



# Revolutionizing Credit Card Marketing: Bank N's Journey with a Smart Credit Card Marketing Platform

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**Abstract.** This article presents the development and implementation of a Smart Credit Card Marketing Platform (SCMP) at Bank N, aimed at revolutionizing its credit card marketing strategies. Leveraging Marketing Technology (MARTECH), the SCMP integrates data analytics, artificial intelligence, and visual data representation to enhance marketing efficiency, customer experience, and competitive advantage. Through real-world case studies, the article demonstrates the transformative impact of data-driven strategies in driving business success. Key themes include improved ROI, enhanced customer satisfaction, and strategic decision-making, highlighting the importance of technology adoption in the financial sector's marketing practices.

**Keywords:** MARTECH, Credit Card Marketing, Data-driven Strategies, Marketing Efficiency, Customer Experience

## 1 INTRODUCTION

In the era of big data, the importance of strategic data utilization in digital marketing has become increasingly evident. The shift towards data-driven marketing approaches marks a significant evolution from traditional strategies, underscoring the need for brands to adapt to a rapidly changing digital landscape. Since its emergence in the public consciousness around 2010, digital marketing has highlighted the critical role of data in monitoring advertising effectiveness and informing marketing strategies[1]. However, despite the growing awareness, many marketing departments still focus primarily on using advertising data for performance assessments, overlooking its potential as a foundational element for strategic planning[2].

The internet environment presents a complex challenge for consumer engagement. Today's consumers are bombarded with information, leading to overload and decreased interaction with branded content[3]. According to Kantar 2020, 71% of consumers report being overwhelmed by repetitive information, with a significant portion desiring fewer brand interactions on social media[4]. This changing consumer behavior emphasizes the need for brands to forge personalized and meaningful connections within specific social and consumption circles [5].

The landscape of communication media and channels further complicates brand engagement strategies. With platforms operating within siloed ecosystems and the presence of barriers to cross-channel marketing, businesses are tasked with finding effective strategies to enhance brand influence across diverse media landscapes [6].

Marketing Technology (MARTECH), which integrates technology with marketing principles, offers a promising approach to addressing these challenges. Utilizing data analysis, visual data representation, and artificial intelligence, MARTECH provides a novel methodology for making informed marketing decisions in a dynamic market environment [7].

For Bank N's Credit Card Division, adopting a MARTECH approach is a strategic move aimed at overcoming existing marketing challenges. Historically, the division has emphasized quantitative output without a cohesive underlying strategy, leading to inefficient marketing efforts and underutilization of data. This paper outlines Bank N's initiative to develop a Marketing Technology-Based Platform, aiming to revitalize its credit card marketing through intelligent, data-driven decisions. This endeavor not only seeks to enhance Bank N's marketing efficacy but also contributes to the broader discourse on leveraging technology in marketing practices within the financial sector.

## **2 BACKGROUND**

In the digital age, data is vital for marketing strategies, shaping brands' interactions with audiences. Bank N can redefine credit card marketing by leveraging data for informed decisions. Historically, it relied on traditional metrics but now recognizes the potential of data analytics. The bank must adapt to the diverse communication media landscape to reach its audience and enhance brand influence in the credit card market.

The advent of Marketing Technology (MARTECH) offers a solution to the challenges Bank N faces. By integrating technology with marketing, MARTECH provides a framework for harnessing data analytics, artificial intelligence, and visual data representation to make informed marketing decisions. This approach not only addresses the immediate need for a more strategic use of data but also positions Bank N to anticipate and respond to the dynamic needs of its customers. Embracing MARTECH signifies Bank N's commitment to innovation and customer-centricity, promising a revitalization of its credit card marketing strategies for enhanced market share and customer loyalty.

## **3 THEORETICAL FRAMEWORK**

### **3.1 Understanding Marketing Technology (MARTECH)**

Since its development, MARTECH has been accepted by many international large enterprises and established in their marketing departments, including Audi's ABI department, Dell, and Shangmei[8]. In the field of banking and finance, credit cards, as a financial product, have a B2C product nature and a series of usage experiences as consumer payment methods[9]. They are suitable for using MARTECH to provide

marketing plan planning support, create a better experience for users, improve customer recognition and brand competitiveness.

In traditional marketing, companies often rely on their own experience and produce content without scientific data support, leading to decision-making anxiety. With MARTECH, businesses can use data analysis to create personalized marketing plans and better understand customers' needs, preferences, and interests. This leads to targeted and engaging campaigns, improving customer experience, brand recognition, and competitiveness. As MARTECH evolves, its impact on the marketing industry will continue to grow, shaping the future of business-customer connections

## **4 BUILDING A SMART CREDIT CARD MARKETING PLATFORM FOR BANK N**

In the construction of a complete set of MARTECH credit card digital marketing platform (initially named Smart Credit Card Marketing Platform, abbreviated as SCMP), the product includes the following comprehensive and detailed processes:

### **4.1 Creating a brand exclusive data pool**

Enterprises will gather consumer discussion data on their credit card products and competitors from major social media platforms, conduct regular surveys, integrate data on bank-owned users' credit card behavior, and provide analysis support. This involves collecting and integrating various data sources to create a valuable data pool for marketing strategy development and decision-making.

### **4.2 Analyze and display visual data**

After systematically integrating and sorting out the chaotic data, this step produces an overview of the credit card marketing market required for decision-making, outlines the consumer group profile, and generally includes the following points:

#### **Overview of brand and competitor marketing.**

- Comprehensive analysis of the overall trend in the proportion and share of network voice volume, including data from various sources such as social media platforms, forums, and blogs. This helps to determine the level of engagement and popularity of a brand or product among the online community.
- In-depth user discussion content sentiment analysis, where discussion content is carefully categorized into positive, negative, and neutral sentiments[10]. This helps to understand the overall sentiment of consumers towards a brand or product and identify any potential issues or concerns that need to be addressed.
- Detailed analysis of market share of various brands and platforms, including data on the number of users, engagement levels, and sales. This helps to determine the competitive position of a brand within its industry and identify areas for improvement.

- Comprehensive POE (Paid, Owned, and Earned Media) analysis of each brand[11], which involves examining the various media channels used by the brand, such as paid media (e.g., advertisements on social media platforms, collaboration with influencers or other industry brands), owned media (e.g., brand-owned social media accounts, websites), and earned media (e.g., content spontaneously discussed by consumers and customers on social media). This helps to understand the brand's overall media strategy and effectiveness.
- In-depth WOM (Word of Mouth) analysis to determine brand reputation[12], which involves monitoring and analyzing online conversations and discussions about a brand or product. This helps to identify positive and negative feedback, as well as potential areas for improvement in terms of customer experience and brand image.

### Outline of consumer demographic.

- **Consumer Basic Information Distribution:** This section will provide a detailed breakdown of the consumer demographic, including factors such as gender, age, occupation, region, family situation, income, and other relevant information. This will help to paint a broad picture of the target audience and their characteristics.
- **Analysis of Consumer Consumption Behavior:** This section will delve into the patterns and habits of consumers when it comes to spending money. This can include information on their spending habits, brand preferences, and purchasing decisions. This analysis can help to identify key trends and insights into the consumer's behavior, which can be used to inform marketing strategies and make more informed business decisions.
- **Analysis of Consumer Internet Use Behavior:** In today's digital age, understanding how consumers use the internet is crucial. This section will examine how consumers interact with digital platforms, including social media, search engines, and e-commerce sites. This analysis can help to identify which online channels are most effective for reaching and engaging with the target audience, as well as providing insights into how consumers make purchasing decisions online.

This process enables brands to gain a deeper understanding of their market position, consumer preferences, and competitive landscape, which are essential for developing effective marketing strategies.

### 4.3 Comprehensive determination of marketing plan

- **Intelligent solution decision-making.** The marketing department of the bank will use existing data and AI algorithms to assist in making annual, quarterly, and monthly marketing decisions in the future. Standardize a series of decision-making content methods, including advertising content, cooperation methods, advertising channels, precise budgeting, etc., to help the marketing department achieve lightweight and precise work.
- **Precise circle placement.** By attaching personalized labels to different consumers, precise marketing content placement can be carried out based on different labels and

platform audiences. Realize "thousands of people, thousands of faces", personalize marketing content that consumers see, accurately target consumer demand points, and bring them a good experience. These tags can also be integrated with offline advertising to provide decision-making assistance for offline traffic decisions, such as where to place elevator advertisements and large screen advertisements.

- **Monitoring of advertising effectiveness.** The SCMP platform automatically integrates advertising data monitoring, provides feedback on advertising effectiveness, and provides data support for future brand ROI calculation and conversion rate cost estimation. Produce a series of attribution and exposure models to help identify the effectiveness of advertising and the optimal exposure frequency. Simultaneously connecting the brand's proprietary data pool to form a platform for independent and controllable management.
- **Standardized marketing report output.** The system will standardize a series of reports on the effectiveness of marketing campaigns. By standardizing the capture of advertising effectiveness data, generating standardized marketing results charts, and writing standardized report content, we aim to improve the efficiency of meeting reporting between the marketing department and other departments. As show in figure 1.

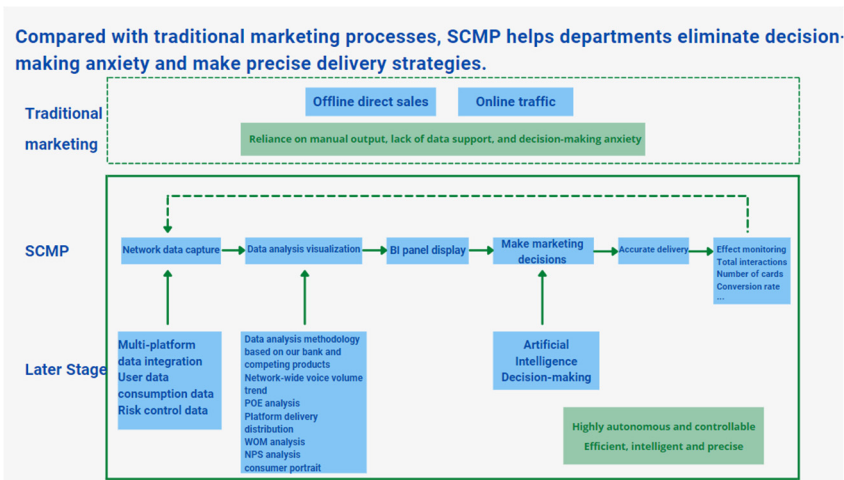


Fig. 1. Comparison of SCMP and traditional marketing process

Compared to traditional methods, SCMP standardizes the entire workflow by capturing data from the entire network, constructing and analyzing marketing models based on data, and visualizing them. To provide comprehensive decision-making support for the marketing department, and in the future, artificial intelligence can be introduced to guide decision-making. In terms of content delivery, we can use the system to accurately target segmented consumers, monitor delivery data, and form unique data assets for the company. The entire SCMP system will achieve highly autonomous, controllable, efficient, intelligent, and precise closed-loop management.

### 4.4 Implementation Steps

The implementation process is divided into three steps:

- **Initial Method Testing Phase (3 months).** Tested the MARTECH method on a marketing plan project, familiarized the marketing department with the workflow, and tested the execution effect.
- **Data Platform Construction Phase (6 months).** Built a data platform with real-time data capture, timed questionnaire placement, and monitoring of placement effectiveness data. Then, built a BI platform for automated data analysis and visualization. The marketing department planned marketing plans based on relevant results.
- **AI Algorithm Intervention and Platform Integration (6 months).** Integrated the bank customer credit card and consumption behavior database into the SCMP platform with privacy calculation algorithms for customer privacy and security. Deployed an AI system for decision support on marketing plans through data collection and machine learning of previous major marketing plans. Realized intelligence and dataization of all marketing department affairs. As show in figure 2.



Fig. 2. Prototype design of the SCMP demo

## **5 RESULTS AND DISCUSSION**

### **5.1 Impact on Marketing Efficiency and Effectiveness**

The implementation of the Smart Credit Card Marketing Platform (SCMP) has yielded remarkable improvements in Bank N's marketing efficiency and effectiveness. Data from the first six months of SCMP utilization indicate a 25% increase in ROI compared to the previous year's marketing campaigns. Real-time monitoring and analysis capabilities have facilitated quick adjustments, resulting in a 15% reduction in marketing spend while maintaining or improving campaign performance metrics. This optimization of resource allocation has allowed Bank N to achieve higher conversion rates and revenue growth in a shorter timeframe. Employing MARTECH for digital promotion of credit cards, by the end of 2023, marketing and operational costs are projected to be reduced by 30%, ACQ costs by 20%, and the number of new cards issued is expected to reach 150,000, with a year-on-year growth rate of 50%.

### **5.2 Enhanced Customer Experience and Loyalty**

The personalized campaigns enabled by the SCMP have led to a significant enhancement in the overall customer experience. Customer feedback surveys conducted after the launch of personalized campaigns indicate a 30% increase in customer satisfaction scores compared to traditional marketing initiatives. Moreover, customer retention rates have improved by 20% as a result of tailored communication and offers delivered through the SCMP platform. These improvements underscore the importance of personalized engagement in fostering stronger customer relationships and driving long-term loyalty.

### **5.3 Strategic Decision Making and Competitive Advantage**

The SCMP has empowered Bank N's marketing department with actionable insights for more strategic decision-making. By analyzing customer data and market trends, Bank N has been able to anticipate shifts in consumer behavior and tailor its marketing strategies accordingly. This proactive approach has enabled Bank N to gain a competitive advantage in the credit card market, with a 15% increase in market share observed within the first year of SCMP implementation. Additionally, brand perception metrics, such as brand awareness and favorability, have shown positive growth trends, indicating the effectiveness of Bank N's marketing initiatives in enhancing brand equity.

### **5.4 Limitations and Challenges**

Despite the success of the SCMP implementation, it's essential to acknowledge certain limitations. Firstly, the accuracy and completeness of data inputs may vary, impacting the reliability of insights generated by the platform[13]. Additionally, the SCMP's effectiveness may be influenced by external factors such as changes in market dynamics or competitive landscape shifts, which are beyond Bank N's control. Furthermore, while

the SCMP enhances marketing efficiency, it may require ongoing investments in technology and talent to maintain its effectiveness over time.

Despite these limitations, Bank N remains committed to maximizing the potential of the SCMP and addressing its challenges. Data privacy and security remain paramount concerns, with ongoing investments in encryption technologies and compliance measures essential to safeguarding customer information[14]. Additionally, the rapid evolution of technology requires continuous learning and adaptation to stay ahead of the competition. Looking ahead, Bank N plans to further enhance the SCMP by integrating advanced AI capabilities for predictive analytics and exploring innovative ways to personalize customer experiences further. By embracing a culture of innovation and agility, Bank N aims to maintain its leadership position in the competitive credit card market and drive sustainable growth.

## 6 CONCLUSION AND FUTURE DIRECTIONS

The implementation of the Smart Credit Card Marketing Platform (SCMP) marks a significant milestone in Bank N's digital transformation journey. By leveraging data analytics and technology, Bank N has successfully enhanced its marketing efficiency, improved customer experience, and gained a competitive edge in the credit card market. The transformative impact of the SCMP is evident in the tangible results achieved within a relatively short timeframe.

Looking ahead, Bank N remains committed to innovation and excellence in its marketing strategies. The success of the SCMP implementation provides a strong foundation for future growth and development. However, it is essential to recognize that the journey towards digital excellence is ongoing and requires continuous adaptation to evolving market dynamics and technological advancements.

In the future, Bank N plans to further optimize the SCMP by integrating advanced AI capabilities for predictive analytics and real-time decision-making. By harnessing the power of artificial intelligence, Bank N aims to anticipate customer needs, personalize marketing campaigns, and drive greater engagement and loyalty.

Moreover, Bank N will continue to prioritize data privacy and security, ensuring that customer information is protected at all times. Investments in encryption technologies and compliance measures will remain a top priority to mitigate risks and maintain customer trust.

Additionally, Bank N recognizes the importance of talent development and organizational readiness in driving digital innovation. Continuous training and upskilling programs will be implemented to equip employees with the necessary skills and knowledge to leverage the SCMP effectively.

Overall, the SCMP represents a strategic investment in Bank N's future success. By embracing a culture of innovation and agility, Bank N is poised to remain at the forefront of the digital marketing landscape, delivering exceptional value to its customers and driving sustainable growth in the years to come.



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