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THE EFFECT OF INSTRUCTOR BRAND ON E-LEARNING SYSTEM USAGE INTENTION

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Abstract

With the increasing sophistication of network and digital technology, educational institutions and companies have invested a lot of money for the development of e-learning systems. The success of e-learning, however, depends on the learner’s usage intention toward e-learning systems. In previous e-learning articles, researchers discussed about the influence of the learners’ usage intention via the technology acceptance perspective, but failed to take into account the role of the instructors. Based on the relative literatures, this paper proposed a conceptual model to explain the effect of instructor brand on e-learning system usage intention. The result suggests that instructors play a crucial role in e-learning system promotion. It is therefore a feasible strategy for e-learning providers to enhance learners’ desire through marketing techniques wherein they promote the instructor’s awareness, image and credibility.

Keywords: E-learning, Technology Acceptance Model (TAM), Satisfaction, Instructor Brand.
1 INTRODUCTION

With the rapid development of network and digital technology, more and more people have begun using the Internet to study (Liu et al., 2010). Differing from the traditional physical learning environment, on-line virtual learning environment integrates information technology and open systems to provide access to a wide range of learning materials (Wooldridge, 1999). The learning method wherein the tools used for communicating and studying are the Internet and the information technology is called e-learning (Govindasamy, 2002).

As Martins and Kellermanns (2004) suggest, e-learning is a platform for information integration, which provides a possible way for learners to access the courses without time and place limits. It breaks the traditional limitations of entity classrooms and assists remote instructors and learners with their work via the Internet. E-learning has the following advantages: (1) It provides a solution to geographical restrictions. The user can study whenever and wherever possible. A virtual learning environment provides an interregional study opportunity for learners without geographical limitations (Xu & Wang, 2006); (2) Compared with the traditional classroom environment, virtual learning environment provides a flexible study mechanism (Carrillo, 2004). E-learners have control over their study pace. They can adjust their studies according to their particular level of ability to obtain the best result; (3) It allows e-learners to choose their own convenient time to study and the basic computer accessories to have – which is only the computer and the Internet. This avoids the necessity of movement when studying in a classroom type environment, therefore enhancing control of the situation and convenience for the learner; (4) The lecture notes can be reused. Through the use of information technology, the lectures can be recorded in a database where succeeding learners can reread freely and therefore, reduce their costs.

With the rapid development of the Internet, a growing number of educational institutions and enterprises have invested in the development of e-learning (Lee, 2010). The e-learning system is widely used in educational institutions to offer education-related courses. Enterprises have put in funds and human resources in the development of private e-learning networks to train staff better and reduce training costs. However, there is also news of bad investment (Wan et al., 2008). Resources may be put to waste if the user does not use the high-cost e-learning system. Thus, the success of e-learning depends on the potential users’ acceptance of it. The purpose of this study is to understand the factors that will encourage potential users’ to use the e-learning system.

According to many existing research reports, the Technology Acceptance Model (TAM), developed by Davis (1989), is often quoted (Ong, 2004; Saade & Bahli, 2005; Chiu & Wand, 2008; Lee, 2010). These researches emphasize the importance of information system quality, but the instructors’ influence on potential users is rarely mentioned.

In entity educational institutions, the instructor’s name is somewhat like a brand. The instructor is one of the considerations when the learner is deciding whether to attend a course. It is quite often in entity educational institutions that students tend to choose the course provided by the teacher with a good reputation (such as famous remedial class instructors). From the perspective of marketing, the customer tends to buy goods with greater branding (Hoyer & Brown, 1990). As Chen and He (2003) suggest, brand awareness has direct and indirect effects on the consumer’s purchasing intention from on-line retailers. The customer has a comparatively lower perceived risk on famous brands. In an e-learning environment, we regard an on-line learner as a consumer and the learning content as the service or the product (Wang, 2003). The process wherein a learner selects an e-learning course is the same as a consumer purchasing products or service. Thus, the result suggests, students are willing to attend an e-learning course when it is to be handled by their preferred instructor. That’s to say, the brand of instructors play an important role in the adoption of e-learning.

Based on the relative literatures, this paper proposed a conceptual model to explain the effect of instructor brand on e-learning system usage intention. We introduce the important role of instructors in an e-learning environment according to extensive technology acceptance literatures and brand
concept in marketing. The result is a great academic contribution and also a valuable reference for the promotion of e-learning.

2 CONCEPTUAL MODEL

In previous researches about e-learning systems, the TAM is widely used to explain the learner’s usage intention toward an e-learning system. Based on TAM and marketing literatures, we propose a conceptual model as shown in the illustration below.

![Conceptual Model Diagram](image)

**Figure 1. Conceptual Model**

### 2.1 Technology Acceptance Model

Based on Fishbein and Ajzen’s (1975) Theory of Reasoned Action (TRA), Davis (1989) proposed the Technology Acceptance Model (TAM). Its two factors - perceived usefulness and perceived ease of use - are considered the most important definitive factors that explain the intention of using technology. Perceived usefulness suggests the degree to which a person believes that using a particular system would enhance his or her job performance. In an e-learning environment, perceived usefulness means the degree to which a person believes that using an e-learning system would enhance his or her learning effectiveness and productivity; perceived ease of use suggests the degree to which person believes that using a particular system would be free of effort. This is the possibility that learners can finish their studies without any difficulty nor trouble when using an e-learning system. The intention of using e-learning will be enhanced when the potential user realizes its convenience and effectiveness.

In previous researches, it is confirmed that TAM’s perceived usefulness and perceived ease of use can influence the intention of using e-learning. Perceived ease of use has a positive impact on perceived usefulness and therefore contributes indirectly on user acceptance (Ong et al., 2004; Saade & Bahli, 2005; Liu, 2009; Liu, 2010). The learners are willing to use an e-learning system when they believe it is effective in promoting productivity. The perceived usefulness and intention to use an e-learning
system can be enhanced when they realize its convenience which cost comparatively less in terms of time and energy. In combination with TAM, we propose the following propositions:

P1: Learners’ perceived usefulness positively impacts the intention to use an e-learning system.

P2: Learners’ perceived ease of use positively impacts the intention to use an e-learning system.

P3: Learners’ perceived ease of use positively impacts their perceived usefulness.

2.2 User Satisfaction

As DeLone and Mclean (1992) suggest, system and information characteristics play crucial roles in ensuring user satisfaction. Based on the relationship between information quality and information satisfaction as well as the relationship between system quality and system satisfaction, proposed by Wixom and Todd (2005), we investigate how e-learning lectures and system quality are influenced as well as the effectiveness of e-learning systems measured in terms of information quality and system quality.

Information quality consists of four features: completeness, accuracy, format, currency (Wixom & Todd, 2005). In an e-learning environment, completeness is the extent to which an e-learning system meets the learner's information requirements. Accuracy is the learner’s perception that the lectures are correct. Format is the learner’s perception of the e-learning content which is rendered in a format that is easily understood. Currency means the e-learning system updates its lectures to offer the latest information. These decide the learner’s perception of the quality of information provided in the e-learning course and therefore influence the user's satisfaction with regard to the lectures.

As DeLone and McLean (1992) suggest, information quality and system quality all affect information system application and user’s satisfaction. Wixom and Todd (2005)’s findings show that, information quality will positively affect information satisfaction and consequently, perceived usefulness. System quality has a positive effect on system satisfaction and consequently, on perceived ease of use. System satisfaction also impacts information satisfaction positively. In an e-learning environment, information satisfaction and system satisfaction are proportional to the perceived information quality and system quality, and therefore influence the use of e-learning. Thus we propose the following propositions:

P4: Learners’ system satisfaction positively affects their perceived ease of use

P5: Learners’ perceived system quality positively affects their system satisfaction.

P6: Learners’ information satisfaction positively affects their perceived usefulness.

P7: Learners’ perceived information quality positively affects their information satisfaction.

P8: Learners’ system satisfaction positively affects their information satisfaction.

2.3 Instructor Brand

As brand is important in purchase decision, “instructor brand” is also a crucial consideration for learners when they choose a course. A brand can be defined as a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors (Kotler, 1991). As Keller (1993) suggests, these units concerning brand are called brand characters, and the combination is called brand. Aaker (1991) also pointed out that brand is the memory node for consumers where the relevant information is positioned. When a consumer thinks about a brand name, the memory node and other information interconnect and becomes the consumer’s perception of the brand. Further, Chernatony and McWilliam (1989) also provide four explanations on the meaning of a brand: (1) Brand as a differentiating device; (2) Brands as shorthand devices for consumers; (3) Brand as a promise of consistent quality, a guarantee; (4) Brand as means of projecting self image. Different per instructor, an instructor brand or reputation aid in decision-making when registering for an e-learning course. Based on brand concept, we examine the relationship between instructor brand awareness, instructor’s
credibility, instructor’s image, perceived instructor quality, instructor brand loyalty, perceived risk and the learner’s interest in using e-learning.

2.3.1 Perceived Instructor Quality

In marketing, the concept of perceived quality is the consumer’s perception of the products (Zeithaml, 1988; Dodds et al., 1991). Bhuian (1997) considers perceived quality as the consumer’s judgment of the products’ consistence and appearance. As Zeithaml (1988) suggests, perceived quality is influenced by the consumers’ evaluation of the outer and inner subordinate quality. The inner subordinate quality is the entity’s attributes which includes the size, shape, function and durability; the outer subordinate quality, as opposed to being part of the entity, is closely related to the product, like brand, price or advertisement. According to the two qualities, consumers judge and then select the product which has a better evaluation.

In an e-learning environment, the learner’s perceived instructor quality is his or her subjective judgment or evaluation of the instructor which is based upon his or her benefit or experiences. In general, before e-learning activities came about, the learner usually has to pay for the course. Therefore, the learner with a higher perceived quality is predisposed to buy and use e-learning. Garretson and Clow (1999) suggest that perceived quality has a positive impact on the consumer’s intent to purchase. Monroe (1990) also thinks that perceived quality influences the consumer’s intent to purchase through the perception of value. It is confirmed in Chi (2009)’s research, that with the promotion of perceived quality, the brand loyalty grows, and therefore encourages the consumer to purchase the product or service. When an instructor is considered as possessing better quality, he is first considered when the learner is going to select the course. Here we propose the following proposition:

P9: Learners’ perceived instructor quality has a positive impact on e-learning usage.
P10: Learners’ perceived instructor quality has a positive impact on instructor brand loyalty.

2.3.2 Instructor Brand Loyalty

Formed by experiences, brand loyalty is a consumer’s attitude towards a brand (Deighton et al., 1994). Assael (1998) considers that based on the satisfaction of a brand, brand loyalty encourages repeat purchase. The consumer is not concerned about other competing brands when he has greater loyalty toward a brand. Oliver (1999) also points out, brand loyalty is a consumer’s commitment to purchase a brand, and it is inflexible in any situation. As Aaker (1991) suggests, brand loyalty consists of the loyalty in attitude and the loyalty in behavior. Attitudinal loyalty includes a degree of dispositional commitment in terms of a unique value that is associated with the brand; and the Behavioral loyalty is a consumer’s repeat purchasing behavior towards a brand they are loyal to. When the consumer possessing the attitudinal and behavioral loyalty towards a brand, he is classified as having a high level of brand loyalty.

In an e-learning environment, instructor brand loyalty is a learner’s attitude towards a certain instructor brand - the learner is predisposed to buy and use the e-learning course offered by an instructor whose teaching technique he particularly likes. The learner does not care about other instructors when he has a greater loyalty to one particular instructor and therefore highly interested to use the e-learning system offered by that instructor. Wu et al. (2008) and Chi et al. (2009) show that brand loyalty has a positive effect on a consumer’s purchasing intention, thus, a proposition is offered below:

P11: Instructor brand loyalty has a positive effect on learners’ intention to use e-learning.

2.3.3 Perceived Risk

Perceived Risk is used to explain the potential hazards for a consumer in the decision-making process. Cox (1967) defines perceived risk as a consumer’s uncertainty before making the purchase and the
degree of loss afterwards. The consumer is not sure whether the decision is consistent with his objective and there are unsatisfactory results sometimes, leading to the perceived risk. The perceived risk can be divided into six forms (Brooker, 1984): financial risk, performance risk, social risk, psychological risk, security risk and time risk.

A learner’s perceived risk is the relevant uncertainty before using an e-learning system and later, the degree of loss, for example, effects do not meet expectation; inconsistency of lectures and derived content; or the time wasted. Compared with a traditional entity classroom, the content of e-learning classes is consistent. The lack of interaction removes the necessity for the instructor to adjust his teaching accordingly. Therefore, the uncertainty of e-learning content may cost learner more time to study, thus lead to perceived risk. Chen and He (2003) suggest that perceived risk has a negative effect on the consumer’s intent of use or purchase from on-line retailers. This study suggests, for an e-learner, high perceived risk results in low intent of use of an e-learning system. We propose the following proposition:

P12: Learner’s perceived risk has a negative effect on the intention of using an e-learning system.

2.3.4 Instructor Brand Awareness

Brand Awareness is a consumer’s ability to recognize and recall a brand in different situations (Asker, 1996). For those instructors with good reputation, the instructor’s name appears when the course is offered. The stronger instructor brand awareness, the higher is the perception of reputation, and therefore the more successful the instructor brand is. Hoyer and Brown (1990) point out that brand awareness is a major selection strategy when a consumer first made a decision. Under this method, the anonymous brands are seldom considered. That's to say, instructor recognition is one of the considerations when making a selection.

Grewal et al. (1998) confirm that brand awareness and perceived quality have positive interconnections. Doodds et al. (1991) argue that brand awareness as having a positive effect on the consumer’s perceived quality and therefore the purchasing intention. The more familiar the learner is with the instructor, the higher the learner thinks of his course, and the more willing he is to purchase the course offered by him. Doodds et al. (1991) point out that the stronger the brand awareness, the better the market share, which encourages the consumer’s preference for the brand.

Asker and Keller (1990) also suggest good brand awareness and brand image will promote consumer’s brand loyalty. Well reputed instructors encourage learner’s dependence and purchasing intention. Chi et al. (2009) argued that consider brand awareness as having a positive impact on perceived quality and brand loyalty, which indirectly influence the consumer’s purchasing intention. As a result, we can cultivate learner’s loyalty towards a particular instructor and encourage them to use the e-learning course offered by the instructor when the instructor has a very good reputation.

Besides quality cognition and brand loyalty, brand awareness can also influence the consumer’s risk cognition at the time of purchase. Chen and He (2003) confirm that brand awareness has a negative effect on perceived risk when purchasing, and therefore influence the consumer’s intent of use. There is a greater degree of uncertainty and perceived risk towards a product when the consumer is unfamiliar with it. As a result, consumers prefer famous products to reduce risks. In e-learning, a learner prefers famous instructors to reduce risks that are involved when they are unfamiliar with the teaching method and contents. From the learner’s point of view, a famous instructor can teach an e-learning course better than anonymous instructors. At the same time, the learner regards this course as being able to meet their expectations. The learner prefers to choose and continually use the course offered by a well reputed instructor, thus we propose the following propositions:

P13: Instructor brand awareness has a positive effect on the learner’s perceived instructor quality.

P14: Instructor brand awareness has a positive effect on the learner’s instructor brand loyalty.

P15: Instructor brand awareness has a negative effect on the learner’s perceived risk.
2.3.5 Instructor Brand Credibility

Brand credibility means the information of what the brand covers is credible. Consumers believe a brand can consistently offer promise and assurance. Wu et al. (2008) propose that the brand’s credibility can influence future purchasing intentions. Erdem and Swait (2004) also suggest that brand credibility can influence perceived risk or perceived quality, and therefore influence brand selection. In an e-learning environment, instructor brand credibility means the information offered by the instructor is credible, and it is believed the instructor has the capability and willingness to provide relevant assurance. A learner’s confidence in well reputed instructors leads to a more accurate perception of perceived quality and perceived risk. Thus we propose the following propositions:

P16: Instructor brand credibility has a positive effect on the learner’s perceived instructor quality.

P17: Instructor brand credibility has a negative effect on the learner’s perceived risk.

2.3.6 Instructor Brand Image

Brand image is defined as the perception towards a brand as reflected by the brand associations held in the consumer’s memory (Keller, 1993). It is the association raised in the consumer’s mind when considering a brand name. To the learner, they associate the lecture or style, or other characteristics when they hear the instructor's name. Chen and He (2003) suggest that brand knowledge, including brand awareness and brand image, has a negative effect on perceived risk, and then influence the consumer’s intent to purchase from the on-line retailers. In an e-learning environment, the learner has a lower perceived risk and prefers the course provided by the instructor with a better brand image. Thus, we propose the following propositions:

P18: Instructor brand image has a negative impact on the learner’s perceived risk.

3 CONCLUSION

The rapidly evolving e-learning technology gradually changed present study patterns and attracted more enterprises to introduce an e-learning system. However, a learner’s intent to use determines the success of e-learning. Different from previous researches which focused more on the system used, this research, in combination with the brand concept in marketing, points out the importance of instructor brand awareness, instructor brand credibility and instructor brand image. The promotion of instructor brand awareness positively influences the potential learners’ perceived quality and brand loyalty, but reduces perceived risk. As a result, the learners’ intent of using e-learning is encouraged. On the other hand, perceived risk can be reduced by promoting instructor brand image and credibility, which can also encourage the learners’ cognition of the course quality and therefore intent of use.

This study also points out that improving system quality and information quality is good for the learners’ system and information satisfaction, and consequently, ease of use or usefulness. The results can be regarded as reference for educational institutes and enterprises. For example, this can be used in conceptualizing how to promote the said factors, including instructor brand awareness, credibility, image, etc., so as to encourage the learners’ intent to purchase and use e-learning systems.

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