SOCIAL RELATIONS MANAGEMENT TOWARDS
SUSTAINABLE GROWTH: A STUDY OF THE DEVELOPMENT
OF E-COMMERCE TOWNS IN CHINA

Lusi Yang, Department of Information Systems, National University of Singapore, Singapore,
yanglusi@comp.nus.edu.sg

Abstract

Based on the context of e-commerce towns’ boost in rural parts of developing countries, this study examines the role of e-commerce association in the organizing and management of social relations to achieve sustainability and address existing social problems. Referring to the existing literature on resource dependence theory and social network theory, the present study aims to investigate the tensions arising from these two theories about relation management by exploring the contingent conditions for the two streams of research. This research-in-progress report presents a preliminary framework, which is based on the theories, initial primary data collection as well as secondary data. This framework presents three phases of the development of the e-commerce towns. In each stage, specific network structure, social relations and corresponding sustainable initiatives are discussed. The case study approach is adopted in this explorative research. Additional data collection and analysis will be conducted in next stage and the findings will be further enhanced. Also, expected theoretical and managerial implications will be discussed in the end of this paper.

Key words: E-commerce towns, Resource dependence, Social network, Case study
1  INTRODUCTION

Over the previous decade, physical access to ICT (Information and Communications Technology) has increased dramatically. The significant shift is obvious in developing countries (Yang & Mao 2014). For example, a recent investigation indicates that Asia and Africa have the largest mobile telephony penetration rates in the world (Yuthamanop 2008). This boost of ICT has help to address several social-economic problems (Avergou 2003), such as improving the basic productions and living conditions in poverty areas. Regarding the situations in China, the rapid ICT uptakes in recent years has become the driving force of Chinese society and changed traditional production mode (Meng & Li 2002). Various kinds of ICTs, especially e-commerce, are becoming prevalent in China’s suburban towns (Xinhua 2013). With the innovation brought by e-commerce, people in towns are able to create their own web stores and run business online, which brings an emerging phenomenon of e-commerce towns in China. Each town is organized and developed in its own specific way. The emergence of this phenomenon brings rural social transformation and is helpful to solve Chinese social problems (e.g., urban and rural disparity, the gap between the poor and the rich).

Most of e-commerce towns in China are organized and managed by social enterprise, which usually exist in the form of e-commerce associations. During the management process, the e-commerce associations need to consider the social relations within town and with other towns, since the internal structure of the town and its structural position in the whole ecosystem play a significant role in determining the activities in which towns engage (Aldrich & Pfeffer 1976; Borgatti & Foster 2003). To be specific, the social relations between different business stakeholders and between business stakeholder and e-commerce association determines the strategies they will take next, which are significant to the development of towns.

Besides organizing social relations well, it is still not easy to achieve stability during the management process, because potential uncertainties in the environment may arise from various sources (Crozier 1964; Gibbons 1999), such as policy changes from government, insufficient supplies of business stakeholders, or the paradox of cooperation and competition between business stakeholders. Facing potential market uncertainties, e-commerce associations need to take measures and strategies to sustain productivity and improve welfare of the town over time. Hence, in the context of Chinese e-commerce towns, “sustainable growth” (i.e., “sustainability”) deserves explorations in depth. And it is e-commerce association’s responsibility to ensure the sustainable development of the town and keep the town being profitable over time. The study therefore aims to answer this research question:

*How do e-commerce associations organize and manage social relations to address existing social problems and achieve sustainable growth?*

2  THEORETICAL BACKGROUND

In light of the social relations within towns, business stakeholders rely on e-commerce association for resources. In turn, because of this reliance, the e-commerce association has the power to guide stakeholders to develop into the directions it desires. To explain the patterns of dependence and power within towns, the lens of resource dependence theory (i.e., RDT) is adopted in the conceptualization of this process. Furthermore, social relations are usually an essential element of social network. The perspective of social network theory is leveraged to analyze the relations between diverse business stakeholders and between business stakeholders and e-commerce association. The social networks formed by these parties have an effect on their activities and the sustainability practices of e-commerce association. In this section, we have a brief literature review about three streams of research: resource dependence theory, social network theory as well as sustainability. The first two provide our theoretical lens. The “sustainability” is outcome and the phenomenon to be examined.
2.1 Resource Dependence Theory

RDT describes the sources and consequences of power in inter-organizational relations, which revolve around the control of vital resources (Pfeffer & Salancik 1978). The emphasis of this theory is “dependence”, which exists when a firm or individual, group, etc. relies on the other for vital resources (Cook 1977). Another emphasis of RDT is “power”, derived from the dependence of the firm on elements of its task environment (Thompson et al. 1967). Dependence and power are the observe of each other (Dwyer & Oh 1987). Because of this, firms intentionally pursue strategies to enhance autonomy and seek control resources on which others are dependent. Also, firms may form alliances with actors with mutual dependences to reduce external constraints, since firms with fewer mutual dependences are more likely to face higher uncertainty (Casciaro & Piskorski 2005).

When RDT is applied in our context, RDT lends substantial emphasis on the e-commerce association’s and business stakeholders’ social context. The e-commerce association intends to guide business stakeholders to develop in its desired directions, and therefore to increase effectiveness of the whole ecosystem system. Nevertheless, from the perspective of business stakeholders, they desire to increase their own autonomy by minimizing the power from association and in turn form their own identities, rather than completely controlled by the association. On the other hand, these stakeholders still need resources from the association. So business stakeholders and e-commerce associations are mutually dependent. Hence, paradoxes will arise from the two contradictory intentions. Drawing from the RDT perspective, business stakeholders and e-commerce association would like to form alliances to achieve sustainability when facing potential market uncertainties. Besides, they also discount their ties or interactions with e-commerce association because these ties put them in the place of dependence, which is caused by imbalanced power between these two parties (Gulati & Sytch 2007; Lincoln & McBride 1985). As power and dependence are two essential constructs in RDT and they have a significant effects on the strategies of e-commerce associations during management process. In our framing, we adopted these two constructs to analysis the development of the e-commerce towns.

2.2 Social Network Theory

Social network theory describes organizational outcomes as a function of the social relationships between organizations or individuals within organizations (Jones et al. 1997; Reagans & Zuckerman 2001). Organizations make decisions based on information and influence that arise from the extent to which they are embedded in their social networks (Wuyts et al. 2004). The structural properties of social networks can be described and measured by indicators, such as centrality and density of network. In a network structure, innovations and strategies diffuse through ties. However, gaps may exist in network among clusters of firms that are not connected to each other. These are called structural holes (Ahuja 2000; Burt 1992, 2004; Zaheer & Soda 2009), which refer to gaps between non-redundant entities. If there is a structural hole between two clusters of people, the probability is high that people in one cluster are so focused on their own activities that have little time to attend to activities of people in the other cluster (Burt 2004). Therefore, within the social network of e-commerce towns, bridging structural holes provides unique benefits that organizations can use to their advantages (Borgatti & Foster 2003). In the context of e-commerce towns, the e-commerce association spans the structural holes so that different clusters of business stakeholders are linked to each other through the public platforms provided by the association. Spanning the structural holes also facilitate diffusion of sustainable strategic initiatives throughout networks.

Furthermore, the economic strategies and actions are embedded in the social relations, which may facilitate or derail the actions (Granovetter 1985; Uzzi 1996). As a sub-stream of research in social network theory, the concept of embeddedness changes actors motivations from narrowly pursuit immediate economic gains to the enrichment of relationships via trust and reciprocity (Powell 1990; Smitka 1991). Viewing from this perspective, the business stakeholders is embedded in the networks composed of all the stakeholders and e-commerce associations. Information from the embeddedness
affects their decision-making as well as enhances their learning and adaptation process. Back to the literature, three kinds of embeddedness are discussed: positional, relational and structural. **Positional embeddedness** focuses on the position of the focal firm in the network, which can be indicated by centrality or status (Bonacich 1987; Gulati & Gargiulo 1999; Podolny 1993, 1994, 2001). **Relational embeddedness** is defined as the “Personal relationships people have developed with each other through a history of interactions” (Nahapiet & Ghoshal 1998, p. 244). In contrast to the interpersonal nature of the relational embeddedness, Nahapiet and Ghoshal (1998) define the **structural embeddedness** as “the impersonal configuration of linkages between people or units” (Nahapiet & Ghoshal 1998, p. 244).

In our context, e-commerce association bridges the structural holes between different clusters of business stakeholders to facilitate diffusion of vital resources and sustainability practices. In other words, it connects those clusters of stakeholders to a larger network. Resource diffusion contains supplies sharing, technology sharing as well as information sharing. All of these sharing actions are the initiatives towards sustainable development. During different stages of the e-commerce towns’ development, parties within the town take on diverse network forms. In different stages we use diverse kinds of embeddedness to conceptualize the activities of business stakeholders.

### 2.3 Sustainability

Sustainability refers to the capacity of an entity to preserve its essential nature over time through its own efforts (Ramirez 2012). Origin of this concept can be traced back to the realm of environment. It referred to the development that meets the needs of the present without compromising the ability of future generations. Peter Drucker was the first to place sustainability within the domain of marketing. He argues that management behaviors need to “consider whether the action is likely to promote the public good, to advance the basic beliefs of our society, to contribute to stability, strength and harmony” (Drucker 1955, p. 382). In this paper, sustainability entails the ability of e-commerce association to create wealth, promote socio-economic improvements as well as manage social relations. Sustainability initiatives of e-commerce association enable the town to differentiate itself from other e-commerce towns and achieve a position of competitive advantage (Menon & Menon 1997; Porter & Van der Linde 1995). In this context, sustainability initiatives include the management of social relations among various parities within towns. In order to achieve sustainability, the e-commerce association has to take strategies to remove or minimize potential market uncertainty and make appropriate sustainable initiatives.

As a summary, two points can be emphasized from the summary of three streams research. First, working from one dimension of RDT, business stakeholders need to rely on mutual dependence and reciprocal exchange relations to reduce uncertainties (Casciaro & Piskorski 2005) through which embeddedness is promoted. In the sense, the embeddedness argument in SNT complements RDT for inter-firm action towards sustainability. Therefore, this study explores the relationship between RDT and SNT in social relations. Second, thinking from another dimension of RDT, business stakeholders need to perform sustainability that can increase autonomy and freedom so that the value of ties, especially those places themselves in the positions of dependence will be discounted. To the contrary, the SNT argues the inter-firm relations increase dependence, but also provide added value to the firm. Therefore, tensions arise from these two streams of research. This study also aims to uncover contingency condition that would be non-obvious using either theory alone. Back to the research question, this research studies how does the e-commerce associations organize and manage social relations to address the social problems and achieve sustainable growth from the perspectives of RDT and SNT, and to discover contingent condition for the tension arising from these two theories.

### 3 RESEARCH METHOD

Case research approach has been adopted for three reasons. First, it is a particularly appropriate approach in answering the “how” research question (Tim et al. 2013; Walsham 1995). Second, because management of social relations in the context is a complex, multi-faceted phenomenon, a qualitative case
research methodology that is explorative in nature enables a more pertinent understanding and interpretation (Kartiwi 2006). Additionally, since case study is more effective in exploring new conceptual arguments (Siggelkow 2007), it is used to break new theoretical background in this study (i.e., sustainability from social enterprise perspective, the mechanism of RDT and social network towards sustainability).

Given the research agenda, the case of “Suichang E-commerce County”, which is located at Zhejiang, China, was selected based on three primary criteria. First, the “Suichang E-commerce Association” has developed into a relatively mature stage. This e-commerce town has gone through a sustainable developing stage. Second, the e-commerce association in Suichang county has done an excellent job in social relations management. Analyzing secondary data online (i.e., public available news and market reports), it was discovered that both business stakeholders and e-commerce association members in this county are satisfied with their own achievement, since socio-economic problems have been alleviated. In addition, members of Suichang e-commerce association were willing and have agreed to support our detailed case study research, therefore rich insights can be gained. Research access was negotiated and granted in August 2013. We conducted three interviews with managers of Suichang e-commerce association: head and deputy head of e-commerce association, as well as social project manager in association. We also directed five in-depth discussions with local business stakeholders. The interviews and discussions were all open-ended, exploratory in nature and occasionally guided by some rudimentary questions, without strict guidelines are imposed. Throughout the conversations, the mirroring technique introduced by Myers and Newman (2007) was used to invite the interviewees to share their “stories” or experiences. To ensure the data were in accordance with our topic of interest, the participants were invited to not only recall the strategies they took, decisions they made events they experienced during the development, but they were also encouraged to pinpoint aspects relevant to e-commerce association and e-commerce adoption. Each interview lasted an average of 90 minutes and was digitally recorded and later transcribed for data analysis. In addition to this primary data collection, multiple sources of data were used to complement the information obtained: reports and news on e-commerce association website, Youtube.com and Youku.com videos about Chinese e-commerce towns as well as Weibo.com of Chinese rural e-commerce leaders. Data from various sources were gathered as supporting evidence for triangulation.

To capitalize on the flexibility of the case research methodology, data analysis were performed concurrently with data collection (Eisenhardt 1989). A set of preliminary theoretical themes potentially relevant to the adoption of e-commerce and the management of ICT uptake in developing countries were first identified based on related literature. These themes form the basis of our theoretical lens and serve as the “sensitizing device” (Klein & Myers 1999 p. 75) to guide subsequent data collection and analysis. Selective coding techniques (Corbin & Strauss 2008) were then used to map our data to the set of themes. The preliminary theoretical lens was modified incrementally whenever new evidence not relevant to the existing schemes emerged (Pan & Tan 2011; Walsham 1995). The data analysis was itself an iterative review cycle of empirical data, relevant literature and the theoretical lens. In addition, a combination of temporal bracketing, visual mapping and narrative strategy (Langley 1999) was used to organize the empirical data and generate the skeletal structure for theory building. Based on the emerging data, we identified three distinct phases from the evolutionary of e-commerce towns; each phase developed and emerged as different forms of network structure, different balance between dependence and power. Faced with different social relations and market uncertainty, appropriate initiatives are taken to achieve sustainability. Further mapping the theory building was conducted using various diagrammatic sketches or condensed tables. The process continues until we developed a preliminary model to (refer to Figure 1) to consolidate the emerging data and to comprehensively explain the case research findings.

### 4 CASE DESCRIPTION

With the rapid adoption of e-commerce in outer suburbs of China, villagers started to open their online store through public e-commerce platform TAOBAO. This phenomenon is named as “Taobao Villages”. 

There exist mature “Taobao Villages” in China, such as “Suichang Mode” and “Shaji Mode”. Informatization in these areas lead to rural social transformation and addresses social problems and meeting social needs. Suichang county, located at Zhejiang province of China, has a total population of 50,000. Up to now, more than 1,500 Taobao stores are opened in Suichang, primary selling bamboo charcoal and local agricultural products. Other kinds of products, such as kids clothes are also provided by stores. The e-commerce of Suichang county starts to emerge and grow in 2005. In 2012, Suichang was awarded the “Best E-commerce Town” at ninth annual Alibaba global e-commerce business stakeholders conference. It was also honored by national media as the China’s first “Taobao County”. This county has a total sale of more than 150 million in 2012, leading the development of Chinese rural e-commerce.

Suichang e-commerce association was established on March 26, 2010, sponsored by local companies. The association initiates e-commerce platform for public service, to provide e-commerce training courses and consulting services to business stakeholders. When a business stakeholder starts to build its own web store, association helps them to get connected to its suppliers and other potential cooperators. At beginning stakeholders are instilled with e-commerce skills and public services, such as photography, picture process, and branding. Having gone through the initial establishment stage, stakeholders get familiar with potential cooperators gradually and get access to its suppliers. They started to achieve collective development through supplies sharing, technology sharing and capital sharing. With the maturity of the e-commerce ecosystem in the town, large-scale stakeholders are invited to provide training and sharing experience towards later-developed stakeholders. At the same time, they also started to search for their own characteristics that distinguish their web store from the group.

5 DISCUSSION

We present our findings in a model (illustrated in Figure 1) to develop observations and frame the discussions. Three distinct phases have been identified according to maturity and scale of the business stakeholders and the e-commerce system. In each phase the constructs from RDT and SNT are utilized to explain how social relations evolve and what the primary market uncertainties facing e-commerce towns and the sustainability initiatives taken by e-commerce association to deal with these uncertainties.

Phase 1 - Early Establishment Stage

During the early establishment stage of the e-commerce towns, the network density within towns is pretty low, since different business stakeholders merely interact with each other before. Some may even not know the others. In this situation, the e-commerce association takes the role of central hub of information, which provides resources to those stakeholders it connects. The resources are not from inside of e-commerce association. Rather, it acts as an intermediary between different stakeholders, including suppliers and web store owners. During this stage, business stakeholders are almost isolated entity in the network. Because they are unfamiliar with others and infrequent communications lend to weak ties (Hansen 1999). In this situation, they would like to develop their social networks through existing relatives and friends. They form alliances primarily through relatives and friends. Therefore, the main social relations between business stakeholders are relational embeddedness. However, existing relationships are far from enough to establish stable and desired network. Suppliers are not willing to provide products to online store with small scale, since these stores do not have previous customers who they can sell products to. Facing market uncertainties, the e-commerce association takes sustainable initiatives to bargain with the suppliers to ensure sufficient supplies for web store owners. Meanwhile, the association lowers entry barriers for new web store owners, so as to help business stakeholders surviving through this early establishment stage. During this stage, various kinds of business stakeholders strive to bridge the structural holes between themselves and e-commerce association to acquire vital resources, and e-commerce association does not exert too much power to business stakeholders.
Phase 2 - Rapid Development Stage

With increasingly prevalence of e-commerce in the town, business stakeholders gradually become familiar with each other through the intermediary of e-commerce association. They also broaden their social network out of personal ties. Compared to the first stage, business stakeholders are more likely to transact directly with each other because of increased mutual trust and reciprocity. Therefore, the main form of network is structural embeddedness since most of the transaction exchanges are connected with impersonal ties among business stakeholders. At this stage, e-commerce association act as the focal point of communication in the social network. Even though some of the communications among business stakeholders are conducted through association, most are guided directly among business stakeholders. The network density is higher when compared with early establishment stage. Relatively closer ties (compared to first stage) lead to competition about products homogeneity, since the primary products are similar. Also, they limited experience in running online store may constrain development of the whole e-commerce town. Under this situation, in order to maintain the sustainable growth of the town, the e-commerce association takes actions to promote strategic alliances among stakeholders to achieve collective development. For stakeholders, especially those having a large scale, they may not be willing to alliance with others. But they have to do so because of the power exerted from e-commerce association.

Phase 3 - Mature Stage

With the development and maturation of business stakeholders, they accumulated certain amount of human resources, social resources and material resources. Their larger business scale ensures their higher status in town’s social network. Their relatively high status can attract potential business collaborators. With positional embeddedness, these business stakeholders have more economic transactions and are more likely to develop their own specialty. At this phase, business stakeholders connect to e-commerce association for collective optimism, and this optimistic atmosphere give them motivation and encouragement. Even with this positive moral, some business stakeholders do not have enough scientific
management skills to support further development to larger scale. With this market uncertainty, the e-commerce association takes practice to invite experienced stakeholders to provide professional training about marketing management for others who are connected to the association. Here, the e-commerce association acts as a platform of sharing, where experienced stakeholders sharing their knowledge with the news. In their mind, they may not want to have too much interaction with those of imbalanced power. But as a member of the e-commerce association, they need to do so.

6 FUTURE RESEARCH

The present study is based on data collected from our first-stage fieldwork and supplemented by several secondary data sources. The preliminary model introduces three phases of the development of e-commerce towns, each phase explained by its own network structure, three different types of embeddedness as well as the sustainable initiatives. This study continues to further develop the contemporary insights of adopted theories. In particular, we aim to more thoroughly investigate how the effects of resource dependence and social network propositions change over development process and how the effects are contingent on the development and maturation of the e-commerce ecosystem. In the second stage of the study, we have planned and gained access to 13 more interviews in Suichang e-commerce town to corroborate the data collection and analysis process. These interviewees include five more business stakeholders, five staffs in the association, two local e-commerce peripheral industry individuals (i.e. delivery company, tele-communication company), and one “Ganjie” social project Manager in the association. We will further validate the preliminary model and conceptualize the collected observations to expand our findings.

7 CONCLUSION AND EXPECTED CONTRIBUTIONS

The expected result of the study is that the relationships of resource dependence theory and social network theory are contingent on the scale of the business stakeholders as well as the development and maturation of the system. During the early development stage of the stakeholders, with only limited resources at hand, they need to fill the structural holes and form alliances with other experienced ones in the network to achieve sustainability. With their development, they like to increase their autonomy and minimize their dependence on others and create their own specialty. Based on different scale of the firm, managers can take strategies on different theories.

In summary, current research has the three potential theoretical implications: First, this study contributes to the sustainability literature that it explores the process to achieve sustainability development from the perspective of social relations management. Previous research of sustainability discussed the importance of this concept, but few focused on their process to achieve it. This study bridges this research gap. Second, this research analyzes the tension arising from one dimension of resource dependence theory and social network theory and uncovers a set of contingency relationships. Third, this research also discovers how resource dependence theory and social network theory complement with each other in achieve sustainability. The last two points contribute to the two streams of literature. For the managerial implications, this research gives managers guidelines about how to manage uncertainty in the informatization process in developing countries. It also helps them to understand practices need to be taken to achieve sustainability.
Reference


