

Shared Links: Building a Community Economic Ecosystem under ‘The Wall’—Based on Observations of Knowledge-Payment Communities

Lengrui Mao

School of Journalism and Communication, Hubei University of Economics, China

Received: 25 Apr 2025; Received in revised form: 19 May 2025; Accepted: 23 May 2025; Available online: 28 May 2025
©2025 The Author(s). Published by AI Publications. This is an open-access article under the CC BY license
(<https://creativecommons.org/licenses/by/4.0/>)

Abstract— In the era of deep mediation, winning core traffic users has become the key to community management. Based on social media digital technology, community managers act as trust agents for users and capital, establishing behavioral order and habits among community users through rituals and rules. Simultaneously, community managers build emotional connections based on a sense of belonging through interactions with users and their digital labor. In knowledge-based communities on social media platforms, community managers connect four main entities: social media platforms, capital providers, paying users, and regular users. Through multidimensional interactions with each entity, they construct a diverse, symbiotic, and dynamically developing community economic ecosystem.

Keywords— Community economy ecosystem; Medialization; Knowledge payment; Affordance

I. INTRODUCTION

Currently, human society has entered an era of medialization [1], where media have deeply penetrated into the process of digital economic transformation. Communities gain corresponding economic value by mining and serving user needs, achieving direct dialogue between the supply side and demand side, providing a shortcut for precise user positioning, and offering new ideas for enterprises to complete their digital transformation. WeChat, as a prominent presence in China's mobile internet scenarios, most typifies the dynamic of media diffusing into people's daily lives [2], which can help analyze the development status and system characteristics of communities [3]. The knowledge payment economy has rapidly heated up since 2016 [4], and while it is expanding rapidly, its long-term sustainable development is also an important issue [5]. Based on this, the author conducts in-depth observations of knowledge

payment communities from the perspectives of medialization and affordability, studying the order construction in community interactions, the power game among multiple actors within the community, and the ecological construction of the community economy, in order to grasp more deeply the rules and trends of community economic development.

II. THEORETICAL BACKGROUND AND LITERATURE REVIEW

The earliest proponent of the concept of 'community,' Ferdinand Tönnies, pointed out that people have a strong sense of belonging and identification with their communities [6]. Peirce believed that community provides a platform for communication and dissemination [7]. The involvement of economic capital in social platforms has shifted the focus of community to an operational category [8].

The concept of 'affordance' was introduced by American experimental psychologist James Gibson, emphasizing the dynamic interaction between humans and their natural environment [9]. With the introduction of affordance into communication studies, it offers a dynamic, intermediate theoretical perspective for analyzing the relationship between the materiality of media technology and communicative practices [10]. In 2015, Schrock proposed communicative affordance, exploring the interaction between users' subjective perception of utility and the objective nature of technology and how this interaction can alter communicative practices or habits [11]. The four core affordances of social media—durability, replication, extension, and retrieval—enable the creation of a new 'networked public.' [12] Additionally, the technological empowerment provided by social platforms gives users more influence in information dissemination and consumption. Moreover, due to the asymmetrical exchange of information resources on social platforms, communities become media spaces that are both commercial and public, with members' sense of belonging stemming from active participation and adherence to community norms.

Media institutionalizes human communication practices at various levels, and the interaction on social platforms by users is a mediated practice based on the platform's system and rules. Social behaviors such as 'liking,' 'sharing,' and 'following' are profoundly changing the nature of people's interactions, forming a "connected culture" submerged in encoded technology [13]. Medialization theory posits that the essence of human communicative actions is a "social" interactive practice, which arises and develops through the acquisition of symbolic codes and learning of social rules during the process of socialization [14]. As a middle-level theory, medialization theory can avoid the dilemma of becoming either overly grand or too detailed in its research scope. On the other hand, it has greater flexibility in application categories, helps to balance theoretical and empirical research, and is more suitable for analyzing the interaction between users and technology, as well as the collective forms and contexts formed under community participation [15].

III. RESEARCH DESIGN AND METHODS

Community is a research category with strong operational characteristics. If approached through questionnaire surveys or case analysis, it is easy to encounter the issue of disconnect between theoretical discussions and real-world development, making it difficult to deeply understand the actual situation of community economic development. Therefore, in the early stages of the study, the author used participatory observation to deeply experience the operation process of community management positions at two internet education companies. As a community operator, they interacted online with thousands of users for nearly 4 months, exploring the operational model of community management based on an understanding of the community management system. In the later stages of the study, the author conducted participatory observations over various types of knowledge payment communities for 6 months and invited 22 different types of users to participate in-depth interviews to clarify the relationships between community operators, users, product capital parties, and platforms, analyze the construction of community order, and uncover power struggles within community interactions. On one hand, this involved analyzing various issues faced by community management; on the other hand, through the analysis of power struggles among multiple subjects, the author sought to explore the ecological construction of community management.

IV. MAINTENANCE OF COMMUNITY ECONOMY

4.1 Media Rituals Construct Community Order

'Media rituals' are complex interactions that lie between simple order and simple disorder, never fully stable, revolving around a central inequality [16]. Through time and distribution of voice, they create exclusive ranks for community members. Power and belonging within the community blend together, subtly creating unequal community identities. Members with higher consumption levels, greater activity, and more specialized knowledge often hold more speaking power. A new member named Tian appears very cautious, saying such things as, 'I feel this group is quite professional, so I don't dare speak recklessly in the group. Who knows if what I say will make things worse or be helpful? If it wastes time, it's

better not to speak'. A relaxed, free, and equal community atmosphere, along with immediate positive feedback, increases users' enthusiasm for participating in community interactions: 'I'm not always eager to express my opinions at any time. In a more relaxed environment where people are treated equally, especially when discussing topics I'm really interested in, I want to speak up. But once I realize there are a few particularly dominant voices already taking control, I don't feel like speaking up anymore' (Ago).

Community operators, leveraging WeChat group chats and Moments, engage with users through multidimensional interactions. They build media rituals through one-on-one message broadcasts, setting group tasks, and check-ins within the groups. The sharing of capital, time, and communal experiences among members is crucial for determining whether users can participate in community activities. Ho refers to the communities he joins as 'paradises beyond the mundane': he mentions that 'compared to those free communities with constant influxes and outflows of people, I prefer these fixed communities where usually just a few regulars chat. If a stranger jumps into the conversation, I feel a bit uncomfortable.' Mu and LiLi enjoy the paid communities they joined, explaining, 'A paid community is like a purification process, gathering people who focus on intimate relationships' (Mu). 'The discussions in these paid groups are more focused, and the environment is purer. Unlike other groups, there won't be constant voting or advertising' (LiLi).

The closed nature of the WeChat platform restricts members of knowledge-based paid communities to self-present through activities such as checking in on WeChat Moments, chatting in WeChat groups, and one-on-one interactions. For instance, when paid audio products experience buffering and delays, or when there are errors in information dissemination by community managers, user experience significantly deteriorates. 'In the previous session, there was a small bug. They pushed a self-service version message to users who followed the official account but did not purchase the product on WeChat. Perhaps WeChat thought they were engaging in malicious marketing or encouraging users to make unauthorized purchases, causing messages to pop up every day. If you click on it, it says it's against regulations, which

might give new users a bad impression'. As an existing user, 'Xuan' acknowledged the crucial role of community managers in this process: 'They repeatedly inform everyone about this issue in the group. For example, if you find that you can't practice after clicking, and then it says it's against regulations when you exit, many people take screenshots and share them in the group. Each time, they respond clearly and explain the situation thoroughly to everyone'.

4.2 Community Empathy for Deep Trust

The complexity and constant changes of the media environment make it difficult for users to clearly understand community interactions and product usage. Community managers become trusted agents for many users. They need to enhance their credibility by promptly addressing members' questions based on the community's theme. By listening to users' life and study issues, they provide emotional support and life advice, creating a virtual intimate relationship with community members that are both mentor-like and friendly. Through skillful communication, they reduce the commercial traces of brand marketing and product promotion during interactions with users, thereby gaining their deep trust. Deng, who has consistently participated for over 200 days, witnessed the growth of the community manager's empathy skills, which transformed his continued participation into motivation: 'Previously, the teaching assistants were very rigid. Now, they have upgraded, showing more empathy and responsiveness. For example, before, if I didn't understand what mindfulness was, he would directly tell me it's a tool to improve attention. But now, he first says, I understand your anxiety and confusion; everyone has such doubts, making you feel you're not alone, before answering your question.' Xuan expressed strong admiration for the main team members of the community multiple times during interviews: 'I really like the main teachers of the team. Their attitude is very accepting and optimistic. They can deeply empathize with you, and their answers are also very inclusive.' The approachable emotional expression and emotional resonance make digital empathy between community managers and users possible, enriching users' understanding of the community.

Based on trust in community operators and platforms,

members share personal privacy and self-expression within communities to gain the right to have their questions answered. However, the relatively democratic and free discussion atmosphere fostered by these communities can lead to misunderstandings among other members, differences in viewpoints, privacy boundaries, and sensitive topics can cause interpersonal conflicts, leading to a breakdown of the context. This necessitates that community operators mediate the diverse needs of different users, keeping conflicts within manageable limits to avoid the risk of a collapse in user trust for the brand. Zao shared his experience with multiple paid communities: 'In the groups I've joined, there's a lot of discussion about politically sensitive topics, which often leads to arguments. Usually, when things are about to get heated, the community managers step in to stop it, using humor to shift the topic. You'll see they try to maintain the discussion while avoiding serious conflicts'. Tong recounted an argument she had in a community: 'I once got into a fight with someone in a community. I wanted to give them some advice, but they felt I was correcting and controlling them. They got upset and didn't respond to me, which made me very angry. I kept trying to provoke them, wanting to see how they would react. At that point, others stepped in to mediate. We discussed it all day until the admin came in and said, let's focus on the present. The people in this team are really good at talking and calming emotions'.

4.3 Emotional Relationship Links Digital Labor

Emotional connections play a crucial role in social mobilization as cognitive link points, fostering shared emotional experiences within communities to unite members around common beliefs, thereby encouraging users to voluntarily engage in digital labor. This digital labor involves contributions to both other community members and brands and is typically voluntary and uncompensated.

The first type of digital labor involves users sharing personal experiences for other community members, offering emotional, self-esteem, and informational support in the form of consolidating shared beliefs among community members. Mu said with emotional reflections, 'I've always emphasized that people in our community are very warm. When I post low-energy or negative messages,

everyone tries to encourage me, not just by saying "keep going," but really addressing my emotions based on what I say '. Yao and Geng expressed that their community friends are their solace during loneliness. Yao said, 'I discuss various life issues I encounter in my daily life on the community platform, and we all brainstorm together. I don't have many friends in real life.' By providing support to community members, users deepen their sense of belonging in the shared virtual space and strengthen their social identity centered on the community and brand.

The second type of digital labor can be divided into unpaid and paid brand promotion. Knowledgeable fans often create more valuable digital labor for brands. A fan, Xuan, who is currently pursuing a PhD, proudly shared her experience of helping promote a brand: 'There was a promotion in the community at that time, but the content by the UP host talked about was hard for everyone to understand. So I watched the promotional video very carefully. It discussed some modern issues from a historical perspective, and then I shared my experience with everyone. In this group, people spontaneously organize some civic actions to advertise for the brand, all very heartfelt '.

In emotionally connected relationships based on a sense of belonging, community operators match user needs with product features through indirect recommendations to stimulate users' desire to consume. Users' long-term digital labor based on emotional relationships transforms into consumption of brand-related products, integrating the brand into their daily lives. Xuan specifically emphasized that she was wearing the brand's shirt during this interview: 'I know every creator very well; I listen to every episode of their podcast. I pay attention to every detail of the product design. I want their presence to permeate my life. Whenever the brand releases related products, I really want them, wanting them to appear physically around me.' She mentioned that she had recommended various products from the brand to her friends and even gave brand products as birthday gifts to her friends. Through emotional interaction and group participation, users gradually internalize community norms and values, strengthening their attachment and commitment to the community and the brand, thus building an emotional relationship that coexists with the brand.

V. BUILDING A COMMUNITY ECOSYSTEM

WeChat tracks user behavior data to align capital-provided knowledge information with users' behavioral needs, delivering personalized information through one-on-one backend pushes. However, merely relying on surface-level 'datafication' and 'selective' mechanisms is insufficient for deep commercialization by capital providers. Many users, after experiencing the wave of knowledge payment, have become more rational about free or low-cost knowledge sharing and more discerning about product content. Tian believes that knowledge payment content priced at 9.9 yuan is very cheap: 'People who know anything about knowledge payment won't be interested in something priced at 9.9 yuan; it's just wasting your time. Either you spend a bit more money to properly understand it, or a superficial understanding is almost the same as no understanding at all, and it's unlikely to be effective for you.' To maximize capital interests, community operators correct user usage data through community interactions, continuously iterating and improving products based on understanding user needs. They invite core users for free product testing to collect feedback, supplemented by online interviews and data monitoring to expand the product production chain and market size. 'Now their templates have been updated, making me feel that their steps are gradually narrowing down, allowing you to connect at every stage. Currently, I am practicing advanced mindfulness, while my husband is practicing basic mindfulness. He himself feels that it's completely different from the basic mindfulness he practiced before, with many updates.' Wei expressed that she enjoys growing together with the brand, and each new product release from the brand piques her curiosity, prompting her to try new content.

In a multi-entity ecosystem based on social platforms, community operators act as a bridging entity that connects four main subjects: social media platforms, product capital providers, paying users, and general users. Social media platforms refer to technical platforms providing community operation services for knowledge-based economies. Product capital providers are brand suppliers offering knowledge products and community services to users. Paying users are those who become targets of knowledge payment products and community services by

paying money. General users are those who use social platforms and have some connection with the products, potentially becoming consumers. These four subjects are intertwined with complex and diverse interests and conflicts. Community operators facilitate multidimensional interactions among these entities, enabling them to engage in competition, compromise, and cooperation, thereby forming a diverse, symbiotic community economic ecosystem (Figure 1).

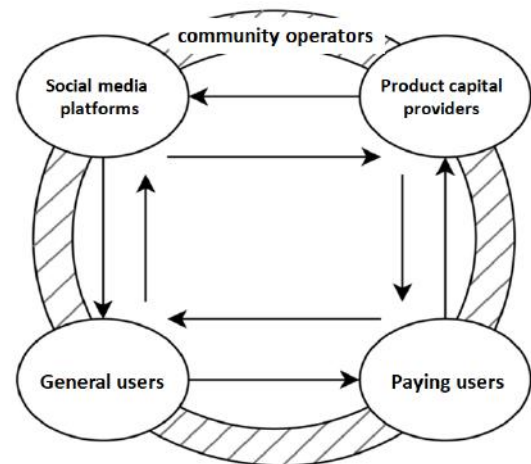


Fig.1 Community Economy Platform Ecosystem Model

As shown in Figure 1, social platforms form the foundation for community operators' interactions, positioning them above the product capital providers in terms of power. The WeChat platform, supported by data, operates automatically through algorithms. By establishing ownership relationships within its business model, it uses interfaces such as WeChat Official Accounts, Moments, and Mini Programs to allow users to receive brand advertisements and purchase products via WeChat Pay. Both advertisement delivery and product purchases require both the capital providers and users to adhere to the platform's agreement of user service agreement. Community operators must understand the basic rules of the platform, enabling capital providers to follow these rules for product production, promotion, and sales, while also coordinating contradictions between user purchases, order data, and platform payments.

Regular users gain access to product usage rights and community services, becoming paid users with phased product usage rights. However, since most paid users only have fixed-term 'access rights' rather than long-term

ownership, this cognitive divergence can lead to conflicts between the product's capital providers and user rights. Community operators need to mitigate users' negative emotions and the interest conflicts caused by cognitive biases. Tong witnessed the entire conflict: "At first, joining the group was really fun. Someone said at 3 or 5 AM, I'm feeling really bad right now; why can't I see the later content? Is there something wrong with your settings?" After all, it was the beginning of joining the group, so everyone was unfamiliar with how to use it. Then the main creators came out to say there was an emotional parachute function, and our content is updated day by day. This helped soothe the users' emotions. As more and more paid communities emerge, mandatory check-in rules and monetary incentives can no longer serve as the driving force for continuous check-ins. Users not only yearn for greater freedom in product consumption and choice but also desire the check-in process to be fun and customizable. Tian enjoys watching others share their check-in pictures in the community: "Every day, I look forward to what card I get today, and I also like seeing other people's cards in the group. This provides me with good positive feedback for sticking to my check-ins." Under the invisible check-in contract, brands package the check-in data of paid users as product effectiveness, achieving external marketing to regular users.

During the free product trial, users provide their attention, personal information, and behavioral data to brands and social platforms based on the usage agreement, creating opportunities for capital expansion and business model transformation. Simultaneously, regular users gain an initial understanding of the product through social platforms and enjoy basic communication rights with community operators. By interacting with community operators, they can gain a deeper understanding of the product information and decide whether to purchase it. For example, when Shuang initially had no knowledge about the product, she consulted the community assistant for basic information about its use. The assistant's patient answers strengthened her determination to continue purchasing the product. Capital providers obtain feedback from community operators regarding user preferences and willingness to use the product, and based on this, they continuously update and improve the product services to

better meet the consumption needs of paying users. Deng pointed out that the current paid product is the result of continuous optimization: 'Initially, the product was very rudimentary, but it has been constantly improving the course content, summarizing many user questions, and now it directly incorporates these questions into the practice process. I am usually too lazy to ask questions, so these answers perfectly meet my needs. I learn something new every day, which motivates me to keep practicing'.

VI. USER RETENTION IN COMMUNITY ECOLOGY

In reality, a community is a capital-centered collective. Capital forms "the wall" between the 'inside' and 'outside' of a paid community, while cultural capital and social capital create the implicit power order in community interactions. Community management maintains a dynamic balance by establishing media rituals, keeping the community order within a relatively orderly threshold to promote continuous development. Community members are invited by the community managers based on different interests. Apart from basic product usage inquiries, other members' check-ins and community discussions fill the gap of lacking role models during product use, encouraging users to continue using the product under the inspiration of other community members.

Community interaction embraces diversity in membership and expression, guiding topics to maintain relative order. Interaction within the community should not become a platform for a few individuals' self-expression but rather an open space that encourages more members to participate in discussions. The role of community managers is to ensure relatively stable circulation of authority of speech, forming community cohesion and order centered on emotional identification and a sense of belonging during processes involving conflicts of interest, user self-expression, brand marketing, and community rule-making.

In terms of community user maintenance, the amount paid serves as a crucial distinction for user classification, which can be divided into three categories from low to high: regular users, basic users, and core users. Core users enjoy the most community services and have the greatest

power but are the least in number; basic users can access basic community services, are more numerous than core users but fewer than regular users, and hold moderate power; regular users are the most numerous and have the highest proportion, but they receive the fewest community services and have the potential to become basic or core users. When regular users pay for the product, they upgrade to basic users, typically following a step-by-step conversion trend.

With the normalization of knowledge-based paid communities, users have raised their expectations for usage experience and community services. In the wave of survival of the fittest in the knowledge-based paid market, high-quality community operations will enable capital providers to achieve sustainable profitability through ecosystem construction and consumption chain expansion. Within this community setting, the asymmetric flow of information hides power struggles and interest distributions among users, capital providers, and platforms. Knowledge-based paid communities built on trust encompass both cooperative win-win outcomes under contractual spirit and the desire for emotional connections. As trust deepens, users transition from rational benefit calculations to profound emotional bonds.

REFERENCES

- [1] Hepp, A. (2020). The fragility of curating a pioneer community: Deep mediatization and the spread of the Quantified Self and Maker movements. *International Journal of Cultural Studies*, 2020, 23(6), 932-950. <https://doi.org/10.1177/1367877920922867>
- [2] Sun, W. WeChat: The Existence of Chinese People. *Academic Monthly*, 2015, 47(12): 5-18
- [3] Peng, L. Internet Knowledge Products: A Long-term Market - The Development Logic and Future Possibilities of Paid Knowledge Products [J]. *News and Writing*, 2020, (07): 50-54.
- [4] Peng L. How to Cultivate 'Community Economy' in Online Communities. *Jianghuai Forum*, 2020, (03): 123-129+144.
- [5] Ding, X., Wang, X., and Gao, S. Knowledge Payment: Conceptual Meaning, Reasons for Popularity, and Current Crises. *Contemporary Communication*, 2018, (02): 29-32.
- [6] Tonnies, F. (Lin, R. translated). *Community and Society: Basic Concepts of Pure Sociology*. Beijing: Peking University Press, 2010.
- [7] Jensen, K. B. (translated by Liu, J.) *Media Convergence: The Three Dimensions of Online Communication, Interpersonal Communication, and Mass Communication*. Shanghai: Fudan University Press, 2012.
- [8] Ma, C., and Mu, T. A New Paradigm for Internet Knowledge Dissemination: The Logic and Reflections of 'Knowledge Payment'. *Journalism and Writing*, 2018, (04): 40-47.
- [9] Gibson, J.J. *The approach to Visual Perception*. New York: Psychology Press.1986.
- [10] Chen, X. Review, Introduction, and Prospects of Medium Affordance Research. *Young Journalist*, 2023, (16): 34-36.
- [11] Schrock, A, R. Communicative Affordances of Mobile Media: Portability, Availability, Locatability, and Multimediality. *International Journal of Communication*, 2015, 9(1):1229-1246
- [12] Papacharissi, Z. *Affective publics: Sentiment, technology, and publics*. Oxford University Press, 2014.
- [13] Van Dijck, J. *The Culture of Connectivity: A Critical History of Social Media*. New York: Oxford University Pres.2013.
- [14] Couldry, N., and Hepp, A. translated by Liu, Y. *The Mediated Construction of Reality*. Shanghai: Fudan University Press, 2023
- [15] Hepp, A., Hjarvard; S., and Lundby, K. *Mediatization: theorizing the interplay between media, culture and society*.Media, Culture & Society, 2015.
- [16] Couldry, N. translated by Cui, K. *Media Rituals: A Critical Perspective*. Beijing: Renmin University of China Press, 2016.