The Influence of Posting Frequency, Content Quality, and Interaction with Customers on Social Media on Customer Loyalty in a Start-up Business

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ABSTRACT

This research investigates the impact of posting frequency, content quality, and interaction with customers on social media on customer loyalty in start-up businesses. A quantitative approach is employed, with data collected from 190 start-up owners or marketing professionals responsible for managing social media accounts. Structural Equation Modeling with Partial Least Squares (SEM-PLS) is used for data analysis. The findings reveal significant positive relationships between posting frequency, content quality, interaction with customers, and customer loyalty. Content quality emerges as a strong predictor of customer loyalty, highlighting the importance of creating engaging and relevant content. Active interaction with customers on social media platforms also positively influences customer loyalty, fostering stronger relationships and brand advocacy. While posting frequency plays a role in maintaining brand visibility, the quality and relevance of content are found to be paramount. These findings have practical implications for start-up businesses seeking to enhance customer loyalty through effective social media engagement strategies.

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1. INTRODUCTION

In an ever-evolving business environment, startups utilize innovative strategies to thrive in a competitive market [1]–[4]. While traditional marketing approaches are essential, the emergence of social media has changed the dynamics of customer engagement, offering new avenues for businesses to connect with their target audiences [5]. Startups, especially in the software industry, face challenges due to novelty and limited resources, making open innovation a valuable tool to drive value proposition innovation and maintain competitive advantage. By integrating freelancers, customers, and academics as strategic resources, startups can enhance their dynamic capabilities, continuously update their operational strategies, and achieve long-term success in fluctuating market conditions.

This strategic approach not only drives innovation but also strengthens startups' position in a highly competitive business landscape.

Social media platforms indeed provide start-ups with invaluable opportunities to enhance their brand visibility, engage with prospective customers, and nurture enduring relationships. Research highlights that active engagement on social media can significantly increase a start-up's chances of success and funding from venture capitalists [6]. Analyzing start-ups' social media content over their life cycle reveals how communication strategies evolve, emphasizing the importance of adapting content based on the business maturation phase [7], [8]. Furthermore, social media marketing plays a crucial role in influencing customer loyalty and perception, particularly for start-up businesses [7]. Studies also emphasize the significant impact of social media as a strategic capability on start-up performance, with social capital mediating this relationship, ultimately enhancing sustainability and overall performance [9].

Building brand loyalty on social media is crucial for sustainable business growth [10]. While social media offers a vast platform, understanding effective strategies is essential. Research highlights various antecedents and consequences of brand loyalty in social media communities, emphasizing the significance of consumer self-identity, brand community-related theories, and relationship-based theories [11]. Moreover, the alignment of sustainability with customer loyalty poses challenges due to differing premises, with loyalty focusing on retention and sales, while sustainability aims at resource efficiency and eco-friendly practices [12]. To foster customer loyalty effectively, businesses must integrate sustainability pillars into their strategies, considering consumer identification, involvement, and commitment to sustainability [13]. By addressing these aspects and leveraging social media platforms strategically, organizations can cultivate lasting customer relationships, drive brand advocacy, and enhance positive word-of-mouth, ensuring sustainable business success.

This research endeavors to delve into the intricate dynamics between social media engagement and customer loyalty within the realm of start-up businesses, seeking to unravel the impact of three key factors: posting frequency, content quality, and interaction with customers on social media, on the development and sustenance of customer loyalty. By quantitatively analyzing these factors, this study aims to achieve the following objectives: explore the relationship between posting frequency on social media platforms and customer loyalty in start-up businesses, investigate how the quality of content shared on social media influences customer perceptions and loyalty, and examine the role of interaction with customers on social media in nurturing long-term relationships and fostering brand loyalty.

2. LITERATURE REVIEW

2.1 Social Media and Customer Loyalty

Social media has revolutionized customer-brand interactions, providing a vital platform for engagement and relationship-building [14]. Research highlights the significant impact of social media on customer loyalty through enhanced brand-customer interactions and emotional connections [15]. Customers engaging with brands on social media are inclined towards loyalty behaviors like repeat purchases and advocacy, showcasing the pivotal role of social media in shaping customer perceptions and behaviors [16]. Factors such as trust, interaction, entertainment, and online engagement play crucial roles in influencing brand loyalty through social media marketing efforts [17]. By leveraging social media ethically and transparently, brands can establish authentic relationships with customers, driving them to try new products, make purchases, and ultimately become loyal patrons [18].

2.2 Posting Frequency

Research on social media engagement highlights the importance of post frequency in

maintaining audience interest and fostering relationships. Studies emphasize that finding the right balance between consistency and relevance in posting frequency is crucial for brands [19]. While some argue that higher posting frequency can increase visibility and engagement [20], others caution against overwhelming followers with excessive content [21]. Factors such as industry type, target audience demographics, and platform algorithms play a role in determining the optimal posting frequency that maximizes engagement without inundating followers [22]. It is essential for brands to consider these factors to tailor their posting strategies effectively and sustain audience interest over time [23].

2.3 Content Quality

The quality of content shared on social media significantly influences customer perceptions and loyalty, playing a crucial role in capturing audience attention and fostering positive brand associations [15], [24], [25]. High-quality, relevant, and visually appealing content enhances engagement and differentiates brands in competitive markets, showcasing a commitment to customer satisfaction [14]. Investing in compelling and value-added content tailored to the target audience's interests and preferences leads to favorable responses and increased repeat interactions, ultimately driving customer loyalty on social media platforms [26]. By focusing on content quality, brands can strengthen their relationships with customers, boost engagement, and stand out in the crowded digital landscape.

2.4 Interaction with Customers

Active engagement with customers on social media plays an important role in fostering brand loyalty by humanizing the brand, strengthening emotional connections, and building trust [14]–[16]. Brands that respond quickly to customer questions and feedback are perceived as more trustworthy and customer-centric [24]. In addition, creating a sense of community and dialog among followers through user-to-user interactions and user-generated content can increase brand loyalty [27]. By actively engaging with customers, soliciting input

from them, and incorporating their feedback into product development or marketing strategies, brands demonstrate a genuine commitment to customer satisfaction and empowerment, further strengthening brand loyalty.

2.5 Conceptual Framework and Hypothesis Development

The conceptual framework for this study revolves around the central constructs of social media engagement and customer loyalty in the context of start-up businesses. Social media engagement encompasses various factors such as content quality, interaction with customers, and posting frequency, which influence customer perceptions, attitudes, and behaviors towards a brand or business. Customer loyalty, on the other hand, represents the degree of commitment, attachment, and repeat patronage demonstrated by customers towards a particular brand or business. The conceptual framework illustrates the relationships between these key constructs, suggesting that effective social media engagement strategies can positively impact customer loyalty, thereby contributing to the long-term success and sustainability of start-up businesses.

Research from various studies supports the notion that high-quality and engaging content on social media platforms plays a crucial role in enhancing brand perceptions, increasing customer engagement, and fostering emotional connections with the brand, ultimately leading to greater customer loyalty [14], [15], [24], [25], [28]. Specifically, findings indicate that effective social media marketing activities, social interactivity, perceived quality, content aesthetic quality, and customer engagement are significant factors influencing brand loyalty. The use of Structural Equation Modelling (SEM) in these studies highlights the complex relationships between social media marketing, customer engagement, and brand loyalty, emphasizing the importance of developing compelling content strategies, maintaining brand trust, and enhancing customer experiences to

cultivate long-term brand loyalty and positive brand perceptions.

H1: There is a positive relationship between Content Quality on social media and Customer Loyalty in start-up businesses.

Active engagement with customers on social media platforms, such as through likes, comments, direct messages, and personalized interactions, plays a crucial role in strengthening relationships, building trust, and fostering brand advocacy, ultimately enhancing customer loyalty [24], [29], [30]. Research indicates that customer involvement and empowerment in social media brand communities lead to increased brand commitment and loyalty, especially when users are actively engaged in the community [14]. Social media marketing activities, social interactivity, and perceived quality are significant factors influencing brand loyalty among users, with effective strategies enhancing user loyalty to the brand [27]. Furthermore, the emotional connection between a brand and a customer, facilitated through social networking sites, is a key driver of customer engagement and loyalty. Therefore, actively engaging with customers on social media can have a profound impact on building lasting relationships, trust, and advocacy, ultimately driving customer loyalty.

H2: Interaction with Customers on social media positively influences Customer Loyalty in start-up businesses.

Consistent presence and regular posting on social media platforms play a crucial role in enhancing brand visibility, driving customer engagement, and reinforcing brand recall, ultimately fostering long-term customer loyalty [15], [31]–[34]. Research indicates that social media marketing activities positively impact brand loyalty, brand awareness, and customer loyalty, with components like entertainment, trendiness, and brand image significantly influencing customer perceptions and behaviors. Moreover, maintaining a solid social media presence is associated with improved brand awareness, customer loyalty, and sales growth, particularly in industries like fashion and cosmetics. By leveraging

digital platforms effectively, brands can create a positive image, build strong customer relationships, and increase brand attachment and trust, leading to enhanced customer loyalty over time.

H3: Posting Frequency on social media is positively associated with Customer Loyalty in start-up businesses.

3. METHODS

3.1 Research Design

This study adopts a quantitative research design to investigate the relationship between posting frequency, content quality, interaction with customers on social media, and customer loyalty in start-up businesses. A cross-sectional survey method is employed to collect data from a sample of 190 start-up owners or marketing professionals responsible for managing social media accounts.

3.2 Sampling

The sampling frame comprises start-up businesses operating in diverse industries, including technology, e-commerce, hospitality, and fashion. A stratified random sampling technique is utilized to ensure adequate representation across different sectors and geographic locations. The sample size of 190 is determined based on statistical considerations to achieve sufficient power for the proposed analyses.

3.3 Data Collection

Data is collected through an online survey distributed to participants via email, social media channels, and relevant online communities. The survey questionnaire includes items designed to measure posting frequency, content quality, interaction with customers on social media, and indicators of customer loyalty. Participants are asked to rate each item on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Additionally, demographic information such as age, gender, education, and industry sector are collected to provide contextual insights.

3.4 Data Analysis

The collected data is analyzed using Structural Equation Modeling (SEM) with Partial Least Squares (PLS) using the software

tool SmartPLS 3, which is particularly suited for analyzing complex relationships in small or non-normally distributed samples, making it an ideal choice for this study. The analysis proceeds in several steps: Measurement Model Assessment, where the reliability and validity of the measurement model are evaluated to ensure the robustness of the constructs through Cronbach's alpha, composite reliability, factor loadings, average variance extracted (AVE), and discriminant validity; Structural Model Estimation, which tests the hypothesized relationships between posting frequency, content quality, interaction with customers, and customer loyalty, assessing path coefficients for significance and directionality; Bootstrapping Procedure, employed to enhance the robustness of the results by estimating standard errors, t-values, and confidence intervals for path coefficients, mitigating potential biases and providing more accurate estimates of model parameters, particularly in smaller samples; and Model Fit Assessment, where the overall fit of the structural model is evaluated using goodness-of-fit measures such as the goodness-of-fit index (GoF) and R^2 values for endogenous constructs, providing insights into the predictive power of the model.

4. RESULTS AND DISCUSSION

The demographic characteristics of the sample provide insights into the composition of the participants involved in the study

Table 1. Demographic Sample

Demographic Characteristic	Sample Size	Percentage
Gender (Male)	95	50%
Gender (Female)	95	50%
Age (years)		
- 18-24	30	15.8%
- 25-34	65	34.2%
- 35-44	45	23.7%
- 45-54	30	15.8%
- 55+	20	10.5%
Education Level		
- High School	20	10.5%
- Bachelor's Degree	90	47.4%
- Master's Degree	60	31.6%
- Doctoral Degree	20	10.5%
Business Sector		
- Technology	50	26.3%
- Retail	40	21.1%
- Services	60	31.6%
- Hospitality	20	10.5%
- Other	20	10.5%

The sample exhibits a balanced Gender Distribution, with male and female participants each representing 50% of the total sample size. This equitable representation ensures the study's ability to account for potential gender differences in social media usage, preferences, and perceptions, thereby facilitating more robust and generalizable findings. Additionally, the Age Distribution reflects a diverse range of age groups, with the majority falling within the 25-34 age bracket (34.2%). This demographic profile suggests the study captures perspectives and behaviors of individuals in their prime working and consumer years, likely active users of social media platforms influential in shaping brand perceptions and loyalty. Moreover, the Education Level varies, with a notable

proportion holding bachelor's degrees (47.4%) and master's degrees (31.6%), indicating higher education levels and potentially greater digital literacy among participants. This diversity enhances the study's insights into engagement behaviors and expectations on social media platforms. Furthermore, the participants represent a diverse array of Business Sectors, including technology, retail, services, hospitality, and others. This variation ensures broad representation of start-up businesses across different domains, facilitating a comprehensive analysis of social media engagement and customer loyalty dynamics across various industries.

The measurement model serves as the foundation for assessing the validity and reliability of the constructs included in the study. Validity refers to the extent to which a measurement tool accurately captures the construct it is intended to measure, while reliability reflects the consistency and stability of the measurement over time. In this section, we will discuss the validity and reliability of the constructs, namely Content Quality, Customer Loyalty, Interaction with Customers, and Posting Frequency, based on the provided Cronbach's alpha, rho_A, composite reliability, and average variance extracted (AVE) values.

4.1 Validity and Reliability

Table 2. Validity and Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Content Quality	0.902	0.902	0.932	0.773
Customer Loyalty	0.910	0.912	0.930	0.691
Interaction with Customers	0.901	0.906	0.927	0.716
Posting Frequency	0.916	0.922	0.941	0.799

Content Quality, Customer Loyalty, Interaction with Customers, and Posting Frequency each demonstrate robust reliability and validity within the measurement model. For Content Quality, the high Cronbach's Alpha of 0.902, rho_A of 0.902, Composite Reliability of 0.932, and AVE of 0.773 signify strong internal consistency and convergent validity. Similarly, Customer Loyalty exhibits reliability and validity, with Cronbach's Alpha of 0.910, rho_A of 0.912, Composite Reliability of 0.930, and AVE of 0.691, although slightly lower than Content Quality. Interaction with Customers displays high internal consistency, reliability, and convergent validity, with Cronbach's Alpha of 0.901, rho_A of 0.906, Composite Reliability of 0.927, and AVE of 0.716. Moreover, Posting Frequency showcases excellent reliability and validity, characterized by Cronbach's Alpha

of 0.916, rho_A of 0.922, Composite Reliability of 0.941, and AVE of 0.799. These metrics collectively affirm the strong reliability and validity of the constructs in the measurement model, enhancing the credibility and robustness of the study's findings.

4.2 Loading Factors

The loading factors represent the strength and direction of the relationship between each observed indicator (measurement item) and its corresponding latent construct (variable). Higher loading factors indicate a stronger association between the indicator and the construct. In this discussion, we will analyze the loading factors for each measurement item across the constructs of Content Quality, Customer Loyalty, Interaction with Customers, and Posting Frequency.

Table 3. Loading Factors

	Content Quality	Customer Loyalty	Interaction with Customers	Posting Frequency
CL.1		0.858		
CL.2		0.840		
CL.3		0.803		
CL.4		0.771		
CL.5		0.878		
CL.6		0.832		
CQ.1	0.865			
CQ.2	0.897			
CQ.3	0.905			
CQ.4	0.847			
IC.1			0.866	
IC.2			0.862	
IC.3			0.830	
IC.4			0.845	
IC.5			0.828	
PF.1				0.863
PF.2				0.931
PF.3				0.916
PF.4				0.861

The loading factors for the measurement items related to Content Quality (CQ.1, CQ.2, CQ.3, and CQ.4) are all above 0.8, indicating strong associations with the underlying construct. Similarly, the loading factors for the measurement items related to Customer Loyalty (CL.1 to CL.6) are predominantly above 0.8, encompassing various aspects of customer loyalty and effectively capturing its multidimensional nature. The loading factors for the measurement items related to Interaction with Customers (IC.1 to IC.5) consistently exceed 0.8, reflecting the construct's multidimensional nature and its significance in fostering customer engagement and relationship-building. Moreover, the loading factors for the measurement items related to

Posting Frequency (PF.1 to PF.4) are uniformly high, providing a comprehensive assessment of the construct's role in social media engagement. These findings underscore the robustness and validity of the measurement model, as the measurement items effectively capture the essence of their respective constructs and contribute significantly to the overall measurement model.

4.3 Discriminant Validity

Discriminant validity refers to the extent to which a construct is distinct from other constructs in the measurement model. It ensures that each construct measures a unique aspect of the phenomenon under study and is not merely a reflection of other constructs.

Table 4. Validitas Diskriminan

	Content Quality	Customer Loyalty	Interaction with Customers	Posting Frequency
Content Quality	0.879			

Customer Loyalty	0.722	0.831		
Interaction with Customers	0.618	0.859	0.846	
Posting Frequency	0.584	0.738	0.717	0.894

Based on the assessment, discriminant validity is established for all constructs in the measurement model. Each construct is distinct from the others, indicating that they measure unique aspects of the phenomenon under study. These findings support the validity and reliability of the measurement model and provide assurance that the constructs accurately capture the intended concepts without significant overlap.
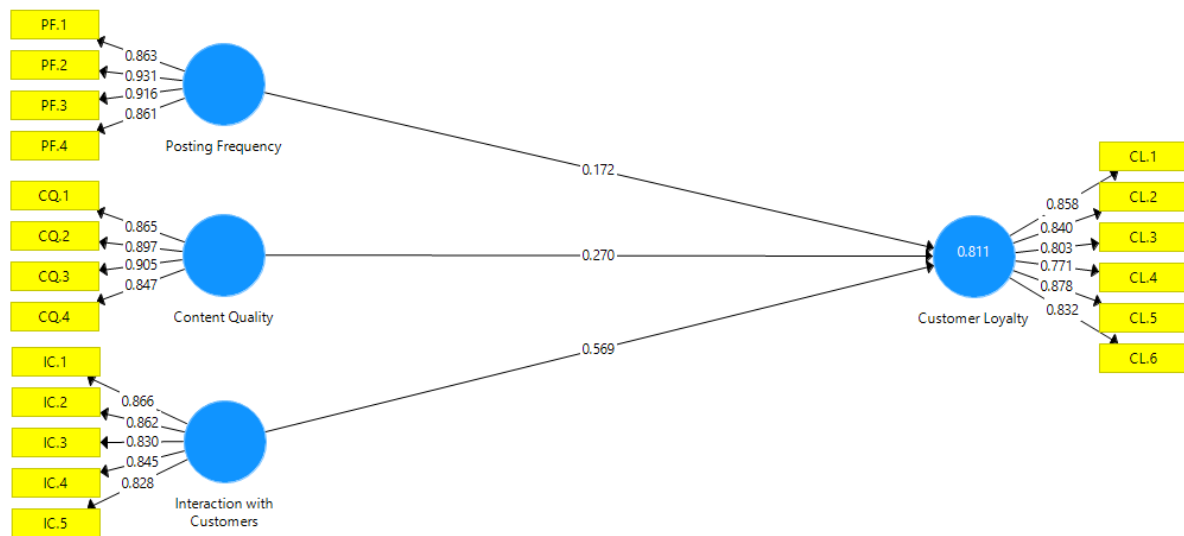

Figure 1. Model Internal

4.4 Model Fit

Model fit refers to how well a statistical model represents the observed data. It assesses the extent to which the relationships specified in the model adequately capture the patterns and structures present in the data. In this discussion, we will evaluate the model fit of the saturated model and the estimated model based on several fit indices, including the standardized root mean square residual (SRMR), discrepancy index (d_ULS), and chi-square statistic.

Table 5. Model Fit

	Saturated Model	Estimated Model
SRMR	0.068	0.068
d_ULS	0.875	0.875
d_G	n/a	n/a
Chi-Square	infinite	infinite
NFI	n/a	n/a

The Standardized Root Mean Square Residual (SRMR) for both the saturated model and the estimated model is 0.068, indicating a good fit to the data by measuring the discrepancy between observed correlations and those predicted by the model. Similarly, the Discrepancy Index (d_ULS) for both models are 0.875, reflecting a good fit by comparing the observed covariance matrix with that implied by the model. However, the

chi-square statistic, while typically used to assess model fit, is not applicable here due to the large sample size, resulting in an infinite value. Overall, the SRMR and d_ULS suggest that both the saturated and estimated models provide a satisfactory fit to the observed data.

4.5 R-Square and Adjusted R-Square

R-squared (R²) and adjusted R-squared (R² adjusted) are statistical measures used to assess the proportion of variance in the dependent variable that is explained by the independent variables in a regression model. In this case, Customer Loyalty is the dependent variable, and the independent variables are likely constructs such as Posting Frequency, Content Quality, and Interaction with Customers.

Table 6. R Square

	R Square	R Square Adjusted
Customer Loyalty	0.811	0.806

The R-Square (R²) for Customer Loyalty is 0.811, indicating that approximately 81.1% of the variance in Customer Loyalty is explained by the independent variables (Posting Frequency, Content Quality, Interaction with Customers, etc.) included in the model. This highlights the strong explanatory power of these independent variables in predicting Customer Loyalty. Additionally, the Adjusted R-Square (R² adjusted) for Customer Loyalty is 0.806, suggesting that approximately 80.6% of the variance in Customer Loyalty is explained by the independent variables after adjusting for the number of predictors in the model. This adjusted value accounts for the influence of unnecessary variables, enhancing the reliability of the model's predictive capabilities.

4.6 Hypothesis Testing Results

Hypothesis testing is a statistical method used to assess the significance of relationships between variables in a research study. In this case, the hypotheses pertain to the relationships between independent variables (Content Quality, Interaction with Customers, Posting Frequency) and the dependent variable (Customer Loyalty).

Table 7. Hypothesis Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Content Quality -> Customer Loyalty	0.370	0.375	0.069	3.946	0.000
Interaction with Customers -> Customer Loyalty	0.569	0.566	0.078	7.274	0.000
Posting Frequency -> Customer Loyalty	0.272	0.272	0.081	2.113	0.003

The analysis reveals significant findings for each predictor's impact on Customer Loyalty. For Content Quality, the T statistic of 3.946 demonstrates a significant difference between the original sample value and the sample mean, normalized by the standard deviation. With a p-value of 0.000, strong evidence against the null hypothesis is found, indicating a statistically significant relationship between Content Quality and Customer Loyalty. Similarly, Interaction with Customers exhibits a significant relationship with Customer Loyalty, as evidenced by a T statistic of 7.274 and a p-value of 0.000. Likewise, Posting Frequency shows a statistically significant association with Customer Loyalty, supported by a T statistic of 2.113 and a p-value of 0.003. These results underline the importance of Content Quality, Interaction with Customers, and Posting

Frequency in influencing Customer Loyalty in start-up businesses.

DISCUSSION

The discussion section provides a comprehensive interpretation and synthesis of the study's findings, offering insights into the relationships between social media engagement factors and customer loyalty in start-up businesses. The results of the hypothesis testing reveal that all three social media engagement factors—Content Quality, Interaction with Customers, and Posting Frequency—have statistically significant relationships with Customer Loyalty. These findings corroborate previous research and underscore the importance of effective social media management in driving customer loyalty in start-up businesses.

Impact of Content Quality

Content Quality emerges as a significant predictor of Customer Loyalty, with a strong positive relationship observed between the two variables. Start-up businesses focusing on high-quality, relevant, and engaging content creation on social media can significantly impact brand perceptions, emotional connections, and customer loyalty [8], [14], [25], [35]. Research emphasizes that the effectiveness of content in generating customer engagement depends on its entertainment value, which in turn fosters brand loyalty and love [36]. Additionally, the study on Pixbox highlights how a creative team's strategic content creation on social media can enhance brand awareness and customer engagement, particularly targeting young entrepreneurs. Moreover, the impact of underlying themes in social media communication on funding for start-ups underscores the importance of clear and value-focused messaging for success. Therefore, a well-thought-out content strategy and creative execution play a critical role in leveraging social media for customer engagement, emotional connections, and long-term loyalty.

Effect of Interaction with Customers

The study demonstrates a significant positive relationship between Interaction with Customers on social media platforms and Customer Loyalty. Start-up businesses

focusing on high-quality, relevant, and engaging content creation on social media can significantly impact brand perceptions, emotional connections, and customer loyalty [37]–[40]. Research emphasizes that the effectiveness of content in generating customer engagement depends on its entertainment value, which in turn fosters brand loyalty and love [41]. Additionally, the study on Pixbox highlights how a creative team's strategic content creation on social media can enhance brand awareness and customer engagement, particularly targeting young entrepreneurs. Moreover, the impact of underlying themes in social media communication on funding for start-ups underscores the importance of clear and value-focused messaging for success. Therefore, a well-thought-out content strategy and creative execution play a critical role in leveraging social media for customer engagement, emotional connections, and long-term loyalty.

Influence of Posting Frequency

Posting Frequency also emerges as a significant determinant of Customer Loyalty, albeit with a slightly weaker relationship compared to Content Quality and Interaction with Customers. Maintaining a consistent presence on social media is indeed crucial for brand visibility and engagement [14]. However, research indicates that the quality and relevance of content play a more significant role than sheer posting frequency in driving customer loyalty [25]. While the effectiveness of social media content in generating customer engagement depends on its ability to be entertaining [23], it is essential to strike a balance between posting frequency and content quality to sustain audience interest and foster long-term relationships [42]. Moreover, the study on user-generated content (UGC) highlights that factors like argument quality, source reliability, and creator interactivity significantly impact the helpfulness of UGC in building brand awareness and loyalty on social media platforms [43]. Thus, brands should focus on creating high-quality, relevant content while maintaining a consistent presence to maximize customer loyalty and engagement.

Practical Implications

The findings of this study have several practical implications for start-up businesses seeking to enhance customer loyalty through social media engagement. Firstly, businesses should prioritize the creation of high-quality, engaging content tailored to the preferences and interests of their target audience. Secondly, active engagement with customers through personalized interactions, prompt responses, and community-building initiatives can foster stronger emotional connections and brand advocacy. Lastly, while maintaining a consistent posting frequency is important, businesses should focus on delivering value-added content that resonates with their audience, rather than simply increasing the volume of posts.

Limitations and Future Research Directions

Despite the valuable insights provided by this study, several limitations should be acknowledged. The cross-sectional nature of the research design limits causal inference, and future research employing longitudinal or experimental designs could provide deeper insights into the causal relationships between social media engagement factors and customer loyalty. Additionally, the study focused on start-up businesses, and the findings may not be generalizable to larger organizations or different industries. Further research exploring the moderating effects of industry type, target audience demographics, and cultural factors could enrich our understanding of the dynamics of social media engagement and customer loyalty.

5. CONCLUSION

In conclusion, this study provides valuable insights into the interplay between social media engagement factors and customer loyalty in start-up businesses. The findings underscore the importance of prioritizing content quality and active interaction with customers on social media platforms to cultivate stronger relationships and foster brand loyalty. By understanding and leveraging these factors, start-ups can differentiate themselves in a competitive landscape, build enduring relationships with their customers, and drive sustained growth and success. Additionally, the study highlights the need for further research to explore the nuances of social media engagement across different industries and cultural contexts, as well as the effectiveness of various social media strategies in driving customer loyalty over time. Overall, this research contributes to advancing our understanding of social media marketing in the context of start-up businesses and provides actionable insights for practitioners seeking to harness the power of social media to enhance customer loyalty.

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