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A Framework for Examining Virtual Brand Community Effectiveness

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Abstract: Virtual community (VC) has been expected to be a potentially powerful way to increase customer loyalty. Marketers are spending significance resources as to tap into this market. But there are issues on what kind of benefit that they can get from those investments and how they can attract and sustain the community? This study is attempts to integrate the TAM and IS Success Model in examining the satisfaction and effectiveness of a VC. Technological features that drive the VC usage and user satisfaction are identified. Brand loyalty is place as the outcome of the system usage and user satisfaction which is considered more appropriate indicator of VC effectiveness. It is hoped that these insights will contribute to the wider understanding pertaining to the VC satisfaction and brand loyalty.

Key words: virtual communities; satisfaction; loyalty; TAM; IS success model
JEL code: M31

1. Introduction

Virtual community (VC) is refers to a group of people who communicate with each other via electronic media, such as the Internet and share common interests unconstrained by their geographical locations (Ridings, Gefen & Arinze, 2002). Such Internet-based communities have become a form of communication between people who know each other primarily in real life. Users can meet new friends, stay in touch with old ones and sharing online content and media in these communities. According to Horrigan (2001), 84% of Internet users have contacted and participated in a VC and the growth in membership and usage is expected to continue (Bressler & Grantham, 2000).

Many businesses are now recognizing the importance of VC due to its popularity and economic potential. Marketers are using the VC as a strategic tool in expanding their markets and also marketing their products and services. For instance, VC is used as an advertising vehicle and to provide responsive communication to the customers. VC is also expected to become a place where members-customers will share credible information and products' associated knowledge (Kardaras, Karakostas & Papathanassiou, 2003) which help in building loyalty among the members. This is to provide assurance to the customer that he/she is receiving a fair deal and good value by allowing them to communicate with other customers, who are otherwise invisible and unbiased, to discuss the products, prices and services.

Establishing a virtual place to make members interact with each other in this new Internet world through the VC has long been expected to be a potentially powerful way to increase customer loyalty (Armstrong & Hagel,

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1996). As such, marketers are spending significance resources to acquire existing VC as to expand their business and also hosting their own VC in order to provide better services to its customers. Such investments should precede impacts and benefits. However, there are issues such as how to measure the effectiveness of a VC and what real benefits can be brought by the VC. Membership of a VC is not an appropriate indicator because an Internet user can easily become a member of VC where users just need to register as member prior to their participation in the community. Because of theses uniqueness, brand loyalty is considered to be an appropriate indicator of VC effectiveness. Limited study has investigated the influence of VC over companies with ownership of the brand (Jang, Ko & Koh, 2007).

Marketers also have to realize that the users drive the success or failure of a particular VC. How they can attract and sustain the community? Hence, it would be important to examine the users' expectations and how they feel about the VC. If users accept and value a particular system, they are likely to use that particular system. Knowledge on the factors that affect the VC adoption is needed in order to better facilitate acceptance (Pikkarainen, Pikkarainen, Karjaluoto & Pahnila, 2004). However, limited research is being done on VC especially from the technical perspective (Lin, 2008). This necessary information would help the marketers to formulate the best strategies or methods to promote the acceptance and adoption and to ensure the users satisfaction in the community.

1.1 Objectives of the Study

The broad objective of this study is to identify and measure the influence of VC over the company with ownership of the brand. The specific objectives are as follows:

- To investigate the technological features that value by the VC users.
- To examine the affect of technological features on VC usage and users satisfaction.
- To examine the affect of system usage and users satisfaction on brand loyalty.
- To propose a model of brand loyalty for the study of VC.

1.2 Research Questions

These research objectives can be answered through the following research questions:

- What are the technological features that attract the VC users?
- How these technological features affect the VC usage and users satisfaction?
- Does system usage play the role in establishing VC brand loyalty?
- Does user satisfaction play the role in establishing VC brand loyalty?

2. Literature Review

2.1 TAM

TAM is an adaptation of the Theory of Reasoned Action (TRA) to the field of IS by Davis (Davis, Bagozzi & Warshaw, 1989). In TAM, two technology acceptance measures—perceived usefulness (PU) and perceived ease of use (PEU), were replaced the attitude measures in TRA.

According to Davis (Davis et al., 1989), PU refers to the degree to which a person believes that using a particular system would enhance his or her job performance. Thus, functionality of a new system is an important component to the acceptance and adoption of that particular system. The users adopt a new technology primarily because of the functionality offered if the benefits of usage are substantive.

PEU refers to the degree to which a person believes that using a particular system would be free of effort

(Davis et al., 1989). If the users perceive that the system to be complex and difficult to use, it is likely that they will not accept and use this system. The users will also have difficulty in recognizing the perceived usefulness of the new system if it is too complex and difficult to use (Davis & Wiedenbeck, 2001).

In prior TAM-based studies, PU typically has a stronger direct effect on attitudes than PEU (Bruner & Kumar, 2005; Hu, Clark & Ma, 2003; Ngai, Poon & Chan, 2007; Pagani, 2004; Saade, Nebebe & Tan, 2007).

Figure 1 below shown the relationships of various variables in TAM. An individual's attitude toward a system is determines by two beliefs: PU and PEU. When these beliefs increase, the individual's attitude toward the system will be more positive. Attitude in turn positively affects the individual's usage intention. If someone forms an intention to use a system, then they are likely to act that behaviour. In other words, usage intention will lead to the actual behaviour. PEU also has a positive influence on the PU (Davis et al., 1989).

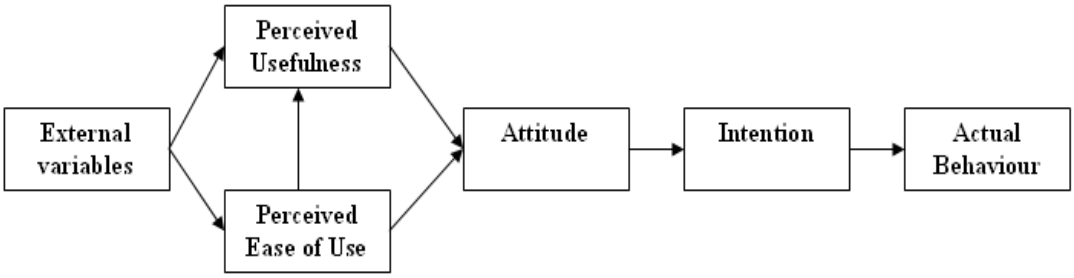

Figure 1 TAM Diagram

Generally, TAM specifies general determinants of individual technology acceptance and therefore can be and has been applied to explain or predict individual behaviours across a broad range of end user computing technologies and user groups (Davis et al., 1989).

TAM has become well-established as a robust, powerful, and parsimonious model for predicting user acceptance (Venkatash & Davis, 1996). Attempts to extend TAM have generally taken one of three approaches: by introducing factors from related models, by introducing additional or alternative belief factors, and by examining antecedents and moderators of PU and PEU (Wixom & Todd, 2005).

2.2 Information Systems (IS) Success Model

DeLone and McLean proposed and presented IS Success Model in 1992 as a framework and model for measuring the complex dependent variable in IS research. In the IS Success Model, "system quality" measures technical success; "information quality" measures semantic success and "system use, user satisfaction, individual impacts" and "organizational impacts" measures effectiveness success (DeLone & McLean, 2003). After ten years of this model was proposed, DeLone and McLean have updated the original model based on research contributions that had reviewed and adopted their original model.

First, "service quality" has added as the third quality dimensions in IS Success Model due to the additional role of IS organizations as information provider and service provider (DeLone & McLean, 2003). Thus, there is a danger that IS researchers will mismeasure IS effectiveness, if they do not include a measure of service quality (Pitt, Watson & Kavan, 1995). Second, "individual" and "organizational impacts" are combined into a single variable "net benefits".

Figure 2 shown the updated IS Success Model. Information, system and service quality are having positive effect on intention to use and user satisfaction. Both intention to use and user satisfaction affect the net benefit.

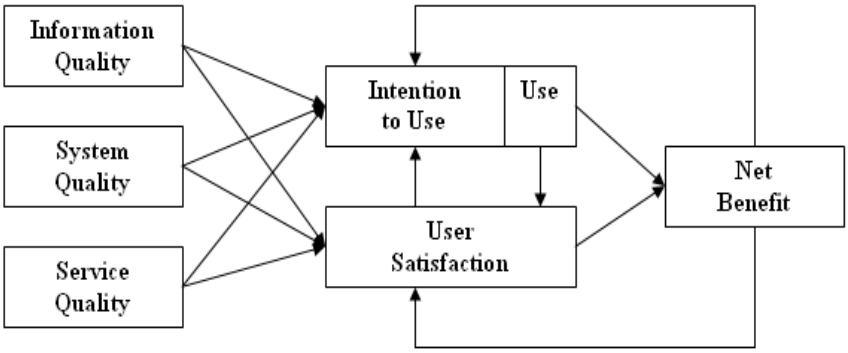

Figure 2 Updated IS Success Model

2.3 Playfulness

Factors contributing to the acceptance of a new IT are likely to vary with the technology, target users and context (Moon & Kim, 2001). Much computer technology nowadays is used for both work and for fun (Starbuck & Webster, 1991). Whether a system is used for utilitarian or recreational reasons will have impacts on the antecedents of adoption (Chesney, 2006). Thus, additional explanatory variables may be needed for research model that has been long used to examine the utilitarian systems. A more recent addition to the TAM is the "playfulness" construct.

Researchers have studied playfulness as either an individual trait or a state of mind (Webster & Martocchio, 1992). In the trait-based approach, Webster and Martocchia (1992) conceived playfulness as the characteristics of an individual. They found that individuals considered to be high on the playfulness trait demonstrated higher performance and showed higher affective responses to computer training tasks. In the state-based approach, playfulness is conceived as the individual's subjective experience of human-computer interaction (Moon & Kim, 2001). Csikszentimihalyi's (1975) Flow Theory emphasizes that human motivated behaviour is influenced by the context rather than individual differences.

On the basis of Csikszentimihalyi's work, perceived playfulness is having the following dimension:

Concentration: An individual's attention will be focused on the activity in the playfulness state. Irrelevant thoughts and perceptions are filtered out. When Internet users fall into a playfulness state during their interaction with the Internet, their attention will be focused on the interactions.

Curiosity: An individual's sensory or cognitive curiosity is aroused in the playfulness state. The Internet can encourage sensory curiosity through hyper-links. Such technological characteristic can encourage the desire of Internet users to explore and to attain competence.

Enjoyment: An individual will find the interaction intrinsically interesting in the playfulness state. They are willing to involve in the activity for pleasure and enjoyment rather than for extrinsic rewards.

2.4 Brand Loyalty

Membership of VC has less requirements where users just need to register as member prior to their participation in the community. VC is also characterized by anonymity and addictive behaviour. Because of these uniqueness, loyalty is considered to be more appropriate indicator of VC effectiveness (Lin, 2008). Engel, Kollat and Blackwell (1982) defined brand loyalty as the preferential, attitudinal and behavioural response toward one or more brands in a product category expressed over a period of time by a consumer. Oliver (1999) expressed the view that brand loyalty is a deeply held commitment to re-buy or re-patronize a preferred product/service

consistently in the future. Thus, brand loyalty here is considered bi-dimensional including both attitudinal commitment and behavioural re-purchase intention. Therefore, brand loyalty in this study is defined as the degree to which a user holds a positive attitude towards a brand, has commitment to it and intends to continue to repurchase and recommend to others in the future.

3. The Proposed Research Framework

Based on the TAM and IS Success Model, this study proposed an integrated framework that presents brand loyalty as a consequence of direct and indirect relationship with system use, user satisfaction, PEU, PU and perceived playfulness (see Figure 3).

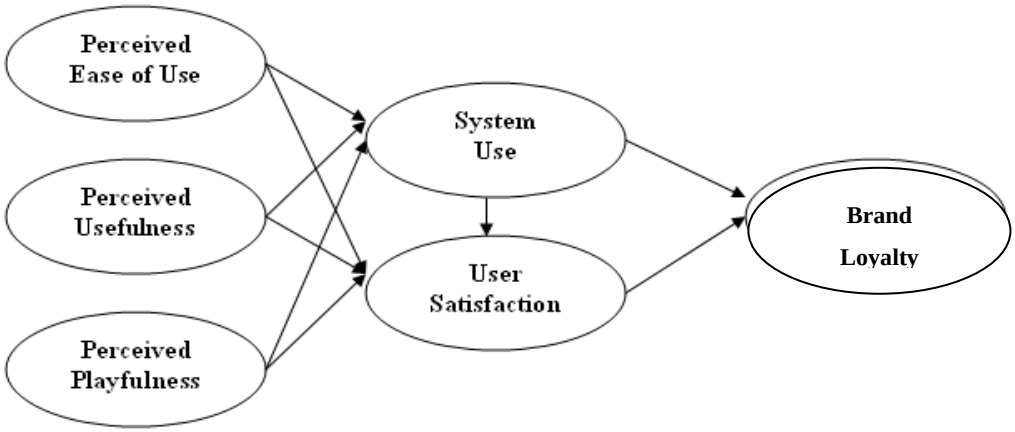

Figure 3 The Proposed Research Framework

3.1 System Use and User Satisfaction

System use and user satisfaction are considered as appropriate measure of IS success. System use is refers to a behaviour (DeLone & McLean, 2003) in using a particular system whereas user satisfaction is refers to the users' favourable attitude (Flavián, Guinalíu & Gurrea, 2006) toward a particular system.

System use is a reflection of acceptance of the system. In other words, if users accept and value a particular system, they are likely to use that particular system. Normally, it was measured as frequency of use, time of use, number of accesses, usage pattern and dependency. Simply measuring the amount of time a system is used is inappropriate, system use should address whether the full functionality of a system is being used for the intended purposes. Hence, system use is a key variable in understanding IS success (DeLone & McLean, 2003). The user experience in using a particular VC will influence their attitude toward the VC. Lin (2008) found that involvement in the VC is significantly influenced user loyalty.

User satisfaction remains as an important means of measuring the users' opinion and attitude of the system. The degree of an individual's satisfaction depends on the relationship between the initial expectations created and the results obtained (Flavián et al., 2006). Users are feeling satisfied if what he or she wanted is being fulfilled and obtained. Greater consumer satisfaction leads to greater individual loyalty (Flavián et al., 2006; Anderson & Sullivan, 1993; Yoon & Kim, 2000). If the user is satisfied with a VC site, then the user will continue to use and also recommend the VC to others.

System usage and user satisfaction are closely interrelated where positive experience with "use" will lead to greater "user satisfaction" (DeLone & McLean, 2003). System usage must precede impacts and benefits.

3.2 Technological Features

According to Davis et al. (1989), an individual adopts a new technology primarily because of the functionality offered. TAM has long been used to examine the acceptance of Internet related technologies. PEU and PU constructs have been considered important in determining the individuals' acceptance and use of Information Technology (IT) (Keil, Beranek & Konsynski, 1995).

Website usability refers as the ease with which a person can employ a system in order to achieve a goal. This definition shows the coincidence between the concept of "ease of use" and "usefulness". Kim and Eom (2002) concluded that website usability is critical importance in achieving the satisfaction of the user. In IS Success Model, DeLone and McLean (2003) proposed that system quality is significantly influence the system user and user satisfaction.

It has been criticized that PEU and PU are found not to be enough to explain the users' motives (Ahn, Ryu & Han, 2007). User believes that an aesthetically pleasing VC is a demonstration of the perceived affective quality (Sanchez-Franco & Rondan-Cataluna, 2009). If users find the VC's appearences pleasing, it is likely that will influence all of the members' emotions and their inclination to use the VC (Browne, Durrett & Wetherbe, 2004). According to Lindgaard (2007), a pleasant experience such as navigating a "beautiful" website shows to be intrinsically connected to customer satisfaction.

4. Conclusion

This study attempts to integrate the TAM and IS Success Model (two primary research streams in IS success) in examining VC effectiveness. The essence of this study is to investigate in depth what drives the VC users to have high satisfaction and brand loyalty toward a particular VC and brand. Loyal customers buy more, are willing to spend more, are easier to reach and act as enthusiastic advocates for the firm (Harris & Goode, 2004). It is hoped that these insights will contribute to the wider understanding pertaining to the VC satisfaction and brand loyalty.

From theoretical perspective, this study is attempts to place brand loyalty as the net benefit or the outcome of satisfaction and usage of the VC. Previous studies in VC have mainly focus on loyalty towards the VC itself instead of investigating the impact on brand loyalty. Sufficient traffic and commitment in a VC are not evidenced enough that the VC bringing visible benefits to the company. Marketers are eager to have more visible benefits in order for them to I flow more investments in this market. From practical perspective, this necessary information will enable the service providers or the developers to be effectively in designing the VC interface. They should know what promotes the VC usage and what hinders the VC usage.

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