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Do People Trust Facebook as a Technology or as a "Person"? Distinguishing Technology Trust from Interpersonal Trust

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ABSTRACT

Several researchers have studied technology trust in terms of the technological artifact of the technology. Two different types of trusting beliefs could apply to websites. First, the trusting beliefs may relate to interpersonal characteristics such as benevolence, competence, and integrity. Second, they may relate to technology characteristics such as helpfulness, functionality, and reliability. Since social networking websites like Facebook may demonstrate either interpersonal trust characteristics or technology trust characteristics, researchers may need to carefully choose the beliefs to model. Thus it is important to not only understand the conceptual meaning of these beliefs, but also whether human and technology trust beliefs of technology trust are distinct. Using data collected from Facebook users, we test alternate factor structures for a measurement model containing three interpersonal trust beliefs and three technology trust beliefs. We find the data fits a first-order six-factor model the best. This suggests people can distinguish between trust in Facebook's interpersonal and technology trust characteristics. it also shows they can distinguish between the individual components of these characteristics.

Keywords

Interpersonal trust, technology trust, social networking, websites, measurement models, second-order factors.

INTRODUCTION

Facebook has grown rapidly as tens of millions of users have adopted it to communicate and socialize (Bausch and Han 2006). Since trust is a factor in adopting websites (Gefen et al., 2003), perhaps one factor in Facebook's meteoric rise is that people trust it. However, what exactly does it mean to say one trusts Facebook? Does one trust it as a technology (i.e., a website artifact) or as a quasi-person? Trust is often a factor in the use or acceptance of consumer product websites (Gefen et al., 2003). When studying trust in these websites, researchers often examine interpersonal trust, i.e., trust between people, the site user and the e-vendor. In this context, interpersonal trust means one is willing to depend on the other person because one believes the other has such favorable attributes as benevolence, ability (competence), and integrity (Mayer, Davis, and Schoorman, 1995). Researchers use these interpersonal trust beliefs to represent how users perceive the attributes of the e-vendor. This is pure interpersonal trust, because it exists between two human parties, a user and an e-vendor.

Recently, some empirical information systems research has explored trust in software recommendation agents (e.g., Komiak and Benbasat, 2006; Wang and Benbasat, 2005). These agents are technological artifacts, not humans. This type of trust, called trust in technology, differs from interpersonal trust because it represents a human-to-technology trust relationship rather than a human-to-human relationship. Trust in technology means one is willing to depend on the other because one believes the technology has desirable attributes (McKnight, 2005). Although some have said trust can only exist between humans (Friedman et al., 2000), many researchers now acknowledge that humans can and do trust technology, despite several differences between human-human and human-technology exchanges (see Lee and See, 2004 and Wang and Benbasat, 2005 for discussions of trust in technology). However, trust in technology is an under-explored IS research domain.

Due to the limited amount of technology trust research, it is difficult to answer the question, "What are the proper attributes of trust in technology?" Research on trust in software agents has employed interpersonal trust beliefs (i.e., integrity, competence, and benevolence) to represent trust in technology because software agents have some human-like characteristics, such as giving advice and interacting with the user on-screen (Wang and Benbasat, 2005). However, some technological web artifacts possess fewer interpersonal characteristics than do software agents. For example, many websites neither give advice nor interact with users. Therefore, while interpersonal trust applies to software agents, it may only

partially apply to other websites. For example, people interface with other people on Facebook, but they neither obtain advice directly from Facebook itself nor interact with Facebook as a person or quasi-person. Still, they may trust Facebook itself in certain ways. They trust it to provide certain functionality, to operate reliably, and to be helpful to its users. People are willing to depend on Facebook (or any technology) because it has these attributes that make it trustworthy (McKnight, 1995). Thus, we propose three technology-related trust beliefs that parallel the interpersonal trust beliefs. We suggest that the technology trust belief *functionality* is analogous to the interpersonal trust belief competence, in that they both refer to users' beliefs about what the other can do for them. Similarly, we introduce *reliability* as a technology trust belief similar to the interpersonal trust belief integrity because they both refer to users' beliefs that the other will do what we expect they will do. We suggest *helpfulness* as a technology trust belief that parallels the interpersonal trust belief benevolence in that they both relate to beliefs that the other provides responsive help.

Empirically we test whether the interpersonal trust beliefs are separate and distinct factors from the technology trust beliefs. We gather data from students using Facebook, a social networking website. A number of social networking websites have grown in popularity among university students. These sites allow their users to create profiles and personal networks. It is possible that even though people don't interact with Facebook as a "person," that they may still attribute human attributes to it, much as Nass and Reeves (1996) found with various technologies. We believe social networking websites represent technologies about which users may perceive both human-like and technology-like trust characteristics and therefore form both interpersonal and technology trust beliefs. Thus, for each technology, researchers will need to understand which beliefs are the most appropriate to use. The paper proceeds as follows. In the next section we discuss the theory and develop hypotheses. Then we discuss the methodology used to test our hypotheses. Next, we discuss the data analysis and results. Finally, we discuss the results.

THEORY AND HYPOTHESES DEVELOPMENT

Technology Trust Beliefs

Researchers in various fields have investigated technology trust. For example, human computer interface researchers have examined trust in automation or the extent to which human operators will trust automated control of systems such as semi-automatic pasteurization plants with optional manual control (e.g., Muir and Morray, 1996; see Lee and See, 2004 for a review). In the social sciences, researchers have examined trust in the technological artifact of online environments (Komiak and Benbasat, 2006; Lee and Turban, 2001; Wang and Benbasat, 2005), and in various business information systems (Lippert ,2001, 2007; Lippert and Swiercz, 2005).

While trust in technology research is just beginning, scholars across these contexts appear to consistently find trust in technology exists and is composed of multiple beliefs. As Table 1 shows, some trust beliefs relate to the human-like characteristics of technology. For example, Wang and Benbasat (2005) apply the three most common interpersonal trust beliefs—competence, integrity, and benevolence—to their study of Internet recommendation agents. However, other researchers use trust beliefs that relate more to the technology-like characteristics of technology including its functionality and reliability (Lippert, 2001; Muir and Morray, 1996). The choice of what trust beliefs to use may depend on the extent to which the technology possesses human-like characteristics. For example, the software agents Wang and Benbasat (2005) studied have more human-like characteristics than Muir and Moray's (1996) automated systems.

Social networking websites represent a technology in which the distinction between human and technology characteristics is less clear. These technologies may demonstrate some human-like trusting characteristics, in that users may develop beliefs about its competence and integrity. For example, a user may think, "Facebook is honest with me about privacy issues." We associate honesty with people. Social networking sites may also demonstrate technology-like trusting characteristics that elicit beliefs such as "Facebook is very reliable and consistent to use." Therefore, researchers may apply both interpersonal and technology trust beliefs to understand users' trust in Facebook. Thus it is important that the technology trust beliefs are conceptualized separately and distinguished empirically from the interpersonal trust beliefs. To our knowledge, no research to-date has done this. In this research, we propose three technology trust beliefs that are related, yet distinct from the three most commonly used interpersonal trust beliefs, which are benevolence, competence, and integrity (Gefen et al., 2003). We test the prediction that they are distinct beliefs by investigating alternative factor structures. The following paragraphs explain the three proposed technology trust beliefs (see Table 1).

Technology Trust Beliefs	Conceptual Origins			
	Trust in Information Systems	Trust in Online Environments and Online Agents	Trust in Automation	Interpersonal Trust
Functionality The degree to which one anticipates the technology will have the functions or features needed to accomplish one's task(s)		*Competence* The trustee has the ability, skills, and expertise to perform effectively in specific domains (Wang and Benbasat, 2005, p. 76).	*Competence* The extent the technology performs its functions properly (Muir and Moray, 1996, p. 434)	*Ability (Competence)* The group of skills, competencies, and characteristics that enable a party to have influence with some specific domain (Mayer et al., 1995, p. 717).
Reliability The degree to which an individual anticipates the technology will continually operate properly, or will operate in a consistent flawless manner.	*Reliability* The technology is fully functioning and not experiencing system downtime when completing job related tasks (Lippert, 2001).	*Integrity* an individual believes that the trustee adheres to a set of principles (Wang and Benbasat, 2005, p. 76).	*Reliability* The extent the technology responds similarly to similar circumstances at different points in time (Muir and Moray, 1996, p. 434).	*Integrity* The trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable (Mayer et al., 1995, p. 719).
Helpfulness the degree to which an individual anticipates the technology will provide adequate and responsive help.		*Benevolence* The trustee cares about her and acts in her interests (Wang and Benbasat, 2005, p. 76).		*Benevolence* The extent to which the trustee is believed to want to do good to the trustor, aside from an egocentric motive Mayer et al., 1995, p. 718).

Table 1. Conceptual Origins of Technology Trust Beliefs

Functionality

Functionality means the degree to which an individual believes the technology will have the functions or features needed to accomplish one's task(s) (McKnight 2005). Functionality originates conceptually from the interpersonal trust competence belief that represents an individual's beliefs that a trustee has the ability, skills, and expertise to perform effectively (Mayer et al., 1995). While individuals demonstrate competence by performing a task well or giving good advice, technology demonstrates 'competence' by performing a function well or providing system features the user needs to perform a task. Thus trust in the competence of technology generally refers to the technology's 'functional' capability to perform a task (McKnight, 2005). Similar trust beliefs have been used in technology contexts including software agents (Wang and Benbasat, 2005) and automation (Muir and Moray, 1996).

Reliability

Reliability is defined as the degree to which an individual believes the technology will continually operate properly, or will operate in a consistent, flawless manner (McKnight, 2005). This technology trust belief has its conceptual foundation in the integrity belief of interpersonal trust that represents the trustor's perceptions that the trustee adheres to a set of principles that the trustor finds acceptable (Mayer et al. 1995, p. 719). An individual may demonstrate reliability by keeping commitments and telling the truth, whereas a technology demonstrates 'integrity' by performing functions well (i.e., just as the technology implicitly promises to do), and by doing so on a consistent basis (i.e. every time the technology is used). Thus, trust in the integrity of technology generally refers to its 'reliability.' Showing its human roots, reliability, and a related construct called dependability, are used by interpersonal trust researchers as interpersonal trust beliefs (Rempel, Holmes and Zanna, 1985). Reliability has been used previously in technology trust studies (Lippert, 2001; Muir and Moray, 1996).

Helpfulness

Helpfulness is defined as the degree to which an individual believes the technology will provide adequate and responsive help, usually through a help function. Helpfulness is based on the benevolence belief from interpersonal trust and trust in online environments. Here the trustee cares and acts in the trustor's interest (Wang and Benbasat, 2005; Mayer et al., 1995). We assume technology is not helpful due to volition or moral agency (i.e. it cannot consciously care about its user). In fact, that would constitute unwarranted personification of the technology (McKnight, 2005). Instead, we presume that technology demonstrates its helpfulness through help functions that aid goal attainment. Individuals who perceive that a technology can provide help as needed, will perceive fewer risks and uncertainties associated with technology use.

In summary, we propose three technology trust beliefs —functionality, reliability, and helpfulness—that are based on three interpersonal trust beliefs–competence, integrity, and benevolence, respectively. Users probably view these technology trust beliefs as relating to the technology itself. By contrast, users probably view the interpersonal beliefs as relating to some kind of person-like characteristics of the technology (Wang and Benbasat, 2005). In other words, because interpersonal trust is trust between people, relating interpersonal beliefs to technology would mean that users believe the technology has some human-like characteristics or in some ways acts a a person does. This view of technology should elicit different cognitions than thinking about the technology strictly as a technology. Because users view the three interpersonal and three technology trust beliefs differently, we believe they will form distinct factors when analyzed in the same model.

H1: All six trust beliefs (three technology trust beliefs and three interpersonal trust beliefs) are distinct factors.

There is a chance that the three technology trust beliefs will probably form a higher-order technology trust factor and the three interpersonal trust beliefs will form a higher-order interpersonal trust factor. These second order factors can represent overall interpersonal and technology trust concepts that explain the covariation among the beliefs or the first-order factors in a more parsimonious way (Segars and Grover, 1998). If this is true, it suggests that respondents were able to distinguish between interpersonal trust and technology trust in Facebook.

H2: The three technology trust beliefs will reflect a separate second-order factor from the second-order factor reflected by the three interpersonal trust beliefs.

We argued above that functionality is the technology equivalent of the interpersonal competence trust belief. That is, functionality is a specific perception that, for technology trust, is similar in nature to competence for interpersonal trust. If the Table 1 logic used to suggest functionality as a technology trust instantiation of the interpersonal competence belief is true, then these beliefs will be significantly and highly correlated. The same is true of the reliability-integrity pair and the helpfulness-benevolence pair because similar logic was used. Because we believe these three pairs are highly correlated, we predict that another viable way to model these beliefs is to have the functionality-competence pair reflect one second-order trust factor, the reliability-integrity pair reflect another second-order trust factor, and the helpfulness-benevolence pair reflect an additional second-order factor.

H3: Functionality-competence, reliability-integrity, and helpfulness-benevolence will reflect three second-order factors that are distinct from each other.

METHODOLOGY

We used survey data to test the hypotheses. The survey used social networking websites as the target technology. The study participants were business college students in an introductory information systems course. College students are an appropriate sample for investigating Facebook trusting beliefs because Facebook was initially targeted at college students. Additionally, a sizeable percentage of current Facebook users are college-aged, with 40% of unique visitors being from the 18-24 age group in 2006 and 29% being from this age group in 2007 (Lipsman, 2007).

Procedure

Four-hundred and twenty seven students completed this survey, which measured the three technology trusting beliefs and the three interpersonal trusting beliefs. The survey instructions asked subjects to indicate a social networking site in which they were currently a member or the site in which they might become a member. The survey then instructed subjects to answer all remaining questions referring to that social networking site, which we referred to in the questions as "MySNW.com". Of the 427 responses, 362 indicated Facebook as their social networking website ***and*** that they had previously used the site. We used this subsample to analyze the factor structure of Facebook users' trusting beliefs.

Measurement Scales

The scales are shown in Appendix A. For the interpersonal trust beliefs, we adapted prior scales from McKnight et al. (2002) and formatted them with headers like those of McKinney et al. (2002). We measured functionality, helpfulness, and reliability using scales that we developed based on a pilot test using 233 students from the same course the previous semester.

DATA ANALYSIS AND RESULTS

We used EQS to test the factor structure. We did this by analyzing the model's psychometric properties in addition to its fit with the data. We compared seven models to test the hypotheses and to test for other possible factor structures that could result if the beliefs are not conceptually or statistically distinct. These models are explained below.

Model 1 (Hypothesis 1 model) represents six first-order factors where the items for each trust belief (reliability, functionality, helpfulness, integrity, competence, and benevolence) load on separate first-order factors.

Model 2 represents one first-order factor where all items load on one first-order factor representing overall trust.

Model 3 represents two first-order factors where the items for each technology trust belief (reliability, functionality, and helpfulness) load together on one factor and the items for each interpersonal trust belief (integrity, competence, and benevolence) load together on another factor.

Model 4 represents three first-order factors where the items from conceptually related trust belief pairings load together (reliability and integrity, functionality and competence, and helpfulness and benevolence).

Model 5 represents six first order factors and one second-order factor where items for each trust belief load on separate first-order factors and these factors load on one second-order overall trust factor.

Model 6 (Hypothesis 2 model) represents six first-order factors and two second-order factors where items for each trust factor load on separate first-order factors. Additionally, items for each technology trust belief (reliability, functionality, and helpfulness) load together on a second-order technology trust factor, and items for each interpersonal trust belief (integrity, competence, and benevolence) load together on a second-order interpersonal trust factor.

Model 7 (Hypothesis 3 model) represents six first order factors and three second-order factors where items for each trust belief load on separate first-order factors. Additionally, items from each related trust first-order factor (reliability and integrity, functionality and competence, and helpfulness and benevolence) load on separate second order factors.

Table 2 summarizes the fit indices for the different models we tested. The H1 model, Model 1, has the lowest chi-square divided by degrees of freedom (χ^2/df) statistic, the highest non-normed fit index (NNFI) and comparative fit index (CFI), and the lowest root mean-square error of approximation (RMSEA) of the models. Additionally, all the fit statistics for Model 1 are within levels prescribed as good fit (Bentler, 1990; Bollen, 1989). χ^2 difference tests show that the other models are all significantly different from Model 1. From this analysis we conclude that Model 1 with six first-order factors fits the data the best and that HI is the best supported hypothesis. The close strength of Model 7 shows that H3 is the next best supported—reliability forms a second-order factor with integrity, as functionality does with competence and helpfulness with benevolence. To a lesser degree, H2 is supported—competence, integrity and benevolence form a second-order interpersonal trust factor, while functionality, reliability, and helpfulness form a second-order technology trust factor.

We also analyzed the measurement model for the six-factor first-order model to assess convergent and discriminant validity. To assess convergent validity, we assessed the item factor loadings, the internal consistency reliability (ICR), and the average variance extracted (AVE). All items load on their own factor at more than the 0.70 standard (Fornell and Larcker, 1981) (see Table 3). The ICR for each construct was greater than 0.80 and the AVE for each construct was greater than 0.50 (see Table 4), which are the recommended minimums (Fornell and Larcker, 1981), thus showing convergent validity.

We assessed discriminant validity by analyzing the Lagrange Multiplier (LM) statistics in EQS and by analyzing the square root of the AVE in comparison to each construct's correlation with other constructs. While the LM test showed several significant model misspecifications, the incremental LM χ^2 values were relatively small, ranging from 4.23 to 20.33. The standardized parameter change values[1] were also small, ranging from .04 to .22. For each factor, the square root of the AVE is greater than the correlations in that construct's row or column (Chin, 1998) (see Table 4). The AVE is also greater than the correlations in that construct's row or column for all factors. This latter test constitutes stronger evidence than the test comparing correlations with AVE *square roots* (Fornell and Larcker, 1981). Both tests support discriminant validity.

We next tested for multicollinearity and common method variance. We assessed multicollinearity by examining variance inflation factors and condition indexes. Variance inflation factors range from1.51 to 2.00 and condition indexes are under .30 suggesting that multicollinearity is not a problem in this data (Belsley, Kuh, and Welsch, 1980). We assessed common method variance by adding a factor with all measures as indicators to the theorized model (Widaman, 1985). This model shows that the nonormed fit index improves only minimally (.006), and the original factor loadings are still significant (Flangovan and Xie, 1999). Therefore, we conclude that common method variance is not a problem in this data.

Model #	Model Fit Statistics						χ^2 Difference Test
	χ^2	*df*	χ^2 / *df*	NNFI	CFI	RMSEA	
MODEL 1 (H1)	650.42	237	2.70	.935	.945	.070	na
MODEL 2	4422.85	252	17.55	.387	.441	.214	$p < .001$
MODEL 3	3725.95	251	14.84	.488	.534	.196	$p < .001$
MODEL 4	2668.52	249	10.72	.640	.676	.164	$p < .001$
MODEL 5	750.76	246	3.05	.924	.932	.075	$p < .001$
MODEL 6 (H2)	740.77	245	3.02	.925	.934	.075	$p < .001$
MODEL 7 (H3)	683.83	243	2.81	.933	.941	.071	$p < .001$

Table 2. Model Fit Statistics

[1] A standardized parameter change value represents a parameter's estimated value if freely estimated in a subsequent test of the model (Byrne 2006).

Item	Factor Loading[1]
Reliability 1	.77
Reliability 2	.87
Reliability 3	.88
Reliability 4	.77
Reliability 5	.80
Functionality 1	.80
Functionality 2	.79
Functionality 3	.84
Functionality 4	.88
Helpfulness 1	.88
Helpfulness 2	.94
Helpfulness 3	.88
Helpfulness 4	.78
Integrity 1	.92
Integrity 2	.94
Integrity 3	.89
Integrity 4	.87
Competence 1	.87
Competence 2	.94
Competence 3	.92
Competence 4	.80
Benevolence 1	.82
Benevolence 2	.83
Benevolence 3	.88

1 All factor loadings are significant at $p < .001$.

Table 3. Item Factor Loadings

	ICR	AVE	1	2	3	4	5	6
1. Reliability	.91	.67	**.82**					
2. Functionality	.90	.69	.53	**.83**				
3. Helpfulness	.93	.76	.37	.41	**.87**			
4. Integrity	.95	.82	.51	.46	.38	**.90**		
5. Competence	.93	.78	.36	.65	.29	.39	**.88**	
6. Benevolence	.88	.71	.44	.40	.41	.69	.35	**.84**

*Diagonal elements are the square roots of the AVE; off-diagonal elements are correlations between latent constructs.

**All correlations are significant at $p < .005$

Table 4. ICRs, AVEs, and Correlations among Latent Constructs

DISCUSSION AND CONCLUSIONS

This study shows the three technology trust beliefs—functionality, reliability, and helpfulness—are related but distinct from the three interpersonal trust beliefs from which they are derived (competence, integrity, and benevolence, respectively). Using data from Facebook users, we find that a first-order six-factor model fits the data best, and demonstrates good psychometric properties. These findings are important for developing research models for social networking websties and other websites that demonstrate human-like and technology-like trust characteristics. Our results imply that these six beliefs can be used in one research model to better understand the factors that cause users to accept and continue using social networking websites. For example, researchers may find that users may attribute all six trust beliefs in varying degrees to Facebook use. It will be important to use theory to develop hypotheses about why, for example, integrity influences Facebook use more than reliability or vice versa.

To show one more indication of the discriminant nature of these constructs, we correlated them with usage continuance intention. We found that they correlated as follows: reliability (.18), functionality (.39), helpfulness (.17), integrity (.22), competence (.36), and benevolence (.24). These results show that the trusting beliefs differ in their associations with usage continuance intention. The results also show that sometimes the technology trusting beliefs are more highly associated with usage continuance intention and sometimes the interpersonal trusting beliefs are. There may be specific characteristics of technology that can be attributed to a higher or lower influence of the interpersonal trust beliefs versus a higher or lower influence of the technology trust beliefs. For example the use context, the user's motivation, or the specific risk may invoke more or less influence of the different trust beliefs. Future research can explore these ideas.

While we have examined trusting beliefs, some trust researchers explore other trust constructs, including institution-based trust and willingness to depend (McKnight et al., 2002). It is important to identify how these concepts affect social networking use. These constructs may moderate or mediate the effects of trusting beliefs on intention to use social networks.

Our results are also important for managers who are trying to help users deal with technology risk. Managers should assess both the interpersonal and technology trust beliefs that users have. For example, understanding that helpfulness is not necessary the same characteristic as benevolence may give managers different perspectives on how to highlight or change these technology characteristics. Managers could also monitor if the beliefs and their influence change over time.

There are several limitations to our study. First, this study uses only one data set. Just because a model fits one sample does not imply that it is the ideal solution (Doll, Xia, and Torkzadeh, 1994). There may be other technologies where the six trust beliefs are not distinct. For example, research involving technology that tends to have strong human-like characteristics (e.g. the software agents of Wang and Benbasat, 2005) may find that the beliefs are not as distinct. Second, three second-order factor models (5, 6, sand 7) displayed adequate model fit despite being significantly different from the first-order six-factor model. Thus, the first-order trust factors may be statistically "caused" by a single second-order factor (Tanaka and Huba, 1984). Future research can explore these issues. A third limitation is that there may be more technology trust beliefs than the three we examined. For example, interpersonal trust contains a trust belief called carefulness (Gabarro, 1978). Likewise, researchers may find that certain technologies demonstrate additional trust characteristics that users consider important when deciding to use a technology. A fourth limitation is that our research does not specifically test if technology trust increases use of social networking websites. While technology trust has been shown to increase use of other technologies, this is an area for future research.

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APPENDIX A

Technology Trusting Beliefs	**Interpersonal Trusting Beliefs**
Functionality I believe MySNW.com is functional. It: 1. has the functionality I need. 2. has the features required for my online social activities. 3. has the ability to do what I want it to do. 4. has the overall capabilities I need.	Competence I believe MySNW.com is competent. It: 1. is competent and effective in providing online social networking. 2. performs its role of facilitating online social networking very well. 3. is a capable and proficient online social networking provider. 4. is very knowledgeable about online social networking.
Reliability I believe MySNW.com is reliable. It: 1. is a very reliable website. 2. does not fail me. 3. is extremely dependable. 4. does not malfunction for me. 5. provides error-free results.	Integrity I believe MySNW.com has Integrity. It: 1. is truthful in its dealings with me. 2. is honest. 3. keeps its commitments. 4. is sincere and genuine.
Helpfulness I believe MySNW.com is Helpful. It: 1. supplies my need for help through a help function. 2. provides competent guidance (as needed) through a help function. 3. provides whatever help I need. 4. provides very sensible and effective advice, if needed.	Benevolence I believe MySNW.com is Benevolent. It: 1. acts in my best interest. 2. does its best to help me if I need help. 3. is interested in my well-being, no just its own.

Note: All items measured on a (7-Point Likert scale from (1) Strongly disagree to (2) Strongly Agree)