

Factors Affecting Students' Behavioral Intention to Use University's Social Media: A Case Study of Public Universities in Thailand

Poom Tantipongnant^{1*}, Prin Laksitamas²

Doctor of Business Administration Program

38 Petkasem Road, Phasicharoen, Bangkok 10160

Email: iamboom@hotmail.com^{1*}, drprineau@gmail.com²

Abstract

The number of social media opportunities provided by universities continues to grow in Thailand. Many public universities have begun incorporating these social media tools such as Facebook and Line into their marketing mix to connect with everyone. In this study, we aim to investigate factors that affect students' behavioral intention to use university's social media for three different faculties from well-known public universities in Thailand. A sample of 230 freshmen university students took part in the research. The proposed model was developed based on the technology acceptance model (TAM) and the adoption process was explained by using the Structural Equation Modeling (SEM). One of interesting results of this study is that both self-efficacy and subjective norm play an important role in affecting students' attitude towards social media and behavioral intention to use social media.

Keywords: social media; technology acceptance model; structural equation modeling; self-efficacy; subjective norm

1. Introduction

The use of social media by institutions of higher education to market themselves to potential students is a relatively new phenomenon [1], [2], [3]. Recently, public universities have begun incorporating social media tools into their marketing mix to connect with everyone, from prospective students to alumni. However, little reliable research existed to indicate whether these networks were an appropriate or effective recruitment and/or engagement resource for colleges or universities to use. Nowadays the landscapes of student engagement for higher education centers in Thailand are constantly changing. It is getting tougher to compete in an environment of decreasing budgets and increasing competition. Currently, this makes it even more important for public universities and institutions because they have to recruit students as well. Many universities are now facing intense pressures to adapt to the change by becoming more prompt and efficient in achieving their recruitment and

engagement goals. However, universities face several challenges in prioritizing and optimizing their recruitment and engagement efforts. These challenges include the increasing complexity of recruitment practices with the emergence of controversial channels such as commissioned agents, as well as the changing communication and decision-making process of prospective students using new channels such as social media. The use of social media by various institutions is presented as follows.

Constantinides & Stagno [5] surveyed 400 Dutch students in their last two years of high school to determine the impact that social media have on their decision to attend a particular college. The findings of this study confirmed those reported in Stagno, as the majority of students ranked social media last on a list of information sources that affect their college decisions. Glassford [7] investigated how Bowling Green State University is leveraging social and digital media for recruitment purposes. The majority of respondents found Facebook and YouTube “somewhat effective” in obtaining admission-related information. However, the response rate for this study was only 3.8%, thus raising questions regarding its representativeness. Merrill [8] sought to determine if universities are utilizing social media for international recruitment and outreach

efforts. The respondents indicated that social media provide greater potential than traditional methods, such as international travel, for recruitment events and direct mailings. Advertising on social media is more cost-effective as compared to traditional methods. Admissions officers also preferred social media as a recruitment strategy because (1) it allows them ‘direct contact’ with prospects, and (2) it expands the recruitment base, especially with respect to international students. Stageman [9] conducted a case study to understand how prospective students use social media to communicate with higher education institutions from the beginning of the application process up to the decision-making point. Stageman’s study also revealed that incoming freshmen find university-sponsored social media useful in helping them to establish two-way communication with university officials, build a network of friends, establish a personal identity, and make a smooth transition from home life to campus life. Spraggon [10] investigated the use of social media as marketing tools for undergraduate business schools, collecting data from 20 undergraduate business school websites and conducting interviews with marketing officers at selected institutions. Based on the findings, he recommended admissions officers draft a strategy that takes into

consideration audience, objectives, tactics, tools, and metrics before engaging in social media marketing. Varsity Outreach [11] surveyed 2,000 colleges and universities to determine if they were using Facebook to recruit new students. More than half of the respondents considered Facebook a “very important” admissions tool. Colleges and universities further reported using other social networking platforms including Twitter, YouTube, and blogs. Finally, the findings also provided some reasons as to why institutions of higher education are not using Facebook as a recruiting tool.

Consequently, both developers and users of social media need more understanding of how students perceive and react to elements of social media through university’s social media website along with how to most effectively apply a social media approach to enhance using and understanding. Therefore, it is necessary to conduct research that deals more intensively with students’ perception of, attitude towards, and intention to use social media.

2. Hypotheses

This study proposed an integrated theoretical framework of public university students’ social media acceptance and intention to use based mainly on the technology acceptance model (TAM) [6]. The objectives of

the study were to analyze the relationship of university freshmen students’ intention to use social media with selected constructs such as their attitude, perceived usefulness, perceived ease of use, self-efficacy of social media, subjective norm and system accessibility, and to develop a general linear structural model of social media acceptance of university students that would provide an educator or university manager with implications for better implementing social media.

In accordance with the previously stated objectives and consistent with related literature, this study tested the following hypotheses:

H₁: University students’ behavioral intention to use social media is affected by their attitude (H₁₁), perceived usefulness (H₁₂), perceived ease of use (H₁₃), social media self-efficacy (H₁₄), subjective norm (H₁₅), and system accessibility (H₁₆).

H₂: University students’ social media attitude is affected by their perceived usefulness (H₂₁), perceived ease of use (H₂₂), social media self-efficacy (H₂₃), subjective norm (H₂₄), and system accessibility (H₂₅).

H₃: University freshmen students’ perceived usefulness of social media is affected by their perceived ease of use (H₃₁), social media self-efficacy (H₃₂), subjective norm (H₃₃), and system accessibility (H₃₄).

H_4 : University freshmen students' perceived ease of use of social media is affected by their social media self-efficacy (H_{41}), subjective norm (H_{42}), and system accessibility (H_{43}).

3. Research Design

The research applies the theoretical conceptual framework based on the combination of Behavioral Intention Theories including: "Theory of Planned Behavior (TPB)", "Technology Acceptance Model (TAM)", and "Unified Theory of Acceptance and Use of Technology (UTAUT)". However, considering the fact that UTAUT and TPB are extensions of TAM [10], the research framework of this study is generally designed based on the Technology Acceptance Model. Figure 1 depicts the original TAM.

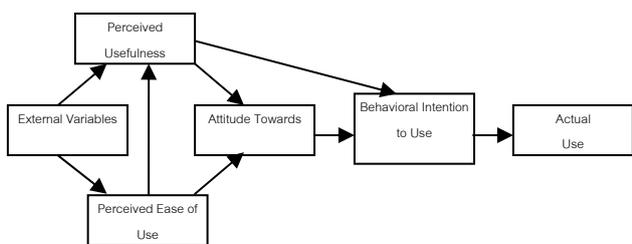


Fig. 1. The original Technology Acceptance Model (TAM).

Based on the previous research, a proposed model was developed (See Figure 2). The latent variables (arrows linking constructs) specify hypothesized causal relationships in the direction of arrows. The observed variables (arrows between constructs and indicators) symbolize measurement validity. Cognitive constructs are perceived ease of use

and perceived usefulness. Attitude is considered an affective construct. Intention to use can be regarded as a behavioral construct. In the proposed model, S, N, and SA represent observed exogenous indicators and U, E, A, and B represents observed endogenous indicators.

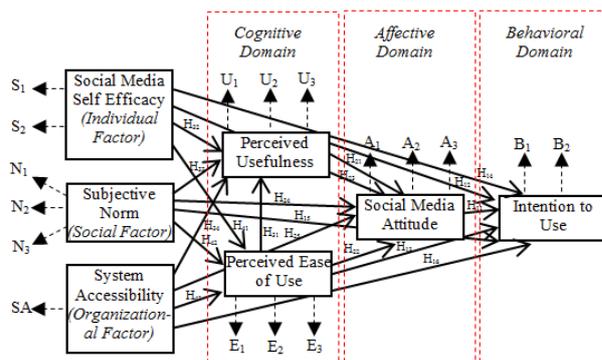


Fig. 2. The proposed model based on the original TAM.

3.1 Sample and Procedure

The population in the study consists of university undergraduate students from three different faculties of three well-known public universities, in Thailand. There are approximately 500 ($N = 500$) first-year undergraduate students from three different faculties (from three universities). The sample size for students is calculated based on Yamane's formula. The calculated sample size is 222. Thus, 230 questionnaires were distributed and collected. A sample size of 230 subjects (> 222) would be appropriate, if one wanted to use LISREL [4].

Based on demographic information of the sample, the reports were summarized as follows. Maximum respondents of our sample

size truly understood and considered the term social media as the interaction among people in which they created, shared, and/or exchanged information and ideas in virtual communities and networks. The number of times respondents used or accessed social media per day was equal or higher than 3 times. They have ever had prior experience of using social media - either personally or professionally. The frequency of using social media for learning or study purposes was high. Out of total 230 sample size, 168 of the cases chose "high or highest" to use social media for search purposes. Almost a "rather fair" number of students currently were aware of the existence of social media at their university. They showed more interest to search information via their university's social media.

3.2 Instrumentation

The instrument was developed by the researcher based on the objectives of the study and previous literature review. Part I was designed to identified demographic attributes of the respondents. It contained demographic items such as gender, academic year, the meanings of social media, the number of times respondents used or accessed social media per day, prior experience of using social media - either personally or professionally, the frequency of using social media for learning or studying

purposes, awareness of the existence of social media at their university, and searching for information from the university's social media in everyday life. Part II consisted of 4 sub-sections as follows: perceived usefulness, perceived ease of use, attitude, and behavioral intention. The questions in Part III were developed by the group of researcher to measure social media self-efficacy. It was measured by 2 important indicators: confidence in searching information in the social media application and degree of essential skills for using social media. The questions in Part IV consisted of 2 sub-sections: subjective norms and system accessibility. All constructs were measured on 7-point Likert-type scales, from 1 (strongly disagree) to 7 (strongly agree).

3.3 Statistical Procedure

Data collected by the questionnaire were coded by a group of researcher. Descriptive statistical analyses such as mean, standard deviation, frequency, percent, and correlation between variables were implemented using the Statistical Package for the Social Sciences (SPSS) software. LISREL Windows version 9.1 was employed in order to test the hypotheses by the Structural Equation Modeling (SEM).

4. Analysis of the Proposed Model

Two types of reliability tests were carried out to secure accuracy and consistency. Composite reliability (α) was obtained for each construct. Another measure of reliability computed was the variance extracted measure (ρ). Guidelines recommend that the variance extracted value should exceed 0.50. A commonly used threshold value for acceptable composite reliability is 0.70. In this study, all measures fulfill the suggested levels. Variance extracted value ranges from 0.71 to 0.82 and composite reliability ranges from 0.80 to 0.94. Table 1 shows summary of means, standard deviations, construct loadings, and reliabilities.

Table 1. Summary of Means, Standard Deviations, Construct Loadings, and Reliabilities.

Construct	Inquiry	Mean (SD.)	Loading	α ρ
Perceived Ease of Use	- Does social media application easy to use for you? (E1)	5.62 (1.18)	0.95	0.93/ 0.82
	- Do you think that the ease of use of social media tools affects the intention to use social media? (E2)	5.65 (1.16)	0.92	
	- Do you think that the ease of use of social media tools affects the perceived usefulness of using social media? (E3)	5.36 (1.17)	0.84	
Perceived Usefulness	- Would Social media improve your learning performance? (U1)	4.20 (1.39)	0.72	0.88/ 0.75
	- Would social media give you useful academic information? (U2)	4.27 (1.29)	0.91	
	- Do you think that the perceived usefulness of using social media affect the intention to use social media? (U3)	4.30 (1.31)	0.94	
Attitude	- Is receiving information/feedback through social media a good idea? (A1)	4.70 (1.44)	0.94	0.94/ 0.84
	- Is posting information/feedback through social media a good idea? (A2)	4.53 (1.40)	0.92	
	- Are you positive toward social media for academic purposes? (A3)	4.18 (1.40)	0.86	
Behavioral Intention	- Do you intend to receive or check information/ announcements/ comments/	4.86 (1.04)	0.75	0.79/ 0.66

Construct	Inquiry	Mean (SD.)	Loading	α ρ
Social Media Self-Efficacy	feedback from social media? (B1) - Do you intend to post information/ announcements/ comments/ feedback from social media? (B2)	4.54 (1.20)	0.90	
	- Do you feel confident searching/ posting information in the social media application? (S1) - Do you have the necessary skills for using social media? (S2)	4.92 (1.23) 4.57 (1.16)	0.74 0.85	0.76/ 0.63
Subjective Norm	- What social media stands for is important for you as an undergraduate student? (N1) - Do you like using social media based on the similarity of society values and your values underlying its use? (N2) - Is it necessary for you to participate in social media in order to take advantage of social media or community? (N3)	4.00 (1.40) 4.07 (1.27) 3.85 (1.38)	0.82 0.84 0.86	0.88/ 0.73
	System Accessibility	Do you have difficulty accessing and using social media of the university? (SA)	5.00 (1.50)	1.0 -

Scale: 1 (Strongly disagree) to 7 (Strongly agree). All loadings were significant based on t-values.

Table 2 summarizes the parameter estimates for the hypothesized paths, the t-values, and result of hypotheses.

Table 2. Summary of the parameter estimates for the hypothesized paths, the t-values, and result of hypotheses.

Hypotheses	Direct Effect	t-value	Indirect Effect	Total Effect	Result of Hypotheses
H ₁₁	0.225	3.30		0.225	Supported
H ₁₂	0.004	0.12	0.050	0.054	Not supported
H ₁₃	-0.04	-0.60	0.118	0.078	Not supported
H ₁₄	0.579	7.08	0.054	0.633	Supported
H ₁₅	0.180	3.40	0.096	0.276	Supported
H ₁₆	0.58	6.99	0.050	0.63	Supported
H ₂₁	0.526	11.36		0.526	Supported
H ₂₂	0.200	5.57	0.052	0.252	Supported
H ₂₃	0.048	1.11	0.229	0.277	Not supported
H ₂₄	0.265	6.49	0.238	0.503	Supported
H ₂₅	0.461	9.17	0.238	0.459	Supported
H ₃₁	0.115	2.65		0.115	Supported
H ₃₂	0.234	3.96	0.05	0.284	Supported
H ₃₃	0.46	9.18	0.248	0.708	Supported
H ₃₄	-0.04	0.93	0.026	0.22	Not supported
H ₄₁	0.42	6.68			Supported
H ₄₂	-0.02	-3.6			Not supported
H ₄₃	0.20	6.10			Supported

In the context of behavioral intention, key constructs of the study, all the relationships among the constructs were significant except parameter estimates from perceived usefulness, perceived ease of use, and system accessibility to behavioral intention to use. According to the direct effect estimates, the strongest magnitude was found in a relationship between system accessibility and university students' behavioral intention to use social media (0.58) followed by social media self-efficacy (0.579). Perceived usefulness and perceived ease of use were significant in affecting students' attitude. The subjective norm was identified as the largest determinant to perceived usefulness, and social media self-efficacy had the largest impact on perceived ease of use.

In contrast, University students' behavioral intention to use social media was found non-significant in affecting perceived usefulness and perceived ease of use. University students' social media attitude was found non-significant in affecting social media self-efficacy. University freshmen students' perceived usefulness of social media was found non-significant in affecting system accessibility.

The findings also showed that social media self-efficacy was the most important factor, followed by subject norm, in effecting behavioral intention to use social media. Figure

3 shows all parameter estimates of the proposed model.

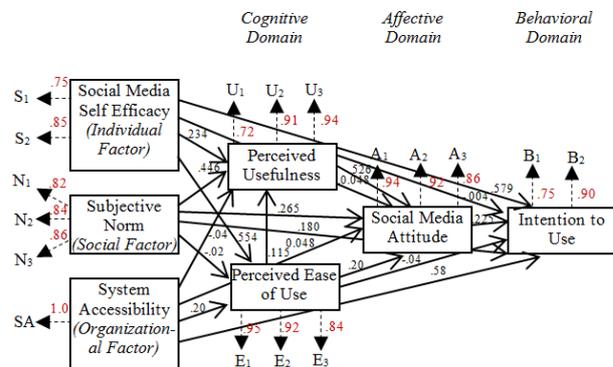


Fig. 3. Parameter estimates of the proposed model.

5. Conclusion

The Technology Acceptance Model was a useful model in helping to understand and explain behavioral intention to use social media. According to the TAM, University students' behavioral intention is hypothesized to affect their attitude, social media self-efficacy, subjective norm, and system accessibility. Students' behavioral intention is not hypothesized to directly affect perceived usefulness and perceived ease of use. University students' social media attitude is not hypothesized to directly affect social media self-efficacy. University freshmen students' perceived usefulness of social media is not hypothesized to directly affect system accessibility and university students' perceived ease of use of social media is not hypothesized to directly affect subjective norm.

Therefore, it is essential for the university to put more emphasis on social media by offering a greater variety of social media content and advertising the benefit of social media to attract students. It is necessary that developers of university's social media must help students increase their perception positively through social media. University student may want to adopt social media because they think social media experience will be beneficial for future study or work.

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