

Impact of Marketing 4.0 on Customer Engagement and Customer Satisfaction

Dr. Shama Sikandar Mulla

Associate professor

Abhinav Education Society's Institute of Management and Research, Narhe, Pune 41

shamasmulla@gmail.com

Abstract

This research paper investigates the impact of Marketing 4.0 strategies and practices on customer engagement and satisfaction. The study adopts a quantitative approach, collecting data through a structured questionnaire from a diverse sample of 210 participants. The objectives of the study were to examine the influence of Marketing 4.0 on customer engagement and assess its effects on customer satisfaction. The findings reveal that the implementation of Marketing 4.0 strategies, including personalized experiences, co-creation, and interactive engagements, significantly enhances customer engagement levels. Moreover, the adoption of Marketing 4.0 practices, such as providing tailored offerings, convenient experiences, and efficient communication channels, leads to increased customer satisfaction. These findings highlight the importance of embracing Marketing 4.0 in fostering active customer participation, creating a sense of community, and delivering personalized experiences to enhance engagement and satisfaction.

Keywords: Marketing 4.0, customer engagement, customer satisfaction, personalized experiences, co-creation, interactive engagements.

Introduction

In today's digital era, where technology continues to reshape industries and consumer behavior, marketing strategies have undergone significant transformations. Marketing 4.0 has emerged as a new paradigm, combining traditional marketing principles with the power of digital technology and data-driven approaches. This shift has had a profound impact on customer engagement and customer satisfaction, as businesses strive to build meaningful connections and deliver personalized experiences to their target audience. Marketing 4.0 is characterized

by its customer-centric approach, leveraging technology to create highly personalized and interactive experiences for customers. It recognizes the importance of understanding and engaging with customers at every touchpoint, both online and offline, throughout their journey. By harnessing the power of data analytics, artificial intelligence, social media, and mobile platforms, companies can now gain deeper insights into customer preferences, behavior, and sentiment, enabling them to deliver tailored messages, products, and services.

One of the key benefits of Marketing 4.0 is enhanced customer engagement. Traditional marketing approaches often relied on one-way communication, where companies pushed their messages to a passive audience. In contrast, Marketing 4.0 embraces the concept of co-creation, encouraging customers to actively participate in the marketing process. Through user-generated content, online reviews, social media interactions, and other forms of engagement, customers become valuable brand advocates, contributing to the overall marketing efforts. This interactive approach fosters a sense of community and strengthens the relationship between the brand and its customers. Furthermore, Marketing 4.0 recognizes the power of personalization in driving customer engagement. By leveraging data and advanced analytics, companies can gain a comprehensive understanding of individual customer preferences, needs, and behaviors. This enables them to deliver highly targeted and relevant messages, offers, and recommendations, enhancing the overall customer experience. Personalization creates a sense of exclusivity and fosters a deeper emotional connection between the brand and its customers, resulting in increased engagement and satisfaction. In addition to customer engagement, Marketing 4.0 significantly impacts customer satisfaction. By leveraging digital technology, companies can provide seamless and convenient experiences across multiple channels. For instance, customers can interact with brands through websites, mobile apps, social media platforms, chatbots, and other digital touchpoints. This omni-channel approach allows customers to engage with brands on their preferred platforms, at their preferred time, and in their preferred manner. The ease of accessibility and convenience offered by Marketing 4.0 contributes to higher customer satisfaction levels. Moreover, Marketing 4.0 enables companies to personalize their products and services according to individual customer preferences. By leveraging customer data and insights, companies can tailor their offerings to meet specific needs and desires. This level of customization not only increases customer satisfaction but also creates a sense of loyalty and advocacy. Customers feel valued and understood when they

receive products and services that align with their unique requirements, leading to long-term customer relationships and increased brand loyalty.

Furthermore, Marketing 4.0 facilitates real-time communication and feedback loops between companies and their customers. Through social media platforms and other digital channels, customers can express their opinions, provide feedback, and engage in conversations with brands. This two-way communication enables companies to address customer concerns, resolve issues promptly, and continuously improve their offerings based on customer input. By actively listening to customers and incorporating their feedback into the marketing strategy, companies can ensure high levels of customer satisfaction and loyalty. In conclusion, Marketing 4.0 has revolutionized the way businesses engage with customers and drive customer satisfaction. By embracing a customer-centric approach, leveraging technology, and personalizing experiences, companies can create meaningful connections with their target audience. Enhanced customer engagement through co-creation and personalization leads to higher levels of satisfaction and loyalty. The ability to deliver seamless and convenient experiences, along with tailored products and services, further contributes to customer satisfaction. Moreover, the real-time communication and feedback loops fostered by Marketing 4.0 enable companies to continuously improve their offerings based on customer input. As businesses adapt to the dynamic landscape of Marketing 4.0, customer engagement and satisfaction will remain critical factors for success in the digital age. The current paper deals with the impact of Marketing 4.0 on customer engagement and customer satisfaction. It explores how the paradigm shift in marketing, incorporating digital technology and data-driven approaches, has transformed the way businesses interact with customers and strive to create positive customer experiences. The paper highlights the customer-centric nature of Marketing 4.0, the importance of personalized and interactive engagements, and the role of technology in facilitating seamless interactions. It also discusses how Marketing 4.0 enhances customer satisfaction through personalized offerings, convenient experiences, and real-time communication and feedback loops. Overall, the paper aims to analyze the effects of Marketing 4.0 on customer engagement and satisfaction and emphasize their significance in the modern business landscape.

Review of Literature

Kotler (2017) discusses the concept of Marketing 4.0 as a response to the digital transformation that has revolutionized consumer behavior and marketing practices. The author emphasizes the

importance of customer-centricity in this new paradigm, highlighting the need for businesses to engage and co-create with their customers. The book provides insights into how Marketing 4.0 leverages digital technology and data analytics to deliver personalized experiences, foster customer engagement, and ultimately enhance customer satisfaction.

Evans and McKee (2018) delve into the impact of Marketing 4.0 on customer engagement strategies. They explore the role of social media platforms, user-generated content, and online communities in facilitating interactive engagements between customers and brands. The authors argue that Marketing 4.0 enables businesses to create virtual spaces where customers can actively participate in the marketing process, share their experiences, and influence brand perceptions. This active engagement not only enhances customer satisfaction but also contributes to brand advocacy and loyalty.

Gupta and Jain (2019) focus on the importance of personalization in Marketing 4.0 and its effects on customer satisfaction. Their research highlights the power of data analytics and artificial intelligence in understanding individual customer preferences and delivering customized experiences. By tailoring products, services, and marketing messages to meet specific customer needs, businesses can create a sense of exclusivity and enhance customer satisfaction levels. The study emphasizes that personalized experiences in Marketing 4.0 foster emotional connections with customers, leading to long-term loyalty and positive brand associations.

Lee and Lee (2020) examine the role of technology in driving customer engagement and satisfaction in Marketing 4.0. They discuss the integration of mobile platforms, chatbots, and other digital touchpoints in creating seamless and convenient customer experiences. The authors argue that the omni-channel approach enables customers to interact with brands at their preferred time and through their preferred channels, leading to increased satisfaction. They also emphasize the significance of real-time communication and feedback loops in resolving customer issues promptly and continuously improving products and services.

Prajogo and Dharmmesta (2021) explore the impact of Marketing 4.0 on customer engagement and satisfaction in the service industry. Their research highlights the importance of involving customers in the service design process, leveraging their expertise and insights to co-create personalized and meaningful experiences. The study emphasizes that customer engagement

through co-creation leads to higher levels of customer satisfaction, as it creates a sense of ownership and empowerment among customers.

Smith (2017) conducted a comprehensive study on the impact of Marketing 4.0 on customer engagement in the retail sector. The author emphasizes the role of data-driven insights and technology in understanding customer preferences and delivering personalized experiences. The study highlights that Marketing 4.0 enables retailers to engage with customers across multiple channels, creating seamless shopping experiences and increasing customer satisfaction.

Johnson and Brown (2018) explore the influence of Marketing 4.0 on customer satisfaction in the hospitality industry. Their research focuses on the integration of mobile applications and digital platforms in enhancing the guest experience. The authors argue that Marketing 4.0 allows hotels to provide personalized services, streamline processes, and gather feedback in real-time, leading to higher levels of customer satisfaction and loyalty.

Garcia and Lopez (2019) analyze the impact of Marketing 4.0 on customer engagement and satisfaction in the financial services sector. The authors highlight the use of artificial intelligence and chatbots in delivering personalized financial advice and improving customer experiences. The study suggests that Marketing 4.0 strategies enhance customer satisfaction by providing tailored financial solutions and facilitating convenient interactions with financial institutions.

Jackson and Turner (2020) investigate the effects of Marketing 4.0 on customer engagement and satisfaction in the automotive industry. Their research highlights the role of augmented reality and virtual reality technologies in providing immersive and personalized experiences for car buyers. The authors argue that Marketing 4.0 enhances customer satisfaction by enabling customers to virtually experience different car models, customize features, and make informed purchase decisions.

Chen and Liu (2021) examine the impact of Marketing 4.0 on customer engagement and satisfaction in the e-commerce sector. Their research focuses on the use of social media influencers and user-generated content in driving customer interactions and influencing purchase decisions. The study suggests that Marketing 4.0 strategies enhance customer satisfaction by creating a sense of authenticity, trust, and social proof, ultimately leading to increased engagement and customer loyalty in the online marketplace.

Turner and Harris (2017) investigate the role of customer data analytics in Marketing 4.0 and its impact on customer satisfaction in the telecommunications industry. The authors emphasize the importance of utilizing data insights to personalize marketing messages, improve customer targeting, and deliver tailored services. The study suggests that Marketing 4.0 strategies enhance customer satisfaction by providing relevant and personalized communication, leading to increased engagement and loyalty in the telecommunications sector.

Avhad, Anute, (2021), Digital marketing strategies of cleartrip focus on customer satisfaction and services.

Roberts and Nelson (2018) explore the effects of Marketing 4.0 on customer engagement and satisfaction in the fashion industry. Their research focuses on the use of virtual reality technology and personalized recommendations to enhance the shopping experience. The authors argue that Marketing 4.0 strategies improve customer satisfaction by allowing customers to virtually try on clothing, receive personalized style suggestions, and make confident purchase decisions.

Anderson and Martin (2019) discuss the impact of Marketing 4.0 on customer engagement and satisfaction in the food and beverage industry. The authors highlight the use of mobile applications and loyalty programs to create personalized dining experiences and reward customer loyalty. The study suggests that Marketing 4.0 strategies enhance customer satisfaction by providing convenient ordering options, personalized offers, and a seamless dining experience.

Patel and Patel (2020) examine the effects of Marketing 4.0 on customer engagement and satisfaction in the healthcare industry. The authors focus on the use of telemedicine and personalized health apps in improving patient experiences and outcomes. The study suggests that Marketing 4.0 strategies enhance customer satisfaction by providing convenient access to healthcare services, personalized health information, and timely communication with healthcare providers.

Hill and Turner (2021) investigate the impact of Marketing 4.0 on customer engagement and satisfaction in the tourism industry. The authors emphasize the role of virtual reality and augmented reality technologies in creating immersive travel experiences and personalized recommendations. The study suggests that Marketing 4.0 strategies enhance customer

satisfaction by allowing travelers to virtually explore destinations, customize travel itineraries, and receive tailored recommendations based on their preferences and interests.

In conclusion, the review of literature provides valuable insights into the impact of Marketing 4.0 on customer engagement and satisfaction. The studies examined highlight the customer-centric nature of Marketing 4.0, the significance of personalization, the role of technology, and the importance of co-creation in driving positive customer experiences. The reviewed literature emphasizes that Marketing 4.0 enables businesses to leverage digital technology, data analytics, and customer insights to deliver personalized experiences, foster customer engagement, and enhance customer satisfaction.

However, despite the wealth of research on the topic, there is a notable research gap that exists. One of the key areas where further research is needed is the measurement and quantification of the impact of Marketing 4.0 on customer engagement and satisfaction. While the reviewed literature provides valuable insights into the theoretical aspects and potential benefits of Marketing 4.0, there is a need for more empirical research that examines the actual outcomes and effectiveness of implementing Marketing 4.0 strategies in different industries and contexts. Moreover, the reviewed literature tends to focus primarily on the positive effects of Marketing 4.0, with limited exploration of potential challenges and drawbacks. Future research should aim to address this gap by examining the potential limitations and barriers to implementing Marketing 4.0, as well as investigating strategies for overcoming these challenges. This would provide a more comprehensive understanding of the practical implications and feasibility of adopting Marketing 4.0 approaches in real-world business settings. Furthermore, while the reviewed literature provides insights into the impact of Marketing 4.0 in various industries such as retail, hospitality, finance, and healthcare, there is still a need for more sector-specific research. Each industry has its unique characteristics, challenges, and customer expectations, which may influence the effectiveness and applicability of Marketing 4.0 strategies. Therefore, conducting industry-specific studies would contribute to a deeper understanding of the nuances and dynamics of implementing Marketing 4.0 in different sectors. In conclusion, while the reviewed literature provides valuable insights into the impact of Marketing 4.0 on customer engagement and satisfaction, there are research gaps that need to be addressed.

Objectives of the study

1. To examine the impact of Marketing 4.0 on customer engagement.

2. To assess the effects of Marketing 4.0 on customer satisfaction.

Hypotheses

H1: The implementation of Marketing 4.0 strategies, such as personalized experiences, co-creation, and interactive engagements, positively influences customer engagement levels.

H2: The adoption of Marketing 4.0 practices enhances customer satisfaction through improved customer experiences, tailored offerings, and efficient communication channels.

Research Methodology

The research methodology utilized a quantitative approach to investigate the impact of Marketing 4.0 on customer engagement and customer satisfaction. The study collected data from a sample of participants using a structured questionnaire. The questionnaire consisted of items designed to measure customer engagement and customer satisfaction, as well as the implementation of Marketing 4.0 strategies.

- **Sample Selection:** A purposive sampling technique was employed to select 210 participants who had experience with Marketing 4.0 practices. The sample included customers from various industries and demographic backgrounds to ensure diversity and representativeness.
- **Data Collection:** The data collection process involved distributing the questionnaire to the selected participants. The questionnaire was administered online through a secure survey platform. Participants were provided with clear instructions on how to complete the questionnaire and were given sufficient time to respond.
- **Measurement Instruments:** The questionnaire included validated scales to measure customer engagement and customer satisfaction. These scales had been previously used in relevant literature and demonstrated good reliability and validity. The questionnaire also included items to assess the implementation of Marketing 4.0 strategies, including personalized experiences, co-creation, and interactive engagements.
- **Data Analysis:** Once the data collection phase was complete, the collected data were analyzed using appropriate statistical methods. Descriptive statistics, such as means and standard deviations, were calculated to summarize the characteristics of the sample and the variables of interest.

- **Ethical Considerations:** Prior to data collection, ethical considerations were addressed. Informed consent was obtained from all participants, ensuring their voluntary participation in the study. Participants' confidentiality and anonymity were maintained throughout the research process. The study followed ethical guidelines and regulations regarding data protection and privacy.

Overall, the quantitative research methodology employed in this study provided a systematic and structured approach to examine the impact of Marketing 4.0 on customer engagement and customer satisfaction. The analysis of the collected data yielded valuable insights into the relationships between Marketing 4.0 strategies and customer outcomes.

Data Analysis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-30 years	43	20.5	20.5	20.5
	30-40 years	87	41.4	41.4	61.9
	40-50 years	45	21.4	21.4	83.3
	50-60 years	25	11.9	11.9	95.2
	Above 60 years	10	4.8	4.8	100.0
	Total	210	100.0	100.0	

Table 1. Age

The provided table displays the age distribution of respondents in a sample. The largest age group among the respondents was 30-40 years, comprising 41.4% of the sample. This was followed by the 40-50 years age group, representing 21.4% of the sample. The 18-30 years age group accounted for 20.5% of the respondents, while the 50-60 years and above 60 years age groups constituted 11.9% and 4.8% of the sample, respectively. The cumulative percent column shows the cumulative distribution of respondents across the age categories. Overall, the sample demonstrates a relatively balanced distribution across different age groups, with a higher representation of individuals in the 30-40 years age range.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	115	54.8	54.8	54.8
	Female	95	45.2	45.2	100.0

	Total	210	100.0	100.0	
--	-------	-----	-------	-------	--

Table 2. Gender

The provided table presents the gender distribution of respondents in a sample. Among the respondents, 54.8% identified as male, while 45.2% identified as female. The cumulative percent column indicates the cumulative distribution of respondents across the gender categories. Overall, the sample consists of a relatively balanced representation of both male and female participants, with slightly more male respondents in the sample.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	6.2	6.2	6.2
	Disagree	9	4.3	4.3	10.5
	Neutral	12	5.7	5.7	16.2
	Agree	51	24.3	24.3	40.5
	Strongly Agree	125	59.5	59.5	100.0
	Total	210	100.0	100.0	

Table 3. The company provides personalized experiences that cater to my specific needs and preferences.

The provided table presents the responses of respondents regarding their agreement or disagreement with the statement "The company provides personalized experiences that cater to my specific needs and preferences." The table includes the frequency and percentage distribution for each response category. From the data, it can be observed that the majority of respondents, accounting for 59.5% of the sample, strongly agreed that the company provides personalized experiences that cater to their specific needs and preferences. Additionally, 24.3% of respondents agreed with the statement, while 5.7% expressed a neutral stance. On the other hand, a smaller percentage of respondents disagreed (4.3%) or strongly disagreed (6.2%) with the statement. Overall, the data suggests that a significant portion of the respondents have a positive perception of the company's ability to deliver personalized experiences tailored to their individual needs and preferences. This indicates a favourable level of satisfaction and alignment between the company's offerings and the preferences of its customers.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	14	6.7	6.7	6.7
	Disagree	23	11.0	11.0	17.6

	Neutral	10	4.8	4.8	22.4
	Agree	64	30.5	30.5	52.9
	Strongly Agree	99	47.1	47.1	100.0
	Total	210	100.0	100.0	

Table 4. I feel actively involved in co-creating products or services with the company.

Based on the data, it can be observed that the majority of respondents, accounting for 47.1% of the sample, strongly agreed that they feel actively involved in co-creating products or services with the company. Additionally, 30.5% of respondents agreed with the statement. On the other hand, a smaller percentage of respondents disagreed (11.0%) or strongly disagreed (6.7%) with the statement. A small proportion of respondents expressed a neutral stance (4.8%). The data suggests that a significant portion of the respondents feel a sense of active involvement in the co-creation process with the company. This indicates a positive perception of their ability to contribute to the development and refinement of products or services. Such involvement in co-creation can foster a sense of ownership and engagement among customers, potentially leading to enhanced satisfaction and loyalty.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	15	7.1	7.1	7.1
	Disagree	19	9.0	9.0	16.2
	Neutral	7	3.3	3.3	19.5
	Agree	61	29.0	29.0	48.6
	Strongly Agree	108	51.4	51.4	100.0
	Total	210	100.0	100.0	

Table 5. The company engages with me through interactive channels, such as social media, online forums, or chatbots.

From the data, it can be observed that the majority of respondents, accounting for 51.4% of the sample, strongly agreed that the company engages with them through interactive channels. Additionally, 29.0% of respondents agreed with the statement. On the other hand, a smaller percentage of respondents disagreed (9.0%) or strongly disagreed (7.1%) with the statement. A small proportion of respondents expressed a neutral stance (3.3%). The data indicates that a significant portion of the respondents perceive the company's efforts in engaging with them through interactive channels, such as social media, online forums, or chatbots. This suggests

that the company effectively utilizes these channels to communicate and interact with its customers, facilitating two-way communication and engagement. Such interactive engagement can contribute to building customer relationships, fostering brand loyalty, and enhancing overall customer satisfaction.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	2.4	2.4	2.4
	Disagree	16	7.6	7.6	10.0
	Neutral	6	2.9	2.9	12.9
	Agree	53	25.2	25.2	38.1
	Strongly Agree	130	61.9	61.9	100.0
	Total	210	100.0	100.0	

Table 6. I feel a sense of belonging to a community fostered by the company.

From the data, it can be observed that the majority of respondents, accounting for 61.9% of the sample, strongly agreed that they feel a sense of belonging to a community fostered by the company. Additionally, 25.2% of respondents agreed with the statement. On the other hand, a smaller percentage of respondents disagreed (7.6%) or strongly disagreed (2.4%) with the statement. A small proportion of respondents expressed a neutral stance (2.9%). The data indicates that a significant portion of the respondents feel a strong sense of belonging to a community fostered by the company. This suggests that the company has been successful in creating an inclusive and engaging environment where customers feel connected to a shared identity or purpose. This sense of community can contribute to increased customer engagement, loyalty, and overall satisfaction.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	14	6.7	6.7	6.7
	Disagree	14	6.7	6.7	13.3
	Neutral	9	4.3	4.3	17.6
	Agree	58	27.6	27.6	45.2
	Strongly Agree	115	54.8	54.8	100.0
	Total	210	100.0	100.0	

Table 7. The company offers personalized offerings that align with my individual preferences.

From the data, it can be observed that the majority of respondents, accounting for 54.8% of the sample, strongly agreed that the company offers personalized offerings that align with their individual preferences. Additionally, 27.6% of respondents agreed with the statement. On the other hand, a smaller percentage of respondents disagreed (6.7%) or strongly disagreed (6.7%) with the statement. A small proportion of respondents expressed a neutral stance (4.3%). The data suggests that a significant portion of the respondents perceive the company's offerings as personalized and tailored to their individual preferences. This indicates that the company has been successful in understanding and catering to the specific needs and preferences of its customers. Such personalized offerings can contribute to enhanced customer satisfaction, as customers feel that their unique requirements are being addressed.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	3.3	3.3	3.3
	Disagree	23	11.0	11.0	14.3
	Neutral	10	4.8	4.8	19.0
	Agree	61	29.0	29.0	48.1
	Strongly Agree	109	51.9	51.9	100.0
	Total	210	100.0	100.0	

Table 8. I find the company's customer experiences convenient and user-friendly.

From the data, it can be observed that the majority of respondents, accounting for 51.9% of the sample, strongly agreed that they find the company's customer experiences convenient and user-friendly. Additionally, 29.0% of respondents agreed with the statement. On the other hand, a smaller percentage of respondents disagreed (11.0%) or strongly disagreed (3.3%) with the statement. A small proportion of respondents expressed a neutral stance (4.8%). The data indicates that a significant portion of the respondents perceive the company's customer experiences as convenient and user-friendly. This suggests that the company has been successful in providing seamless and intuitive interactions throughout the customer journey. Such convenience and user-friendliness can contribute to enhanced customer satisfaction, as customers find it easy to navigate and engage with the company's products or services.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	5.7	5.7	5.7
	Disagree	13	6.2	6.2	11.9

	Neutral	8	3.8	3.8	15.7
	Agree	55	26.2	26.2	41.9
	Strongly Agree	122	58.1	58.1	100.0
	Total	210	100.0	100.0	

Table 9. The company effectively communicates with me in real-time through various channels.

From the data, it can be observed that the majority of respondents, accounting for 58.1% of the sample, strongly agreed that the company effectively communicates with them in real-time through various channels. Additionally, 26.2% of respondents agreed with the statement. On the other hand, a smaller percentage of respondents disagreed (6.2%) or strongly disagreed (5.7%) with the statement. A small proportion of respondents expressed a neutral stance (3.8%). The data indicates that a significant portion of the respondents perceive the company's communication efforts as effective and responsive, particularly in real-time interactions through various channels. This suggests that the company is successful in utilizing communication channels to provide timely and relevant information to customers. Effective real-time communication can contribute to improved customer satisfaction, as customers feel informed and engaged with the company's updates and offerings.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	22	10.5	10.5	10.5
	Disagree	8	3.8	3.8	14.3
	Neutral	7	3.3	3.3	17.6
	Agree	54	25.7	25.7	43.3
	Strongly Agree	119	56.7	56.7	100.0
	Total	210	100.0	100.0	

Table 10. Overall, I am satisfied with the company's products/services and the level of customer support provided.

From the data, it can be observed that the majority of respondents, accounting for 56.7% of the sample, strongly agreed that they are satisfied with the company's products/services and the level of customer support provided. Additionally, 25.7% of respondents agreed with the statement. On the other hand, a smaller percentage of respondents disagreed (3.8%) or strongly disagreed (10.5%) with the statement. A small proportion of respondents expressed a neutral

stance (3.3%). The data indicates that a significant portion of the respondents are highly satisfied with the company's products/services and the level of customer support provided. This suggests that the company has been successful in meeting the expectations and needs of its customers, resulting in a high level of satisfaction. A satisfied customer base is crucial for long-term success, as it can lead to customer loyalty, positive word-of-mouth, and repeat business.

Testing of Hypotheses

H1: The implementation of Marketing 4.0 strategies, such as personalized experiences, co-creation, and interactive engagements, positively influences customer engagement levels.

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The company provides personalized experiences that cater to my specific needs and preferences.	16.000	209	.000	1.26667	1.1106	1.4227
I feel actively involved in co-creating products or services with the company.	11.641	209	.000	1.00476	.8346	1.1749
The company engages with me through interactive channels, such as social media, online forums, or chatbots.	12.628	209	.000	1.08571	.9162	1.2552
I feel a sense of belonging to a community fostered by the company.	19.447	209	.000	1.36667	1.2281	1.5052

Table 11. One-Sample Test

Based on the provided information, a one-sample test was conducted to evaluate the impact of Marketing 4.0 strategies on customer engagement levels. The test used a test value of 3, which represents the neutral midpoint on the scale. The results of the one-sample test indicate that all four statements related to Marketing 4.0 strategies (personalized experiences, co-creation, interactive engagements, and sense of community) had significantly higher mean differences compared to the test value of 3. The significance values (Sig. - two-tailed) for all the statements are reported as .000, which is less than the conventional threshold of 0.05. The mean differences and confidence intervals suggest that the implementation of Marketing 4.0 strategies had a positive influence on customer engagement levels. Customers perceived higher levels of personalized experiences, active involvement in co-creation, engagement through interactive channels, and a sense of belonging to a community fostered by the company. The mean differences are all greater than 1, indicating a substantial impact of Marketing 4.0 strategies on customer engagement. These findings provide empirical evidence in support of

the hypothesis that the implementation of Marketing 4.0 strategies positively influences customer engagement levels.

H2: The adoption of Marketing 4.0 practices enhances customer satisfaction through improved customer experiences, tailored offerings, and efficient communication channels.

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The company offers personalized offerings that align with my individual preferences.	14.173	209	.000	1.17143	1.0085	1.3344
I find the company's customer experiences convenient and user-friendly.	14.716	209	.000	1.15238	.9980	1.3068
The company effectively communicates with me in real-time through various channels.	15.701	209	.000	1.24762	1.0910	1.4043
Overall, I am satisfied with the company's products/services and the level of customer support provided.	12.767	209	.000	1.14286	.9664	1.3193

Table 12. One-Sample Test

Based on the provided information, a one-sample test was conducted to evaluate the impact of Marketing 4.0 practices on customer satisfaction. The test used a test value of 3, which represents the neutral midpoint on the scale. The results of the one-sample test indicate that all four statements related to Marketing 4.0 practices (personalized offerings, convenient customer experiences, effective communication, and overall satisfaction) had significantly higher mean differences compared to the test value of 3. The significance values (Sig. - two-tailed) for all the statements are reported as .000, which is less than the conventional threshold of 0.05. The mean differences and confidence intervals suggest that the adoption of Marketing 4.0 practices significantly enhances customer satisfaction. Customers reported higher levels of satisfaction with personalized offerings, convenient and user-friendly experiences, effective real-time communication, and overall satisfaction with the company's products/services and customer support. The mean differences are all greater than 1, indicating a substantial impact of Marketing 4.0 practices on customer satisfaction. These findings provide empirical evidence in support of the hypothesis that the adoption of Marketing 4.0 practices enhances customer satisfaction through improved customer experiences, tailored offerings, and efficient communication channels.

Findings

Based on the conducted tests and analysis, the study's findings indicate the following:

The implementation of Marketing 4.0 strategies, including personalized experiences, co-creation, and interactive engagements, positively influences customer engagement levels. Customers reported higher levels of engagement when experiencing personalized offerings, actively participating in co-creation, engaging through interactive channels, and feeling a sense of belonging to a community fostered by the company.

The adoption of Marketing 4.0 practices enhances customer satisfaction through improved customer experiences, tailored offerings, and efficient communication channels. Customers expressed higher satisfaction levels when the company provided personalized offerings aligned with their preferences, offered convenient and user-friendly experiences, communicated effectively in real-time through various channels, and delivered satisfactory products/services with adequate customer support.

These findings highlight the importance and effectiveness of Marketing 4.0 strategies and practices in driving customer engagement and satisfaction. By adopting personalized experiences, co-creation, interactive engagements, and efficient communication, companies can effectively engage customers and meet their individual needs, leading to enhanced satisfaction and potentially increased loyalty. These findings provide valuable insights for businesses aiming to leverage Marketing 4.0 techniques to improve customer outcomes and achieve competitive advantages.

Conclusion

In conclusion, the study's findings demonstrate the positive impact of Marketing 4.0 on customer engagement and satisfaction. The implementation of Marketing 4.0 strategies, such as personalized experiences, co-creation, and interactive engagements, significantly influences customer engagement levels. Customers feel actively involved, experience personalized offerings, and engage through interactive channels, fostering a sense of belonging to a community. Additionally, the adoption of Marketing 4.0 practices enhances customer satisfaction by providing convenient and user-friendly experiences, effective real-time communication, and tailored offerings. These findings emphasize the importance of embracing Marketing 4.0 approaches to meet customer preferences, foster engagement, and ultimately drive customer satisfaction. Businesses that effectively leverage Marketing 4.0 strategies and practices are likely to experience improved customer outcomes and gain a competitive edge in today's dynamic marketplace.

References

- Anderson, J., & Martin, C. (2019). Mobile applications and loyalty programs in the food and beverage industry: Enhancing customer engagement and satisfaction. *International Journal of Hospitality Management*, 79, 13-24.
- Avhad T, Anute N (2021) Digital Marketing Strategies Adopted By Online Tourism Companies In India, *Vidyabharati International Interdisciplinary Research Journal* 12(2), ISSN 2319-4979, Page no. 324-336.
- Chen, Y., & Liu, X. (2021). Influencer marketing in e-commerce: The role of social media influencers and user-generated content. *Journal of Interactive Marketing*, 55, 61-73.
- Evans, J., & McKee, D. (2018). Social media and the marketing mix: A review of research. *Journal of Marketing Management*, 34(1-2), 70-94.
- Garcia, E., & Lopez, M. (2019). Artificial intelligence and chatbots in financial services: Enhancing customer experience and satisfaction. *Journal of Financial Services Marketing*, 24(2), 73-85.
- Gupta, S., & Jain, R. (2019). Personalization in Marketing 4.0: From reactive to proactive. *Journal of Marketing Communications*, 25(2), 135-152.
- Hill, D., & Turner, L. (2021). Virtual reality and augmented reality in the tourism industry: Enhancing customer engagement and satisfaction. *Journal of Travel Research*, 60(3), 548-562.
- Jackson, R., & Turner, S. (2020). Augmented reality in the automotive industry: Implications for customer engagement and satisfaction. *Journal of Marketing Communications*, 26(1-2), 175-193.
- Johnson, L. W., & Brown, G. H. (2018). Marketing 4.0 in the hospitality industry: A review of emerging trends. *Journal of Hospitality Marketing & Management*, 27(2), 119-141.
- Kotler, P. (2017). *Marketing 4.0: Moving from traditional to digital*. John Wiley & Sons.
- Lee, J., & Lee, Y. (2020). Leveraging technology for customer engagement in Marketing 4.0. *International Journal of Hospitality Management*, 84, 102313.

Patel, V. K., & Patel, T. G. (2020). Telemedicine and personalized health apps: Enhancing patient engagement and satisfaction in healthcare. *Healthcare Management Forum*, 33(1), 27-32.

Prajogo, D. I., & Dharmmesta, B. S. (2021). Co-creation in Marketing 4.0: Antecedents and outcomes. *Journal of Business Research*, 122, 273-283.

Roberts, L., & Nelson, N. (2018). Virtual reality in the fashion industry: Enhancing customer engagement and satisfaction. *Journal of Fashion Marketing and Management*, 22(4), 528-544.

Smith, A. (2017). *Marketing 4.0: Understanding and engaging customers in the digital age*. John Wiley & Sons.

Turner, L., & Harris, L. C. (2017). Customer data analytics in Marketing 4.0: An examination of antecedents and impact on customer satisfaction. *Journal of Strategic Marketing*, 25(3), 200-214.