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The Evolution of Online Short-Term Rental Enterprises' Ecosystem and Legitimacy: A Longitudinal Interpretive Case Study

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Abstract: As an emerging field, the online short-term rental in China appears with poor national policy and industry general regulations. All enterprises in this industry are constantly groping for sustainable strategy of legitimacy. Previous studies on the online short-term rental mainly focus on the positive influence, the business model, and policy and regulation. However, there is currently little research on how the online short-term rental enterprises develop ecosystem and legitimacy during different phases involved, which provides a good reference for other emerging organization in sharing economy. This study applied business ecosystem and legitimacy to analyze the development of a typical online short-term rental company via a longitudinal interpretive case study. A process model of how an online short-term rental company's sub-ecosystems is inductively derived and elucidates the regulative challenges, normative challenges, and cognitive challenges in each phase. The findings of this case study provide a comprehensive and empirically supported framework and demonstrate a successful process model.

Keywords: Sharing Economy, Online Short-Term Rental, Business Ecosystem, Legitimacy

1. INTRODUCTION

Spurred by ICT (Information Communications Technology), sharing economy platforms such as Airbnb and Uber have recently flourished in the tourism industry. The emergence of these platforms has enabled individuals to collaboratively make use of under-utilized inventory via fee-based sharing^[1]. While the fast development and success of these sharing economy platforms appeared overseas, this kind of new ventures is still exploring in China, especially the online short-term rental.

Since the online short-term rental enterprises appeared in China, some of them broke down and some of them survived. Different from mature companies, new ventures often face more resource constraints and uncertainties with shorter operating time, and are difficult to show their reliability and obtain other enterprise stakeholders' recognition. On one hand, when the platform enterprises grow, it is essential to develop suitable framework as business ecosystem evolves, so as to effectively help the users in the multilateral market find their real needs^[2-4]. On the other hand, several empirical researchs show that the lack of legitimacy leads to the death of the new ventures^[5,6]. The majority of the studies on legitimacy focus on the IS adoption and emerging organization from a static perspective overall, and fewer studies take this issue from a dynamic perspective^[7,8].

To examine how online short-term rental companies' business ecosystem and legitimacy evolve with a theoretical lens based on business ecosystem and legitimacy, we undertook a longitudinal interpretive case study of a typical and successful online short-term rental company in Chinese sharing economy, Tujia Online Information Technology (Beijing) Co., LTD. (hereinafter referred to as Tujia). Through an interpretive case study, we aimed to identify the subecosystems and institutional pillars that facilitated the development of online short-term rental companies. Based on our case findings, we provide actionable strategies for other emerging organization in sharing economy to maximize success.

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2. THEORETICAL BACKGROUND

2.1 Business ecosystems

A firm should be viewed not as a member of a single industry but as part of a business ecosystem^[2]. These business ecosystems refer to networks of organizations held together by formal contracting and mutual dependency^[9]. The entities of a business ecosystem consist of suppliers, producers, retailers and customers that work cooperatively and competitively^[10]. Generally, every business ecosystem develops in four distinct stages: birth, expansion, leadership, and self-renewal or death^[10-11]. Studies about business ecosystems have emerged as a response to the growing need for a new paradigm for strategizing, competing and innovating in the networked economy^[9].

2.2 Legitimacy

Institutions are social structures on the base of taken-for-granted, formal, or informal rules that restrict and control (or support) social behaviors^[12]. Institutions are comprised of regulative, normative and cultural–cognitive elements that, together with associated activities and resources, provide stability and meaning to social life^[13]. Each institutional pillar corresponds with each of the three different mechanisms of isomorphism: coercive, normative, and mimetic^[13-15], and these mechanisms can shape and influence how organizational practices or innovations are diffused within an institutional setting. According to this view, institutional scholars affirm that organizations thus become more legitimate when they behave or take actions in order to comply with regulatory requirements, normative structures, and cultural values^[16].

2.3 Theoretical framework

We constructed a theoretical lens based on the literatures on business ecosystems and legitimacy^[10,13]. As part of this lens, we identified an initial set of 2 aggregate theoretical dimensions and 8 second-order themes that were potentially relevant to our inquiry. According to the closeness and importance of the membership in a business ecosystem, there are core ecosystem, support system, competition system, and social and natural environment system (Moore, 1996), as shown in Table 1.

Table 1. The members of the ecological subsystem

Ecological subsystem	Members
Core ecosystem	Direct suppliers, manufacturers, sales channels and direct customers.
Support system	Investors, government, universities, research institutions, and associations on behalf of consumers and suppliers, etc.
Competition system	Direct competitors, and potential competitors, etc.
Social and natural environment system	Political environment, economic environment and social environment, etc.

In terms of legitimacy, the first institutional pillar is about rules and regulations. These serve as the basis of coercive isomorphism to control and constrain organizational behaviors through the power of enforcement and the power to impose sanctions and other penalties for non-compliance. The second institutional pillar relates to compliance with the set of norms and values held within a social system that can determine the appropriateness of organizational actions^[13]. Norms describe how things should be done and represent the appropriate ways to achieve the defined goal and objectives. In addition to conforming with regulatory rules and normative values, organizational actions also need to comply with the cultural–cognitive beliefs rooted in an institutional environment^[17]. This cultural–cognitive dimension highlights the importance of symbolic representation, norms, and meanings shared in a broader social context^[18].

3. RESEARCH METHODOLOGY

We selected interpretive case study for this study for several reasons. First, our research questions examine how online short-term rental enterprises' ecosystem and legitimacy evolves. Explaining this kind of enterprises' development can provide a reference for other peer enterprises. Second, the multi-dimensional theoretical framework is based on business ecosystem and legitimacy, it may be more appropriate to examine the issue from the perspectives of the relevant stakeholders^[19].

In this study, secondary sources were used to explain the development of Tujia. Secondary data analysis can transcend the boundaries of time and space, and accumulate a large amount of data^[20]. Compared with primary data, secondary data provides greater depth and breadth. Using document data for collecting the history record of the people's thoughts and actions and comparing the different data of events with time change is more advantageous. In addition, because the online short-term rental is an emerging field with limited data, secondary data analysis method is more applicable.

3.1 Data collection

Information was collected from relevant academic studies, news coverage, industry conferences, and business-related websites and blogs, as shown in Table 2. The keywords are Tujia, online short-term rental, non-standard accommodation, and shared housing, etc. The research period is from November 2011 to May 2017.

Type	Numbers
Academic studies	307
News coverage	350
Industry reports	6

3.2 Data analysis

For data analysis, at first, we started with data preprocessing, so as to acquire more complete information and more authoritative sources. We spared no effort to eliminate subjective information, such as the questionnaires of Tujia's consumers. We focused on policies, internal information, and events of Tujia. Second, after filtering the secondary data, we identified the development of major events and it became readily apparent that Tujia underwent four distinct phases. Third, we followed the approach suggested by Walsham (2006) to categorize and code manually the textual data in accordance with the theoretical framework. In the final, to further validate our findings, another co-author independently reviewed the empirical data, and ensured the validity and reliability of our findings generated from the coding process. We consider that this is essentially an iterative process with the purpose of meeting the principles put forward by Klein & Myers(1999)^[19].

3.3 Case Background

Tujia was founded in 2011, has been dubbed as "the Chinese HomeAway". It is a typical emerging company in sharing economy that relies on the international distributed hotel management and business standards, combines offline tourist real estate stock with call center services and online apartment reservation trading system. At the beginning, Tujia adopts B2C model and the majority of its primary consumers is middle class. In 2015, Tujia transform its model to C2C and starts to develop in sharing economy. At present, Tujia's houses covers 325 destinations in Chinese mainland and 1085 destinations overseas, Hong Kong and Taiwan.

4. CASE FINDINGS

4.1 The birth of ecosystem(2011.12-2013.2)

In the first phase, Tujia was a new founded company. The online short-term rental market was still in the

initial stage and there were fewer members in the ecosystems. Tujia developed steadily while the national policy about online short-term rental market has not yet been put forward. In addition, Tujia actively cooperated with local government and first set high standards, reducing the risk of future development. Table 3 presents the dimensions and themes that we found to be salient in this phase and their supporting evidence.

Table 3. Dimensions, themes and data in the birth of ecosystem phase(2011.12-2013.2)

Dimensions and second-order themes		Representative data
Business ecosystems		
Core ecosystem	B2C model and more consumers	Shimao Group provided houses and Sweetome provided service. Consumers were continually cumulative.
Support system	Financing smoothly	Tujia received investment from Ctrip, HomeAway, etc.
Competition system	Not competitive market	Mayi, Xiaozhu and other peerl companies began to appear.
Social and natural environment system	The short-term rental was in the initial stage with poor standards and regulations.	Tujia first developed from the tourist cities such as Sanya and Xiamen. The short-term reantal was not popular with poor standards and regulations and the trust between people was low.
Legitimacy		
Regulative pillar	Complying with local regulation and collaborating with local Tourist Administration.	Tujia complied with local regulation, collaborated with local Tourist Administration, and "Hospitality Shandong to Tujia" brand was born.
Normative pillar	Standardizing and specializing the houses. Cooperating with real estate developers and ICT-enabled companies.	Tujia standardized and specialixed its houses. Tujia begin to cooperate with Shimao Group and Ctrip, and put forward the national expansion plans.
Cultural–cognitive pillar	Participating in social public welfare activities.	Tujia started to focus on the social public welfare undertakings and charity.

4.2 The expansion of ecosystem(2013.3-2014.9)

In the first industry "shuffle", some platforms collapsed such as Airizu and some platforms continued to develop. Though the policy had not yet come, Tujia made use of the existing resources to gain a broader market, setting up network, gaining recognition and promoting actively. By 2014, Tujia ranked first while Ctrip, Muniuo, Qunar and other enterprises followed. Table 4 presents the dimensions and themes that we found to be salient in this phase and their supporting evidence.

Table 4. Dimensions, themes and data in the expansion of ecosystem phase(2013.3-2014.9)

Dimensions and second-order themes		Representative data
Business ecosystems		
Core ecosystem	B2C model with more suppliers and consumers	Until July 2014, Tujia had hundreds of thousands of houses in more than 138 cities, nearly 200 tourist destinations. Tujia cooperated with other Online Travel Agencies to gain more consumers, and then Tujia occupied the largest market size in domestic online short-term rental.
Support system	Financing fully	Tujia completed a series C round of funding with \$100 million.
Competition system	Not competitive market	Airizu, the first domestic online short-term rental enterprise, closed down in July 2013. Then, more than ten companies went out of business.
Social and natural environment system	The short-term rental developed circuitously.	Some enterprises collapsed and some enterprises continued to develop. Then several investments were introduced and the industry recovered. The policy and regulation on online short-term rental had not yet come.

Legitimacy		
Regulative pillar	Complying with local regulation and collaborating with local Tourist Administration.	Tujia started to collaborate with local Tourist Administration such as Chongqing, Fujian and Jilin.
Normative pillar	Setting up network and gaining recognition.	Tujia began to cooperate with China Vanke Group. Ctrip Tujia Channel went live.
Cultural–cognitive pillar	Promoting actively	Tujia and R&F Properties provided houses for The X Factor in China. In 2014, Tujia carried on a big sales promotion.

4.3 The leadership of ecosystem(2014.10-2016.2)

In the third phase, the government put forward the policy to support the industry. In November 2015, the State Council web site first announced, "Actively developing homestay, short-term and long-term rental apartments", and considered them as living service, given multidimensional policy support. Tujia seized the opportunity to begin the homestay business. With National policy support, Tujia continued to set up its own network and broadcast actively. Table 5 presents the dimensions and themes that we found to be salient in this phase and their supporting evidence.

Table 5. Dimensions, themes and data in the leadership of ecosystem phase(2014.10-2016.2)

Dimensions and second-order themes		Representative data
Business ecosystems		
Core ecosystem	B2C and C2C model with more suppliers and consumers	Tujia started the plan, "looking for hundreds of managers" in Taiwan. Tujia decided to use C2C model and found more individual landlords. At that time, Tujia's consumers were increasing sharply.
Support system	Financing fully	Tujia completed a series D and D+ round of funding with \$300 million and became a member of \$1 billion club.
Competition system	Competitive market	Differentiated competition appeared.
Social and natural environment system	The short-term rental developed with the government support.	The government stimulated tourism consumption and put forward "Reducing the real estate market inventory". Then the government began to help the development of the online short-term rental.
Legitimacy		
Regulative pillar	Several national policy support	In November 2015, the State Council web site announced for the first time, "Actively developing homestay, short-term and long-term rental apartments", and took them as living service, given multidimensional policy support.
Normative pillar	Setting up network and gaining recognition.	Tujia began to cooperate with Beijing Capital Development Holding Group.
Cultural–cognitive pillar	Broadcasting actively	Tujia updated the new logo and put forward the concept of "sharing and home". "Tujia" high iron in Fuzhou had been used.

4.4 The self-renewal of ecosystem(2016.3-Present)

The online short-term rental had a development bottleneck and serveral integration in 2016 whlie policies and regulations were still required improvement and renewal. On November 4, 2016, Airbnb entered China. As people were more enthusiastic about homestay than before, Tujia did mergers and acquisitions with Mayi and the homestay business of Ctrip and Qunar. In addition, Tujia responded to the call of the government, applied for establishing new industry standard and made inner resource orchestration. On August 4, 2016, Tujia's daily orders exceeded 56000, which is the highest single-day record of short-term rental in China. Table 6 presents the

dimensions and themes that we found to be salient in this phase and their supporting evidence.

Table 6. Dimensions, themes and data in the self-renewal of ecosystem phase(2014.10-2016.2)

Dimensions and second-order themes		Representative data
Business ecosystems		
Core ecosystem	C2C and B2C model with more suppliers and consumers	Tujia cooperated with LY and helped Roomorama gain more houses overseas. Tujia’s daily orders exceeded 56000, which is the highest single-day record of short-term rental in China.
Support system	Financing fully and developing homestay business fast	Tujia did mergers and acquisitions with Mayi and the homestay business of Ctrip and Qunar.
Competition system	Competitive market	On November 4, 2016, Airbnb entered China.
Social and natural environment system	The short-term rental was popular with imperfect policies and regulations.	People were more enthusiastic about homestay than before. Policies and regulations of the online short-term rental were still required improvement and renewal.
Legitimacy		
Regulative pillar	Responding to the call and establishing new industry standard	On May 6, 2016, the government put forward several policies to support the industry. Tujia responded to the call and started “Tuyuang” programme. Tujia applied for establishing the “national standard of vacation rental apartment”, which was then allowed by the National Standardization Committee.
Normative pillar	Making inner resource orchestration	Tujia broke up the online and offline business.
Cultural–cognitive pillar	Broadcasting actively	In 2016, Tujia held several press conferences about its strategies.

5. DISCUSSION

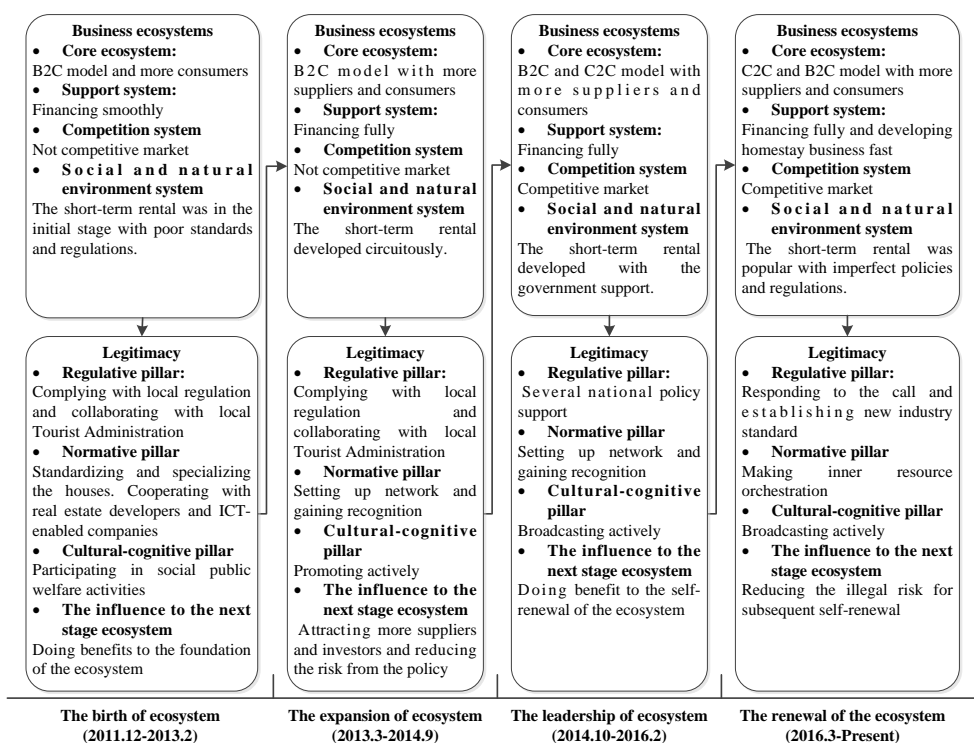


Figure 1. Tujia’s evolution model on business ecosystem and legitimacy

By integrating the different patterns of Tujia across the four distinct phases, a process model of how Tujia's business ecosystem and legitimacy evolved (refer to Figure 1) can be inductively derived.

In the early stage, from the birth to the expansion of the ecosystem, there were no clear norms, standards and policy. With respect to the regulative pillar, Tujia paid more attention to comply with local regulation and collaborate with local Tourist Administration. On the issue of normative pillar, Tujia made several efforts. At first, Tujia standardized and specialized the houses. Then, Tujia cooperated with real estate developers and ICT-enabled companies to set up its own network and gain recognition. The third pillar focuses on compliance with the cultural-cognitive values, while the short-term rental was in the initial stage, the public didn't know about this new business much. Tujia participated in social public welfare activities and promoted actively.

As Tujia gradually developed, the public started to be interested in the online short-term rental and expected to have a different experience with lower price. Tujia began to use C2C model with increasing suppliers and consumers. On one hand, the government encouraged the online short-term rental with policy support. On the other hand, the industry should have clear norms and regulations, which described building standards, hygiene standards and safety standards. Tujia had a set of feasible specification and standard. Tujia actively responded to the call of the government and applied to establish new industry standard in terms of regulatory rules. In addition, Tujia made resource orchestration and broadcasted actively to prove culture-cognitive pillar.

In different stages, Tujia's legitimacy and institutional environment varied. At the beginning, Tujia was in Legal Grey Zone with all kinds of problems appeared. As the government realized to support and regulate the industry, Tujia became legal from the perspective of three factors of legitimacy respectively. On the whole, the legitimacy issues in general are emerging with new business or change. The emergence of the contradictions and problems calls for requirement specification, recognition and management. In this process, enterprises' hard efforts in three aspects are important and interrelated. Along with the development of economy and technology, the new business forms may appear more frequently with more legitimacy challenges.

6. CONCLUSIONS

6.1 Theoretical and Practical Implications

By addressing the research questions set forth at the beginning of this paper, this study makes several important theoretical contributions. First, previous studies on the online short-term rental, mainly focus on the positive influence, the business model, and policy and regulation^[1,2,5,6]. However, the online short-term rental has always been confused with development and legitimacy in Legal Grey Zone in China. This study puts forward a process model of how Tujia overcome legitimacy challenges with rapid development, which enriches and extends the studies on the online short-term rental in sharing economy.

Secondly, this study also makes significant contribution to the literature on legitimacy. Previous studies have identified a number of antecedents for the legitimacy of organization and IS adoption^[7,8], most studies consider overall and rarely look at the topic from a process perspective. We use a longitudinal interpretative case study to identify the subecosystems and institutional pillars in each stage, and analyse their differences to have a clear and better understanding of Tujia's challenges and actions.

Finally, this study proposes a specific combination of business ecosystem and legitimacy that contributes to the development of the online short-term rental enterprises in sharing economy. The process model developed in this article advances the state of existing knowledge by providing specific and testable propositions for the online short-term rental enterprises to evolve their ecosystem and institutional pillars that are grounded in the empirical reality of a real world organization.

In terms of implications for practice, this study is significant in that it provides a comprehensive and

empirically supported framework for evolution and development of an online short-term rental enterprise, and answers the question of how it became legitimate and successful. More specifically, the results of our study show a good process model and several strategies for senior managers and other peer companies in sharing economy.

6.2 Limitations and Future Research

This study is not without its limitations. Although secondary data selected as research data has so many advantages, primary data such as interviews of online short-term rental companies' managers and employees may be useful to conduct our study. With the rapid development of online short-term rental, future research can be directed at the views and thoughts of related enterprises about business ecosystem and legitimacy as primary data.

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