# Factors Affecting the Intention to use E-marketing of Small and Medium Sized Businesses in the Three Southern Border Provinces of Thailand

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## **Abstract**

This research purposed to investigate factors affecting the intention to use electronics marketing of Small and Medium Sized Businesses in the Three Southern Border Provinces of Thailand. This study integrated Technology Acceptance Model with The Diffusion of Innovation theory to identify causal factors. The 430 participants were interviewed by using questionnaires as a research instrument. The data were analyzed by structural equation model using Lisrel. The statistics used to assess the validity of the final overall model showed acceptable fit of the measurement model to the data.  $\chi^2/d$ . was 2.83; GFI, CFI, NFI, RMSEA and SRMR were 0.93, 0.98, 0.96, 0.065 and 0.059 respectively, all of these indices were within acceptable ranges. The results of this study indicated that the factor which had the highest direct effect on Intention to use E-marketing was Attitude toward using E-marketing, and the factor which had the highest indirect effect on Intention to use E-marketing was Compatibility.

**Keywords:** Intention to use, E-marketing, Small and medium sized businesses, Thailand

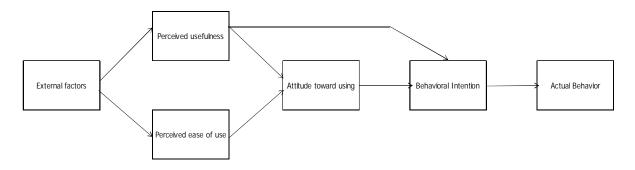
#### 1. Introduction

The Internet technology has rapidly developed and impacted to human lifestyle. People change the way they communicate to each other. They prefer using online channel than traditional channel. In the past small and medium sized businesses had more advantage to access the niche market than large sized businesses, nowadays with the Internet technology large sized businesses can access the niche market that belong to small and medium sized businesses easily. E-marketing is the important marketing channel that will support small and medium sized businesses to compete with the large sized businesses (Hoffman and Novak, 1996; Herbig and Hale, 1997; McCue, 1999; Nguyen and Barret, 2006). The advanced analysis on SMEs separated by provinces group report (The Office of SMEs Promotion (OSMEP), 2012)indicated that small and medium sized businesses in the three southern border provinces of Thailand (Yala, Pattani and Narathiwas provinces) used the Internet and social media to promote their products and services only 0.65 %. So, it was the finding for the research question what were the factors affected the intention to use E-marketing of small and medium sized businesses in the three southern border provinces of Thailand.

#### 2. Literature Review

2.1 Technology Acceptance Model (TAM) (Davis, 1989), this model explained the motivation of users to adopt the new technology. TAM consists of three factors; Attitude toward using new technology, Perceived Usefulness and Perceived ease of use. Both Perceived Usefulness and Perceived ease of use had an indirect effect to Intention to use new technology through Attitude toward using the new technology, while Perceived Usefulness had direct effect to Intention to use the new technology, as shown in Figure 1.

Figure 1: Technology Acceptance Model



Source: Adapted from Malhotra and Galletta (1999)

2.2 The Diffusion of Innovation Theory (DIT) (Roger, 1983), the purposed of this theory was to analyze the characteristics of innovation that related to the consumption of media. When the innovation was launched, individuals would have internal communication within their group to make decisionsaboutaccepting or rejecting the new innovation. DIT suggests five characteristics of innovation; Relation Advantage, Compatibility, Complexity, Trial Ability and Observe Ability. These characteristics explained the innovation communication process through the certain channelsand times among the members of the group, as shown in Figure 2.

Prior condition

Resultion

Decision making unit

Characteristic of innovation

1. relation advantage

2. compatibility

3. complexity

4. trial ability

5. observe ability

Figure 2: Diffusion of Innovation Theory

Source: Adapted from Zolkepli and Kamarulzaman (2011)

2.3 The integrated TAM with DIT, there were many researchers that applied DIT to study the adoption of the new technology such as Lin and Yu (2006) applied DIT to study the adoption of the Internet and communication channel, Roach (2009) applied DIT to study the adoption of mobile phone.

The study of Agarwal and Jayesh Prasad (1998) indicated that only three innovation characteristics were consistent; Relation Advantage (labeled Perceived Usefulness in TAM), Compatibility and Complexity (labeled Perceived ease of use in TAM). It is evident that TAM is similar to DIT in some aspects. If the two theories are integrated it would allow the model to be more appropriate, as shown in Figure 3.

Relative Adventage

Attitude toward the behavior

External factors

Compatibility

Figure 3: The Integrated TAM with DIT

Source: Adapted from El-Gohary (2011)

## 3. Research Objectives

To analyze the path analysis of the factors affecting to the intention to use E-marketing of small and medium sized business in the three southern border provinces of Thailand.

#### 4. Research Model

Based on the research presented in the literature review, a research model of the factor affecting intention to use E-marketing was developed. The model shows the relationship between the four factors affecting the intention to use E-marketing, as shown in Figure 4.

Attitude toward using E-marketing Perceived (AT) Ease of Use (PEU) Intention to Use E-marketing (BI) Compatibility (CO) Perceived Usefulness (PU)

Figure 4: Research model

#### 5. Research Method

The data of this study were collected from the small and medium sized business owners in the three southern border provinces of Thailand. The 430 participants were interviewed by using questionnaires as a research instrument. The measures of these questionnaires were five-point Likert's scales anchored by "strongly agree", "agree", "neutral", "disagree" and "strongly disagree". The collected data were analyzed by using Lisrel. The Goodness of Fit Measure such as Chi-square Statistics, Goodness of fit index (GFI), Comparative fit index (CFI), Normed fit index (NFI), Root Mean Square Error of Approximation (RMSEA),Standardized Root Mean Square Residual (SRMR) and qualitative analysis were employed for the data analysis.

## 6. Research Results

Acceptable model fit was indicated by a chi-square value over degrees of freedom ( $\chi^2$ /d.f.) between 1 and 3, with the value of a Goodness of fit index (GFI), Comparative fit index (CFI), Normed fit index (NFI), all equal to or greater than 0.9, and the Root Mean Square Error (RMSEA) and Standardized Root Mean Square Residual (SRMR) between 0 and 0.08. The statistics used to assess the validity of the final overall model showed acceptable fit of the measurement model to the data.  $\chi^2$ /d.f. was 2.83; GFI, CFI, NFI, RMSEA and SRMR were 0.93, 0.98, 0.96, 0.065 and 0.059 respectively, all of these indices were within acceptable ranges. The results of structural equation model analysis, as shown in Figure 5. The factors loading of directeffect, indirect effect and total effect, as shown in Table 1.

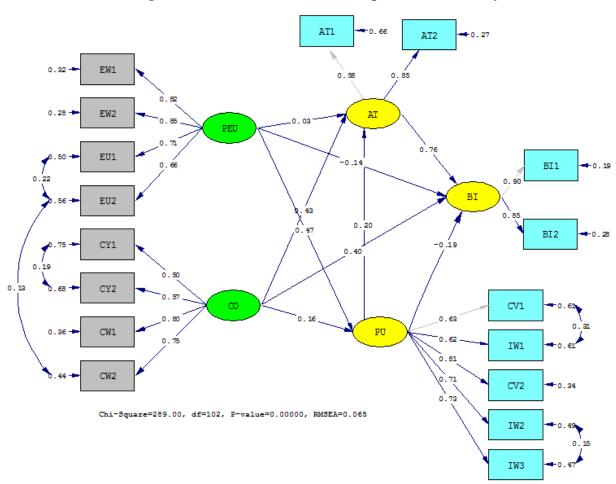


Figure 5: The Results of Structural Equation Model Analysis

AT Causal ΒI PU**Factors** DE ΙE TE DE ΙE TE DE ΙE TE AT 0.76\* 0.76\* PU -0.19\* 0.16\* -0.03\* 0020\* 0.20\* PEU -0.03 0.03 0.47\* -0.14 0.01 0.10 0.13 0.47\* CO 0.40\*0.32\* 0.72\*0.43\* 0.03\*0.46\*0.16 0.16

**Table 1: Factors Loading** 

DE = Direct effect, IE = Indirect effect, TE = Total effect

- 6.1 Compatibility (CO) had a positive direct effect on Intention to Use E-marketing (BI).
- 6.2 Compatibility (CO) had a positive indirect effect on Intention to Use E-marketing (BI) through Attitude toward using E-marketing (AT).
- 6.3 Perceived Usefulness (PU) had a negative direct effect on Intention to Use E-marketing (BI).
- 6.4 Perceived Usefulness (PU) had a positive indirect effect on Intention to Use E-marketing (BI) through Attitude toward using E-marketing (AT).
- 6.5 Attitude toward using E-marketing (AT) had a positive direct effect on Intention to Use E-marketing (BI).

#### 7. Conclusions

- 7.1 The causal factors which had the direct effect on Intention to use E-marketing (BI) of small and medium businesses in the three southern border provinces in Thailand were Attitude toward using E-marketing (AT), Compatibility (CO) and Perceived Usefulness (PU). The factor which had the highest direct effect on Intention to use E-marketing (BI) was Attitude toward using E-marketing (AT).
- 7.2 The causal factors which had the indirect effect on Intention to use E-marketing (BI) of small and medium businesses in the three southern border provinces in Thailand were Compatibility (CO) and Perceived Usefulness (PU). The factor which had the highest indirect effect on Intention to use E-marketing (BI) was Compatibility (CO).
- 7.3 Perceived Ease of Use (PEU) had no both direct and indirect effect on Intention to use E-marketing (BI).

## 8. Recommendation

The study of Factors Affecting the Intention to use E-marketing of Small and Medium Sized Businesses in the Three Southern Border Provinces of Thailand, would help The Office of SMEs Promotion (OSMEP) to realize, which would be the highest causal factor that influences the intention to use E-marketing of Small and Medium Sized Businesses in the Three Southern Border Provinces of Thailand, and it helped them to improve the right factors for increasing the intention to use E-marketing in the future.

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<sup>\*</sup>Statistics Significant level p < 0.05

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