

A Study on the Diffusion Patterns of Tribal Consumption on Social Media Based on Social Network Analysis

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Abstract

Tribal consumption refers to informal communities formed by consumers based on shared values, lifestyles, or identity, along with their collective consumption behaviors. On social media platforms, this consumption pattern spreads rapidly through the guidance of opinion leaders, symbolic communication, and emotional resonance. This study focuses on representative tribal consumption topics—such as “Guochao” fashion, the “camping economy”, and vegetarianism—on Xiaohongshu, Weibo, and Douyin. By collecting user interaction data from 2021 to 2024, the research applies Social Network Analysis (SNA) to identify key nodes, community structures, and diffusion pathways in information dissemination. The findings reveal that tribal consumption exhibits a “core-periphery” network structure, with both Key Opinion Leaders (KOLs) and Key Opinion Consumers (KOCs) serving as central hubs in the diffusion process. The study uncovers the social construction mechanisms of consumer culture in the digital era and provides strategic insights for firms engaging in community marketing and brand co-creation.

Keywords

Tribal Consumption, Social Network Analysis, Social Media Diffusion.

1. Introduction

The rapid development of social media has fundamentally transformed consumption patterns, giving rise to what scholars term “tribal consumption” [1]. Tribal consumption represents informal communities where consumers unite around shared values, lifestyles, or identities, engaging in collective consumption behaviors that reinforce group belonging. Unlike traditional market segments, consumption tribes are fluid, emotionally charged, and self-organized through digital platforms [2].

Social media platforms like Xiaohongshu, Weibo, and Douyin have become fertile ground for tribal consumption, facilitating rapid information diffusion through opinion leadership, symbolic communication, and emotional resonance. The “Guochao” (national trend) fashion movement, the camping economy boom, and the rise of vegetarianism exemplify how consumption tribes form and spread through digital networks. Understanding the diffusion patterns of these tribal consumption phenomena requires examining the underlying social structures that facilitate their propagation.

While existing research has explored tribal consumption from sociological and marketing perspectives [3], few studies have systematically analyzed the structural patterns of information diffusion using empirical network data. Social Network Analysis (SNA) provides a powerful methodological framework for examining how consumption-related information flows through social ties, identifying key influencers, and mapping community structures [4].

This study addresses this gap by investigating three representative cases of tribal consumption on Chinese social media platforms from 2021 to 2024.

Our research makes three primary contributions. First, we identify the characteristic network structures of tribal consumption diffusion, revealing a consistent core-periphery pattern across different consumption tribes. Second, we demonstrate the complementary roles of Key Opinion Leaders (KOLs) and Key Opinion Consumers (KOCs) in driving information spread. Third, we provide practical insights for marketers seeking to leverage tribal dynamics for brand community building and co-creation [5-8].

2. Literature Review

2.1. Theoretical Foundations of Tribal Consumption

The concept of tribal consumption emerged from sociological research on postmodern consumption, which emphasized the symbolic and experiential aspects of consumer behavior [1]. Traditional segmentation approaches based on demographic or psychographic variables have limitations in capturing the fluid, community-based nature of contemporary consumption patterns. Consumption tribes form around shared passions, lifestyles, or identity projects, creating temporary emotional communities bound by common consumption practices [2].

Social media platforms have accelerated the formation and diffusion of consumption tribes by lowering communication barriers and enabling real-time interaction. Platforms like Xiaohongshu, with its focus on lifestyle sharing, and Douyin, with its short-video format, provide ideal environments for tribal consumption to flourish. The visual and interactive nature of these platforms facilitates the symbolic communication essential for tribal identity formation [3].

2.2. Social Network Analysis in Consumption Research

Social Network Analysis has gained traction in marketing research as scholars recognize the importance of social structures in shaping consumption behaviors [4]. SNA examines patterns of relationships among interacting units, allowing researchers to identify influential nodes, map information flow pathways, and detect community structures within networks. In the context of tribal consumption, SNA helps visualize how consumption-related information spreads through social connections.

Previous applications of SNA in marketing have focused on brand communities, innovation diffusion, and viral marketing [9]. However, few studies have applied SNA specifically to tribal consumption phenomena on social media. Our study extends this literature by examining multiple cases of tribal consumption with longitudinal data from major Chinese platforms.

Table 1: Data Collection Overview by Platform and Tribe

Platform/Tribe	Guochao	Camping	Vegetarianism
Xiaohongshu	12,543 posts	8,976 posts	6,432 posts
Weibo	24,876 posts	15,432 posts	9,654 posts
Douyin	18,765 posts	12,345 posts	7,890 posts
Time period	2021-2024	2021-2024	2021-2024
Total users	156,432	98,765	54,321

3. Methodology

3.1. Data Collection and Processing

We collected data from three major Chinese social media platforms—Xiaohongshu, Weibo, and Douyin—focusing on three representative tribal consumption phenomena: “Guochao” fashion, the camping economy, and vegetarianism. The data collection period spanned from January 2021 to December 2024, capturing the evolution of these consumption tribes over time. Table 1 summarizes the scope of our dataset.

Data collection employed platform APIs to gather posts, comments, shares, and user interaction data related to our focal tribes. For each platform, we identified relevant keywords and hashtags associated with each consumption tribe. The Guochao tribe was tracked using terms such as “#” (national trend), “#” (Chinese style), and brand-specific hashtags. The camping tribe was identified through terms like “#” (camping) and “#” (outdoor life), while vegetarianism used “#” (vegetarian) and “#” (healthy eating).

User networks were constructed based on interaction patterns, where nodes represent users and edges represent interactions such as comments, shares, or mentions. Network ties were weighted by interaction frequency and directionality. This approach allowed us to map the social structures through which tribal consumption content diffused.

3.2. Social Network Analysis Metrics

We employed standard SNA metrics to analyze the diffusion patterns of tribal consumption. Degree centrality identified influential nodes based on their connection volume. Betweenness centrality revealed nodes that acted as bridges between different parts of the network. Clustering coefficients measured the extent to which nodes formed tightly-knit groups, while modularity algorithms detected community structures within the larger network.

The analysis proceeded in three stages. First, we examined the overall network structure for each consumption tribe. Second, we identified key nodes and their roles in information diffusion. Third, we traced information flow pathways to understand how content spread through the networks. Longitudinal analysis allowed us to observe how these patterns evolved over the four-year study period.

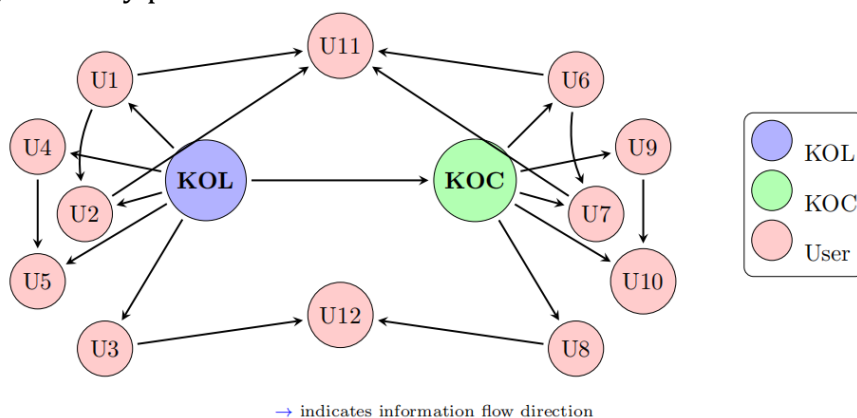


Figure 1: Optimized Network Structure with External Legend Showing Tribal Consumption Diffusion

4. Results

4.1. Core-Periphery Network Structure

Our analysis reveals that tribal consumption networks consistently exhibit a core-periphery structure across all three platforms and consumption tribes. This structure consists of a densely connected core of influential users surrounded by a sparser periphery of regular users. The

core nodes demonstrate high betweenness centrality, acting as bridges that connect different parts of the network.

The core-periphery structure facilitates efficient information diffusion while maintaining tribal cohesion. Content typically originates in the core and radiates outward to the periphery, though we also observed reverse flow where peripheral content gains traction and moves inward. This bidirectional flow distinguishes tribal consumption networks from traditional hub-and-spoke models of information diffusion.

Network visualization (Figure 1) illustrates this structure, with Key Opinion Leaders (KOLs) and Key Opinion Consumers (KOCs) occupying central positions. The persistence of this pattern across different tribes and platforms suggests it represents a fundamental characteristic of tribal consumption diffusion on social media.

4.2. Key Nodes: KOLs and KOCs

Both KOLs and KOCs play crucial but distinct roles in tribal consumption diffusion. KOLs typically have larger follower bases and higher visibility, making them effective for broad awareness generation. However, KOCs often demonstrate higher engagement rates and stronger trust within their immediate networks, making them more effective for driving actual consumption behaviors.

KOLs serve as initial content amplifiers, while KOCs function as validation agents who authenticate and contextualize consumption recommendations. This complementary relationship creates a two-stage diffusion process where KOLs generate initial momentum and KOCs facilitate deeper tribal integration.

The ratio of KOLs to KOCs varies by tribe, with Guochao networks showing higher KOL concentration compared to the camping and vegetarianism tribes.

Table 2: Network Metrics by Consumption Tribe (Average Values)

Metric/Tribe	Guochao	Camping	Vegetarianism
Network size	15,643	9,876	5,432
Average degree	8.7	6.3	4.9
Clustering coefficient	0.45	0.52	0.61
Modularity	0.32	0.41	0.48
KOL centrality	0.67	0.54	0.48
KOC centrality	0.58	0.62	0.65

4.3. Diffusion Pathways and Community Structures

Information diffusion follows predictable pathways shaped by the core-periphery structure. Content typically follows one of three patterns: radial diffusion from core to periphery, hierarchical diffusion through nested communities, or viral diffusion through peripheral networks that bypass the core. The predominance of each pattern varies by platform and tribe. Community detection algorithms revealed distinct sub-tribes within each consumption tribe. For example, the Guochao tribe contained subgroups focused on fashion, cosmetics, and lifestyle products. These sub-communities maintained semi-permeable boundaries, allowing information flow while preserving distinctive identities. The camping tribe showed stronger geographical clustering, while vegetarianism exhibited value-based segmentation.

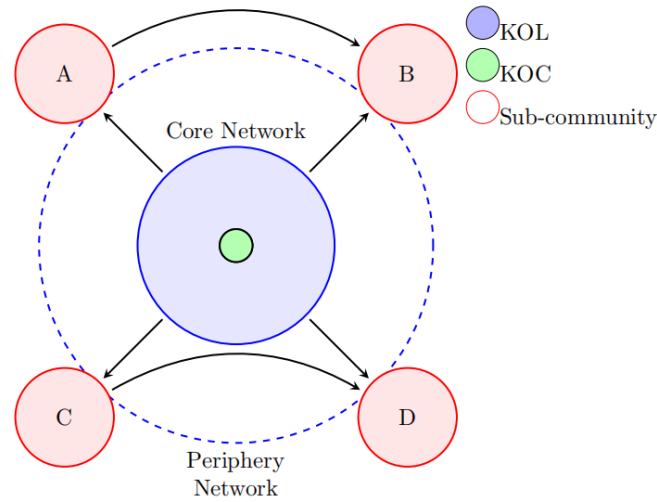


Figure 2: Core-Periphery Structure with Sub-communities in Tribal Consumption Networks

5. Discussion

5.1. Theoretical Implications

Our findings contribute to tribal consumption theory by elucidating the structural mechanisms underlying its diffusion on social media. The consistent core-periphery pattern across different tribes suggests this structure optimally balances efficiency and stability for consumption-related information flow. The core provides amplification while the periphery offers diversification, creating a resilient diffusion system.

The complementary roles of KOLs and KOCs challenge simplistic influencer marketing approaches that prioritize reach over relevance. Our results indicate that effective tribal marketing requires both broad-reach influencers and trusted validators within specific communities. This dual-influencer model extends existing theories of opinion leadership in digital environments.

The identification of distinct diffusion pathways (radial, hierarchical, viral) provides a typology for understanding how consumption content spreads through social networks. Each pathway has implications for the speed, scale, and persistence of tribal consumption trends. Marketers can leverage this typology to develop more nuanced diffusion strategies tailored to specific tribal characteristics.

5.2. Practical Implications

For marketers, our findings offer strategic guidance for engaging with consumption tribes on social media. The core-periphery structure suggests that resource allocation should balance investments between core influencers and peripheral community building. While KOLs provide initial visibility, sustained tribal engagement requires nurturing KOCs and facilitating organic community development.

Platform-specific strategies emerge from our cross-platform comparison. Xiaohongshu's visually oriented, community-focused platform favors detailed consumption narratives and lifestyle integration. Weibo's public discourse environment suits trend amplification and public opinion shaping. Douyin's entertainment-oriented format benefits from creative content that aligns with tribal identities while offering entertainment value.

Brands seeking to leverage tribal consumption should focus on community co-creation rather than one-way messaging. This involves identifying and collaborating with both KOLs and KOCs, creating shareable content that reinforces tribal identity, and facilitating user-generated

content that deepens tribal engagement. Success requires authentic alignment with tribal values rather than superficial appropriation.

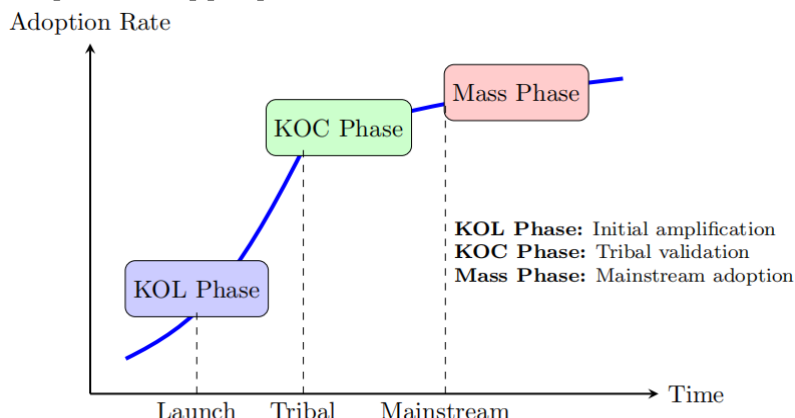


Figure 3: Diffusion Timeline Showing KOL, KOC, and Mass Adoption Phases in Tribal Consumption

6. Conclusion

This study examined the diffusion patterns of tribal consumption on social media through Social Network Analysis of three representative cases from 2021 to 2024. Our findings reveal that tribal consumption networks consistently exhibit a core-periphery structure with distinct diffusion pathways. Both KOLs and KOCs play complementary roles in driving information spread, with KOLs providing initial amplification and KOCs enabling deeper tribal integration. The research contributes to theoretical understanding of tribal consumption dynamics in digital environments and offers practical insights for marketers. The identified network structures and diffusion patterns provide a framework for developing more effective tribal marketing strategies that balance broad reach with community authenticity.

Several limitations suggest directions for future research. Our focus on Chinese social media platforms limits generalizability to other cultural contexts. Future studies could examine tribal consumption diffusion cross-culturally. Additionally, our data collection period captured established tribes rather than nascent formation processes. Longitudinal tracking of emerging tribes would provide insights into tribal genesis and evolution.

As social media continues to evolve, understanding the network dynamics of tribal consumption becomes increasingly important for both academic research and marketing practice. The structural patterns identified in this study offer a foundation for further investigation into how digital communities form around consumption practices and how these communities shape contemporary consumer culture.

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