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Gaining Insight into Enterprise 2.0 by Comparing with Web 2.0: Matrix analysis and instrument development

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Gaining insight into successful Enterprise 2.0 by comparing with Web 2.0: Matrix analysis and instrument development

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Abstract

Emerging Web 2.0 provides an insight into its application to enterprise 2.0 that is currently in an immature state. The effort to apply the successful Web 2.0 to Enterprise 2.0 requires careful analysis of similarity and dissimilarity of "state of the art" social systems such as Web 2.0 and proposed Enterprise 2.0. For this analysis, a knowledge-seeker/sharer paradigm is proposed from the assumption that these two parties may have different perceptions towards the social systems.

The paradigm consistently works as a baseline that comparison and contrast of Web 2.0 and Enterprise 2.0 are performed based on. This answer is organized as follows. First, two social systems are compared from knowledge-seekers' perspective, knowledge-sharers' perspective, and both parties' perspective by supporting with relevant literature. Second, two social systems are contrasted from knowledge seekers' perspective, knowledge sharers' perspective, and both parties' perspective by supporting with relevant literature. Third, meaningful implications are suggested from the analyses.

Key word: Web 2.0, Enterprise 2.0, Knowledge Management, Matrix Analysis, Ease of Use, Perceived Usefulness, Cooperation Learning, Social Exchange Theory, Social Cognitive Theory, Theory of Reasoned Action, Interpersonal Communication.

Introduction

Social web such as Blogs, Wiki and "Yahoo Answers", is recently being spotlighted as "state of the art" communication media by many internet users(Roush 2006), thus many internet firms are trying to implement and provide a social web service for users communication, sharing knowledge and seeking knowledge. The success of Web 2.0 provides an insight into the potential of implementing Enterprise 2.0. Enterprise 2.0 is considered that can change company's competitive environment, and enhance business efficiency and accelerate business model innovation. However, Enterprise 2.0 has not yet become very popular,

there is little evidence and practice of the effectiveness of it.

For this analysis, we will compare and contrast web 2.0 and enterprise 2.0 to improve its future. There is a taxonomical framework that will be used throughout this answer (Figure 1). Roush (2006) explains internet-based social web and McAfee (2006) explains and suggests intranet-based innovative tools, specifically Enterprise 2.0, based on social web. In comparing and contrasting these two parts, it would be useful to look over a knowledge-seeker's perspective and a knowledge-sharer's perspective, independently. In order to differentiate such perspectives, this taxonomical framework will consistently be applied to relevant theories, and literature. A knowledge-seeker/sharer paradigm is proposed from the assumption that these two parts may have different perceptions towards web social network system and enterprise social network system. The factors measured in this paper, is based on the success factors of Web 2.0. Therefore, the factors and analysis will be helpful for company to build the Enterprise 2.0.
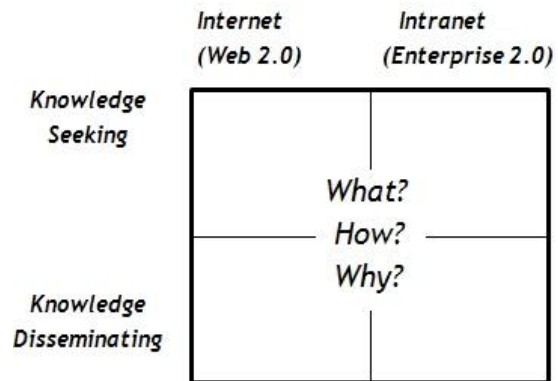
Figure 1. Framework for comparison and contrast of Web 2.0 and Enterprise 2.0

Common Issues Explaining Knowledge Seeking on Web 2.0 and Enterprise 2.0

Perceived Usefulness, Perceived Accuracy and Ease of use

As figure 2 showed, there are two kinds of users on the two networking web sites, knowledge seeker and knowledge disseminator. First, we analyze knowledge seeking on social networking web sites and it could be applicable to knowledge seeking on

business networking web sites.
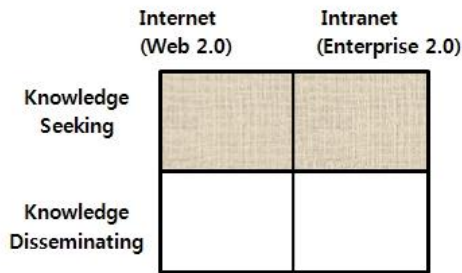

Figure 2. Framework for comparison of knowledge
seeking on web 2.0 and enterprise 2.0

Perceived usefulness and Ease of use are theoretical important variables as determinant of user behavior. Perceived usefulness is a major determinant of people's intentions to accept technology. Perceived ease of use is a significant secondary determinant of people's intentions to use technology.(Fred D. Davis et al., 1989.) As well Wixom and Todd (2005) claim that the quality of knowledge (or knowledge quality) and the quality of system (or system quality) are object-based beliefs and imply that these two beliefs are independent of each other. The accuracy of knowledge, which is one attribute of knowledge quality, is a feeling toward specific knowledge; i.e. "accuracy" is a subjective attribute in the context of users' perception. Thus, the accuracy of knowledge is an object-based belief. In the same manner, system quality is also a feeling toward a specific system, and thus, the system quality is also an object-based belief. In the context of social web, the distinction between system quality and knowledge quality becomes apparent in users' minds. Thus, users will blame a social web provider when they find the social website as a communication channel flawed but they will not blame the provider when they find the knowledge on the social website inaccurate. In order to understand this phenomenon, the following points are presumed: when people find a piece of knowledge from social web inaccurate, they attribute the inaccuracy not to the social website itself, but to the unspecified person who posted the knowledge, which hardly affects their satisfaction with the social website. However, the published sources are usually refined by experts, and thus much more accurate than social web. But when people find that a piece of knowledge from a published source is inaccurate, they attribute the inaccuracy to the published source, which does affect their satisfaction to the organization that provides the published source.

More interestingly, social website users are rational enough to think they can correct the inaccurate

knowledge themselves, and they do this by posting feedback or correcting inaccurate parts of the posted knowledge. No article is owned by its creator or any other editor, or is vetted by any recognized authority; rather, the articles are collectively owned by a community of editors (Wikipedia: Ownership of articles). It enables knowledge communities to share implicit knowledge and define and refine a knowledge base over time and space. Therefore, there are more practical or experiential nature to inform individuals and groups to arrive at their own conclusions, rather than expert system and the others.

Since Enterprise 2.0 has not yet become very popular, there is little evidence and practice of the effectiveness of it. However, the success of Web 2.0 provides an insight into the potential of implementing Enterprise 2.0 under the assumption that the perceived distinction between system quality and knowledge quality would make accuracy of knowledge less important for the success of the system.

The measurement for accuracy issue of knowledge seeking common issue: "Using A/B enhances my effectiveness on the task/job." "There are few errors in the information I obtain from A/B." "It is easy for me to remember how to perform tasks/job using A/B." etc. (A is a type of Web 2.0 and B is a type of Enterprise 2.0.)

Important Issue for Knowledge seeking on Enterprise 2.0 Rather than Web 2.0

The difference of knowledge-seekers' perspective between Web 2.0 and Enterprise 2.0 contrasted as below.
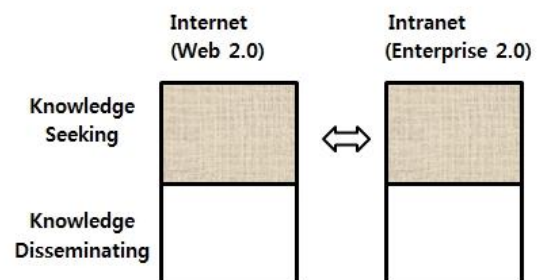
Cooperative learning theory

Figure 3. Framework for contrast of knowledge
seeking on web 2.0 and enterprise 2.0

Individuals can maximize the effectiveness of learning through cooperative (collaborative) activities allowing them to exercise, verify, and solidify and enhance their mental models through discussion and knowledge sharing while working

on the assigned tasks (Alavi 1994). That is, cooperative learning is effective in performing tasks. If it is understood that the primary goal of knowledge seeking is learning, cooperative learning can also be discussed in the context of the knowledge seeking process.

Web 2.0 and Enterprise 2.0 are designed based on the need for cooperative learning. By discussion and knowledge sharing, users of those systems can enrich their knowledge and consequently utilize it for their tasks. Meanwhile, knowledge embedded in a collaborative group is defined as the knowledge generated through group activities or experiences. Unlike knowledge that an individual has or is stored in knowledge repositories, knowledge embedded in a collaborative group can only be shared when all members of the group are willing to collaborate.

Within an organization, Enterprise 2.0 can maximize the effectiveness of collaborative learning of knowledge workers because they share common concerns, activities and experiences. On the other hand, even though Web 2.0 increases the function of cooperative learning compared to the general Web, knowledge acquisition through collaborative activities cannot be anticipated.

The superiority of Enterprise 2.0 over Web 2.0 is also differentiated from existing knowledge management systems. That is, the difference between Enterprise 2.0 and Web 2.0 and between Enterprise 2.0 and existing knowledge management systems should be carefully articulated. For example, with Wiki, within an organization, task-specific term "A" can be defined, described, and modified only by the knowledge workers who share common concerns about the specific task. Furthermore, if the knowledge workers who partook in authoring "A" in Wiki acquired the knowledge about "A" through certain experiences, "A" becomes unique. However, in the knowledge management system, knowledge sharing is a unidirectional transfer rather than cooperative learning.

The measurement for Cooperative learning theory: "I find that the course of knowledge seeking from B is a good learning experience." etc. (B is a type of Enterprise 2.0.)

Common Issues Knowledge Disseminating on Web 2.0 and Enterprise 2.0

Relevant theories explaining why people share knowledge on Web 2.0 and on Enterprise 2.0

In this section, knowledge dissemination will be focused on from knowledge-sharers' perspectives. Figure 1 summarizes relevant theories explaining

why people share their knowledge and how those theories can be applied to Web 2.0 and Enterprise 2.0.
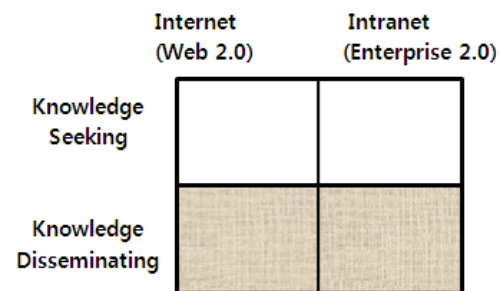

Figure 4. Framework for comparison of knowledge disseminating on web 2.0 and enterprise 2.0

Social exchange theory

Social exchange theory is often used to explain why people are motivated to share their knowledge. It posits that people share knowledge because they expect something, such as gratitude, personal obligation, status, or respect and trust, in return from the recipient (Barua et al. 1997; Bock et al. 2005b; Constant et al. 1994; Wasko et al. 2005).

In the context of social exchange, the benefit from sharing in an organization seems to be regarded as high by knowledge workers. Interestingly enough, social isolates with special expertise are more likely to share their unique knowledge than socially connected members with special expertise (Argote et al. 2003). On the other hand, the benefits from sharing knowledge over the internet are relatively less than over face-to-face relationships. Over the internet there are fewer channels through which to get gratitude, respect, and trust. Most of the time knowledge-sharers do not even know who the recipients are.

However, Web 2.0 satisfies knowledge-sharers' desires to get such intrinsic benefits, to some degree. Web 2.0 is characterized by socialization. That is, knowledge-sharers can socialize with recipients using the given media; they can send gratitude and feedback to one another, and they sometimes even show respect and trust towards one another.

Enterprise 2.0 also targets the integration of channel and platform to maximize social exchange. Knowledge management system (KMS) contains various tools for knowledge sharing. But, some tools are used for communication while other tools are used for storing knowledge into repositories. Enterprise 2.0 is a communication-enabled knowledge sharing system. It may encourage knowledge workers to create and share practices and outputs , which is deeply associated with social

exchange theory (McAfee 2006).

The measurement for social exchange theory of knowledge dissemination common issue: "I earn respect from others by partivipating in A/B." etc. (A is a type of web 2.0 and B is a type of Enterprise 2.0).

Social cognitive theory

Social cognitive theory is used as a base theory to explain cognitive influence on behavior. According to the theory, people are more willing to behave in ways which will produce outcomes that will be valued by recipients (Compeau et al. 1995). If a knowledge-holder believes that his knowledge will be used by a certain knowledge-seeker, he will share his knowledge with the knowledge-seeker rather than share the knowledge with an unspecified majority by storing the knowledge into the knowledge repositories. In other words, he would share his knowledge with people who ask specific questions because those people are more likely to use his knowledge in a useful manner.

Socialization inherently increases the outcome expectation. Since the outcome of knowledge sharing is how successfully transmitted the knowledge is to the recipient and the satisfaction of the outcome is determined by how adaptable the knowledge is to the recipient's task, how close the knowledge a potential recipient seeks is to the knowledge-holder is perceived to be very important. This closeness can be maximized by socialization.

In fact, many knowledge workers are spending time and effort on posting their knowledge that may not be read even once. One day, the knowledge workers may become skeptical of storing their knowledge in the system repositories. Web 2.0 and Enterprise 2.0 are ideal systems in the sense that both are designed for maximizing socialization functions.

The measurement for Social cognitive theory of knowledge dissemination common issue: Because "Get support from others so share my knowledge." Etc.

Theory of reasoned action

The theory of reasoned action (TRA) posits that intention to perform a behavior is strongly associated with actually carrying out the behavior (Bassellier et al. 2004). In the knowledge sharing context, it can be extended to the relationship between the intention to share knowledge and the actual act of sharing the knowledge (Bock et al. 2005a; Ford 2004).

Then does a knowledge-holder always share his knowledge if he has the intention to share knowledge? As studied in TRA literature, knowledge-holders with sharing intentions would share more than ones without the intention. But

there may be several factors hindering this causal link. For example, knowledge workers may have no time to post or store their knowledge; they may not know how to post or store it; media may be inappropriate for expressing specific knowledge; and knowledge conversion from tacit to explicit may not be viable.

Web 2.0 enables people who have the intention to share knowledge but cannot share it. For example, Web 2.0 provides more opportunities for people who want to post only a few pieces of knowledge, who are not good at computer web-skills, who have no time to manage personal websites, and who have difficulties in organizing document formats.

In the context of TRA, Enterprise 2.0 does not provide any prominent benefit because knowledge workers who have the intention to share their knowledge would already have shared it in the given knowledge management system.

The measurement for Theory of reasoned action of knowledge dissemination common issue: "Members of A/B think I definitely should use A/B." etc. (A is a type of web 2.0 and B is a type of enterprise 2.0.)

Important Issue for Knowledge Disseminating on Enterprise 2.0 Rather than Web 2.0

The difference of knowledge disseminating' perspective between web 2.0 and enterprise 2.0.
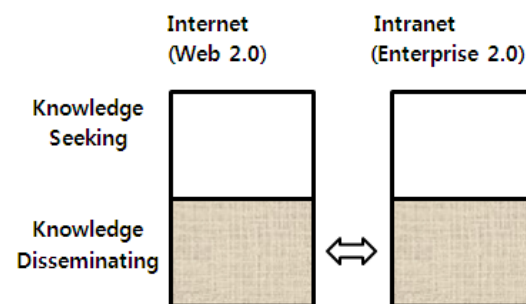
Figure 5. Framework for contrast of knowledge disseminating on web 2.0 and enterprise 2.0

Organizational Knowledge Creation – Networking knowledge

Knowledge disseminating and knowledge sharing is a beginner for organizational knowledge creation Adapted from Ikujiro Nonaka, 1994. Knowledge sharing on enterprise 2.0 can be seen the organizational knowledge creation processes. At first the basic concepts and models of the theory of organizational knowledge creation are presented. So knowledge disseminating on enterprise 2.0 is

very important process for organizational knowledge creation.

The measurement for organizational knowledge creation-Networking knowledge of knowledge dissemination on enterprise 2.0 special issue: "If you have a business question or problem that you cannot solve alone, could you find the right contacts from B?" etc. (B is a type of enterprise 2.0)"

Interpersonal communication

Organizational commitment is 'the relative strength of an individual's identification with and involvement in a particular organization (Mowday el a/. (1979, p. 226), Poor organizational commitment may lead to lateness, poor attendance but particularly to turnover and turnover-related intentions (Mathieu and Zajac 1990, Randall 1990). Employees can increase communication by participating organizational network. They can share their knowledge voice their opinion. I interpersonal communication is a way of prevent turnover.

The measurement for Interpersonal communication of knowledge dissemination on enterprise 2.0 special issue: "You can communicate with people at different levels of the organization on B." etc. (B is a type of enterprise 2.0)"
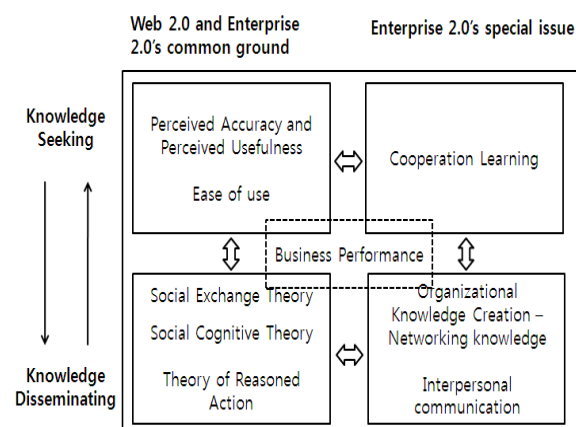

Figure 6. Theories and issues for comparison and contrast of Web 2.0 and Enterprise 2.0

Methods

Focus group interview

First we collect questions for each theories and issues. Table 3 shows the original questions on previously papers of the theories and issues. Then we have a focus group interview. Eight students of MIS Ajou University and one adviser for this paper together have this meeting. In this way, we refine the test questions.

Pilot test Data Collection

Subsequently we surveyed the question for staffs from Hyundai Elevator, SKT, Samsung Electronics, SKCC, Samsung SDS, etc 10 companies in Korea, and we received 65 comments. We find the average to the answers of each person, we pull out two maximums and two minimums, and then we got 61 answers. In the respondents, there are 27 persons are male and 33 persons are female, and persons who are using internet more than 5 years are 57 and period of work is shown as Figure 7.

The period of work	<1year	17persons
	1–3years	7persons
	3–5years	13persons
	>5years	24persons

Table 1. The respondents period of work

Pilot Test Data Analysis

Pilot test date analysis took place in two phases. In the first phase, paired samples t-test was applied to analyze comparatively Web 2.0 and Enterprise 2.0. The result shows in Figure 7.

	t value	p value
WPU1-EPU1	5.505	0
WPU2-EPU2	5.032	0
WPU3-EPU3	6.153	0
WPU4-EPU4	5.915	0
WPU5-EPU5	5.599	0
WPU6-EPU6	0.063	0.95
WPU7-EPU7	2.641	0.011
WPU8-EPU8	2.829	0.006
WPU9-EPU9	2.687	0.009
WPU10-EPU10	2.473	0.016
WPA1-EPA1	-0.305	0.762
WPA2-EPA2	5.398	0
WPA3-EPA3	-0.571	0.57
WPA4-EPA4	-3.014	0.004
WPA5-EPA5	-2.611	0.011
WEU1-EEU1	4.646	0
WEU2-EEU2	3.694	0

WEU3-EEU3	2.295	0.025
WEU4-EEU4	2.007	0.49
WEU5-EEU5	2.795	0.007
WEU6-EEU6	3.911	0
WCI1-WCI1	3.498	0.001
WCI2-WCI2	-0.985	0.329
WCI3-WCI3	1.267	0.21
WCI4-WCI4	1.609	0.113
WCI5-WCI5	2.673	0.01
WCI6-WCI6	2.783	0.007
WCI7-WCI7	0.806	0.424
WCI8-WCI8	1.806	0.76
WSE1-ESE1	-0.173	0.864
WSE2-ESE2	0.285	0.777
WSE3-ESE3	0.704	0.484
WSE4-ESE4	1.367	0.177
WSE5-ESE5	0	1
WSE6-ESE6	-0.357	0.723
WSE7-ESE7	-0.65	0.518
WSE8-ESE8	-0.092	0.927
WSC1-ESC1	-0.621	0.537
WSC2-ESC2	-0.493	0.624
WSC3-ESC3	0.216	0.829
WSC4-ESC4	-2.092	0.041
WSC5-ESC5	-1.045	0.3
WSC6-ESC6	0.252	0.802
WSC7-ESC7	0.093	0.926
WTR1-ETR1	0.739	0.463
WTR2-ETR2	0.168	0.867
WTR3-ETR3	0.538	0.592
WTR4-ETR4	-0.081	0.936
WTR5-ETR5	-2.703	0.009
WTR6-ETR6	0.73	0.942
WTR7-ETR7	1.398	0.167
WTR8-ETR8	0.825	0.413

WTR9-ETR9	2.124	0.038
WKN1-EKN1	1.154	0.253
WKN2-EKN2	-0.637	0.526
WKN3-EKN3	1.622	0.11
WIC1-EIC1	-0.298	0.767
WIC2-EIC2	-1.665	0.101
WIC1-EIC3	-1.94	0.057

Figure 7. Paired sample t test result

The second phase principal components factor analysis and reliability analysis for the measurement items were conducted to determine the extent to which the high-level trust constructs were discriminant. Reliability Cronbach's α for each of factors is shown in Figure 8. Our objective with the PCA was to cut out items that did not load on the appropriate high-level construct(Churchill 1979). And the results are most relatively high as Table 2 showed.

Factor	Cronbach's α	Factor	Cronbach's α
WPU	0.929	EPU	0.958
WPA	0.653	EPA	0.78
WEU	0.882	EEU	0.928
WCI	0.896	ECI	0.952
WSE	0.908	ESE	0.935
WSC	0.936	ESC	0.949
WTR	0.874	ETR	0.943
WKN	0.768	EKN	0.92
WIC	0.917	EIC	0.949

Figure 8. Reliability test result

Main Test

Depending on the principal components factor analysis result we will have a main test for this paper.

Conclusion

For this paper, we analyze both knowledge seekers‟ and knowledge sharers‟ characteristic based on the framework. There are some similarities and differences for Web 2.0 and Enterprise 2.0 from the paired sample t test result. We successfully find why people use Web 2.0 and Enterprise 2.0, and why people share knowledge on Web 2.0 and

Enterprise 2.0. Consequently, we conclude that the significance of Enterprises 2.0 will be helpful for companies.

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APPENDIX

Table 3. Original question list.

Construct	Original question	Source
Perceived Usefulness	When I have a question or problem, I usually research the information from A/B.	Self-developed
	There are more useful information from A/B rather than Internet web site.	Self-developed
	Using A/B enables me to access a lot of usefulness information.	Self-developed
	I feel comfortable researching the information from A/B, e.g. wiki, etc.	Self-developed
	Using A/B improves my ability to make good decisions.	Barbara H. Wixom, Peter A. Todd, 2005.
	My task/job would be difficult to perform without A/B.	Fred D. Davis et al., 1989.
	Using A/B improves my task/job performance.	Fred D. Davis et al., 1989.
	A/B enables me to accomplish tasks/job more quickly.	Fred D. Davis et al., 1989.
	Using A/B enhances my effectiveness on the task/job.	Fred D. Davis et al., 1989.
	Using A/B makes it easier to do my task/job.	Fred D. Davis et al., 1989.
Perceived Accuracy	If I find out the information I wanted on A/B, I will trust it.	Self-developed
	I have ever found a piece of information from A/B inaccurate?	Self-developed
	A/B produces correct information.	Barbara H. Wixom, Peter A. Todd, 2005

	There are few errors in the information I obtain from A/B.	Barbara H. Wixom, Peter A. Todd, 2005
	The information provided by A/B is accurate.	Barbara H. Wixom, Peter A. Todd, 2005
Ease of use	It is easy to get what I want it to do on A/B.	Barbara H. Wixom, Peter A. Todd, 2005
	A/B is easy to operate.	Barbara H. Wixom, Peter A. Todd, 2005
	It is easy for me to remember how to perform tasks/job using A/B.	Fred D. Davis et al., 1989.
	My interaction with A/B is easy for me to understand.	Fred D. Davis et al., 1989.
	A/B provides helpful guidance in performing tasks/job.	Fred D. Davis et al., 1989.
	Overall, I find A/B easy to use.	Fred D. Davis et al., 1989.
Cooperative learning theory	Researching information on A/B can effectively solve problem in less time.	Self-developed
	When I work in a collaborative group, I am willing to share my information on A/B.	Self-developed
	In general, if I discuss the problem on A/B, it will be effectively solve.	Self-developed
	In general, I think using A/B is effective to communicate with people at different levels of A/B.	Self-developed
	I find that knowledge seeking from B is a good learning experience.	Maryam Alavi, 1994
	Members of B comments were useful to me.	Maryam Alavi, 1994
	Using B can contribute to course quality.	Maryam Alavi, 1994
	Using B can learn to identify central issues.	Maryam Alavi, 1994
Social exchange theory	If I can get some marks for sharing my information on A/B, I will readily do it.	Self-developed
	I can create strong relationships with other users by sharing my information on A/B.	Self-developed
	In general, knowledge sharing is valued in A/B.	Self-developed

	I could share knowledge when I could get the reward.	Self-developed
	I feel that participation A/B improves my status among the group members.	Molly McLure Wasko, Samer Faraj, 2005
	I earn respect from others by partivipating in A/B.	Molly McLure Wasko, Samer Faraj, 2005
	I participate in A/B to improve my reputation.	Molly McLure Wasko, Samer Faraj, 2005
	I expect others to help me, so it's only fair to help them on A/B.	David Constant , Lee Sproull , Sara Kiesler, 1996.
Social cognitive theory	If some person asked the question on A/B, I will readily share my information to help him?	Self-developed
	I had gotten support from other A/B users so I provide help to others.	Self-developed
	Get support from others.	Robert LaRose and Matthew S. Eastin, 2004.
	Feel like I belong to a group.	Robert LaRose and Matthew S. Eastin, 2004.
	Maintain a relationship I value.	Robert LaRose and Matthew S. Eastin, 2004.
	Improve my future prospects in life.	Robert LaRose and Matthew S. Eastin, 2004.
	Find others who respect my views.	Robert LaRose and Matthew S. Eastin, 2004.
Theory of reasoned action	When A/B users are discussing on A/B, I want to share my information with others.	Self-developed
	My knowledge sharing with other A/B user is good.	Gee-Woo Bock, Robert W. Zmud, 2005.
	My knowledge sharing with other A/B user is an enjoyable experience.	Gee-Woo Bock, Robert W. Zmud, 2005.
	My knowledge sharing with other A/B users is a wise move.	Gee-Woo Bock, Robert W. Zmud, 2005.
	Members of A/B think I definitely should use A/B.	TERENCE A. SHIMP, ALICAN KAVAS, 1984.

	My attitude toward using A/B is very favorable.	Barbara H. Wixom, Peter A. Todd, 2005
	I intend to use A/B at every opportunity over the next year.	Barbara H. Wixom, Peter A. Todd, 2005
	I plan to increase my use of A/B over the next year.	Barbara H. Wixom, Peter A. Todd, 2005
	I intend to use A/B at every opportunity over the next year.	Barbara H. Wixom, Peter A. Todd, 2005
Knowledge Networking	If you have a business question or problem that you cannot solve alone, could you find the right contact or other relevant sources from your organization?	Genevieve Bassellier, Izak Benbasat, 2004.
	If you have a business question or problem that you cannot solve alone, could you find the right contacts from A/B?	Genevieve Bassellier, Izak Benbasat, 2004.
	If you have a business question or problem that you cannot solve alone, could you find other relevant sources of business information from A/B?	Genevieve Bassellier, Izak Benbasat, 2004.
Interpersonal communication	You can communicate with people at different levels of the organization on A/B.	Genevieve Bassellier, Izak Benbasat, 2004.
	You can communicate with your group members on A/B.	Genevieve Bassellier, Izak Benbasat, 2004.
	You can communicate with other group of your organization on A/B.	Genevieve Bassellier, Izak Benbasat, 2004.

Table 4. Principal Component Analysis Result.

Rotated Component Matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
WPU9	.880	.123	.026	-.019	.112	.150	.167	.170	.109
WPU8	.877	.147	.048	-.142	.096	.143	.133	1.326E-5	.112
WPU10	.857	.091	.180	.096	.142	.091	.237	.125	.125
WSE7	-.044	.882	.043	.114	.111	.119	.060	.128	.139
WSE6	.237	.873	.153	.220	.017	.058	-.077	.009	.056
WSE5	.195	.833	.173	.026	.227	.082	.086	.193	.017
WTR2	.063	.154	.878	.099	.151	.133	.110	.263	.055

WTR3	.151	.188	.786	.192	.022	.383	.089	.213	.003
WIC2	-.056	.100	.124	.939	.137	.102	.053	.021	.075
WIC3	-.021	.226	.111	.882	.119	.126	.211	.162	.039
WPA4	.143	.178	.038	.051	.888	.135	.103	.162	.156
WPA5	.162	.124	.145	.228	.867	-.015	.165	.125	.053
WCI4	.251	.091	.304	.219	.043	.768	.061	.252	.098
WCI3	.250	.313	.359	.113	.122	.701	.232	.104	.143
WEU1	.313	.093	.148	.198	.222	.008	.821	-.018	.137
WEU5	.373	-.076	.082	.119	.113	.312	.734	.218	.180
WSC2	.187	.204	.290	.131	.254	.248	-.034	.784	.118
WSC1	.161	.222	.421	.112	.175	.119	.248	.744	.077
WKN1	.168	.041	-.031	-.003	.218	.394	.046	.018	.801
WKN2	.232	.239	.136	.178	.032	-.174	.312	.173	.733

Extraction Method: Principal Component Analysis.

 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.