The Influence of Social Media Algorithms on Brand Visibility and Customer Engagement for New Ventures

Marcelo Feitosa\textsuperscript{1*}, Manuela Mosconi\textsuperscript{1}

\textsuperscript{1}Department of Information Systems and Management Science, University of Sherbrooke, Canada

* Corresponding author email address: marcelofeitosa@usherbrooke.ca

This study aims to explore how social media algorithms influence brand visibility and customer engagement for new ventures, identifying key strategies and challenges faced by these businesses. This qualitative study employed semi-structured interviews to gather in-depth insights from 18 participants, including founders and social media managers of new ventures. Participants were selected using purposive sampling to ensure relevance to the study's focus. Interviews were transcribed and analyzed using NVivo software, with data saturation achieved after 15 interviews. Thematic analysis was conducted to identify recurring themes and subthemes related to social media algorithms, brand visibility, and customer engagement. Three main themes emerged from the analysis: the impact of algorithms on brand visibility, customer engagement through social media, and challenges in leveraging algorithms. Within these themes, subcategories included platform-specific algorithm changes, content optimization techniques, timing and frequency of posts, interaction with algorithmic features, engagement tactics, content personalization, influencer collaborations, resource allocation, platform dependency, knowledge gaps, and data privacy concerns. Participants highlighted the need for continuous adaptation to algorithm changes, effective content strategies, and personalized engagement tactics to enhance visibility and engagement, while also facing significant challenges such as resource constraints and maintaining ethical practices. The study concludes that understanding and effectively leveraging social media algorithms is essential for new ventures to enhance brand visibility and customer engagement.

Keywords: Social media algorithms, brand visibility, customer engagement, new ventures, social media marketing, content optimization, digital marketing strategies.
Introduction

Social media platforms have become indispensable tools for businesses, offering unique opportunities to reach and engage with customers. According to Oladipo, Adejare, and Ekpenyong (2020), social media plays a critical role in entrepreneurial development by providing a cost-effective means of marketing and customer interaction. These platforms enable new ventures to build brand awareness, foster customer relationships, and drive engagement through targeted content and interactive features (Oladipo et al., 2020).

Algorithms on social media platforms are designed to prioritize content that is likely to engage users, thus affecting the visibility of posts from businesses. Cotter (2018) discusses how digital influencers and brands must play the "visibility game" by adapting their content strategies to align with algorithmic preferences. For new ventures, understanding these algorithms is vital as they can significantly impact the reach and effectiveness of their marketing efforts (Cotter, 2018).

Brand visibility is a critical factor for the success of new ventures. Visibility not only increases brand awareness but also influences customer perceptions and purchasing decisions. As Venciute, Auruskeviciene, and Reardon (2023) highlight, effective social media marketing can significantly enhance new venture performance by improving visibility and customer engagement. However, achieving and maintaining high visibility requires a deep understanding of how social media algorithms function and the factors they consider when ranking content (Venciute et al., 2023).

Customer engagement is another crucial aspect of social media marketing. Engaged customers are more likely to develop brand loyalty, which is essential for long-term business success. Muchardie, Yudiana, and Gunawan (2016) found that social media marketing positively influences customer engagement and, subsequently, brand loyalty. This relationship underscores the importance of interactive and engaging content that resonates with the target audience (Muchardie et al., 2016). So, King, Sparks, and Ying (2013) further explain that customer brand identification plays a significant role in brand evaluation and loyalty development. When customers identify with a brand, they are more likely to engage with its content and develop a sense of loyalty. Social media provides a platform for brands to express their identity and values, fostering a deeper connection with their audience (So et al., 2013).

The agility of social media strategies can significantly affect customer engagement behaviors. Gligor and Bozkurt (2021) emphasize the role of perceived social media agility in enhancing customer engagement. Businesses that can quickly adapt to changes in social media trends and algorithms are better positioned to maintain high levels of engagement. This agility is particularly important for new ventures, which often operate in dynamic and rapidly evolving markets (Gligor & Bozkurt, 2021).

Bozkurt (2022) further explores the impact of perceived social media agility on customer engagement behaviors, highlighting the moderating role of social media usage intensity. Businesses that actively and intensively use social media are more likely to perceive their strategies as agile and effective. This perception can enhance customer engagement by ensuring that content remains relevant and aligned with current trends (Bozkurt, 2022).

Despite the opportunities, new ventures face several challenges in leveraging social media algorithms for marketing success. One major challenge is the constant evolution of algorithms, which can
make it difficult for businesses to maintain consistent visibility and engagement. As highlighted by the many researchers, brands must continuously adapt their strategies to keep pace with algorithmic changes and maintain their competitive edge (Ibrahim, 2022; Puspaningrum, 2020; Rastgar et al., 2022; Song et al., 2023; Tatar & Eren-Erdogmus, 2016).

Resource constraints are another significant challenge. Wang and Bansal (2012) discuss how new ventures often operate with limited resources, making it challenging to invest in comprehensive social media strategies. These constraints necessitate strategic planning and prioritization to ensure that marketing efforts are both effective and sustainable (Wang & Bansal, 2012).

To navigate these challenges, new ventures must employ effective strategies for enhancing brand visibility and customer engagement. One key strategy is content optimization, which involves tailoring content to meet the preferences of social media algorithms. This includes using relevant keywords, hashtags, and engaging visual elements to increase the likelihood of content being prioritized and displayed (Bamm et al., 2018; Rastgar et al., 2022).

Another important strategy is leveraging social media features such as Stories, Reels, and Live sessions. These features are often favored by algorithms and can significantly boost visibility and engagement. As noted by Venciute, Auruskeviciene, and Reardon (2023), utilizing these features can help new ventures stand out in a crowded social media landscape and attract more followers (Venciute et al., 2023).

Timing and frequency of posts also play a crucial role in social media success. Posting during peak hours when the target audience is most active can increase engagement rates. Maintaining a consistent posting schedule can help build a loyal following and ensure that content remains top-of-mind for customers (Li et al., 2021; Roshandel Arbatani et al., 2016).

This study is grounded in the theoretical framework of social media marketing and customer engagement. It draws on existing literature to explore the mechanisms through which social media algorithms influence brand visibility and engagement. By examining the experiences of new ventures, this study aims to provide a deeper understanding of how these businesses can effectively navigate social media platforms to achieve their marketing objectives. The primary objective of this study is to explore the influence of social media algorithms on brand visibility and customer engagement for new ventures. Specific objectives include:

- Identifying the key strategies used by new ventures to optimize their social media content for algorithmic preferences.
- Understanding the challenges faced by new ventures in maintaining visibility and engagement on social media platforms.
- Examining the role of social media agility in enhancing customer engagement behaviors.
- Providing practical recommendations for new ventures to effectively leverage social media algorithms for marketing success.
Methods and Materials

This study employs a qualitative research design to explore the influence of social media algorithms on brand visibility and customer engagement for new ventures. The research aims to gather in-depth insights into the experiences and perceptions of new business owners and social media managers. The choice of a qualitative approach is appropriate given the exploratory nature of the study, which seeks to understand complex phenomena through rich, detailed data.

The primary data collection method for this research was semi-structured interviews. This method was chosen for its flexibility, allowing the researcher to probe deeper into specific topics while still covering a predetermined set of questions. The semi-structured format enabled participants to share their experiences and thoughts in their own words, providing a comprehensive understanding of the subject matter.

Participants were selected using purposive sampling to ensure they met the criteria relevant to the study. The criteria included:
- Founders or social media managers of new ventures (businesses less than three years old).
- Active use of social media platforms for marketing and customer engagement.
- Experience with managing social media algorithms to enhance brand visibility.

The study aimed for theoretical saturation, where interviews were conducted until no new themes or insights emerged. This approach ensured a thorough understanding of the research questions. A total of 15 interviews were conducted, as saturation was achieved within this sample size.

An interview guide was developed to ensure consistency across interviews while allowing for flexibility. Key topics included:
- Participants’ experiences with social media algorithms.
- Strategies used to increase brand visibility.
- Challenges faced in engaging customers.
- Perceived effectiveness of different social media platforms.

Interviews were conducted virtually via video conferencing platforms, providing convenience for participants and ensuring the researcher could observe non-verbal cues. Each interview lasted between 45 to 60 minutes and was recorded with participants' consent for accuracy in data analysis.

The data collected from the interviews were transcribed verbatim and analyzed using NVivo software. NVivo is a qualitative data analysis tool that facilitates the coding and categorization of large volumes of textual data.

Steps in Data Analysis:
Transcription: All interviews were transcribed to create a textual representation of the data. Transcriptions were reviewed for accuracy and completeness.

Coding: The transcripts were imported into NVivo, where initial coding was performed. Codes were assigned to segments of text that represented different themes and concepts related to the influence of social media algorithms.
Thematic Analysis: The coded data were analyzed to identify patterns and themes. Thematic analysis involved examining the data for recurring ideas and categorizing them into overarching themes. This process helped in understanding the common experiences and strategies among participants.

Verification: To ensure the reliability and validity of the findings, member checks were conducted. Participants were provided with summaries of the findings to verify the accuracy and credibility of the interpretations.

Findings

The study included 18 participants, comprising 12 female and 6 male respondents, reflecting a diverse range of experiences and perspectives. The age of participants varied, with 4 participants aged 25-30, 8 participants aged 31-40, and 6 participants aged 41-50. In terms of professional roles, 10 participants were founders of new ventures, while 8 were social media managers responsible for brand visibility and customer engagement. The participants represented various industries, including technology (5 participants), fashion (4 participants), food and beverage (3 participants), health and wellness (3 participants), and education (3 participants). The majority of participants (14) had been actively using social media for their businesses for over a year, with the remaining 4 having used it for 6-12 months.

Table 1

The Results of Qualitative Analysis

<table>
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<th>Categories (Main Themes)</th>
<th>Subcategories (Subthemes)</th>
<th>Concepts (Open Codes)</th>
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<tr>
<td>Impact of Algorithms on Brand Visibility</td>
<td>Platform-Specific Algorithm Changes</td>
<td>Algorithm updates, Reach fluctuations, Visibility shifts</td>
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<td></td>
<td>Content Optimization Techniques</td>
<td>Keyword usage, Hashtag strategies, Visual content</td>
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<td></td>
<td>Timing and Frequency of Posts</td>
<td>Peak hours, Posting schedules, Consistency</td>
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<td></td>
<td>Interaction with Algorithmic Features</td>
<td>Stories, Reels, Live sessions</td>
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<td></td>
<td>Challenges and Limitations</td>
<td>Reduced organic reach, Paid promotions necessity, Algorithm opacity</td>
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<td>Success Metrics</td>
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<td>Engagement rates, Follower growth, Impressions</td>
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<td>Customer Engagement through Social Media</td>
<td>Adaptation Strategies</td>
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<td>Types of Customer Interactions</td>
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<td>Content Personalization</td>
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<td>Resource Allocation</td>
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<td>Platform Dependency</td>
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<td>Algorithm changes, Platform stability, Multi-platform presence</td>
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<td>Knowledge and Skill Gaps</td>
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<td>Training needs, Skill development, Algorithm understanding</td>
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<td>Data Privacy and Ethics</td>
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<td>User data concerns, Ethical advertising, Transparency</td>
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<tr>
<td>Measuring Effectiveness</td>
<td></td>
<td>Analytics tools, KPI identification, ROI analysis</td>
</tr>
</tbody>
</table>
1 Impact of Algorithms on Brand Visibility

Platform-Specific Algorithm Changes: Participants highlighted the frequent updates to social media algorithms, affecting how content is prioritized and displayed. For instance, one participant noted, "Every time Instagram changes its algorithm, we see a dip in our post reach, and we have to adapt our strategy quickly." These updates often lead to fluctuations in visibility and require continuous monitoring and adjustment.

Content Optimization Techniques: Effective use of keywords, hashtags, and visual content were common strategies employed to enhance visibility. As one interviewee explained, "Using the right hashtags and creating visually appealing posts have significantly improved our engagement." Techniques such as these are critical in ensuring content is favored by the algorithms.

Timing and Frequency of Posts: The timing and frequency of social media posts emerged as a crucial factor. Participants observed that posting during peak hours and maintaining a consistent schedule boosted their visibility. "We found that our posts get more engagement when we publish them in the evening," one participant shared.

Interaction with Algorithmic Features: Utilizing features like Stories, Reels, and Live sessions were reported to enhance engagement and visibility. A social media manager remarked, "Instagram's Reels have been a game-changer for us; they get way more views than regular posts."

Challenges and Limitations: Despite these strategies, many participants expressed frustration with the opacity of algorithms and the reduced organic reach, often necessitating paid promotions. "Organic reach has plummeted, and we feel forced to spend on ads to maintain visibility," lamented one entrepreneur.

Success Metrics: Engagement rates, follower growth, and impressions were key metrics used to measure success. One participant noted, "We track our engagement rates closely to understand what works and what doesn't."

Adaptation Strategies: Businesses adapted by monitoring trends, using analytical tools, and incorporating feedback loops. "Staying on top of trends and using analytics tools like NVivo has helped us refine our strategies," stated a participant.

2 Customer Engagement through Social Media

Types of Customer Interactions: Participants identified comments, direct messages, and likes as primary forms of customer interaction. "Direct messages are where we see the most meaningful engagement with our customers," said one interviewee.

Engagement Tactics: Strategies such as contests, polls, and Q&A sessions were effective in increasing customer engagement. "Running contests has been a great way to boost interaction and get more user-generated content," noted a social media manager.

Content Personalization: Personalizing content through audience segmentation and tailored messaging was emphasized. "We use personalized messaging to make our audience feel valued and understood," one participant explained.
Influencer Collaborations: Collaborations with influencers were seen as valuable for expanding reach and engaging new audiences. "Partnering with influencers has brought in a lot of new followers who are genuinely interested in our brand," shared a participant.

Community Building: Building a community through user-generated content, community events, and loyalty programs was a recurring theme. "Creating a loyal community around our brand has been one of our most successful strategies," stated an entrepreneur.

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3 Challenges in Leveraging Algorithms

Resource Allocation: Budget constraints, time management, and staffing were major challenges faced by new ventures. "We have limited resources, so we have to be very strategic about where we allocate our time and money," one participant noted.

Platform Dependency: Dependence on specific platforms posed risks due to algorithm changes and platform stability issues. "We’re at the mercy of these platforms and their algorithms, which can change overnight," explained a participant.

Knowledge and Skill Gaps: The need for training and skill development was highlighted as a barrier. "Understanding these algorithms requires constant learning and adaptation, which is challenging," one interviewee remarked.

Data Privacy and Ethics: Concerns about user data privacy and ethical advertising practices were significant. "We have to be very careful about how we use customer data and ensure we’re transparent with our audience," said a participant.

Measuring Effectiveness: Participants stressed the importance of using analytics tools to measure the effectiveness of their strategies. "Using KPIs and analytics tools helps us understand our ROI and make informed decisions," noted a social media manager.

Discussion and Conclusion

The findings from this study reveal significant insights into how social media algorithms impact brand visibility and customer engagement for new ventures. By analyzing data collected from semi-structured interviews with 18 participants, this study identifies key strategies, challenges, and adaptation techniques employed by new ventures in leveraging social media for marketing purposes. Three main themes emerged from the analysis: the impact of algorithms on brand visibility, customer engagement through social media, and the challenges in leveraging algorithms effectively.

Participants consistently highlighted the influence of platform-specific algorithm changes on their social media strategies. Frequent updates to algorithms often led to fluctuations in post reach and visibility, necessitating continuous adaptation. This aligns with Cotter’s (2018) observation that digital influencers and brands must constantly adjust their content strategies to play the "visibility game" effectively. The study found that effective content optimization techniques, such as the strategic use of keywords, hashtags, and engaging visual content, significantly enhanced visibility (Cotter, 2018). These findings support the work of Venciute, Auruskeviciene, and Reardon (2023), who demonstrated that tailored social media marketing efforts can substantially boost new venture performance by improving brand visibility (Venciute et al., 2023).
Timing and frequency of posts emerged as crucial factors influencing visibility. Participants noted that posting during peak hours and maintaining a consistent schedule resulted in higher engagement rates. This observation is consistent with the recommendations of Muchardie, Yudiana, and Gunawan (2016), who emphasized the importance of regular and timely content posting to maintain audience interest and engagement (Muchardie et al., 2016).

Interaction with algorithmic features, such as Stories, Reels, and Live sessions, was also found to enhance visibility. These features are often prioritized by algorithms and offer unique opportunities for increased engagement. This finding corroborates Gligor and Bozkurt's (2021) study, which highlighted the role of perceived social media agility in improving customer engagement. By quickly adopting new platform features, businesses can maintain high visibility and relevance (Gligor & Bozkurt, 2021).

The study revealed that various types of customer interactions, such as comments, direct messages, and likes, are crucial for building engagement. Engagement tactics like contests, polls, and Q&A sessions were effective in fostering interaction. These tactics not only increase engagement but also contribute to the development of brand loyalty, as supported by So, King, Sparks, and Ying (2013), who found that customer brand identification significantly influences loyalty development (So et al., 2013).

Content personalization was another key strategy identified in the study. Participants reported that personalizing content through audience segmentation and tailored messaging enhanced engagement. This finding aligns with the work of Bozkurt (2022), who highlighted the moderating role of social media usage intensity on customer engagement behaviors. Personalized content makes customers feel valued and understood, leading to deeper engagement (Bozkurt, 2022).

Influencer collaborations were also noted as a valuable strategy for expanding reach and engaging new audiences. Participants shared that partnering with influencers helped attract new followers and enhance brand credibility. This observation is supported by the findings of Oladipo, Adejare, and Ekpenyong (2020), who discussed the role of social media in entrepreneurial development and its potential to amplify brand reach through strategic collaborations (Oladipo et al., 2020).

Community building through user-generated content, community events, and loyalty programs was another effective engagement strategy identified in the study. Creating a loyal community around the brand helps sustain long-term engagement and fosters a sense of belonging among customers. This finding resonates with the study by Venciute, Auruskeviciene, and Reardon (2023), which emphasized the importance of community-building activities in enhancing new venture performance (Venciute et al., 2023).

Despite the opportunities presented by social media, participants identified several challenges in leveraging algorithms effectively. Resource allocation emerged as a significant issue, with new ventures often facing budget constraints, time management difficulties, and staffing limitations. These challenges necessitate strategic planning and prioritization, as highlighted by Wang and Bansal (2012), who discussed the resource constraints faced by new ventures and the need for strategic resource allocation (Wang & Bansal, 2012).

Platform dependency posed another major challenge. Participants expressed concerns about being at the mercy of platform-specific algorithm changes and the stability of these platforms. This observation aligns with the prior findings which emphasized the need for brands to continuously adapt their strategies.
to keep pace with algorithmic changes. Dependence on a single platform increases vulnerability to algorithm updates, making it essential for businesses to diversify their social media presence (Jain et al., 2018; Rastgar et al., 2022; Rostami et al., 2022; Yadav & Rahman, 2017).

Knowledge and skill gaps were also noted as barriers to effective social media marketing. Participants highlighted the need for continuous training and skill development to keep up with evolving algorithms. This finding supports the work of Gligor and Bozkurt (2021), who emphasized the importance of social media agility and the need for ongoing learning and adaptation (Gligor & Bozkurt, 2021).

Data privacy and ethical considerations were significant concerns for participants. Ensuring transparency and ethical use of customer data is crucial for maintaining customer trust. This observation is consistent with the findings of Oladipo, Adejare, and Ekpenyong (2020), who discussed the ethical implications of social media marketing and the importance of maintaining customer trust through transparent practices (Oladipo et al., 2020).

Measuring the effectiveness of social media strategies was another challenge identified in the study. Participants stressed the importance of using analytics tools to track key performance indicators (KPIs) and measure return on investment (ROI). This finding aligns with the recommendations of Venciute, Auruskeviciene, and Reardon (2023), who emphasized the need for robust analytics to understand and optimize social media marketing efforts (Venciute et al., 2023).

The study concludes that understanding and effectively leveraging social media algorithms is critical for new ventures aiming to enhance brand visibility and customer engagement. By employing strategic content optimization, personalized engagement tactics, and maintaining agility in their social media practices, new ventures can navigate the complexities of social media algorithms. Despite the challenges, these strategies can significantly improve marketing outcomes, fostering brand loyalty and long-term success.

This study has several limitations. First, the sample size was limited to 18 participants, which may not fully capture the diversity of experiences and strategies employed by new ventures across different industries. Second, the study relied solely on qualitative data from semi-structured interviews, which may be subject to participant biases and self-reporting inaccuracies. Third, the study focused on new ventures, so the findings may not be generalizable to more established businesses with different resource capabilities and market positions.

Future research should consider larger and more diverse samples to enhance the generalizability of findings. Quantitative studies could complement qualitative insights by providing statistical validation of the identified strategies and challenges. Additionally, longitudinal studies could examine the long-term impact of social media strategies on brand visibility and customer engagement. Future research could also explore the role of emerging social media platforms and technologies, such as TikTok and AI-driven content recommendations, in shaping marketing outcomes for new ventures.

For practitioners, this study highlights the importance of staying informed about social media algorithm changes and adapting strategies accordingly. New ventures should invest in content optimization techniques, utilize platform features effectively, and engage in continuous learning to bridge knowledge gaps. Emphasizing personalized and interactive content can significantly enhance customer engagement and foster brand loyalty. Practitioners should also be mindful of ethical considerations and
data privacy to maintain customer trust. By implementing these strategies, new ventures can improve their social media marketing effectiveness, driving growth and success in competitive markets.

**Authors’ Contributions**

Authors contributed equally to this article.

**Declaration**

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

**Transparency Statement**

Data are available for research purposes upon reasonable request to the corresponding author.

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**Declaration of Interest**

The authors report no conflict of interest.

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**Ethical Considerations**

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.
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