

Study on the Impact of Online Interaction with Marketing Short Videos on Purchase Intentions

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Abstract

The advancement of digital media has established the marketing of short videos as an increasingly significant channel for brands to interact with consumers. Short and bright video content alongside interactive modes, such as liking and commenting, have created new consumer dialogue scenarios. This dynamic communication model shifts users from information receivers to participative roles, and subtly affects consumers' decision-making journeys. Understanding how an online interaction can be utilized to foster the formation of purchase intention, through both emotional connection and cognitive penetration, is essential to understanding today's consumer behavior.

Keywords: marketing short videos, online interaction, purchase intention, influence

1. Introduction

In the current business environment, marketing short videos have surpassed the one-way communication mode of traditional advertising, creating a digital space for instant interaction between brands and consumers. Users' behaviors such as asking questions in the comment section and participating in topic challenges not only enrich the consumption experience but also reshape the process of purchasing decision-making. Brands stimulate participation enthusiasm through carefully designed interactive links, naturally integrating consumption scenarios into daily entertainment. This two-way interaction mechanism is changing the traditional path of achieving marketing effects and is worth further exploration.

2. Theoretical Foundations of Online Interaction with Marketing Short Videos on Purchase Intentions

2.1 Definition and Characteristics of Marketing Short Videos

Marketing short videos typically refer to commercial promotional video content lasting between 15 seconds and 1 minute. Their core characteristics lie in the vertical screen format adapted for mobile dissemination and the immersive viewing experience. This type of content often integrates product demonstration and usage scenarios with emotional resonance elements, utilizing background music and fast-paced editing to enhance visual impact within a limited time frame. Distinct from the one-way communication of traditional advertising, marketing short videos embed likes, favorites, and sharing functions in their interface design, prompting viewers to transform from passive recipients into active participants. The interactive field formed by user comments through bullet comments further extends the lifecycle of video content, and creators adjust their subsequent creative direction based on real-time feedback [1]. This dynamic adjustment mechanism ensures that marketing content always maintains a high degree of alignment with audience needs, laying the foundation for the formation of subsequent purchase intentions.

2.2 Theories and Models of Online Interaction

Primarily, online interaction theory consists of the two facets of social response theory and social identity theory. Social response theory makes its presence known with psychological satisfaction when users receive a reply from the creator after commenting — this feedback creates emotional ties in the digital realm. Social identity theory expresses itself in the belonging viewers feel to other comments from the likes section, as group consensus reinforces individuals' identification of product value. The interactive model provided by short video platforms employs these two processes into interface functions with the comment section serving as public space for debate and likes and forwards providing a quick way to express an attitudinal response. As users participate in this

interactive space, they affectively construct a sense of identity toward the brand community, and membership identification becomes a motivator for purchasing behavior.

2.3 Formation Mechanisms of Purchase Intentions

The establishment of purchase intention develops according to the three psychological paths of cognition-emotion-behavior. Consumers receive messages about the product while watching short-form video content, creating a first impression at the cognition level. Then, the positive experience triggered during the interactive context generates emotional resonance. When messages about the product are further reinforced by the authenticity of other users' reviews and usage, all of this social proof eventually erases the individual decision anxiety about purchasing. The wait from favoriting the product until adding to the shopping cart provides a buffer period for the consumer to help process the decision, and through continuous exposure to content: the psychological inertia is fully formed. The entire process of conversion indicates the intertwining of rational cognition and emotional experience, which is a hallmark of modern decision making [2].

3. Issues in Online Interaction with Marketing Short Videos

3.1 Insufficient Alignment Between Interactive Content and User Needs

The current interactive design of marketing short videos often fails to accurately meet the actual needs of users. Brands invest a lot of resources in producing standardized content, but overlook the personalized characteristics of different audiences. Creators rely too much on hot topics and generic templates, resulting in a lack of specificity in the interaction questions in the comment section. Although the algorithm recommendation mechanism can identify user interest tags, it is difficult to capture the constantly changing emotional states and situational needs of consumers. When faced with the same old lottery activities and formatted question interactions, users are prone to experiencing participation fatigue. This mismatch between content supply and real demand makes it difficult for the interactive segments to touch the deep emotional resonance points of users, ultimately affecting the effective delivery of marketing information.

3.2 Technical Platform Limitations and User Experience Challenges

The limitations of platform technical architecture have a multi-faceted impact on user experience, especially in the key aspects of user engagement and interaction. Some short video applications often experience video loading delays and frame stutters during evening peak traffic periods, which directly affects the immersion of users in viewing. The design of the comment section has significant flaws, with important discussions and product feedback often being overwhelmed by rapidly scrolling bullet comments, making it difficult to effectively retain valuable information. The instant interactive communication between creators and viewers is often interrupted due to frequent interface transitions, disrupting the coherence and depth of the dialogue. Excessive commercial promotion elements in the page layout occupy the already limited interactive space, requiring users to click multiple times to find the real communication entry. These persistent technical obstacles not only consume users' patience but also invisibly reduce the willingness of viewers to participate in interaction, making it difficult to achieve the deep connection that brand owners aspire to establish.

3.3 Data Privacy and Ethical Concerns

In the realm of short video marketing, the blurring boundaries of data collection and utilization have emerged as a noteworthy phenomenon. Platform operators typically embed extensive data collection clauses in user agreements, granting them permission to track users' viewing preferences and interaction habits. When consumers inquire about product information in the comment section or participate in topic challenges initiated by brands, these behavioral data are automatically recorded by the system and utilized to construct more refined user personas. Some companies, without explicit notification, utilize the collected information for cross-platform advertising, leading to situations where users frequently encounter relevant advertisements immediately after discussing a certain product. This invisible data flow path leaves consumers with a lack of clear awareness regarding the direction of their personal information, thereby generating a sense of unease from being monitored. As user privacy awareness rises, this lack of transparency in data processing is eroding the trust foundation between brands and consumers, potentially affecting the long-term effectiveness of marketing activities [3].

3.4 Inaccurate Measurement of Marketing Effectiveness

The current marketing effectiveness evaluation system exhibits notable limitations. Many enterprises tend to equate interaction data with commercial value, leading to distorted judgments. Marketing teams often overly focus on superficial indicators such as likes and comments, neglecting the true motivations and emotional tendencies of user engagement. Data analysis systems struggle to accurately trace the complete path from interaction behavior to actual purchases, as users may develop interest on short video platforms and then proceed to other channels to

finalize transactions. Data barriers across different platforms fragment cross-platform user behavior analysis, making it difficult to form a comprehensive consumer decision-making map. Some users' habitual liking behavior has little correlation with their actual purchase intention, while in-depth consultation with high conversion potential fails to gain sufficient weight in existing indicators. These measurement blind spots may lead enterprises to continuously invest resources in content directions that are lively on the surface but have limited conversions, resulting in efficiency losses in marketing resource allocation.

3.5 Shortage of Professional Talent

The contradiction between the rapid development of the industry and the insufficient reserve of professional talents has become increasingly prominent. The knowledge structure of existing practitioners is difficult to meet the needs of high-quality interactive marketing. Many content creators are skilled in producing eye-catching video content, but lack a systematic understanding of consumer psychology and marketing theory, resulting in superficial interactive design. Although marketing graduates have mastered traditional marketing theory, they lack sufficient grasp of the algorithm logic and user behavior characteristics of short video platforms. The internal training system of enterprises has not kept up with the speed of technological iteration, and employees often rely on personal experience rather than scientific methods when dealing with data analysis and user interaction. There is a disconnect between the professional curriculum settings in colleges and universities and the actual needs of the industry. Students rarely encounter cutting-edge practices in short video marketing during their school years. This mismatch between talent quality and job requirements has led to homogenization competition in short video marketing for many enterprises, making it difficult to enhance brand influence through innovative interaction.

4. Innovative Strategies for Online Interaction in Marketing Short Videos

4.1 Personalized Recommendations and Interactive Strategies

In the construction process of a personalized recommendation system, enterprises need to establish a refined tagging system based on users' historical behavior data. These tags should cover multiple dimensions of consumer characteristics, such as content preferences, interaction habits, and purchase cycles. Recommendation algorithms should move beyond simple content classification logic and focus on the changing needs of users in different scenarios, such as the differences in interests between weekdays and holidays. When users show sustained attention to a certain type of product, the system can automatically push in-depth evaluation videos or limited-time discount information related to the brand. It is essential to design differentiated interaction mechanisms for different customer groups. New customers may need more vivid demonstrations of the basic functions of the product, while existing customers prefer professional explanations of value-added services [4]. After users complete an effective interaction, the system should promptly adjust subsequent recommendation strategies. For example, when consumers inquire about specific parameters in the comment section, subsequent pushes should include comparative evaluations or usage tutorials for that product. A dynamically optimized recommendation mechanism can significantly improve the matching accuracy between content and user needs, making each interaction step an effective touchpoint for driving consumption decisions.

4.2 Social Media Integration and Viral Marketing

In the social media integration strategy, enterprises should systematically plan the collaborative mechanism for cross-platform content distribution, organically combining short video content with social scenarios such as Weibo topics and WeChat communities. Content creators need to design interactive elements with the potential for spontaneous dissemination, such as setting controversial or emotionally resonant topic tags to guide user discussions. Brands can establish a user sharing incentive mechanism, providing corresponding benefits to consumers who share videos on social platforms and receive a certain amount of interaction. During the dissemination process, attention should be paid to the adaptive adjustment of content forms. The same core information should be reconstructed in different forms based on the characteristics of different platforms, such as transforming Tiktok short videos into Xiaohongshu graphic notes. The enterprise marketing team should monitor the content dissemination paths on various platforms in real time, intervene in content nodes with viral dissemination potential in a timely manner, and promote content diffusion through official account interactions. A three-dimensional dissemination network can effectively expand the brand's reach, making each user's social circle a potential dissemination channel, forming a ripple effect of continuous diffusion [5].

4.3 Application of AR/VR Technology in Short Videos

In the practical application of augmented reality (AR) and virtual reality (VR) technologies, brands can develop AR filters with practical functions. For example, beauty brands can launch virtual makeup trial tools, while furniture companies can develop simulators to show how their products would look in a home setting. Technical

teams should optimize the fluency of the AR experience on mobile devices, ensuring that users can smoothly use virtual try-on functions even on ordinary smartphones. Content creators need to naturally integrate AR interactive elements into short video narratives, such as guiding users to activate the virtual try-on function when showcasing clothing combinations. Marketing teams can design location-based AR treasure hunt games, where users can unlock exclusive discount content by opening short video applications in specific business districts. Enterprises should establish a feedback loop for user participation in AR interactions, collecting experience data from consumers after using virtual products to optimize subsequent product development. This approach, which closely integrates virtual technology with real consumption scenarios, can effectively reduce users' uncertainty about product effects and provide intuitive reference for purchasing decisions.

4.4 User-Generated Content and Community Engagement

Enterprises should establish a systematic incentive mechanism for user content creation, and stimulate users' enthusiasm for participation by regularly holding themed creation contests. Community managers need to design content templates and creation guidelines that are easy to imitate, reducing the threshold for ordinary users to participate in content production. Brands can set up dedicated areas for displaying user works, incorporate high-quality content into official communication channels, and provide corresponding honorary certifications to creators. The community operation team should cultivate a sense of belonging among core users, establishing emotional connections through offline meet-ups and exclusive customer service channels. After users post content, community managers need to respond promptly and guide other members to engage in constructive discussions, creating a friendly atmosphere of mutual assistance and exchange. Enterprises can develop content co-creation platforms, inviting loyal users to participate in new product trials and creative solicitation, allowing consumers to feel the actual impact of their opinions on brand decisions [6]. This deep interaction model can effectively stimulate users' creative enthusiasm and willingness to share, making every community member a disseminator and co-builder of the brand story.

4.5 Data Analytics and Precision Marketing

The data analysis system needs to fully capture users' dwell time and interactive hotspots on the video page, and combine historical order information to build a multi-dimensional consumer portrait. The marketing team should establish a dynamic tagging system that updates interest preferences in real time based on users' recent viewing categories and comment content. When the system identifies that a consumer has revisited a product video multiple times but has not placed an order, it can automatically trigger exclusive coupons or limited-edition trial invitations. The algorithm model needs to distinguish the psychological motivations behind different interactive behaviors, such as the act of bookmarking may represent hesitation and comparison, while the act of sharing often implies strong recognition. During specific marketing cycles, the data analysis platform should monitor the conversion efficiency of traffic across various channels and adjust the video content delivery strategy on social platforms in a timely manner. By connecting the front-end and back-end data chains, enterprises can accurately determine which interactive links truly lead to transactions, thereby optimizing resource allocation and achieving precise reach.

5. Implementation Pathways and Development Recommendations

5.1 Establishing Cross-Departmental Collaboration Mechanisms

Organizations need to establish a physical workspace for cross-departmental collaboration, allowing marketing, product development, and customer service personnel to work together in the same physical environment and eliminate information barriers through daily face-to-face communication. Specialized teams should adopt agile working methods, breaking down short video marketing projects into iterative tasks with a two-week cycle, and conducting cross-departmental review meetings at the end of each cycle to adjust future directions. Marketing specialists need to participate in product feature discussions with consumer persona data, while product engineers should regularly explain technical principles to the content team to accurately convey product value. Customer service representatives should establish real-time problem feedback channels and transform high-frequency consultation topics into creative materials for short video interactive scripts. The project management team can introduce a collaborative software platform to visualize work progress and set up a reminder mechanism for cross-departmental task dependencies. The human resources department needs to design joint assessment indicators, incorporating both video interaction conversion rates and user satisfaction into the performance weights of each department. This deep collaboration mechanism can promote the natural flow of professional knowledge between departments, forming a seamless connection from market insights to technical implementation.

5.2 Balancing Technical Development and Content Innovation

In the practice of short video marketing, the technical team should focus on developing lightweight interactive features, such as optimizing the animation effect of likes and simplifying the comment posting process, to provide users with a smoother participation experience. The content creation team needs to deeply understand the application scenarios of these technical features, naturally integrating interactive functions into the video narrative rhythm and avoiding rigid technical accumulation. Product managers should establish a rapid response mechanism for user feedback, regularly collecting audience suggestions for improving existing interactive features, which serves as an important basis for technological iteration. The technical department can develop simple content effect analysis tools to help creators intuitively understand the impact patterns of different interactive designs on user behavior. The content team should maintain sensitivity to emerging technological trends and promptly transform applicable technical solutions into innovative means to enhance content attractiveness. This bidirectional empowerment work model ensures the practicality of technological development while maintaining the continuous vitality of content creation, forming a virtuous cycle where technology empowers content and content nurtures technology [7].

5.3 Cost Control and Industrialized Promotion

In terms of cost control, enterprises can establish a standardized content template library to prefabricate common scenarios and interactive modules, significantly reducing the time and economic costs of single video production. The production team should adopt a flexible resource allocation approach, rationally utilizing a production model that combines user-generated content with professional production, while ensuring content quality. It is recommended to adopt a gradient deployment strategy during the promotion stage, testing the effectiveness of content in a small scope before gradually expanding the deployment scale to avoid blind resource investment. Industrial promotion requires the establishment of a replicable success case library, organizing market-validated interactive modes into standardized operation guidelines for reference by various branches. Channel selection should focus on cost-effectiveness, prioritizing in-depth cooperation with vertical platforms that align with brand tone and have high user activity. By constructing such an intensive operation system, enterprises can maximize marketing effectiveness while controlling overall investment, laying a solid foundation for large-scale expansion.

5.4 Innovating Professional Talent Cultivation Models

Educational institutions should collaborate with industry-leading enterprises to establish short video marketing laboratories, incorporating real project cases into classroom teaching, allowing students to gain exposure to cutting-edge industry practices during their school years. Enterprises need to establish a hierarchical mentor training system, where experienced marketing experts lead newcomers through the entire project process, imparting practical skills in content planning and data analysis through practice. Human resources departments can design a dynamic job rotation mechanism, encouraging creative personnel to learn basic data analysis techniques, while allowing technical staff to participate in content creation discussions. Enterprises should collaborate with industry associations to develop a vocational skill certification system, incorporating core competencies such as user interaction design and effect evaluation in short video operations into standardized assessment scopes. In the process of talent cultivation, emphasis should be placed on the organic integration of theoretical teaching and practical training, enhancing students' ability to solve practical problems through specialized workshops that simulate real business scenarios. This open training system can continuously produce versatile talents who understand both marketing principles and platform characteristics, providing human resources support for the innovative development of the industry.

6. Conclusion

The research on the interactivity of marketing short videos uncovers the often multifaceted characteristics of the era of digital consumption. Marketers are challenged with thinking beyond the immediacy of the technological experience into the underlying human needs of interaction and values to consider every interaction as an opportunity to build trust. Marketers must seek to ensure any future marketing will involve a balance of technological innovation and content value, as well as seek balance between data use and individual privacy. The future and sustainability of any content ecosystem comprise the proactive efforts of creators, platforms and consumers to shape healthier content ecosystems and try to steer the next wave of marketing practice towards a more sustainable horizon.

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