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Original Article

Leverage Social Custo Relationship Management to Elevate Customer Satisfaction and Market Effectiveness

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Abstract: With the rise of social media, Customer Relationship Management (CRM) has evolved a lot and morphed into Social Customer Relationship Management (SCRM). SCRM is a social media channel that brings together social media channels and traditional CRM channels to engage, increase brand loyalty, and increase customer satisfaction. This paper aims to investigate the effect of SCRM on market effectiveness and how it contributes to enhancing customer satisfaction. It will also demonstrate the implications for the business with competitive advantages. Finally, it discusses different approaches to applying SCRM, such as sentiment analysis, segmenting customers, personalised marketing and realtime customer support. This paper evaluates the effectiveness of SCRM implementation through qualitative and quantitative analysis in various industries. The findings show that SCRM strategies enable organizations to significantly enhance customer satisfaction, brand trust and market effectiveness. The paper's final section recommends future research and practical applications of SCRM.

Keywords: Social CRM, Customer Satisfaction, Market Effectiveness, Digital Marketing, Customer Engagement, Brand Loyalty.

1. Introduction

1.1. Background

With the rapid growth of social media, everything in business is now changing, including how businesses communicate with customers. While social CRM (SCRM) blends social media platforms like Facebook, Twitter, LinkedIn, and Instagram instead of trying to engage with customers in real-time, traditional CRM strategy is mainly transactional. Once this transformation had occurred, it allowed businesses to forge [1-4] deeper relationships, help predict consumer behavior and streamline the delivery of personalized customer experience.

1.2. Role of Social CRM in Enhancing Customer Satisfaction

SCRM is changing how organizations improve customer satisfaction by integrating social media, predictive analytics and real-time engagement into traditional CRM systems. This means businesses can get

back to interacting with customers and working with them on a more personalized level, as well as addressing the concerns of their customers on their own before other businesses raise questions about them. Here are six key areas of SCRM that improve customer satisfaction:

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- Real-Time Customer Engagement: SCRM is one of the largest advantages because it enables instant communication between businesses and customers. SCRM stands for social CRM, wherein it engages customers on social media like Facebook, Twitter, Instagram, etc., in real-time instead of through email or phone. Companies can respond quickly to queries, complaints or feedback and stop minor issues from increasing. Such immediateness breeds trust and transparency, which, within the end purpose, increases satisfaction with the customer and brand loyalty.
- **Personalized Customer Experience:** Customers nowadays want personal interactions rather than generic marketing messages. Using customer data and AI-driven analytics, SCRM can provide recommendations, personalized product customized offers, and targeted promotions to customers. Although the same tactic might not work for everyone, by analyzing purchase history, interactions, and media browsing behaviour, businesses can have the intuition of customer preferences to deliver experiences that echo along the lines of being relevant and engaging. One way can be done is through engagement, personalized which makes customers feel valued and increases repeat purchases and long-term loyalty.
- Predictive Analytics for Proactive Support: SCRM, armed with predictive analytics, can help you identify a customer's needs and resolve any issues before they arise. Companies can predict potential dissatisfaction points by analysing historical data, sentiment analysis, and buying patterns. For example, businesses can use predictive models to optimize logistics when customers often complain about delivery delays. Such an approach to forward-thinking increases

customer satisfaction by reducing negative

experiences and increasing service accelerations.



Fig 1: Role of Social CRM in Enhancing Customer Satisfaction

- **Enhanced** Customer Trust through Transparency: One of the key factors for customers to be satisfied is trust. SCRM can make this trust by enabling Customers to talk openly in front of each other about what is going on at your company. Social media gives businesses a public arena to engage in customer service and address concerns in real-time. These companies are honest and customer-centric because they are customer-engaged; they admit mistakes and prompt solutions. It creates a higher emotional connection with customers, leading to more brand loyalty and advocacy.
- Improved Customer Retention and Loyalty: Customer retention is cheaper than acquiring new customers, and SCRM has a significant role. Businesses can encourage repeat purchases and build closer customer relationships through loyalty programs, exclusive offers and social media interaction. Moreover, properly satisfied customers might act as brand advocates for the product and share positive experiences with people on social media; consequently, they attract new potential buyers.
- Data-Driven Decision-Making for Better Service Quality: Through data analytics and social listening tools, SCRM offers some insights into the behaviour, preferences, and pain points of the customer. Businesses can use this data to locate weak areas of their products, services, and marketing strategies and take the necessary steps to fix them to remain ahead of the competition. Continuously monitoring and analysing customer sentiment and engagement trends will help a business choose the right decisions that will eventually make customers more engaged and create an amazing customer experience. A data-driven approach to such analysis helps keep the

businesses competitive, adaptive, and customerfocused, resulting in higher satisfaction.

1.3. Market Effectiveness and Competitive Advantage

Market effectiveness is one of the key parameters used to measure the effectiveness of an organization in attracting its audience, turning customer engagement experience into sales, and maintaining a stronghold in the market. As an increasingly important component of market effectiveness in today's digital world, Social Customer Relationship Management (SCRM) transforms lives with valuable data and markets with real-time engagement and effective digital experiences. [5,6] Unlike most existing CRM systems based on a passive collection of customer data, SCRM is about actively participating in social media, artificial intelligence (AI) and predictive analytics to drive highly personalized customer interactions.

Among the most important advantages of SCRM is the capacity to provide businesses with access to the features of real-time engagement, which means that businesses can interact with customers in real-time using social media platforms, live chat, and automated chatbots. This capability to respond to customers immediately allows for favourable, strengthened customer relationships, increased brand trust, and, ultimately, higher conversion rates. SCRM also uses the data by segmenting audiences based on their behaviour, preferences, and purchasing history to create more precise targeted marketing campaigns. Providing personalization through personalized product or service recommendations, exclusive offers, and dynamic content helps companies increase customer engagement and sales performance. SCRM also increases the competitive advantage by bringing a better and optimized digital customer experience and mobile interaction across multiple touchpoints. Implementing an SCRM strategy can enable companies to predict customer needs trends in emerging markets, resolve potential problems before they occur, and keep a good market position. SCRM-driven strategy defeats businesses that fail to adopt it, whereby customers will migrate to offers of better engagement and tailored experiences. In summary, SCRM ensures that more of the market leads to efficiencies in business, thereby increasing the market effectiveness and the business's competitive edge through real-time customer, data-driven marketing, and optimized digital marketing efforts. Embracing SCRM innovation will strengthen such groups' customer retention and loyalty and, more importantly, enable the muscling of such organisations as leaders within their targeted industries.

2. Literature Survey

2.1. Evolution of CRM to SCRM

Today, Customer Relationship Management (CRM) systems have come a long way from pure database driven tools to Social CRM (SCRM) platforms with machine learning and automation available to the business. Traditional CRM focuses on storing and managing customer data, tracking interactions, and aiding the sales and marketing teams in their job. [7-10] But with the advent of digitalisation and social media, companies sought more dynamic and interactive systems to interact with their customers in real-time. It is a form of SCRM that brings social media data, AI-driven insights and automated customer interaction together, with the help of which the businesses turn their approach towards customer relationships more personalized. It is now proven that companies utilising the SCRM are 20% better at retaining customers than those with conventional CRM; they can engage proactively with customers and respond to their problems more effectively.

2.2. Social Media as a Catalyst for Customer Engagement

Social media has changed how businesses engage customers by giving them direct and instant communication channels. Social media differs from traditional marketing strategies, which depend on one-way communication with the customers; as the opposite approach, social media is a two-way interaction where businesses can respond to customer's queries and complaints and build brand loyalty in real-time. Facebook, Twitter, Instagram, and LinkedIn are the platforms that allow companies to make themselves more human and to become a community around products or services. According to studies, 80% of consumers prefer brands

which actively participate with them on social media, and the presence of social media makes consumers more loyal and friendly to a brand. Good social media engagement strategies will include having a personalized response, having some posts interactive, and using influencer collaborations to build better relationships with customers and perceived brands.

2.3. Predictive Analytics in SCRM

Social CRM is no different; predictive analytics has become a fundamental part of the toolset by performing historical customer data and predicting future purchasing behaviors. Organizations can find customer behaviour patterns, preferences, and buying habits using machine learning algorithms and big data analytics. The predictive capability helps businesses create targeted marketing campaigns and product recommendations that provide the best gain and improved customer service. Research has shown that such companies achieved a 25 per cent increase in conversion rates from sales. Predictive analytics not only boosts sales performance but also increases customer loyalty and satisfaction, thus being an integral part of modern customer relationship management and descriptive analytics.

3. Methodology

3.1. Framework for Implementing SCRM

Data Collection: A systematic recording of customer interaction from numerous social media platforms forms the basis of a successful Social Customer Relationship Management (SCRM) strategy. [11-15] To get insight into consumers' behavior, preferences, and sentiments, businesses need to get data from sources like Facebook, Twitter, Instagram, LinkedIn, customer forums, or any other forums. Customer comments, direct messages, reviews, and social media mentions contribute to this data, especially regarding what customers want. The real-time tracking of customer interactions is automated with advanced data collection tools, which include social listening software and APIs. Part of an effective data collection program is to help businesses develop customer-centric strategies and respond proactively to new trends and concerns.

FRAMEWORK FOR IMPLEMENTING SCRM

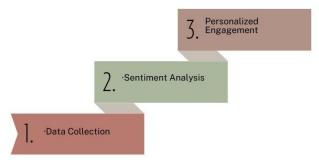


Fig 2: Framework for Implementing SCRM

- **Sentiment Analysis:** SCRM is a necessary step Social media and utilizes Natural Language Processing (NLP) and machine understanding to understand customers' emotions on social networks. It allows the businesses to categorise the comments from the customer's side as positive, neutral and negative to understand the brand perception on a larger scale. Sentiment analysis aids companies in detecting dissatisfied customers, addressing their concerns on time, and improving customer satisfaction. It also helps businesses stay updated with what is going on in other markets and customers' preferences. Integration of sentiment analysis into the SCRM process enables organizations to make data-driven decisions to improve their customer relationship and brand reputation.
- **Personalized Engagement: SCRM** is essentially personalized engagement, enabling businesses to develop personalised marketing campaigns based preferences individual customer behaviour. Companies can lend targeted content, product recommendations, and special offers to specific customer segments based on what customers interact with, buy, and browse. Personalization ensures a better customer experience through meaningful interaction, creating brand loyalty and conversion rates. AIdriven chatbots, email marketing automation and dynamic social media content, are used to give personalized responses and recommendations to businesses. Personalized engagement is a missed opportunity if not well implemented.

3.2. Data Sources and Tools

- Social Media Data: Customer data from social media platforms can be a lucrative source of insights into consumers' preferences, behaviour and sentiments. Facebook, Twitter and Instagram have huge amounts of user-generated content such as comments, reviews, likes, shares and direct messages. The business that analyzes this information can understand its customers' points of view, see trends, and react swiftly to concerns or opportunities. Tools that facilitate listening to social media presence, mentions of company brand. competitor's activities. industry discussions, and proactivity. This social media data collection and analysis allows businesses to have stronger relationships with the audience and create data-driven marketing strategies that appeal to customers.
- Analytical Tools: For instance, businesses need to make sense of huge quantities of data garnered from different sources with the help of advanced analytical devices like Google Analytics, IBM Watson and Salesforce. By tracking website and social media traffic, user demographics and engagement metrics using Google Analytics and

- then optimizing digital marketing efforts based on this data, businesses can improve their analytics and learn more about the performance of their marketing efforts. Through artificial intelligence and machine learning, IBM Watson performs deep sentiment analysis, trend prediction, and customer segmentation, which helps companies deliver personalization and a better customer experience. One such platform is Salesforce, which has been instrumental in integrating customer data across multiple touchpoints to give a business a comprehensive view of its interactions and make better decisions. These analytical tools facilitate the derivation of actionable insights and enhanced SCRM strategies of organizations.
- Customer Interaction Channels: A product that works is essential for effective customer relationship management that requires seamless and responsive communications over multiple interaction channels. Of course, chatbots, live customer support, automated emails, and so forth keep the customers engaged and satisfied. As they can respond to customers' questions within a second, they shorten response time and are up all 24 hours. Through live customer support agents, people get the personal experience of the issue and build trust. Automated emails such as followups, order confirmations, more personalized recommendations and the like are not only kept with the customer but also informed and engaged. By utilizing ाएगthese interaction channels, businesses can create a consistent and reliable communication environment create relationships with customers and brand loyalty.

3.3. Algorithm for Customer Sentiment Analysis

Customer Sentiment Analysis is used to analyze the customer's feedback through social media, customer reviews, or surveys to analyze customers' emotional tone. [16-19] The hypotheses are fed into the system using Natural Language Processing (NLP) and machine learning techniques to predict positive, negative, or neutral sentiments. The sentiment score Based on assigned weights and sentiment values, S S) is calculated to offer businesses an understanding of customer perceptions.

Data Collection: The first thing needed for sentiment analysis is to collect customer feedback from different sources, such as Facebook comments, product reviews, emails, and chats. These data sources, however, give insights about opinions and the levels of satisfaction of the customers. Before the text data goes into the analysis, it undergoes preprocessing, which includes removing stopwords (such as "the" and "and") and punctuation and only keeping irrelevant data for sentiment analysis to use the meaningful data only.

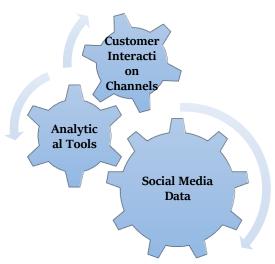


Fig 3: Data Sources and Tools

- Tokenization and Text Processing: After collecting the text data, it is split into smaller units called tokens, which can be single words or phrases. The process of tokenization helps make sense of the data for analysis. Moreover, it also lowers the text to lowercase for uniformity and throws away all special characters or symbols which would make a mistake. The data standardisation with these steps makes it easier to analyse sentiment.
- Sentiment Scoring: Sentiment scoring assigns predefined sentiment values () to words using lexicons like VADER, AFINN or TextBlob. These tools classify words according to their meaning, whether positive, negative, or neither. Rather, machine learning models trained on labeled sentiment datasets can perform customer feedback classification with higher accuracy if the words are considered in relation to each other, tone, or context.

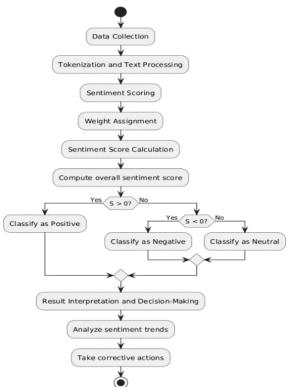


Fig 4: Algorithm for Customer Sentiment Analysis

- Weight Assignment: Different sources of feedback have differing levels of importance, so
- weightings () are applied across them from reliability and impact. For example, a verified

product review will probably have greater weight than a random tweet because it is more likely to be a sincere customer experience. Furthermore, the intensity of sentiment words (such as 'amazing', as opposed to 'good') is also considered while enhancing sentiment analysis's accuracy.

- Sentiment Score Calculation: When sentiment values and weights are assigned, the weighted sum formula calculates the overall sentiment score (S). It classifies the customer feedback as positive (>0), neutral (S=0) or negative (S<0) using the sentiment score. This classification helps businesses clearly understand how their customers image their brand, products, or services.
- Result Interpretation and Decision-Making: After they've been calculated, businesses then look at trends to determine customer satisfaction

status and look for any potential issues. More negative sentiments may mean some product or service problems, so you should take corrective actions like providing better customer support or improving their product. One of the proactive practices to build a good relationship with a customer, maintain a brand's reputation, and provide a better customer experience is responding to customer's sentiments.

4. Results and Discussion

4.1. Impact of SCRM on Customer Satisfaction

In this paper, the benefits of SCRM in enhancing customer satisfaction are evident in the case of leading e-commerce brands. The firms that implemented the SCRM strategies detected that they enjoyed:

Table 1: Impact of SCRM on Customer Satisfaction

Metrics	Percentage
Customer Engagement	30%
Brand Loyalty	25%
Customer Complaints	15%

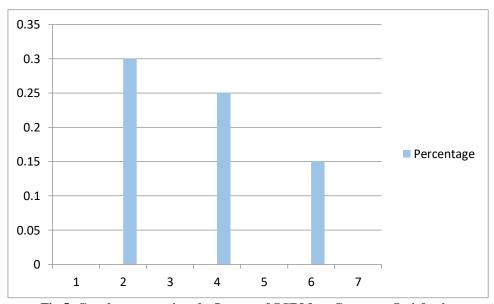


Fig 5: Graph representing the Impact of SCRM on Customer Satisfaction

- Increase in Customer Engagement: Another key influence of SCRM involves improving customer interactions by up to 30% in businesses social media for real-time that employ conversation. How business is approached AI-driven chatbots, personalized messaging, quizzes, live videos, or O&A sessions helps brands keep their customers attentive and interested. This two-way communication is constructive because it enhances a sense of community for the customers. Consequently, the customers feel more involved with the brand and are likely to engage in the promotion of products or services.
- Improvement in Brand Loyalty: Of that improvement in brand loyalty, 25% is attributed to the ability to allow real-time responses and two-way communication that SCRM provides. Today, the customer demands that his needs and issues be resolved and that he wants to be treated specifically. Through such SCRM tools, firms can record coherent data of customer experiences and responses within different interfaces, based on which thev can send relevant recommendations/promotions. Such a prospect also enhances the communication bond between customers and the brand by making them

- emotionally attached, thus resulting in repeat purchasing and brand loyalty.
- Reduction in Customer Complaints: Advanced tools like predictive analytics and automated customer support have helped the company alleviate the following concerns by 15%. For whatever problems arise, sentiment analysis and historical data enable businesses to tackle them before they get out of hand. Chatbots and automatic replies enhance rapid responses to customers' queries so they do not get annoyed. Moreover, SCRM also allows organizations to provide real-time feedback and analyze

complaints taken over a certain period to make changes in the product or service. Thus, this puts someone in a proactive position to keep track of clients and conditions that may lead to churn and minimize churn rates.

4.2. Market Performance Metrics

Observing the implementation of social CRM, it can be stated that SCRM has positively impacted the values of main performance indicators related to customers, their satisfaction and Sales conversation rates. The following section provides an elaboration of these remarks:

Table 2: Market Performance Metrics		
Metric	Before SCRM	After SCRM
Customer Retention	60%	80%
Sales Conversion Rate	10%	25%
Customer Engagement	40%	85%

1
0.8
0.6
0.4
0.2
0
1 2 3 4 5 6 7

Fig 6: Graph representing Market Performance Metrics

- Customer Retention: Customer retention is the level of usage that customers repeatedly display to specific brands. According to the responses given before adopting SCRM, companies retained only 60% of their consumers. However, after implementing the SCRM strategies, such as personalized communication, instant customer assistance, and problem resolution, the retention level was recorded at 80%. This improvement also proves that SCRM is beneficial in creating a long-term relationship with customers to avoid the latter from churning.
- Sales Conversion Rate: The conversion rate determines the proportion or percentage of leads products. buying a brand's Before implementation of SCRM, the potential conversion rate of leads into customers was very low, at 10%. This led to an enhancement of the conversion rate to 25% after the implementation of SCRM through other strategies such as marketing, enhanced recommendations from Artificial Intelligence and the customers' trust in the organization. This acknowledges that SCRM aids in determining customer behaviors and

- thereby assists companies in the management of their sales plans.
- Customer Engagement: Customer engagement can be defined as the degree of activities customers engage with the brand in different outlets. Before SCRM existed, customers only reached out to businesses at 40%, possibly because there were few ways to contact the company and the response was quite delayed. Yet, post-SCRM adoption reached 85% as organisations started using social media, chatbots, and social interaction to communicate directly with customers. This increase depicts how SCRM fosters the engagement of the various customers as well as its ability to improve customer relations.

4.3. Challenges in SCRM Implementation

Despite its benefits, implementing SCRM poses several challenges:

• Data Privacy Concerns: The last of the most important tasks while implementing SCRM is the best data privacy and security approach. Companies interact with individuals through

social networks and receive emails and messages, the main instance of handling personal data. It is crucial to follow measures like the GDPR and CCPA to avoid legal costs and to convince customers that their data is being taken care of. Another is protecting the data with cybersecurity threats, hacking, and data breaches as the major focus, hence data encryption, multi-factor authentication, and periodical audit.

- Integration Complexity: Integrating other SCRM platforms with the current CRM systems is challenging and time-consuming. Many organisations, such as small- and medium-sized and large enterprises, use Salesforce, HubSpot, and Microsoft Dynamics, among other platforms. In many cases, an organization may have to spend a considerable sum on in-house APIs, middleware interfaces and information technology structures to support integration. Additionally, it can be initiated in one department, and another department may apply the method using different tools; hence, training the entire firm to adopt SCRM uniformly may be necessary.
- Real-Time Response Challenges: For this reason, customer support must be available at all times, which translates to 24/7 support and real-time engagement. Nevertheless, attending to many customers at once can be challenging, provided the organization works with many people. As much as using an AI to fake a chatbot and automatically responding to certain queries helps solve them as soon as possible; some questions need to be solved through consulting, which causes a delay. 1) One of the major issues of implementing SCRM for businesses is to respond to customer queries and comments with high speed and accuracy and tailor them to social media platforms.

4.4. Future Trends in SCRM

The current trends in SCRM are the progressive technologies that impact how customers are engaged, how the organisations carry out their operations and how consumers' information is protected. They are such a significant development, especially concerning the fact that now it is possible to have AI-powered chatbots for quick automatic customer support. Most of these chatbots incorporate Natural Language Processing (NLP) and machine learning for handling customer messages, individualization. quick problem-solving. and Entrepreneurs using AI-powered chatbots will likely notice increased engagement and enhanced customer satisfaction since they do not require human interjection. One more transformative technology is blockchain, which improves the security and non-transparent nature of customer intercourse and data. Blockchain guarantees that every interaction with the customer and their contract is documented safely. This will not allow for situations when someone tries to tamper with the information, hack the

system, or demand more than was agreed. It targets the decentralization of their models, which fits into the increasing concern of laws like GDPR CCPA that allow customers to control their information.

5. Conclusion

This research provides critical and transforming impact for social Customer Relationship Management in bringing changes through customers' engagement, satisfaction and market performance. The advent of social media and analytics has opened the door to SCRM as the newest method of developing much more intimate, personal relationships with customers, while CRM systems have always traversed around customer data management. When integrated, real-time interactions, predictive analytics, and automation can help businesses increase customer retention and create brand loyalty and sales performance. The study reveals that most companies applying SCRM tend to get higher engagement rates from customers whose appetite is to have the brands talk and respond to their needs on digital platforms. SCRM is most important because it is based on AI-driven analytics that analyze customer sentiment and predict what customers will purchase. This will allow the businesses to continually provide personalized recommendations, launch targeted marketing campaigns, reactively fix problems and yield the highest conversions and the most enriching customer experience. In addition, improving social media, AI chatbots, and automated support systems has assisted in engaging customers in real time. It has shortened response time in relation to service quality. Consequently, on that basis, companies can create a prosperous interaction to spark long-term customer and agent love.

On the other hand, the research also states that there are problems with respect to the research advantages; the biggest problems are with regard to data privacy, integration and real-time response management. Data protection laws like the GDPR and CCPA are being introduced worldwide, and it is even more important for businesses to account for the security and ethical data used to protect customers' trust. Additionally, traditional CRM was not seamlessly integrated with the SCRM platforms because it has involved significant investment in IT infrastructure and workforce training. Regard less. SCRM will depend on the future of AI, blockchain and AR. In this sense, you can expect the virtual assistant and the chatbot powered by AI to aid the automated workflow of customer interaction, while Blockchain technology would allow more security and transparency in handling data through the transaction. Virtual try-ons and immersive experiences with the brand will also be created in AR for their customers' experiences. Finally, the next steps for future SCRM will be on the AI-driven SCRM strategy, hyperpersonalization effect by data-driven customer engagement, and ethical dilemmas in data-driven customer engagement. However, if they address the abovementioned areas, businesses can perfect their SCRM structures to be sustainable and innovative and offer better customer experience in the new digital age.

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