Social Media Factors Creating Impact on Customer Engagement

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Abstract

Customer engagement on social media has become a crucial factor in modern digital marketing. This study aims to examine the impact of various social media factors on customer engagement, providing insights into how businesses can optimize their social media strategies. The research focuses on five independent variables—Entertainment, Credibility, Interactivity, Sharing Behavior, and Commenting Behavior—and their influence on the dependent variable, Customer Engagement.

To achieve this objective, data was collected from 228 respondents using a structured questionnaire via Google Forms. The responses were analyzed using SPSS and Smart PLS4, ensuring a comprehensive evaluation of relationships among variables. Several key statistical tests were employed, including Descriptive Statistics, Path Coefficient Analysis, R^2 (Coefficient of Determination), Effect Size (f^2), Bootstrapping, and Reliability & Validity Analysis, to ensure the accuracy and robustness of the findings.

The results indicate that social media factors play a significant role in influencing customer engagement. Among the factors studied, Interactivity and Commenting Behavior emerged as the strongest predictors of engagement, suggesting that customers actively participating in discussions and engaging in interactive experiences are more likely to be engaged with a brand. Conversely, Credibility was found to have a minimal impact, indicating that while trustworthiness is important, it may not be the primary driver of engagement in the social media landscape.

Based on these findings, businesses should prioritize strategies that enhance interactivity and encourage user participation, such as interactive posts, engaging discussions, and features that facilitate real-time responses. By leveraging these elements, brands can create a more engaging social media environment, fostering stronger relationships with customers and enhancing overall brand engagement.

Keywords:

Customer Engagement, Social Media, Entertainment, Credibility, Interactivity, Sharing Behavior, Commenting Behavior, Digital Marketing, SPSS, Smart PLS4, Path Coefficient Analysis, R^2 (Coefficient of Determination), Effect Size (f^2), Bootstrapping, Reliability Analysis, Validity Analysis, User Participation, Brand Engagement.

Introduction

Social media has transformed the way brands interact with customers, shifting from one-way communication to a dynamic, two-way engagement model. Kaplan and Haenlein (2010) define social media as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, allowing the creation and exchange of user-generated content.” Unlike traditional media, where businesses controlled

messaging, social media enables real-time interactions, allowing customers to share opinions, ask questions, and influence brand perception. This shift has made social media an essential tool for businesses looking to enhance customer engagement.

With platforms like Facebook, Instagram, Twitter, and LinkedIn, businesses can connect with customers on a more personal level. Mangold and Faulds (2009) emphasize the power of social media in shaping consumer opinions and building brand loyalty. Customers are no longer passive recipients of marketing messages but active participants who engage with brands through likes, comments, and shares. The ability to create interactive and personalized content has given businesses new ways to maintain customer interest and foster long-term relationships.

Several factors impact customer engagement on social media, including content quality, posting frequency, responsiveness, and influencer collaborations. Ashley and Tuten (2015) highlight that engaging and valuable content significantly enhances customer interactions. High-quality posts, such as product demonstrations, educational content, and user-generated testimonials, encourage users to interact with brands. Additionally, Goh, Heng, and Lin (2013) found that maintaining a consistent posting schedule and responding promptly to customer queries increases engagement and strengthens trust.

Understanding these factors is crucial for businesses to develop effective digital marketing strategies. By focusing on relevant content, timely responses, and collaborations with influencers, companies can enhance their online presence and create stronger connections with their audience. As social media continues to evolve, brands must adapt their strategies to maintain engagement, build loyalty, and stay competitive in the digital landscape. This study explores these social media factors in detail, examining their role in shaping customer engagement and providing insights for businesses to optimize their online interactions.

Objectives

1. Examine the impact of social media factors on customer engagement.
2. Identify key drivers like entertainment, credibility, interactivity, sharing, and commenting behavior.
3. Provide insights for businesses to enhance engagement strategies.

Literature Review

Several drivers were found through thorough research on the impact of social media on customer engagement. Thus, the dependent variable is customer engagement; its independent variables are entertainment, credibility, interactivity, sharing behavior, and commenting behavior.

Entertainment is among the key factors that pull users to interact with content posted on social media. According to McQuail (1983) and Pöyry (2013), entertainment content fulfills the psychological needs of users for rest and escapism, compelling them to interact with such posts that elicit a feeling of amusement. Such engagement leads to stronger relationships between users and brands, which in turn leads to long-term interactions.

Credibility also determines customer engagement because the people engage with content that they can trust. According to Hovland et al. (1953), perceived credibility of content is a very crucial factor for engagement because people's trust in the brand enhances repeat interaction. Tafesse & Wien (2018) argue that credible content is the basis of long-term customer relationships since it creates trust and reliability.

Interactive features give an enhanced user experience and involvement through enabling communication from the brand to the consumer and vice versa. According to Liu and Shrum (2002), the interactive nature of polls,

Q&A sessions, and live chats allows users to feel involved with the brand that then leads to more involvement (Vivek et al., 2012).

The second critical driver is sharing behavior. According to Chu and Kim (2011), content-sharing users help spread the reach of a brand, and such behavior not only increases the visibility of a brand but also strengthens the customer relationship through the manifestation of personal alignment with the brand. Commenting behavior, according to Muntinga et al. (2011), creates conversations that increase brand visibility and create a sense of community, thereby further increasing engagement.

In a nutshell, entertainment, credibility, interactivity, sharing, and commenting behaviors are independent variables that highly influence customer engagement on social media. With this understanding, businesses can develop content strategies to facilitate deeper, more meaningful interactions and foster stronger relationships with customers.

Does Social Media Marketing Trigger Customer Engagement In Virtual Brand Communities?

This study by Changani, Kumar, and Tripathi (2023) looks at how social media marketing impacts the level of customer engagement within virtual brand communities. This has been shown to be able to create loyalty and participation in brand-centric interactions through the outcome-based metrics to establish the relationship between digital strategies and customer involvement, making strategic importance of social media indispensable to build committed communities.

Influence Of Social Media Marketing On Customer Engagement

Farook and Abeysekara (2022) examine how social media marketing affects customer engagement with the increasing interactivity between brands and customers. Their research demonstrates that through social media, brands can communicate and also add value through engagement, thereby deepening the relationship between customers and brands. The findings show that consumer behavior is affected by the use of social media and makes them bond deeper with brands.

Impact And Experience Of Social Media Marketing On Customer Engagement

Bhargava and Ojha (2023) discuss the role of social media marketing in customer engagement, focusing on experiential content such as immersive videos and interactive posts. Such content emotionally connects with consumers, making them more attached to the brand. This calls for brands to transcend transactional interactions and create meaningful experiences.This will, in turn, enable brands to develop higher loyalty and deepen relationships with customers. This way, social media marketing becomes more of an engagement tool rather than just advertising.

Determinants Of Customer Brand Engagement On Social Media Sites: A Conceptual Framework

Jayasingh proposed a conceptual framework in 2021, identifying some of the most important determinants of consumer engagement with social media, such as content quality, interactivity, and emotional engagement. This conceptual foundation provides a theoretical starting point that could explain reasons behind consumer engagement and explains mechanisms of how social media strengthens relationships between brands and consumers.

Customer Engagement Behavior In Social Media Advertising: Antecedents And Consequences

Chiang, Lo, and Wang (2022) explain the behaviors of engaged customers on social media, which identifies antecedents and outcomes. The findings show that for engagement, content relevance and emotional appeal are essential factors leading to positive brand perceptions and thus increased loyalty. This research gives insight into the psychological motivators behind customer engagement as well as its long-lasting effects on consumer-brand relationships.

Research Methodology

This study examines the impact of social media factors on customer engagement. The research follows a quantitative approach using a structured survey to collect data from 228 respondents through Google Forms. The sample consists of active social media users who engage with brands online.

Data Collection: Primary data is gathered using a questionnaire with close-ended questions based on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The questions focus on five independent variables: entertainment, credibility, interactivity, sharing behavior, and commenting behavior, and their effect on customer engagement (dependent variable).

Data Analysis: The collected data is analyzed using SPSS software and Smart PLS 4 to ensure comprehensive statistical evaluation. These tools help in understanding the relationships between independent variables (entertainment, credibility, interactivity, sharing behavior, and commenting behavior) and the dependent variable (customer engagement).

Descriptive Statistics: Descriptive analysis is conducted in SPSS to summarize the demographic characteristics of the respondents, including age, gender, social media usage patterns, and engagement levels. Measures such as mean, standard deviation, and frequency distribution help in understanding data trends.

Reliability Testing: To ensure consistency and reliability of the survey instrument, Cronbach's Alpha is used. A value above 0.7 indicates acceptable reliability, confirming that the items measuring each variable produce consistent results.

Correlation Analysis: Pearson's correlation analysis in SPSS examines the strength and direction of relationships between independent variables and customer engagement. This helps identify whether factors like entertainment or credibility significantly impact engagement.

Regression Analysis: A multiple regression analysis in SPSS is performed to measure how much each independent variable influences customer engagement. This identifies the most significant predictors among entertainment, credibility, interactivity, sharing behavior, and commenting behavior.

Structural Equation Modeling (SEM) in Smart PLS 4:

To further validate the model, Smart PLS 4 is used for Structural Equation Modeling (SEM). SEM helps assess the direct and indirect relationships among variables. This includes:

- Path analysis to examine the impact of each independent variable on customer engagement.
- Factor loadings to determine the strength of each survey item in measuring the underlying construct.
- Model fit evaluation to confirm the reliability and validity of the conceptual framework.

By combining SPSS and Smart PLS 4, the study ensures a robust statistical analysis, providing a clearer understanding of how social media factors drive customer engagement.

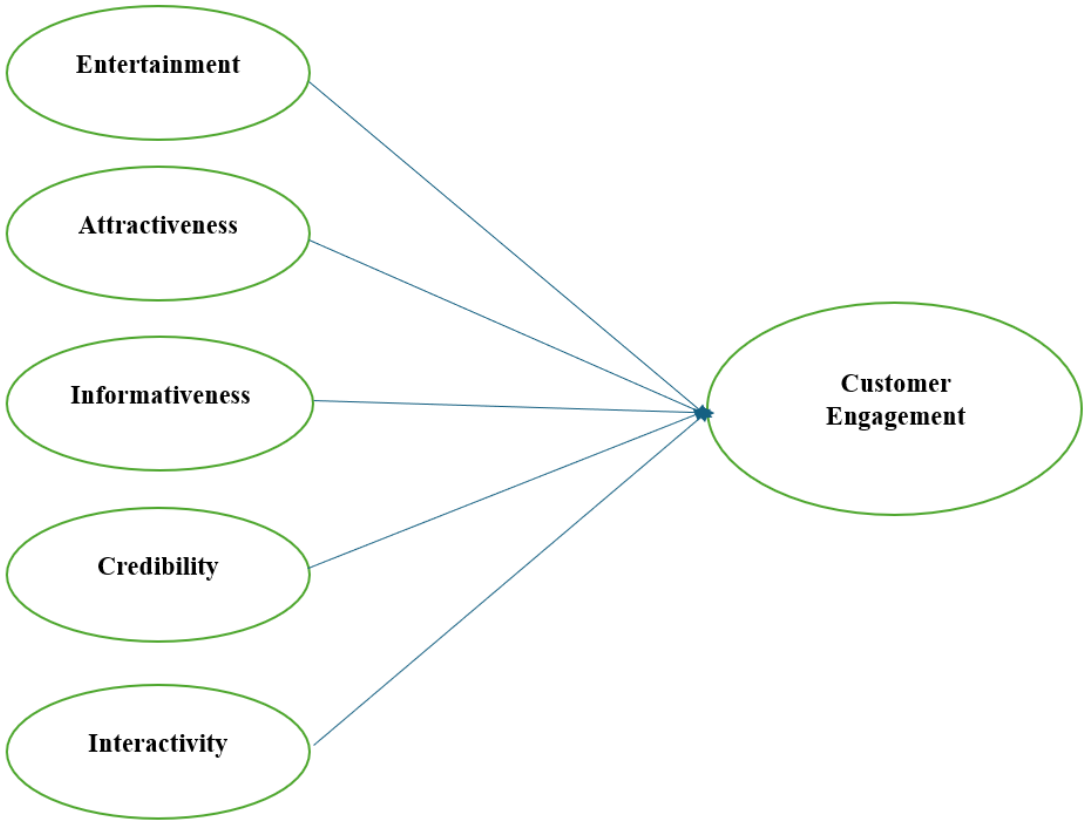
Sampling Technique: The study uses a non-probability convenience sampling method, targeting users who actively follow and engage with brand pages on social media platforms like Instagram, Facebook, and Twitter.

Hypothesis Development

H1: Entertainment has a positive impact on customer engagement.
H2: Credibility of social media content increases customer engagement.
H3: Interactivity (polls, live chats, Q&A) positively influences customer engagement.
H4: Sharing behavior enhances customer engagement.
H5: Commenting behavior strengthens customer engagement.

These hypotheses will be tested through statistical analysis to validate their significance in shaping customer engagement on social media.

Conceptual Framework



Data Analysis

Demographics

Variable	Category	Frequency	Percentage (%)
Gender	Female	121	53.1
	Male	107	46.9
Age	18-24	104	45.6
	25-34	96	42.1
	35-44	16	7
	45-54	9	3.9
	55+	3	1.3
Occupation	Student	117	51.3
	Employee	93	40.8
	Businessman	13	5.7
	Others	5	2.2
Education	Master's	122	53.5
	Diploma/Bachelor's	90	39.5
	Doctoral	7	3.1
	High School	9	3.9
Marital Status	Unmarried	178	78.1
	Married	50	21.9
Social Media Usage	Yes	228	100

- Gender: Slight female majority (53.1%), ensuring diverse views.
- Age: Mostly young adults (18-34 years, 87.7%), with minimal participation from 55+ (1.3%).
- Occupation: Students (51.3%) and employees (40.8%) dominate; business professionals and others have lower engagement.
- Education: Majority hold a Master's (53.5%) or Bachelor's/Diploma (39.5%); fewer Doctoral (3.1%) and High School (3.9%) users.
- Marital Status: Mostly unmarried (78.1%), possibly having more time for social media.
- Usage: 100% are active social media users, confirming its universal adoption.

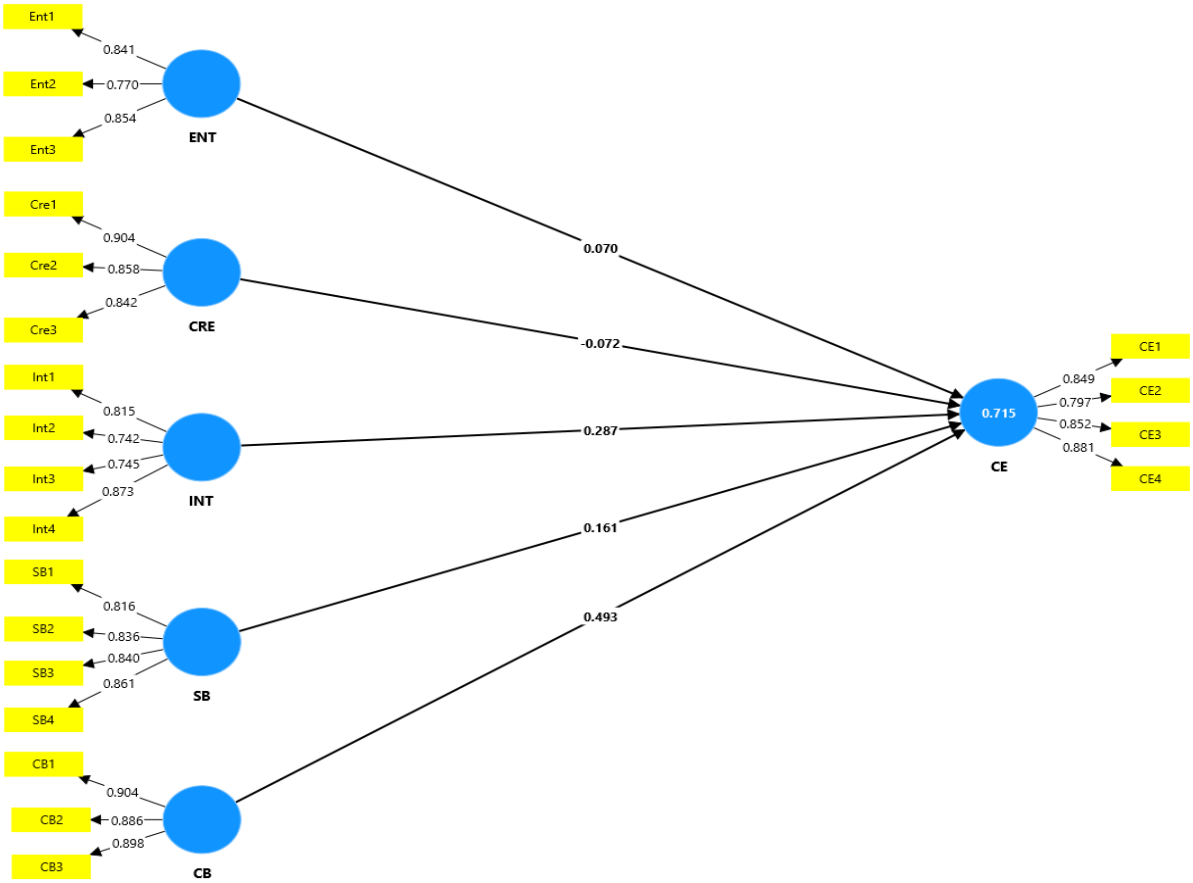
Social Media Platforms Usage

Platforms Used	Frequency	Percentage (%)
Facebook	4	1.8
Facebook, Instagram, X, WhatsApp	16	7
Instagram, X, WhatsApp	29	12.7
Instagram, WhatsApp, YouTube	43	18.9
Instagram, WhatsApp, LinkedIn, YouTube	50	21.9
All platforms (Full combination)	28	12.3
Less common (Niche combinations)	58	25.4

- Multi-platform preference: Most users engage across multiple platforms; only 1.8% use Facebook exclusively.
- Top combination: Instagram, WhatsApp, and LinkedIn/YouTube (21.9%) are the most popular mix, balancing social and professional needs.
- Dominant platforms: Instagram and WhatsApp are widely used for communication and content sharing.
- High engagement: 12.3% use all platforms, showing strong digital adaptability.
- Personalized use: 25.4% follow unique combinations, reflecting diverse social media habits.
- Key drivers: Instagram, WhatsApp, and YouTube lead engagement, while LinkedIn is growing among professionals.

Step 1 - Measurement Model

A)Individual Item Reliability



- All indicator loadings exceed 0.70, confirming good reliability.
- The latent constructs (ENT, CRE, INT, SB, CB, CE) show strong measurement consistency.

- The highest loading is 0.904 (CB1, Cre1), indicating strong item reliability.
- The lowest loading is 0.742 (Int2), but still acceptable.

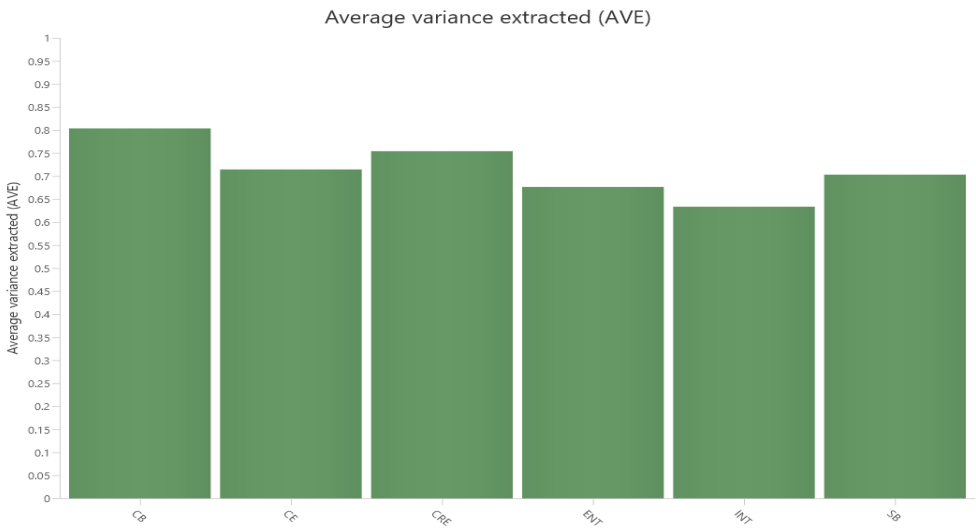
Overall, the measurement model demonstrates high reliability for all constructs.

B)Composite Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
CB	0.878	0.880	0.925	0.803
CE	0.866	0.871	0.909	0.714
CRE	0.842	0.902	0.902	0.754
ENT	0.765	0.789	0.862	0.676
INT	0.805	0.813	0.873	0.633
SB	0.859	0.863	0.904	0.703

- Cronbach's Alpha (≥0.7) – All constructs have good internal consistency, with values ranging from 0.765 (ENT) to 0.878 (CB), ensuring reliable measurement.
- Composite Reliability (rho_c ≥ 0.8) – All constructs show strong reliability (0.862 to 0.925), confirming consistency across indicators.
- Average Variance Extracted (AVE ≥ 0.5) – All constructs exceed the 0.5 threshold, indicating good convergent validity, with CB (0.803) having the highest AVE.

C)Average Variance Extracted(AVE)



- All constructs have AVE values above 0.5, indicating good convergent validity.
- CB (0.803) has the highest AVE, suggesting strong variance explanation by its indicators.

- INT (0.633) and ENT (0.676) have the lowest AVE, but still meet the acceptable threshold.
- Overall, the constructs effectively capture the variance in their respective indicators, ensuring measurement reliability.

Step 2 - Discriminant Validity

A)Fornell-Larcker Criterion

	CB	CE	CRE	ENT	INT	SB
CB	0.896					
CE	0.797	0.845				
CRE	0.592	0.524	0.868			
ENT	0.532	0.573	0.445	0.822		
INT	0.620	0.700	0.580	0.639	0.796	
SB	0.813	0.739	0.660	0.556	0.646	0.838

- Diagonal values (bold) represent the square root of AVE, confirming all constructs have strong internal validity.
- Each construct's diagonal value is higher than its correlations with other constructs, indicating good discriminant validity.
- Highest correlation: CB and CE (0.797), suggesting a strong relationship.
- Lowest correlation: CRE and ENT (0.445), indicating weak association.
- Overall, the constructs are distinct and reliable for analysis.

B)HTMT Discriminant Criteria

	CB	CE	CRE	ENT	INT	SB
CB						
CE	0.909					
CRE	0.666	0.584				
ENT	0.623	0.684	0.508			
INT	0.737	0.835	0.691	0.799		
SB	0.939	0.850	0.753	0.658	0.778	

- All HTMT values are below the threshold of 0.90, except for CB-SB (0.939), indicating potential overlap between these constructs.
- The highest value (CB-SB: 0.939) suggests a strong relationship, which may require further examination.
- Other construct pairs remain within acceptable limits, confirming discriminant validity for most constructs.

- Overall, the constructs are distinct, but CB and SB might need closer evaluation.

Step 3 - Structural Model

A)Path Coefficient of the Research Hypotheses

	Path coefficients
CB -> CE	0.493
CRE -> CE	-0.072
ENT -> CE	0.070
INT -> CE	0.287
SB -> CE	0.161

- CB → CE (0.493): Strong positive impact, indicating CB significantly influences CE.
- CRE → CE (-0.072): Negative and weak, suggesting CRE has little to no effect on CE.
- ENT → CE (0.070): Very weak positive impact, showing ENT has minimal influence on CE.
- INT → CE (0.287): Moderate positive impact, meaning INT contributes to CE.
- SB → CE (0.161): Weak positive effect, implying SB has a small influence on CE.

Overall, CB has the strongest influence on CE, while CRE has a negligible impact.

B)Coefficient of Determination(R2)

	R-square	R-square adjusted
CE	0.715	0.709

- R^2 for CE (0.715): Indicates that 71.5% of the variance in CE is explained by the independent variables.
- Adjusted R^2 (0.709): Slightly lower, accounting for the number of predictors, confirming a strong model fit.

Overall, the model has good explanatory power for CE.

C)Effect Size(F2)

	f-square
CB -> CE	0.272
CRE -> CE	0.009
ENT -> CE	0.010
INT -> CE	0.125
SB -> CE	0.025

- CB → CE (0.272): Moderate to strong effect on CE.
- INT → CE (0.125): Moderate effect on CE.
- SB → CE (0.025): Weak effect on CE.
- ENT → CE (0.010) & CRE → CE (0.009): Negligible effects on CE.

CB has the most significant impact on CE, while CRE and ENT contribute minimally.

Step 4 - BootStrapping

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
CB -> CE	0.493	0.490	0.081	6.057	0.000
CRE -> CE	-0.072	-0.071	0.059	1.211	0.226
ENT -> CE	0.070	0.080	0.068	1.034	0.301
INT -> CE	0.287	0.278	0.088	3.248	0.001
SB -> CE	0.161	0.166	0.117	1.375	0.169

- CB → CE (p = 0.000, t = 6.057): Strong and significant impact on CE.
- INT → CE (p = 0.001, t = 3.248): Moderate and significant impact on CE.
- SB → CE (p = 0.169, t = 1.375), ENT → CE (p = 0.301, t = 1.034), CRE → CE (p = 0.226, t = 1.211): Not significant impacts on CE.

CB and INT significantly influence CE, while CRE, ENT, and SB do not show a statistically significant effect.

Discussion of Findings

This study aimed to analyze the impact of various social media factors—Entertainment (ENT), Credibility (CRE), Interactivity (INT), Sharing Behavior (SB), and Commenting Behavior (CB)—on Customer Engagement (CE). The findings reveal that among these factors, Interactivity (INT) and Commenting Behavior (CB) have a significant positive influence on Customer Engagement, while Entertainment, Credibility, and Sharing Behavior do not show a significant impact.

The significance of Interactivity suggests that when users feel actively involved through discussions, polls, Q&A sessions, or direct communication with brands, they are more engaged. Similarly, Commenting Behavior plays a vital role, indicating that users who participate in conversations by leaving comments or responding to others feel more connected to the brand or content.

On the other hand, the insignificance of Entertainment, Credibility, and Sharing Behavior suggests that simply providing entertaining content, being perceived as credible, or encouraging sharing does not necessarily lead to higher engagement. This indicates that active participation (interaction and commenting) matters more than passive actions (watching or sharing).

Implications

The results have important implications for marketers, content creators, and social media strategists:

1. Focus on Engagement-Driven Content
   - Brands should prioritize content that encourages interactivity such as live sessions, engaging stories, contests, and direct user engagement rather than just posting static or entertaining content.
2. Encourage Meaningful Discussions
   - Given the impact of Commenting Behavior, businesses should create discussion-oriented posts, reply to user comments, and encourage user opinions to enhance engagement.
3. Rethink Entertainment and Credibility Strategies
   - While entertaining and credible content is important, it should be paired with interactive elements (such as quizzes, challenges, or comment-based discussions) to drive engagement effectively.
4. Optimize Social Media Algorithms
   - Social media platforms should refine their algorithms to prioritize posts that encourage active user participation, such as comments and replies, rather than just passive shares.
5. Content Planning for Better Engagement
   - Businesses should focus on interactive campaigns rather than solely relying on viral entertainment or credibility-based content.

Conclusion

This study provides valuable insights into the impact of various social media factors on customer engagement, highlighting the crucial role of active user participation. While entertainment and credibility are often considered important in social media marketing, this research demonstrates that interactivity and commenting behavior have the most significant influence on engagement levels. This indicates that customers are more likely to engage with brands when they have opportunities to interact, respond, and participate in discussions rather than passively consuming content.

For businesses and marketers, the key takeaway is to move beyond traditional content strategies and focus on fostering real-time interactions. Creating content that encourages conversations, user-generated responses, and interactive experiences can significantly boost customer engagement. Features such as live Q&A sessions, polls, interactive stories, and real-time discussions can be leveraged to enhance user involvement. Additionally, brands should actively respond to user comments, encouraging meaningful dialogue to build stronger relationships with their audience.

The findings of this study also suggest that credibility, while important, does not have a strong direct impact on customer engagement. This implies that while users may appreciate trustworthy information, it is not necessarily the primary factor driving active engagement. Marketers should ensure that credibility is maintained but should complement it with more interactive and community-driven content strategies.

Future research can expand on these findings by exploring additional social media behaviors, such as the role of visual content, video engagement, and platform-specific trends. Examining how these factors vary across different industries can also provide more industry-specific insights for businesses. Furthermore, investigating how emerging technologies like AI-driven personalization and augmented reality experiences affect customer engagement could be a valuable area for future exploration.

By leveraging these insights, businesses can build more engaged online communities and enhance the effectiveness of their social media strategies. A well-executed engagement strategy, centered on interactivity and active user participation, can strengthen brand loyalty, improve customer relationships, and ultimately drive long-term success in the digital space.

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