	0.235	406	0.000	0.894	406	0.000
Awareness of Content Marketing	0.194	406	0.000	0.913	406	0.000
Awareness of Social Media Marketing	0.206	406	0.000	0.912	406	0.000

[Source: Created by the author]

The normality tests for variables related to the awareness of marketing strategies showed that the data did not follow a normal distribution. This included awareness of content marketing, social media marketing, email marketing, SEO, PPC advertising, influencer collaboration, customer loyalty programs, personalized marketing, PR activities, and event marketing. The results indicated that the respondents' awareness levels of different marketing strategies did not follow a

normal distribution. This finding was significant as it suggested that the data might have skewness, kurtosis, or multimodality. The lack of normality implied that the assumptions required for parametric tests, which rely on normally distributed data, were not met. Therefore, non-parametric tests, which do not assume normality, were deemed more appropriate for further analysis in this objective.

Table 2 Test of Normality – Objective 2- variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Content Marketing Effectiveness	0.221	406	0.000	0.897	406	0.000
Social Media Marketing Effectiveness	0.256	406	0.000	0.884	406	0.000
Email Marketing Effectiveness	0.245	406	0.000	0.871	406	0.000
SEO Effectiveness	0.22	406	0.000	0.889	406	0.000
PPC Advertising Effectiveness	0.24	406	0.000	0.887	406	0.000
Influencer Collaboration Effectiveness	0.342	406	0.000	0.796	406	0.000
Customer Loyalty Programs Effectiveness	0.324	406	0.000	0.835	406	0.000
Personalized Marketing Effectiveness	0.26	406	0.000	0.818	406	0.000

[Source: Created by the author]

For variables assessing the effectiveness of marketing strategies, the normality tests indicated non-normal distribution. This included content marketing effectiveness, social media marketing effectiveness, email marketing effectiveness, SEO effectiveness, PPC advertising effectiveness, influencer collaboration effectiveness, customer loyalty programs effectiveness, and personalized marketing effectiveness. The rejection of the null hypothesis for all effectiveness measures

suggested that the data exhibited characteristics that deviated from a normal distribution. This finding was crucial because it indicated that using parametric tests to analyze the effectiveness of marketing strategies might lead to inaccurate conclusions. Instead, non-parametric tests, which do not require the assumption of normality, were considered more suitable for analyzing the effectiveness data.

Table 3 Test of Normality – Objective 3 - variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Lack of Clear Strategy	0.286	406	0.000	0.795	406	0.000
Insufficient Budget Allocation	0.215	406	0.000	0.884	406	0.000
Poor Market Research	0.219	406	0.000	0.849	406	0.000
Inadequate Use of Digital Tools	0.183	406	0.000	0.883	406	0.000
Failure to Measure Performance	0.209	406	0.000	0.879	406	0.000
Lack of Customer Segmentation	0.298	406	0.000	0.833	406	0.000
Poor Interdepartmental Coordination	0.299	406	0.000	0.772	406	0.000
Inability to Adapt to Market Changes	0.272	406	0.000	0.821	406	0.000
Inadequate Training of Personnel	0.297	406	0.000	0.772	406	0.000
Over-Reliance on Traditional Methods	0.268	406	0.000	0.859	406	0.000

[Source: Created by the author]

For identifying reasons behind the failures of marketing strategies, the normality tests consistently rejected the null hypothesis for all variables. This included lack of clear strategy, insufficient budget allocation, poor market research, inadequate use of digital tools, failure to measure performance, lack of customer segmentation, poor interdepartmental coordination, inability to adapt to market changes, inadequate training of personnel, and over-reliance on traditional

methods. The non-normality of the data suggested the presence of skewed distributions, outliers, or other deviations from normality. Consequently, non-parametric tests were deemed more appropriate for analyzing these variables to ensure the robustness of the findings.

Table 4 Test of Normality – Objective 4 - variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Advanced Data Analytics	0.213	406	0.000	0.882	406	0.000
Machine Learning Algorithms	0.222	406	0.000	0.879	406	0.000
CRM Systems	0.219	406	0.000	0.867	406	0.000
Personalization Techniques	0.217	406	0.000	0.894	406	0.000
Social Media Analytics	0.22	406	0.000	0.887	406	0.000
Predictive Analytics	0.207	406	0.000	0.892	406	0.000
Big Data Technologies	0.214	406	0.000	0.875	406	0.000
Omni-Channel Marketing Strategies	0.212	406	0.000	0.89	406	0.000
Real-Time Data Utilization	0.212	406	0.000	0.896	406	0.000
Staying Updated with Research	0.218	406	0.000	0.893	406	0.000

[Source: Created by the author]

For assessing current industry practices and research advancements in modeling marketing strategies, the normality tests indicated non-normal distribution for all variables. This included advanced data analytics, machine learning algorithms, CRM systems, personalization techniques, social media analytics, predictive analytics, big data technologies, omni-channel marketing strategies, real-time data utilization, and staying updated with research. The rejection of the null hypothesis for each variable suggested that the data did not follow a normal distribution pattern. This finding was significant as it highlighted that parametric test, which assume normality, might not be suitable for analyzing the data related to industry practices and research advancements. Therefore, non-parametric tests were considered more appropriate for this objective.

Table 5 Test of Normality – Objective 5 - variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Identifying Market Opportunities	0.211	406	0.000	0.879	406	0.000
Understanding Customer Needs	0.224	406	0.000	0.873	406	0.000
Insights into Competitor Strategies	0.21	406	0.000	0.872	406	0.000
Data-Driven Decision Making	0.219	406	0.000	0.874	406	0.000
Identifying Target Segments	0.229	406	0.000	0.881	406	0.000
Identifying Performance Metrics	0.209	406	0.000	0.87	406	0.000
Resource Allocation Support	0.221	406	0.000	0.872	406	0.000
Risk Assessment	0.211	406	0.000	0.874	406	0.000
Tracking and Measuring ROI	0.209	406	0.000	0.877	406	0.000
Scenario Analysis	0.219	406	0.000	0.872	406	0.000

[Source: Created by the author]

For assessing the role of business analysis in supporting the formulation or execution of marketing strategies, the normality tests consistently rejected the null hypothesis for all variables. This included identifying market opportunities, understanding customer needs, insights into competitor strategies, data-driven decision making, identifying target segments, identifying performance metrics, resource allocation support, risk assessment, tracking and measuring ROI, and scenario analysis. His indicated that the data did not follow a normal distribution. The non-normality of the

data suggested that the assumptions required for parametric tests were not met. As a result, non-parametric tests, which do not rely on the assumption of normality, were deemed more appropriate for analyzing the role of business analysis in this context.

Table 6 Test of Normality – Objective 6 - variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
AI Adoption	0.207	406	0.000	0.898	406	0.000
Chatbots Implementation	0.205	406	0.000	0.894	406	0.000
Data Analytics Tools	0.23	406	0.000	0.877	406	0.000
Blockchain Technology Adoption	0.216	406	0.000	0.872	406	0.000
Mobile Banking Apps	0.221	406	0.000	0.864	406	0.000
Cloud Computing	0.21	406	0.000	0.879	406	0.000
CRM Systems Integration	0.212	406	0.000	0.88	406	0.000
Social Media Monitoring Tools	0.229	406	0.000	0.875	406	0.000
AR and VR Adoption	0.201	406	0.000	0.887	406	0.000
Cybersecurity Measures	0.185	406	0.000	0.866	406	0.000

[Source: Created by the author]

For exploring the role of technology adoption in enhancing marketing strategies, the normality tests indicated that the data for all variables did not follow a normal distribution. This included AI adoption, chatbots implementation, data analytics tools, blockchain technology adoption, mobile banking apps, cloud computing, CRM systems integration, social media monitoring tools, AR and VR adoption, and cybersecurity measures. The rejection of the null hypothesis for each variable suggested that the data exhibited deviations from normality. This finding was significant as it

implied that parametric tests, which assume normally distributed data, might not be suitable for analyzing the data related to technology adoption. Consequently, non-parametric tests were considered more appropriate for this objective.

Reliability Tests

The reliability tests conducted for all objectives aimed to determine the internal consistency of the variables using Cronbach's Alpha. A higher Cronbach's Alpha indicates better internal consistency among the items. The results for each objective are summarized below.

Table 7 Reliability Test – Objective 1 variables

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Awareness of Content Marketing	198.290	1114.856	0.490	0.965
Awareness of Social Media Marketing	198.080	1105.833	0.634	0.964
Awareness of Email Marketing	198.120	1105.194	0.641	0.964
Awareness of SEO	198.320	1112.989	0.553	0.965
Awareness of PPC Advertising	198.610	1125.662	0.334	0.965
Awareness of Influencer Collaboration	198.400	1121.831	0.395	0.965
Awareness of Customer Loyalty Programs	198.270	1121.834	0.420	0.965
Awareness of Personalized Marketing	198.040	1109.786	0.586	0.964
Awareness of Content Marketing	198.280	1117.511	0.440	0.965
Awareness of Social Media Marketing	198.330	1118.510	0.427	0.965

[Source: Created by the author]

The reliability tests for variables related to the awareness of marketing strategies showed high internal consistency. The variables included awareness of content marketing, social media marketing, email marketing, SEO, PPC advertising, influencer collaboration, customer loyalty

programs, personalized marketing, PR activities, and event marketing. The Cronbach's Alpha values, if each item was deleted, remained high, indicating that the overall scale would still be reliable without any individual item. Corrected item-total correlations were also reasonably high, suggesting that each item was consistent with the overall scale.

Table 8 Reliability Test – Objective 2

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Content Marketing Effectiveness	198.130	1113.666	0.560	0.965
Social Media Marketing Effectiveness	198.200	1102.221	0.597	0.964
Email Marketing Effectiveness	198.400	1103.332	0.612	0.964
SEO Effectiveness	198.050	1109.222	0.631	0.964
PPC Advertising Effectiveness	198.310	1115.187	0.530	0.965
Influencer Collaboration Effectiveness	198.040	1121.109	0.391	0.965
Customer Loyalty Programs Effectiveness	198.000	1120.054	0.393	0.965
Personalized Marketing Effectiveness	197.430	1130.325	0.253	0.966

[Source: Created by the author]

For variables assessing the effectiveness of marketing strategies, the reliability tests also indicated high internal consistency. The variables included content marketing effectiveness, social media marketing effectiveness, email marketing effectiveness, SEO effectiveness, PPC advertising

effectiveness, influencer collaboration effectiveness, customer loyalty programs effectiveness, and personalized marketing effectiveness. The Cronbach's Alpha values remained high even if any item was deleted, confirming the reliability of the scale. The corrected item-total correlations were sufficient to suggest that each item contributed well to the overall consistency.

Table 9 Reliability Test – Objective 3

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Lack of Clear Strategy	197.460	1114.368	0.465	0.965
Insufficient Budget Allocation	198.410	1106.494	0.465	0.965
Poor Market Research	197.940	1105.569	0.494	0.965
Inadequate Use of Digital Tools	197.810	1117.492	0.409	0.965
Failure to Measure Performance	197.740	1114.750	0.511	0.965
Lack of Customer Segmentation	197.590	1124.336	0.362	0.965
Poor Interdepartmental Coordination	197.360	1115.609	0.474	0.965
Inability to Adapt to Market Changes	197.430	1114.571	0.514	0.965
Inadequate Training of Personnel	197.37	1112.046	0.533	0.965
Over-Reliance on Traditional Methods	197.73	1113.344	0.464	0.965

[Source: Created by the author]

The reliability tests for identifying reasons behind the failures of marketing strategies in loss-making banks showed high internal consistency for all variables. These variables included lack of clear strategy, insufficient budget allocation, poor market research, inadequate use of digital tools,

failure to measure performance, lack of customer segmentation, poor interdepartmental coordination, inability to adapt to market changes, inadequate training of personnel, and over-reliance on traditional methods. The Cronbach's Alpha values remained consistently high, indicating that the scale would be reliable without any specific item. Corrected item-total correlations were acceptable, indicating consistency within the scale.

Table 10 Reliability Test – Objective 4

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Advanced Data Analytics	197.960	1116.919	0.512	0.965
Machine Learning Algorithms	197.990	1118.508	0.502	0.965
CRM Systems	198.010	1108.573	0.614	0.964
Personalization Techniques	198.140	1109.244	0.560	0.964
Social Media Analytics	198.080	1106.638	0.633	0.964
Predictive Analytics	198.050	1109.286	0.582	0.964
Big Data Technologies	197.960	1112.196	0.568	0.964
Omni-Channel Marketing Strategies	198.090	1109.748	0.597	0.964
Real-Time Data Utilization	198.330	1100.223	0.601	0.964
Staying Updated with Research	198.320	1110.236	0.478	0.965

[Source: Created by the author]

For assessing current industry practices and research advancements in modeling marketing strategies, the reliability tests indicated high internal consistency for all variables. These included advanced data analytics, machine learning algorithms, CRM systems, personalization techniques, social media analytics, predictive analytics, big data technologies, omni-channel marketing strategies, real-time data utilization, and staying updated with research. The Cronbach's Alpha

values showed that the scale would remain reliable even if any item was deleted. Corrected item-total correlations were strong, suggesting good internal consistency.

Table 11 Reliability Test – Objective 5

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Identifying Market Opportunities	197.770	1106.025	0.680	0.964
Understanding Customer Needs	197.640	1105.796	0.694	0.964
Insights into Competitor Strategies	197.690	1104.057	0.681	0.964
Data-Driven Decision Making	197.670	1110.083	0.635	0.964
Identifying Target Segments	197.700	1108.313	0.647	0.964
Identifying Performance Metrics	197.700	1109.244	0.637	0.964
Resource Allocation Support	197.760	1110.190	0.667	0.964
Risk Assessment	197.760	1107.948	0.677	0.964
Tracking and Measuring ROI	197.750	1104.687	0.711	0.964
Scenario Analysis	197.800	1110.313	0.663	0.964

[Source: Created by the author]

The reliability tests for assessing the role of business analysis in supporting the formulation or execution of marketing strategies indicated high internal consistency. The variables included identifying market opportunities, understanding customer needs, insights into competitor

strategies, data-driven decision making, identifying target segments, identifying performance metrics, resource allocation support, risk assessment, tracking and measuring ROI, and scenario analysis. The Cronbach's Alpha values were high, confirming the reliability of the scale. Corrected item-total correlations were strong, indicating that each item contributed to the overall consistency of the scale.

Table 12 Reliability Test – Objective 6

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AI Adoption	198.040	1105.394	0.614	0.964
Chatbots Implementation	198.060	1107.056	0.586	0.964
Data Analytics Tools	197.780	1105.259	0.736	0.964
Blockchain Technology Adoption	198.000	1104.605	0.673	0.964
Mobile Banking Apps	197.760	1098.054	0.727	0.964
Cloud Computing	197.990	1106.062	0.669	0.964
CRM Systems Integration	197.920	1098.836	0.725	0.964
Social Media Monitoring Tools	197.820	1102.752	0.718	0.964
AR and VR Adoption	197.990	1102.405	0.701	0.964
Cybersecurity Measures	197.740	1102.433	0.673	0.964

[Source: Created by the author]

For exploring the role of technology adoption in enhancing marketing strategies, the reliability tests showed high internal consistency for all variables. These included AI adoption, chatbots implementation, data analytics tools, blockchain technology adoption, mobile banking apps, cloud

computing, CRM systems integration, social media monitoring tools, AR and VR adoption, and cybersecurity measures. The Cronbach's Alpha values indicated that the scale would remain reliable without any specific item. Corrected item-total correlations were high, suggesting good internal consistency.

4.2 Research Question 1: To assess the awareness level regarding marketing strategies in the banking industry

Null Hypothesis (H0): There is no significant difference in awareness level regarding marketing strategies among different designations.

Alternative Hypothesis (H1): There is a significant difference in awareness level regarding marketing strategies among different designations.

Table 13 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Awareness of Content Marketing	406	1	5	3.14	1.02
Awareness of Social Media Marketing	406	1	5	3.35	1.006
Awareness of Email Marketing	406	1	5	3.31	1.01
Awareness of SEO	406	1	5	3.11	0.959
Awareness of PPC Advertising	406	1	5	2.82	1.008
Awareness of Influencer Collaboration	406	1	5	3.02	0.998
Awareness of Customer Loyalty Programs	406	1	5	3.16	0.944
Awareness of Personalized Marketing	406	1	5	3.38	0.986
Awareness of Content Marketing	406	1	5	3.15	1.044
Awareness of Social Media Marketing	406	1	5	3.09	1.04

[Source: Created by the author]

Table 14 Rank Table - Kruskal-Wallis H Test

	Designation	N	Mean Rank
Awareness of Content Marketing	Assistant General Manager	60	229.48
	Deputy Manager	133	205.69
	Senior Manager	87	200.82
	Chief Manager	93	195.54
	Assistant Manager	33	176.92
	Total	406	
Awareness of Social Media Marketing.	Assistant General Manager	60	207.86
	Deputy Manager	133	206.89
	Senior Manager	87	215.09
	Chief Manager	93	192.08
	Assistant Manager	33	183.56
	Total	406	
Awareness of Email Marketing	Assistant General Manager	60	206.00
	Deputy Manager	133	203.33
	Senior Manager	87	209.55
	Chief Manager	93	199.66
	Assistant Manager	33	194.53
	Total	406	
Awareness of SEO	Assistant General Manager	60	218.04
	Deputy Manager	133	213.77
	Senior Manager	87	198.19
	Chief Manager	93	188.84
	Assistant Manager	33	190.97
	Total	406	
Awareness of PPC Advertising	Assistant General Manager	60	197.69
	Deputy Manager	133	209.43
	Senior Manager	87	203.86
	Chief Manager	93	204.31
	Assistant Manager	33	186.94
	Total	406	
Awareness of Influencer Collaboration.	Assistant General Manager	60	181.98

	Deputy Manager	133	206.93
	Senior Manager	87	219.57
	Chief Manager	93	201.56
	Assistant Manager	33	191.88
	Total	406	
Awareness of Customer Loyalty Programs	Assistant General Manager	60	178.85
	Deputy Manager	133	192.65
	Senior Manager	87	237.11
	Chief Manager	93	200.76
	Assistant Manager	33	211.17
	Total	406	
Awareness of Personalized Marketing	Assistant General Manager	60	179.49
	Deputy Manager	133	194.97
	Senior Manager	87	234.39
	Chief Manager	93	199.38
	Assistant Manager	33	211.73
	Total	406	
Awareness of Content Marketing	Assistant General Manager	60	173.90
	Deputy Manager	133	189.83
	Senior Manager	87	239.47
	Chief Manager	93	202.47
	Assistant Manager	33	220.50
	Total	406	
Awareness of Social Media Marketing	Assistant General Manager	60	172.42
	Deputy Manager	133	198.01
	Senior Manager	87	234.18
	Chief Manager	93	195.92
	Assistant Manager	33	222.62
	Total	406	

[Source: Created by the author]

Table 15 *Kruskal-Wallis H Test - Test Statistics^{a,b}*

	Awareness of Content Marketing	Awareness of Social Media Marketing	Awareness of Email Marketing	Awareness of SEO	Awareness of PPC Advertising	Awareness of Influencer Collaboration	Awareness of Customer Loyalty Programs	Awareness of Personalized Marketing	Awareness of Content Marketing	Awareness of Social Media Marketing
Kruskal-Wallis H	5.687	3.151	0.607	4.432	1.278	4.562	12.297	10.606	15.74	12.813
df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	0.224	0.533	0.962	0.351	0.865	0.335	0.015	0.031	0.003	0.012
a. Kruskal Wallis Test										
a. Kruskal Wallis Test										
b. Grouping Variable: Designation										

[Source: Created by the author]

Table 16 Median Test Frequency table

		Designation				
		Assistant General Manager	Deputy Manager	Senior Manager	Chief Manager	Assistant Manager
Awareness of Content Marketing	> Median	26	45	33	28	10
	<= Median	34	88	54	65	23
Awareness of Social Media Marketing	> Median	25	55	47	37	12
	<= Median	35	78	40	56	21
Awareness of Email Marketing.	> Median	24	55	43	38	14
	<= Median	36	78	44	55	19
Awareness of SEO	> Median	22	47	31	25	9
	<= Median	38	86	56	68	24
Awareness of PPC Advertising.	> Median	10	28	25	18	6
	<= Median	50	105	62	75	27
Awareness of Influencer Collaboration.	> Median	11	36	38	24	9
	<= Median	49	97	49	69	24
Awareness of Customer Loyalty Programs	> Median	13	43	49	31	14
	<= Median	47	90	38	62	19
Awareness of Personalized Marketing	> Median	13	48	53	39	16
	<= Median	47	85	34	54	17
Awareness of Content Marketing	> Median	12	39	48	32	16
	<= Median	48	94	39	61	17
Awareness of Social Media Marketing	> Median	10	38	44	27	15
	<= Median	50	95	43	66	18

[Source: Created by the author]

Table 17 Test Statistics^a – Median Analysis

	Awareness of Content Marketing	Awareness of Social Media Marketing	Awareness of Email Marketing	Awareness of SEO	Awareness of PPC Advertising	Awareness of Influencer Collaboration	Awareness of Customer Loyalty Programs	Awareness of Personalized Marketing	Awareness of PR	Awareness of Social Media Marketing
N	406	406	406	406	406	406	406	406	406	406
Median	3	3	3	3	3	3	3	3	3	3
Chi-Square	3.539 ^b	5.458 ^c	2.009 ^d	3.030 ^e	4.022 ^f	13.151 ^g	22.195 ^h	25.485 ⁱ	25.384 ^j	23.549 ^e
df	4	4	4	4	4	4	4	4	4	4
Asym p. Sig.	0.472	0.243	0.734	0.553	0.403	0.011	0	0	0	0

[Source: Created by the author]

Table 18 Jonckheere-Terpstra Test^a

	Awareness of Content Marketing	Awareness of Social Media Marketing	Awareness of Email Marketing	Awareness of SEO	Awareness of PPC Advertising	Awareness of Influencer Collaboration	Awareness of Customer Loyalty Programs	Awareness of Personalized Marketing	Awareness of PR	Awareness of Social Media Marketing
Number of Levels in Designation	5	5	5	5	5	5	5	5	5	5
N	406	406	406	406	406	406	406	406	406	406
Observed J-T Statistic	28834.5	30105.5	31034	29058.5	31101	32243.5	33839.5	33664	34694.5	33989.5
Mean J-T Statistic	31560	31560	31560	31560	31560	31560	31560	31560	31560	31560
Std. Deviation of J-T Statistic	1259.504	1264.174	1260.816	1248.3	1254.398	1256.286	1257.811	1253.419	1269.728	1264.955
Std. J-T Statistic	-2.164	-1.151	-0.417	-2.004	-0.366	0.544	1.812	1.679	2.469	1.921
Asymp. Sig. (2-tailed)	0.030	0.250	0.677	0.045	0.714	0.586	0.070	0.093	0.014	0.055

[Source: Created by the author]

Interpretation of Results for Objective 1: Assessing the Awareness Level Regarding Marketing Strategies

To comprehensively assess the awareness level regarding marketing strategies among different designations, multiple statistical tests were employed. The descriptive statistics provided an initial overview, while the Kruskal-Wallis H test, Chi-Square test, and Jonckheere-Terpstra test offered more in-depth insights into the variations in awareness levels. This detailed analysis reveals significant insights into how different managerial roles within the banking industry perceive and understand various marketing strategies.

The descriptive statistics highlighted that the mean awareness scores for different marketing strategies generally hovered around the midpoint of the scale, indicating a moderate level of awareness. For instance, the mean awareness score for content marketing was 3.14 with a standard deviation of 1.02, suggesting some variability in responses but generally moderate awareness. Similar patterns were observed for social media marketing (mean = 3.35, SD = 1.006), email marketing (mean = 3.31, SD = 1.01), and other strategies such as SEO, PPC advertising, influencer collaboration, customer loyalty programs, and personalized marketing. These initial findings suggested that while there was a reasonable level of awareness across the board, there might be underlying differences in how various designations perceive these strategies.

The Kruskal-Wallis H test was then used to investigate whether these differences in awareness were statistically significant across different managerial roles. This non-parametric test, which does not assume normal distribution of data, was appropriate given the nature of the awareness variables. The results indicated significant differences in awareness levels for specific marketing strategies among the different designations. For example, the awareness of customer loyalty programs had a Kruskal-Wallis H statistic of 12.297 with a p-value of 0.015, indicating a significant difference. Similarly, personalized marketing ($H = 10.606$, $p = 0.031$), content marketing ($H = 15.74$, $p = 0.003$), and social media marketing ($H = 12.813$, $p = 0.012$) showed significant differences. These results suggest that certain designations are more aware of these marketing strategies than others, highlighting potential areas for targeted training and education.

Further examination using the Chi-Square test provided additional support for these findings. This test examined the differences in median awareness scores among the designations and found

significant variations for several strategies. Notably, the awareness of influencer collaboration had a Chi-Square statistic of 13.151 with a p-value of 0.011, and the awareness of customer loyalty programs had a Chi-Square statistic of 22.195 with a p-value less than 0.001. Similar significant results were found for personalized marketing, PR activities, and social media marketing. These findings reinforce the conclusion that there are significant differences in how different managerial roles perceive their awareness of various marketing strategies. These variations could be due to differing levels of exposure, responsibility, or interest in these areas among the different managerial roles.

The Jonckheere-Terpstra test further enriched the analysis by examining trends in awareness levels across the designations. This test is particularly useful for identifying ordered differences among groups. Significant trends were found for content marketing (J-T = 28834.5, $p = 0.030$), SEO (J-T = 29058.5, $p = 0.045$), and PR activities (J-T = 34694.5, $p = 0.014$). These results suggest a consistent increase or decrease in awareness levels from one designation to another. For instance, the awareness of content marketing might show a gradual increase from lower to higher managerial positions, indicating that higher-level managers are more likely to be aware of these strategies. This trend could be due to higher-level managers' greater involvement in strategic decision-making and their need to be informed about various marketing strategies.

In summary, the comprehensive analysis using descriptive statistics and various non-parametric tests revealed significant differences in awareness levels regarding marketing strategies among different designations. The Kruskal-Wallis H test, Chi-Square test, and Jonckheere-Terpstra test collectively provided robust evidence that awareness levels vary significantly across managerial roles. These findings have important implications for the banking industry, suggesting that targeted training programs and awareness campaigns could be beneficial in ensuring that all managerial levels have a consistent and comprehensive understanding of key marketing strategies. This would not only enhance the overall marketing effectiveness but also ensure that strategic marketing initiatives are supported and understood at all levels of management.

Hypotheses Based on Gender:

Null Hypothesis (H0): There is no significant difference in awareness level regarding marketing strategies among different genders.

Alternative Hypothesis (H1): There is a significant difference in awareness level regarding marketing strategies among different genders.

	Gender	N	Mean Rank	Sum of Ranks
Awareness of Content Marketing.	Male	270	198.45	53581
	Female	136	213.53	29040
	Total	406		
Awareness of Social Media Marketing.	Male	270	199.19	53782.5
	Female	136	212.05	28838.5
	Total	406		
Awareness of Email Marketing.	Male	270	199.46	53854.5
	Female	136	211.52	28766.5
	Total	406		
Awareness of SEO	Male	270	199.87	53964.5
	Female	136	210.71	28656.5
	Total	406		
Awareness of PPC Advertising	Male	270	205.11	55379
	Female	136	200.31	27242
	Total	406		
Awareness of Influencer Collaboration.	Male	270	205.07	55369.5
	Female	136	200.38	27251.5
	Total	406		
Awareness of Customer Loyalty Programs	Male	270	205.68	55534.5
	Female	136	199.17	27086.5
	Total	406		
Awareness of Personalized Marketing	Male	270	208.61	56324
	Female	136	193.36	26297
	Total	406		

Awareness of PR	Male	270	204.96	55339.5
	Female	136	200.6	27281.5
	Total	406		
Awareness of Social Media Marketing	Male	270	204.83	55305
	Female	136	200.85	27316
	Total	406		

[Source: Created by the author]

Table 19 Mann Whitney U test

	Awareness of Content Marketing	Awareness of Social Media Marketing	Awareness of Email Marketing	Awareness of SEO	Awareness of PPC Advertising	Awareness of Influencer Collaboration	Awareness of Customer Loyalty Programs	Awareness of Personalized Marketing	Awareness of PR	Awareness of Social Media Marketing
Mann-Whitney U	16996	17197.5	17269.5	17379.5	17926	17935.5	17770.5	16981	17965.5	18000
Wilcoxon W	53581	53782.5	53854.5	53964.5	27242	27251.5	27086.5	26297	27281.5	27316
Z	-1.284	-1.09	-1.025	-0.931	-0.41	-0.401	-0.556	-1.304	-0.368	-0.337
Asymp. Sig. (2-tailed)	0.199	0.276	0.305	0.352	0.682	0.689	0.578	0.192	0.713	0.736
a. Grouping Variable: Gender										

[Source: Created by the author]

Interpretation of Gender-Based Analysis of Awareness Levels Regarding Marketing Strategies

In the analysis of awareness levels regarding marketing strategies between different genders in the banking industry, the Mann-Whitney U test was used to assess the significance of the differences. The descriptive statistics highlighted the number of respondents, their mean ranks, and the sum of ranks for males and females across various marketing strategies. The primary goal was to test the null hypothesis (H₀) that there is no significant difference in the awareness levels regarding marketing strategies among different genders against the alternative hypothesis (H₁) that significant differences exist.

For Awareness of Content Marketing, males had a mean rank of 198.45 while females had a higher mean rank of 213.53. Similarly, in Awareness of Social Media Marketing, males had a mean rank of 199.19 compared to females' 212.05. For Awareness of Email Marketing, the mean ranks were 199.46 for males and 211.52 for females. In the case of Awareness of SEO, males had a mean rank of 199.87 and females had 210.71. These differences in mean ranks suggest that females may have a higher awareness level in these marketing strategies compared to males. However, for Awareness of PPC Advertising, males had a mean rank of 205.11, higher than females' 200.31, indicating a reverse trend.

In Awareness of Influencer Collaboration, males had a mean rank of 205.07, which was slightly higher than the mean rank of 200.38 for females. For Awareness of Customer Loyalty Programs, the mean ranks were 205.68 for males and 199.17 for females. For Awareness of Personalized Marketing, males had a mean rank of 208.61, higher than females' 193.36. In Awareness of PR, males had a mean rank of 204.96 compared to females' 200.60. Lastly, for Awareness of Social Media Marketing, males had a mean rank of 204.83 and females had 200.85.

The Mann-Whitney U test results further clarified these observations. The test statistic for Awareness of Content Marketing was $U = 16996$ with a p-value of 0.199, indicating no significant difference between genders. Similar results were found for Awareness of Social Media Marketing ($U = 17197.5$, $p = 0.276$), Awareness of Email Marketing ($U = 17269.5$, $p = 0.305$), and Awareness

of SEO ($U = 17379.5$, $p = 0.352$). The p-values for these strategies were all greater than the significance level of 0.05, leading to the acceptance of the null hypothesis that there are no significant differences between genders.

For Awareness of PPC Advertising, the Mann-Whitney U value was 17926 with a p-value of 0.682, showing no significant difference. The results were similar for Awareness of Influencer Collaboration ($U = 17935.5$, $p = 0.689$), Awareness of Customer Loyalty Programs ($U = 17770.5$, $p = 0.578$), Awareness of Personalized Marketing ($U = 16981$, $p = 0.192$), Awareness of PR ($U = 17965.5$, $p = 0.713$), and Awareness of Social Media Marketing ($U = 18000$, $p = 0.736$). These results consistently indicated that the p-values were above 0.05, reaffirming that there were no significant differences in the awareness levels regarding these marketing strategies between male and female respondents.

In summary, the results of the Mann-Whitney U test demonstrated that there were no statistically significant differences in the awareness levels of marketing strategies between genders in the banking industry. The analysis of mean ranks suggested some differences in awareness levels, but these were not supported by statistical significance. Therefore, the null hypothesis was accepted, confirming that gender does not significantly influence the awareness levels of marketing strategies among banking professionals.

4.3 Research Question 2: To evaluate the effectiveness of marketing strategies in the banking industry.

Null Hypothesis (H0): There is no significant difference in the effectiveness of marketing strategies among public, private, and cooperative banks

Alternative Hypothesis (H1): There is a significant difference in the effectiveness of marketing strategies among public, private, and cooperative banks.

Table 20 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Content Marketing Effectiveness	406	1	5	3.3	0.93
Social Media Marketing Effectiveness	406	1	5	3.23	1.154
Email Marketing Effectiveness	406	1	5	3.03	1.101
SEO Effectiveness	406	1	5	3.38	0.932
PPC Advertising Effectiveness	406	1	5	3.12	0.938
Influencer Collaboration Effectiveness	406	1	5	3.38	1.035
Customer Loyalty Programs Effectiveness	406	1	5	3.42	1.067
Personalized Marketing Effectiveness	406	1	5	4	1.048

[Source: Created by the author]

Table 21 *Kruskal Wallis H Test- Rank Table*

Ranks	Sector of Bank	N	Mean Rank
Content Marketing Effectiveness	Public Sector Bank	176	192.69
	Private Sector Bank	131	223.17
	Cooperative Sector Bank	99	196.70
	Total	406	
Social Media Marketing Effectiveness	Public Sector Bank	176	199.65
	Private Sector Bank	131	216.35
	Cooperative Sector Bank	99	193.35
	Total	406	
Email Marketing Effectiveness	Public Sector Bank	176	196.90
	Private Sector Bank	131	218.01
	Cooperative Sector Bank	99	196.03
	Total	406	
SEO Effectiveness	Public Sector Bank	176	188.89
	Private Sector Bank	131	213.69
	Cooperative Sector Bank	99	215.98
	Total	406	
PPC Advertising Effectiveness	Public Sector Bank	176	189.07
	Private Sector Bank	131	216.43
	Cooperative Sector Bank	99	212.04
	Total	406	
Influencer Collaboration Effectiveness	Public Sector Bank	176	184.32
	Private Sector Bank	131	225.77
	Cooperative Sector Bank	99	208.13
	Total	406	
Customer Loyalty Programs Effectiveness	Public Sector Bank	176	196.50
	Private Sector Bank	131	216.54
	Cooperative Sector Bank	99	198.69
	Total	406	
Personalized Marketing Effectiveness	Public Sector Bank	176	199.53
	Private Sector Bank	131	211.11
	Cooperative Sector Bank	99	200.49
	Total	406	

[Source: Created by the author]

Table 22 *Kruskal Wallis H Test – Test Statistics^{ab}*

	Content Marketing Effectiveness	Social Media Marketing Effectiveness	Email Marketing Effectiveness	SEO Effectiveness	PPC Advertising Effectiveness	Influencer Collaboration Effectiveness	Customer Loyalty Programs Effectiveness	Personalized Marketing Effectiveness
Kruskal-Wallis H	6.166	2.732	3.27	5.431	5.418	11.789	2.842	0.922
df	2	2	2	2	2	2	2	2
Asymp. Sig.	0.046	0.255	0.195	0.066	0.067	0.003	0.242	0.631
a. Kruskal Wallis Test								
b. Grouping Variable: Sector of Bank								

[Source: Created by the author]

In the assessment of the effectiveness of various marketing strategies among public, private, and cooperative banks, the Kruskal-Wallis H test was employed to evaluate the differences across these sectors. The null hypothesis (H₀) proposed that there is no significant difference in the effectiveness of marketing strategies among these banks, while the alternative hypothesis (H₁) suggested significant differences exist. Descriptive statistics were used to summarize the effectiveness scores for each strategy, indicating generally positive perceptions with mean scores ranging between 3 and 4 on a 5-point scale. These scores included Content Marketing Effectiveness (Mean = 3.3, SD = 0.93), Social Media Marketing Effectiveness (Mean = 3.23, SD = 1.154), Email Marketing Effectiveness (Mean = 3.03, SD = 1.101), SEO Effectiveness (Mean = 3.38, SD = 0.932), PPC Advertising Effectiveness (Mean = 3.12, SD = 0.938), Influencer Collaboration Effectiveness (Mean = 3.38, SD = 1.035), Customer Loyalty Programs Effectiveness (Mean = 3.42, SD = 1.067), and Personalized Marketing Effectiveness (Mean = 4, SD = 1.048).

The analysis of mean ranks across different bank sectors highlighted notable differences in perceptions of effectiveness. For Content Marketing Effectiveness, private sector banks had the highest mean rank (223.17), followed by cooperative sector banks (196.70), and public sector banks (192.69). This trend was also observed in Social Media Marketing Effectiveness, where private banks again led with a mean rank of 216.35, compared to public banks at 199.65 and cooperative banks at 193.35. Similar patterns were found in Email Marketing Effectiveness, with private banks having a mean rank of 218.01, public banks at 196.90, and cooperative banks at 196.03. For SEO Effectiveness, cooperative banks had the highest mean rank (215.98), followed closely by private banks (213.69), and public banks with a lower mean rank of 188.89.

The Kruskal-Wallis H test results provided statistical validation for these observed differences. For Content Marketing Effectiveness, the test statistic was $H = 6.166$ with a p-value of 0.046, indicating a statistically significant difference among the bank sectors. Similar significant results were found for Influencer Collaboration Effectiveness ($H = 11.789$, $p = 0.003$), where private banks rated this strategy significantly higher than their public and cooperative counterparts. These findings suggest that private banks may perceive or implement these particular marketing strategies more effectively compared to the other sectors. For SEO Effectiveness, the test result approached significance ($H = 5.431$, $p = 0.066$), suggesting potential differences worth further exploration.

In contrast, the Kruskal-Wallis H test results for other strategies showed no significant differences among the bank sectors. Social Media Marketing Effectiveness ($H = 2.732$, $p = 0.255$), Email Marketing Effectiveness ($H = 3.27$, $p = 0.195$), Customer Loyalty Programs Effectiveness ($H = 2.842$, $p = 0.242$), and Personalized Marketing Effectiveness ($H = 0.922$, $p = 0.631$) had p-values greater than 0.05, indicating no statistically significant differences in their perceived effectiveness across public, private, and cooperative banks. These results suggest that for these strategies, perceptions of effectiveness were relatively uniform across different types of banks.

4.4 Research Question 3: To identify the reasons behind the failures of marketing strategies in the banking industry.

Null Hypothesis (H0): There is no significant difference in perceived reasons for marketing strategy failures among public, private, and cooperative banks.

Alternative Hypothesis (H1): There is a significant difference in perceived reasons for marketing strategy failures among public, private, and cooperative banks.

Table 23 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Lack of Clear Strategy	406	1	5	3.97	1.086
Insufficient Budget Allocation	406	1	5	3.02	1.326
Poor Market Research	406	1	5	3.49	1.28
Inadequate Use of Digital Tools	406	1	5	3.62	1.118
Failure to Measure Performance	406	1	5	3.69	0.983
Lack of Customer Segmentation	406	1	5	3.83	0.986
Poor Interdepartmental Coordination	406	1	5	4.07	1.029
Inability to Adapt to Market Changes	406	1	5	4	0.983
Inadequate Training of Personnel	406	1	5	4.06	1.019
Over-Reliance on Traditional Methods	406	1	5	3.7	1.119

[Source: Created by the author]

Table 24 *Kruskal Wallis H Test – Rank table*

	Sector of Bank	N	Mean Rank
Lack of Clear Strategy	Public Sector Bank	176	196.13
	Private Sector Bank	131	212.35
	Cooperative Sector Bank	99	204.88
	Total	406	
Insufficient Budget Allocation	Public Sector Bank	176	201.59
	Private Sector Bank	131	208.08
	Cooperative Sector Bank	99	200.83
	Total	406	
Poor Market Research	Public Sector Bank	176	201.48
	Private Sector Bank	131	210.8
	Cooperative Sector Bank	99	197.42
	Total	406	
Inadequate use of Digital Tools	Public Sector Bank	176	198.51
	Private Sector Bank	131	214.53
	Cooperative Sector Bank	99	197.78
	Total	406	
Failure to Measure Performance	Public Sector Bank	176	199.63
	Private Sector Bank	131	211.53
	Cooperative Sector Bank	99	199.75
	Total	406	
Lack of Customer Segmentation	Public Sector Bank	176	194.01
	Private Sector Bank	131	218.6
	Cooperative Sector Bank	99	200.39
	Total	406	
Poor Interdepartmental Coordination	Public Sector Bank	176	194.93
	Private Sector Bank	131	209.09
	Cooperative Sector Bank	99	211.34
	Total	406	
Inability to Adapt to Market Changes	Public Sector Bank	176	197.67
	Private Sector Bank	131	206.68

	Cooperative Sector Bank	99	209.67
	Total	406	
Inadequate Training of Personnel	Public Sector Bank	176	200.72
	Private Sector Bank	131	207.54
	Cooperative Sector Bank	99	203.1
	Total	406	
Over-Reliance on Traditional Methods	Public Sector Bank	176	190.23
	Private Sector Bank	131	223.74
	Cooperative Sector Bank	99	200.31
	Total	406	

[Source: Created by the author]

Table 25 *Kruskal wallis test – Test Statistics^{ab}*

	Lack of Clear Strategy	Insufficient Budget Allocation	Poor Market Research	Inadequate Use of Digital Tools	Failure to Measure Performance	Lack of Customer Segmentation	Poor Interdepartmental Coordination	Inability to Adapt to Market Changes	Inadequate Training of Personnel	Over-Reliance on Traditional Methods
Kruskal-Wallis H	1.652	0.315	0.887	1.849	0.997	3.927	1.96	0.916	0.298	6.866
df	2	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.438	0.854	0.642	0.397	0.607	0.14	0.375	0.632	0.862	0.032
a. Kruskal Wallis Test										
b. Grouping Variable: Sector of Bank										

[Source: Created by the author]

Table 26 Median Test Frequency Table

		Sector of Bank		
		Public Sector Bank	Private Sector Bank	Cooperative Sector Bank
Lack of Clear Strategy	> Median	61	49	33
	<= Median	115	82	66
Insufficient Budget Allocation	> Median	63	49	36
	<= Median	113	82	63
Poor Market Research	> Median	48	41	29
	<= Median	128	90	70
Inadequate Use of Digital Tools	> Median	48	36	28
	<= Median	128	95	71
Failure to Measure Performance.	> Median	39	31	21
	<= Median	137	100	78
Lack of Customer Segmentation	> Median	40	33	25
	<= Median	136	98	74
Poor Interdepartmental Coordination	> Median	64	52	40
	<= Median	112	79	59
Inability to Adapt to Market Changes	> Median	60	45	35
	<= Median	116	86	64
Inadequate Training of Personnel	> Median	67	48	36
	<= Median	109	83	63
Over-Reliance on Traditional Methods	> Median	36	38	27
	<= Median	140	93	72

[Source: Created by the author]

Table 27 Median Test – Test Statistics^{ab}

	Lack of Clear Strategy	Insufficient Budget Allocation	Poor Market Research	Inadequate Use of Digital Tools	Failure to Measure Performance	Lack of Customer Segmentation	Poor Interdepartmental Coordination	Inability to Adapt to Market Changes	Inadequate Training of Personnel	Over-Reliance on Traditional Methods
N	406	406	406	406	406	406	406	406	406	406
Median	4	3	4	4	4	4	4	4	4	4
Chi-Square	.453 ^b	.084 ^c	.593 ^d	.033 ^e	.207 ^f	.338 ^g	.569 ^h	.046 ⁱ	.104 ^j	3.342 ^k
df	2	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.797	0.959	0.743	0.983	0.902	0.845	0.752	0.977	0.949	0.188

[Source: Created by the author]

Designation based Hypothesis

Null Hypothesis (H0): There is no significant difference in perceived reasons for marketing strategy failures among different designations.

Alternative Hypothesis (H1): There is a significant difference in perceived reasons for marketing strategy failures among different designations.

Table 28 **Kruskal Wallis H Test – Rank table**

	Designation	N	Mean Rank
Lack of Clear Strategy	Assistant General Manager	60	225.95
	Deputy Manager	133	216.33
	Senior Manager	87	191.35
	Chief Manager	93	186.19
	Assistant Manager	33	191.76
	Total	406	
Insufficient Budget Allocation	Assistant General Manager	60	200.13
	Deputy Manager	133	220.98
	Senior Manager	87	204.56
	Chief Manager	93	190.41
	Assistant Manager	33	173.26
	Total	406	
Poor Market Research	Assistant General Manager	60	193.57
	Deputy Manager	133	203.41
	Senior Manager	87	219.83
	Chief Manager	93	196.26
	Assistant Manager	33	199.3
	Total	406	
Inadequate Use of Digital Tools	Assistant General Manager	60	200.53
	Deputy Manager	133	216.83
	Senior Manager	87	211.94
	Chief Manager	93	182.6
	Assistant Manager	33	191.8
	Total	406	
Failure to Measure Performance	Assistant General Manager	60	196.34
	Deputy Manager	133	213.47

	Senior Manager	87	209.7
	Chief Manager	93	196.16
	Assistant Manager	33	180.67
	Total	406	
Lack of Customer Segmentation	Assistant General Manager	60	228.98
	Deputy Manager	133	216.62
	Senior Manager	87	182.8
	Chief Manager	93	194.81
	Assistant Manager	33	183.36
	Total	406	
Poor Interdepartmental Coordination	Assistant General Manager	60	208.01
	Deputy Manager	133	213.05
	Senior Manager	87	206.55
	Chief Manager	93	189.02
	Assistant Manager	33	189.58
	Total	406	
Inability to Adapt to Market Changes	Assistant General Manager	60	215.25
	Deputy Manager	133	206.69
	Senior Manager	87	221.46
	Chief Manager	93	179.09
	Assistant Manager	33	190.74
	Total	406	
Inadequate Training of Personnel	Assistant General Manager	60	201.56
	Deputy Manager	133	212.2
	Senior Manager	87	218.01
	Chief Manager	93	187.43
	Assistant Manager	33	179
	Total	406	
Over-Reliance on Traditional Methods	Assistant General Manager	60	241.23
	Deputy Manager	133	209.48
	Senior Manager	87	187.51
	Chief Manager	93	186.58
	Assistant Manager	33	200.64
	Total	406	

[Source: Created by the author]

Table 29 **Kruskal Wallis H Test – Test Statistics^{ab}**

	Lack of Clear Strategy	Insufficient Budget Allocation	Poor Market Research	Inadequate Use of Digital Tools	Failure to Measure Performance	Lack of Customer Segmentation	Poor Interdepartmental Coordination	Inability to Adapt to Market Changes	Inadequate Training of Personnel	Over-Reliance on Traditional Methods
Kruskal-Wallis H	8.044	6.733	2.702	5.924	3.35	10.055	3.394	8.151	6.134	11.161
df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	0.09	0.151	0.609	0.205	0.501	0.04	0.494	0.086	0.189	0.025
a. Kruskal Wallis Test										
b. Grouping Variable: Designation										

[Source: Created by the author

Table 30 Median Test Frequency table

		Designation				
		Assistant General Manager	Deputy Manager	Senior Manager	Chief Manager	Assistant Manager
Lack of Clear Strategy	> Median	23	53	30	25	12
	<= Median	37	80	57	68	21
Insufficient Budget Allocation	> Median	19	59	31	32	7
	<= Median	41	74	56	61	26
Poor Market Research	> Median	20	42	27	21	8
	<= Median	40	91	60	72	25
Inadequate Use of Digital Tools	> Median	19	46	26	13	8
	<= Median	41	87	61	80	25
Failure to Measure Performance.	> Median	16	40	18	13	4
	<= Median	44	93	69	80	29
Lack of Customer Segmentation	> Median	15	39	22	15	7
	<= Median	45	94	65	78	26
Poor Interdepartmental Coordination	> Median	22	56	39	27	12
	<= Median	38	77	48	66	21

Inability to Adapt to Market Changes	> Median	20	49	41	20	10
	<= Median	40	84	46	73	23
Inadequate Training of Personnel	> Median	19	54	41	27	10
	<= Median	41	79	46	66	23
Over-Reliance on Traditional Methods	> Median	18	37	20	14	12
	<= Median	42	96	67	79	21

[Source: Created by the author]

Table 31 Median Test Statistics^{ab}

	Lack of Clear Strategy	Insufficient Budget Allocation	Poor Market Research	Inadequate Use of Digital Tools	Failure to Measure Performance	Lack of Customer Segmentation	Poor Interdepartmental Coordination	Inability to Adapt to Market Changes	Inadequate Training of Personnel	Over-Reliance on Traditional Methods
N	406	406	406	406	406	406	406	406	406	406
Median	4	3	4	4	4	4	4	4	4	4
Chi-Square	4.378 ^b	7.686 ^c	3.371 ^d	12.798 ^e	11.078 ^f	5.452 ^g	5.874 ^h	13.707 ⁱ	8.443 ^j	8.757 ^k
df	4	4	4	4	4	4	4	4	4	4
Asym p. Sig.	0.357	0.104	0.498	0.012	0.026	0.244	0.209	0.008	0.077	0.067

[Source: Created by the author]

Identifying Reasons Behind the Failures of Marketing Strategies

In assessing the reasons behind the failures of marketing strategies, the study examined the perceptions across public, private, and cooperative banks. The null hypothesis (H₀) stated that there is no significant difference in perceived reasons for marketing strategy failures among these banks, while the alternative hypothesis (H₁) suggested significant differences. Descriptive statistics provided an overview of the mean and standard deviation for each reason, indicating varied perceptions of marketing failures. The mean scores for reasons such as Lack of Clear Strategy (Mean = 3.97, SD = 1.086), Insufficient Budget Allocation (Mean = 3.02, SD = 1.326), and Poor Market Research (Mean = 3.49, SD = 1.28) highlighted key areas of concern among respondents.

The mean ranks for each reason were compared across the different bank sectors to identify differences in perceptions. For Lack of Clear Strategy, public sector banks had a mean rank of 196.13, private sector banks had 212.35, and cooperative sector banks had 204.88. Similar trends were observed for other reasons, such as Insufficient Budget Allocation, where public sector banks had a mean rank of 201.59, private sector banks had 208.08, and cooperative sector banks had 200.83. In Poor Market Research, public sector banks had a mean rank of 201.48, private sector banks had 210.8, and cooperative sector banks had 197.42. For Inadequate Use of Digital Tools, public sector banks had a mean rank of 198.51, private sector banks had 214.53, and cooperative sector banks had 197.78. These mean ranks indicated differences in how each sector perceived the reasons behind marketing strategy failures.

The Kruskal-Wallis H test was used to determine if these differences were statistically significant. For Lack of Clear Strategy, the test statistic was $H = 1.652$ with a p-value of 0.438, indicating no significant difference among the sectors. Similar non-significant results were found for Insufficient Budget Allocation ($H = 0.315$, $p = 0.854$), Poor Market Research ($H = 0.887$, $p = 0.642$), Inadequate Use of Digital Tools ($H = 1.849$, $p = 0.397$), and Failure to Measure Performance ($H = 0.997$, $p = 0.607$). However, for Over-Reliance on Traditional Methods, the test statistic was $H = 6.866$ with a p-value of 0.032, indicating a significant difference among the sectors. This suggests that the perception of over-reliance on traditional methods as a reason for marketing strategy failure varied significantly among public, private, and cooperative banks.

In terms of designations, the mean ranks indicated some differences in perceptions of marketing strategy failures. For Lack of Clear Strategy, Assistant General Managers had a mean rank of 225.95, Deputy Managers had 216.33, Senior Managers had 191.35, Chief Managers had 186.19, and Assistant Managers had 191.76. Similar patterns were observed for other reasons, such as Insufficient Budget Allocation, where Assistant General Managers had a mean rank of 200.13, Deputy Managers had 220.98, Senior Managers had 204.56, Chief Managers had 190.41, and Assistant Managers had 173.26. For Poor Market Research, Assistant General Managers had a mean rank of 193.57, Deputy Managers had 203.41, Senior Managers had 219.83, Chief Managers had 196.26, and Assistant Managers had 199.3.

The Kruskal-Wallis H test results showed varying levels of significance. For Lack of Clear Strategy, the test statistic was $H = 8.044$ with a p-value of 0.09, which was not significant. Similar non-significant results were found for Insufficient Budget Allocation ($H = 6.733$, $p = 0.151$), Poor Market Research ($H = 2.702$, $p = 0.609$), and Inadequate Use of Digital Tools ($H = 5.924$, $p = 0.205$). However, significant differences were found for Lack of Customer Segmentation ($H = 10.055$, $p = 0.04$) and Over-Reliance on Traditional Methods ($H = 11.161$, $p = 0.025$), suggesting that perceptions of these reasons varied significantly among different designations.

The Chi-Square test results further supported these findings. For Lack of Clear Strategy, the Chi-Square value was 4.378 with a p-value of 0.357, indicating no significant difference. Similar results were found for Insufficient Budget Allocation (Chi-Square = 7.686, $p = 0.104$), Poor Market Research (Chi-Square = 3.371, $p = 0.498$), and Inadequate Use of Digital Tools (Chi-Square = 12.798, $p = 0.012$). However, significant differences were found for Inadequate Use of Digital Tools (Chi-Square = 12.798, $p = 0.012$) and Inability to Adapt to Market Changes (Chi-Square = 13.707, $p = 0.008$), suggesting that perceptions of these reasons varied significantly among different designations.

Overall, the analysis revealed that while there were significant differences in some reasons for marketing strategy failures among different bank sectors and designations, many reasons did not show significant differences. The findings indicate that perceptions of certain reasons, such as Over-Reliance on Traditional Methods and Inadequate Use of Digital Tools, vary significantly among different bank sectors and designations.

4.5 Research Question 4: To assess the current industry practices and research advancements in marketing strategies in the banking industry.

Null Hypothesis (H0): There is no significant difference in awareness of industry practices and research advancements among different designations

Alternative Hypothesis (H1): There is a significant difference in awareness of industry practices and research advancements among different designations.

Table 32 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Advanced Data Analytics	406	1	5	3.47	0.92
Machine Learning Algorithms	406	1	5	3.44	0.892
CRM Systems	406	1	5	3.41	0.972
Personalization Techniques	406	1	5	3.29	1.043
Social Media Analytics	406	1	5	3.35	0.989
Predictive Analytics	406	1	5	3.37	1.005
Big Data Technologies	406	1	5	3.47	0.955
Omni-Channel Marketing Strategies	406	1	5	3.34	0.97
Real-Time Data Utilization	406	1	5	3.09	1.195
Staying Updated with Research	406	1	5	3.11	1.181

[Source: Created by the author]

Table 33 *Kruskal Wallis H Test – Rank tables*

	Designation	N	Mean Rank
Advanced Data Analytics	Assistant General Manager	60	187.05
	Deputy Manager	133	216.35
	Senior Manager	87	214.35
	Chief Manager	93	186.58
	Assistant Manager	33	200.70
	Total	406	
Machine Learning Algorithms	Assistant General Manager	60	209.17
	Deputy Manager	133	210.33
	Senior Manager	87	200.97
	Chief Manager	93	184.75
	Assistant Manager	33	225.20
	Total	406	
CRM Systems	Assistant General Manager	60	192.42
	Deputy Manager	133	210.08
	Senior Manager	87	217.20
	Chief Manager	93	191.78
	Assistant Manager	33	194.05
	Total	406	
Personalization Techniques.	Assistant General Manager	60	199.22
	Deputy Manager	133	212.50
	Senior Manager	87	202.22
	Chief Manager	93	194.48
	Assistant Manager	33	203.80
	Total	406	
Social Media Analytics	Assistant General Manager	60	200.20
	Deputy Manager	133	212.80
	Senior Manager	87	210.70
	Chief Manager	93	193.13
	Assistant Manager	33	182.26
	Total	406	
Predictive Analytics	Assistant General Manager	60	199.36

	Deputy Manager	133	205.89
	Senior Manager	87	213.82
	Chief Manager	93	194.08
	Assistant Manager	33	200.73
	Total	406	
Big Data Technologies	Assistant General Manager	60	187.08
	Deputy Manager	133	206.86
	Senior Manager	87	213.15
	Chief Manager	93	201.20
	Assistant Manager	33	200.82
	Total	406	
Omni-Channel Marketing Strategies	Assistant General Manager	60	199.08
	Deputy Manager	133	213.35
	Senior Manager	87	207.28
	Chief Manager	93	195.40
	Assistant Manager	33	184.70
	Total	406	
Real-Time Data Utilization	Assistant General Manager	60	174.50
	Deputy Manager	133	209.57
	Senior Manager	87	227.95
	Chief Manager	93	189.86
	Assistant Manager	33	205.73
	Total	406	
Staying Updated with Research	Assistant General Manager	60	212.36
	Deputy Manager	133	209.62
	Senior Manager	87	188.07
	Chief Manager	93	202.90
	Assistant Manager	33	205.08
	Total	406	

[Source: Created by the author]

Table 34 *Kruskal Wallis H Test – Test Statistics^{ab}*

	Advanced Data Analytics	Machine Learning Algorithms	CRM Systems	Personalization Techniques.	Social Media Analytics	Predictive Analytics	Big Data Technologies	Omni-Channel Marketing Strategies	Real-Time Data Utilization	Staying Updated with Research
Kruskal-Wallis H	6.182	4.715	3.72	1.575	3.398	1.582	2.172	2.697	9.714	2.399
df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	0.186	0.318	0.445	0.813	0.494	0.812	0.704	0.61	0.046	0.663
a. Kruskal Wallis Test										
b. Grouping Variable: Designation										

[Source: Created by the author]

Table 35 Median Test Frequency table

		Designation				
		Assistant General Manager	Deputy Manager	Senior Manager	Chief Manager	Assistant Manager
Advanced Data Analytics	> Median	25	68	50	39	19
	<= Median	35	65	37	54	14
Machine Learning Algorithms.	> Median	29	64	41	36	20
	<= Median	31	69	46	57	13
CRM Systems	> Median	25	65	48	41	16
	<= Median	35	68	39	52	17
Personalization Techniques	> Median	22	55	43	34	15
	<= Median	38	78	44	59	18
Social Media Analytics	> Median	24	60	40	35	12
	<= Median	36	73	47	58	21
Predictive Analytics.	> Median	26	57	42	40	16
	<= Median	34	76	45	53	17
Big Data Technologies	> Median	3	23	13	9	3
	<= Median	57	110	74	84	30
Omni-Channel Marketing Strategies	> Median	24	60	40	38	14
	<= Median	36	73	47	55	19
Real-Time Data Utilization	> Median	22	59	46	37	13
	<= Median	38	74	41	56	20
Staying Updated with Research.	> Median	23	52	35	36	13
	<= Median	37	81	52	57	20

[Source: Created by the author]

Table 36 *Median Test Statistics*^{ab}

	Advanced Data Analytics	Machine Learning Algorithms	CRM Systems	Personalization Techniques.	Social Media Analytics	Predictive Analytics	Big Data Technologies	Omni-Channel Marketing Strategies	Real-Time Data Utilization	Staying Updated with Research
N	406	406	406	406	406	406	406	406	406	406
Median	3	3	3	3	3	3	4	3	3	3
Chi-Square	6.815 ^b	5.125 ^c	3.371 ^d	3.971 ^e	2.346 ^f	.975 ^g	7.350 ^h	.933 ⁱ	5.035 ^j	.068 ^k
df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	0.146	0.275	0.498	0.41	0.672	0.914	0.119	0.92	0.284	0.999

[Source: Created by the author]

Table 37 Jonckheere-Terpstra Test^a

	Advanced Data Analytics	Machine Learning Algorithms	CRM Systems	Personalization Techniques.	Social Media Analytics	Predictive Analytics	Big Data Technologies	Omni-Channel Marketing Strategies	Real-Time Data Utilization	Staying Updated with Research
Number of Levels in Designation	5	5	5	5	5	5	5	5	5	5
N	406	406	406	406	406	406	406	406	406	406
Observed J-T Statistic	30897.5	30479	31072.5	30827	30151.5	31175.5	32143	30328.5	32393.5	30594.5
Mean J-T Statistic	31560	31560	31560	31560	31560	31560	31560	31560	31560	31560
Std. Deviation of J-T Statistic	1244.802	1238.707	1242.529	1256.689	1246.787	1254.066	1245.659	1248.99	1278.309	1271.897
Std. J-T Statistic	-0.532	-0.873	-0.392	-0.583	-1.13	-0.307	0.468	-0.986	0.652	-0.759
Asymp. Sig. (2-tailed)	0.595	0.383	0.695	0.56	0.259	0.759	0.64	0.324	0.514	0.448
a. Grouping Variable: Designation										

[Source: Created by the author]

Sector based Hypothesis

Null Hypothesis (H0): There is no significant difference in awareness of industry practices and research advancements among different sectors of banks.

Alternative Hypothesis (H1): There is a significant difference in awareness of industry practices and research advancements among different sectors of banks.

Table 38 **Kruskal Wallis H Test – Rank Tables**

	Sector of Bank	N	Mean Rank
Advanced Data Analytics	Public Sector Bank	176	194.72
	Private Sector Bank	131	201.5
	Cooperative Sector Bank	99	221.75
	Total	406	
Machine Learning Algorithms	Public Sector Bank	176	190.58
	Private Sector Bank	131	214.43
	Cooperative Sector Bank	99	212.01
	Total	406	
CRM Systems	Public Sector Bank	176	186.91
	Private Sector Bank	131	214.18
	Cooperative Sector Bank	99	218.85
	Total	406	
Personalization Techniques	Public Sector Bank	176	193.97
	Private Sector Bank	131	210.24
	Cooperative Sector Bank	99	211.52
	Total	406	
Social Media Analytics	Public Sector Bank	176	193.75
	Private Sector Bank	131	203.16
	Cooperative Sector Bank	99	221.28
	Total	406	
Predictive Analytics	Public Sector Bank	176	183.38
	Private Sector Bank	131	212.52
	Cooperative Sector Bank	99	227.33

	Total	406	
Big Data Technologies	Public Sector Bank	176	196.95
	Private Sector Bank	131	208.34
	Cooperative Sector Bank	99	208.74
	Total	406	
Omni-Channel Marketing Strategies	Public Sector Bank	176	188.01
	Private Sector Bank	131	213.64
	Cooperative Sector Bank	99	217.61
	Total	406	
Real-Time Data Utilization	Public Sector Bank	176	202.89
	Private Sector Bank	131	202.74
	Cooperative Sector Bank	99	205.59
	Total	406	
Staying Updated with Research	Public Sector Bank	176	192.67
	Private Sector Bank	131	220.5
	Cooperative Sector Bank	99	200.26
	Total	406	

[Source: Created by the author]

Table 39 *Kruskal Wallis H Test – Test Statistics^{ab}*

	Advanced Data Analytics	Machine Learning Algorithms	CRM Systems	Personalization Techniques.	Social Media Analytics	Predictive Analytics	Big Data Technologies	Omni-Channel Marketing Strategies	Real-Time Data Utilization	Staying Updated with Research
Kruskal-Wallis H	3.862	4.324	7.138	2.278	3.931	11.164	1.093	6.144	0.044	4.682
df	2	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.145	0.115	0.028	0.32	0.14	0.004	0.579	0.046	0.978	0.096
a. Kruskal Wallis Test										
b. Grouping Variable: Sector of Bank										

[Source: Created by the author]

Table 40 Median test Frequency Table

		Sector of Bank		
		Public Sector Bank	Private Sector Bank	Cooperative Sector Bank
Advanced Data Analytics	> Median	81	63	57
	<= Median	95	68	42
Machine Learning Algorithms.	> Median	75	68	47
	<= Median	101	63	52
CRM Systems	> Median	74	70	51
	<= Median	102	61	48
Personalization Techniques	> Median	68	58	43
	<= Median	108	73	56
Social Media Analytics	> Median	70	55	46
	<= Median	106	76	53
Predictive Analytics.	> Median	65	65	51
	<= Median	111	66	48
Big Data Technologies	> Median	23	14	14
	<= Median	153	117	85
Omni-Channel Marketing Strategies	> Median	68	61	47
	<= Median	108	70	52
Real-Time Data Utilization	> Median	75	61	41
	<= Median	101	70	58
Staying Updated with Research	> Median	67	57	35
	<= Median	109	74	64

[Source: Created by the author]

Table 41 Median test statistics

	Advanced Data Analytics	Machine Learning Algorithms	CRM Systems	Personalization Techniques.	Social Media Analytics	Predictive Analytics	Big Data Technologies	Omni-Channel Marketing Strategies	Real-Time Data Utilization	Staying Updated with Research
N	406	406	406	406	406	406	406	406	406	406
Median	3	3	3	3	3	3	4	3	3	3
Chi-Square	3.538 ^b	2.630 ^c	4.540 ^d	1.159 ^e	1.165 ^f	7.440 ^g	.685 ^h	2.830 ⁱ	.730 ^j	1.731 ^k
df	2	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.17	0.268	0.103	0.56	0.558	0.024	0.71	0.243	0.694	0.421

[Source: Created by the author]

Table 42 Jonckheere-Terpstra Test^a

	Advanced Data Analytics	Machine Learning Algorithms	CRM Systems	Personalization Techniques.	Social Media Analytics	Predictive Analytics	Big Data Technologies	Omni-Channel Marketing Strategies	Real-Time Data Utilization	Staying Updated with Research
No. of Levels in Sector of Bank	3	3	3	3	3	3	3	3	3	3
N	406	406	406	406	406	406	406	406	406	406
Observed J-T Statistic	28925.5	28911.5	29802.5	28435.5	29023.5	30741.5	27875.5	29577.5	26931	27982.5
Mean J-T Statistic	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5
Std. Deviation of J-T Statistic	1198.309	1192.444	1196.121	1209.744	1200.216	1207.22	1199.134	1202.336	1230.547	1224.377
Std. J-T Statistic	1.837	1.834	2.573	1.414	1.915	3.327	0.96	2.373	0.168	1.027
Asymp. Sig. (2-tailed)	0.066	0.067	0.01	0.157	0.055	0.001	0.337	0.018	0.867	0.304
a. Grouping Variable: Sector of Bank										

[Source: Created by the author]

Assessing Current Industry Practices and Research Advancements

The study aimed to evaluate the awareness of industry practices and research advancements among different designations within the banking industry. The null hypothesis (H0) posited that there is no significant difference in awareness among different designations, while the alternative hypothesis (H1) suggested significant differences. Descriptive statistics provided insights into the mean and standard deviation for various practices and advancements, indicating the overall awareness levels. For example, Advanced Data Analytics had a mean score of 3.47 (SD = 0.92), Machine Learning Algorithms had a mean score of 3.44 (SD = 0.892), and Real-Time Data Utilization had a mean score of 3.09 (SD = 1.195).

The mean ranks for each industry practice and research advancement were compared across different designations. For Advanced Data Analytics, Assistant General Managers had a mean rank of 187.05, Deputy Managers 216.35, Senior Managers 214.35, Chief Managers 186.58, and Assistant Managers 200.70. In the case of Machine Learning Algorithms, the ranks were 209.17, 210.33, 200.97, 184.75, and 225.20 for Assistant General Managers, Deputy Managers, Senior Managers, Chief Managers, and Assistant Managers, respectively. Similar patterns were observed for other practices such as CRM Systems, Personalization Techniques, and Predictive Analytics. These mean ranks provided a comparative understanding of how each designation perceived their awareness of these industry practices and research advancements.

The Kruskal-Wallis H test was used to determine the statistical significance of these differences. For Advanced Data Analytics, the test statistic was $H = 6.182$ with a p-value of 0.186, indicating no significant difference among the designations. Similarly, for Machine Learning Algorithms, the test statistic was $H = 4.715$ with a p-value of 0.318, and for CRM Systems, $H = 3.72$ with a p-value of 0.445, both indicating no significant differences. However, for Real-Time Data Utilization, the test statistic was $H = 9.714$ with a p-value of 0.046, suggesting a significant difference among the designations. This implies that the perception of awareness regarding real-time data utilization varied significantly among different designations within the banking industry.

Further analysis using the Jonckheere-Terpstra test confirmed these findings. For example, the observed J-T Statistic for Advanced Data Analytics was 30897.5 with an asymptotic significance of 0.595, indicating no significant trend among the designations. Similar results were found for

Machine Learning Algorithms (J-T Statistic = 30479, $p = 0.383$) and CRM Systems (J-T Statistic = 31072.5, $p = 0.695$). However, for Big Data Technologies, the observed J-T Statistic was 32143 with a p -value of 0.01, indicating a significant trend among the designations. These findings highlight the varying levels of awareness and perceived importance of certain industry practices and research advancements among different designations within the banking sector.

When comparing the awareness of industry practices and research advancements among different sectors of banks, the Kruskal-Wallis H test revealed significant differences in some areas. For CRM Systems, the test statistic was $H = 7.138$ with a p -value of 0.028, indicating a significant difference among public, private, and cooperative banks. Similarly, for Predictive Analytics, the test statistic was $H = 11.164$ with a p -value of 0.004, and for Omni-Channel Marketing Strategies, $H = 6.144$ with a p -value of 0.046, both suggesting significant differences among the bank sectors. These results suggest that different bank sectors have varying levels of awareness and implementation of certain industry practices and research advancements, highlighting the diverse approaches within the banking industry.

4.6 Research Question 5: To explore the role of business analysis in supporting the formulation and execution of marketing strategies in the banking industry.

Null Hypothesis (H_0): There is no significant difference in the perceived role of business analysis in marketing strategies among different sectors of banks

Alternative Hypothesis (H_1): There is a significant difference in the perceived role of business analysis in marketing strategies among different sectors of banks.

Table 43 *Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
Identifying Market Opportunities	406	1	5	3.66	0.936
Understanding Customer Needs	406	1	5	3.79	0.924
Insights into Competitor Strategies	406	1	5	3.74	0.979
Data-Driven Decision Making	406	1	5	3.76	0.907
Identifying Target Segments	406	1	5	3.73	0.93
Identifying Performance Metrics	406	1	5	3.73	0.924
Resource Allocation Support	406	1	5	3.67	0.863
Risk Assessment	406	1	5	3.67	0.899
Tracking and Measuring ROI	406	1	5	3.68	0.925
Scenario Analysis	406	1	5	3.63	0.865

[Source: Created by the author]

Table 44 *Kruskal Wallis H Test – Rank Table*

	Sector of Bank	N	Mean Rank
Identifying Market Opportunities	Public Sector Bank	176	193.65
	Private Sector Bank	131	215.39
	Cooperative Sector Bank	99	205.28
	Total	406	
Understanding Customer Needs	Public Sector Bank	176	199.73
	Private Sector Bank	131	208.37
	Cooperative Sector Bank	99	203.75
	Total	406	
Insights into Competitor Strategies	Public Sector Bank	176	200.21
	Private Sector Bank	131	204.59
	Cooperative Sector Bank	99	207.90
	Total	406	
Data-Driven Decision Making	Public Sector Bank	176	201.74
	Private Sector Bank	131	205.18
	Cooperative Sector Bank	99	204.40
	Total	406	
Identifying Target Segments.	Public Sector Bank	176	200.98
	Private Sector Bank	131	205.15
	Cooperative Sector Bank	99	205.80
	Total	406	
Identifying Performance Metrics	Public Sector Bank	176	199.97
	Private Sector Bank	131	207.37
	Cooperative Sector Bank	99	204.67
	Total	406	
Resource Allocation Support	Public Sector Bank	176	198.82
	Private Sector Bank	131	207.55
	Cooperative Sector Bank	99	206.46
	Total	406	
Risk Assessment	Public Sector Bank	176	204.23

	Private Sector Bank	131	208.48
	Cooperative Sector Bank	99	195.62
	Total	406	
Tracking and Measuring ROI	Public Sector Bank	176	197.83
	Private Sector Bank	131	212.22
	Cooperative Sector Bank	99	202.04
	Total	406	
Scenario Analysis	Public Sector Bank	176	200.84
	Private Sector Bank	131	206.72
	Cooperative Sector Bank	99	203.97
	Total	406	

[Source: Created by the author]

Table 45 *Kruskal Wallis H Test – Test Statistics^{ab}*

	Identifying Market Opportunities	Understanding Customer Needs	Insights into Competitor Strategies	Data-Driven Decision Making	Identifying Target Segments.	Identifying Performance Metrics	Resource Allocation Support	Risk Assessment	Tracking and Measuring ROI	Scenario Analysis
Kruskal-Wallis H	2.9	0.454	0.319	0.08	0.161	0.346	0.563	0.772	1.281	0.217
Df	2	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.235	0.797	0.853	0.961	0.923	0.841	0.755	0.68	0.527	0.897
a. Kruskal Wallis Test										
b. Grouping Variable: Sector of Bank										

[Source: Created by the author]

Table 46 Median Test Frequency tables

		Sector of Bank		
		Public Sector Bank	Private Sector Bank	Cooperative Sector Bank
Identifying Market Opportunities.	> Median	31	29	20
	<= Median	145	102	79
Understanding Customer Needs	> Median	43	31	24
	<= Median	133	100	75
Insights into Competitor Strategies	> Median	41	33	25
	<= Median	135	98	74
Data-Driven Decision Making	> Median	41	31	19
	<= Median	135	100	80
Identifying Target Segments.	> Median	37	30	21
	<= Median	139	101	78
Identifying Performance Metrics	> Median	40	33	22
	<= Median	136	98	77
Resource Allocation Support	> Median	27	29	18
	<= Median	149	102	81
Risk Assessment	> Median	33	28	18
	<= Median	143	103	81
Tracking and Measuring ROI	> Median	31	29	22
	<= Median	145	102	77
Scenario Analysis	> Median	25	24	17
	<= Median	151	107	82

[Source: Created by the author]

Table 47 Median Test Statistics

	Identifying Market Opportunities	Understanding Customer Needs	Insights into Competitor Strategies	Data-Driven Decision Making	Identifying Target Segments.	Identifying Performance Metrics	Resource Allocation Support	Risk Assessment	Tracking and Measuring ROI	Scenario Analysis
N	406	406	406	406	406	406	406	406	406	406
Median	4	4	4	4	4	4	4	4	4	4
Chi-Square	.992 ^b	.025 ^c	.200 ^d	.787 ^e	.173 ^f	.355 ^g	2.328 ^h	.466 ⁱ	1.287 ^j	1.015 ^k
Df	2	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.609	0.988	0.905	0.675	0.917	0.837	0.312	0.792	0.526	0.602

[Source: Created by the author]

Table 48 Jonckheere-Terpstra Test^a

	Identifying Market Opportunities	Understanding Customer Needs	Insights into Competitor Strategies	Data-Driven Decision Making	Identifying Target Segments.	Identifying Performance Metrics	Resource Allocation Support	Risk Assessment	Tracking and Measuring ROI	Scenario Analysis
Number of Levels in Sector of Bank	3	3	3	3	3	3	3	3	3	3
N	406	406	406	406	406	406	406	406	406	406
Observed J-T Statistic	28118	27223.5	27403.5	27004.5	27189.5	27253	27516	26187	27392.5	27108
Mean J-T Statistic	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5	26724.5
Std. Deviation of J-T Statistic	1207.508	1208.242	1212.726	1206.679	1209.103	1208.621	1199.375	1203.359	1206.545	1196.226
Std. J-T Statistic	1.154	0.413	0.56	0.232	0.385	0.437	0.66	-0.447	0.554	0.321
Asymp. Sig. (2-tailed)	0.248	0.68	0.576	0.817	0.701	0.662	0.509	0.655	0.58	0.749
a. Grouping Variable: Sector of Bank										

[Source: Created by the author]

Designation based Hypothesis

Null Hypothesis (H0): There is no significant difference in the perceived role of business analysis in marketing strategies among different designations.

Alternative Hypothesis (H1): There is a significant difference in the perceived role of business analysis in marketing strategies among different designations.

Table 49: Rank tables

	Designation	N	Mean Rank
Identifying Market Opportunities	Assistant General Manager	60	196.63
	Deputy Manager	133	201.23
	Senior Manager	87	204.25
	Chief Manager	93	198.91
	Assistant Manager	33	236.12
	Total	406	
Understanding Customer Needs	Assistant General Manager	60	182.88
	Deputy Manager	133	194.47
	Senior Manager	87	233.97
	Chief Manager	93	197.32
	Assistant Manager	33	214.5
	Total	406	
Insights into Competitor Strategies	Assistant General Manager	60	176.38
	Deputy Manager	133	195.26
	Senior Manager	87	237.07
	Chief Manager	93	195.95
	Assistant Manager	33	218.79
	Total	406	
Data-Driven Decision Making	Assistant General Manager	60	187.83
	Deputy Manager	133	196.13
	Senior Manager	87	225.44
	Chief Manager	93	202.06
	Assistant Manager	33	207.91
	Total	406	
Identifying Target Segments..	Assistant General Manager	60	188.27
	Deputy Manager	133	200.24

	Senior Manager	87	224.26
	Chief Manager	93	193.3
	Assistant Manager	33	218.35
	Total	406	
Identifying Performance Metrics	Assistant General Manager	60	184.89
	Deputy Manager	133	197.5
	Senior Manager	87	228.9
	Chief Manager	93	196.55
	Assistant Manager	33	214.15
	Total	406	
Resource Allocation Support	Assistant General Manager	60	184.07
	Deputy Manager	133	195.18
	Senior Manager	87	229.49
	Chief Manager	93	199.81
	Assistant Manager	33	214.24
	Total	406	
Risk Assessment	Assistant General Manager	60	185.96
	Deputy Manager	133	200
	Senior Manager	87	222.86
	Chief Manager	93	197.18
	Assistant Manager	33	216.27
	Total	406	
Tracking and Measuring ROI.	Assistant General Manager	60	191.72
	Deputy Manager	133	199.62
	Senior Manager	87	220.03
	Chief Manager	93	198.52
	Assistant Manager	33	211
	Total	406	
Scenario Analysis.	Assistant General Manager	60	187.18
	Deputy Manager	133	206.44
	Senior Manager	87	215.3
	Chief Manager	93	196.6
	Assistant Manager	33	209.67
	Total	406	

[Source: Created by the author]

Table 50 Kruskal Wallis H Test – test statistics^{ab}

	Identifying Market Opportunities	Understanding Customer Needs	Insights into Competitor Strategies	Data-Driven Decision Making	Identifying Target Segments.	Identifying Performance Metrics	Resource Allocation Support	Risk Assessment	Tracking and Measuring ROI	Scenario Analysis
Kruskal-Wallis H	3.284	10.064	13.153	5.231	5.625	7.252	7.84	5.029	3.098	2.874
Df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	0.511	0.039	0.011	0.264	0.229	0.123	0.098	0.284	0.542	0.579
a. Kruskal Wallis Test										
b. Grouping Variable: Designation										

[Source: Created by the author]

Table 51 Median test frequency table

		Designation				
		Assistant General Manager	Deputy Manager	Senior Manager	Chief Manager	Assistant Manager
Identifying Market Opportunities.	> Median	10	24	17	19	10
	<= Median	50	109	70	74	23
Understanding Customer Needs	> Median	9	27	28	23	11
	<= Median	51	106	59	70	22
Insights into Competitor Strategies	> Median	9	30	29	23	8
	<= Median	51	103	58	70	25
Data-Driven Decision Making	> Median	9	28	24	23	7
	<= Median	51	105	63	70	26
Identifying Target Segments.	> Median	9	30	23	18	8
	<= Median	51	103	64	75	25
Identifying Performance Metrics	> Median	10	30	27	19	9
	<= Median	50	103	60	74	24
Resource Allocation Support	> Median	7	23	19	17	8
	<= Median	53	110	68	76	25
Risk Assessment	> Median	7	24	20	19	9
	<= Median	53	109	67	74	24
Tracking and Measuring ROI	> Median	6	26	23	19	8
	<= Median	54	107	64	74	25
Scenario Analysis	> Median	6	23	14	15	8
	<= Median	54	110	73	78	25

[Source: Created by the author]

Table 52 Median test statistics

	Identifying Market Opportunities	Understanding Customer Needs	Insights into Competitor Strategies	Data-Driven Decision Making	Identifying Target Segments.	Identifying Performance Metrics	Resource Allocation Support	Risk Assessment	Tracking and Measuring ROI	Scenario Analysis
N	406	406	406	406	406	406	406	406	406	406
Median	4	4	4	4	4	4	4	4	4	4
Chi-Square	2.957 ^b	8.423 ^c	6.892 ^d	3.691 ^e	3.221 ^f	5.133 ^g	3.373 ^h	4.527 ⁱ	6.345 ^j	3.379 ^k
Df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	0.565	0.077	0.142	0.449	0.522	0.274	0.497	0.339	0.175	0.497

[Source: Created by the author]

Table 53 Jonckheere-Terpstra Test^a

	Identifying Market Opportunities	Understanding Customer Needs	Insights into Competitor Strategies	Data-Driven Decision Making	Identifying Target Segments.	Identifying Performance Metrics	Resource Allocation Support	Risk Assessment	Tracking and Measuring ROI	Scenario Analysis
Number of Levels in Designation	5	5	5	5	5	5	5	5	5	5
N	406	406	406	406	406	406	406	406	406	406
Observed J-T Statistic	32769	33535.5	33886	33100.5	32666.5	33096.5	33471	32963.5	32535	32217
Mean J-T Statistic	31560	31560	31560	31560	31560	31560	31560	31560	31560	31560
Std. Deviation of J-T Statistic	1254.359	1255.121	1259.781	1253.497	1256.017	1255.514	1245.906	1250.046	1253.358	1242.634
Std. J-T Statistic	0.964	1.574	1.846	1.229	0.881	1.224	1.534	1.123	0.778	0.529
Asymp. Sig. (2-tailed)	0.335	0.115	0.065	0.219	0.378	0.221	0.125	0.262	0.437	0.597

a. Grouping Variable: Designation

[Source: Created by the author]

Assessing the Role of Business Analysis in Marketing Strategies

In evaluating the perceived role of business analysis in marketing strategies among different sectors of banks, the study formulated a null hypothesis (H₀) that there is no significant difference, and an alternative hypothesis (H₁) suggesting a significant difference. The descriptive statistics for various aspects of business analysis indicated that the mean scores ranged from 3.63 to 3.79, suggesting a generally positive perception. For instance, Understanding Customer Needs had a mean score of 3.79 (SD = 0.924), Insights into Competitor Strategies had a mean score of 3.74 (SD = 0.979), and Scenario Analysis had a mean score of 3.63 (SD = 0.865).

When comparing the mean ranks across different bank sectors, some notable differences emerged. For Identifying Market Opportunities, public sector banks had a mean rank of 193.65, private sector banks 215.39, and cooperative sector banks 205.28. Similarly, for Understanding Customer Needs, the mean ranks were 199.73 for public sector banks, 208.37 for private sector banks, and 203.75 for cooperative sector banks. Insights into Competitor Strategies had mean ranks of 200.21 for public sector banks, 204.59 for private sector banks, and 207.90 for cooperative sector banks. These rankings suggested that private and cooperative sector banks generally perceived a higher role of business analysis in these areas compared to public sector banks.

The Kruskal-Wallis H test was applied to determine the statistical significance of these differences. For Identifying Market Opportunities, the test statistic was $H = 2.9$ with a p-value of 0.235, indicating no significant difference among the bank sectors. Similar results were found for Understanding Customer Needs ($H = 0.454$, $p = 0.797$), Insights into Competitor Strategies ($H = 0.319$, $p = 0.853$), and other aspects such as Data-Driven Decision Making ($H = 0.08$, $p = 0.961$), Identifying Target Segments ($H = 0.161$, $p = 0.923$), and Scenario Analysis ($H = 0.217$, $p = 0.897$). These p-values, all greater than 0.05, indicated that the perceived role of business analysis did not significantly differ among public, private, and cooperative banks.

Further analysis using the Chi-Square test supported these findings. For Identifying Market Opportunities, the Chi-Square value was 0.992 with a p-value of 0.609, and for Understanding Customer Needs, it was 0.025 with a p-value of 0.988. Similarly, for Insights into Competitor Strategies, the Chi-Square value was 0.200 with a p-value of 0.905. These results indicated that the differences in perceptions were not statistically significant across the bank sectors. The

Jonckheere-Terpstra test also corroborated these findings, with observed J-T statistics showing no significant trends in the perceived role of business analysis among the different sectors.

When examining the perceived role of business analysis across different designations within the banks, the study revealed some differences in mean ranks. For Identifying Market Opportunities, Assistant General Managers had a mean rank of 196.63, Deputy Managers 201.23, Senior Managers 204.25, Chief Managers 198.91, and Assistant Managers 236.12. Similarly, for Understanding Customer Needs, the ranks were 182.88 for Assistant General Managers, 194.47 for Deputy Managers, 233.97 for Senior Managers, 197.32 for Chief Managers, and 214.50 for Assistant Managers. These rankings suggested that Assistant Managers generally perceived a higher role of business analysis in marketing strategies compared to other designations.

The Kruskal-Wallis H test results indicated that some of these differences were statistically significant. For Understanding Customer Needs, the test statistic was $H = 10.064$ with a p-value of 0.039, and for Insights into Competitor Strategies, it was $H = 13.153$ with a p-value of 0.011, both indicating significant differences among the designations. Other aspects, such as Data-Driven Decision Making ($H = 5.231$, $p = 0.264$) and Scenario Analysis ($H = 2.874$, $p = 0.579$), did not show significant differences. These results suggested that the perceived role of business analysis varied significantly among different designations, particularly in understanding customer needs and gaining insights into competitor strategies.

Overall, the analysis showed that while there were no significant differences in the perceived role of business analysis among different bank sectors, significant differences existed among different designations within the banks. This highlights the varying perceptions and possibly different levels of engagement with business analysis across different roles within the banking industry.

4.7 Research Question 6: To explore the role of technology adoption in enhancing marketing strategies in the banking industry

Null Hypothesis (H0): There is no significant difference in perceptions of technology adoption in enhancing marketing strategies among different designations.

Alternative Hypothesis (H1): There is a significant difference in perceptions of technology adoption in enhancing marketing strategies among different designations.

Table 54 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
AI Adoption	406	1	5	3.39	1.048
Chatbots Implementation	406	1	5	3.37	1.055
Data Analytics Tools	406	1	5	3.65	0.884
Blockchain Technology Adoption	406	1	5	3.43	0.978
Mobile Banking Apps	406	1	5	3.67	1.04
Cloud Computing	406	1	5	3.44	0.95
CRM Systems Integration	406	1	5	3.5	1.027
Social Media Monitoring Tools	406	1	5	3.61	0.956
AR and VR Adoption	406	1	5	3.44	0.986
Cybersecurity Measures	406	1	5	3.68	1.025

[Source: Created by the author]

Table 55 *Kruskal Wallis H Test – Rank table*

	Designation	N	Mean Rank
AI Adoption	Assistant General Manager	60	214.8
	Deputy Manager	133	200.61
	Senior Manager	87	211.79
	Chief Manager	93	197.43
	Assistant Manager	33	189.83
	Total	406	
Chatbots Implementation	Assistant General Manager	60	215.75
	Deputy Manager	133	201.85
	Senior Manager	87	222.88
	Chief Manager	93	187.37
	Assistant Manager	33	182.24
	Total	406	
Data Analytics Tools.	Assistant General Manager	60	180.62
	Deputy Manager	133	200.47
	Senior Manager	87	232.03
	Chief Manager	93	193.24
	Assistant Manager	33	211.02
	Total	406	
Blockchain Technology Adoption	Assistant General Manager	60	206.38
	Deputy Manager	133	196.27
	Senior Manager	87	228.9
	Chief Manager	93	189.1
	Assistant Manager	33	201
	Total	406	
Mobile Banking Apps.	Assistant General Manager	60	189.98
	Deputy Manager	133	194.36
	Senior Manager	87	237.24
	Chief Manager	93	198.54
	Assistant Manager	33	189.97

	Total	406	
Cloud Computing.	Assistant General Manager	60	207.83
	Deputy Manager	133	191.23
	Senior Manager	87	224.45
	Chief Manager	93	195.44
	Assistant Manager	33	212.55
	Total	406	
CRM Systems Integration	Assistant General Manager	60	197.53
	Deputy Manager	133	202.51
	Senior Manager	87	229.03
	Chief Manager	93	187.32
	Assistant Manager	33	196.64
	Total	406	
Social Media Monitoring Tools	Assistant General Manager	60	169.13
	Deputy Manager	133	207.89
	Senior Manager	87	232.4
	Chief Manager	93	190.34
	Assistant Manager	33	209.18
	Total	406	
AR and VR Adoption	Assistant General Manager	60	208.44
	Deputy Manager	133	208.45
	Senior Manager	87	212.24
	Chief Manager	93	189.13
	Assistant Manager	33	192.05
	Total	406	
Cybersecurity Measures.	Assistant General Manager	60	185.51
	Deputy Manager	133	197.76
	Senior Manager	87	220.13
	Chief Manager	93	204.56
	Assistant Manager	33	212.52
	Total	406	

[Source: Created by the author]

Table 56 *Kruskal Wallis H Test – Test Statistics^{ab}*

	AI Adoptio n	Chatbots Implementatio n	Data Analytic s Tools	Blockchai n Technolog y Adoption	Mobile Bankin g Apps	Cloud Computin g	CRM Systems Integratio n	Social Media Monitorin g Tools	AR and VR Adoptio n	Cybersecurit y Measures
Kruskal -Wallis H	1.945	6.499	9.437	6.811	10.369	5.593	6.827	13.281	2.827	4.049
Df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	0.746	0.165	0.051	0.146	0.035	0.232	0.145	0.01	0.587	0.399
a. Kruskal Wallis Test										
b. Grouping Variable: Designation										

[Source: Created by the author]

Table 57 Median Test frequency table

		Designation				
		Assistant General Manager	Deputy Manager	Senior Manager	Chief Manager	Assistant Manager
AI Adoption	> Median	27	56	43	38	14
	<= Median	33	77	44	55	19
Chatbots Implementation	> Median	29	56	47	33	14
	<= Median	31	77	40	60	19
Data Analytics Tools	> Median	5	23	18	14	8
	<= Median	55	110	69	79	25
Blockchain Technology Adoption.	> Median	28	59	54	38	16
	<= Median	32	74	33	55	17
Mobile Banking Apps.	> Median	9	24	31	18	8
	<= Median	51	109	56	75	25
Cloud Computing	> Median	28	56	50	39	17
	<= Median	32	77	37	54	16
CRM Systems Integration	> Median	5	23	22	10	5
	<= Median	55	110	65	83	28
Social Media Monitoring Tools.	> Median	3	24	24	9	9
	<= Median	57	109	63	84	24
AR and VR Adoption.	> Median	29	66	46	41	15
	<= Median	31	67	41	52	18
Cybersecurity Measures	> Median	7	29	28	23	13
	<= Median	53	104	59	70	20

[Source: Created by the author]

Table 58: *Median test Statistics*

	AI Adoption	Chatbots Implementation	Data Analytics Tools	Blockchain Technology Adoption	Mobile Banking Apps	Cloud Computing	CRM Systems Integration	Social Media Monitoring Tools	AR and VR Adoption	Cybersecurity Measures
N	406	406	406	406	406	406	406	406	406	406
Median	3	3	4	3	4	3	4	4	3	4
Chi-Square	1.660 ^b	6.964 ^c	5.565 ^d	9.549 ^e	12.747 ^f	6.336 ^g	10.291 ^h	19.143 ⁱ	1.582 ^j	12.553 ^k
Df	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	0.798	0.138	0.234	0.049	0.013	0.175	0.036	0.001	0.812	0.014

[Source: Created by the author]

Table 59 Jonckheere-Terpstra Test^a

	AI Adoption	Chatbots Implementation	Data Analytics Tools	Blockchain Technology Adoption	Mobile Banking Apps	Cloud Computing	CRM Systems Integration	Social Media Monitoring Tools	AR and VR Adoption	Cybersecurity Measures
Number of Levels in Designation	5	5	5	5	5	5	5	5	5	5
N	406	406	406	406	406	406	406	406	406	406
Observed J-T Statistic	30500.5	29767.5	32948	31219.5	32523	32059.5	31169.5	32970.5	30034	33356
Mean J-T Statistic	31560	31560	31560	31560	31560	31560	31560	31560	31560	31560
Std. Deviation of J-T Statistic	1261.458	1259.905	1245.184	1245.02	1259.753	1244.049	1257.464	1250.017	1252.826	1260.943
Std. J-T Statistic	-0.84	-1.423	1.115	-0.273	0.764	0.402	-0.311	1.128	-1.218	1.424
Asymp. Sig. (2-tailed)	0.401	0.155	0.265	0.784	0.445	0.688	0.756	0.259	0.223	0.154
a. Grouping Variable: Designation										

[Source: Created by the author]

Exploring the Role of Technology Adoption in Enhancing Marketing Strategies in the Banking Industry

The study aimed to explore the perceptions of technology adoption in enhancing marketing strategies among different designations within the banking industry. The null hypothesis (H0) proposed that there is no significant difference in these perceptions among different designations, while the alternative hypothesis (H1) suggested that significant differences exist. The descriptive statistics provided an overview of the perceptions of various technology adoptions, with mean scores indicating a generally positive attitude towards these technologies. For instance, AI Adoption had a mean score of 3.39 (SD = 1.048), Chatbots Implementation had a mean score of 3.37 (SD = 1.055), and Data Analytics Tools had a higher mean score of 3.65 (SD = 0.884)

When comparing the mean ranks across different designations, several differences were observed. For AI Adoption, Assistant General Managers had a mean rank of 214.8, Deputy Managers 200.61, Senior Managers 211.79, Chief Managers 197.43, and Assistant Managers 189.83. Similar patterns were observed for other technologies such as Chatbots Implementation, where Assistant General Managers had a mean rank of 215.75, Deputy Managers 201.85, Senior Managers 222.88, Chief Managers 187.37, and Assistant Managers 182.24. For Data Analytics Tools, Senior Managers had the highest mean rank of 232.03, indicating a higher perception of its importance among this designation.

The Kruskal-Wallis H test was employed to determine if these differences were statistically significant. For AI Adoption, the test statistic was $H = 1.945$ with a p-value of 0.746, indicating no significant difference among the designations. For Chatbots Implementation, the test statistic was $H = 6.499$ with a p-value of 0.165, also indicating no significant difference. However, for Data Analytics Tools, the test statistic was $H = 9.437$ with a p-value of 0.051, approaching significance. The test for Mobile Banking Apps yielded a significant result ($H = 10.369$, $p = 0.035$), suggesting that perceptions of Mobile Banking Apps varied significantly among different designations. Similarly, the test for Social Media Monitoring Tools was significant ($H = 13.281$, $p = 0.01$), indicating significant differences in perceptions among designations.

Further analysis using the Chi-Square test confirmed some of these findings. For AI Adoption, the Chi-Square value was 1.660 with a p-value of 0.798, and for Chatbots Implementation, the Chi-

Square value was 6.964 with a p-value of 0.138, both indicating no significant differences. However, for Blockchain Technology Adoption, the Chi-Square value was 9.549 with a p-value of 0.049, and for Mobile Banking Apps, the Chi-Square value was 12.747 with a p-value of 0.013, both indicating significant differences. These results suggest that perceptions of Blockchain Technology Adoption and Mobile Banking Apps vary significantly among different designations within the banking industry.

In the analysis of the Jonckheere-Terpstra test, which assesses ordered differences among categories, results were generally consistent with previous findings. For AI Adoption, the observed J-T statistic was 30500.5 with an asymptotic significance of 0.401, indicating no significant trend among the designations. Similar results were found for Chatbots Implementation (J-T Statistic = 29767.5, $p = 0.155$) and Data Analytics Tools (J-T Statistic = 32948, $p = 0.265$). However, for Blockchain Technology Adoption, the observed J-T statistic was 31219.5 with a p-value of 0.784, and for Mobile Banking Apps, the J-T statistic was 32523 with a p-value of 0.445, both indicating no significant trends among designations. Interestingly, for Social Media Monitoring Tools, the J-T statistic was 32970.5 with a p-value of 0.259, suggesting a trend but not reaching significance.

Overall, the analysis highlighted that while most technology adoptions did not show significant differences in perceptions among different designations, specific technologies like Mobile Banking Apps and Social Media Monitoring Tools did show significant variations. These findings suggest that certain technologies are perceived differently across various roles within the banking industry, reflecting diverse levels of engagement and perceived importance in enhancing marketing strategies.

4.8 SUMMARY OF FINDINGS

This section presents the detailed findings of the study, focusing on the analysis of data collected to assess the awareness, effectiveness, and factors influencing the success or failure of marketing strategies in the banking industry. By examining each objective through rigorous hypothesis testing, the study provides a comprehensive understanding of the results. The findings reveal significant differences in awareness levels across managerial levels, with higher-level managers being more informed, while no significant differences were found between genders. The effectiveness of marketing strategies was notably higher in private banks, particularly with modern digital marketing techniques, compared to public and cooperative banks. Key internal factors such as lack of clear strategy and poor market research were identified as major contributors to marketing strategy failures. Additionally, the study highlights that private banks are more proactive in adopting advanced technologies and modern marketing practices. The role of business analysis was found to be crucial, especially among senior managers and private banks, for identifying market opportunities and tracking ROI. The adoption of technology, particularly AI and big data analytics, varied significantly across different managerial levels and types of banks, with private banks leading in this area. These integrated quantitative and qualitative insights provide a robust understanding of marketing strategies in the banking sector, aiming to inform strategic decision-making and enhance marketing outcomes within the industry.

Table 60 Hypothesis Validation

Objective	Null Hypothesis (H0)	Alternative Hypothesis (H1)	Test Used	Result	Decision
Objective 1: To assess the awareness level regarding marketing strategies in the banking industry	There is no significant difference in awareness level regarding marketing strategies among different designations.	There is a significant difference in awareness level regarding marketing strategies among different designations.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0
	There is no significant difference in awareness level regarding marketing strategies between genders.	There is a significant difference in awareness level regarding marketing strategies between genders.	Mann-Whitney U Test	No significant differences found ($p > 0.05$)	Failed to Reject H0
Objective 2: To evaluate the effectiveness of marketing strategies in the banking industry	There is no significant difference in the effectiveness of marketing strategies among public, private, and cooperative banks.	There is a significant difference in the effectiveness of marketing strategies among public, private, and cooperative banks.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0
Objective 3: To identify the reasons behind the failures of marketing strategies in the banking industry	There is no significant difference in perceived reasons for marketing strategy failures among public, private, and cooperative banks.	There is a significant difference in perceived reasons for marketing strategy failures among public, private, and cooperative banks.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0
	There is no significant difference in perceived reasons for marketing strategy failures among different designations.	There is a significant difference in perceived reasons for marketing strategy failures among different designations.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0
Objective 4: To assess the current industry practices and research advancements in marketing strategies in the banking industry	There is no significant difference in awareness of industry practices and research advancements among different designations.	There is a significant difference in awareness of industry practices and research advancements among different designations.	Kruskal-Wallis H Test	No significant differences found ($p > 0.05$)	Failed to Reject H0
	There is no significant difference in awareness of real-time data utilization among different designations.	There is a significant difference in awareness of real-time data utilization among different designations.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0
Objective 5: To explore the role of business analysis in supporting the formulation and execution of marketing strategies in the banking industry	There is no significant difference in the perceived role of business analysis in marketing strategies among different sectors of banks.	There is a significant difference in the perceived role of business analysis in marketing strategies among different sectors of banks.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0
	There is no significant difference in the perceived role of business analysis in marketing strategies among different designations.	There is a significant difference in the perceived role of business analysis in marketing strategies among different designations.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0
Objective 6: To explore the role of technology adoption in enhancing marketing strategies in the banking industry	There is no significant difference in perceptions of technology adoption in enhancing marketing strategies among different designations.	There is a significant difference in perceptions of technology adoption in enhancing marketing strategies among different designations.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0
	There is no significant difference in perceptions of technology adoption in enhancing marketing strategies among different types of banks.	There is a significant difference in perceptions of technology adoption in enhancing marketing strategies among different types of banks.	Kruskal-Wallis H Test	Significant differences found ($p < 0.05$)	Reject H0

[Source: Created by the author]

5 CHAPTER V: DISCUSSION

The final chapter of this study provides a thorough examination of the marketing strategies implemented by public, private, and cooperative banks in India. This chapter offers a comprehensive examination of the factors that contribute to the success or failure of these strategies, as well as their effectiveness and awareness levels. The study provides valuable insights into the current marketing practices and their implications for the banking sector by systematically evaluating the disparities in awareness and effectiveness among various managerial levels and types of banks. The results emphasise the significance of strategic clarity, targeted training programmes, and the implementation of contemporary digital marketing strategies to improve marketing outcomes in the financial sector.

This chapter also explores the study's broader implications, emphasising several critical areas. The necessity for regulatory bodies and bank management to establish policies that mandate consistent training programmes and encourage the implementation of advanced marketing technologies is suggested by policy implications. The significance of investing in digital marketing tools and comprehensive training programmes is underscored by their practical implications. The necessity of clear and comprehensive marketing strategies, which are supported by extensive market research and the integration of business analysis into marketing processes, is evident from both strategic and operational implications. The collective objective of these implications is to enhance decision-making within banks, optimise resource allocation, and bridge the knowledge divide.

Additionally, the chapter investigates numerous potential areas for future research, including the psychological aspects of consumer behaviour, the integration of ESG, the impact of emerging technologies, cultural differences in marketing strategies, and sustainability and CSR. These research directions are indispensable for the creation of marketing strategies that are more effective, culturally aware, and technologically advanced, and that are in accordance with the changing demands of the market. Future research can offer more profound insights into the ways in which banks can improve customer engagement, enhance their marketing strategies, and achieve superior marketing performance by addressing these areas. The objective of this chapter is to offer a comprehensive comprehension of the current state of marketing strategies in the banking industry,

as well as to offer actionable recommendations and future research directions to ensure sustained growth and competitiveness in the sector.

5.1 Discussion of Research Question 1: To assess the awareness level regarding marketing strategies in the banking industry

To assess the awareness level regarding marketing strategies among bank employees, the study formulated hypotheses to explore the differences in awareness across various designations and genders. Specifically, the study sought to determine if there were significant differences in awareness levels among different managerial levels and between male and female employees. The primary hypothesis posited that there is no significant difference in awareness levels regarding marketing strategies among different designations. Additionally, the study hypothesized that there would be no significant difference in awareness levels between male and female employees.

To test these hypotheses, the Kruskal-Wallis H test was employed due to the non-normal distribution of the data. This test is appropriate for comparing the medians of three or more independent groups, in this case, the different managerial levels (senior managers, middle managers, and frontline employees). The results of the Kruskal-Wallis H test revealed significant differences in awareness levels among the different designations ($p < 0.05$). Specifically, higher-level managers exhibited a greater awareness of various marketing strategies compared to their lower-level counterparts. This finding suggests that awareness of marketing strategies increases with managerial level, indicating that senior managers are more informed and possibly more involved in the development and implementation of these strategies.

In contrast, the Mann-Whitney U test was used to examine the differences in awareness levels between male and female employees. This non-parametric test is suitable for comparing two independent groups when the data is not normally distributed. The results indicated no significant differences in awareness levels between male and female respondents ($p > 0.05$). Therefore, the study failed to reject the hypothesis that there is no significant difference in awareness levels between genders. This finding suggests that gender does not play a significant role in determining the awareness of marketing strategies among bank employees.

Overall, the results highlight that while managerial level significantly influences awareness of marketing strategies, gender does not. Higher-level managers are more aware of marketing strategies, which may be due to their greater involvement in strategic planning and decision-making processes. These insights underscore the need for targeted training and information dissemination across all levels of the organization to ensure that all employees, regardless of their managerial level, have a good understanding of the bank's marketing strategies. This approach can help create a more cohesive and informed workforce capable of effectively executing the bank's marketing initiatives.

5.2 Discussion of Research Question 2: To evaluate the effectiveness of marketing strategies in the banking industry

The second objective of the study aimed to evaluate the effectiveness of various marketing strategies within the banking industry, focusing on differences among public, private, and cooperative banks. The hypothesis tested was whether there is a significant difference in the perceived effectiveness of marketing strategies across these different types of banks. This evaluation is crucial for understanding which strategies work best in different banking contexts and for identifying areas where improvements can be made. To test this hypothesis, the Kruskal-Wallis H test was again employed due to the non-normal distribution of the data. This test is appropriate for comparing the medians of three or more independent groups, in this case, public, private, and cooperative banks. The results of the Kruskal-Wallis H test indicated significant differences in the perceived effectiveness of certain marketing strategies among the different types of banks ($p < 0.05$). Specifically, private banks rated the effectiveness of content marketing and influencer collaboration significantly higher than public and cooperative banks. This finding suggests that private banks may be more adept at leveraging these modern marketing techniques to achieve their marketing goals.

In contrast, the effectiveness of traditional marketing strategies, such as print and television advertisements, did not show significant differences among the three types of banks. This indicates that traditional marketing methods are perceived similarly across public, private, and cooperative banks, possibly due to their established nature and widespread use.

The study's findings underscore the importance of tailoring marketing strategies to the specific context and strengths of each type of bank. Private banks, which often have more flexibility and resources, appear to be more successful in implementing and benefiting from modern digital marketing techniques. Public and cooperative banks may need to explore these strategies further and consider how they can be adapted to fit their unique contexts. Overall, these insights can help banks optimize their marketing efforts by focusing on strategies that are proven to be effective in similar banking environments.

5.3 Discussion of Research Question 3: To identify the reasons behind the failures of marketing strategies in the banking industry

The third objective of the study focused on identifying the reasons behind the failures of marketing strategies in the banking industry. This objective aimed to uncover both internal and external factors that contribute to unsuccessful marketing efforts. The hypothesis tested was whether there are significant differences in the perceived reasons for marketing strategy failures among public, private, and cooperative banks, as well as across different managerial levels. To test this hypothesis, the Kruskal-Wallis H test was used due to the non-normal distribution of the data. This test compared the medians of the different groups to identify significant differences. The results indicated significant differences in the perception of over-reliance on traditional marketing methods as a reason for marketing strategy failure among the different types of banks ($p < 0.05$). Specifically, private banks were less likely to perceive over-reliance on traditional methods as a significant issue compared to public and cooperative banks. This suggests that private banks may have already transitioned more towards modern marketing techniques, reducing their dependence on traditional methods. In addition, the designation-based analysis using the Kruskal-Wallis H test revealed significant differences in the perceived reasons for marketing strategy failures among various managerial levels ($p < 0.05$). For example, senior managers were more likely to cite lack of clear strategy and poor market research as major reasons for failure, while middle managers and frontline employees highlighted issues such as inadequate use of digital tools and lack of customer segmentation

These findings highlight the complex nature of marketing strategy failures in the banking industry. The results suggest that internal factors such as lack of clear strategy, poor market research, and inadequate use of digital tools are significant contributors to marketing failures. Additionally, the

reliance on traditional marketing methods remains a challenge, particularly for public and cooperative banks. These insights can help banks identify specific areas for improvement in their marketing strategies, ensuring that they are better equipped to avoid common pitfalls and achieve greater success in their marketing efforts.

5.4 Discussion of Research Question 4: To assess the current industry practices and research advancements in marketing strategies in the banking industry

The fourth objective aimed to assess the current industry practices and research advancements in marketing strategies within the banking sector. This objective sought to understand how banks are incorporating modern practices and innovations into their marketing strategies. The hypothesis tested was whether there are significant differences in the awareness and implementation of industry practices and research advancements among different managerial levels and sectors of banks. To test this hypothesis, the Kruskal-Wallis H test was employed to compare the medians of different groups. The results indicated no significant differences in the awareness of most industry practices and research advancements among different designations ($p > 0.05$). This suggests that awareness of current industry practices and research advancements is relatively uniform across different managerial levels within banks. However, significant differences were found in the awareness of real-time data utilization among different designations ($p < 0.05$). Senior managers showed a higher level of awareness and implementation of real-time data utilization compared to middle managers and frontline employees. This finding highlights the importance of ensuring that knowledge and practices related to real-time data utilization are disseminated throughout all levels of the organization. The study also found that private banks were more likely to implement advanced data analytics, machine learning algorithms, and customer relationship management (CRM) systems compared to public and cooperative banks. This suggests that private banks may be more proactive in adopting and integrating modern marketing technologies and practices into their strategies.

Overall, the findings indicate that while awareness of industry practices and research advancements is generally high, there are specific areas such as real-time data utilization where knowledge dissemination could be improved. Additionally, private banks appear to be at the

forefront of adopting advanced technologies, suggesting that other sectors may benefit from exploring and integrating these innovations into their marketing strategies.

5.5 Discussion of Research Question 5: To explore the role of business analysis in supporting the formulation and execution of marketing strategies in the banking industry

The fifth objective of the study aimed to explore the role of business analysis in supporting the formulation and execution of marketing strategies within the banking industry. The hypothesis tested was whether there are significant differences in the perceived role of business analysis in marketing strategies among different sectors of banks and managerial levels. To test this hypothesis, the study conducted reliability analysis using Cronbach's alpha to ensure high internal consistency among the variables related to business analysis. The results indicated a high level of internal consistency (Cronbach's alpha > 0.7), confirming the reliability of the measures used. The Kruskal-Wallis H test was then used to compare the medians of different groups. The results revealed significant differences in the perception of business analysis roles among different designations ($p < 0.05$). For instance, senior managers perceived business analysis as more critical in identifying market opportunities and tracking return on investment (ROI) compared to middle managers and frontline employees. This suggests that senior managers place a higher value on the strategic use of business analysis in their marketing efforts. Additionally, significant differences were found among different types of banks ($p < 0.05$). Private banks were more likely to perceive business analysis as essential for data-driven decision-making and optimizing resource allocation compared to public and cooperative banks. This indicates that private banks may be more advanced in integrating business analysis into their marketing strategy development and execution processes.

These findings underscore the crucial role of business analysis in enhancing the effectiveness of marketing strategies. By providing valuable insights into market trends, customer preferences, and competitive dynamics, business analysis helps banks make informed decisions, identify opportunities, and measure the success of their marketing efforts. The results suggest that while business analysis is valued across the banking sector, its perceived importance varies among different managerial levels and types of banks.

5.6 Discussion of Research Question 6: To explore the role of technology adoption in enhancing marketing strategies in the banking industry

The sixth and final objective of the study focused on exploring the role of technology adoption in enhancing marketing strategies within the banking industry. The hypothesis tested was whether there are significant differences in perceptions of technology adoption in enhancing marketing strategies among different designations and types of banks. To test this hypothesis, the Kruskal-Wallis H test was employed due to the non-normal distribution of the data. This test compared the medians of different groups to identify significant differences. The results indicated high internal consistency among the variables related to technology adoption, with Cronbach's alpha values exceeding 0.7. The Kruskal-Wallis H test revealed significant differences in the perception of AI adoption and real-time data utilization among different designations ($p < 0.05$). Senior managers and middle managers showed higher levels of perceived importance and implementation of AI and real-time data utilization compared to frontline employees. This finding suggests that higher-level managers are more engaged with and aware of the benefits of adopting advanced technologies in their marketing strategies. Furthermore, significant differences were found among different types of banks ($p < 0.05$). Private banks were more likely to adopt advanced technologies such as AI, machine learning, and big data analytics compared to public and cooperative banks. This indicates that private banks may have more resources and flexibility to integrate these technologies into their marketing efforts, leading to more sophisticated and effective strategies. These findings highlight the critical role of technology adoption in enhancing marketing strategies in the banking industry. The results suggest that while higher-level managers and private banks are more proactive in adopting advanced technologies, there is a need for broader dissemination and integration of these technologies across all levels and types of banks. By leveraging the capabilities of AI, machine learning, and big data analytics, banks can enhance the precision, personalisation, and overall effectiveness of their marketing strategies.

6 CHAPTER VI: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 SUMMARY

Awareness Level Regarding Marketing Strategies

The study revealed notable disparities in the awareness levels of marketing strategies among different managerial designations within banks. Higher-level managers consistently exhibited greater awareness of various marketing strategies compared to their lower-level counterparts (Mehta, Dubinsky and Anderson, 2002; Olson, Slater and Hult, 2005). This trend underscores the critical role of senior management in staying informed and up-to-date with contemporary marketing practices to drive strategic decision-making and organizational success (Sharma, Mithas and Kankanhalli, 2014). This could be attributed to the broader exposure and strategic roles that senior managers typically hold, which necessitates a comprehensive understanding of marketing strategies. Conversely, the data did not indicate any significant differences in awareness levels between male and female employees, suggesting that gender does not play a significant role in influencing the understanding of marketing strategies within the banking sector (Kotler and Keller, 2016).

Effectiveness of Marketing Strategies

The effectiveness of marketing strategies varied among different types of banks (Rhee and Mehra, 2006). Private banks rated content marketing and influencer collaborations as significantly more effective than their public and cooperative counterparts (Sang, 2024). This suggests that private banks may have a better grasp of utilizing modern digital marketing techniques, which could be attributed to their more flexible and innovative corporate cultures. These banks have likely made substantial investments in digital marketing infrastructure and training, enabling them to effectively use content marketing and influencer partnerships to improve their outreach and customer engagement (Saunders and Kulchitsky, 2021). This finding underscores the importance of adopting contemporary marketing methods to remain competitive, particularly in a rapidly evolving digital landscape.

Reasons Behind the Failures of Marketing Strategies

Significant differences were observed in the perceived reasons for marketing strategy failures among public, private, and cooperative banks. Private banks were less likely to attribute failures to an over-reliance on traditional methods compared to public and cooperative banks. Senior managers identified the lack of a clear strategy and poor market research as major reasons for failure, highlighting the importance of strategic clarity and thorough market analysis in successful marketing campaigns (Chaffey and Ellis-Chadwick, 2019). Middle managers and frontline employees, on the other hand, emphasized the inadequate use of digital tools and the lack of customer segmentation as key issues. This discrepancy suggests a need for better alignment and communication across different managerial levels to ensure comprehensive and cohesive marketing strategies (Holliman and Rowley, 2014).

Current Industry Practices and Research Advancements

Awareness of industry practices and research advancements was generally high across different managerial levels, yet significant differences were found in the awareness and utilization of real-time data. Senior managers demonstrated a higher level of awareness and implementation of real-time data utilization compared to middle managers and frontline employees, reflecting their strategic roles and responsibilities (Kumar and Shah, 2004). Private banks were also more likely to adopt advanced data analytics, machine learning algorithms, and Customer Relationship Management (CRM) systems than public and cooperative banks. This proactive approach towards modern technologies helps private banks stay competitive and responsive to market changes, underscoring the critical role of technology in contemporary marketing practices (Rust, Moorman and Bhalla, 2010).

Role of Business Analysis

The role of business analysis in supporting marketing strategies was perceived as more critical by senior managers, particularly in identifying market opportunities and tracking Return on Investment (ROI). This aligns with the broader responsibilities of senior managers to ensure the overall effectiveness and efficiency of marketing efforts. Middle managers and frontline employees also recognized the importance of business analysis but to a lesser extent. Private banks were more likely to integrate business analysis into their marketing strategy development and

execution processes, seeing it as essential for data-driven decision-making and optimizing resource allocation. This indicates a more structured and analytical approach towards marketing in private banks, which can lead to more informed and effective marketing strategies (Hbr, Davenport and Harris, 2007).

Role of Technology Adoption

The study highlighted significant differences in perceptions of technology adoption across various managerial levels and types of banks. Senior managers and middle managers showed higher levels of perceived importance and implementation of Artificial Intelligence (AI) and real-time data utilization compared to frontline employees. This suggests that those in higher managerial positions are more likely to recognize and leverage the benefits of advanced technologies in marketing (Provost and Fawcett, 2013). Private banks demonstrated a more proactive stance in adopting advanced technologies such as AI, machine learning, and big data analytics compared to public and cooperative banks. This technological adoption is crucial for enhancing marketing precision, personalization, and overall effectiveness, helping private banks maintain a competitive edge in the dynamic banking sector (Chen, Chiang and Storey, 2012).

6.2 CONCLUSIONS

In this study, we tested several hypotheses to evaluate the awareness, effectiveness, and implementation of marketing strategies across different types of banks, including public, private, and cooperative sectors. Our findings reveal significant insights into how these strategies perform under varied contexts and provide a nuanced understanding of their implications.

First, the hypothesis regarding the awareness levels of marketing strategies among bank employees demonstrated that awareness significantly varies across different managerial levels and types of banks. Public sector banks, for instance, showed lower levels of awareness among frontline employees, potentially due to limited exposure and training opportunities. This suggests a need for comprehensive training programs that target these gaps, emphasizing the role of employee awareness in implementing effective marketing strategies.

The analysis of the second hypothesis, which focused on the effectiveness of marketing strategies, revealed notable differences between public, private, and cooperative banks. Private banks, with their customer-centric and technology-driven approaches, demonstrated higher success rates in marketing campaigns compared to public and cooperative banks. This supports the growing importance of adopting advanced marketing tools such as AI and data analytics to enhance personalization and reach.

The third hypothesis examined the reasons behind the failures of marketing strategies, and the findings highlighted that inadequate market research and misalignment with customer needs are major factors, particularly in public banks. This underscores the necessity for these banks to integrate more robust business analysis techniques and ensure a data-driven approach when formulating marketing strategies.

Furthermore, the study tested the hypothesis related to the role of business analysis in supporting marketing strategy formulation. The results indicate that private banks utilize business analysis more effectively, allowing them to identify opportunities and optimize resource allocation efficiently. In contrast, public and cooperative banks need to focus on improving their analytical capabilities to align with market trends and customer expectations.

Finally, the exploration of technology adoption showed that private banks lead in integrating digital tools, significantly enhancing their marketing precision and engagement levels. This finding supports the argument that investing in technology is crucial for all banks aiming to remain competitive in an increasingly digital landscape. These insights not only validate the hypotheses tested but also provide actionable recommendations for banking professionals and policymakers. By integrating business analysis, enhancing employee awareness, and adopting advanced technologies, banks can refine their marketing strategies to achieve long-term growth and sustainability.

The comprehensive analysis of marketing strategies within the banking industry conducted in this study reveals several significant insights that can profoundly influence future practices and policies, aligning with the findings of (Kumar *et al.*, 2019). This study delves into the awareness levels, effectiveness, and various factors contributing to the success or failure of marketing

strategies in public, private, and cooperative banks in India, supporting the conclusions of (Kaur, Singh and Arora, 2023). The findings highlight disparities in the perception and implementation of these strategies across different types of banks and managerial levels, providing a nuanced understanding of the current marketing landscape in the banking sector, consistent with (Gupta and Xia, 2018).

One of the key findings of this study is the variation in awareness levels regarding marketing strategies among different managerial levels, corroborating the conclusions of Khan et al. (2020). Higher-level managers generally exhibit a greater understanding and awareness of both traditional and modern marketing techniques compared to their lower-level counterparts, in line with Patel and Sharma (2017). This disparity suggests a need for targeted training programs to bridge the knowledge gap between various hierarchical levels within banks, as also recommended by Verma (2019). Ensuring that all employees, regardless of their position, are well-informed about marketing strategies can lead to more cohesive and effective marketing efforts, supporting the assertions of (Bhasin, Mushtaq and Gupta, 2019).

The study also indicates no significant difference in awareness levels between male and female employees, suggesting that gender does not significantly influence the understanding of marketing strategies, in line with findings by (Jain and Saxena, 2019). This finding is essential for designing inclusive training programs that cater to all employees, ensuring equal opportunities for knowledge enhancement and professional development, aligning with the recommendations of Agarwal (2018). The study further reveals that private banks rate the effectiveness of modern digital marketing techniques, such as content marketing and influencer collaborations, significantly higher than public and cooperative banks, which is in line with the findings of (Chaudhuri and Holbrook, 2001). Another critical finding is the identification of several internal factors that significantly contribute to the failure of marketing strategies. Among these, the lack of a clear strategy and poor market research stand out as major issues. Senior managers often cite these factors as primary reasons for marketing failures, underscoring the importance of strategic clarity and thorough market analysis in developing successful marketing campaigns. To address these issues, banks need to invest in comprehensive strategic planning and robust market research. Developing clear, well-defined marketing strategies based on thorough market analysis can help banks better understand their target audiences, competitive landscape, and market trends. This

understanding is crucial for crafting marketing campaigns that resonate with customers and achieve the desired outcomes. Additionally, middle managers and frontline employees highlighted the inadequate use of digital tools and the lack of customer segmentation as significant factors contributing to marketing failures. The success of these modern marketing techniques in private banks highlights a significant opportunity for public and cooperative banks, supporting the findings of (Rust and Huang, 2014). These findings suggest a need for better alignment and communication across different managerial levels. Ensuring that all levels of management are equipped with the necessary digital tools and knowledge to implement effective marketing strategies is crucial for the overall success of marketing efforts.

The integration of business analysis into marketing strategy development and execution emerges as a crucial factor for making informed decisions, optimizing resource allocation, and measuring success, supporting the findings of (Hbr, Davenport and Harris, 2007). Business analysis helps in identifying market opportunities, tracking the return on investment (ROI), and ensuring that marketing initiatives are aligned with the bank's overall goals. This data-driven approach enables banks to make strategic decisions based on empirical evidence, thereby enhancing the effectiveness of their marketing efforts. Private banks, in particular, are more likely to integrate business analysis into their marketing strategies, viewing it as essential for optimizing resource allocation and making informed decisions. This structured and analytical approach towards marketing can lead to more effective marketing campaigns, better resource utilization, and ultimately, improved business performance. Public and cooperative banks can benefit significantly from adopting similar practices, incorporating business analysis into their marketing processes to enhance their strategic decision-making capabilities.

The study also underscores the critical importance of technology adoption in enhancing marketing strategies, in line with the findings of (Bharadwaj, 2000). Advanced technologies such as artificial intelligence (AI), machine learning, and big data analytics have the potential to significantly improve the precision and personalization of marketing efforts. These technologies enable banks to analyze vast amounts of data, gain deeper insights into customer behavior, and tailor marketing campaigns to meet individual customer needs, consistent with the conclusions of (Davenport and Patil, 2012). Senior and middle managers, particularly in private banks, recognize the importance of these technologies and their implementation. This proactive stance

towards technology adoption helps private banks stay competitive and responsive to market changes, aligning with the findings of (Mithas, Ramasubbu and Sambamurthy, 2011). Public and cooperative banks can benefit from adopting advanced technologies to enhance their marketing strategies, ensuring they remain relevant and competitive in the rapidly evolving banking sector. AI and machine learning can be used to analyze customer data, predict future trends, and personalize marketing messages, supporting the findings of (Davenport, 2014). Big data analytics enables banks to gain insights from large datasets, identifying patterns and trends that can inform marketing strategies. By fostering a culture of data-driven decision-making and encouraging cross-functional collaboration, banks can ensure that their marketing strategies are well-supported by technological and analytical capabilities.

In conclusion, this study provides a comprehensive analysis of marketing strategies within the banking industry, revealing significant insights that can guide future practices and policies. By examining awareness levels, effectiveness, and the factors contributing to the success or failure of marketing strategies, it becomes evident that there are disparities in how these strategies are perceived and implemented across different types of banks and managerial levels. This research highlights the need for targeted training programs to ensure that all employees, regardless of their position, are well-informed about both traditional and digital marketing strategies. Such training initiatives can help bridge the knowledge gap between different managerial levels, leading to more cohesive and effective marketing efforts.

Moreover, the higher effectiveness of modern digital marketing techniques, such as content marketing and influencer collaborations in private banks, underscores the potential benefits for public and cooperative banks to integrate these approaches into their marketing plans. This shift towards contemporary marketing methods is essential for staying competitive in a rapidly evolving digital landscape. Addressing critical internal factors, such as the lack of a clear strategy and poor market research, through comprehensive strategic planning and robust market analysis, can significantly enhance the overall effectiveness of marketing efforts. Ensuring that all levels of management are equipped with the necessary digital tools and knowledge to implement effective marketing strategies is crucial for the success of these initiatives.

Furthermore, the integration of business analysis into marketing strategy development and execution is vital for making informed decisions, optimizing resource allocation, and measuring

success. This data-driven approach helps banks identify market opportunities, track ROI, and ensure that marketing initiatives are aligned with their overall goals. Additionally, the adoption of advanced technologies, such as artificial intelligence, machine learning, and big data analytics, is crucial for enhancing the precision and personalization of marketing efforts. By fostering a culture of data-driven decision-making and encouraging cross-functional collaboration, banks can ensure that their marketing strategies are well-supported by technological and analytical capabilities. These findings provide a roadmap for banks to optimize their marketing strategies, improve customer engagement, and achieve better marketing performance, ultimately leading to sustained growth and competitiveness in the banking sector.

6.3 IMPLICATIONS OF THE STUDY

Policy Implications

The study's findings suggest several important policy implications for the banking sector that can significantly enhance marketing strategies and overall performance. Regulatory bodies and bank management should consider developing policies that mandate regular training programs for all employees on marketing strategies. This approach can help bridge the awareness gap identified among different managerial levels, ensuring that middle managers and frontline employees are equally informed about both traditional and digital marketing strategies. Such policies would not only standardize the knowledge base across the organization but also promote a culture of continuous learning and adaptation. Additionally, policies promoting the adoption of advanced marketing technologies such as artificial intelligence (AI), machine learning, and big data analytics should be encouraged. These technologies have been shown to enhance marketing effectiveness by providing deeper insights into customer behavior, enabling more personalized and targeted marketing efforts, and improving decision-making processes. Encouraging the adoption of these technologies will ensure that banks remain competitive in a rapidly evolving technological landscape, capable of responding to market changes and customer needs with agility and precision.

Practical Implications

From a practical standpoint, the study highlights the need for banks to invest in comprehensive training programs and advanced digital marketing tools. Regular workshops and seminars,

complemented by online training modules, can significantly improve the awareness and understanding of marketing strategies among all employees. Such training initiatives should focus on both theoretical knowledge and practical application, ensuring that employees can effectively implement the strategies in their day-to-day operations. Furthermore, banks should form strategic partnerships with influencers and invest in creating engaging content tailored to different customer segments. This approach can enhance the bank's reach and appeal, leveraging the credibility and popularity of influencers to attract and retain customers. Implementing advanced data analytics platforms is another practical step that can greatly benefit banks. These platforms enable the collection, analysis, and interpretation of vast amounts of data, providing valuable insights that can inform marketing strategies and campaigns. By fostering a culture of data-driven decision-making, banks can enhance the precision and personalization of their marketing efforts, leading to improved customer engagement and overall marketing performance.

Strategic and Operational Implications

Strategically, the study underscores the importance of clear and comprehensive marketing strategies supported by thorough market research. Banks should establish dedicated marketing research teams to gather and analyze market data, developing detailed marketing plans with specific goals, strategies, and performance metrics. This strategic approach ensures that marketing efforts are aligned with the bank's overall objectives and are based on a solid understanding of the market environment. Operationally, the integration of business analysis into marketing processes is crucial. Business analysis provides the tools and frameworks needed to assess market opportunities, track return on investment (ROI), and optimize resource allocation. Banks need to develop a structured framework for incorporating business analysis into their marketing strategies, training marketing teams on business analysis tools and techniques, and regularly analyzing marketing performance data to make data-driven adjustments. These strategic and operational changes can help banks avoid common pitfalls and achieve greater marketing success, ensuring that their marketing strategies are both effective and efficient.

Research and Academic Implications

The findings of this study also have significant implications for future research and academia. Researchers should explore the impact of emerging technologies such as blockchain, augmented reality (AR), and virtual reality (VR) on marketing strategies in the banking sector. These

technologies have the potential to revolutionize marketing by providing new ways to engage with customers and deliver personalized experiences. Comparative studies across different countries or regions can provide insights into how cultural differences impact the effectiveness of marketing strategies, helping multinational banks tailor their strategies to suit local preferences. Understanding these cultural nuances is crucial for developing marketing campaigns that resonate with diverse customer bases. Longitudinal research tracking the evolution of marketing strategies over time can provide a deeper understanding of how these strategies adapt to changes in technology, consumer behavior, and regulatory environments. Such research can help banks anticipate future trends and prepare more effectively. Academically, these findings can contribute to curriculum development for marketing and business courses, providing students with up-to-date knowledge and practical insights into effective marketing strategies in the banking industry. Incorporating these insights into educational programs can better prepare future professionals for the challenges and opportunities in the banking sector.

Technological Implications

The adoption of advanced technologies in marketing strategies has significant technological implications. Banks need to prioritize the implementation of AI, machine learning, and big data analytics to enhance their marketing efforts. Investing in these technologies and conducting pilot projects to test their effectiveness can help banks stay ahead of technological advancements. Ensuring that all employees are trained in using these technologies can maximize their benefits, leading to more precise, personalized, and effective marketing campaigns. This technological advancement is crucial for maintaining a competitive edge in the banking industry. By leveraging AI and machine learning, banks can automate various marketing processes, analyze large datasets to uncover patterns and trends, and predict customer behavior with greater accuracy. Big data analytics enables banks to gain insights into customer preferences, optimize marketing strategies, and measure the effectiveness of marketing campaigns. By staying at the forefront of technological innovation, banks can enhance their marketing strategies, improve customer satisfaction, and drive business growth.

Cross-Functional Collaboration Implications

The study also highlights the importance of cross-functional collaboration between marketing, IT, and business analysis teams. By fostering collaboration, banks can ensure that their marketing

strategies are well-supported by technological and analytical capabilities. Setting up cross-functional teams to work on marketing projects and holding regular meetings to discuss progress and share insights can lead to more innovative and effective marketing solutions. This collaborative approach can significantly enhance the overall effectiveness of marketing strategies in the banking sector. Marketing teams can benefit from the technical expertise of IT professionals, while business analysts can provide valuable insights into market trends and customer behavior. By working together, these teams can develop and implement marketing strategies that are both data-driven and technologically advanced, leading to better marketing performance and customer engagement.

By addressing these implications, banks can enhance their marketing strategies, improve customer engagement, and achieve better overall marketing performance. These steps are designed to leverage the study's findings and ensure that marketing strategies are well-informed, data-driven, and technologically advanced, ultimately leading to sustained growth and competitiveness in the banking sector. The study provides a roadmap for banks to optimize their marketing strategies, emphasizing the importance of continuous learning, technological innovation, and cross-functional collaboration. By implementing the recommendations from this study, banks can better navigate the challenges and opportunities in the marketing landscape, ensuring long-term success and competitiveness in an increasingly dynamic and digitalized environment.

6.4 AREAS FOR FUTURE RESEARCH

Impact of Emerging Technologies

Future research should explore how emerging technologies such as blockchain, augmented reality (AR), and virtual reality (VR) can transform marketing strategies in the banking sector. These technologies offer the potential for more immersive and personalized customer experiences. Studies could focus on their integration into existing marketing frameworks, examining the opportunities they present for enhancing customer engagement and retention.

Cultural Differences in Marketing Strategies

The effectiveness of marketing strategies can vary widely across different regions and countries due to cultural differences. Comparative studies are needed to understand how local customs,

values, and consumer behaviors influence the success of marketing initiatives. Such research would be invaluable for multinational banks seeking to tailor their marketing strategies to local preferences, thereby improving their global effectiveness.

ESG Integration in Banking Marketing Strategies

Future research should investigate the integration of Environmental, Social, and Governance (ESG) criteria into the marketing strategies of banks. Understanding how to effectively communicate ESG initiatives is essential as sustainability becomes a more pressing concern for consumers and stakeholders. The influence of ESG-focused marketing on consumer trust, loyalty, and brand perception could be investigated through research. Furthermore, research can examine the obstacles that banks encounter in authentically promoting their ESG initiatives and the ways in which these challenges can be resolved to prevent the perception of greenwashing. This field of research would offer valuable insights into the alignment of marketing strategies with the broader corporate sustainability objectives, thereby improving the bank's reputation and consumer engagement.

Sustainability and Corporate Social Responsibility (CSR)

As consumer awareness of environmental issues grows, integrating sustainability and CSR into marketing strategies is becoming increasingly important. Future studies could examine how banks can effectively communicate their CSR initiatives and the impact of these efforts on customer loyalty and brand perception. Research could also explore the challenges and opportunities of incorporating sustainability into both traditional and digital marketing strategies.

Psychological Aspects of Consumer Behavior

The cognitive and emotional factors that influence consumer responses to marketing strategies are critical yet underexplored areas. Future research could employ psychological theories and methodologies to gain deeper insights into how customers perceive and react to marketing messages. This understanding can help banks craft more effective marketing strategies that resonate on a psychological level with their target audience.

The exploration of future research areas in marketing strategies within the banking sector reveals several critical avenues that warrant further investigation. Firstly, understanding the impact

of emerging technologies such as blockchain, augmented reality (AR), and virtual reality (VR) on marketing strategies can provide insights into how these innovations can enhance customer engagement and operational efficiency. Secondly, conducting cross-cultural comparisons of marketing strategies across different countries or regions will help multinational banks tailor their approaches to suit local preferences and behaviors, ensuring more effective marketing outcomes. Thirdly, longitudinal studies tracking the evolution of marketing strategies over time will offer a deeper understanding of how these strategies adapt to changes in technology, consumer behavior, and regulatory environments. Fourthly, investigating customer perceptions and satisfaction regarding various marketing strategies will provide direct feedback on the effectiveness of these approaches, guiding banks in refining their marketing efforts to better meet customer needs and preferences. Lastly, integrating Environmental, Social, and Governance (ESG) criteria into banking marketing strategies is an essential area of future research. This focus will help banks understand the impact of ESG-focused marketing on customer trust, loyalty, and brand perception, addressing the challenges of promoting sustainability initiatives authentically. By pursuing these research directions, banks can develop more effective, culturally aware, and technologically advanced marketing strategies that align with evolving market demands and contribute to sustained growth and competitiveness in the banking sector.

I. SUGGESTIONS AND RECOMMENDATIONS

Enhance Awareness of Marketing Strategies Across All Levels

To increase marketing strategy awareness among middle managers and frontline employees, banks should implement targeted training programs. Regular workshops and seminars focusing on marketing strategies should be conducted for all employees. Additionally, developing online training modules accessible at their convenience can ensure continuous learning. Interactive elements such as case studies and role-playing exercises can enhance engagement and understanding, helping to ensure that all employees, regardless of their managerial level, have a clear understanding of the bank's marketing initiatives.

Leverage Modern Digital Marketing Techniques

Public and cooperative banks should integrate modern digital marketing techniques, such as content marketing and influencer collaborations, into their marketing strategies. Investing in digital marketing tools and platforms can provide the necessary infrastructure. Developing strategic partnerships with influencers relevant to the bank's target audience can enhance marketing reach and effectiveness. Creating engaging content tailored to different customer segments and distributing it through appropriate digital channels can significantly improve marketing outcomes.

Address Internal Factors Contributing to Marketing Failures

To mitigate the risk of marketing failures, banks should develop clear, comprehensive marketing strategies supported by thorough market research and effective use of digital tools. Establishing a dedicated marketing research team to gather and analyze market data is crucial. Creating detailed marketing plans with specific goals, strategies, and performance metrics will provide direction and clarity. Providing training on digital marketing tools and techniques to all marketing staff ensures that they are equipped to execute the strategies effectively. Implementing a robust customer segmentation framework ensures targeted and efficient marketing efforts.

Promote Advanced Data Utilization Practices

Fostering a culture of data-driven decision-making and improving the awareness and usage of real-time data across all managerial levels is essential. Implementing advanced data analytics platforms

that are accessible to all employees will facilitate this process. Regular training sessions on interpreting and using data insights for marketing decisions will enhance employees' ability to leverage data effectively. Encouraging data sharing and transparency within the organization through internal reports and dashboards can help in building a data-centric culture.

Integrate Business Analysis into Marketing Strategies

Integrating business analysis deeply into the development and execution of marketing strategies is critical for making informed decisions and optimizing resource allocation. Developing a structured framework for incorporating business analysis into marketing strategy formulation is recommended. Training marketing teams on business analysis tools and techniques will enhance their analytical capabilities. Regularly analyzing marketing performance data to identify trends, assess ROI, and make data-driven adjustments to marketing strategies will ensure that marketing efforts are effective and aligned with business goals.

By implementing these specific, actionable recommendations, banks can significantly improve the effectiveness of their marketing strategies, enhance customer engagement, and achieve better marketing performance. These steps are designed to address identified gaps and leverage opportunities for improvement, ensuring that marketing strategies are well-informed, data-driven, and technologically advanced.

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