

Relationship between Motivation and Behavior of SNS User

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Abstract—With 225 SNS network users as the subjects, the research focuses on the influence of SNS network users' motivation on their behavior. Data are collected through questionnaires and the relationship between motivation and behavior is studied with relative analytical methods. As shown in the study, information and instrument motivation, entertainment and aesthetic motivation, social connection motivation, altruism motivation, ascription and identification motivation, and intrinsic motivation have significant positive correlation with usage time, usage frequency and usage level of the users.

Index Terms—SNS user, motivation, behavior

I. INTRODUCTION

With the wide spread of Internet and the development of Web 2.0, socializing network has become one of the most important basic applications for netizens.

At the end of 2009, the CNNIC (China Internet Network Information Center) issued Survey of Chinese Netizens' Use of Socializing Network-2009, which shows that at present there are more than 1000 SNS websites and the number is increasing. By the end of 2009, the number of netizens using the SNS has been up to 124 million, one third of the total number of netizens in China.

The various applications of SNS websites have been affecting people in a lot of aspects, such as the habit of using the internet, living styles, interests and even the social values. Take one popular SNS application Happy Farm as an example, "stealing vegetables" have been affecting our lives greatly. First, the approach has been a big bang on Chinese' preferences, which means a preference for a virtual mode of fun. Second, the concept of "steal" has challenged the Chinese ethics. Third, the people playing this game tend to ignore the time and energy, affecting their work or study. Four, this social networking game has been a hinder to family harmony. Last, there are also concerns on the fact that some netizens use the SNS website to achieve some goals which is against the social ethics, such as a personal attack, or a manipulation of media.

Therefore, the impact of the SNS websites on the society has been all round. With the booming of SNS

websites, we have been faced with unprecedented challenges. Whether the government should monitor the business mode or not? How can the SNS websites monitor their own development mode? How to regulate and guide the netizens? The answers lies on the research of the SNS websites users' behaviours. Why do they use the SNS websites? What are the needs met by the SNS websites? Why do they indulge in the forums, information and games provided by the SNS websites? A research on these problems can help the government evaluate the necessity of monitoring these SNS websites, and the methods of regulating the SNS websites, which would therefore bring a healthy development to the SNS websites. However, the researches on this research are still blank.

This research focuses on the relationship between motivation and behavior of the netizens, through which it discusses what influences motivation has on behavior and how.

II. LITERATURE REVIEW

A. Concept of Social Network

Being one of the most important applications of web 2.0, SNS websites has been the focus and a hot topic in the internet industry. SNS (Social Network Service) refers to one of the Internet applications which provide assistance in building online social network

The SNS can be divided into two types, according to the standards and functions. Type I. Manage the real social network online. Such as Facebook ,Renren and kaixin . Type II. Connect people by the same interests, such as Myspace and douban. The previous one manages the social network on the real identities, while the latter one is more of entertaining and making friends. This paper defines the SNS websites on the first one.

B. Research on virtual community users' motivations

Dholakia et.al (2004) 's research shows that the personal motivations that influencing users of SNS websites are purpose value(including information value and instrumental value), self-identification, interpersonal relationship maintenance, social reinforcement and entertainment value. Informative value means that the participants acquire and share information in the virtual community and have access to the others' mind.

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(Dholakia, 2004) Information value involves acquiring information, learning to do things, providing information, and contributing to the community. Instrumental value is to solve a problem or to create something new through online communication. (Hars&Ou, 2002; McKenna&Bargh, 1999) After surveying 280 SNS website users, Ohbyung Kwon, Yixing Wen (2009) suggests that the components of SNS website users' motivations are social identity, altruism, and perceived identification. It points out that altruism includes two types: kin altruism and reciprocal altruism. In the virtual world, kin altruism refers to the fact that the internet users tend to share the secrets online, form the family-like relationship with other users and do things beneficial for each other. Reciprocal altruism refers to the fact that the internet users help the others without sacrificing one's own maxims and beliefs, hoping for a similar help in the future.

After surveying 178 SNS website users, Chen & Yin (2010) holds that SNS users' motivations can be classified into six types: information and instrumental motivation, recreational and aesthetic motivation, socializing motivation, altruism motivation, ascription and identification motivation, and intrinsic motivation. This research adopts this classification pattern to analyze the relationship between SNS users' motivation and behavior.

C. Relationship between motivation and behavior

"Motivation" is a psychological concept, the cognition of which has gone through different stages. Motivation is the intrinsic cause for people to take part in certain activity, that is, an intrinsic force that drives people to take actions so as to meet certain needs and reach certain goals.

As for the relationship between motivation and behavior, Taylor and others (Taylor, Sluckin, Davies, Reason, Thomson & Colman, 1982) propose that "psychologists interpret motivation as a process or a series of processes that will stimulate, guide, maintain and finally ends at certain target-directed behavior succession."

Motivation has a complicated relationship with behavior in addition to stimulating, guiding and maintaining behavior. Behaviors of the same kind may have different motivations, i.e., different motivations are manifested by the same kind of behavior, and different behaviors may come from the same or similar motivation. Psychologists often explain the differences in behavior strength with the concept of motivation and consider strong behavior as the result of high level motivation. Moreover, the concept of motivation is often used to indicate behavior's persistence. It is suggested that the higher the motivation level, the longer the behavior will be even with a relatively low strength. Then, what's the relationship between SNS users' motivation and behavior in the virtual world?

D. Research on Virtual community Members' Behavior

Wang and Fesenmaire hold that on one hand members in the community expect to gain certain value from the

community, which is interests-oriented; on the other hand, they want to contribute to the community, servicing for its development. The two factors codetermine the members' behaviors in the community. The members' participation is defined by two dimensions: one is the time the members spent on virtual community, the other one is the degree to which the members exchange with each other's actively.

In terms of participation pattern, Adler and Christopher (1998) classify virtual community members into four categories: passive person (who wants to gain entertainment or information without any effort), active person (who takes part in activities and discussions initiated by others), inducer (who initiates discussions or arranges activities to attract other members to take part in), and manager (who is a mature inducer as an intermediary between community members and community operators such as a forum moderator). In terms of two factors, the relationship between members and consume activity and that between members and virtual community, Kozinets (1999) classify virtual community members into several types: browser, socializer, contributor and intrinsic person. In terms of the contribution level of members to the community, Wang and Fesenmaire (2004) classify the members into four categories: browser (who does not have strong social connection with other members and seldom make contributes to the community), socializer (who keeps certain social connection with the community group and sometimes make contributes to the community), contributor (who keeps strong connection with the community and have great enthusiasm to community activities, and often make contributes to the community), intrinsic person (who keeps very strong social and personal connection with the community as an very active contributor).

In this research, SNS users' behavior includes usage time, usage frequency and usage level, and the concept of usage level cites the views of Wang and Fesenmaier (2004).

III. RESEARCH TARGET AND RESEARCH HYPOTHESIS

A. Research Target

The research studies the relationship between SNS virtual community members' motivation and their behavior, SNS users' motivation in this research comes from the researcher's previous research. (Chen, 2010), in which the motivation is classified into information and instrumental motivation, recreational and aesthetic motivation, social connection motivation, altruism motivation, ascription and self-identification, and intrinsic. The user behavior is divided into time, frequency and level.

The operating definitions of every variable are as below.

Information and instrumental motivation: Users acquire or share the information in the internet community, and get the information they need.

Recreational and aesthetic motivation: To get pleasure and relaxation through surfing the content within the internet community and interacting with other users. To get the aesthetic pleasure through designing the internet community (such as pictures, videos and flash)

Social connection motivation: Users communicate with people of the same opinions, avoid feeling lonely, and receive friendship and social support within the virtual community.. Users get recognition and acceptance from other users for their contribution, therefore a promotion of social status.

Altruism motivation: It includes kin altruism and reciprocal altruism. In the virtual world, kin altruism refers to the fact that the users tend to share the secrets, form the family-like relationship and do the things beneficial for each other online. Reciprocal altruism refers to the fact that help the other users without sacrificing one's own maxims and beliefs, hoping for a similar help in the future.

Sense of belonging and personal identification: Users rely on the virtual community, thinking themselves important to the community. Users sense their conformity to the group.

Intrinsic: users' personal goals are in conformity to the group goals or are fit in the group goals.

Time: The average time per week of using the SNS website.

Frequency: The average times per week of using the SNS website.

Level: Based on the previous researches, four levels of involvement into the SNS websites are defined:

- Surfer: Few connections with the other members, and few contributions to the virtual community. Features: no specific purposes, random surfing, self-enjoyment or passive information receiver.
- Socialiser: have certain social connection within the community and occasional contributions to the community Features: occasional attention to the other members, occasional participation of the discussions and activities started by others.
- Contributors: strong social connections with the virtual community, passionate for the activities of the virtual community, and frequent contributions for the community. Features: passionate attentions to the other members, frequent participations of the discussions and activities started by others.
- Insider: extremely strong social connection and personal relation with the community, extremely active contributor of the community. Features: besides attention to individuals, also participate in group activities, and be willing to start a discussion or organize activities in order to attract the other members, like an intermediary between the community members and community operators.

B. Research Hypothesis

Based on the above study, the research hypotheses are established to probe into what is the relationship between SNS users' motivation and their behavior (usage time, usage frequency and usage level), and whether they are correlated with each other.

Hypothesis H1: Members' motivation has a positive correlation with their behavior.

H1.1: The stronger the members' information and instrument motivation, the longer their usage time;

H1.2: The stronger the members' entertainment and aesthetic motivation, the longer their usage time;

H1.3: The stronger the members' social connection motivation, the longer their usage time;

H1.4: The stronger the members' altruism motivation, the longer their usage time;

H1.5: The stronger the members' ascription and identification motivation, the longer their usage time;

H1.6: The stronger the members' intrinsic motivation, the longer their usage time;

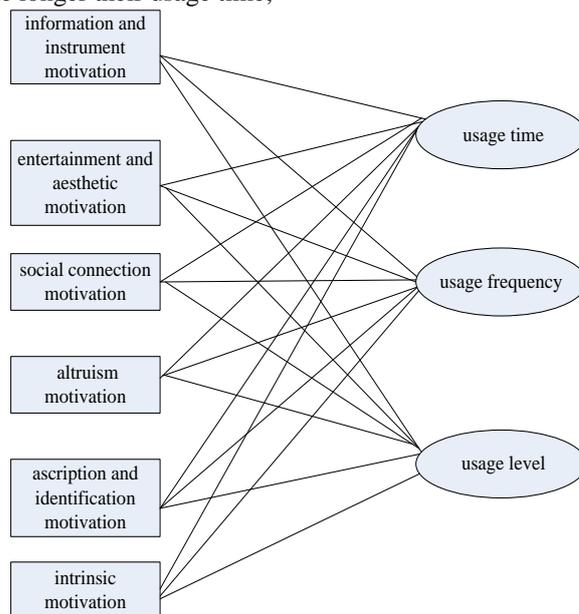


Figure 1. Research Model

Hypothesis H2: Members' usage has a positive correlation with their usage frequency.

H2.2: The stronger the members' entertainment and aesthetic motivation, the higher their usage frequency;

H2.1: The stronger the members' information and instrument motivation, the higher their usage frequency;

H2.3: The stronger the members' social connection motivation, the higher their usage frequency;

H2.4: The stronger the members' altruism motivation, the longer their usage frequency;

H2.5: The stronger the members' ascription and identification motivation, the higher their usage frequency n, the longer their usage frequency;

H2.6: The stronger the members' intrinsic motivation, the higher their usage frequency;

Hypothesis H3: Members' motivation has a positive correlation with their usage level.

H3.1: The stronger the members' information and instrument motivation, the higher their usage level;

H3.2: The stronger the members' entertainment and aesthetic motivation, the higher their usage level;

H3.3: The stronger the members' social connection motivation, the higher their usage level;

H3.4: The stronger the members' altruism motivation, the longer their usage level;

H3.5: The stronger the members' ascription and identification motivation, the higher their usage level;

H3.6: The stronger the members' intrinsic motivation, the higher their usage level;

IV. RESEARCH METHOD

A. Research Tool

The research adopts questionnaire as its main research material. Questionnaire One focuses on the SNS users' six motivations, and it measures users' motivation with the six-point scale of Likert Scale, in which 1 to 6 represent completely disagree, basically disagree, partially disagree, partially agree, basically agree, completely agree respectively. For example: In this community, I can gain some useful information and data.

Questionnaire Two measures SNS users' behavior, including their usage frequency, usage time and usage level. Questionnaire Three surveys SNS users' basic information, including their gender, age, marital status, education level, after-tax monthly income and whether they are intrinsic students or not.

B. Research Process

The questionnaires were delivered from 1st Nov. 2010 to 15th Dec. 2010 to subjects who are SNS network users through site link, email and papery questionnaires. Altogether 230 questionnaires have been collected, in which 225 are valid.

C. Research Method

The study adopts data analysis as the research method.

(1) Descriptive analyze: Make statistic on average, standard deviation and so on of each variable, so as to describe SNS network users' motivation and behavior.

(2) Reliability analyze: Before a further data analysis, reliability analysis should be conducted first of the variable measures in the research models and hypotheses. Reliability can measure the reliability, uniformity and stability of the questionnaire.

(3) Correlation analyze: It is a statistical method to research the correlative degree among variables. The paper focuses on the correlation analysis of users' each motivation and behavior.

V. RESEARCH RESULTS

A. Sample Composition

In this survey, there are 225 valid samples, in which male account for 56.2%, while female account for 43.8%; the age mainly ranges from 21 to 30, in which 21-25 account for 63.7%, while 26-30 account for 27.4%; 86.7% of the subjects are unmarried; education level mainly covers bachelor degree and master degree, in

which bachelor degree accounts for 43.4%, while master degree accounts for 49.1%; among the subjects, 55.3% are intrinsic students.

B. Descriptive Statistical Analyze

TABLE I.
DESCRIPTIVE E STATISTICS OF EACH MOTIVATION VARIABLE

Independent Variable	Items	Min	Max	Aver	SD
information and instrument motivation	3	1.00	6.00	5.63	0.130
entertainment and aesthetic motivation	4	1.00	6.00	4.72	0.162
Social connection motivation	7	1.00	6.00	4.60	0.212
altruism motivation	4	1.00	6.00	4.32	0.077
ascription and identification motivation	6	1.00	6.00	4.03	0.054
intrinsic motivation	2	1.00	6.00	3.87	0.014

Table I shows the results of the descriptive statistical analysis of the six motivation variables in the model, including the minimum and the maximum, average and standard deviation.

It can be seen that information and instrument motivation is the strongest one. Intrinsic motivation is the only one the average of which is below 4, so most people tend not to have this motivation.

Judged from the survey, the SNS network users whose registration time are below 1 year, 1-2 years, 2-3years, and more than 3 years account for 8.0%, 22.1%, 32.7%, and 37.2% respectively, so more than half of the subjects have been using SNS network for more than two years.

In this survey, more than half of the members use social websites less than 9 hours every week, 21.2% 10-19 hours, 15.5% more than 20 hours. 51.8% members log in social websites more than 6 times every week, so the usage level is very high and the users even highly depend on the social websites.

According to this survey, most of the users are browsers, accounting for 64.2%, 19.5% socializers, and 11.5% contributors. In this survey, usage level of SNS social websites is not high.

C. Reliability Analyze

In the research, SPSS software is used to test the questionnaire's reliability. Data analysis shows that Alpha coefficient of the whole questionnaire is 0.942 and that of each usage behavior is 0.934 and 0.612 respectively, which indicates a high reliability.

D. Correlation Analyze

The research adopts correlation analysis to study the correlation between motivation and behavior. See Table 4 for its results.

Based on the correlation analysis, the following hypotheses are proved.

H1.1 is proved: The stronger the members' information and instrument motivation, the longer their usage time;

H1.2 is proved: The stronger the members' entertainment and aesthetic motivation, the longer their usage time;

H1.3 is proved: The stronger the members' social connection motivation, the longer their usage time;

H1.4 is proved: The stronger the members' altruism motivation, the longer their usage time;

H1.5 is proved: The stronger the members' ascription and identification motivation, the longer their usage time;

H1.6 is proved: The stronger the members' intrinsic motivation, the longer their usage time;

H2.2 is proved: The stronger the members' entertainment and aesthetic motivation, the higher their usage frequency;

H2.3 is proved: The stronger the members' social connection motivation, the higher their usage frequency;

H2.5 is proved: The stronger the members' ascription and identification motivation, the higher their usage frequency n, the longer their usage time;

H3.1 is proved: The stronger the members' information and instrument motivation, the higher their usage level;

TABLE II. RESULTS OF RELIABILITY ANALYZE

Dimensions	Cronbach's Alpha
Information and Instrument Motivation	.642
Entertainment and Aesthetic Motivation	.570
Social Motivation	.835
Ascription and Identification Motivation	.842
Altruism Motivation	.748
Intrinsic Motivation	.877

H3.2 is proved: The stronger the members' entertainment and aesthetic motivation, the higher their usage level;

H3.3 is proved: The stronger the members' social connection motivation, the higher their usage level;

H3.4 is proved: The stronger the members' altruism motivation, the higher their usage level;

H3.5 is proved: The stronger the members' ascription and identification motivation, the higher their usage level;

H3.6 is proved: The stronger the members' intrinsic motivation, the higher their usage level;

Based on the correlation analysis, the following hypotheses are not proved.

H2.1 is not proved: The stronger the members' information and instrument motivation, the higher their usage frequency;

H2.6 is not proved: The stronger the members' intrinsic motivation, the higher their usage frequency;

H2.4 is not proved: The stronger the members' altruism motivation, the longer their usage time;

VI. RESEARCH DISCUSSION

It can be judged from the above results that social network users' usage time has positive correlation with information and instrument motivation, entertainment and aesthetic motivation, social connection motivation, altruism motivation, ascription and identification motivation, and intrinsic motivation, which indicates that members must spend much time on SNS websites if they want to browse or gain information on SNS websites, to release themselves through entertainment games, to establish contact with others, or to do favors for others;

TABLE III. RESULTS OF RELIABILITY ANALYZE

Motivation and Behavior		Time	Frequency	Usage Level
Information and Instrument motivation	Pearson correlation	0.165*	0.064	0.378*
	Sig.	0.013	0.336	0.000
Entertainment and Aesthetic Motivation	Pearson correlation	0.369*	0.189*	0.304*
	Sig.	0.000	0.005	0.000
Social Connection Motivation	Pearson correlation	0.381*	0.136*	0.546*
	significance	0.000	0.041	0.000
Altruism Motivation	Pearson correlation	0.243*	0.115	0.375*
	Sig.	0.000	0.085	0.000
Ascription and Identification Motivation	Pearson correlation	0.380*	0.179*	0.512*
	Sig.	0.000	0.007	0.000
Intrinsic Motivation	Pearson correlation	0.247*	0.027	0.348*
	Sig.	0.000	0.692	0.000

*. Significant correlation exists in (both sides) of the 0.05 level. **. Significant correlation exists in (both sides) of the 0.01 level.

moreover, only by regularly participation in a certain SNS social network can the SNS members feel they belong to the community; similarly, if one confirms his own contribution, he will be inspired to spend more time on SNS community.

Moreover, social network members' usage frequency have a positive correlation with the entertainment and aesthetic motivation, which indicates that members must frequently pay attention to SNS community to take part in SNS games, for example, in the "stealing vegetables" game, members have to keep eyes on "planting vegetables and stealing vegetables" by frequently logging

in the community. Similarly, if one confirms his own contribution, he will be inspired to spend more time on SNS community.

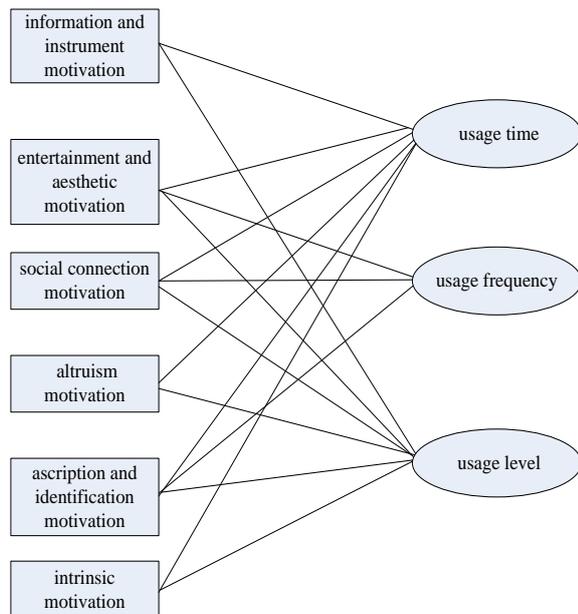


Figure 2. Research Result

At last, the usage level of social websites has positive correlation with the six motivations, which indicates that the stronger the motivation, the higher degree the members use and concern on the social websites, that is to say, the higher degree they act as browsers, socializers, contributors and intrinsic persons.

VII. RESEARCH APPLICATION

Based on the previous studies of network social community, the research discusses SNS members' motivation and behavior in specific SNS network environment and it has some significance in practice:

A. Strengthen network regulation

From the above survey, it can be found that SNS users spend much time on SNS websites, with 51.8% netizens logging in social websites more than six times every week, which indicates that social websites are highly attractive to netizens. As a "double-edged sword", the Internet offers both spaces for free expression and ways to spread vicious information. Websites' fidelity and information dissemination's reliability are improved with the emerging of SNS websites, which once release vicious information, will results in some bad consequences because the vicious information will be spread quickly by users who trust the websites. Therefore, it is important to regulate SNS social websites as quickly as possible.

B. Protect and regulate SNS social network members' privacy.

Many SNS websites are based on real-name registration, regulatory agencies should require the SNS network operators discipline themselves. SNS operators

control tremendous substantial and detailed information, which may cause hidden dangers to information security. To be legal operators, they are required to protect the users' privacy well.

C. Lead public opinion in a correct direction

As a platform for sharing, spreading and gaining information, SNS is characterized with publicity, accessibility and integration. Public opinion generally reflects public's faiths, attitudes, ideas and emotions towards various phenomenon and problems in the real society. Rationality is often mixed with irrationality in public opinion. Given that Network has great influence, bribing and manipulating of Internet public opinion has become one way of vicious competition of domestic commerce and other fields. In such case, SNS users and the society will suffer terrible negative effects. Therefore, operators are responsible to lead the public opinion in a correct direction.

D. Implications on marketing

First, the research can help SNS operators to develop unique services.

SNS social network operators should recognize that people use SNS websites for different purposes, which will change over time. Therefore, they should design the services of SNS social websites on consideration of members' different motivations and their needs.

Second, the research can help SNS websites to create E-business model. SNS websites can access to each member's profile from the registration information, and find the users' interests, hobbies, experiences, preference and relationship circle through behavior analysis. Match users' interests and hobbies with their consuming behavior exactly, will help their market decision-making.

VIII. LIMITATION OF STUDY AND FUTURE STUDY

The conclusion of the study was limited by the amount of information and data discovered in the documents, reports, and studies comprising the literature review. In addition, the use of survey only to collect the data was a limitation because the data cannot be triangulated. Babbie(2004) describes triangulation as "the use of several different research methods to test the same findings". Triangulation allows stronger support for the presence of a relationship [15]. However, similar limitation inhibits the validation of findings of any study or research project.

Second limitation was the sample. The author just used college students as the study objectives. If the results of this research want to be generalized, there will be more similar researches with different objectives.

Another limitation was the use of the Likert scale. As Gill and Jonson (2002) noted, participants may or may not give an accurate assessment of their beliefs, feelings, attitudes or behaviors [16]. Rather, they may answer according to what they feel the correct response should be, not how they really feel, or may respond by always marking the most neutral possible answer. Thus, the data

is legitimate only to the extent that participants are completely honest.

Based on the findings, conclusions and limitation of this study, recommendations are presented in this section.

First, the research methods can be developed. Lab research can be introduced into the research. Because the field study has some factors which are difficult to control, such as the feeling of objectives, the environment factors. In laboratory, those factors can be controlled effectively.

Second, the research objectives can be distributed, more distributed samples can give more generalized result, which should be much more useful to the development of the theories.

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REFERENCES

- [1] CNNIC. The 26th Statistics Report on Chinese Internet Development situation. 2010.7.
- [2] Richard P. Bagozzi, Utpal M. Dholakia, "Intentional social action in virtual communities", *Journal of Interactive Marketing*, Volume 16, Issue 2, 2002, Pages 2-21.
- [3] McKenna K Y A, and Bargh J A. Causes and consequences of social interaction on the internet: A conceptual framework[DB / OL]. *Media Psychology*, 1999, (1):249-269.
- [4] Utpal M. Dholakia, Richard P. Bagozzi, Lisa Klein Pearo "A social influence model of consumer participation in network- and small-group-based virtual communities" *International Journal of Research in Marketing*, Volume 21, Issue 3, September 2004, Pages 241-263
- [5] Hogg M A. The social psychology of group cohesiveness: Form attraction to social identification [DB/OL]. NY: NYU Press, 1992.
- [6] McKenna K Y A, and Bargh J A. Causes and consequences of social interaction on the internet: A conceptual framework[DB / OL]. *Media Psychology*, 1999, (1):249-269.
- [7] Ohbyung Kwon, Yixing Wen. An empirical study of the factors affecting social network service use[DB / OL]. *Computers in Human Behavior*, 2010,26: 254-263
- [8] Youcheng Wang, Daniel R. Fesenmaier. "Towards understanding members' general participation in and active contribution to an online travel community", *Tourism Management*, Volume 25, Issue 6, December 2004, Pages 709-722.
- [9] Kozinets, V., E-tribalized Marketing?: The Strategic implications of Virtual Communities of Consumption, *European Management Journal*, 1999, 17(3): 252-264.
- [10] McKenna K Y A, and Bargh J A. Causes and consequences of social interaction on the internet: A conceptual framework[DB / OL]. *Media Psychology*, 1999, (1):249-269.
- [11] Zeithaml, V.A. Consumer perceptions of price, quality, and value: A mean-end model and synthesis of evidence. *Journal of Marketing*, Vol. 52(1988), p. 2-22.
- [12] Zeithaml, V.A., Parasuraman, A., & Malhotra, A. Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, vol. 30(2002), p. 362-375.
- [13] Parasuraman, A., Zeithaml, V.A., & Malhotra, A. E-S-QUAL: A multiple-items scale for assessing electronic service quality. *Journal of Service Research*, Vol. 7(2005), p. 213-233.
- [14] Ulaga, W. & Eggert, A. Exploring the key dimensions of relationship value and their impact on buyer-supplier relationships. *American marketing Association Conference proceedings*, Vol. 13(2002), p. 411.
- [15] McKnight, H.D., Choudhury, V. & Kacmar, C. Developing and Validating Trust Measures for e-Commerce: An Integrative Typology. *Information Systems Research*, Vol. 13(2002), p. 334 — 359.
- [16] Gefen, D. Reflections on the Dimensions of Trust and Trustworthiness Among Online Consumers. *ACM SIGMIS Database*, Vol.33(2002), p. 38-53.
- [17] Jarvenpaa, S. L., Tractinsky, N. & Vitale, M. Consumer trust in an Internet store. *Information Technology and Management*, Vol. 1 (2000), p. 45-71.
- [18] Chen, L., Gillenson, M. L., & Sherrell, D. L. Enticing online consumers: an extended technology acceptance perspective. *Information & Management*, Vol. 39(2002), p. 705-719.
- [19] Srinivasan, N, & Ratchford, B. T. An empirical test of a model external search for automobiles. *Journal of Consumer research*. Vol. 18(1991), p. 233-242.
- [20] Koiso-Kanttila, N. Time, attention, authenticity, and consumer benefits of the Web. *Business Horizons*, Vol. 48 (2005), p. 63-70.
- [21] Wang, S.. Cue-based trust in an online shopping environment: conceptualization and propositions. In T. A. Suter, (Ed.), *Marketing Advances in Pedagogy, Process and Philosophy*, Proceedings of the Annual Meeting of the Society for Advances in Marketing (2001), 6-10, November, New Orleans, LA.
- [22] Crosby, L. A., Evans, K. R. & Cowles, D. Relationship quality in services selling: An interpersonal influence perspective. *Journal of Marketing*, Vol. 54(1990), p. 8-81.
- [23] Gefen, D., Karahanna, E. & Straub, D.W. Trust and TAM in online shopping: an Integrated model. *MIS Quarterly*, Vol.27 (2003), P.51-90.G.
- [24] Ba, S, & Pavlou, P. A. Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behavior. *MIS Quarterly*, Vol. 26 (2002), p. 243-268.
- [25] Babbie, E. *The practice of social research* (10th ed.). Belmont, CA: Wadsworth Thomson Publishing (2004).
- [26] Gill, J., & Johnson, P. *Research methods for managers*. London: Sage Publications (2002).
- [27] *tise on Electricity and Magnetism*, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68-73.
- [28] CNNIC. The 26th Statistics Report on Chinese Internet Development situation. 2010.7.
- [29] Richard P. Bagozzi, Utpal M. Dholakia, "Intentional social action in virtual communities", *Journal of Interactive Marketing*, Volume 16, Issue 2, 2002, Pages 2-21.
- [30] McKenna K Y A, and Bargh J A. Causes and consequences of social interaction on the internet: A conceptual framework[DB / OL]. *Media Psychology*, 1999, (1):249-269.
- [31] Utpal M. Dholakia, Richard P. Bagozzi, Lisa Klein Pearo "A social influence model of consumer participation in network- and small-group-based virtual communities" *International Journal of Research in Marketing*, Volume 21, Issue 3, September 2004, Pages 241-263

- [32] Hogg M A. The social psychology of group cohesiveness: Form attraction to social identification [DB/OL].NY: NYU Press, 1992.
- [33] McKenna K Y A, and Bargh J A. Causes and consequences of social interaction on the internet: A conceptual framework [DB / OL]. *Media Psychology*, 1999, (1):249-269.
- [34] Ohbyung Kwon, Yixing Wen. An empirical study of the factors affecting social network service use [DB / OL]. *Computers in Human Behavior*, 2010, 26: 254-263
- [35] Youcheng Wang, Daniel R. Fesenmaier. "Towards understanding members' general participation in and active contribution to an online travel community ", *Tourism Management*, Volume 25, Issue 6, December 2004, Pages 709-722.
- [36] Kozinets , V. , E-tribalized Marketing?: The Strategic implications of Virtual Communities of Consumption , *European Management Journal*, 1999, 17(3): 252-264.
- [37] McKenna K Y A, and Bargh J A. Causes and consequences of social interaction on the internet: A conceptual framework [DB / OL]. *Media Psychology*, 1999, (1):249-269.
- [38] Li, N. and Zhang, P. (2002) "Consumer online shopping attitudes and behavior: An assessment of research", Eighth Americas Conference on Information Systems, 2002.
- [39] Hsua, M. H., Yen, C. H., Chiu, C. M., and Chang, C. M. (2006) "A longitudinal investigation of continued online shopping behavior: An extension of the theory of planned behavior", *Int. J. Human-Computer Studies*, 64, pp. 889-904.
- [40] Stewart, D. W., and Pavlou, P. A. (2002) "Substitution and complementary: Measuring the effectiveness of interactive marketing communications", *Journal of the Academy of Marketing Science*, 30(4), pp. 376-396.
- [41] Pavlou, P. A., and Fygenson, M. (2006) "Understanding and predicting electronic commerce adoption: An extension of the theory of planned Behavior", *MIS Quarterly*, 30(1), pp. 115-143.
- [42] Jarvenpaa, S. L. and Todd, P. A. (1997) "Consumer reactions to electronic shopping on the World Wide Web", *International Journal of Electronic Commerce*, 2, pp. 59-88, 1997.
- [43] Zhou, L., Dai, L., and Zhang, D. (2007) "Online shopping acceptance model - A critical survey of consumer factors in online shopping", *Journal of Electronic Commerce Research*, 8(1), pp. 41-62.
- [44] Ajzen, I. (1991) "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, 50, pp. 179-211.
- [45] Limayem, M., Khalifa, M., and Frini, A. (2000) "What makes consumers buy from internet? A longitudinal study of online shopping", *IEEE Transactions on System, Man, and Cybernetics-Part A: Systems and Humans*, 30(4), pp.421-432
- [46] Cho, V. (2006) "A study of the roles of trusts and risks in information-oriented online legal services using an integrated model", *Information & Management*, 43, pp. 502-520.
- [47] Battacherjee, A. (2002) "Individual trust in online firms: Scale development and initial test", *Journal of Management Information Systems*, 19(1), pp. 211-241.
- [48] Heijden, H. V., Verhagen, T., and Creemers, T. (2001) "Predicting online purchase behavior: Replications and tests of competing models", *Proceedings of 34th Hawaii International Conference of systems Science*, Maui, HI.
- [49] Reichheld, F. F., and Scheferm P. (2000) "E-loyalty: Your secret weapon on the web", *Harvard Business Review*, 78(4), pp. 105-113.
- [50] Pavlou, P. A., and Gefen, D. (2004) "Building effective online marketplaces with institution-based trust", *Information Systems Research*, 15(1), pp. 37-59.
- [51] Gefen, D. (2002) "Customer loyalty in e-commerce", *Journal of the Association for Information Systems*, 3, pp. 27-51
- [52] Luo, X. (2002) "Trust production and privacy concerns on the internet: A framework based on relationship marketing and social exchange theory", *Industrial Marketing Management*, 31(2), pp. 111-118
- [53] Gefen, D. (2000) "E-commerce: The role of familiarity and trust", *Qmega* (28:6), pp. 725-737.
- [54] Jarvenpaa, S. L. and Tractinsky, N. (1999) "Consumer trust in an internet store: A crosscultural validation", *Journal of Computer-Mediated Communication*, 5(2),
- [55] Jarvenpaa, S. L., Tractinsky, N., and Vitale, M. (2000) "Consumer trust in an internet store", *Information Technology and Management*, 1(1/2), pp. 45-71.
- [56] Pavlou, P. A., and Fygenson, M. (2006) "Understanding and predicting electronic commerce adoption: An extension of the theory of planned Behavior", *MIS Quarterly*, 30(1), pp. 115-143.
- [57] Pavlou, P. A. (2002) "What drivers electronic commerce? A Theory of planned behavior respective", *Academy of Management Proceedings 2002 OCIS: A1-A6*.
- [58] Bailey, J. P., and Bakos, J. Y. (1997) "Reducing buyer search costs: Implications for electronic marketplaces", *Management Science*, 43(12), pp. 1676-1692.
- [59] Ba, S., and Pavlou, P. A. (2002) "Evidence of the effect of trust in electronic markets:

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