

Dual-Wheel Drive of Trust and Interest: A Study on Communication Mechanisms and User Behavior on Social Platforms—An Empirical Analysis Based on Xiaohongshu and Douyin

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Abstract: The Internet has restructured the relationship between brand communication and user consumption. Xiaohongshu and Douyin, as core arenas for social marketing, have formed differentiated communication ecosystems. Based on an integrated analytical framework combining "Uses and Gratifications Theory, Social Identity Theory, and Algorithmic Communication Theory," this study employs case study, content analysis, and in-depth interview methods. Taking "Perfect Diary" and the pet e-commerce brand "Colorful Pets" as empirical subjects, it systematically dissects the differences in communication mechanisms between the two platforms and their impact on user behavior. The research finds that Xiaohongshu revolves around "social identity - trust building," forming a rational decision-making chain of "people searching for goods" through KOL/KOC matrices and substantive content while Douyin follows the logic of "algorithm recommendation - emotional stimulation," building a perceptual conversion chain of "goods finding people" relying on short video scenarios and e-commerce closed loops. The two are not in competition but form a synergistic chain through "interest discovery - trust verification - conversion transaction." This research not only proposes a "Dual-Wheel Drive Model for Social Platform Communication" but also provides empirical support for brands to formulate cross-platform communication strategies.

1. Introduction

In recent years, the deep penetration of the Internet has upgraded social media from mere social interaction tools to comprehensive service platforms integrating content creation, community communication, and consumption decision-making.

As the two most active social applications currently, Xiaohongshu and Douyin have become core carriers for brand marketing activities. In 2023, Xiaohongshu's monthly active users exceeded 260 million, with the post-90s generation accounting for 72%, and 60% of users searching for consumption-related information on the platform. Douyin's monthly active users reached 780 million, with daily average usage time exceeding 120 minutes, and the platform's annual e-commerce transaction growth rate reached 90%[1]. Against this backdrop, clarifying the

differences in communication logic between the two platforms and formulating precise marketing plans hold significant practical value for brands to achieve efficient connection from traffic to conversion. Simultaneously, analyzing platform ecosystems and user behavior patterns can provide empirical support for the contextual application of communication theories.

Existing researches have three gaps: firstly, fragmented theoretical application, often relying on a single theory to explain complex communication phenomena, lacks an integrated analytical framework; secondly, research objects tend to be generalized, with insufficient empirical focus on vertical fields such as pet e-commerce; thirdly, there are few researches on dual-platform synergy mechanisms, often focusing on single-platform effects and neglecting the cross-platform chain of "discovery - decision - conversion." Based on this, this research takes dual-platform comparison as its core and constructs an integrated theoretical framework to fill the above research gap.

2. Research Design

2.1. Research Questions

This study revolves around three core questions:

- (1) What are the essential differences between the communication mechanisms of Xiaohongshu's "community trust" and Douyin's "algorithmic interest"?
- (2) How do the communication mechanisms of the two platforms influence user decision-making through different pathways, and what effects do they produce at the cognitive, affective, and behavioral dimensions?
- (3) How can brands construct a synergistic "interest-trust-conversion" chain based on the characteristics of both platforms, and what are the implementation conditions and boundaries?

2.2. Research Methods

This study adopts mixed research methods:

- (1) Case Study Method: The pet e-commerce brand "Colorful Pets" is selected as the case, considering both industrial representative and data accessibility.
- (2) Content Analysis Method: 200 representative content pieces from each platform are coded. Dimensions include content type, interaction metrics, and conversion orientation. NVivo12 is used for data analysis.
- (3) In-depth Interview Method: 30 users from both platforms are selected for interviews lasting 30-60 minutes, forming saturated interview data.

3. Theoretical Framework: Communication and User Behavior Models in the Social Media Environment

3.1. Evolution from the AIDMA Model to the SICAS Model

In the late 19th century, the popularization of print media gave rise to the AIDMA model (Attention-Interest-Desire-Memory-Action). Its logic of "one-way progressive communication" suited the "brand-led, user-passive reception" characteristics of traditional media. However, with the rise of digital media, this model struggled to explain the fragmented, non-linear user behaviors in social media contexts due to its neglect of user initiative and interaction needs[2][3].

In 2011, based on long-term monitoring of digital user behavior, DCCI proposed the SICAS model (Sense-Interest&Interaction-Connect&Communication-Action-Share), marking the transition of marketing models from "one-way communication" to "two-way connection"[4]. Its core features

include: Two-way Sense, where brands and users mutually reach each other; Real-time Interaction (Interest&Interaction/Connect&Communication), enabling dynamic communication between users and brands; and Closed-loop Share, where sharing experience after purchase becomes a new starting point for communication[5].

In this study, the adaptability of the SICAS model is reflected in the following: Xiaohongshu's "search-comment verification" behavior corresponds to the "Connect&Communication" stage; Douyin's "live-stream interaction-instant purchase" behavior corresponds to the "Interest&Interaction-Action" stage; and the sharing behaviors on both platforms (Xiaohongshu note creation, Douyin secondary dissemination) land in the "Share" stage. This provides the core framework for analyzing the relationship between platform strategies and user behavior[5][6].

3.2. Contextualized Application of Core Supporting Theories

3.2.1. Uses and Gratifications Theory

Proposed by communication scholar Katz in 1974, the core paradigm of the Uses and Gratifications Theory is "users actively select media → satisfy specific needs → form differentiated behaviors," shifting the focus from "media-centrism" to "user-centrism." Its core viewpoints include: users are active, and their media choices are based on their own needs; need satisfaction is diverse, covering information acquisition, social interaction, etc.; and media effects are contextual, requiring analysis within specific ecosystems.

In its contextualized application, the core needs of Xiaohongshu users focus on information acquisition and consumption decision support, satisfying "pre-purchase research" needs through substantive notes and gaining "social identity" through community interaction. The core needs of Douyin users focus on entertainment and interest exploration, satisfying "fragmented entertainment" needs through algorithm-recommended short videos and achieving "instant social interaction" through live-stream engagement. Essentially, the two platforms cater to different needs.

3.2.2. Social Identity Theory

Social Identity Theory emphasizes that individuals form a sense of group belonging through participation in community interactions, which in turn influences attitudes and behaviors. This theory provides key support for analyzing Xiaohongshu's "trust-building" mechanism: users form shared brand cognition and trust through content interaction and experience sharing within the community. Trust based on this group identity leads to significantly higher conversion efficiency than single-message transmission.

3.2.3. Algorithmic Communication Theory

Algorithmic Communication Theory focuses on the role of algorithms in reshaping content distribution and user behavior. Its core viewpoint is that algorithms efficiently match content to users through user behavior data, constructing a "content-user" connection[1]. This theory fits Douyin's communication logic: the algorithm pushes content based on three-dimensional data—"user behavior, content tags, collaborative filtering"—and filters high-quality content through metrics like "completion rate, like rate, share rate," creating a "viral content-massive reach" communication effect, laying the foundation for interest-based e-commerce.

4. In-Depth Analysis of Dual-Platform Cases

4.1. Xiaohongshu: The "People Find Goods" Ecosystem Driven by Community Trust

4.1.1. Platform Characteristics: The Trust Cornerstone Under Strong Community Attributes

Since its launch in 2013, Xiaohongshu has transformed from an overseas shopping guide tool into a full-scenario lifestyle content platform. Its "Mark My Life" positioning has built an ecosystem with strong community attributes. Content distribution employs a hybrid recommendation mechanism of "Follow + Interest", which retains the warmth of interpersonal communication while achieving precise reach.

Table 1: Comparison of Content Types and Interaction Rates on Dual Platforms (n=400)

Content Type	Xiaohongshu Proportion (%)	Douyin Proportion (%)	Xiaohongshu Interaction Rate (%)	Douyin Interaction Rate (%)
Guides&Reviews	42	18	5.8	2.3
Entertainment&Fun	15	52	3.2	8.6
Emotional Resonance	23	20	4.5	5.1
Commercial Promotion	20	10	1.3	1.8

As shown in Table 1, content in the "Guides&Reviews" category accounts for 42% on Xiaohongshu, significantly higher than Douyin's 18%. "Authentic experience" is the core standard by which users judge content quality. The interaction rate for overly commercialized content is 67%, lower than that of authentic content. Furthermore, 68% of users search on Xiaohongshu with clear demand. This active search behavior indicates users are in a critical stage of their consumption strategy, resulting in conversion rates far higher than those in scenarios of passive information reception.

4.1.2. Core Communication Strategy: A Three-Dimensional Implementation Path with Trust at the Core

(1) Pyramid-Style Community Communication System: Top-tier KOLs (followers ≥ 1 million) undertake the "topic ignition" function, accounting for 35% of total platform reach. Mid-tier KOLs ($100k \leq \text{followers} < 1$ million) focus on subdivided fields, achieving "vertical penetration." KOCs (followers $< 10k$) publish authentic experience notes, completing "trust verification." For example, Colorful Pets collaborated with over 500 pet-owner KOCs to publish hands-on review notes, increasing the search volume for the keyword "splash-proof litter box" by 200%.

(2) Value Delivery Dominated by Substantive Content: The interaction rate for tutorial, guide, and review content is 42% higher than ordinary sharing content. This type of content satisfies users' "information needs", forming a "value recognition - trust generation" chain. Colorful Pets' "Pet Seasonal Care Guide" series deeply integrates product placement with practical knowledge. The summer edition dedicated 60% of its content to "dog heatstroke symptoms and first-aid methods" and 40% to introducing the advantages of its own cooling pad. The notes achieved an average volume of favorites of over 8,000 and three months after publication, 15% of visits still originated from search.

(3) Traffic Accumulation via Search Optimization: Brands improve their ranking in search results by embedding core keywords in note titles and body parts, thereby reaching target users. Xiaohongshu's search-entry characteristic allows high-quality content to generate "long-tail traffic", providing brands with sustained and accurate exposure.

4.1.3. User Behavioral Effects: Full-Chain Guidance for Rational Decision-Making

Based on the SICAS model, Xiaohongshu's influence on user behavior exhibits characteristics of a "full-chain rational decision-making process"[5]:

Sense Stage: Dual-path reach through "active search (68%) + interest recommendation (32%)". Users form initial recognition by searching for keywords of their needs or via Discovery page recommendations.

Interest & Interaction Stage: The average reading time reaches 1 minute 35 seconds. Consulting comments account for 45% of the total comments. Answers from bloggers and other users form "collective wisdom", intensifying needs.

Connection & Communication Stage: 30% interacting users follow the brand account; 24% join pet care exchange groups. Trust is reinforced through long-term community interaction.

Action Stage: The redemption rate for exclusive coupons within groups is 22%, higher than the platform average of 8%. 65% users make purchases by jumping from note product cards.

Share Stage: 15% purchasing users publish "post-use feedback" notes, which become trust evidence for new users, forming a closed loop.

Colorful Pets achieved a repurchase rate of 35%, far exceeding the pet e-commerce industry average of 20%. This confirms the role of community trust in enhancing user loyalty.

4.2. Douyin: The "Goods Find People" Ecosystem Driven by Algorithmic Interest

4.2.1. Platform Characteristics: Strong Algorithmic and Entertainment Attributes

Douyin constructs an entertainment-focused content ecosystem centered on "algorithm recommendation". Its recommendation algorithm achieves precise convey based on three-dimensional data: "user behavior - content tags - collaborative filtering"[2]. Short videos of 15-60 seconds fit fragmented usage scenarios. "Entertainment&Fun" content accounts for 52%(see Table 1), with visual impact and emotional resonance being the core elements of content communication. Unlike Xiaohongshu's "community connection", Douyin user interaction is primarily based on "content interest" rather than "identity identification". In-depth interviews revealed that 18 users stated they "follow anchors because the content is interesting, rarely participating in community discussions." The platform filters high-quality content through metrics like "completion rate, like rate, share rate," creating a "viral content-massive reach" communication effect, providing the ecological foundation for interest-based e-commerce[1].

4.2.2. Core Communication Strategy: The Closed-Loop Conversion Path Led by Interest

Interest Stimulation via Emotional Content: Viral Douyin content features "strong visual impact + emotional resonance + clear call-to-action", stimulating users' potential needs through situational presentation[6]. Colorful Pets' short video "Cat Unboxing Automatic Feeder" used scenes like "curious cat unboxing - self-feeding - cute interaction" to evoke "pet empathy", achieving a 28% completion rate and a 15% click-through conversion rate for the attached live-stream coupon.

Path Shortening via Interest-Based E-commerce Closed Loop: The model of "short video grass-planting - live stream acceptance - limited-time stimulation" constructs a "goods find people" consumption scenario. Users' needs are stimulated while browsing videos; they enter the live stream via anchor links and complete purchases under the stimulation of real-time explanations and limited-time offers. Douyin e-commerce users' repurchase rate reaches 45%, significantly higher than traditional e-commerce platforms.

Fission communication through Challenge Campaigns + UGC: By lowering creation barriers and setting incentive mechanisms, user participation enthusiasm is ignited. Colorful Pets' "My Fur

Baby's Fashionable Item" challenge campaign invited pet influencers to shoot fun videos and set up a "show your pet's outfit to win annual supplies" reward, attracting 230,000 users to create UGC content. Twelve pieces trended on the Hot List, and topic views exceeded 3.5 billion. The average reach of UGC content was 4.8 times that of branded content.

4.2.3. User Behavioral Effects: Immediate Drive of Impulsive Emotion

Based on the SICAS model, Douyin's influence on user behavior exhibits characteristics of a "short-chain impulsive emotion drive"[1]:

(1) Sense Stage: 92% users are passively reached via the recommendation feed, attracted by algorithm-pushed content of interest, forming initial recognition.

(2) Interest & Interaction Stage: Interaction is dominated by likes (68%) and shares (22%), with in-depth comments comprising only 10%. Shares of Colorful Pets' challenge videos "to Moments" accounted for 35%, reflecting emotion-driven sharing behavior.

(3) Connect & Communication Stage: 25% of interacting users follow the anchor, but 60% unfollow within a month. The connection basis is "content interest", resulting in less stability.

(4) Action Stage: The "atmosphere infection + limited-time offers" in live streams shorten the decision cycle to 3-5 minutes. "Flash purchase" orders account for 75%, reflecting impulse-buying characteristics.

(5) Share Stage: User sharing is mostly "original video reposting", with only 5% publishing usage experiences, making it difficult to form a secondary grass-planting closed loop.

Douyin users' repurchase rate is 20%, lower than Xiaohongshu's 35%, reflecting the limitations of impulsive emotional consumption on user loyalty.

5. Comparative Analysis of Dual-Platform Communication, User Behavior and Synergy Mechanisms

5.1. Comparative Analysis of Core Differences

Table 2 compares the communication mechanisms and user behavior on Xiaohongshu and Douyin. The fundamental difference between the two platforms reflects the two logics of "community trust" and "algorithmic interest". This stems from differences in platform DNA (Xiaohongshu's community attributes vs. Douyin's algorithmic attributes) and core user needs (information query vs. Entertainment&fun).

Table 2: Comparison of Communication Mechanisms and User Behavior on Xiaohongshu and Douyin

Comparative Dimension	Xiaohongshu (Trust-Driven Wheel)	Douyin (Interest-Driven Wheel)
Core Logic	People Find Goods: Active Search + Trust Conversion	Goods Find People: Algorithm Recommendation + Interest Conversion
Core Content	Substantive Utility + Authentic Experience, primarily texts/images	Emotional Fun + Visual Impact, primarily short videos
Decision Path	Long Decision Chain: Cognition → Multi-Source Verification → Trust → Conversion (Ration-led)	Short Decision Chain: Cognition → Interest Stimulation → Impulse Conversion (Emotion-led)
Trust Source	KOC Authentic Experience, Community Word-of-Mouth, Multi-Note Comparison	KOL Personal Charisma, Live-Stream Real-time Interaction, Limited-Time Offers
Conversion Scenario	Note Product Card jumping to External E-Commerce Platform / Offline Store Experience	Short Video Product Anchor Link, Live-Stream Shopping Cart (In-Platform Closed-Loop Conversion)

5.2. Dual-Platform Synergistic Communication Mechanism

The two platforms are not in competition but form a "complementary and synergistic" communication chain. Based on the "decision path" shown in Table 2, this communication chain can be divided into three stages:

Interest Stimulation Stage (Douyin-led): The algorithm pushes content via interest tags, stimulating users' potential needs. Among Colorful Pets' Douyin users, 38% further searched for brand information, directing traffic to Xiaohongshu.

Trust Verification Stage (Xiaohongshu-led): Users whose interest is sparked by Douyin search for brand keywords on Xiaohongshu, leveraging KOC notes and community word-of-mouth to verify product value. 72% cross-platform users stated they "purchased only after confirming reliability on Xiaohongshu".

Conversion Transaction Stage (Dual-platform acceptance): Users who have established trust can choose to place orders via Douyin live-stream limited-time offers (instant conversion) or make purchases by jumping from Xiaohongshu product cards (rational conversion).

Case data shows this synergistic model increased brand conversion rate by 25% and repurchase rate by 10%, achieving an organic combination of "traffic breadth" and "conversion depth."

6. Challenges and Optimization Suggestions

6.1. Core Challenges

(1) **Content Homogenization and Attention Scarcity:** Brands on Douyin overly rely on algorithm recommendation. Formulaic content like "pet unboxing" accounts for 65%, leading to user aesthetic fatigue and a 20% drop in interaction rate. Competition for high-quality traffic intensifies on both platforms, and customer acquisition costs for brands continue to rise.

(2) **Trust Crisis Eroding Platform Ecology:** Xiaohongshu investigated over 2 million fake notes in 2023, highlighting the conflict between commercial interests and community trust. User tolerance for ad-like content is decreasing. Balancing "commercial communication" and "authentic experience" has become an industry challenge.

(3) **Low Cross-Platform Synergy Efficiency and Brand-Performance Imbalance:** Most brands adopt extensive operation of "content copying", directly converting Xiaohongshu texts/images into Douyin short videos, resulting in a 50% lower conversion rate compared to customized content. Some brands excessively pursue short-term sales volume, neglecting brand value accumulation, leading to "brand-performance imbalance."

6.2. Optimization Suggestions

6.2.1. Trust Dimension: Reconstructing a Trust Ecosystem Guided by Authentic Value

Implement "Content Transparency": Label KOC notes with "Product Trial" to clarify content nature and reduce user resistance[1].

Build a "User Word-of-Mouth System": Integrate authentic Xiaohongshu reviews into "Product Reputation Reports" and display them in Douyin live streams to aid user decision-making.

Participate in Platform Integrity Mechanisms: Join Xiaohongshu's "Authentic Grass-planting Certification Program" to gain official traffic support and strengthen brand credibility.

6.2.2. Content Dimension: Differentiated Innovation Based on Platform Characteristics

Xiaohongshu Focus on "Professional Depth": Collaborate with industry experts to publish

authoritative content (e.g., pet e-commerce brands partnering with veterinarians to release "Product Safety White Papers"), outputting substantive content like ingredient analysis and ingredient traceability to strengthen professional trust[5].

Douyin Focus on "Format Innovation": Adopt novel formats like personification and plot reversal (e.g., product placement in funny short skits starring cats) to improve content completion rates[6].

Establish a "Content Innovation Library": Track platform trends and user preferences to dynamically adjust content direction, avoiding formulaic creation[3].

6.2.3. Synergy Dimension: Building an Integrated Operational System

Data Synergy: Use data analysis from Douyin's "Ocean Engine" and Xiaohongshu's "Business Advisor" to identify "High-Potential User Tags" (e.g., "females aged 25-35 + pet ownership <1 year") for precise reach[6].

Strategy Synergy: Clarify the division of labor of "Douyin for user acquisition, Xiaohongshu for user retention", directing traffic from Douyin to Xiaohongshu communities for long-term conversion.

Content Synergy: Establish a "Content Asset Library" and perform secondary creation tailored to dual-platform characteristics (e.g., decomposing "pet care knowledge" into 15-second knowledge points for Douyin and long texts/images guides for Xiaohongshu)[4].

6.2.4. Public-Private Domain Linkage: Achieving a Win-Win of Short-Term Conversion and Long-Term Loyalty

Public Domain Traffic for Acquisition: Publish high-quality content on Xiaohongshu search and Douyin recommendation feeds to attract potential users[6].

Private Domain Traffic for Retention: Enhance user stickiness and repurchase rates through Xiaohongshu fan groups and Douyin fan clubs, utilizing membership systems, exclusive offers, and regular interaction.

7. Conclusions

Through mixed research methods, this paper systematically dissects the differences in communication mechanisms and their impact on user behavior between Xiaohongshu and Douyin, arriving at the following core conclusions:

(1) The communication logic of the two platforms essentially represents precise adaptation to users' differentiated needs: Xiaohongshu, rooted in "social identity," builds a trust ecosystem through substantive content and KOC matrices, forming a rational "people find goods" decision chain. User behavior exhibits characteristics of "long-chain, high trust, high repurchase." Douyin, centered on algorithm recommendation, relies on emotionalized content and interest-based e-commerce closed loops to stimulate potential needs, constructing an emotional "goods find people" conversion chain. User behavior is characterized by "short-chain, high impulse, low repurchase"[1].

(2) The two platforms form a complementary, synergistic relationship: The synergistic chain of "Douyin stimulates interest — Xiaohongshu verifies trust — dual platforms handle conversion" enables an organic combination of "traffic breadth" and "conversion depth". Case data shows this model can increase brand conversion rate by 25% and repurchase rate by 10%.

(3) Theoretical Contribution: The "Dual-Wheel Drive Model for Social Platform Communication" is proposed, integrating Uses and Gratifications Theory, Social Identity Theory, and Algorithmic Communication Theory[7]. This provides an integrated analytical framework for

explaining social platform communication phenomena and addresses the challenge of fragmented marketing.

This study has certain limitations: the case focuses on the single, vertical field of pet e-commerce, resulting in limited industry coverage. The scale of quantitative data needs to be expanded. Future research can be improved through cross-industry comparisons, large-sample quantitative analysis, and dynamic tracking studies to provide more comprehensive support for brand cross-platform communication and the contextual development of social communication theory.

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