

An Empirical Study on the Effect of Organizational Culture on the Acceptance of eLearning in Thai Higher Education

Suthilux Chanasuc

Project Office for Consortium on Doctor of Philosophy Programs,
Phranakorn Rajabhat University, Bangkok, Thailand.

E-mail: m.kmutt@hotmail.com

Prasong Praneetpolgrang

Master of Science Program in Information Technology, Graduate School
Sripatum University, Bangkok, Thailand

E-mail: prasong.pr@spu.ac.th

Abstract

The objective of this research was to study the effect of organizational culture on the acceptance of elearning for Thai students in higher education.

The data were collected from 2 sample groups, the first group is students in Sripatum university and the second group is IT experts and eLearning teachers. Both questionnaire and constructive interview were used.

The research result show that organizational culture can effect on elearning. Both of the sample groups accept eLearning in high levels. Using elearning of the students is depending on personal characteristics, motivation, interesting and attitude, and also depending on the comparing cost of studying between eLearning and in classroom.

1. Introduction

Culture flashes on goodness that refined, acknowledge, practice and pass from one to later generation. (Nienghatai Kopholklang, 2545). Late two decade, ICT change and development expands in rapidly level and always blow up, effected of this

change is connect the whole world together or globalization (Somchai Pakaphakviwat, 2539; Vichai Tonsiri, 2538) and effected to social, culture change and also organization operation.

Education institute has main duty in study, research, academic service, develop and transmit technology to local society for supporting increase student and computer service, responding the search data, elearning, special program and teaching. Increasing ICT center operates in the university plan for complying with the plan, the university should know situation of student's acceptance and perception of elearning.

Nowadays, ICT has speedily developed, using ICT in education should concern to readiness of student's changing behaviors and also balancing of organization culture and modern technology. If most students have less using ICT skill, problems will occur and be main trouble for self development. With this reason, researcher designed to research the state of perception and acceptance of elearning of undergraduate student, for to be the direction in solve the problem, develop and improve the state of perception and acceptance of elearning, to reach the goals and efficiency operation.

2. Research Objective

To study the effect of organizational culture on the acceptance of elearning for Thai students in higher education.

3. Theories and Related Research

3.1 Perception

Perception is the process that person interprets and reacts to motivation. Each

person's perception is individuality because of his individual experiences and learning. As individual back ground, experience, characteristic including all changing and time and perception in useful of data, importance and applying usefulness. ICT users have different perception level in system usefulness application and convenience to use, Influential factors for perception are recipients factor, situations factor and goals factor as shown in Figure 1.

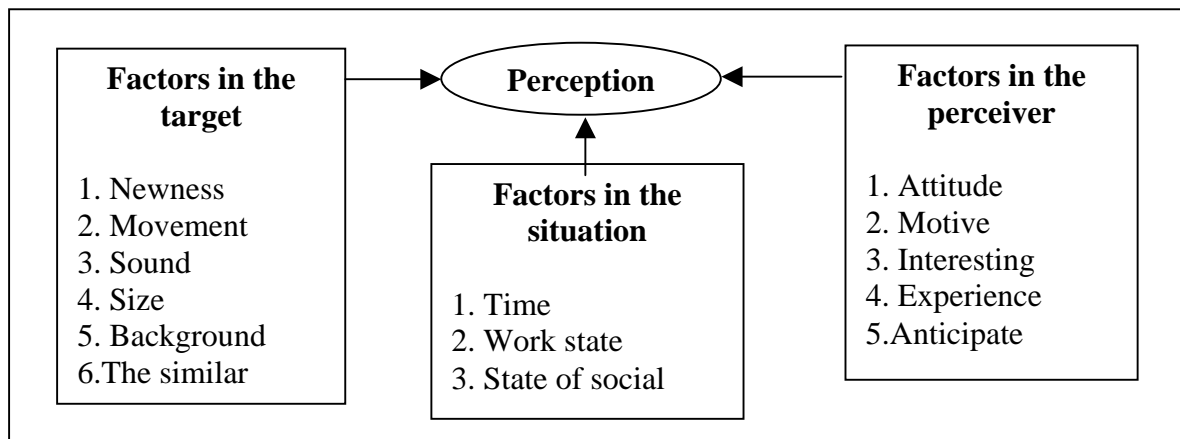


Fig. 1 : Factor that is influential build the perception
Source of : Rungsan Prasertsri, (2545).

Beside influential factors for perception, another important thing is step of person's perception, 1) adopting data, 2) proposing to adopt data, 3) interpreting data, 4)

maintaining data, and after pass step of perception, person will have reaction behaviors in feeling and thinking as. shown in Figure 2.

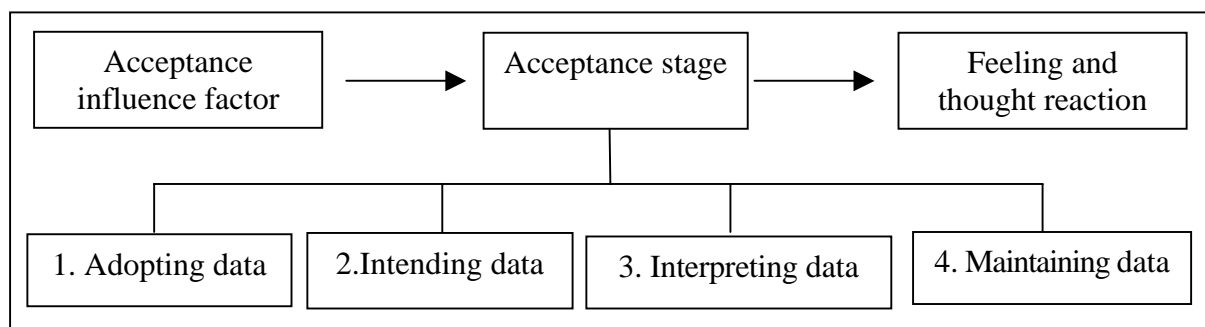


Fig. 2 : The step in the perception
Source of : Rungsan Prasertsri, (2545).

3.2 Technology Acceptance

Technology acceptance is person's decided to use innovation or technology in full efficiency. Researchers, information technology system scholars try to develop model that can explain, predict user's technology acceptance behavior because if we can understand or predict technology acceptance of person it will be advantageous for creativity, developing and present new technology to user.

Thus, there was a researcher who had invented ICT acceptance, is model TAM Model (Technology Acceptance Model). In Figure 3 is the model that was developed from self perception theory by simple using perception, self-ability perception. There is the same definition and same significance meaning of innovation character in innovation spreading theory's complexity.

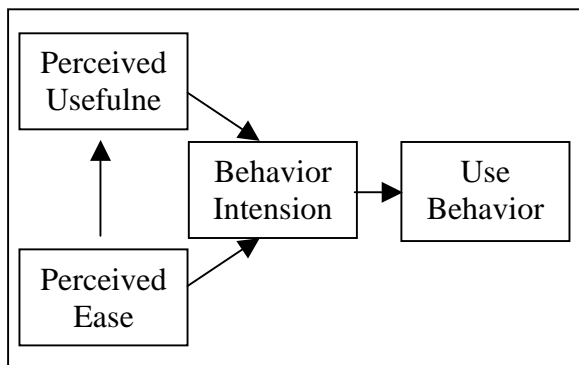


Fig. 3 : TAM Model
Source of : Davis (1989)

Pattern of acceptance decision has 5 stage

1) Awareness Stage, person perceived that there has a concept but he has not deep knowledge about the particular content

2) Interest Stage is the stage that person is interesting in studying but he has not evaluated the real situation, just only increase his knowledge.

3) Evaluation Stage, person uses his intelligent for evaluate with his experiences

4) Trail Stage is the stage that person does some parts in real situation for confirming that it's as good results as he thinks.

5) Adoption Stage, it is the last procedure for person's acceptance to completely use, not use little as in Trail Stage.

3.3 Literature Review

Kanchit Malaiwong, (2548). Offer that IT compose of computer technology and communication technology. Computer technology helps us to collect and evaluate data with rapidly and correctly rate. Communication technology helps us fast and convenience for sending the digital computer output to distant users.

Veerawut Pheucharean, (2539) studied the related factors with innovation technology acceptance, found that 19 positive relation variable has statistic significant at .05. There are 9 high relation variable, 1. culture value 2. convenience using innovation 3. innovation that go together with teacher's society 4. teacher's academic experience 5. administrator's using innovation supporting 6. instant innovation 7. training course supporting policy 8. teacher's seeking knowledge 9. innovation price.

3.4 Research Conceptual Framework

The research conceptual framework has shown in Figure 4.

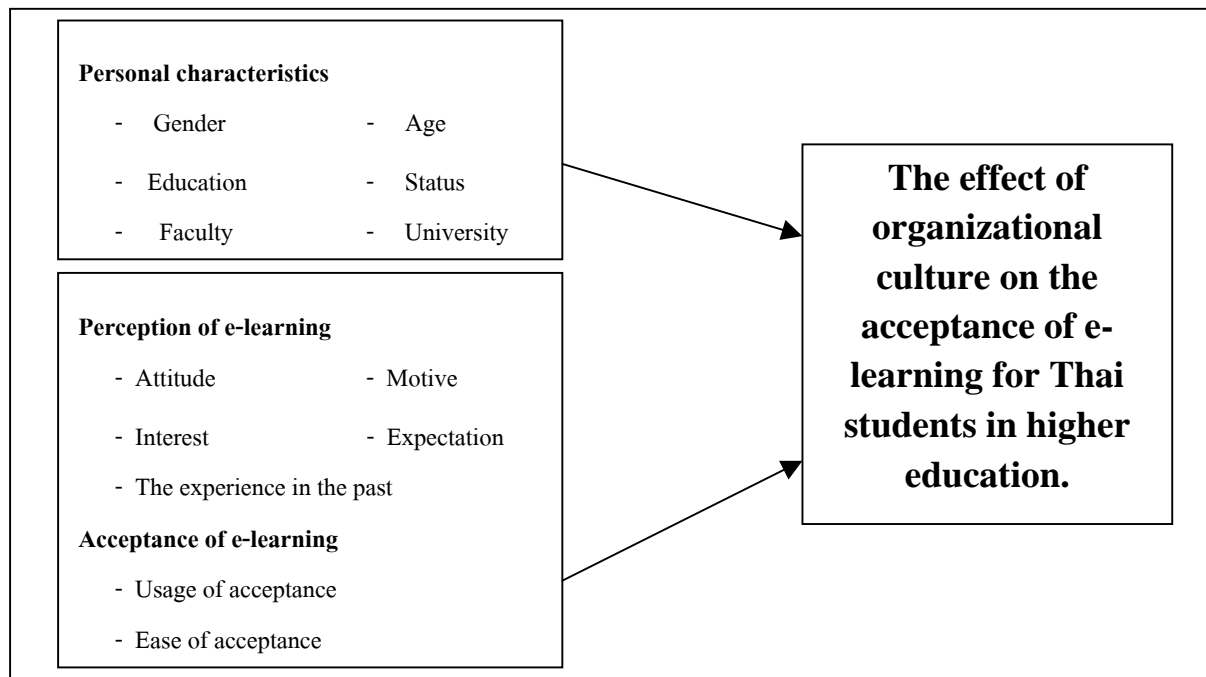


Fig. 4 : Research Conceptual Framework

4. Research Hypothesis

1. The influence of organizational culture that effected the the level of e-learning's acceptance.

2. The influence of organizational culture that effected the acceptance of eLearning for Thai students in Higher Education with high level.

5. Research Methodology

The research methodologies were mixed in both qualitative and quantitative method. The populations are persons in Sripatum university and the students in classroom and eLearning teachers. The sampling groups were divided into two groups as follows: 1) students 2) IT experts.

5.1 Categorizing Data

As the previous mention, we use both qualitative and quantitative research.

1. The qualitative is represented by content analysis from documents and constructive interview.

2. The quantitative is represented by data collected in analyzing questionnaires.

5.2 Data Analysis

Based on qualitative and quantitative research, it can be divided into 4 steps and briefly explained as follow: Step 1: Study about culture, policies, visions, objectives, and management from related documents in eLearning of university, as well as related literature. Study about use application of ICT in university of ICT master plan. Step 2: Develop tools for collecting data. Step on

organizational culture of ICT use from the 2 sampling groups. 3: Data collections form all sampling groups. Step 4: Analyze data in details from step 3 in order to obtain an overall figure of the affecting of culture organization on the acceptance of eLearning in higher education.

5.3 Data Analysis

Item 1 : Personal status data of replied samples, frequency and percent analysis.

Item 2 : State of acceptance data in elearning is evaluation questionnaires, mean and standard deviation analysis.

6. Research Results

The qualitative methodology result which came from IT experts interview found that IT experts greatly realize to perception, understanding, transmission technology and organization’s culture in using eLearning . In addition, on the average IT expert place importance on organization operation’s culture which effect to perception, using and transmission eLearning of their personal. There is fairly high level of acceptance and attitude which support the using ICT. However, IT experts suggest that it should adjust positive attitude to personal, motivation, interesting and create eLearning for increasing the using eLearning. Also, IT experts comment about the cost of studying, eLearning is high cost and need add more electronic machine but in the near future, it is possible to have fully elearning in education systems. In traditional classroom learning is lower cost since the resources are more available.

From this study, researchers found that effects of organizational culture which impact to state of using eLearning in efficiency of persons in the university that came from influence variables. These

variables are personal characteristics, using technology culture, perception of usefulness and ease to use eLearning, and technology acceptance. These effect to organizational culture in efficiently using eLearning in Thai higher education.

Item 1 : Personal status data of replied samples, frequency and percent analysis, has shown in Table 1.

Table 1 : Show personal characteristics.

Personal characteristics		No	%
Gender	Male	36	34.3
	Female	69	65.7
Age	18-23 years	37	35.2
	24-29 years	48	45.7
	30-35 years	9	8.6
	36-41 years	3	2.9
	42-47 years	4	3.8
	Upper 48 years	4	3.8
Educa tion	Lower bachelor	9	8.6
	Bachelor degree	71	67.6
	Master degree	20	19.0
	Doctoral degree	5	4.8
Status	Part is usual	16	15.2
	Part is special	89	84.8
Faculty	Graduate School	7	6.7
	Communication arts	10	9.5
	Business	27	25.7
	Management Science	45	42.9
	Accounting	11	10.5
	Law	5	4.8

Item 2 : State of acceptance data in elearning is evaluation of questionnaires, mean and standard deviation analysis, has shown in Table 2.

Table 2 : Show mean and percents. Separate follow organizational culture of effecting elearning’s acceptance.

Organizational Culture	\bar{x}	S.D.	Levels
Acceptance	3.7305	.62912	High

From Table 2, organizational culture that effect the acceptance of elearning in high levels ($x = 3.7305$).

7. Conclusions

From the research hypothesis, we concluded that:

1. Organizational culture influence in the acceptance of e-learning in Thai undergraduate student with high level.

2. Overall conclusion on organizational culture influence effected to the under graduates student's acceptance on eLearning in high level.

8. Suggestions

With this research result, we can suggest as the followings.

For universities and related organizations, they can use this result to develop elearning and teaching model which matching to the user's perception, cause to the students accept elearning in universities. Moreover, it can apply this concept to higher level of educational institute. Subsequently research suggestions are

1. Should study student's problem situation and using ICT requirement to find the model of organizational culture perception and acceptance in elearning.

2. Should study ITIL and ISO 20000 for management and using ICT for perception and acceptance in elearning, corresponding with eteaching.

9. References

[1] Adam, D.A., Nelson, R.R. and Todd, P.A. (1992). *Perceived Usefulness, Ease of Use, and Usage of Information Technology: A Replication*. MIS Quarterly. 16(2):227-247.

[2] Anothai Songphasert.(2549). *Psychology Factor effect to Employee's Using*

Information System in Property Management Company. Graduate School Thesis, Science Programme in Education Research Technology, Burapha University.

[3] Davis, F.D. (1989). *Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*. MIS Quarterly. 13(3):319-339.

[4] Institute of Technology for Developing Rural Areas. (2540). *Thailand's Appropriate Policy and Information Technology Management Structure*. Journal of Chulalongkorn University 14(2).

[5] Kidanant Malithong. (2548). *ICT for Education*. Bangkok: Arun publishing.

[6] Krejcie, R.V. & Morgan, D.W. (1970). *Determining Sample Size for Research Activities*. Journal of Educational and Psychological Measurement. 30, 607-610.

[7] Nienghatai Kopholklang. (2545). *Thai media's role for creating and carrying culture in information technology*. era Suranaree University of Technology.

[8] Orawan Pilantaovath. (2536). *Information Technology and Role in Thai Social Development*. The Faculty of Communication Arts, Chulalongkorn University.