

Factors Affecting E-marketing Adoption by Small and Medium Sized Enterprises in Thailand

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Abstract

Small and medium sized enterprises (SMEs) have an important role in increasing the economic growth of the country. Electronic marketing (e-marketing) is important to both traditional commerce and electronic commerce because of reduced costs and increased interactive communication with the customer. The purpose of this study was to investigate the internal and external factors which influence the adoption of E-marketing in order to develop a conceptual model which is suitable for small and medium sized enterprises. The study was conducted by using a literature review and content analysis of secondary data. The results showed that the internal factors which influence the adoption of E-marketing are perceived usefulness, perceived risk, and readiness, while the external factor is social influence.

Keywords : E-marketing adoption, Perceived usefulness, Perceived risk, Readiness, Social influence

Introduction

Nowadays the Internet has become more important in everyday life. It has changed the way people trade, and thus changes the economic system. E-commerce has become a new market channel for consumers and Small and Medium Sized Enterprises (SMEs) (Chong, Man, Chen & Lai, 2011). SMEs try to reach the international market via effective borderless communication channels, similar to large sized enterprises (McCue, 1999; Hoffman and Novak, 1996; Herbig and Hale, 1997; Nguyen and Barret, 2006). SMEs have increased the usage of the Internet (Sadowski, Maitland & van Dongen, 2002) because the Internet is the communication channel that has increased benefits to economic systems, especially for rural area businesses. If business owners do not decide to implement e-marketing, they may leave their business at risk (Egan, Clancy & O'Toole, 2003). So encouraging SME owners to adopt E-marketing usage and to correctly implement E-marketing are both essential.

The purpose of this study is to investigate factors that determine whether SMEs adopt e-marketing, by reviewing relevant theories and research. This is used to develop a structural relationship model of the factors affecting the E-marketing adoption by SMEs. The expected benefit from this study is the identification of ways to develop ability of SMEs to increase E-marketing opportunities to support their strengths, correct their weaknesses, and minimize threats.

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Materials and Methods

This study was conducted by using a literature review and content analysis using secondary data from related theories and other research. Content analysis is a methodology used in social sciences for studying the content of words, concepts, themes, phases or sentences within a text or set of texts from articles, books or other documents (McTavish and Pirro, 1990). The results will show internal and external factors that affect E-marketing adoption and their relationship to each other. The data collection for this study was undertaken from various sources including textbook, research, publication, Internet, and online databases. The research report presents an analysis description.

Results and Discussion

1. Theoretical Background

This study integrated four theories to investigate factors affecting E-marketing adoption consisting of The Theory of Reasoned Action (TRA), The Theory of Planned Behavior (TPB), The Technology Acceptance Model (TAM) and The Diffusion of Innovation Theory (DIT).

1.1 The Theory of Reasoned Action (TRA)

The Theory of Reasoned Action is based on Social Psychology theory, and was developed by Icek Ajzen and Martin Fishbein in 1975, who tried to explain individual behavioral intention. The Theory of Reasoned Action explains that individual behavior can be predicted by four components, namely Behavioral Intention (BI), Attitude Toward the Behavior (AT), Subjective Norms (SN) and Beliefs (BL). Attitude Toward the Behavior is an evaluation level that affects Actual Behavior (AB). Subjective Norms is a social influence that also affects Actual Behavior. The core concept of the Theory of Reasoned Action is that behavior can be predicted by Behavioral Intention and Behavioral Intention is identified by Subjective Norms and Attitude Toward the Behavior .

1.2 The Theory of Planned Behavior (TPB)

The Theory of Planned Behavior, which was extended from the Theory of Reasoned Action (Ajzen, 1991) also tries to explain individual behavioral intentions, and consists of three components: Attitude Toward the Behavior (AT), and Subjective Norms (SN) taken from the Theory of Reasoned Action, plus Perceived Behavior Control (PB). Perceived Behavior Control refers to the individual's ability to control their behavior; it has a direct effect on Behavioral Intention. The Theory of Planned Behavior can predict behavioral intention as in the Theory of Reasoned Action. The core concept of the Theory of Planned Behavior is that human behavior comes from three beliefs consisting of behavior beliefs, normative beliefs and control beliefs (Viriyaprayoon, 2005).

1.3 Technology Acceptance model (TAM)

While the Theory of Reasoned Action has been used in many areas, Davis (1986) has applied the Theory of Reasoned Action to information technology and developed the Technology Acceptance model (TAM). The Technology Acceptance model explains the motivation of the user in adopting new technology, and consists of three components: Perceived Ease of Use (PE), Perceived Usefulness (PU), and Attitude toward Using (AU). Both Perceived Ease of Use and Perceived Usefulness have an indirect effect on Behavioral Intention through Actual Use while Perceived Usefulness has a direct effect on Behavioral Intention. The same as the Theory of Reasoned Action, Behavioral Intention has a direct effect on Actual Use but does not include Subjective Norms in the Technology Acceptance model because, in the information technology area, Subjective Norms has very little effect on Behavioral Intention.

Many researchers have applied TAM in their research and suggested factors to improve the capability of the model (Legris, Ingham & Colletette, 2003). Malhotra and Galletta (1999) referred to Kelman (1958) who suggested that Social Influence is an external factor which can influence attitude in varying extends depending on the individuals. They added Social Influence as a psychological factor to TAM. Venkatesh and Davis (2000) extended TAM to TAM2 by adding Social Influence Processes consisting of Subjective Norm, Voluntariness and Image, and Cognitive Instrument Processes consisting of Job Relevance, Output Quality and Result Demonstrability. Venkatesh and Bala (2008) studied TAM2 and extended it to TAM3 by adding six components consisting of Computer Self-efficacy, Perceived External Control, Computer Anxiety, Computer Playfulness, Perceived Enjoyment and Objective Usability.

1.4 The Diffusion of Innovation Theory (DIT)

Rogers (1995) had developed the Diffusion of Innovation Theory (DIT). The Diffusion of Innovation Theory was used for analyzing technology characteristics associated with the consumption of media when innovation or new ideas happen. Individuals use the internal communication within their group for making decisions to accept or reject new innovations. The Diffusion of Innovation Theory consists of five innovation characteristics: relation advantage, compatibility, complexity, trial ability and observe ability. The Diffusion of Innovation Theory is used to explain innovation communication processes through certain channels and time. Many studies applied the Diffusion of Innovation Theory to study new technology adoption such as mobile telephones (Roach, 2009) and the Internet and communication channels (Lin and Yu, 2006).

The study of Agarwal and Prasad (1998) found that only three innovation characteristics were consistent - Relation Advantage, Compatibility and Complexity. These three innovation characteristics are similar to some factors in TAM: Relation Advantage is similar to Perceived Usefulness (PU), and Complexity is similar to Perceived Ease of Use (PE). It is evident that TAM is similar to The Diffusion of Innovation Theory in some parts. If the two theories are integrated together, that will allow the model to be

more appropriate. Wu and Wang (2005) studied M-Commerce adoption by integrating TAM 2 with The Diffusion of Innovation Theory and added two factors- Cost and Perceived Risk.

None of these four theories are better than the others rather they can be used to support each other. Both TAM and TPB were extended from TRA. TPB added a factor, Perceived Behavior Control to explain individual behavior. TAM applied TRA Information Technology and added two factors; Perceived Usefulness and Perceived Ease of Use to explain individual's technology adoption behavior. DIT consists of five innovation characteristic, some of which are close to some factors of TAM: Relation Advantage is close to Perceived Usefulness, and Complexity is close to Perceived Ease of Use. Integration of TAM and DIT will make a more effective and useful basis for understanding technology adoption.

2. E-marketing Adoption in Thailand

The 2010 Electronic Commerce Status Survey in Thailand by the National Statistical Office of Thailand found that most electronic commerce businesses in Thailand did not implement marketing promotion. Businesses which implemented marketing promotion used both online and offline together. Online marketing promotions often used e-mail, web site banners, search engine results and web boards. Offline marketing promotions often used brochures and advertising (Thailand National Statistical Office, 2011a). Moreover The 2010 Information and Communication Technology Survey in Establishment from the National Statistical Office of Thailand found that in 2010 there were 2,157,907 establishments in Thailand but only 111,430 establishments (5.16 percent) purchased or sold goods and services or had a trading partner via the Internet (Thailand National Statistical Office, 2011b).

There are several factors discouraging businesses from using E-marketing. But according to the Technology Acceptance Model (Davis, 1986) the key factor is the attitude toward using E-marketing which influences the intention to use e-marketing. The person who decides to implement E-marketing is the business owner. The key parameter affecting the implementation of E-marketing is the intention to use E-marketing by the business owner.

3. Factors Affecting E-marketing Adoption

TAM is an important model that is used to study the adoption of technology in general. This study applied TAM to E-marketing adoption for SMEs with four factors consisting of Perceived Usefulness, Perceived Risk, Readiness and Social Influence. Perceived Usefulness, Readiness and Social Influence are the factors that have positive influence on E-marketing adoption, while Perceived Risk is a factor that has negative.

3.1 Perceived Usefulness (PU) synthesized from Davis (1986) refers to the level of individual belief that using technology will increase work performance. The study by Taylor and Strutton (2010) showed that Perceived Usefulness has direct and indirect effects on Intention to use E-marketing (IU) through Attitude Toward Using E-marketing (AU). Moreover, Intention to use E-marketing positively influences E-marketing Usage and it can be assumed that Perceived Usefulness influences E-marketing

Usage. This is similar to the studies of El-Gayar, Moran and Hawkes (2011), the study of Ha and Stoel (2009) and the study of Vijayasathy (2004).

Proposition 1 Perceived Usefulness positively directly affects Attitude toward using e-marketing.

Proposition 2 Perceived Usefulness positively directly affects Intention to use e-marketing.

3.2 Perceived Risk (PR) synthesized from integrated TAM and DIT. Forsythe and Shi (2003) said that Perceived Risk relates to an individual's perceived gain or loss benefits when they decide to adopt technology. Perceived Risk is an important factor that influences individual behavior and whether they will decide to adopt E-marketing if they perceive that the technology is low risk. Wu and Wang (2005) showed that PR has a negatively direct effect on new technology adoption intention and Taylor and Strutton (2010) showed that Perceived Risk has a negatively direct effect on E-marketing adoption intention. It can be assumed that Perceived Risk has direct and indirect effects on Intention to use E-marketing (IU) through Attitude toward using E-marketing (AU), and Perceived Risk influences E-marketing Usage.

Proposition 3 Perceived Risk negatively directly affects Attitude toward using e-marketing.

Proposition 4 Perceived Risk negatively directly affects Intention to use e-marketing.

3.3 Readiness (RD) is synthesized from Lertwongsatien and Wongpinunwatana (2003) and El-Gohary (2010). El-Gohary said that Readiness means the ability of SMEs to access such resources as human resources, technology resources and financial resources. Readiness of SMEs depends on internal factors such as an owner's skills and support because for most of the SMEs the owner manages the enterprise. If SME owners have E-marketing skills and experience, it assumes that they are ready to adopt e-marketing. Lertwongsatien and Wongpinunwatana (2003) showed that Readiness of SMEs has a direct effect on e-commerce adoption, so it can be assumed that Readiness influences E-marketing Usage.

Proposition 5 Readiness positively directly affects Intention to use e-marketing.

3.4 Social Influence (SI) has been synthesized from Malhotra and Galletta (1999). Kelman (1958) said that SI refers to the external factors that induce individuals to change their attitude. This may happen on several levels, and each level relates to different processes of inducement. The Social Influence process that relates to individual behavior has three levels consisting of Compliance, Identification and Internalization. El-Gayar, Moran and Hawkes (2011) showed that Social Influence has a direct effect on new technology adoption intention. It can be assumed that Social Influence has direct and indirect effects on Intention to use E-marketing (IU) through Attitude toward using E-marketing (AU), and Social Influence influences E-marketing Usage.

Proposition 6 Social Influence positively directly affects Attitude toward using e-marketing.

Proposition 7 Social Influence positively directly affects Intention to use e-marketing.

Proposition 8 Attitude toward using E-marketing influences Intention to use e-marketing.

Proposition 9 Intention to use E-marketing influences E-marketing usage.

4. The proposed Conceptual Model

Based on the research presented in the literature review, a conceptual model can be developed of the factors affecting E-marketing adoption. The model shows the relationship between four factors affecting E-marketing adoption, as shown in Figure.1

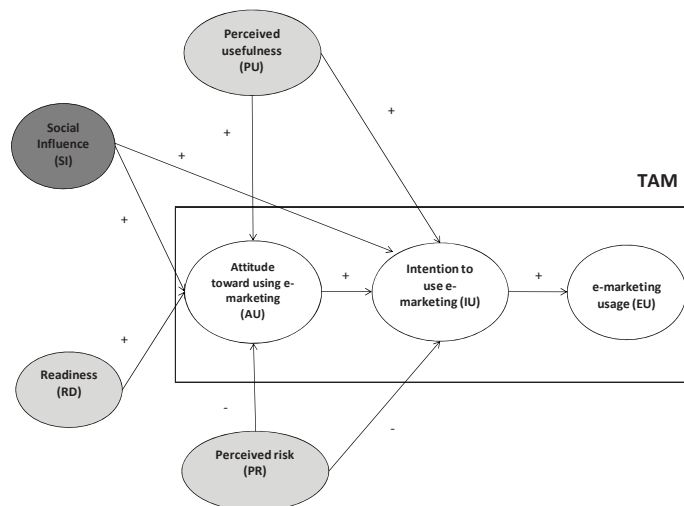


Figure 1 Conceptual model

This conceptual model shows the structural causal relationship of factors affecting E-marketing adoption of SMEs.

Conclusion

This study has developed a research-based conceptual framework and presented a relationship model of the causal factors affecting E-marketing adoption of SMEs. It indicates that the internal factors that influence the adoption of E-marketing are Perceived usefulness, Perceived risk and Readiness. The external factor that influences the adoption of E-marketing is Social influence. The expected benefits of this study are to increase the body of knowledge in management and to allow development of guidelines for the adoption of E-marketing strategic at SMEs through develop training program to encourage SMEs to adopt E-marketing depend on factors that indicated in this study. Future research must be conducted to test the empirical relationship between these variables through collecting data from SME entrepreneurs.

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