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EXPLAINING E-TAILERS' SOURCE OF COMPETITIVENESS: AN INTEGRATIVE FRAMEWORK

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Abstract

E-tailers refer to small and medium size enterprises or individual entrepreneurs primarily conducting businesses on online shopping platforms. Although many works on e-marketplaces have been done, theory-driven studies that explain e-tailers' source of competitiveness are relatively scarce. The current work developed an integrative theoretical model in which online social capital, structural assurance, and online word-of-mouth are proposed to affect e-tailers' business performance. The current study offers implications on: 1) what are the unique sources of competitiveness for businesses operating in pure online environment; 2) how can the resource-scare e-tailers survive in their rivalry with large offline retailers.

Keywords: Internet entrepreneurship; E-tailers; Word-of-mouth; Social network; Theoretical model

1 INTRODUCTION

In recent years, China's online shopping market is growing rapidly in terms of sales volume and customer base. Consequently, social impact and economic influence of online retailing on the society is more and more significant. According to an industry report, the average annual growth rate of China's online shopping market has surged up to 102% since 2004 (Alibaba.com 2009). In 2008, when the transaction value amounts to RMB 128.18 billion (about USD 19.2 billion), the online market accounts for 1.5% of total retailing sales volume in China (iResearch 2009). The number of active online stores listed on Taobao.com, the largest shopping platform in China, has reached 2 millions by the end of 2009 (Alibaba.com 2009).

The focus of this paper is e-tailers, which are small businesses conducting trading activities mainly on online shopping platforms. Specifically, e-tailers refer to small and medium-sized enterprises (SMEs), online stores, and Internet entrepreneurs who sell goods or offer services under the umbrella of Internet shopping platforms (Alibaba.com 2009). Compared with traditional businesses, Chinese e-tailers have some unique characteristics. 1) E-tailers are *small or micro-enterprises*. Although some e-tailers have grown their business to a scale of several hundreds employees, the majority of e-tailers in China market have a workforce team less than 10 persons. 2) There is *a large number of e-tailers* right now in China. The active storefronts hosted on Taobao.com alone has surpassed 2 millions as of 2009, which provided more than 3 millions job opportunities directly and indirectly (analysys.com.cn 2009). According to an industry report, the sales on Taobao.com has surpassed that of the Chinese branches of three big retailers, Lianhua, Walmart, and Carrefour altogether in 2008; 3) They *primarily operate online*. Partially due to the lack of physical facilities, most e-tailers primarily do business on Internet. The resources required to operate a storefront are relatively easy to accrue and the entry barrier of online retailing business is relatively low.

However, despite the increasingly favourable online environment, it is difficult for e-tailers to accrue economical rents from information asymmetry since searching and comparing prices of different e-tailers are made easy (Ba and Pavlou 2002). Furthermore, most individual e-tailers are small and lack financial, physical and human capitals that offline retailers can enjoy and leverage (Alibaba.com 2009).

Therefore, one may expect that the competitiveness factors on the Internet to be sharply different from that of offline contexts (Grewal et al. 2004). However, to the best of the authors' knowledge, theory-driven studies explaining e-tailers' unique competitiveness factors are relatively scarce. Specifically, there is a lack of theoretical explanation on what resources are uniquely available to e-tailers and how they can achieve commercial success online. Most extant literature either addresses the factors that lead to business performance of traditional/offline organizations (e.g., Rowley et al. 2004), limits their research scope to online auction (prices, price premiums, or sale probability) (e.g., Melnik and Alm 2002), or examines solely from the perspective of online trust (e.g., Ba and Pavlou 2002).

This paper attempts to establish a theoretical model to address the issue of e-tailers' sources of competitiveness. We proposed that online social network, structural assurance (a type of institution-based trust), and online word-of-mouth of e-tailers affect their business performance. Theoretically, our framework informs related research fields including social capital/network, entrepreneurship, and online trust. Practically, we offer managerial implications to e-tailers on how to excel in pure virtual business environments.

2 LITERATURE REVIEW

In the last few decades, many studies on sources of organization competitiveness have been done. Below we summarized relevant studies along three lines of inquiries.

2.1 Social Network and Social Capital

Originating from sociology, social network and social capital theory has long been introduced into the management domain to account for the differential business performance of organizations (Tichy et al. 1979). Nahapiet and Ghoshal (1998, p.243) defined social capital as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit.”

The central idea underlying social network and social capital theories is that valuable resources of the focal actor (called ego) are not necessarily possessed directly by the ego and might be embedded in ego's social networks and mobilized when necessary for desired outcomes. The relationships between social capital and ego's performance have been empirically examined in different levels of analysis. In the firm level, network support was found to increase the probability of survival and growth of newly founded businesses (Bruderl and Preisendorfer 1998). Since e-tailers are independent business bearing a wide range of transaction management functionalities (stock replenishment and management, advertising and marketing, after sale services, etc.), the most relevant literature for this study are those of firm level analysis.

In their efforts of explaining differential firm performance, some researchers examined the strength of social ties, while others focused on the actors' network positions. Granovetter (1973) was the first researcher differentiated strong ties and weak ties. He argued that although strong ties better serve the objectives of integrating and mobilizing resources, only weak ties can bring new information. Later studies in this lane centred on contexts under which strong ties and weak ties can be optimally configured to advance business performance. Bruderl and Preisendorfer (1998) showed that both weak ties and strong ties can improve start-ups' sales performance. In contrast, Rowley et al. (2000) suggested that the influence of relational embeddedness (in particular, strong ties and weak ties) is contingent on industry context.

Alternatively, researchers also tested the causal link between organization network position in social network and their business performance. It seems that consensus has been reached on the benefits of being positioned centrally. For example, in their examination of the growth rate of Canadian biotechnology start-ups, Baum et al. (2000) found firms locating at the centre of alliance networks could access more diversified information and thus grow up more rapidly. In a study of the investment banking industry, Rowley et al. (2004) indicated that network members gain larger market shares when they share similar network position (in terms of centrality) but each has different role specializations.

As discussed in the introduction section, because e-tailers are businesses operating in online environments that are sharply distinct from traditional business contexts, whether the strength of online network ties and their positions in online social networks affect e-tailer business performance has not been empirically studied.

2.2 Online Trust

Trust is the “subjective assessment of one party that another party will perform a particular transaction according to his or her confident expectations, in an environment characterized by uncertainty (Ba and Pavlou 2002).” In the social capital literature, trust was deemed to be the most important aspect of relational social capital (in contrast to social ties, which are structural aspect of social capital) (Nahapiet and Ghoshal 1998). Nevertheless, trust represents one independent stream of inquiry in the information management research field, partially due to the unfavourable business environments at the initial stage of electronic commerce development. Gefen et al. (2003) proposed three types of trusts including knowledge-based, institution-based, and calculative-based trust. Since this typology is proposed from seller (not buyer) perspective, the only type of trust salient in our research context is institution-based trust, which in turns has two dimensions, structural assurance and situational normality (Gefen et al. 2003). Structural assurance refers to institutional structures such as guarantees, regulations, legal recourse, or other policies being put in place to promote the online exchange.

Situational normality, on the other hand, refers to the sense that the environment is in proper order and success is likely because the situation is normal or favorable (Lewis and Weigert 1985).

In empirical studies, it seems that the literature focuses overwhelmingly toward consumers' perspective. For example, Ba and Pavlou (2002) showed that trust building mechanisms such as consumer rating system could mitigate information asymmetry by reducing transaction-specific risks, therefore generating price premiums for reputable sellers. Online buyers' intention to purchase are attributed to the active impacts of institution-based trust (Gefen et al. 2003). The rich content of feedback text comments was found to lift a buyer's trust in a seller's benevolence and credibility (Pavlou and Dimoka 2006).

Although it was generally agreed that knowledge-based trust, calculative-based trust, and situational normality are important antecedents leading to consumer shopping intention (Gefen 2000; Lu et al. Forthcoming; Melnik and Alm 2002), sellers can not intervene or change these types of trust perceptions of buyers, especially those whom the sellers never have a chance to directly interact with. Therefore, research findings offered by this stream of studies, although important to electronic markets, carry little managerial hints to seller groups.

Comparatively, another dimension of institution-based trust, structural assurance, is more relevant to e-tailers. This is because contemporary shopping platforms, in their efforts of reinforcing faithful online trading, put into places such consumer rights safeguarding plans as real-name registration authentication, consumer rights safeguarding plans, 3rd party payment systems, penalty on "bad" e-tailers, etc. Online sellers have the option of joining in those plans or not, thus disseminating different quality signals to the buyer groups. However, so far structural assurance was less frequently examined in the literature.

2.3 Online Word-of-Mouth

In the marketing literature, word-of-mouth marketing is to purposefully design messages about a particular product or service in a promotional campaign which operates through an individual's personal recommendations to their social networks (Dellarocas 2003).

A number of empirical studies on e-tailers have been conducted to examine the impact of consumer feedback systems and ratings (online word-of-mouth) on such outcomes as sales opportunity, price premium, and increase in sales. For example, using consumer review data collected from Amazon and Barnesandnoble.com, Chevalier and Mayzlin (2004) found that an improvement in reviews for a book leads to a relative increase in the sales of that book. However, the degree of effects on sales volume differs between positive reviews and negative reviews. In particular, the marginal impact of 1-star (negative) reviews is greater than the impact of 5-star (positive) reviews.

Consumer reviews are not always found to be beneficial to e-tailers. Chen and Xie (2008) showed that delaying the availability of consumer reviews for a given product can be beneficial if the number of expert product users is relatively large and cost of the product is low. Furthermore, online user reviews don't always enhance business performance. In a study of movie box office revenue, Duan et al. (2008) found that online user reviews have little persuasive effect on movie ticket purchasing decisions. Besides quantity, quality of the consumer reviews also counts. Park et al. (2007) found low-involvement consumers are affected by the quantity rather than quality of online product reviews, while high-involvement consumers are affected by review quantity mainly when the review quality is high. To conclude, many works have been done concerning the effects of online word-of-mouth on e-tailer performance. The effect size of online reviews on business outcomes seems to be contingent on factors such as quality of the reviews, timeliness of reviews, demographic characteristics of consumers, among others.

3 THEORETICAL MODEL

An integrative theoretical framework that synthesizes online social network, online word-of-mouth, online trust literatures in their relations to e-tailer business performance is provided in this section, and organized within the organization relations framework proposed by Adler and Kwon (2002). Adler and Kwon (2002) suggested three types of relations that an organization has to deal with in its economical activities, including market, hierarchical and social relations. The three types of relations can directly or indirectly generate commercial value through different exchange mechanisms (see Table 1).

Specifically, *market relation* refers to the relationship between the focal organization and its customers. On the market places, goods and services are exchanged for money. *Hierarchical relation*, represents connections through which obedience to authority is exchanged for material and spiritual security (Adler and Kwon 2002). Business practices in accordance to corporate policies or being viewed as ethical/legitimate are therefore protected and supported. *Social relation* is characterized by favour and gift exchanging. But, unlike the market relation wherein terms of exchanges are often made explicit and specific, the favours exchanged through social relations are based on tacit understanding or shared norms that a favour one offers will be returned *someday yet to be determined* and by *somebody not necessarily benefited directly*. The key differences among the three types of relations are listed in Table 1.

Dimension	Market Relations	Hierarchical Relations	Social Relations
What is exchanged?	Goods and services for money	Obedience to authority for security	Favours, gifts
Are terms of exchange specific or diffuse?	Specific	Diffuse (Duties not fully specified, some even yet to be determined)	Diffuse (A favour is made in exchange for a favour and at a time yet to be determined)
Are terms of exchange made explicit?	Explicit	Explicit	Tacit (A favour is made in the tacit understanding that it will be returned someday)
Is the exchange symmetrical?	Symmetrical	Asymmetrical (Hierarchy is a form of domination)	Symmetrical

Table 1. Market, hierarchical, and social relations
2002, p.19)

Notes: adapted from (Adler and Kwon

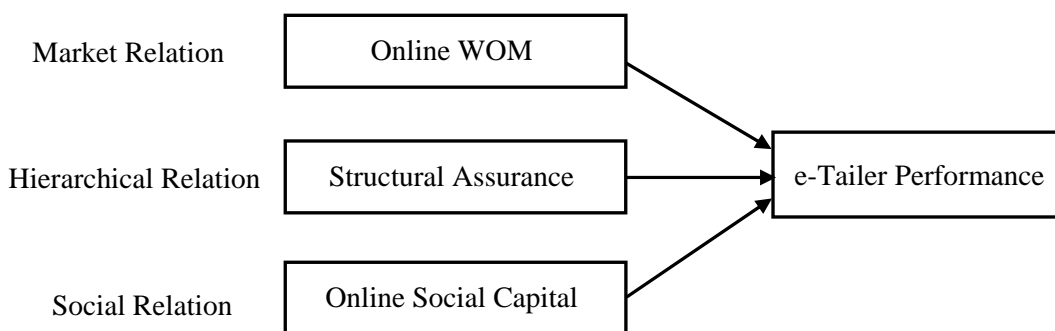


Figure 1. A model of e-tailers' sources of competitiveness

As discussed in prior sections, e-tailers operate in very different business contexts from that of traditional enterprises. Therefore, although the three relations for a business unit are conceptually straightforward, how e-tailers organize three types of relations in the pure online contexts to achieve higher performance are not clear. Subsequently, based on Adler and Kwon's (2002) framework and the characteristics of online retailing, a contextualized theoretical model is proposed (see Figure 1). In general, we posit that e-tailers good at exploiting the three relations online will enjoy high business performance.

3.1 Online Social Capital

Social relations of e-tailers on shopping platforms are embedded in their online social networks. A large body of literature support the argument that social networks offer opportunities and resources for actors in the offline contexts. For example, Friedkin (1982) showed that rich connections foster mutual understanding, norms, and trust, and thus facilitate cooperation and collective actions among members. Putnam (2000) claimed that when social network is full of good wills, members tend to more cooperative, eventually improving the survival and success chances of start-ups. Brass et al. (2004) did a comprehensive literature review on the antecedents and consequences social networks at different level of analysis.

Much similar to face to face social networks, online social networks enable actors to exchange for things such as emotional support, information, and resources. Unlike face to face social networks, however, IT-supported social network is less constrained by the number of social ties, which means individual e-tailers are capable of managing a large number of social ties with relatively less efforts per tie (Qureshi and Haggerty 2009). Another aspect of online social networks is that the strength of social ties is weak on average in contrast to face to face social networks. Consequently, whether the net benefits accruing from online social network is larger or smaller relative to face to face social network is a function of network size, centrality, and diversity (Qureshi and Haggerty 2009). Hence, we propose:

Proposition 1: *The more benefits accruing from an e-tailer's online social network (online social capital), the higher its business performance.*

3.2 Structural Assurance

Since e-tailers operate on third party online shopping platforms, the institutions and rules of platforms can impact their performance. To encourage faithful transactions and sustain the online marketplaces, shopping platform operators often enforce some authentication plans for e-tailers' choice. These plans are the structure and mechanisms for online marketplace to prevent opportunistic behaviours of online sellers. Since shopping platforms, which are normally well-recognized brand names, are trustworthy for buyers, and that some consumer rights safeguarding plans have been put into place, buyers are prone to trust those e-tailers who join in such plans. In this way, institution-based trust could be established.

We argue that the relationship between shopping platform and individual e-tailers, exemplified by consumer right safeguarding plans, is a type of the hierarchical relation in online retailing contexts. Firstly, what exchanged in such a relation is *obedience to authority* for the e-tailer group; Secondly, the terms of exchange in the relation between platform and sellers are specific for rules already being put into place, but *diffuse* for many other guidelines has yet to be disclosed or decided. Thirdly, the terms of exchange in such a relation are *specified* in formal business contracts (see empirical evidences later); Lastly, the exchange relation is *asymmetrical* because the authority of shopping platforms is unchallengeable. Online sellers become more legitimate if they pass the authentication procedures of shopping platforms. Hence, the relationship between sellers and the platforms they use match the definition of hierarchical relation well. Following Adler and Kwon (2002), we further posit that such relation will engender business value for e-tailers abiding by the consumer right safeguarding plans.

Proposition 2: *In comparison to e-Tailers who don't adhere to the structure assurance plans issued by the shopping platform, e-tailers abiding by the plans have better business performance.*

3.3 Online Word-of-Mouth

In the online business environment, the availability of customer ratings and text feedbacks for every single transaction makes reputation indispensable assets for e-tailers. When the overall ratings and text comments for transactions are easily accessible to buyers, the degree to which prior buyers were

satisfied with their online shopping experiences will affect later customers' shopping intention. Therefore, the online word-of-mouth reflects quality of market relations an e-tailer has with its customers.

The effects of quantity of consumer feedback postings and positive ratings on business performance have been empirically examined in the prior literature. Duan et al. (2008) proposed that online word-of-mouth can gender two types of effects, namely awareness and persuasive effects. They showed that box office sales are significantly influenced by the volume of online postings, suggesting the importance of the awareness effect. In addition, Chevalier and Mayzlin (2004) found that an improvement in reviews for a book at one site leads to a relative increase in the sales of that book at that site. Grounded on the literature, we posit:

Proposition 3: *The better online reputation/word-of-mouth of e-tailers, the better their business performance.*

4 CONCLUSION

Although many works have been done on e-marketplaces, the extant literature is characterized by fragmented studies on what are the sources of competitiveness of e-tailers. This paper proposed an integrative theoretical framework in an effort to synthesize past studies on word-of-mouth marketing, social network/capital, and e-commerce trust. Online social capital, structural assurance, and online word-of-mouth are hypothesized to be the key predictors of e-tailers' business performance. By doing so, this paper paves the way for empirical studies that shed lights on how to excel in pure virtual business environments.

Currently, the authors of this paper have secured data sets necessary for empirical study. Therefore, one area for future study is to do rigorous data analysis and verify the proposed model. Since multiple measures with nuanced conceptual differences are available for each construct, it offers us a good opportunity to enrich our understandings on different structural assurance approaches (e.g., those on products versus those on services), social networks (e.g., peer networks versus buyer-seller networks), and their differential effects on e-tailers' business performance. Another possibility of extending the current study is to collect data from multiple countries and comparing the empirical results. In this way, the generalizability of proposed model can be tested on e-marketplaces in different cultural, religious, and legal systems. Putting together, this line of inquiry has potentials to theoretically extend our knowledge about Internet entrepreneurship, online marketing, and online social networks, while informing the business practices of e-tailers and shopping platform operators.

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