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Understanding UGC popularity on social media: A grounded theory-based conceptual framework

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Abstract

User-generated content (UGC) has become increasingly popular among tourists, largely due to its widespread circulation on social media; however, its influence on user perceptions and behaviors has received limited academic attention. Drawing on grounded theory and three-level coding, this study systematically develops a conceptual framework of UGC popularity based on semi-structured interviews with 17 active social media users on RedNote (*Xiaohongshu*). The analysis identified 10 categories, which were further integrated into three overarching dimensions: attractiveness (data indicator and content value), relevance (content characteristics, platform operation mechanisms, user interaction, account attributes, and external environment), and evaluation (destination cognition, travel decision, and trust perception). These categories are intricately connected and reflect the underlying logic of the three dimensions. By clarifying the meaning and constituent elements of UGC popularity, this study establishes a theoretical basis for future quantitative research in social media marketing. It offers practical insights for destination marketing organizations, content creators, and platform operators.

1. Introduction

Driven by the rapid advancement of mobile internet and digital technologies, social media has become embedded in daily life and has reshaped individual consumption decisions. In this digitally connected social ecosystem, user-generated content (UGC) has emerged as a core engine of content production that influences how users access information, form attitudes, and shape behavioral intentions (Kaplan & Haenlein, 2010). UGC Popularity is widely used in academic and business contexts to assess content performance. It is generally understood as the degree of user engagement with voluntarily created and shared content across digital platforms in diverse formats, including text, images, and videos. Prior studies commonly measure popularity using observable interaction metrics such as likes, comments, shares, and saves (Revathi, 2024); however, these indicators may oversimplify popularity by emphasizing surface behaviors while overlooking the social, psychological, and technological drivers of engagement.

Research increasingly conceptualizes UGC popularity as multidimensional. Content that elicits strong emotions is more likely to go viral (Berger & Milkman, 2012). In a systematic review, Woods (2023) summarized the research landscape of social media popularity, spanning consumer behavior effects to content diffusion mechanisms, and classified influencing factors into two categories: behavioral strategies (e.g., emotional expression, visual design, posting frequency) and social structural conditions (e.g., follower size, resource support, identity verification). Furthermore, Zhuang et al. (2025) emphasized that UGC popularity is jointly affected by information quality and source credibility, with text length, emotional intensity, and media richness as critical determinants. Collectively, UGC popularity is a multidimensional construct shaped by content, emotion, social context, and platform-related factors.

However, UGC popularity is still often treated as a unidimensional, indicator-based construct, and its conceptual definition remains underdeveloped. Moreover, existing research tends to emphasize platform- and algorithm-centered explanations while giving less attention to users' subjective

perceptions and cognitive interpretations of what constitutes “popular” UGC. This ambiguity limits theoretical advancement and weakens the practical application of UGC insights in marketing and platform governance. To address these gaps, this study uses RedNote (*Xiaohongshu*) as the research context and conducts semi-structured interviews to conceptualize UGC popularity and its core dimensions. The study develops a theoretically grounded framework and provides actionable implications for destination marketing organizations, content creators, and platform operators.

2. Literature review

2.1 User-generated content

UGC is conceptualized as a heterogeneous set of media content (e.g., text, images, videos, and comments) created, edited, and shared by end users rather than professional content producers or commercial entities (Martí-Parreño et al., 2015). Compared with brand-generated content (BGC), which is often guided by commercial objectives, UGC is characterized by grassroots production, spontaneous dissemination, and a user-centric value orientation. Prior research commonly highlights three core characteristics that underpin UGC’s influence: interactivity, authenticity, and perceived expertise.

Interactivity enables two-way communication between content creators and audiences and supports peer-to-peer interaction among users (Li et al., 2025). Through likes, comments, and shares, interactivity increases user involvement, strengthens community ties, and supports platform retention. It also contributes to the iterative development of UGC, as feedback can shape creators’ subsequent content.

Authenticity is widely recognized as UGC’s key advantage over BGC. Since it is grounded in personal experience and voluntary sharing, UGC is perceived as less commercially manipulated and therefore more credible (Levallois, 2024). This perceived authenticity directly impacts users’ attitudinal and behavioral responses, including their trust in information, willingness to adopt recommendations, and subsequent consumption decisions. However, recent research has highlighted the conditional nature of this authenticity: when users perceive hidden commercial intent (e.g., disguised promotions), credibility declines (Werenowska & Jaska, 2025).

Perceived expertise and content quality further extend UGC’s value proposition. When creators possess domain-specific knowledge, practical experience, or professional skills, their content can rival that produced by professional institutions (Li et al., 2025). In turn, users rely on peer-generated content for practical guidance and specialized insights. Content quality, such as visual design, narrative clarity, and technical execution, also shapes UGC’s functional, emotional, and social value (Kim et al., 2012).

In addition to these inherent attributes, Hsiao and Wang (2015) argue that the social and psychological drivers of UGC production reflect a socially embedded process shaped by social comparison and social identity. High engagement with others’ posts can create comparison pressure that motivates more frequent and refined content creation, thus reinforcing a self-perpetuating cycle within social networks.

2.2 Theoretical frameworks for understanding ugc and its popularity

Classic communication models provide a foundation for explaining information diffusion in UGCs. Lasswell's (1948) model breaks communication into five components: communicator, message, medium, audience, and effect, addressing the fundamental question of "who says what, through which channel, to whom, and with what effect" (Ouirdi et al., 2014). This model provides a framework for analyzing the roles of UGC creators (communicators), content (messages), social media platforms (mediums), users (audiences), and behavioral outcomes (effects).

The Shannon-Weaver model (1949) extends this framework by emphasizing information transmission and introducing "noise" to describe interference factors that may distort messages during dissemination (Nag, 2024). In social media contexts, algorithmic filtering, information overload, and competing content can function as noise that shapes UGC reach and impact. Additionally, the two-step flow theory (Lazarsfeld et al., 1944) highlights the mediating role of opinion leaders, suggesting that UGC often influences opinion leaders, who then transmit this information to broader audiences (Gangadharbatla & Valafar, 2017).

Uses and gratifications theory (UGT) offers a user-centered explanation of engagement, arguing that users actively select and interact with media to meet specific requirements rather than passively receiving information (Ruggiero, 2000). On social media, these needs include information acquisition (e.g., travel guides), entertainment (e.g., visually appealing content), and social interaction (e.g., peer discussion). Du et al. (2024) further demonstrate that algorithmic recommendations aligned with user interests strengthen these gratifications and sustain engagement with popular UGC, positioning popularity as a signal of content relevance to user needs.

Social identity theory (SIT) explains herd behavior and community dynamics in the formation of popularity. SIT argues that individuals seek social validation by aligning with group norms, particularly in uncertain situations (Tajfel & Turner, 1979). On social media, UGC popularity indicators such as likes, comments, and shares can signal perceived consensus and a reinforcing feedback loop: high popularity attracts more engagement, which in turn enhances popularity (Yang et al., 2019). High-popularity UGC may reflect community norms, enabling users to strengthen group identity through interactive behaviors. Users may also adjust interaction strategies (e.g., using likes rather than commenting in negative discussion contexts) to maintain social identity boundaries and avoid conflict (Yang et al., 2019).

Information adoption theory (IAT) focuses on how users evaluate and adopt UGC as information. IAT identifies two determinants: content quality and source credibility (Zhuang et al., 2023). Content quality is shaped by attributes such as detail, readability, and objectivity, while source credibility is influenced by the creator's expertise, social recognition, and perceived independence from commercial interests. Kim and Song (2020) find that perceived advertising reduces trust, especially for experiential information. Khobzi and Lau (2017) further note that negative comments may not reduce UGC popularity. Some

highly endorsed negative comments can create “controversial popularity”; this phenomenon may suppress likes but increase shares, which reflects the complex emotional dynamics of UGC engagement.

2.3 UGC popularity: Conceptualization, antecedents, and measurement

Despite growing interest in UGC popularity, a unified conceptual definition and measurement framework remain limited. Popularity generally refers to the state of being widely recognized and endorsed by a large group (Cillessen & Marks, 2011; Shin, 2020). In the UGC context, popularity refers to the extent to which user-created content attracts attention, generates engagement, and spreads across social media platforms. Existing research mainly examines what drives UGC popularity and how it is measured, but important conceptual and methodological gaps persist.

Studies typically group antecedents of UGC popularity into content, creator, and contextual factors. At the content level, features such as text length, emotional intensity, entertainment value, and practicality influence popularity, often depending on content type (Liu-Thompkins & Rogerson, 2012). Emotionally evocative content is more likely to go viral (Berger & Milkman, 2012), whereas practical information tends to generate sustained engagement. At the creator level, professional identity, niche positioning, and alignment with trends can increase visibility and reach (Lu & Zheng, 2025; Zhuang et al., 2025). Social ties and peer interaction further facilitate sharing and popularity increases (Hsiao & Wang, 2015). At the contextual level, platform algorithms can amplify popularity and exposure bias by extending the visibility of already popular content and shaping user perceptions (Bartley et al., 2021). Popularity can also be event-driven and time-sensitive, with short-term “buzz” and longer discussion cycles (Deusser et al., 2018), and it may vary with external conditions such as holidays and tourism promotions (Tsiakali, 2018).

Most studies operationalize UGC popularity using unidimensional, quantitative metrics such as likes, comments, shares, and saves (Revathi, 2024). While these indicators are intuitive and easy to measure, they may not capture users’ perceptions or the conditions under which popularity translates into influence. Evidence of heterogeneous user responses suggests that popularity effects are conditional on user identity, trust patterns, and involvement levels (Beurer-Zuellig & Klaas, 2020). Recent advances in popularity measurement have shifted from static cross-sectional indicators to modeling popularity as a dynamic trajectory, including the detection of emerging topics, classification of growth patterns, and time-series prediction (Garroppo et al., 2018; Reed et al., 2011; Xu et al., 2025). In addition, Woods (2023) argues that existing measurement approaches often overlook structural constraints (e.g., race, class, and gender) that affect the distribution of UGC popularity, and these gaps may carry offline inequalities into online spaces.

In tourism, UGC popularity is closely tied to electronic word-of-mouth (eWOM) because consumers rely heavily on peer-generated content for experience-based decisions (Litvin et al., 2008). Research distinguishes “naturally generated” eWOM (organic UGC) from “marketing-generated” eWOM (commercial UGC) and cautions that disguised promotional content may increase short-term popularity

but undermine user trust (Tsiakali, 2018). A loss of trust can lead to negative secondary dissemination, thus highlighting the importance of maintaining UGC's perceived authenticity in tourism marketing.

3. Methodology

3.1 Methods

This study aims to investigate the conceptual meanings, key dimensions, and primary characteristics of UGC popularity on social media. Data were collected through semi-structured interviews, and the findings were analyzed using grounded theory with thematic analysis. Grounded theory is particularly well-suited for exploratory research because it supports concept identification and theory development from empirical data when established frameworks are limited (Charmaz & Thornberg, 2021). Consistent with thematic analysis procedures, the study followed six steps: familiarizing oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report (Braun & Clark, 2006).

Initially, a comprehensive literature search was conducted on Scopus using keywords such as user-generated content, social media popularity, destination marketing, and user perception. This literature review outlined the current research landscape, clarified key concepts, and established a preliminary analytical framework. This framework provided a theoretical foundation for designing the interview guide and served as a point of reference for subsequent coding and theme development.

Given its distinctive communication culture and high conversion rate, RedNote was selected as the research context for examining UGC popularity. A total of 17 active RedNote users participated in in-depth interviews, including 15 primary interviews and two additional interviews to confirm theoretical saturation. The interviews centered on users' perceptions of UGC popularity, the factors contributing to its formation, and its perceived impacts.

Lastly, interview transcripts were imported into NVivo 15 Plus for data management and coding. Analysis proceeded through iterative coding and constant comparison, followed by theme development and interpretive explanation. Drawing on uses and gratifications theory and social identity theory, an initial coding framework organized the analysis around three elements: phenomenon recognition, cause exploration, and influence and perception. Grounded theory emphasizes the construction of theory from empirical data (Thornberg & Charmaz, 2014). By integrating grounded theory with thematic analysis, this study identified the core dimensions and characteristics of UGC popularity and developed a theoretical model of the construct.

3.2 Data collection

This study collected data from active users of the RedNote platform, tourism content creators, and online marketing personnel from travel agencies. It centered on key research topics, including perceptions of popularity, its causes, and effects. RedNote is a vital hub for tourism-related UGC, with its

interactive environment and the evolution of content popularity serving as crucial contexts for examining the dissemination of social media content and the dynamics of destination marketing. By collecting data on RedNote, the study captured users' perceptions and evaluative logic concerning popularity. This, in turn, provided empirical support to develop a theoretical framework with practical relevance. Furthermore, this study offers targeted insights for destination marketing, content creation, and platform management.

The main data collection method involved semi-structured interviews conducted both online via audio calls and face-to-face. A total of 17 participants were included, with 15 participating in primary interviews to gather essential data and two additional participants (i.e., A12 and A17) interviewed to confirm theoretical saturation. Respondents were selected based on three criteria: participants used the platform at least three times a week to demonstrate familiarity with the platform's ecosystem; they had published or engaged with tourism-related UGC in the past year, thereby possessing practical experience in perceiving popularity; and their demographic characteristics spanned the age range of 20 to 40, while also considering a diverse user group with varying levels of UGC creation experience. This approach supported sample diversity and representativeness. Table 1 presents an overview of the interview participants.

Table 1
Sample Overview

No.	Gender	Age	Occupation	UGC creation experience	Category
A01	Male	30	Self-media blogger	Regular production	Tourism content creator
A02	Female	28	Operations specialist	Occasional sharing	Active user
A03	Female	32	Sales representative	Occasional sharing	Active user
A04	Female	30	Fashion merchandiser	Occasional sharing	Active user
A05	Male	26	Teacher	Occasional sharing	Active user
A06	Female	31	Project manager	Occasional sharing	Active user
A07	Female	27	Online promotion specialist	Regular production	Online promotion specialist
A08	Female	38	Travel agency manager	Occasional sharing	Active user
A09	Female	24	Customer support specialist	Occasional sharing	Active user
A10	Female	25	Overseas education consultant	Occasional sharing	Active user
A11	Male	35	HR business partner	Occasional sharing	Active user
A12	Male	27	Online promotion specialist	Regular production	Online promotion specialist
A13	Male	23	Student	Occasional sharing	Active user
A14	Female	22	Student	Occasional sharing	Active user
A15	Male	25	Cross-border e-commerce specialist	Occasional sharing	Active user
A16	Male	40	Sales representative	Occasional sharing	Active user
A17	Female	26	Stay-at-home mother	Occasional sharing	Active user

All respondents voluntarily participated in this study. Interviews were conducted from October 14 to November 15, 2025, and all sessions were audio-recorded. The recordings were subsequently transcribed verbatim, resulting in approximately 25,000 words of interview text. The transcripts documented users' judgments of popularity metrics, perceived factors contributing to popularity, and the effects of popularity on decision-making, thereby providing an empirical basis for subsequent grounded theory coding and theoretical framework development.

The interview guide was structured around three core questions: (1) Phenomenon: How do you assess the popularity of a travel note on RedNote? (2) Factors: What elements contribute to the sustained popularity of a note (post) on RedNote? (3) Perception: How does this perceived popularity influence your views and choices regarding travel destinations? Throughout the interviews, respondents were encouraged to share experiences through personal anecdotes and storytelling, while avoiding academic terminology that might compromise the authenticity of the information. Clarifying and follow-up questions were employed to probe ambiguous responses and to elicit elaboration when needed. Table 2 presents the interview guide.

Table 2
Interview questions

Intent	Interview question samples
Phenomenon	*Q1:How do you assess the popularity of a travel note on RedNote?* *Follow-up Questions*: *• What specific metrics or indicators do you pay attention to first (e.g., number of likes, comments, shares, cover image)?* *• Besides these indicators, what else catches your attention (e.g., comment quality, friend sharing, author-user interaction)?* *• When recommending a highly popular note to a friend, how do you usually describe it?*
Factors	*Q2*: *In your opinion, what factors contribute to the sustained popularity of a note on RedNote?* *Follow-up Questions*: *• How important is the content itself (e.g., attraction selection, writing style, images/videos) in maintaining popularity? Please provide examples.* *• What roles do platform mechanisms (e.g., algorithm recommendations, trending topics) and user behaviors (e.g., likes, saves, shares) play in sustaining popularity?* *• In your experience, does popularity tend to emerge abruptly or accumulate gradually? What factors influence the duration of a note's popularity?*
Perception	*Q3: How does perceived popularity influence your views and decisions about travel destinations?* *Follow-up Questions*: *• Does high popularity lead you to perceive the content as more credible or attractive? Why?* *• Does it primarily elicit your emotional desire (e.g., "I really want to go") or provide practical information for decision-making (e.g., transportation, itineraries, participation)? If so, do these responses prompt you to contact the note's author for further details?* *• How do you distinguish whether the popularity comes from genuine word-of-mouth or commercial promotion? How does this distinction affect your trust?*

3.3 Data analysis

This study systematically organized and analyzed the interview data. Coding followed the three-stage grounded theory procedures: open coding, axial coding, and selective coding.

1. Open coding: The interview transcripts were analyzed line by line to identify initial concepts related to UGC popularity directly from participants' interview statements. For example, terms such as

"number of likes" and "number of saves" were identified as first-level codes, supporting comprehensive coverage of the raw data.
2. Axial coding: Based on the logical linkages among concepts, the initial codes were compared and synthesized into second-level codes. For example, "cover visual appeal" and "title relevance" were grouped under the category of "content characteristics".
3. Selective coding: Second-level categories were then integrated around the study's core concerns to form a third-level coding system.

To enhance analytical rigor and reliability, the coding process incorporated iterative verification of the alignment between interview statements and assigned codes. As for theoretical saturation, analysis of the first 15 interviews revealed no emergence of new concepts, categories, or dimensions, which led to the establishment of a preliminary framework. To further confirm saturation, two additional interviews (A12 and A17) were analyzed as validation cases. The analysis indicated that no new categories or dimensions emerged, suggesting that the existing coding structure adequately captured the essential information in the additional data. Consequently, the theoretical framework was confirmed, and data collection was concluded. Figure 1 presents a word cloud visualization of the interview data.

4. Results

Based on a systematic coding analysis of interview data from 17 respondents, this study has developed a conceptual framework of UGC popularity. The coding results indicate that UGC popularity comprises three dimensions: attractiveness (2 categories), relevance (5 categories), and evaluation (5 categories). The categories and characteristic elements associated with each dimension are presented as follows:

4.1 Attractiveness

The attractiveness dimension captures the dual cognitive logic through which participants assessed the popularity of UGC notes on RedNote, encompassing two categories: data indicator and content value (see Table 3).

Table 3
Coding results of the attractiveness dimension

Open coding	Axial coding	Original interview statement example
Likes	Data indicator	What makes it popular is, first of all, its likes and bookmarks, which are reflected in the data.
Bookmarks	Data indicator	Basically, it's based on the number of bookmarks.
Comments	Data indicator	Look at the comments; if there are many user comments, I feel its popularity is quite good.
Views	Data indicator	There's also the view count and comments.
Shares	Data indicator	Let's say the forwarding count; if this note is popular, everyone would want to share it with their friends.
Homepage Recommendation ranking	Data indicator	For example, look at the ranking of the homepage recommendations and the comments.
Practical information value	Content value	The note can provide users with some substantial help.
Emotional resonance value	Content value	Some people might take beautiful, detailed photos, paired with text that expresses genuine feelings. I feel this is more moving than purely AI-generated viral travel notes.
Content authenticity	Content value	The content should be relatively authentic, not advertising-laden.
Information detail	Content value	Detailed text looks more authentic.

Data indicators provided the most direct basis for quantifying UGC popularity, including likes, bookmarks, comments, views, and shares. For example, Respondent A02 stated, "Basically, it's based on the number of bookmarks; a higher count indicates that the content is valuable". Respondent A06 added, "Look at the comments; if there are many user comments, I feel its popularity is quite good". In addition to these interaction metrics, homepage recommendation rankings were also considered an important signal of popularity, as noted by A05: "For example, look at the ranking of the homepage recommendations and the comments".

Similarly, content value reflected assessments of UGC popularity, including practical information value, emotional resonance value, content authenticity, and information detail. Respondent A01 pointed out, "The content that can provide users with substantial help is what makes its popularity meaningful". Respondent A09 emphasized authenticity: "The content should be relatively real, not advertising-laden". Emotional resonance is also an important element, as noted by A13: "Some people take very beautiful, detailed photos paired with text that expresses genuine feelings. This is more moving than purely AI-

generated viral content”. Collectively, quantitative indicators and content value constitute the overall evaluative logic of UGC popularity.

4.2 Relevance

The results for the relevance dimension indicated a multi-layered system of factors related to UGC popularity, encompassing five categories: content characteristics, platform operation mechanisms, user interaction, account attributes, and external environment (see Table 4).

Table 4
Coding results of relevance dimensions

Open coding	Axial coding	Original interview statement example
Cover visual appeal	Content characteristics	The cover of the first note can draw my attention. Its aesthetics are sufficient and relatively appealing.
Alignment of titles to trending topics	Content characteristics	The title covers holidays; people search for guides when they need to travel. It has tags for specific destinations and includes terms like “guideline”.
Content controversy	Content characteristics	Because the content is good enough and has some resonance or discussion topics, the comment volume will be very high.
Information timeliness	Content characteristics	It’s important to continuously update the timeliness of the material, which I think is essential for staying up to date.
Variety of content formats	Content characteristics	The format of the content is also very important. Some notes look bland to me; for instance, some food photos don’t look appealing, while some travel notes capture food in a way that looks tempting.
Content practicality	Content characteristics	Many notes feature simple images and text that people casually look at. If the content is practical, the platform will likely promote it.
Interactive data-driven algorithms	Platform operation mechanisms	Likes, comments, and saves increase a note's exposure. This way, the platform’s algorithm recognizes that the note is popular and will direct some traffic to it.
Targeted pushes based on user preference	Platform operation mechanisms	The platform should provide targeted pushes. For example, if I’ve recently searched for certain keywords, it will send me links related to similar keywords.
Support for popular topics	Platform operation mechanisms	If your content traffic aligns with the platform's latest promotions, the platform will provide some traffic support.
Secondary flow	Platform operation mechanisms	Maintaining an article's popularity may involve repeatedly editing a viral post. For instance, upon reaching a certain view count, appropriate modifications are made to be recognized by the platform for secondary flow.
Paid promotion	Platform operation mechanisms	If the market average price is ¥30 and my company invests ¥100, even if the article is poorly done, it will still attract customers and clicks.
Positive interaction	User interaction	If there is interaction, its popularity will not decline.
Author responses	User interaction	Maintaining its popularity depends not only on the richness of its content but also on interactions with commenters.

Open coding	Axial coding	Original interview statement example
Cross-platform sharing and dissemination	User interaction	Usually, I share notes that I find useful on WeChat or send screenshots directly to friends.
Account nichedness	Account attributes	The popularity of a note mainly refers to the degree to which a self-media account's content focuses on a specific niche. An account that consistently shares travel-related guides is very helpful.
Creator professionalism	Account attributes	If a blogger frequently posts travel journals that resemble professional travel content, I tend to prefer them.
Cultural tourism promotion	External environment	I believe that local cultural tourism promotion is very important. If it significantly promotes local tourism and attracts attention, it will greatly enhance its inherent popularity.
Holiday demand	External environment	This may relate to specific statutory holidays.
Social hotspot coupling	External environment	Whether it aligns with current social hotspots and whether it relates to tourism content, for example, travel guides.

Content characteristics were identified as the foundational determinants of popularity, including cover visual appeal, alignment of titles with trending topics, content controversy, timeliness of information, variety of content formats, and content practicality. Respondent A02 pointed out, “The cover of the first note attracted my attention; its aesthetics were sufficient”. Respondent A12 emphasized timeliness: “It’s important to continuously update the timeliness of the materials and keep up with the times”.

Platform operation mechanisms played a crucial role in the spread of popularity, including interactive data-driven algorithms, targeted pushes based on user preference, support for popular topics, secondary flow, and paid promotion. Respondent A08 explained, “Likes, comments, and favorites increase the exposure of a note, making the platform algorithm think that the note is popular and thus directing platform traffic towards it”. Respondent A15 added, “The platform’s targeted push notifications, for instance, based on my recent search keywords, will send me many links with similar keywords”.

User interaction behaviors contributed to sustained popularity, including positive interactions, author responses, and cross-platform sharing and dissemination. Respondent A06 pointed out, “If there’s interaction, its popularity definitely won’t drop”. Respondent A11 added, “Maintaining popularity depends not only on the richness of the content itself, but also on interaction with those who leave comments”.

Account attributes exerted a secondary influence on UGC popularity, including account nichedness and creator professionalism. Respondent A14 stated, “A note’s popularity is related to whether its author’s account has high niche consistency. An account that consistently posts travel-related guides helps the

note". Respondent A14 added, "If a blogger frequently posts travelogues, it's like they're a professional travel blogger; I'd be more inclined to follow them".

The external environment indirectly influenced UGC popularity by shaping user demand, including cultural and tourism promotions, holiday demand, and the coupling with social hotspots. Respondent A11 pointed out, "Local cultural and tourism resources are very important. If it can significantly promote local tourism and attract local attention or support, it will greatly increase popularity."

4.3 Evaluation

The evaluation dimensions delineated the pathway through which UGC popularity influenced users' travel-related cognition and decision-making, including three categories: destination cognition, travel decision, and trust perception (see Table 5).

Table 5
Coding results of evaluation dimensions

Open coding	Axial coding	Original interview statement example
Emotional appeal activation	Destination cognition	I became longing for that place, and I would recommend this attraction to my companions.
Information acquisition efficiency	Destination cognition	From an efficiency standpoint, it helps me reduce search time.
Destination cognition reinforcement	Destination cognition	I tend to agree. Based on this note, I would consider traveling to the relevant destination.
Destination preference	Travel decision	I don't like visiting attractions recommended in notes that are too popular. The popularity should be kept within a reasonable limit; if everyone knows it's a must-visit during key holidays, I would avoid it.
Itinerary planning	Travel decision	There was a note written by a local that gave a detailed introduction to the travel route, including which entrance to use and taking a boat, etc. I liked and saved it, and then used it during my trip.
Credibility endorsement	Trust perception	High-popularity notes are definitely the result of many people's choices, I think.
Authenticity of positive comments	Trust perception	I believe that if a note has many positive comments below, I tend to recognize its authenticity. I would trust it more.

High-popularity UGC played a significant role in destination cognition by stimulating users' emotional appeal activation, information acquisition efficiency, and destination cognition reinforcement. Respondent A10 stated, "If it sparks my desire for that place, I'll recommend it to my travel companions". Respondent A02 added, "In terms of energy, it helps me reduce search time".

UGC Popularity also influenced users' travel decisions, including destination preference and itinerary planning. Respondent A16 pointed out, "I'm more likely to agree with and consider traveling to related destinations based on posts". Notably, some respondents reported a reverse selection: "I don't like going to attractions recommended by posts with too much popularity. If everyone knows it's a must-see, I'll avoid it during peak holidays", as Respondent A09 stated.

Users' trust perception of high-popularity UGC exhibited complex characteristics. On the one hand, popularity metrics served as a credibility endorsement: "High-popularity posts are definitely the result of many people's selections", as Respondent A08 noted. Moreover, broad participation in a trending topic was perceived as indirect evidence of content quality, suggesting that high engagement reinforced user perception and increased the perceived credibility of UGC. On the other hand, users also considered the authenticity of positive comments: "If there are many positive comments below, I'm more likely to believe it's authentic," as Respondent A14 stated. This indicated that positive comment feedback was an important reference for users when judging content authenticity.

4.4 Conceptual framework of UGC popularity

Based on the grounded theory analysis presented, this study proposes a conceptual framework for understanding UGC popularity (see Fig. 2). This framework conceptualizes UGC popularity as a dynamic phenomenon on social media platforms, shaped by the collective actions of various stakeholders, including users, platforms, creators, and external factors. At the core of the model, UGC popularity is represented through three interrelated dimensions: attractiveness, evaluation, and relevance. Data indicators and content value function as key informational bases through which UGC popularity is manifested and assessed. The framework specifies how UGC popularity affects users' behavior by influencing their destination cognition, travel decisions, and trust perception. The framework identifies antecedent conditions that shape UGC popularity within the platform environment: content characteristics, platform operation mechanisms, user interaction behaviors, account attribute influences, and external environments. Overall, this conceptual framework depicts UGC popularity as a multidimensional construct within a broader social media ecosystem.

5. Discussion and conclusion

5.1 Discussion

This study employs grounded theory to develop a comprehensive framework for understanding UGC popularity on social media. The framework integrates three dimensions that explain how users perceive, evaluate, and respond to UGC popularity: (1) Attractiveness reflects users' dual cognitive approach to UGC popularity; (2) Relevance reveals the multifaceted mechanisms behind the formation of UGC popularity; and (3) Evaluation clarifies how UGC popularity influences user cognition and behavior.

First, Attractiveness integrates objective metrics and subjective value. The attractiveness dimension, which includes data indicators and content value, enhances the current understanding of UGC popularity

measurement. Prior studies have predominantly relied on overt interaction metrics (likes, comments, saves) as proxies for popularity (Revathi, 2024). Still, this study demonstrates that users' assessments of popularity are dualistic: they first rely on quantitative data as a quick heuristic, but ultimately judge popularity's "meaningfulness" through content value (practicality, authenticity, emotional resonance). This aligns with Berger and Milkman's (2012) argument that content resonance, not just quality, drives virality, but further specifies that resonance is rooted in both emotional and functional value. For example, respondents emphasized that "authentic, non-advertising-laden content" (A09) and "substantial practical help" (A01) are as critical to perceived popularity as high like counts. This finding enriches uses and gratifications theory by showing that users' engagement with popular UGC is motivated by both informational and emotional gratifications (Du et al., 2024), while also highlighting the conditional nature of authenticity—a factor previously noted to be non-universal (Werenowska & Jaska, 2025).

Second, Relevance from a multi-stakeholder framework of popularity formation. The relevance dimension identifies five interrelated categories (content characteristics, platform operation mechanisms, user interaction, account attributes, external environment) that collectively shape UGC popularity, addressing the literature's overemphasis on platform/algorithm-centered explanations (Bartley et al., 2021; Deusser et al., 2018) and neglect of user and contextual factors. Content characteristics emerged as the foundational determinant, consistent with Liu-Thompkins and Rogerson's (2012) finding that content value (entertainment, education) drives dissemination; this study further specifies key attributes: cover visual appeal, title alignment with trends, and information timeliness. Notably, respondents highlighted "content controversy" as a driver of comment volume, echoing Khobzi and Lau's (2017) observation of "controversial popularity" but extending it to tourism UGC contexts.

Platform operation mechanisms, including algorithmic recommendations and secondary flow, confirm Bartley et al.'s (2021) observation of "popularity bias" but add nuance: users are aware of algorithmic influences (e.g., "likes increase exposure," A08) and even strategically adapt content (e.g., "editing viral posts for secondary flow," A15) to sustain popularity. User interaction, meanwhile, is framed as a "sustaining force" rather than a mere outcome of popularity, aligning with Hsiao and Wang's (2015) emphasis on social relational networks in UGC creation. Account attributes (nichedness, professionalism) and external environments (cultural tourism promotion, holiday demand) further expand the antecedents of UGC popularity, filling gaps in prior research that focused on content or creator factors in isolation (Zhuang et al., 2025; Lu & Zheng, 2025).

Third, the evaluation focuses on the causal pathway from popularity to user outcomes. It clarifies how UGC popularity influences destination cognition, travel decisions, and trust perception—addressing the literature's limited focus on the consequences of popularity (Litvin et al., 2008; Tsiakali, 2018). High popularity evokes emotional appeal (e.g., "longing for the destination," A10) and improves information acquisition efficiency, enhancing destination cognition.. This aligns with social identity theory: popularity signals a "community consensus" (Yang et al., 2019), prompting users to align their perceptions with the collective. However, the study also identifies a novel "reverse selection" phenomenon: some users avoid overly popular destinations to escape crowds (A09), suggesting that popularity's effects are not uniform

—a finding supported by Beurer-Zuellig and Klaas's (2020) observation of heterogeneous user responses to UGC.

Regarding trust perception, popularity serves as a credibility endorsement (A08: "high-popularity notes are the result of many people's choices"), but users also scrutinize comment authenticity (A14: "positive comments indicate authenticity"). This reconciles conflicting findings in the literature: while Zhuang et al. (2023) emphasize source credibility as a determinant of information adoption, this study shows that popularity enhances trust only when paired with perceived authenticity, thereby avoiding the "trust collapse" risk of disguised promotional content (Tsiakali, 2018).

5.2 Theoretical implications

The primary contribution of this study is clarifying the multifaceted nature of user-generated content (UGC) popularity, which has often been oversimplified in previous research as merely a collection of quantitative metrics (Revathi, 2024; Beurer-Zuellig & Klaas, 2020). The proposed three-dimensional framework—comprising attractiveness, relevance, and evaluation—demonstrates that UGC popularity is not merely a static representation of interaction data but a dynamic construct shaped by the interplay among content attributes, platform mechanisms, user behaviors, and external contexts. This interplay has significant implications for user cognition and decision-making. This finding effectively addresses a critical gap in the literature: the absence of a systematic definition and conceptualization of UGC popularity that integrates both objective indicators and subjective user perceptions (Woods, 2023; Zhuang et al., 2025).

This study integrates multiple theoretical frameworks—uses and gratifications theory, social identity theory, and information adoption theory—to advance understanding of how UGC popularity influences users' cognition and decision-making, addressing the literature's limited focus on the consequences of popularity (Litvin et al., 2008; Tsiakali, 2018). The evaluation dimension (destination cognition, travel decision, trust perception) clarifies the causal pathways through which popularity shapes user outcomes, reconciling conflicting findings in existing research and providing a more comprehensive theoretical explanation.

From the perspective of uses and gratifications theory, the study enriches understanding by showing that users' engagement with popular UGC is motivated by both informational (e.g., itinerary planning, information acquisition efficiency) and emotional (e.g., emotional appeal activation) gratifications (Du et al., 2024). This extends the theory by demonstrating that popularity cues enhance these gratifications, as users perceive popular content as more valuable and credible. From the lens of social identity theory, the study confirms that popularity signals a "community consensus" (Yang et al., 2019), prompting users to align their perceptions with the collective. However, it also identifies a novel "reverse selection" phenomenon—some users avoid overly popular destinations—highlighting the heterogeneity of user responses and challenging the assumption that popularity uniformly influences behavior (Beurer-Zuellig & Klaas, 2020).

Regarding information adoption theory, the study reconciles conflicting findings by showing that popularity enhances trust only when paired with perceived authenticity (Zhuang et al., 2023). It shows that users do not blindly trust popular content; instead, they examine the authenticity of comments and the value of the content, steering clear of the "trust collapse" risk related to disguised promotional material (Tsiakali, 2018). This integration of theoretical perspectives provides a more nuanced understanding of the psychological mechanisms underlying popularity's influence, bridging gaps between different streams of UGC research.

Lastly, based on the proposed framework, the study identifies a triangular relationship among the company, community, and customer engaged in social media marketing (see Fig. 3). Building on the three-dimensional UGC popularity framework, this study proposes a "UGC popularity triangle marketing" model that identifies a dynamic triangular relationship among companies, communities, and customers in social media marketing. This theoretical contribution advances social media marketing theory by moving beyond traditional dyadic models (company-customer) to a holistic framework that emphasizes the role of community in mediating the relationship between UGC popularity and marketing outcomes.

The "company" plays an essential role in driving UGC popularity by creating engaging materials and connecting with its audience. It focuses on establishing a strong brand identity while delivering valuable content that aligns with its core values. To accomplish this, companies should cultivate a distinctive UGC presence characterized by a unique voice and persona, maintain consistent messaging across platforms, and share behind-the-scenes content to humanize the brand and strengthen connections with the audience.

The "community" involves followers, fans, and advocates who contribute to UGC popularity. It emphasizes the importance of relationships and ongoing member engagement. To nurture this community, brands can facilitate discussions and interactions through polls, questions, and comments; create community-driven content featuring user-generated submissions; and organize events or live sessions to reinforce connections among members.

The "customer" refers to end users or consumers of a company's products or services. It underscores the importance of understanding customer needs, preferences, and behaviors to effectively tailor marketing strategies that leverage UGC popularity. To accomplish this, companies can monitor UGC popularity through surveys and social listening tools, provide personalized experiences based on customer data, and respond promptly to inquiries and feedback. These actions demonstrate that customer voices are valued and acknowledged.

The triangle framework conceptualizes companies as drivers of UGC popularity (creating valuable content, building brand identity), communities as facilitators (engaging with content, fostering social connections), and customers as recipients and co-creators (interpreting popularity cues, making decisions). This model illustrates how the interaction among these three stakeholders creates a self-reinforcing engagement loop: content generated by the company resonates with communities, drives

customer engagement, and boosts the popularity of user-generated content (UGC), while feedback from customers and communities refines future content strategies.

This theoretical model fills a gap in social media marketing research by highlighting the central role of UGC popularity in connecting companies, communities, and customers. It provides a theoretical basis for understanding how UGC can be leveraged to build brand loyalty and drive growth, extending prior research on UGC marketing (Martí-Parreño et al., 2015; Li et al., 2025) by linking popularity dynamics to stakeholder interactions.

5.3 Practical implications

This study outlines actionable recommendations for social media stakeholders. Destination marketing organizations (DMOs) should leverage the relevance dimension to design effective UGC marketing strategies. First, align promotional activities with external conditions (holiday demand, social hotspots) to enhance content resonance (e.g., creating travel guides for peak seasons). Second, collaborate with niche professional creators (rather than solely pursuing high follower counts) to ensure content authenticity and practicality, thus avoiding the risk of “trust collapse” associated with disguised promotion (Tsiakali, 2018). Third, monitor UGC evaluation dynamics: while high popularity can enhance destination visibility, DMOs should tackle the issue of "reverse selection" by promoting lesser-known attractions alongside popular ones. This strategy helps to balance mass appeal with niche interests. Additionally, DMOs can use the proposed framework to evaluate the effectiveness of UGC by focusing on both data indicators and users' trust.

Creators should prioritize both data-driven strategies and content value to enhance popularity. First, optimize data indicators by focusing on high-impact metrics (saves and comments, which respondents prioritized over likes) and aligning with platform algorithms (e.g., updating content for secondary flow). Second, enhance content value by emphasizing authenticity (avoiding overt commercialization), practicality (detailed itineraries, local tips), and emotional resonance (genuine personal experiences). Additionally, creators should cultivate account nichedness and professionalism—consistent posting of travel-related content builds audience trust and improves content visibility (A14). Engaging with commenters (author responses) and encouraging cross-platform sharing also sustain popularity by reinforcing user interaction.

Platforms should refine algorithmic mechanisms to balance popularity bias and content quality. While interactive data (likes, saves) are useful for identifying popular content, algorithms should also prioritize content value (authenticity, practicality) to avoid amplifying low-quality, commercially manipulated content. Targeted pushes based on user preferences (A15) should be paired with support for niche content to diversify the distribution of popularity, addressing Woods’s (2023) concern about the reproduction of online inequality. Additionally, platforms could provide creators with guidance on optimizing content characteristics (e.g., cover design, title trends) to improve content discoverability, and transparency about algorithmic rules would help creators make informed decisions.

In addition, platforms can support capacity building and informed consumption. For content creators, platforms should provide educational resources that explain the mechanisms behind popularity, such as content optimization guidelines and algorithmic logic, to help creators standardize and enhance content quality. For users, platforms should develop tools to assess content credibility, including labels for commercial collaborations and disclosure of creator verification information, to help users critically evaluate popularity metrics and avoid placing blind trust in high-popularity content.

5.4 Limitations and future research

This study had several limitations. First, this research was conducted only on the RedNote platform, which has unique algorithmic, cultural, and user characteristics. Factors influencing UGC popularity may differ across platforms such as TikTok, Instagram, or Weibo; thus, generalizability beyond RedNote remains limited. Second, this study employs a qualitative, grounded theory design, which supports conceptual development but does not allow for statistical quantification of effect sizes or causal inference. The relative importance of each dimension cannot be determined from the present data. Third, the study reflects cross-sectional user perceptions rather than longitudinal dynamics of popularity. UGC popularity often evolves through growth, saturation, and decay; this study does not capture such lifecycle patterns. Fourth, data rely on self-reported interview responses, which may be subject to recall bias or social desirability, potentially influencing the consistency of interpretive codes. Future research may address these limitations by developing quantitative scales to measure UGC popularity, conducting cross-platform comparisons, applying longitudinal designs to model popularity trajectories, and using experimental methods to verify causal effects of popularity cues on user behavior.

Future research could build on the conceptual framework established in this study by employing quantitative methods to develop a measurement scale for UGC popularity and empirically validate the proposed framework. Comparative studies across platforms (e.g., TikTok and Instagram) and content domains (e.g., food and beauty) could further examine similarities and differences in UGC popularity. Longitudinal tracking studies could also be undertaken to analyze the lifecycle of UGC popularity, from growth and peak to decline, and identify factors influencing these phases. Additionally, experimental research designs could be employed to manipulate popularity indicators (e.g., likes and comments) to test their causal effects on user perception and decision-making. Finally, future work could examine whether cultural background and demographic characteristics (e.g., age and gender) moderate perceptions of UGC popularity.

Declarations

Ethical statement

This study received ethical approval from the Ethics Review Board: Research Committee of Macao Polytechnic University

Official ethics approval number: RP/CJT-02/2025/E01. All procedures performed in this study adhered to the ethical standards outlined in the Declaration of Helsinki. Participants' confidentiality and informed consent were obtained from all participants before their involvement in the study. Anonymity was strictly maintained to protect their privacy throughout the research process.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Author Contribution

J.Z: original draft, Validation, Software, Methodology, Investigation, Data curation, Conceptualization. H.H: Writing – review & editing, Supervision, Project administration, Methodology, Funding acquisition, Data curation, Conceptualization. Hong-Wai Ho: Writing – review & editing, Visualization, Resources, Methodology, Investigation, Data curation, Conceptualization. C.C: Writing – review & editing, Validation, Software, Resources, Investigation, Data curation.

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Figures

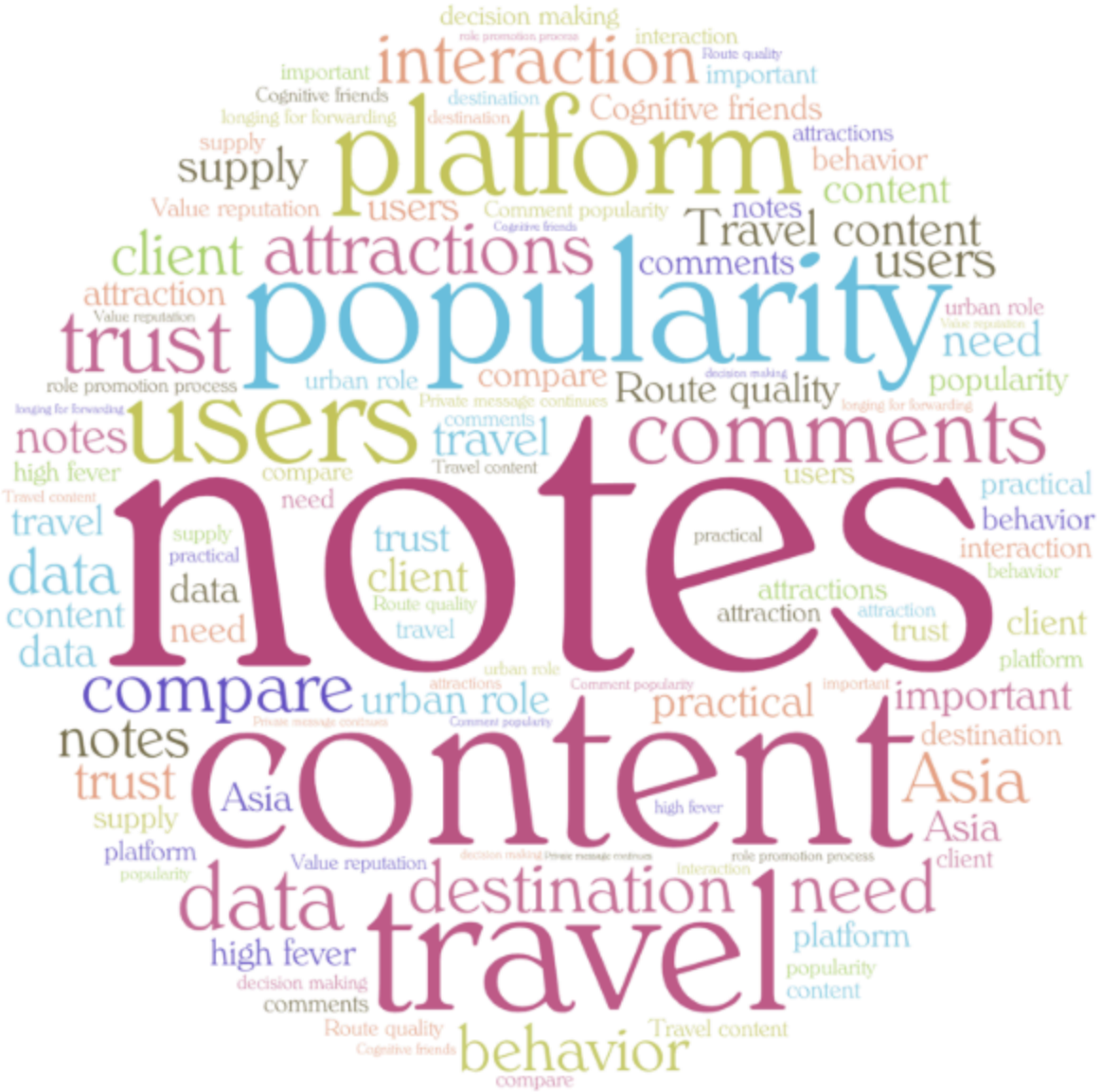


Figure 1

Word cloud of user-generated content (UGC) popularity



Figure 2

Conceptual framework of UGC popularity



Figure 3

UGC popularity triangle marketing