

The Process of User Entrepreneurial Opportunity Development from the Perspective of Cognition

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Abstract: This study examines the cognitive process behind user entrepreneurial behavior, drawing on entrepreneurial cognitive theory and focusing on Bilibili as a typical user entrepreneurial company. It identifies two pathways to idea generation during the opportunity creation stage: entrepreneurial vigilance and entrepreneurial bricolage, both driven by counterfactual thinking. The opportunity evaluation stage involves risk-reward perception and cognition leading to the formation of first-person opportunity beliefs and third-person opportunity evaluations by user entrepreneurs. The opportunity development stage involves two key mechanisms: exploration-oriented entrepreneurial model innovation and new enterprise growth for external mechanisms, and cognitive factors such as perspective-taking and effectual reasoning for internal mechanisms, promoting innovation and resource acquisition in new enterprises.

Keywords: User Entrepreneurship; Entrepreneurial Opportunity; Opportunity Development; Cognitive Perspective

1. Introduction

The field of entrepreneurship has long captured the interest of researchers, policymakers, and practitioners alike due to its recognized potential to drive economic growth, innovation, and job creation. Recently, there has been increasing attention on the role of users in the entrepreneurship process, specifically in the context of user entrepreneurship that is driven by user innovation. User entrepreneurship refers to the process in which users actively innovate or improve products and bring them to the market because their own needs are not being met (Shah & Tripsas, 2007; Escobar et al., 2021). Unlike traditional entrepreneurship, this type of entrepreneurship is driven by the user's desire to solve a problem or fulfill a need, rather than by a profit motive (Pedeliento et al., 2018; Hamdi-Kidar & Vellera, 2018).

In this context, we aim to examine the process of user entrepreneurial opportunity development from a cognitive perspective. Specifically, the study focuses on the typical user entrepreneurial company Bilibili as the research object and explores the cognitive mechanisms behind user entrepreneurial behavior. The study provides insights into how user entrepreneurs generate and evaluate opportunities and develop their ventures. By analyzing the case of Bilibili, the study also contributes to the theoretical research on opportunity development and sheds light on the potential for user-driven innovation and entrepreneurship.

2. Literature review

2.1 User innovation and entrepreneurship

User entrepreneurship is a growing trend fueled by user innovation, where users create new products or services to meet their own needs and then commercialize them by starting new enterprises. The concept of user innovation was introduced by von Hippel (1986), and numerous studies have since confirmed its importance in various industries. More recently, researchers have focused on the link between user innovation and entrepreneurship, recognizing that many user innovators possess valuable knowledge and expertise that can be harnessed through entrepreneurship to benefit both themselves and the economy as a whole (Schiafone et al., 2021; Kalisz et al., 2021).

2.2 Entrepreneurial opportunity

Entrepreneurship opportunity refers to the chance to create new products, services, or processes that can be commercialized for economic gain. Identifying and exploiting these opportunities is crucial for entrepreneurial success. The concept was first introduced by Israel Kirzner in the 1970s, who argued that entrepreneurs possess the ability to discover and capitalize on previously unnoticed opportunities. The study of entrepreneurship opportunity has been approached from various angles, including the cognitive perspective, which examines how entrepreneurs perceive, evaluate, and exploit opportunities; the network perspective, which emphasizes the importance of social networks in identifying and seizing opportunities; and the institutional perspective, which explores how the institutional environment influences entrepreneurship opportunities.

2.3 Cognitive perspective on user entrepreneurial opportunity

Cognitive perspective has been applied to studying user entrepreneurship opportunity development. It emphasizes how entrepreneurs use cognitive processes such as attention, memory, perception, and decision-making to identify and exploit opportunities. User entrepreneurs are viewed as individuals who use cognitive abilities, such as counterfactual thinking and perspective-taking, to create and develop entrepreneurial opportunity (Chen et al., 2020; Raza et al., 2020; Schmitt et al., 2018).

3. Case selection

Using the principle of theoretical sampling (Pandit, 1996; Low, 2019), we selected Bilibili as a representative user entrepreneurial enterprise for our case study. Bilibili started as a video-sharing site for the ACG (Animation, Comics, and Games) community but expanded into other content areas as its user base grew. Studying Bilibili's cognitive mechanism behind user entrepreneurial behavior can provide insights into the process and mechanism of user entrepreneurial opportunity development, contributing to relevant theoretical and practical fields. Bilibili's innovative business model has had a significant impact on internet culture and the entertainment industry in China, emphasizing the importance of studying user entrepreneurship in the digital age.

4. Case study

4.1 Bilibili background

Bilibili, founded in 2009, is a Chinese user entrepreneurial enterprise that initially focused on the ACG (Animation, Comics, and Games) field. Over time, it expanded into a wider range of content areas. As of December 2021, Bilibili had over 230 million monthly active users, making it one of the largest online video platforms in China.

4.2 Analysis and discovery of user entrepreneurial process in Bilibili

4.2.1 User entrepreneurial opportunity discovery process

Xu Yi, the founder of Bilibili, is a young entrepreneur from a programming background. He started trying to start a business in college and accumulated a lot of experience in the process. After encountering the video sharing website YouTube, he decided to create a similar website for the Chinese market, which was the origin of Bilibili.

In the opportunity creation stage, Xu Yi formed his ideas through two approaches: counterfactual thinking and entrepreneurial bricolage. By observing the market and user needs, he imagined an innovative concept of a danmaku video community and used his own technology and entrepreneurial experience to bring it to life. He collected a large amount of user feedback and opinions from his own life and social network to validate and refine this idea.

During the process of rejection and convergence of new and old cognitive systems, Xu Yi constantly learned and tried new innovative methods in the entrepreneurial process and drew useful knowledge from his old experiences. He gained a deep understanding of user needs, considered product design and functionality from a user perspective, and drew experience from competitors to improve his own competitiveness.

4.2.2 User entrepreneurial opportunity evaluation process

During the opportunity evaluation stage, Bilibili's founder Xu Yi used a multi-round interactive approach to evaluate risk-reward perceptions and perceptions, forming a first-person opportunity belief and a third-person opportunity evaluation. Utilizing his technical and entrepreneurial experience, he designed and developed product features and continuously optimized and adjusted the product

based on user feedback and market data.

Throughout this process, Xu Yi continuously considered the balance between risk and reward and attempted to reduce risk while increasing reward. He employed various strategies, including promotional activities, community building, and content creation, to attract more users and content creators.

In addition, he conducted market research and competitive analysis to understand the main competitors and trends in the market, in order to better respond to market changes and risks. Utilizing this information, he evaluated his strengths and weaknesses and developed corresponding strategies and plans.

4.2.3 User entrepreneurial opportunity development process

Bilibili user entrepreneurs use both internal and external mechanisms during opportunity development to drive enterprise growth. External mechanisms require analyzing the market, user demand, competitors, and industry trends, as well as product innovation and business expansion. Internal mechanisms involve cognitive factors such as innovative thinking, effect reasoning, and empathy, which can improve product competitiveness and user satisfaction and also promote resource acquisition and partnership building.

Bilibili user entrepreneurs utilized market research and user feedback to identify the demand for anime, games, music, and other fields. They designed and developed a video-sharing platform with social and interactive features, continuously innovating with the introduction of features like bullet comments, UP users, and members to improve user experience and community activity. Active community construction and content production activities further attracted users and creators, promoting enterprise growth and market share expansion. They utilized cognitive factors like empathy and effect reasoning to understand user needs and expectations, leading to improved services and experiences. They also formed partnerships to expand resources and channels, promoting enterprise development and innovation.

In summary, Bilibili user entrepreneurs utilized internal and external mechanisms to achieve rapid growth and market competitiveness improvement, providing a model for other user entrepreneurs.

5. Conclusion and discussion

This study, based on a cognitive theory perspective, analyzed Bilibili as a typical user startup company to explore the cognitive mechanism of user entrepreneurship behavior. It revealed that user entrepreneurs generate ideas through entrepreneurial vigilance and bricolage, and form opportunity beliefs and evaluations through risk-benefit perception and cognition. The study also identified two mechanisms for opportunity development: internal and external, which involve cognitive factors such as empathy and effect reasoning.

The research findings enrich the cognitive theory of entrepreneurship and have practical implications for user entrepreneurs to improve product competitiveness and user satisfaction. However, the study is limited to a single case and early stages of entrepreneurship. Future research can explore more cases and later stages of entrepreneurship. Overall, this research contributes to the understanding of the cognitive mechanism of user entrepreneurship and provides a foundation for future studies in this field.

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References

- [1] Chen PC., Chan WC., Hung SW., & Lin DZ. (2020). How entrepreneurs recognise entrepreneurial opportunity and its gaps: a cognitive theory perspective. *Technology Analysis & Strategic Management*, 32(2), 223-238.
- [2] Escobar O., Schiavone F., Khvatova T., & Riviuccio G. (2021). Lead user innovation and entrepreneurship: Analyzing the current state of research. *Journal of Small Business Management*, 1-18.
- [3] Hamdi-Kidar L., & Vellera C. (2018). Triggers entrepreneurship among creative consumers. *Journal of Business Research*, 92, 465-473.
- [4] Kalisz D., Schiavone F., Riviuccio G., Aversano N., & Garavelli AC. (2021). Analyzing the macro-level determinants of user entrepreneurship. The moderating role of the national culture. *Entrepreneurship & Regional Development*, 33(3-4), 185-207.
- [5] Low J. (2019). A pragmatic definition of the concept of theoretical saturation. *Sociological Focus*, 52(2), 131-139.

[6] Pandit NR. (1996). The creation of theory: A recent application of the grounded theory method. *The Qualitative Report*, 2(4), 1-15.

[7] Pedeliento G., Bettinelli C., Andreini D., & Filippetti A. (2018). Consumer entrepreneurship and cultural innovation: The case of GinO12. *Journal of Business Research*, 92, 431-442.

[8] Raza A., Muffatto M., & Saeed S. (2020). Cross-country differences in innovative entrepreneurial activity: An entrepreneurial cognitive view. *Management Decision*, 58(7), 1301-1329.

[9] Schiavone F., Riviuccio G., Paolone F., & Colombo G. (2021). The macro-level determinants of user entrepreneurship in healthcare: An explorative cross-country analysis. *Management Decision*, 59(5), 1158-1178.

[10] Shah SK., & Tripsas M. (2007). The accidental entrepreneur: The emergent and collective process of user entrepreneurship. *Strategic Entrepreneurship Journal*, 1(1-2), 123-140.

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