Transactions on Computational and Scientific Methods | Vol. 1, No. 1, 2021
ISSN: 2998-8780
https://pspress.org/index.php/tcsm
Pinnacle Science Press

User-Created Value in Mobile Social Networks: Foundations and Strategic Implications

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Abstract: Mobile social networks offer a platform for users to engage in value-generating activities, significantly influencing corporate strategy, marketing philosophies, and consumer behavior. Despite its importance, the theoretical exploration of user-generated value within mobile social networks remains nascent, with no consensus on its definition, implications, or operational models within academic circles. Nevertheless, extensive research in related areas, such as user-generated value theory, social networks, social commerce, and value chain-based mobile user engagement, has established a solid foundation for investigating value creation behaviors among mobile social network users.

Keywords:mobile Internet; user-creation value; social network.

1. Research on the Behavior of User Creating Value

The theory of the user's creation value is based on the earlier customer participation and cooperative production research, and in 1823, the Storch research work has made a contribution to the economy, and the service process requires cooperation between the producer and the consumer. Then the customer's participation in the research is gradually extended from the service industry to the cooperation production and cooperation innovation of the tangible products. In the 21st century, because the enterprise and the user can't control all the resources and conditions needed to create the value in a wide range of social exchange, the role of the user in the creation of the value activity is highlighted, the force and the effect between the value creation main body are balanced, The value theory of the user has been further developed and consolidated. With the development of the network economy and the development of the value creation research paradigm, the customer-led logic paradigm has laid a good foundation for the user-created value behavior research in the line, and has become the leading area of the current management and marketing research.

The germination of the study of user creation value behavior: the early viewpoint of customer participation and co-production holds that the appearance of customer body in service system can be regarded as customer participation. Lovelock and Young point out from the point of view of service marketing that customer is a factor of production, and service enterprises should involve customers more in the production process in order to improve the production efficiency of service. Ives is in the research of user innovation and management information system service. The importance of customer participation is further pointed out. Early customer participation research mostly from the perspective of enterprises, that customer participation in enterprise activities can reduce enterprise costs and improve labor productivity. With the change of the times, the enthusiasm and participation of customer participation have been increasing. After the 1990s, scholars began to study the customer participation behavior in the service. Peng pointed out that without customer participation, it is difficult to ensure service in terms of production or quality, and customer

participation creates improved value. Terashima and Dawson, customer participation will improve the quality of service. Service quality has a positive impact on customer perceived value. Fan proposes that customer participation is conducive to value creation when studying the impact of customer participation on the performance of service enterprises. Although it is not clearly pointed out in the study of customer participation to create value, the importance of customer participation in service is generally affirmed, and customer participation is the premise of creating value.

The research on customer participation in manufacturing industry mainly focuses on co- production. Customers may play the roles of resource providers, co-producers, buyers and users in enterprises. Wikstr ö m points out that customers participate in enterprise production services as resource providers and co-producers, and bring more value to enterprises and customers through in-depth interaction between enterprises and customers. According to Christopher research, Customer participation in the product development process greatly improves the novelty of the final product. Ram í rez puts forward the concept of value co- production (valueco-production), emphasizing that enterprises and customers create value together, customers are value creators rather than value destroyers, and customers create value through interaction with enterprises at every stage of value creation. Co-production began to pay attention to the role of customers in value creation, and put customers as a factor of production resources into value creation conversion activities. However, customers only participate in production within the limits of the enterprise, which is still essentially based on the traditional product leading logic, emphasizing that value creation is enterprise-led. Normann points out that the purpose of business is not only to create value for customers. It is also to organize customers to participate in the creation of value. Therefore, co-production can be regarded as one of the budding ideas of user creation value.

2. The Development of User Creation Value Behavior Research: Value Co-Creation

In the beginning of the 21st century, the manufacturing enterprise tries to find a new value- added point, which can meet the individual demand of the consumer through the integration of the product and the service, and the research focus on the value creation is shifted from the enterprise production process to the customer consumption process. Vargo unifies the product and service separated under the commodity-led logic, thinks that all the economy is the service economy, the customer is actively engaged in the relationship exchange and the common production, the value is determined by the customer and co-created (also called the value creation). The scope of the customer's participation is gradually expanded to the product and service, and the service-oriented logic is the main research perspective of the value creation theory. The value creation theory under the service-oriented logic paradigm is the focus of the research on the process of enterprise production or service. The value is created by the enterprise and the customer. The customer can participate in the production or service, thus creating the value. Prahalad, an example of the Ford Motor Company, found that in the new vehicle development, there is a value creation between the buyer and the supplier; Norton studies many of the company's practices, such as Nike, Dell, Ikea, and so on, They work together to create value by providing platforms or resources to support the customer's design or production of the products they need. In the aspect of domestic research, JAN] takes the Ctrip as an example to study the online travel service value creation system, and the service provider, the service integrator and the customer interact, and the service integrator makes the internal and external integration to form the value creation system. Through the common participation and resource sharing of the network members, the value is jointly created; the YANG points out that Xiaomi is a common creation of the value through the social value creation mode, and the ZHOU jointly creates a value perspective from the enterprise and the customer, The value creation in the large-scale custom-made production of the product of the product is studied, and the two-way O2O mode of the product-winning is taken as an example, and the connotation and the characteristics of the value creation are analyzed from the perspective of the multi- body. The LIU believes that the customer's participation in the production or service process can enhance the customer's product value perception, reduce the risk perception of the customer on the product quality, and reduce the product acquisition cost, thereby being beneficial to the customer to obtain

the experience value, the relationship value, the learning value, and the like. With the development of the Internet technology, the social network platform represented by the micro-blog and WeChat has sprung up, and the customers can share their brand experiences more widely through the special brand community, such as the Xiaomi Community, the Taobao Forum and so on. The research of NIU shows that Haier, through "Haier Community", "Haier's innovation interactive platform" and other ways, strengthens the real-time communication and interaction between the enterprise staff and the customer, creates higher brand value for Haier, and the virtual brand community has profoundly changed the way of the customer to participate in the brand value creation and the brand management mode. Customers can access information from all over the world, build various "Theme Community" through the network, provide more interactive opportunities for customers than offline, and customers can also test and develop products. In the virtual brand community, the influence of the customer's participation value creation on the brand experience points out that the process of the common creation of the customer's participation value is the continuous, socialized and dynamic interaction process of the customer's participation in the design, development and production of the enterprise. The customer group in the virtual brand community has the great initiative and influence to drive the speech direction, create the word of mouth economy and subvert the enterprise brand, and the role of the customer is also evolved and transformed from the passive recipient of the value to the value co-creator. This power and role shift of the customer will be more prominent in the mobile internet environment. As a kind of interactive value, the user's quality-of-service perception and demand directly influence the evolution and development of the mobile Internet. The McColl-Kennedy study points out that the boundaries between customers, businesses and other organizations are becoming blurry and customers increasingly offer the idea of service innovation, design, participate in collaborative production, create value-based passive recipients, and transform into value-based co-creators, Even the final determinant of value. The creation subject of value is changing, and the degree of customer's participation is continuously deepened, so that the traditional one-way and separated value creation and transmission mode is changed into two-way, and the interactive value is jointly created and shared, which will become an important source of the enterprise's future acquisition of the competitive advantage.

3. The Trend of the Research on the Value Creation Behavior of Users.

With the advent of the era of network economy and experience economy, customers are no longer satisfied to become passive recipients of standard products or services, but actively become value co-creators of self-needed products. Customer-led logic has become a new perspective in the study of value creation paradigm. Under the background of the increasing practical phenomenon of customer independent value creation, the concept of "customer original value" was clearly put forward by the scholar Gr ö nroos when he studied the process of value creation in 2013. In fact, as early as 2006, when Lusch and other research services led logic, it was mentioned that value can only be created and determined by users. Payne then describes the phenomenon of independent value creation by customers. Lee Yao and Wang Xinxin use the concept of "customer creating value alone" to explain the phenomenon of customer original value, emphasizing that value creation occurs in the process of customer consumption, that enterprises do not participate, and that customers and enterprises are independent of each other. Domestic scholars also try to define the concept of customer original value by "creating value in the field of consumption". On the basis of drawing lessons from foreign research results, domestic scholars have carried out related research on customer original value, such as ZHENG, based on marketing resources and social structure theory, abstracts the path of customer value creation in the network through interaction based on weak relationship and strong relationship, LI studies the motivation, mode, process and influence of customer original value on enterprises and customers. LI also constructs a chain intermediary model to study the driving mechanism of customer knowledge to customer original value behavior. The research on customer original value is still in its infancy, and the way, influencing factors and mechanism of customer independent value creation have not been clearly defined. In view of the fact that the network is becoming an important platform for enterprises and customers to interact with each other, customer independent value creation in the Internet environment will become an

important research direction of value creation theory. The study of customer original value not only has guiding significance for the study of user creation value behavior, but also promotes the development of user creation value behavior under the network situation.

4. Research on Value Creation Behavior of Social Network Users

Social network service is a kind of Internet application service which is based on the interpersonal relationship in the real society and connects the Blog, Wiki, WeChat owned by users through Tag, RSS or IM, mail with the support of Web2.0, so that the social circle of each user can be magnified in the social network. Thanks to the progress of network technology, social network service has developed rapidly in the 21st century, and it is also an early and clear field in which users create value. User experience and value creation based on social network are becoming the focus of attention in the field of consumer experience and social network research. The main problems in the study of value creation by social network users are as follows:

(1) The motivation of users to create value in the context of Social Network

Creating and sharing information is the meaning of the social media, and Chai is of the view that social factors and technical factors, environmental factors will influence people's knowledge-sharing behavior through social networking sites, and Traineor's research on social media technology and customer relationship performance. Social networks allow users to create and share content, provide communication channels for users and businesses, users and users, and build social relationships. The Berthon study found that social demand that was fun to interact with other members of the same interest or demand was a driver that affected the customer's participation in the creation of value activities. In the study of the customer's willingness to participate in the creation of the value activity in the virtual environment, the whole benefit is one of the motivations of the customer to participate in the creation of value activities such as product development. In order to obtain the reputation, the status and the self-efficacy, the customer will be involved in the creation of value activities. The study of the brand community has pointed out that customers attach great importance to their social identity and relationship in the brand community. Therefore, in order to strengthen the sense of belonging and social identity, they will participate in the common creation value activities in the brand community.

(2) The way users create value in the context of Social Network

When Chiu studies the knowledge sharing of virtual communities, it finds that sharing, discussing and establishing close personal relationships based on shared content can maximize the value of knowledge management. Tumba found that narration and stories can create a network virtual society and gain illusions and interesting experiences. Wang believes that consumer interaction plays a major role. The value created by users is realized by the interaction of network members, that is, the value is created by all members, and the enterprise plays a supportive role, and only in practice can it be beneficial to the co-creation of value. Turri found that in the art market, the transmission of product information by users in social media is also a kind of brand value co-creation behavior. Brodie's research on virtual brand community found that, Social network users create value by interacting with enterprises, brands or other users. Sicilia's case study of Coca-Cola brand community shows that social network provides a wider range of interactive opportunities than offline means, which stimulates the process of co-creating value. Therefore, comments, discussion, sharing, forwarding and other interactive methods based on Internet environment are more common ways or methods for social network users to create value.

(3) The benefits or results of creating value by social network users.

By empirical research, Stephen found that online communities are more likely to make customers experience value, and vendors can create more value through contact with customers and benefit from online networks. in that opinion of the PU, the user's participation in the common creation value will obtain the knowledge of the enterprise and the product, and provide the opportunity for the user's knowledge, skill and expertise to provide the user with the realization of knowledge acquisition, self-esteem and self-worth, At the same time, in the process of communication with other users of the social network, not only can information exchange be realized, the user's social

needs can be met, but also the user's enjoyment can be increased. Chiu found that knowledge-sharing can form a sense of belonging and mutual commitment to the community of practice, and enterprises and individuals can thus gain various resources and abilities and expand social capital. Vargo studies the role of social relation and social network in the creation of experience value, and consumers through social network make innovation and interaction in the online community become more and more efficient and effective. The social network combines the competition, the ability and the knowledge together, and the enterprise and the user jointly create the value based on the social network to consolidate the dynamic cooperation relationship. The social network provides the context for the individual users from the simple information receiver to the information transmission source, and becomes the ideal platform for users to share information and value and form the brand community.

5. Research on User Creating Value Behavior in Socialized Business

The development of mobile Internet and Web2.0 technology has not only brought about the change of communication and communication mode, but also made e-commerce break through the space-time limit of transaction and evolve to social business dominated by buyer and relying on new social network platform. Social network service provides a large number of hidden customers for social commerce. Their value creation behavior plays an important role in the social network platform, which makes the social business market produce fierce competition and gradually become an important force to promote the development of social commerce. Yahoo first defined what social commerce is in 2005: a new network service based on web2.0 technology. Subsequently, some enterprises have actively combined e-commerce with social networks to explore the mode of socialized commerce, such as the services provided directly by Dell on Twitter, Carrefour's social network sales on Facebook, and so on. Beautiful said that the practice of socialized business in China was earlier: the strategic cooperation between Mogujie, JD.com and Tencent, the acquisition of Sina Weibo by Alibaba Group, the website traffic of socialized commerce, the number of users, and so on. Indicators such as revenue are growing sharply. Scholars have studied the development course and mode, characteristics and elements, driving factors and the influence mechanism of customer participation behavior of socialized commerce. However, up to now, the definition of socialized commerce still has not formed a unified point of view the deep integration of social network and business activities, which makes socialized commerce produce rich value. Kumar compares and analyzes the marketing performance of HokeyPokey company before and after the implementation of socialized commerce. It is estimated that social commerce can bring sales growth rate of 40%, increase brand awareness by 49%, increase the return on investment by 83%, and increase positive word of mouth by 33.5% per week. The value creation activities in socialized business have attracted the attention of enterprises and scholars. In terms of the way socialized business users create value, IBM believes that people-to-people networks are used to create business value. The ways for users to participate in social business include participating in the activities of brand community, sharing and soliciting business information and purchasing, among which sharing and soliciting business information is the most important participation behavior. With the help of social network and social media service, people can carry out extensive and real-time information exchange activities, and many outstanding people have become active users of social network service. The growing number of users and the creation of content predict the strong development potential of social commerce in the future. Lai believes that the network effect contributed by users and the word-of-mouth marketing of users are the competitive advantages of social commerce. Social commerce creates value by building and maintaining users' social relationships, and each node in the value chain has its own profit model. Social network and user participation are the key to distinguish socialized business from electronic commerce, that is, relying on social network platform to assist the purchase and sale of goods or services through socialized interaction between users and user-generated content. Wang believes that social support, relationship quality and privacy concern will significantly affect the co-creation of brand value in socialized commerce. Socialized commerce is in the process of vigorous development, and user participation has become one of the core driving factors in the development of socialized commerce. In the

socialized business environment, the boundary between the enterprise and the user is more and more blurred, and the value creation is realized through the socialized interaction process between the company and the customer.

6. Research on Mobile User Participation Behavior based on Value Chain

The concept of value chain, such as value chain, virtual value chain and mobile commerce value chain, reveals the value creation model under the network environment, clearly describes the activities and processes of enterprise cooperation to create value, and makes people have a certain understanding of the value creation and its form of enterprises. The research on the participation behavior of mobile users based on value chain is more common in the discussion of mobile commerce value chain. Researchers put forward the main body or link of mobile commerce value chain, and considered that the ultimate purpose of all mobile commerce activities is to provide value for customers, the end user is the main body to undertake mobile commerce services, and the paid use behavior of mobile users is the only source of profit realization in the mobile commerce value chain. It is generally placed at the end of the value chain. These studies emphasize that enterprises, as the main body of value creation in the value chain, carry out value creation activities around the technical support or network facilities needed to provide mobile services to users. With the individualization of customer demand becoming more and more prominent, the management concept of enterprise and value chain slowly shifts from "production-oriented" to "demand-oriented". Mobile users begin to play a certain role in value creation activities, thus having a certain decision power in the value chain. In the field of virtual community, customer participation chain and other fields, some scholars study the value creation activities of users from the perspective of value chain. Zhang points out that users are the core of value chain and the starting point of value creation from the perspective of industrial value chain integration. Lai points out that through interaction, when analyzing the information sharing of online community, Community members participate in content creation, production, distribution, purchase and other links in the value chain to varying degrees, and gradually gain more control over the value chain, which will eventually become stronger and smarter than businesses, middlemen and producers, which will bring about changes in the value creation structure. Zhang pointed out in the customer participation chain model that customers create value with enterprises by providing knowledge, skills and time and energy. This kind of user creation value paradigm subverts the cognition of user role in value chain and the monopoly position of enterprise in value creation.

7. Conclusion and Review of Research

Through the research on social network, value-creating behavior of users in social commerce and value chain-based behavior of mobile users, it shows that the research on value co-creation of service or virtual brand community emphasizes that enterprises let customers participate in the process of production and service, and customers realize value creation through interaction, which lays a theoretical foundation for the research of value-creating behavior of users.

However, reviewing the relevant literature, it is found that the current research results have the following characteristics:

(1) Most of the researches on user's value-creating behavior are based on social network and social situation, while few researches are based on mobile social network. The author has studied the behavior, influencing factors and driving mechanism of user value creation in service industry, manufacturing industry and virtual brand community. And with the development of ICT technology and the continuous innovation of business model, mobile social network is becoming popular, mobile situation has become one of the most important variables to study the mechanism of user's value creation behavior, and it leads to the change of decision- making situation such as the participation of mobile service enterprises in the market and the purchase of products by users. The existing research on value creation takes into account the characteristics of mobile social network, such as mobility, private property, socialization and so on, and studies the influence factors, ways and results of mobile social network users' value creation behavior, so it is urgent to consider the

characteristics of mobile environment in the research of user value creation behavior.

(2) There are few studies on the behavior motivation, influencing factors and mechanism of users' value creation in mobile social networks. The existing social network research has focused on the psychological, social and emotional factors in the process of creating value, but little attention has been paid to the behavior change, influence and the private and credibility characteristics of the user relationship after the transformation of social network users from "information recipient" to "information provider ". The user's value creation behavior in mobile social network will become the main self-expression form of users, and affect the competitive advantage of mobile service enterprises and the development trend of mobile commerce industry. Therefore, it is necessary to further analyze the behavior and characteristics of mobile social network users to create value from the perspective of social network users as the main body of value creation.

(3) There has been a preliminary consensus on the process or mode of participation of social network users in value creation, that is, users obtain information or create content mainly through communication and interaction, but there is a lack of detailed and in-depth research on the process of value creation activities, the mode of participation and the mechanism of information transmission. Mobile social network users create value under the influence of many factors, based on good perception experience to reveal the real situation of a specific product or service, and through the social relationship network for information creation, release, recommendation sharing and other interactive behavior. In this process, users' participation mode, transmission mechanism, cooperation with enterprises in the value chain and value distribution are analyzed, which is more in line with the law of value creation behavior of mobile social network users.

(4) Most of the existing researches based on value creation theory still adhere to the view that "enterprise is the subject of value creation ". With the change of mobile social network users' participation in value creation activities from passive to active, the degree of participation becomes deeper and deeper. Therefore, how to integrate mobile social network users into the value creation activities of mobile service value chain, the influence of user value creation behavior on the decision-making, cooperation mode and coordination mechanism of mobile social network service value chain, and how to motivate mobile social network users to create value behavior in user chain, etc.

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