

EXPLAINING USER ACCEPTANCE OF SOCIAL NETWORKING: EMPLOYEES' PERSPECTIVE

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ABSTRACT

The recent advent of social networking has changed the way people communicate and connect with each other. As a result, several studies have been conducted on social networking, but they rarely touched on the user acceptance of social networking by employees. This study, in turn, attempts to fill this gap by explaining the user acceptance of social networking by proposing a research model for the acceptance of social networking by employees, based on the technology acceptance model (TAM). I do this by examining the extent to which the perceptions of 193 employees about the usefulness, enjoyment, and ease of use of social networking affect the intention to adopt the use of social networking. The findings of this study show that perceived enjoyment explains most of the variance.

INTRODUCTION

The technological advances and the rapid use of the Internet in recent years have led to a communication revolution changed the way people communicate and connect with each other (Coyle, 2008; O'Murchu, Breslin, & Decker, 2004). Social networking sites are a recent trend of this revolution that we live with everyday. Social networking sites are defined by Boyd & Ellison (2007) as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection with, and (3) view and traverse their list of connections and those made by others within the system" (p. 211). Ellison, Steinfield, and Lampe (2007) classified social networking sites into several categories: work-related contexts such as LinkedIn, romantic relationship such as Friendster, connecting those with common interests such as MySpace in terms of music, and (originally) college students such as Facebook.

The purpose of this study is to attempt to explain the user acceptance of social networking in the workplace by proposing a research model for the acceptance of social networking, based on the technology acceptance model (TAM), in order to explain the intention to adopt social networking site use by employees. We attempt to determine the extent to which perception of employees about the perceived usefulness, ease of use, and enjoyment of the use of social networking sites affect the perception of intention to adopt the use of social networking sites. We do this by surveying and collecting data on the perception of a sample of 193 employees in the U.S.

This paper is organized in the following order. I first present a review of the literature related to social networking, followed by a description of the theoretical framework for this study which is based on the technology acceptance model (TAM). I then describe the methods used to conduct this study, and the data analysis and results. I finally conclude with a discussion of the findings, and a conclusion.

SOCIAL NETWORKING LITERATURE REVIEW

Several studies have been conducted on social networking sites. In a study of 59 American current and potential professionals towards the use of social networking sites in the workplace, North (2010) found that although some participants find social networking to be potential liability and marginal time waster, they believe that it is justifiable to use while at work. Boyd and Ellison (2007) provide a comprehensive definition as well as literature review of social networking sites. Leidner, et al.(2010), in their turn, found that the use of an internal social networking system at USAA, an investment/insurance firm based in San Antonio, Texas, helped elevate new hires retention rate. Patel and Jasani (2010) offer several guidelines that can be used by businesses when establishing corporate social media policies that can ensure social media security. This study also examines the effect of social networking sites on corporate culture and corporate information security policies.

Ellison, et al.(2007) study the relationship between the formation and maintenance of social capital and the use of Facebook by surveying 286 undergraduate students. The results indicate that Facebook intensity might help benefit users with low self-esteem and low life satisfaction.

Not many companies have found benefits of the use of social networking in the workplace. According to a survey of more than 1,400 CIOs conducted by Robert Half Technology (2009), about one in every five companies in the U.S. allow the use of social networking sites for business purpose while only one in ten companies allow the use of social networking at the workplace for personal use. In fact, reasonable access to social networks can increase productivity (AT&T, 2008; Bennett, Owers, Pitt, & Tucker, 2010). A European study commissioned by AT&T in 2008 found that 65 percent of employees believed that the use of social networking helped them be more productive (AT&T, 2008). Social networking can have benefits as well as drawbacks on the workplace. Bennett, et al. (2010) argued that the business benefits of social networking in the workplace outweigh the negative perceptions and those benefits are still undervalued by many organizations although some organizations started to adopt social networking.

THEORETICAL BACKGROUND

Technology Acceptance Model

TAM is a technology acceptance model developed by Davis (1989) that is used to measure the user acceptance of technology use. The original determinants of intention in TAM were perceived ease of use (PEOU) and the perceived usefulness (PU) representing the beliefs of the user. An important construct related to belief is perceived enjoyment (Davis, Bagozzi, & Warshaw, 1992). This construct is defined as “the extent to which the activity of using the computer is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated” (Davis, et al., 1992). Several studies have been done using the construct of enjoyment (Davis, et al., 1992; Li, Chua, & Lou, 2005; Teo, Lim, & Lai, 1999; van der Heijden, 2004). Davis, et al. (1992) stated that users exert efforts as a result of intrinsic and extrinsic motivation. Both types of intrinsic and extrinsic motivation are based on Deci’s (1975) motivational theory. Intrinsic motivation refers to doing something because it is inherently enjoyable or interesting (Deci, 1975); these factors are generated in the process of performing the activity (Davis, et al., 1992). Extrinsic motivation, on the other hand, refers to an individual’s involvement in an activity as something that is perceived to be instrumental in achieving valued outcomes (Davis, et al., 1992).

In several of the studies conducted on the technology acceptance body of literature, perceived usefulness is attributed to extrinsic motivation, while perceived ease of use is attributed to intrinsic motivation (Davis, et al., 1992; Igbaria, Parasuraman, & Baroudi, 1996; Teo, et al., 1999; van der Heijden, 2004; Venkatesh, Morris, Gordon, & Davis, 2003). Perceived ease of use refers to how much mental effort is expended in the use of the system, in which the user assesses the ease of use through the interaction with the system rather than through the outcome of the interaction with the system. Several studies have

reported positive significant association between ease of use and adoption of a new system (Davis, 1989; van der Heijden, 2004; Venkatesh, et al., 2003). This leads us to the following hypothesis:

Hypothesis 1: Perceived ease of use is positively influencing the intention of employees to use social networking sites.

Similarly, other studies show that perceived ease of use - a belief that using a particular system is free of effort - to be positively affecting perceived enjoyment (Davis, et al., 1992; Gu, Fan, Suh, & Lee, 2010; Teo, et al., 1999; van der Heijden, 2004). This leads us to the following hypotheses:

Hypothesis 2: Perceived ease of use is positively influencing the perceived enjoyment of the use of social networking sites by employees.

On the other hand, perceived usefulness refers to the external benefits to the user-system interaction which are improving the job performance. In other words, individuals will use a system only if they perceive its use would assist them achieve the desired performance. Several studies conducted in this area show significant positive influence of perceived usefulness on adoption (Davis, 1989; van der Heijden, 2004; Venkatesh, et al., 2003). This leads us to our third hypothesis:

Hypothesis 3: Perceived usefulness is positively influencing the intention of employees to use social networking sites.

Perceived enjoyment refers to the extent to which enjoyment and fun can arise from using a system. In other words, individuals may adopt a system if its use is giving them enjoyment and fun. Teo, et al. (1999) showed that perceived enjoyment is positively related to frequency of Internet usage and daily internet usage. Prior to that, Davis, et al. (1992) concluded that perceived enjoyment had a significant positive effect on the intention to use computers. Other studies showed consistent findings in the body of literature (Li, et al., 2005; van der Heijden, 2004). This leads us to our fourth hypothesis:

Hypothesis 4: Perceived enjoyment is positively influencing the intention of employees to use social networking sites.

Based on consumer behavior literature that differentiates between hedonic and utilitarian products (Hirschman & Holbrook, 1982), we can attribute the hedonic term to information systems that are associated with more enjoyment and fun such as video games as well social networking sites. The word hedonic refers to “the doctrine that pleasure or happiness is the sole or chief good in life,” (Merriam-Webster, 2003). Hedonic systems’ goal is to provide individuals with internal and self-fulfilling value such as providing fun and pleasurable experience rather than instrumental value such as increasing the user’s task performance as is the case for utilitarian systems (van der Heijden, 2004). Therefore, according to van der Heijden (2004), the intention to use an information system depends on the nature of the system underhand, either hedonic or utilitarian. In our turn, we are attempting to test this theory using social networking sites as a type of hedonic information systems using the TAM model. van der Heijden (2004) showed that perceived enjoyment to be a much stronger predictor of the intention to use a hedonic system than perceived usefulness. He also concluded that perceived ease of use is a stronger predictor of intention to use than perceived usefulness when it comes to a hedonic type of system. In our turn, we are going to test these findings using social networking sites as an example of a hedonic type of information system. This leads us to the following hypotheses:

Hypothesis 5: For social networking sites (hedonic systems), perceived enjoyment is a stronger predictor of the intention of employees to use than perceived usefulness.

Hypothesis 6: For social networking sites (hedonic systems), perceived ease of use is a stronger predictor of the intention of employees to use than perceived usefulness.

RESEARCH METHOD

Measurement

I adopted items for intention to use from Agarwal and Karahanna (2000) and Davis et al. (1992); items for perceived ease of use from Davis (1989); and items for perceived enjoyment from Agarwal and Karahanna (2000) and Davis et al. (1992). I adopted some of the items of perceived usefulness from Davis (1989) and I added some other items that may be useful to employees as a result of using social networking such as the use of social networking sites will enhance employee's morale, performance, commitment, and satisfaction. The scale of items was measured on a 5-point Likert scale ranging from 1, *strongly disagree*, to 3 *neutral*, to 5 *strongly agree*. Perceived usefulness was measured by four items (USEF1-4), perceived ease of use by three items (EOU 1-3), perceived enjoyment by three items (ENJ 1-3), and finally perceived intention to use by three items (INT 1-3).

Data Collection

I employed both an offline as well as a web-based survey in order to test the model. The online respondents were employees from different states in the USA while the offline respondents were employees in a metropolitan border town in Southern Texas. We received responses from 79 online and 114 offline questionnaires. I ended up with 193 observations for this research, of which 90 were male (47 percent) and 103 were female (53 percent). Their average age was 27 years of age (standard deviation 7.97). Moreover, 118 of the respondents were Hispanics. While 80 of the respondents were full-time employees, the average years of experience were 5.5 years (standard deviation 5.6).

Validation of the Model

The proposed model is evaluated using structural equation modeling (SEM) (Chin, 1998; Lohmoller, 1989), a very powerful second generation multivariate technique for the analysis of causal models with an estimation of structure models and measurement. The measurement model is measured using confirmatory factor analysis (CFA) to examine whether the constructs have sufficient reliability and validity. This study uses WarpPLS 2.0 to assess the measurement model (Kock, 2010, 2011).

Measurement Model

I started by assessing the measurement model for construct validity and reliability. A factor analysis was conducted using principal components as the means of extraction and the oblique method of rotation. A confirmatory factor analysis (CFA) was conducted to establish the discriminant and convergent validity. The purpose of the convergent validity is to ensure unidimensionality of the multi-item constructs and omit the unreliable items (Bollen, 1989). The loadings of all items is recommended to be 0.50 (Hair, Anderson, Tatham, & Black, 1992) or above on their hypothesized component and they should be significant ($p < 0.05$) (Bagozzi & Yi, 1988; Fornell & Larcker, 1981; Sujan, Barton, & Kumar, 1994). All of the standardized factor loadings for this study were significant and they ranged from 0.837 to 1.027 as shown in Table 1.

Table 1: Summary of Factors Loadings and Reliability

Item	USEF	EOU	ENJ	INT	Cronbach's Alpha	Composite Reliability
USEF1	(0.872)	0.006	0.065	-0.029	0.936	0.954
USEF2	(0.939)	-0.024	0.117	-0.104		
USEF3	(0.914)	0.013	-0.013	0.020		
USEF4	(0.940)	0.005	-0.170	0.116		
EOU1	0.049	(0.900)	0.132	-0.122	0.921	0.950
EOU2	-0.020	(0.945)	-0.102	0.071		
EOU3	-0.027	(0.943)	-0.027	0.048		
ENJ1	0.005	0.052	(0.901)	0.031	0.966	0.978

ENJ2	0.014	-0.029	(1.000)	-0.017		
ENJ3	-0.019	-0.022	(1.001)	-0.013		
INT1	-0.031	0.010	0.155	(0.837)	0.960	0.974
INT2	0.019	-0.002	-0.059	(1.023)		
INT3	0.012	-0.008	-0.098	(1.027)		

Notes:

- USEF = Usefulness; EOU= Ease of Use; ENJ = Enjoyment; INT = Intention

- Loadings are shown within parentheses; loadings and cross-loadings are oblique-rotated and were obtained through bootstrapping.

As for the discriminant validity, the goal behind it is to test whether the constructs differ from each other (Bollen, 1989; Chin, Marcolin, & Newsted, 2003; Fornell & Larcker, 1981). I tested discriminant validity by comparing the inter-construct correlations with their respective variance extracted measures (below the diagonal) as well as the square roots of the average variance extracted (on the diagonal) of the constructs. As shown in Table 2, the average variance extracted by each construct was found to be greater than the squared correlations between that construct and every other construct in this study. We can conclude that the discriminant validity of the model constructs was satisfactory.

Table 2: Latent Variables Correlation

	USEF	EOU	ENJ	INT
USEF	(0.916)			
EOU	0.120	(0.929)		
ENJ	0.394	0.543	(0.968)	
INT	0.352	0.490	0.828	(0.962)

Notes:

- USEF = Usefulness; EOU= Ease of Use; ENJ = Enjoyment; INT = Intention

- Square roots of AVEs are shown on diagonal within parentheses.

In assessing the internal consistency reliability, the reliability for all items can be assessed using Cronbach's Alpha test. The Cronbach's alpha test provides an estimate for the reliability based on the indicator inter-correlations (Henseler, Ringle, & Sinkovics, 2009). An acceptable measure for the Cronbach's alpha is 0.7 or above (Nunnally & Bernstein, 1994). Table 1 shows that all constructs in this study passed the threshold mentioned above. In addition to using the Cronbach's alpha, internal consistency reliability can also be measured by testing the composite reliability. In order to possess good reliability, construct's composite reliability is recommended to be 0.70 or above (Hair, Anderson, Norman, & al, 1995; Nunnally & Bernstein, 1994). The composite reliability estimate, unlike the Cronbach's alpha, takes into consideration that indicators have different weights. As shown in Tables 1, composite reliability of all constructs has exceeded the threshold mentioned above and can justify the use of the constructs. Over all, all the scales met the requirements of unidimensionality, convergent, discriminant validity, and internal consistency (Fornell & Larcker, 1981) in order to be included in the structural model.

Table 3: VIF

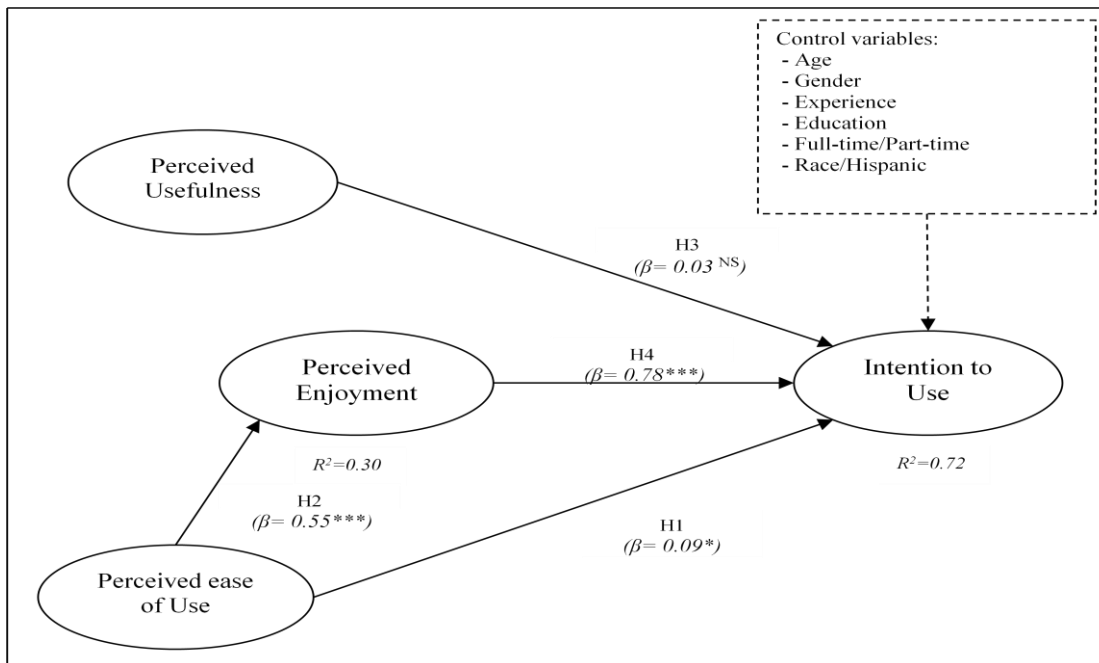
USEF	EOU	ENJ	INT
1.235	1.502	4.073	3.624

When I looked at the large effect of perceived enjoyment and its major responsibility of the explanation of the behavioral intention variance, I suspected that there might be multicollinearity between the constructs. Therefore, I ran a full collinearity test to examine whether there is multicollinearity between variables by assessing the variance inflation factor (VIF) values. Using WarpPLS 2.0 (Kock, 2010), I was able to conduct this test and I found that the VIF values for all constructs were less than the threshold 5 (Hair, Black, Babin, & Anderson, 2010). The highest VIF value was 4.073 for perceived enjoyment, as shown in Table 3. This means that multicollinearity has been ruled out as an explanation for the results using this specific test for the presence of multicollinearity.

RESULTS

After examining the results in terms of paths, only six of all the seven proposed hypotheses were supported (Figure 1). Perceived ease of use (H1) (coefficient=0.09, $p < 0.10$) and perceived enjoyment (H4) (coefficient=0.78, $p < 0.01$) both had significant effects on behavioral intention. Perceived usefulness, (H3) (coefficient=0.03, $p > 0.10$), was not supported. This leads us to also conclude that both H5 and H6 hypotheses were supported since the perceived enjoyment had a quite stronger effect on the intention of employees than that of the perceived usefulness. H2 was supported, showing that perceived ease of use (coefficient=0.54, $p < 0.01$) had a significant positive effect on perceived enjoyment, explaining 30 percent of the variance. All control variables were not significant except for the full-time employment was significant at ($p < 0.10$). In general, the three latent variables in this study, when accounting for control variables, explained 72 percent of the variance of the intention to use social networking by employees.

Figure 1: Results



Notes:

- $*$ = $P < 0.10$; $**$ = $P < 0.05$; $***$ = $P < 0.01$; NS = not statistically significant

DISCUSSION

The proposed research model used for this study was a good fit with the data collected. The three main independent constructs, namely perceived ease of use, perceived enjoyment, and perceived usefulness explained 72 percent of the variance in behavioral intention, after accounting for control variables. Consistent with previous studies, the results of this research indicate that perceived ease of use and perceived enjoyment, except for perceived usefulness were significant in explaining employee's behavioral intention to use social networking, supporting H1 and H4, but not H3.

On the other hand, unlike previous studies (e.g., (Davis, et al., 1992; Igbaria, et al., 1996; Li, et al., 2005; van der Heijden, 2004), this study shows that the explanatory effect of perceived enjoyment (coefficient=0.78, $p < 0.01$) on behavioral intention was much higher than that of perceived ease of use (coefficient=0.09, $p < 0.10$) and perceived usefulness (coefficient=0.04, $p > 0.10$). This result is supporting

H6. This could be explained by the nature of the technology type under study which happened to be a hedonic one. Social networking sites provide personal benefits to individuals such as keeping people in touch with close friends and family members which could contribute to people's perception that social networking sites are fun and enjoyable to use.

As for H6, its support is consistent with van der Heijden's (2004) findings that perceived ease of use is a much stronger predictor than the perceived usefulness. The explanation of this result can be attributed to that for hedonic information systems; the big concern is on reaching the enjoyment and the pleasure part of it through the ease of use of the system rather than the ability of the information system to increase the task performance.

CONCLUSION

This empirical study investigated three main constructs relevant to the explanation of the acceptance of social networking sites by employees, namely: perceived enjoyment, perceived ease of use, and perceived usefulness. The results show that employees use social networking sites mainly because they believe that social networking sites provide them with fun and enjoyment, and secondarily because social networking sites are easy to use. This leads us to our conclusion that the nature of the information system under study plays a big role in the explanation of the technology acceptance model. In this case, perceived enjoyment – representing a hedonic type of information system - was the main construct responsible for the explanation of the behavioral intention to use social networking sites by employees, while perceived ease of use and perceived usefulness lost their predictive power to perceived enjoyment.

Another conclusion from this empirical study is that in a hedonic type of information systems, perceived ease of use is more important to the users than perceived usefulness because the users' main goal in this type of information system is to reach a state of enjoyment and fun and the perceived ease of use is an important means that enables users to reach their goals.

One of the implications of this empirical research is that it is important for system developers to include some aspects of fun and enjoyment in the systems they build in order to increase the system's acceptance by employees. In addition to this implication, it is pivotal that system developers pay much attention to the ease of use when it comes to hedonic types of information systems because this feature helps increase the likelihood of user acceptance.

REFERENCES

Agarwal, R., & Karahanna, E. (2000). Time Flies When You're Having Fun: Cognitive Absorption and Beliefs about Information Technology Usage. *MIS Quarterly*, 24(4), 665-694.

AT&T. (2008). *Social Networking in the Workplace Increases Efficiency*.

Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.

Bennett, J., Owers, M., Pitt, M., & Tucker, M. (2010). Workplace impact of social networking. *Property Management*, 28(3), 138 - 148.

Bollen, K. (1989). *Structure equations with latent variables*. New York: Wiley.

Boyd, D., & Ellison, N. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of*

Computer-Mediated Communication, 13(1), article 11.

Chin, W. W. (1998). Commentary: Issues and Opinion on Structural Equation Modeling. *MIS Quarterly*, 22(1), vii-xvi.

Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and an Electronic-Mail Emotion/Adoption Study. *Information Systems Research*, 14(2), 189-217.

Coyle, C. L. V. H. (2008). Social networking: Communication revolution or evolution?. *Bell Labs Technical Journal*, 13(2), 13-17.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.

Davis, F. D., Bagozzi, R., & Warshaw, P. (1992). Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *Journal of Applied Social Psychology* 22(14), 1111-1132.

Deci, E. L. (1975). *Intrinsic motivation* New York: Plenum Press.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 12, 1143–1168.

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50.

Gu, J.-C., Fan, L., Suh, Y.-H., & Lee, S.-C. (2010). Comparing Utilitarian and Hedonic Usefulness to User Intention in Multipurpose Information Systems. [Article]. *CyberPsychology, Behavior & Social Networking*, 13(3), 287-297.

Hair, Anderson, R. E., Tatham, R. L., & Black, W. C. (1992). *Multivariate data analysis with readings*. New York: MacMillan.

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis*. Upper Saddle River, N.J.; London: Pearson.

Hair, J. J., Anderson, J., Norman, J., & al, e. (1995). *Multivariate data analysis with readings*. Upper Saddle River, NJ: Prentice-Hall.

Henseler, J., Ringle, C. M., & Sinkovics, R. (2009). The use of partial least squares path modeling in international marketing. *Emerald Group Publishing Limited*, 20, 277–319.

Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic Consumption: Emerging Concepts, Methods and Propositions. *The Journal of Marketing*, 46(3), 92-101.

- Igbaria, M., Parasuraman, S., & Baroudi, J. J. (1996). A Motivational Model of Microcomputer Usage. [Article]. *Journal of Management Information Systems*, 13(1), 127-143.
- Kock, N. (2010). Using WarpPLS in E-collaboration Studies: An Overview of Five Main Analysis Steps. *International Journal of e-Collaboration*, 6(4).
- Kock, N. (2011). *WarpPLS 2.0 User Manual*. Laredo, TX: ScriptWarp Systems.
- Leidner, D., Koch, H., & Gonzalez, E. (2010). Assimilating Generation Y IT New Hires into USAA's Workforce: The Role of an Enterprise 2.0 System. *MIS Quarterly Executive*, 9(4), 229-242.
- Li, D., Chua, P., & Lou, H. (2005). Understanding Individual Adoption of Instant Messaging: An Empirical Investigation. [Article]. *Journal of the Association for Information Systems*, 6(4), 102-129.
- Lohmoller, J.-B. (1989). *Latent Variable Path Modeling with Partial Least Squares*. Heidelberg, Germany: Physical-Verlag.
- Merriam-Webster. (2003). Merriam-Webster's collegiate dictionary. In e. resource (Ed.). Springfield, Mass: Merriam-Webster, Inc.
- North, M. (2010). An Evaluation of Employees' Attitudes Toward Social Networking in the Workplace. *Issues in Information Systems, Volume XI* (No. 1).
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory*. New York, NY: McGraw Hill.
- O'Murchu, I., Breslin, J. G., & Decker, S. (2004). Online Social and Business Networking Communities. *Proceedings of ECAI 2004 Workshop on Application of Semantic Web Technologies to Web Communities*, 241-267.
- Patel, N., & Jasani, H. (2010). Social Media Security Policies: Guidelines for Organizations. *Issues in Information Systems, XI*(1), 628-634.
- Sujan, H., Barton, A. W., & Kumar, N. (1994). Learning Orientation, Working Smart, and Effective Selling. *The Journal of Marketing*, 58(3), 39-52.
- Technology, R. H. (2009). Wisle – But Don't's Tweet – While You Work.
- Teo, T. S. H., Lim, V. K. G., & Lai, R. Y. C. (1999). Intrinsic and extrinsic motivation in Internet usage. *Omega*, 27(1), 25-37.
- van der Heijden, H. (2004). User Acceptance of Hedonic Information Systems. *MIS Quarterly*, 28(4), 695-704.
- Venkatesh, V., Morris, M. G., Gordon, B. D., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.