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Affective and Social Factors Influencing the Continuance Intention of Using Social Technology for the Case-based Learning

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The proliferation of social technology poses both a threat and an opportunity for the delivery of traditional case method learning in business schools. This paper extends the expectation confirmation model (ECM) to examine the possibility of delivering the case method learning via social technology. Our regression analysis shows that, in addition to affective factors, the social factor of information and knowledge sharing can help improve the accuracy of predicting a student's continuance intention of using social technology in case method learning. The analysis result leads to theoretical and empirical findings for business schools to consider adopting social technology as the next-generation tool for case method teaching.

Keywords: social network, social technology, e-learning

Introduction

Case method teaching is a widely accepted method of instruction in social and natural sciences. Although this instructional method is used extensively in face-to-face classroom environment, its effective application via social technology remains unanswered. As social technology becomes an integral part of most college students' lives, a growing number of faculty members in business schools are facing the challenge of incorporating social technology into case method teaching. In the meantime, learning about using social technology as an effective online teaching tool may have lasting impact on a student's learning performance. To address this possibility, the first and foremost issue is to understand the belief, attitude, and behavior of college students to continue using social technology in classroom learning. These effective factors are a prerequisite to the understanding of new technology adoption and continuance use. Technology acceptance model (TAM) and expectation confirmation model (ECM) are two salient frameworks used

to assess the affective factors of users with respect to information technology adoption decision. TAM is effective at predicting IT adoption behavior of users in a pre-adoption situation (Davis, 1989), whereas ECM is effective in the post-adoption situation (Bhattacherjee, 2001). Since social computing has been integral to the daily life of most college students, ECM is more appropriate than TAM to help us understand college students' continuance intention of using the technology to facilitate their learning. Subjective norm factors, including perceived usefulness (PU), confirmation, user satisfaction, and continuance intention, are key elements in ECM model. A confirmation experience can influence perceived usefulness (PU), thereby affecting user satisfaction and continuance intention. The application of social technology as a business-case learning tool requires that students be formed in groups, as well as encouraged to converse and share divergent ideas. The inclusion of these three factors – grouping, conversing, and sharing – has the potential of improving the accuracy of ECM in predicting intention of college students to continue using social technology as a business case-based learning tool. This research project has one primary goal: to understand the influence of affective factors (e.g. beliefs and values) and social factors (e.g. grouping, conversing and sharing) on the adoption of social media for case method learning.

The remainder of the paper is structured as follows. The next section is a thorough discussion of affective and social factors pertinent to the use of social learning technology for business case-based learning. The literature review will lead to the development of hypotheses on the relationships among these factors. We will then propose a theoretical framework to summarize all hypotheses. Research methodology is presented to help readers understand the nature of our data, as well as assess the reliability and validity of our empirical data. Data analysis will be conducted to report findings on our proposed hypotheses. The paper will be concluded with discussion, implications, limitations, and future research directions.

Theoretical Development

Case Method Learning Effectiveness via Social Technology

Case method learning is a widely accepted practice in business schools. Social networking is essential to case method learning because group members need to converse with each other, share ideas, and solve business problems together (Voigt, 2010). The success of case-based learning depends on how well learners are socially connected, and if social bonds among team members are formed. A well-connected social network can help promote learning in the community of practice (Voigt & MacFarlane, 2010). Social technology is proliferating and transforming the way people interact with each other. Americans are spending an average of 25 per-

cent of their time on social networking technology (The Nielsen Company, 2010). In some countries, the usage rate can be as high as 40 percent (Piskorski & McCall, 2010). College students are one of those groups embracing social networking technology, and using them in every aspect of their life. It is customary to see students 'always staying on' social technology to check news feeds, IM friends, update status, and track upcoming events inside and outside the classroom. The new trend is affecting the learning behaviors and styles of college students (Baird, 2005). An increasing number of administrators and educators find incorporating social technology into the existing curriculum a challenge. On the other hand, social technology may be an effective medium to help deliver effective case method instruction because of its nature to support social interactions. Social learning theory asserts that social interactions are essential to the social learning process because students need to learn from each other via observation, imitation, and modeling (Bandura, 1977). After each social interaction, individuals learn to establish their behavior models by observing and imitating other individuals' behaviors or through the enforcement of the media and the environment. Learning by modeling takes place in four sequential steps: (1) attention, (2) retention, (3) motor reproduction and (4) motivation and reinforcement (Bandura, 1977). Enforcement forces, such as the duration of training, praise, motivation and attention of others, allows learning to move along these four steps against counter forces and lead to better cognitive learning (Yi & Davis, 2001). Social technology has the potential of enforcing each of these four sequential steps. For instance, peer-to-peer pressure on a social site is a great motivation for a student to make visible contribution to his/her team. Divergent ideas about a posted question can stimulate discussion and lead to a higher degree of attention and retention.

The Influence of Confirmation Experience on Perceived Usefulness

A user will experience a positive confirmation experience if his/her post-adoption experiences exceed pre-adopted expectations, according to the cognitive dissonance theory. PU is the degree to which a user believes that a particular information system would enhance his or her job performance (Davis, 1989). A positive confirmation experience can increase the user's PU for the adopted information system (Zviran, Pliskin, & Levin 2005; Amoakogyampah, 2007). Perceived usefulness in the context of using social technology to learn business cases should help users understand main concepts of a business case and solve problems related to the case. After using social technology to learn a business case, college students should have either a positive or a negative confirmation experience. If the confirmation experience is positive, it shall enhance the student's perceived

usefulness of social technology as a learning tool to improve his/her understanding of a business case. We therefore propose the following hypotheses:

Hypothesis 1 Confirmation experience of using social technology to learn business cases has a positive influence on a student's perceived usefulness of social technology to acquire IT concepts and solve business case-related problems.

The Influence of Perceived Usefulness and Confirmation Experience on User Satisfaction

Perceived usefulness is 'the degree to which a person believes that using a particular system would enhance his or her job performance' (Davis, 1989). A positive confirmation experience can increase the satisfaction level of a user (Lee, 2010; Ho, 2010). These two affective factors are positively correlated with user satisfaction because they are the user's perceptions based on the accumulated experiences of using a particular information system. The higher the perceived usefulness or the more positive the confirmation experience, the more likely a user is satisfied with the adopted information system (Roca, Chiu and Martinez, 2006). In addition, the user's perceived usefulness can increase his/her continuance intention of using a particular information system (Ajzen & Fishbein, 1980). Social technology has been primarily used as a tool for networking. To incorporate the social technology into the business case-based learning, it is important to first convince users regarding the possibility of turning social technology into a learning tool. At the experimental stage, it is important to encourage users to assimilate social technology in their business case-based learning by improving their perceived usefulness and confirmation experiences. Doing so can have the potential of increasing user satisfaction. We therefore propose the following hypotheses:

Hypothesis 2 A user's perceived usefulness of using social technology to learn business cases has a positive influence on a student's intention of continuously using social technology to acquire IT concepts and solve business case-related problems.

Hypothesis 3 A user's perceived usefulness of using social technology to learn business cases has a positive influence on a student's satisfaction with the use of social technology to acquire IT concepts and solve business case-related problems.

Hypothesis 4 A positive confirmation experience of using social technology to learn business cases has a positive influence on a student's satisfaction with the use of social technology to acquire IT concepts and solve business case-related problems.

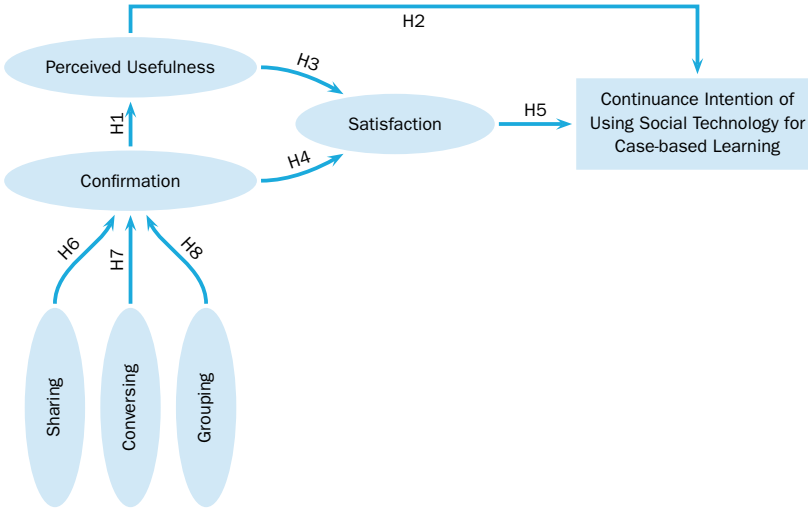

Figure 1 Theoretical Framework

The Influence of Satisfaction on the Continuance Intention of Adopting Social Technology

When users are satisfied with a new technology, they are more likely to continue using the technology. The use of social technology to acquire IT concepts and solve business case-related problems is a new experience for our students. When students are satisfied with the use of social technology for case method learning, they are more likely to continue to use the technology to perform the same task in the future.

Hypothesis 5 A user's satisfaction with the use of social technology to learn business cases has a positive influence on a student's confirmation experience with the use of social technology to acquire IT concepts and solve business case-related problems.

The Influence of Social Factors on the Continuance Intention of Social Technology

As social technology proliferates, many scholars recognize the importance of incorporating social factors (e.g. interpersonal influence, community, intimacy, familiarity, and self-identity) into the ECM model (Kim, 2011). The findings of their studies confirm the importance of social factors to promote the adoption of users for social technology. However, little research has investigated the potential influence of three social factors, including grouping, conversing, and sharing, on the use of social technology for learning purpose. These three social factors are particularly important because these

activities are indispensible to the success of business case-based learning courses. Replicating these factors in the online social sites could be as important as it is in the traditional face-to-face environment. However, the level of influence of each of these three social factors on a learner's confirmation experience has not been explored.

Hypothesis 6 The more frequently a learner uses social technology to share case-related information with other students, the more likely he/she will have a positive confirmation experience.

Hypothesis 7 The more frequently a learner uses social technology to converse with other students on case-related issues, the more likely he/she will have a positive confirmation experience.

Hypothesis 8 The more frequently a learner uses social technology to discuss with other group members on case-related issues, the more likely he/she will have a positive confirmation experience.

Research Methodology

A field experiment methodology was conducted because it has the merits of 'testing theory' and 'obtaining answers to practical questions' (Kerlinger & Lee, 2000). The exploratory nature of the study requires that variables (e.g., interaction modes and usage patterns) under investigation be carefully observed and interpreted. The setting for the field experiment is three information systems classes offered by a public university in Thailand. About 30 students in each class session participated in this study. A total of 90 students in the college of business in this university were invited to spend two weeks to discuss the Harvard business case 'Apple Inc.' on the social site (http://www.edmodo.com). Instructor, course materials, learning content, and evaluation criteria were controlled to be the same in all three class sessions. A professional translator was used to translate English materials into Thai to help students in Thailand understand the learning materials. All subjects followed the four learning phases to complete each case discussion: (1) introduction of Edmodo and case-related concepts, (2) student case analysis, (3) output generation and discussions, and (4) follow-up and evaluation. A survey was conducted with subjects to understand the influence of affective and social factors on their intention of using the social technology as a case method learning tool. We also monitored the usage behaviors (e.g. the number of messages posted, comments and responses) on Edmodo and assessed the impact of these behaviors on individual learning performance and team effectiveness.

Development of Measurement Instrument

To improve the validity of our survey instrument, we adopted the instruments used in previous literature and modified them for the purpose of this

study. Questions used to measure affective factors, including perceived usefulness, confirmation experience, satisfaction, and continuance intention, were modified from Bhattacherjee's (2001) study. Questions used to measure social factors, including sharing, conversing, and grouping were modified from Kietzmann, Hermkens, McCarthy, and Silvestre's (2011) study. Since the original questions were in English, we hired a professional translator in Thailand to translate the survey instrument into Thai so that students could comprehend. To achieve a reliable content validity, two information systems experts were asked to review and edit the translated document. Students participating in this study used the revised survey to report their experiences of using Edmodo for case method learning.

The internal reliability of the questionnaire scales was checked using the Cronbach's coefficient (α) for 28 statement items. The alpha values for all constructs, other than the sharing construct, were greater than 0.7, the threshold value for high reliability (Table 1). The alpha value of the sharing construct was 0.42, lower than o.5, the acceptable reliability. We therefore removed the third item in this construct and recalculated its alpha value. The new alpha value was increased to 0.643, exceeding the minimum acceptable value for reliability test. Therefore, the overall reliability of all constructs was deemed acceptable and all constructs were included in further data analysis.

Demographics

Although 90 students participated in this study, filling out the survey was voluntary. A total of 78 responses were returned as a result. The demographic profiles are presented in Table 2. It is noted that females make up the majority of participants (80.77%). All subjects were freshmen and had not claimed their major. Subjects in this study hold the primary interest of majoring in accounting (43.48%), followed by finance (35.87%), and marketing (16.3%). About 21.79% of subjects had experiences of using social network sites, such as Facebook, Hi5, Twitter, and YouTube. All subjects (100%) had limited experiences of using Edmodo. No one used the application longer than 1 year. Uploading photos (80.77%) makes up the majority of Edmodo experiences, followed by conversation, discussion, and sharing with each other, 1–3 hours each time (57.69%), and learning course materials 4–6 hours per day (38.46%).

Data Analysis Results

The multiple regression analysis was adopted to investigate the relationships among affective factors, social factors, and expectation confirmation experience.

As shown in Table 3, the results indicated that a positive confirmation experience of using social technology to learn business cases has a sig-

Table 1 Reliabilities and Composite Mean for Each Constructs

Factor	(1)	(2)	(3)	(4)
Confirmation Experience	3	3.48	0.65	0.71
Conf. exp. of using Edmodo to learn is better than I expected		3.49	0.72	
Service of Edmodo is better than I expected		3.43	0.64	
Overall, expectation to use Edmodo as expected		3.52	0.60	
Perceived Usefulness	10	3.29	0.69	0.80
Time passes quickly when I used Edmodo		2.99	0.69	
Nothing bothered me when I used Edmodo		2.65	0.64	
I forgot everything when I used Edmodo		2.39	0.78	
Learning to operate Edmodo is easy for me		3.51	0.73	
Edmodo is very easy to understand		3.42	0.75	
I find Edmodo easy to use		3.55	0.75	
Edmodo could enhance my learning		3.66	0.66	
Edmodo could enhance my ability		3.58	0.65	
Edmodo could improve the understanding of each topic		3.51	0.66	
Overall Edmodo could have the potential about the concepts		3.68	0.61	
Satisfaction	3	3.77	0.56	0.82
I am satisfied with Edmodo		3.82	0.55	
Edmodo is a good choice for me		3.82	0.60	
Overall, Edmodo can respond to my needs		3.70	0.54	
Sharing	3	3.67	0.74	0.63
I would like to share with my friends		3.67	0.57	
I would like to post the answer of assignment		3.66	0.90	
Conversing	4	3.14	0.84	0.72
I would like to post the information		2.75	0.86	
I would like to check friend's post		3.09	0.84	
I would like to reply to my friends		2.86	0.82	
I would like to check my grade book		3.87	0.83	
Grouping	2	1.52	0.75	0.75
I would like to use the appointment calendar with my friends		1.38	0.72	
I would like to use supporting community for learning		1.68	0.78	
Continuance Intention	3	3.01	0.71	0.71
I will continue to use Edmodo in the future		3.47	0.65	
I will continue to use Edmodo for learning*		3.32	0.73	
I aim to Edmodo's usefulness		2.26	0.74	

Notes Column headings are as follows: (1) no. of items, (2) composite mean, (3) standard deviation, (4) reliability. * Instead of face-to-face learning.

nificant influence ($\beta = 33.8$; $p = 0.003 < 0.05$) on a student's perceived usefulness of social technology to acquire IT concepts and solve business case-related problems. Thus, Hypothesis 1 was confirmed.

Table 2 Demographic Data Summary Categorized by Students Who Used the Edmodo for Case-Based Learning

Features	Amounts	Percent
Gender		
Male	15	19.23
Female	63	80.77
Expected major (choose more than one)		
Accounting	40	43.48
MIS	0	0.00
Marketing	15	16.30
Finance	33	35.87
IBLT	3	3.26
HO	0	0.00
RE	0	0.00
OM	0	0.00
Experience in using online Social Networking Site such as Facebook, Hi5, Twitter, YouTube		
Less than 1 year	2	2.56
1 to 2 years	13	16.67
2 to 3 years	16	20.51
3 to 4 years	13	16.67
4 to 5 years	17	21.79
More than 5 years	17	21.79
The duration of Edmodo use in hours per week		
Less than hour	31	39.74
1 to 3 hours	40	51.28
4 to 6 hours	6	7.69
7 to 9 hours	1	1.28
More than 10 hours	0	0.00

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As shown in Table 5, the results indicated that perceived usefulness ($\beta = 33.3$; $p = 0.000 < 0.005$), and satisfaction ($\beta = 39.7$; $p = 0.002 < 0.05$) when using social technology to learn business cases have a positive influence on a student's intention to continue using social technology to acquire IT concepts and solve business case-related problems. Therefore, Hypotheses 2 and 5 were confirmed.

As shown in Table 6, the results indicated that the social factor of sharing ($\beta = 29.0$; $p = 0.015 < 0.05$) information and knowledge with each other has a positive influence on a student's intention to continue using social technology to acquire IT concepts and solve business case-related problems. Therefore, Hypothesis H6 was confirmed. In contrast, the social factors of grouping ($\beta = -10.1$; $p = 0.396 > 0.05$), and conversing ($\beta = 4.4$; $p = 0.715 > 0.05$) have no significant influences on a student's intention to

Table 2 *Continued from the previous page*

Features	Amounts	Percent
Experiences with Edmodo		
Less than 1 year	78	100.00
1 to 2 years	0	0.00
2 to 3 years	0	0.00
3 to 4 years	0	0.00
4 to 5 years	0	0.00
More than 5 years	0	0.00
How many hours I used Edmodo for learning		
Less than hour	4	5.13
1 to 3 hours	27	34.62
4 to 6 hours	30	38.46
7 to 9 hours	11	14.10
More than 10 hours	6	7.69
Duration of Edmodo use for the knowledge or discussion sharing per times		
Less than hour	6	7.69
1 to 3 hours	45	57.69
4 to 6 hours	24	30.77
7 to 10 hours	2	2.56
More than 10 hours	1	1.28
The Frequency of Edmodo use for education per times		
13 times	18	23.08
46 times	26	33.33
79 times	20	25.64
1012 times	6	7.69
1315 times	4	5.13
More than 15 times	4	5.13
Experienced uploading a photo on Edmodo		
Yes	63	80.77
No	15	19.23

Table 3 The Influence of factor on the Perceived Usefulness of Edmodo

Independent	Standardized Coefficients β	t	Sig.
Constant		71.313	0.000
Confirmation Experience	33.8	3.089	0.003*

Notes * $p < 0.05$. $R^2 = 0.114$. Dependent variable: Perceived Usefulness.

continue using social technology to acquire IT concepts and solve business case-related problems. Therefore, Hypotheses H7 and H8 were rejected. Table 7 summarizes all hypothesis testing results.

Table 4 The Influence of factor on the Satisfaction with Edmodo

Independent	Standardized Coefficients β	t	Sig.
Constant		–5.112	0.000
Perceived Usefulness	0.542	5.163	0.000*
Confirmation Experience	0.009	0.081	0.936

Notes * $p < 0.05$. $R^2 = 0.298$. Dependent variable: Satisfaction.

Table 5 The Influence of factor on the Continuance Intention of Edmodo

Independent	Standardized Coefficients β	t	Sig.
Constant		–2.685	0.009
Perceived Usefulness	0.333	2.724	0.008*
Satisfaction	0.397	3.282	0.002*

Notes * $p < 0.05$. $R^2 = 0.412$. Dependent variable: Continuance Intention.

Table 6 The Influence of Sharing, Grouping, Conversing on Confirmation Experience

Independent	Standardized Coefficients β	t	Sig.
Constant		6.621	0.000
Sharing	0.290	2.457	0.016*
Grouping	–0.101	–0.854	0.396
Conversing	0.044	0.366	0.715

Notes * $p < 0.05$. $R^2 = 0.092$.

Discussion

This study has one primary research objective: to understand the potential contribution of affective and social factors to a student's decision of adopting social technology for case method learning. Since all subjects had prior experiences in using the adopted social technology Edmodo, the emphasis of this study was on post-adoption process. We postulated that a positive confirmation experience could have significant influences on both perceived usefulness and user satisfaction, thereby affecting the continuance intention of users in adopting social technology as a case method learning tool.

The data analysis results indicate that direct influence of confirmation experience on user satisfaction does not exist. Rather, subjects in this study expressed increased perceived usefulness after receiving a confirmation experience. The influence persisted after the user's perceived usefulness toward social technology was formed. A similar magnitude of positive relationship also existed between perceived usefulness and continuance intention. These findings suggested that an instructor, who is interested in using social technology to deliver case method instruction, should focus on increasing the perceived usefulness of social technology rather than learner satisfaction. A case method instructor may want to thoroughly explain the potential usefulness of using social technology to his/her students. Conse-

Table 7 Summary of Hypotheses Test Results

Hypothesis	Result
The Influence of Confirmation Experience on Perceived Usefulness	
Hypothesis 1 *Confirmation experience of using social technology to learn business cases has a positive influence on a student's perceived usefulness of social technology to acquire IT concepts and solve business case-related problems.*	Confirmed
The Influence of Perceived Usefulness and Confirmation Experience on User Satisfaction	
Hypothesis 3 *A user's perceived usefulness of using social technology to learn business cases has a positive influence on a student's satisfaction with the use of social technology to acquire IT concepts and solve business case-related problems.*	Confirmed
Hypothesis 4 *A positive confirmation experience of using social technology to learn business cases has a positive influence on a student's satisfaction with the use of social technology to acquire IT concepts and solve business case-related problems.*	Disproved
The Influence of Social Factors on the Continuance Intention of Social Technology	
Hypothesis 2 *A user's perceived usefulness of using social technology to learn business cases has a positive influence on a student's intention of continuously using social technology to acquire IT concepts and solve business case-related problems.*	Confirmed
Hypothesis 5 *The more satisfied with the use of social technology, the more likely a learner will continue to use social technology in the future.*	Confirmed
The Influence of Social Factors on the Continuance Intention of Social Technology	
Hypothesis 6 *Information and knowledge sharing using social technology has a positive influence on a student's confirmation experiences of using social technology to acquire IT concepts and solve business case-related problems.*	Confirmed
Hypothesis 7 *Grouping via social technology has a positive influence on a student's confirmation experiences of using social technology to acquire IT concepts and solve business case-related problems.*	Disproved
Hypothesis 8 *Conversing with each other via social technology has a positive influence on a student's confirmation experiences of using social technology to acquire IT concepts and solve business case-related problems.*	Disproved

quently, a learner will be satisfied with the use of social technology and/or will have higher intention of continuing to use social technology for next case method learning assignment.

Sharing information and knowledge via social technology is the only social factor with an impact on the confirmation experience of subjects in this study. Grouping and conversing features of social technology have little impact on the student's confirmation experiences. These findings indicate that social technology is effective at helping learners share and exchange information and knowledge in the process of learning a business case. The more useful information and knowledge shared on a social site, the higher intention the user has to continue using the social site to learn business cases. A case method instructor may want to encourage team members to disseminate useful information and knowledge to help each other complete

case-related assignments. Although social technology can be also assimilated to facilitate the grouping and conversing activities, they add little values to the user's continuance intention. An instructor may want to consider adopting other communication (e.g. instant messenger or email) and collaboration technologies (e.g. Google Doc. and Windows Live) for conversing and grouping activities, respectively.

Implications

We extended the existing ECM framework by including three social factors – sharing, grouping, and conversing. We used the extended ECM to investigate the contribution of these three social factors and affective factors to the user's satisfaction and continuance intention. Our findings suggest that not all social factors are meaningful in the context of case method learning. Sharing is a much more important social factor than grouping and conversing to increase the learner's intention of continuing the use of social technology to learn business cases. As social technology proliferates, researchers who are interested in social technology adoption may want to investigate other social factors (e.g. trust, reputation, identity, and presence) that may be pertinent to different learning tasks (e.g. skills-based training, situated learning, conceptual acquisition).

The findings of this study further affirm that perceived usefulness has a direct impact on user satisfaction and continuance intention of adopting a new technology. This study makes contribution by substantiating that the logical relationship exists in the context of social technology adoption for case method learning. This study further suggests that, although a user's confirmation experience plays an important role in increasing learner's perceived usefulness, the affective factor does not have a direct impact on user satisfaction. The instructor, who conducts the case method instruction, may want to establish the sequence of developing a positive confirmation experience, as well as increasing perceived usefulness, user satisfaction, and continuance intention.

As social technology continues to evolve, more features (e.g. RSS, cloud computing, video conferencing) will be available for an instructor to add to an online course. An instructor may want to spend efforts in learning not only about the applicability of these features in the case method instruction, but also about the perceived usefulness of a learner. The understanding of learner's perceived usefulness of social technology features can help an instructor to better understand his/her student's intention of continued use for the purpose of case method learning.

Limitations and Research Directions

A small sample size is a major limitation of this study. There are seven variables investigated in this study. A rule of thumb is that a variable needs

at least 10 observations. Since our proposed framework includes seven variables, at least 70 observations are deemed appropriate. There are 78 subjects in our sample. Our sample size barely meets the minimum requirement. A large sample size has the potential of minimizing Type I and II errors.

More than 80% of subjects in this study are females. The findings of this study warrant careful interpretations because gender may have potential influence on the findings of this study. Future research may want to assess the potential influence by controlling the sample size of males and females.

In addition to the evaluation of affective and social factors, future research may want to examine the efficacy of online social media in improving individual and group performance. Individual performance may include conceptual acquisition, analytical skills, and problem solving. Group performance may include conflict resolution, decision-making, and leadership. These performance measurements generally fall into three categories: student behavior, generative activities, and analytical activities (Wasserman, 1994). A correlation analysis of learning performance and continuance intention can provide insights on the perceived usefulness and actual usefulness of social technology for case method learning.

A recent study surveyed 50,000 users of 5 social platforms in 18 countries, including blogging, managing social network profile, sharing photos, sharing videos, and microblogging, and found that not everyone in the world have been using social technology in the same manner (Piskorski & McCall, 2010). For instance, Japanese primarily use social websites to network with their closest friends, whereas Americans do so to extend their social circle virtually. Blogging is a major tool for people in Eastern countries to stay in touch with families and friends. In contrast, the Westerns use blogs to publish their thoughts.

Although Edmodo is a social technology purposely designed to facilitate the online learning, learners from different countries may have different receptivity for the use of this social technology for case method learning. The findings of this study can only suggest how college students in Thailand are susceptible to the influence of affective and social factors in their decision of adopting social technology as an online tool to learn business cases. Future research may want to experiment with Edmodo on other groups of subjects with different cultural backgrounds.

Conclusions

The importance of social technology is growing in campus as college students are embracing it in every aspect of their life. Many instructors in the college of business find integrating social technology in their course to be challenging. This study confronts the pedagogical challenge by conducting

an experiment with 90 subjects in a Thai university to learn about their continuance intention of using social technology to learn business cases. All subjects were divided into teams and had two weeks of learning a Harvard business case before filling out a survey to report their individual learning experiences. Statistical analysis of our collected data shows that perceived usefulness is an important affective factor leading to user satisfaction and user's continuance intention. Case-related information sharing is an important social factor having a direct impact on learner's confirmation experience. An instructor who is interested in assimilating social technology for case method instruction may want to take affective and social factors into consideration.

References

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Amoakogyampah, K. (2007). Perceived usefulness, user involvement and behavioral intention: An empirical study of ERP implementation. *Computers in Human Behavior, 23*(3), 1232–1248.

Alavi, M. (1994). Computer-mediated collaborative learning: An empirical evaluation. *MIS Quarterly, 18*(2), 159–174.

Baird, D. (2005). Neomillennial user experience design strategies: Utilizing social networking to support 'always on' learning styles. *Journal of Education Technology Systems, 34*(1), 5–32

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bhattacherjee, A. (2001). Understanding information systems continuance: An expectation confirmation model. *MIS Quarterly, 25*(3), 351–370.

Christensen, R., & Hansen, A. (1981). *Teaching and the case method.* Boston: Harvard Business School Press.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3): 319–340.

Ho, C.-H. (2010). Continuance intention of e-learning platform: Toward an integrated model. *International Journal of Electronic Business, 8*(3), 206–215.

Kerlinger, F., & Lee, H. (2000). *Foundations of behavioral research.* Orlando, FL: Harcourt College Publishers.

Kietzmann, J. H., Hermkens, K., McCarthy, I. P, and Silvestre, B. S. (2011). Social Media? Get Serious! Understanding the Functional Building Blocks of Social Media. *Business Horizons, 54*(3), 241–251.

Kim, B. (2011). Understanding antecedents of continuance intention in social-networking services. *Cyber Psychology, Behavior, and Social Networking, 14*(4), 199–205.

Lee, M.-C. (2010). Explaining and predicting users' continuance intention toward e-learning: An extension of the expectation-confirmation model. *Computers & Education, 54*(2), 506–516.

Piskorski, M. J. & McCall, T. (2010). Mapping the social internet. *Harvard Business Review, 88*(7–8), 32–33.

Roca, J. C., Chiu, C.-M., & Martinez, F. J. (2006). Understanding e-learning continuance intention: An extension of the Technology Acceptance Model. *International Journal of Human-Computer Studies, 64*(8), 683–696.

The Nielsen Company. (2010, August 2). *What americans do online: Social networking and games dominate.* Retrieved from http://blog.nielsen.com/nielsenwire/online_mobile/what-americans-do-online-social-media-and-games-dominate-activity/

Wasserman, S. (1994). *Introduction to case method teaching: A guide to the galaxy.* New York, NY: Teachers College Press.

Voigt, C. (2010). A Pattern in the making: The contextual analysis of electronic case-based learning. In P. Goodyear & S. Retalis (Eds.), *Technology-enhanced learning: Design Patterns and Pattern Languages* (pp. 107–122). Rotterdam, The Netherlands: Sense Publishers.

Voigt, C. & MacFarlane, K. (2010, September–October). The affective domain and social networking: Definitorial issues and misleading assumptions. Paper presented at the Workshop during 5th European Conference on Technology Enhanced Learning, Barcelona, Spain.

Yi, M. U., & Davis, F. D. (2001). Improving computer training effectiveness for decision technologies: Behavior modeling and retention enhancement. *Decision Sciences, 32*(3), 521–544.

Zviran, M., Pliskin, N., & Levin, R. (2005). Measuring user satisfaction and perceived usefulness in the ERP context. *Journal of Computer Information Systems, 45*(3), 43–52.

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