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### **Examining Virtual Tourism Community in China**

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#### **ABSTRACT**

This paper works to increase the body of knowledge on virtual community and incorporates a comparison using a different cultural environment – the context of China. We examine a virtual community of one of the largest travel companies in China – Mango. The Mango virtual community provides a platform for people to get to know each other, offer help and receive help when they have tourism related questions. The purpose of this study is to 1) investigate the usage pattern of a tourism virtual community, 2) apply social capital theory to virtual community, 3) validate prior virtual community research findings in a non-Western (China) tourism context 4) provide implications based on the analysis of user posting patterns. Our results also show collective action is generated by networks of relationships, reciprocity, trust, and social norms.

#### **KEYWORDS**

Virtual community, tourism, text analysis, user-generated content, social capital theory.

#### INTRODUCTION

Virtual communities provide a platform for members to exchange information, give and receive social and emotional support, develop friendships, and have fun (Ridings and Gefen, 2004). The virtual community phenomenon has been studied by many researchers examining: benefits of online communities for individuals (Malooney-Krichmar and Preece 2005; Butler et al.2005; Johnson and Ambrose 2006), success factors of virtual community (Ginsburg and Weisband, 2004; Leimeister and Sidiras, 2004; Andrews, Preece, and Turoff, 2001), rewards and recognition (Beenen et al. 2004), participation and contribution (Sangwan, 2005; Jones and Rafaeli, 2000), trust (Leimeister, Ebner, and Krcmar, 2005), life cycle perspective (Iriberri and Leroy, 2009), information sharing (Iriberri, 2005; Hall and Graham, 2004).

To some extent, virtual communities replicate physical communities. In both worlds, members join a community for a purpose or affinity; there is a variety of foci such as health, hobbies, jobs skills, etc. Both communities perform the base function of information sharing and friendship building. Examples abound; members of travel virtual community want to search and exchange travel related information whereas members of the technology virtual community are interested in finding news and solutions related to technology. Consumers rely more on the Internet and virtual communities to find information on hotels, airfares, and vacation products. Virtual travel communities provide an online space for people to share

their travel experiences, post opinions about services on hotels and airlines, travel sites, search for bargain prices and conduct other activities.

The existing body of studies on virtual communities is heavily focused on Western countries. Though prior studies have produced some fruitful results, empirical studies on the travel related virtual communities remain scarce, particularly studies on non-Western cultures such as China. This paper works to increase the body of knowledge on virtual community and incorporates a comparison using a different cultural environment – the context of China. We examine a virtual community of one of the largest travel companies in China - Mango. The Mango virtual community provides a platform for people to get to know each other, offer help and receive help when they have tourism related questions. The purpose of this study is to 1) investigate the usage pattern of a tourism virtual community, 2) apply social capital theory to virtual community, 3) validate prior virtual community research findings in a non-Western (China) tourism context 4) provide implications based on the analysis of user posting patterns.

This paper is organized as follows. In literature review section, we discuss social capital theory which serves as the foundation for this research and review prior findings on virtual community. An overview of China's travel industry is provided for context. The methodology section states the research method and data analysis. The discussion section talks about the findings derived from the data analysis. We conclude the paper with contributions and limitations.

#### LITERATURE REVIEW

#### **Tourism In China**

iResearch (2008) reports that the online travel booking market in China reached 27.89 billion RMB in 2008, 22.7% increase compared to 2007. Income from vacation products and other travel related is 2.7 billion RMB, up 0.8% from 2007. Currently, there are three major players in the travel industry in China: Ctrip, eLong and Mango. These three take 86% of market share in the travel industry. Mango is a subsidiary company of Hong Kong China Travel Service Corporation which has branches in 16 countries including U.S., Canada, Australian, Britain, France, Germany, Singapore, Thailand, Korea, etc. It also has the largest sea world hot spring resort in Asia. Mango has over 2000 employees and has over 20 employees in its e-business department. Mango's virtual business site was established in March 2003. Mango offers such business as hotel reservations, air tickets, packaged tour and travel management for companies. Figure 1 shows the number of online travel users increased from 0.6% in 2003 to 2.0% in 2009 and it is forecasted to go up steadily in 2012.



Figure 1. The Number of Online Travel Users/the number of Internet User

Figure 1 Online Travel Booking Market

#### **Social Capital Theory**

This study uses social capital theory to explore the social interactions and activities on the Mango virtual community. Dekker and Uslaner (2001) posited that social capital is fundamentally about how people interact with each other. Social capital represents a theoretical integration from multiple disciplines, especially between sociology and economics (Adam and Roncevic 2003). Social capital refers to the social relationships between people that create beneficial outcomes (Szreter 2000). Members of a social community can leverage social trust, norms, and networks to solve common problems. Adler and Kwon (2002) identify that the goodwill that others have toward us is a valuable resource. They define social capital as 'the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to the actor' (Adler and Kwon 2002, p. 23).

Like face to face interaction, online interactions accumulate social capital which may enhance civil involvement. By facilitating strong social relationships, trust, and reciprocity, an online community may gather enough social capital to engage in social action to achieve a collective goal (Blanchard and Horan 1998; Chaboudy and Jameson 2001; Hampton 2003; Iriberri 2005). Blanchard and Andmarkus (2004) examine feelings of community members including belonging, safety, and attachment to the group. They find that the presence of these feelings facilitates the development of lasting relationships with other members, create loyalty to the community, and allow members to use the online community for social and emotional support. In some cases active participation may lead to private and face-to-face interactions. Arefi (2003) suggests consensus building as a direct positive indicator of social capital (2003). In this context, consensus means common interest or agreement among members to take collective action.

Other researchers consider social capital to be multidimensional and must be defined to have any explanatory value (Eastis 1998). Social capital is 'the information, trust, and norms of reciprocity inhering in one's social networks' (Woolcock 1998, p. 153). Social networks have values as they take on the value system of their members (Putnam 2000). Individuals could leverage social capital to further their own career prospects and satisfy social needs. Furthermore, empirical findings support the notion of social capital to be described as an indicator of the normative influences of voluntarism, reciprocity, and social trust (Mathwick, Wiertz, and De Ruyter, 2008). Ultimately, social capital measures the relationship of people and their community, social cohesion, and feelings of connectedness.

#### **Virtual Community**

Kozinets (1999) defines a community as a group of people with social interactions, social ties, and a common 'space'. A community fosters a social network of relationships that maintain members socially, share information, and give members a sense of belonging (Wellman, 2001). A community allows members to interact socially for mutual benefit (Smith 2002). The development of technology has removed the geographical barrier associated with community and enabled communities to become virtual – without having to meet same place or even same time. Blanchard and Markus (2004) define virtual communities as "groups of people who interact primarily through computer-mediated communication and who identify with and have developed feelings of belonging and attachment to each other." Members of virtual communities use electronic media to communicate shared common values and interests on a regular basis (Schubert and Ginsburg 2000). Prior work on virtual community has addressed information sharing, success factors, community types, and benefits.

Active participation and the quality of relationships among members are important factors for a successful online community (Iriberri and Leroy, 2009). Several researchers attempted to extract and measure metrics concerning the success or failure of an online community. Ludford et al. (2004) use the number of messages posted as a measure in the volume of contributions. Preece (2001) classified success metrics into two groups: sociability and usability. Sociability measures include number of participants, number of messages per unit of time, member's satisfaction, reciprocity, and trustworthiness while usability metrics focus on the number of errors when using the interface, user productivity, and user satisfaction. In the end, both qualitative and quantitative measures are important. Typically, quantitative metrics include size (number of members), participation (number of visits, hits, logins), contributions (number of messages posted per period), and relationship development (extent of contact between members). The size of the community is a commonly used measure of success. When evaluating the success of online communities, it is important to consider all of these categories.

As the number of virtual communities grows, progressive firms see an opportunity to engage in this trend and seize it to promote their products and services. There are many business objectives that can be accomplished with virtual communities. Firms can use it to seek customer feedback on products and services, and such feedback may contribute to product innovation (Jeppesen and Frederiksen, 2006). There are numerous benefits that businesses can get from virtual communities; such benefits include understanding customers' needs, improving service quality, enhancing employee communication, and increasing productivity (Millen, Fontaine, and Muller 2002). Community building efforts require the understanding of the needs of members and of the whole community in each stage (Andrews 2002; Kling and Courtright 2003). Firms can

participate in online communities as a means to enhance demand for their products (Miller, Fabian and Lin, 2008). Consumers making purchase decision use virtual communities as a reference group; they seek feedback from the online community members and consider the feedback in their decision making process. Companies such as eBay and Amazon have incorporated the feedback mechanism of an online community into their business models and website functionality. In the travel industry, virtual communities grow rapidly as shown by more and more travelers discussing their travel experience and posting reviews with airlines companies and with accommodation providers. Travelers do value the online word-of-mouth system and factor the online feedback in their travel decisions (Ghose and Ipeirotis, 2009).

#### **METHODOLOGY**

This paper provides an in-depth insight into the discussion topics and pattern of participation in the virtual world. The site of our research interest is a virtual community dedicated to travel. The community's topics of interest include attractions, member organized group tours, scenery pictures, foods, hotels, ticket related information, health related information, etc. The virtual community consists of a central homepage, discussion forums, and a large database with pictures, food recipes, reviews, and articles. Currently, the main page contains five sub-communities: travel journal, photo album, group tour, voting, and opinions. The community has been online since 2003, and it is managed by Mango company. Mango recruits people to be the editors for the discussion threads. The policy of the virtual community is that commercial advertisements are prohibited. For example, if hotels put ads on the virtual community, it's the editor's job to remove the ads. The editors screen messages and make decisions on the content appropriateness. Obscene messages and commercial messages are removed. Mango provides the infrastructure for member to exchange information and the members provide all the content. The community's content is almost completely generated by members with occasional hiring ads and topical announcements made by Mango.

Because we are interested in the text information published on the Mango site, content analysis is a suitable technique for this study. We used the posts data for three months between May 2006 – July 2006 to conduct content analysis. Content analysis is popular in analyzing qualitative information (Kolbe and Burnett 1991; Pavlou and Dimoka 2006) and when applying it, it requires a transformation of qualitative text comments into more quantitative, objective data. In undertaking this transformation, we first examine the content of the thread topics and develop a categorical scheme. Next, we develop a coding scheme and follow Weber's (1990) suggestions to ensure both objectivity and reliability of a data analysis. Two researchers independently coded the discussion topics. Table 1 shows the categories.

Typically, the "asking tour info" category list messages related to travel. One finds, questions like where to stay and how to get discounted airfare but there are occasions when some companies use it covertly to do advertisement. In the "providing tour information" category, travel suggestions range from money saving tips, best place to visit, food to eat, and how to accumulate bonus points by posting messages on the Blog. Some messages provide warnings on some hotels usually related to poor quality (filthy), poor service, price (expensive), and inconvenient check in – check-out times with suggestions that Mango delist such hotels on their site.

	Frequency	Percentage		
providing tour info	39	4.84%		
asking tour info	29	3.60%		
travel journal	25	3.10%		
Attraction	96	11.91%		
group tour	29	3.60%		
Mango announcement/hiring ads/user guide/comments from Mango employee/asking suggestions on VC blogs	5	0.62%		
greetings	11	1.36%		
User feedback/Mango bonus points	16	1.99%		
ads restaurant/hotels	2	0.25%		
others/news/food/health/joke/pictures	554	68.73%		
Total	806	100.00%		
Table 1 Discussion Thread Categories				

In the "user feedback" category, some offers concerns that Mango provide hotel reservations for hotels that are only located within the sightseeing area. Others complain of the inconvenience of getting tickets because Mango did not allow customers to pick up tickets at airport. Some suggest that Mango should offer multiple means for ticket delivery and method of payments. Some suggest Mango have a travel consultation site which focus on customers' travel needs, other suggest on the web site improvement such as adding animation to the picture in the reply box. There are complaints concerning Mango's website: suggestions for improvements; negative comments about changes, such as flying girls on the screen, small topic area, news and loss of previous information or functionality. In addition, related business affinity ideas are collected through this virtual community. For example, the suggestion that Mango distinguishes between members and non-members of its virtual community in a tangible and meaningful (incentives) emerged from this site.

#### **Data Analysis**

To explore the post patterns and content posted, we analyze 809 discussion topics between May 2006-July 2006 based on posting frequency, posting content, posting date and time. Each discussion thread contains the following information: topicId, topic Title, topic Author, topic Board, topic Hits, topicPubTime (topic publication time). Two researchers spent considerable time analyzing discussion threads. To test the reliability of the content analysis, a reliability score is calculated for each of the two categories. We use the Kappa statistic to measure the inter-rater agreement between the two coders. This analysis shows substantial agreement with a Kappa value of 0.86, exceeding the acceptable level of 0.7. As shown in Table 1, 27.05% are directly related to travel (providing tour info, asking tour info, travel journal, attraction, group tour) and 69% of the discussion threads are in the category of others; 1.36% of new users post greeting messages to other community members.

Month	Total Number of Postings/month
May	291
June	72
July	446

**Table 2 Posts by Month** 

Table 2 shows the number of discussion threads posted in the three month period. One thing notable is that the discussion threads are significantly less in June 2006 than the other two months. By talking to the relevant Mango people, we were told in June 2006, Mango virtual community site underwent some technological changes and as a result, there were some period that community messages were not posted.

Days of Week	Frequency	Percent
Monday	63	7.4
Tuesday	106	12.5
Wednesday	118	13.9
Thursday	133	15.7
Friday	133	15.7
Saturday	215	25.3
Sunday	41	4.8
Total	809	95.3

Table 3 Discussion Thread Distribution by Days of Week

Table 3 shows the distribution of discussion threads by the days of the week. It shows that Saturday ranks first in terms of the total number of discussion threads, followed by Friday/Thursday, and Wednesday while Sunday has the least discussion threads. Saturday attracts more members' participation. As users, if they want their messages to get to as many members as possible, Saturday is the day to contact community members. The usage pattern in Table 3 also provides suggestions for the Mango corporation. If Mango announces new products/services to its community members, Saturday seems the most opportune day while Sunday should be avoided. In the alternate, Mango may wish to provide hardware services and software upgrades on Sundays where disruption of service can be minimized.

#### DISCUSSION

Consistent with prior findings (Blanchard and Markus, 2004), members of virtual community seek and receive social and emotional support when they need it. Though the purpose of the Mango site is for members to share travel related information, the content of the posts do suggest that some members turn to the online community for emotional and social support. For example, there is a post related to a member mentioning about her personal life and relationship with her husband but she received 2104 replies to her post. We do see members showing empathy and trying to comfort another member when somebody experience hardships.

Prior work suggests that people find self-satisfaction and pride in helping others within their community (Wang and Fesenmaier, 2004). Members do exhibit altruistic goals of helping member in the community. In our data, the altruistic

behaviors are shown as providing tour related information, and bad experiences they have with a company or a service and suggestions on what to bring when they travel to a particular attraction, or maybe a list of "do not do's" if they visit a culturally different region. Such altruistic behavior benefits other members and may generate reciprocity and trust among members. When many members actively participate in sharing and helping others, the quality of member relationship improves and member loyalty to its community also increases. As a result, the community grows and the online relationships may move to private or face-to-face relationship. We can see this evolution in the Mango virtual community. The community creates and self-initiates group tours. This is an example of collective action due to trust and interactions with other members online. Collective action produces tangible benefits for the members, such benefits include discounted tickets, airfare and hotels, etc.

#### CONCLUSION

Virtual communities provide opportunities to exchange information, give and receive social and emotional support, develop friendships, and have fun (Ridings and Gefen 2004). In this study we examine the content generated by a virtual tourism community members and our analysis confirms prior findings on social capital theory. Our results also show collective action is generated by networks of relationships, reciprocity, trust, and social norms.

From a business perspective, it is important to understand the activities that members conduct on the virtual community and needs underlying theses activities. The user generated content on the Mango community site provides valuable insight on how to make improvements. Mango Corporation uses the virtual community to examine comments from its members and to develop strategies and identify business opportunities. For example, user feedback has driven changes in web site functionality. The feedback suggests that Mango should hire experienced web site developers to improve the appearance and function of its web site. Based on suggestions related to Mango hotels and service quality, Mango should offer multiple means for ticket delivery and method of payments.

Though prior findings suggest that rewards and recognition for contributions increase the number of messages posted by community members (Andrew et al. 2001, Hall and Graham 2004), our data on the Mango virtual site do not show such correlation between rewards and the number of posts. However, our data is based on three months of posts. If a larger sample is used, we may see correlations between rewards and the number of posts. In addition, other factors related to personal, cultural and/or social backgrounds of users would affect usage patterns and therefore should be taken into account.

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