

Influences of Relationship Benefits of Social Network Service on User-Perceived Usability and Brand Attitude

Seunghee Baek

D. of Business Administration
Ewha Womans University
(victory@ewha.ac.kr)

Sangwon Lee

D. of Information and Electronic Commerce
Wonkwang University
(Corresponding Author)
(sangwonlee@wku.ac.kr)

Supporting communications among users, Social Network has encouraged various information flows through relationships among them. This paper studies on mentality or attitude of Social Network Services (SNS for short) users, on the basis of Technology Acceptance Model (TAM for short) and then proposes so-called TAMS, Technology Acceptance Model for Social Network Services. SNS users make full use of SNS as channels in order to create, expand, and obtain some information related to personal concerns. We will research on how the benefits that users get by using SNS exert influence on user-perceived usability. The SNS-using benefits focus on relationship benefits that are formed by interactions among users. Provided that perceived usability affects mental or informational benefits according to involvement of SNS users, we will check how perceived usability or ease of use is connected to brand attitude.

※ Key Words: Social Network, Technology Acceptance Model, Relationship Benefit, Involvement, Perceived Usability, Perceived Ease of Use

I . Introduction

Lately many enterprises have done their marketing activities by use of Social Network Service (SNS for short) which supports relationship-making or communications among users. As a

tool to satisfy emotional and reasonable needs of consumers, SNS has come into wider and faster use than any other technologies up to now and influenced on general social and culture fields. And then, Social Network has tried to change the whole society, with backing up one-to-one communications as well as tra-

ditional one-to-many communications between persons. For maintaining more intimate relationships between customers and a company, many enterprises are now trying to use this Social Network as a SNS user with various information services and events for other users. The advancements of technologies make many SNS users communicate diverse information in real time by use of their smart phones as well as computers. This rapid information interchange enables them to feel interactions among users, which makes relationships among them after all. The Facebook, a famous SNS, is now used by more than 600 million users all over the world and is connected to more than 200 million mobile devices. Therefore, SNS will dynamically exercise its influence over users with more diverse relationship benefits. The objective of this research is to understand how the relationship benefits of users affect perceived usability and ease of use as related technologies advance and the number of SNS users increase, and how these perceived usability and ease of use affect brand attitude of SNS users.

II. Related Works

2.1 The Concept and Characteristics of Social Network Services

Social Network is a collection that is com-

posed of people or organizations with friendships, monetary transactions, reiterated memberships, and so on [Laumann et al. 1978]. And, Social Network Service is to connect a person with a person on the basis of the internet and then manage or maintain the connections by use of information sharing, personal networking, and self-expression. In the traditional theory defines Social Network as a social entity that is connected by value-sharing among persons or organizations and socially meaningful relationship-maintenance. While the traditional SNS focuses on one-to-one relationships with friends, the recent SNS concentrates on online virtual community and computer mediated communication [Kwon et al. 2010]. Therefore, the present SNS has wider scope of communication and shares information with various groups.

2.2 The Procedure of Innovative Technology Acceptance

2.2.1 Traditional Approaches on the Procedure of Innovative Technology Acceptance

Several researches explain about the procedure that a user accepts a product with innovative technologies: Technology Acceptance Model (TAM for short) [Davis 1989], Theory of Reasoned Action (TRA for short) Model, Theory of Planned Behavior (TPB for short) Model, Integrated Model of both TAM and TPB Model, PC-Utilized Model, Social Cogni-

tive Theory, Motivational model, United Theory of Acceptance and Use of Technology (UTAUT for short) Model. Models such as TAM, TRA, TPB, and Innovation Diffusion Theory (IDT for short) Model are used to disclose acceptance intention of customers who are related to information telecommunication technologies [Kang et al. 2007].

2.2.2 Technology Acceptance Model

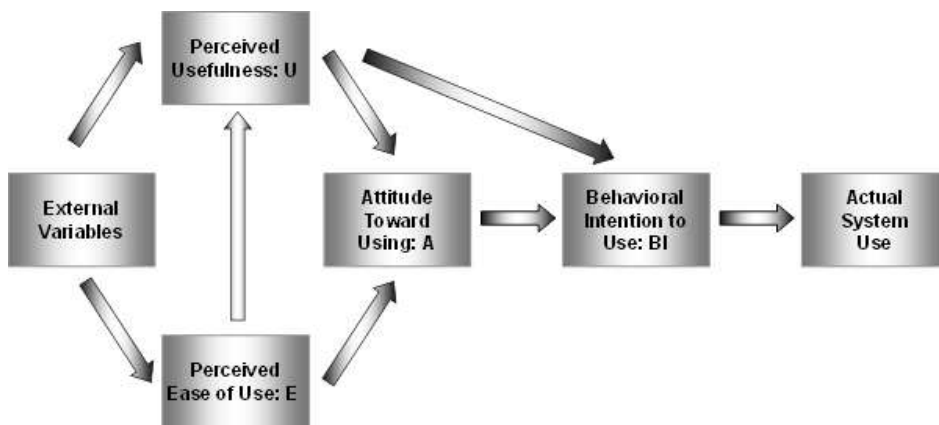
Technology Acceptance Model (TAM) is based on TRA Model and TPB. The TRA [Fishbein et al. 1975] has an assumption that a human being has his or her own reason enough that his or her attitudes and subjective norms affect behavioral intentions. TRA has been useful in explaining about acceptance in order that a user may use information systems. And, the following TAM shows major factors affecting users' behaviors in accepting and using information technologies.

After reviewing on Expectance Theory, Behavioral Decision Theory, Innovation Diffusion Theory, Self-Efficacy Theory, Relationship Theory of Human and Computer, Marketing, and so forth, Davis, F. D. [Davis 1989] found out that two beliefs variable, perceived usefulness and perceived ease of use, have to do largely and importantly with a user's attitude toward information technology and behavioral intention. Davis defined "perceived usefulness" as "a user's subjective probability which a specific application system would increase his or her work accomplishment in the organizational environment". And Davis also defined "perceived ease of use" as "the expectation degree that a user could use a target system without many efforts".

2.3 Relational Benefits

Enterprises use SNS for business promotion

<Figure 1> Technology Acceptance Model



to low information access barrier for them, to share opinions with their users, which could naturally lead to viral marketing on the network. Also, users can feel various relational benefits through communication activities of personal opinion and information. Relational benefits imply all kinds of benefits that an enterprise provides to customers [Gwinner et al. 1998]. When both an enterprise and a customer benefits from the relationship between them, lasting relationship could be maintained and improved. So, relational benefits of both are necessary to last relationship [Berry 1995].

Gwinner and Bitner [Gwinner et al. 1998] proposed four components of relational benefits on the basis of literature reviews and exploratory experience researches by use of customer-interview materials of service enterprises as follows [Kim et al. 2010]: 1) Desire for positive relationships between a customer and an employee through social benefits, 2) Relational dimension with focusing on decreasing uncertainty through psychological benefits, 3) Economic benefits in getting economic profits from relationship with a customer, and 4) Individual benefits when a service provider treats an individual. This research on offline relational benefits of Gwinner was extended to online relational benefits. Yen [Yen et al. 2003] and Gwinner studied on relational benefits in the environment of online shopping. Yen and Gwinner assert that

not social benefits but convertible or special treatment benefits improve satisfaction. It is so because direct interactions among persons are scarce in the online shopping environment.

Shin, J. [Shin et al. 2011] added new variables by expanding these relational benefits of the SNS. Adding non-monetary economic benefits and reputable benefits to the previous relational benefits, Shin researched on differences of relational benefits that are perceived according to personal characteristics in the SNS environment. The relational benefits are as follows.

- (1) Social Benefits: By creating or participating in a group, SNS intend to social network for interactions with persons who meet a new person or have similar interests.
- (2) Psychological Benefits: SNS Users feel mutual trust and psychological stability during lasting interactions for friendship and company with sharing their daily life.
- (3) Informational Benefits: A major goal of SNS is to share knowledge or information.
- (4) Non-monetary Economic Benefits: Even though SNS does not get any monetary benefits directly, it saves time and decrease efforts for personal networking.
- (5) Reputational Benefits: Since SNS is able to define identity through self-representation, it enable to establish

an own self-image that is discriminated from others online.

Traditional researches focus on analyzing utilization status of SNS users. However, as the number of SNS users is increasing nowadays, it is necessary to study on why customers are getting to participate in using SNS. As a try from the aspect of users, this research intends to analyze how psychological status that SNS users feel in using SNS influences on SNS providers. We will research on how the benefits that users get by using SNS exert influence on user-perceived usability. The SNS-using benefits focus on relationship benefits that are formed by interactions among users. Provided that perceived usability affects mental or informational benefits according to involvement of SNS users, we will check how perceived usability or ease of use is connected to brand attitude.

2.4 Involvement

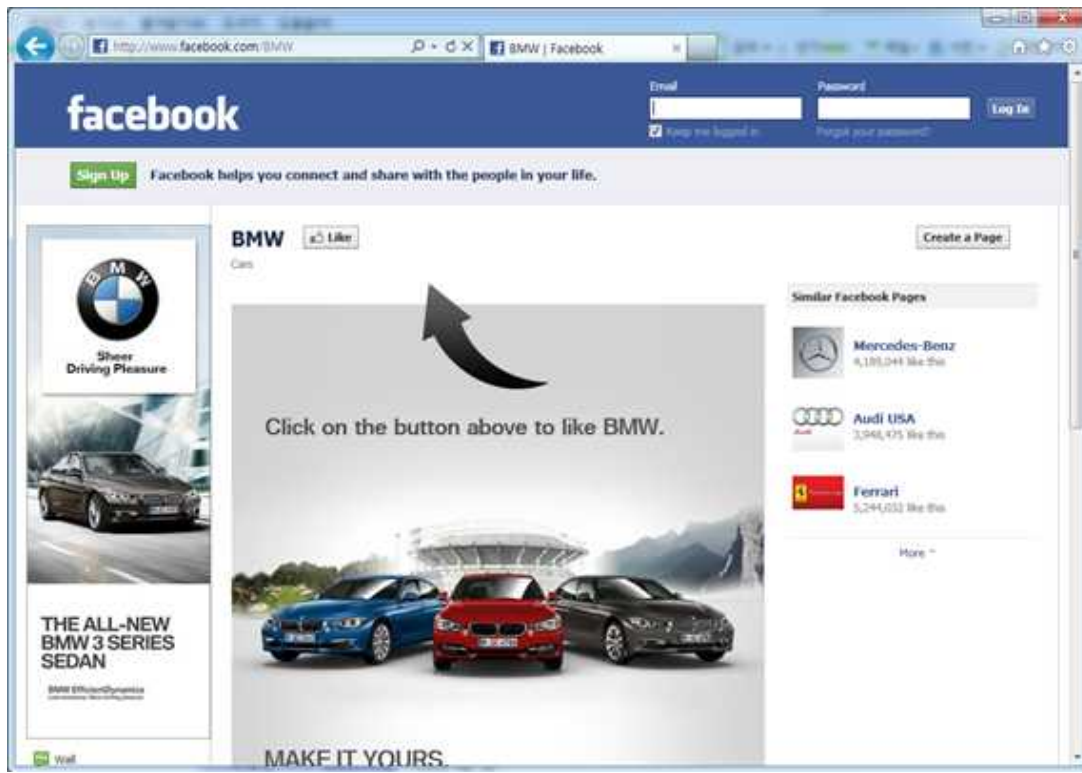
Involvement is the standard of personally perceived importance or concern that is enlightened by a stimulus under a specific situation. And it is a kind of function among person, object, and situation. That is, involvement is a motive to operate information that is extracted from perceived personal relation of products or services in a specific context [Zaichkowsky 1985; Petty et al.

1983]. Zaichkowsky classifies involvement into 3 categories: personal characteristics, physical characteristics, and situational characteristics. Personal characteristics represent that each person recognizes the same product differently and has mutually different involvement level. Physical characteristics are related to difference among products in the product group. Situational characteristics show that the involvement level is affected by various situations that arise from purchasing intentions, purchasing usages, and prior purchasing experiences. When purchasing with the similarity of alternative options such as product price, situation necessity, consuming time (purchasing interval), complexity, and so on, situation characteristics affect perceived experiences and then decide the involvement level [Park et al. 2008].

2.5 Brand Attitude

As an overall evaluation of brand, brand attitude is a kind of tendency that consumers evaluate brand consistently and positively or negatively [Fishbein et al. 1975]. Mitchell [Mitchell et al. 1981] and Olsen define brand attitude as personal inner-evaluation of a product with brand. As they insist, the reason why attitude is important in marketing researches is that sustainability and stability of attitude are indicators in forecasting a consumer's behaviors and that attitude proposes

〈Figure 2〉 An Enterprise with performing Social Network Services on Facebook



a theoretical model related to socio-psychological attitude formation.

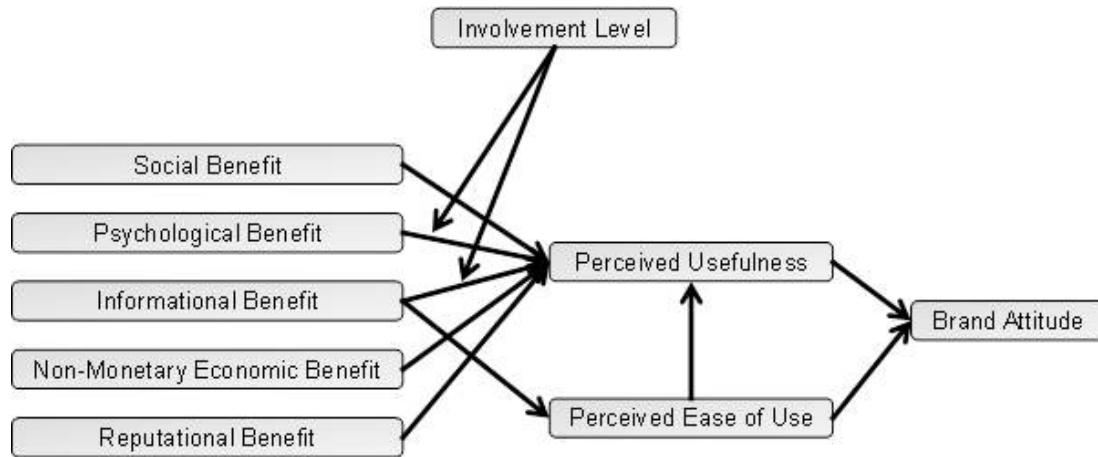
III. Technology Acceptance Model for Social Network Services

3.1 Research Model

This paper studies on mentality or attitude of Social Network Services (SNS for short) users, on the basis of Technology Acceptance

Model (TAM for short) and then proposes so-called TAMS, Technology Acceptance Model for Social Network Services. We judge that the relationship among SNS users has a great effect on SNS usefulness motivations with exchanging opinions and sharing information among users. To verify the perceived usefulness of SNS users, the relationship benefit theory [Shin et al. 2011] according to personal characteristics in the SNS environment is adopted and TAMS is proposed with psychological characteristics of SNS users on the basis of TAM [Davis 1989].

〈Figure 3〉 Technology Acceptance Model for Social Network Services



3.2 Research Design

From the viewpoint of TAM [Davis 1989], perceived usefulness and ease of use is a concrete personal belief in the domain of information technology that makes effects on attitude for innovative technology acceptance. In TRA Model [Fishbein et al. 1975], there exist several external variables that affect TRA factors such as belief, evaluation, attitude, subjective norm. Especially, these variables could have effects on attitude and subjective norm and would be more than one. For example, there are demographic variables, bygone experiences, personalities, social classes, businesses, and situational attribute variables. In the end, SNS users revisit SNS after perceiving various psychological benefits through experiencing SNS usages. To understand psychological motivations which users use

SNS with, we build several hypotheses about relationships between relational benefit and perceived usefulness of SNS as follows.

- (H1) Social benefit that is felt by using SNS affects perceived usefulness positively.
- (H2) Psychological benefit that is felt by using SNS affects perceived usefulness positively.
- (H3) Informational benefit that is felt by using SNS affects perceived usefulness positively.
- (H4) Non-monetary economic benefit that is felt by using SNS affects perceived usefulness positively.
- (H5) Reputational benefit that is felt by using SNS affects perceived usefulness positively.

A user of SNS could perceive information of

others differently according to his or her own inner experiences or information level. A person soaks up information with counting on his existing knowledge when facing a problem and learning a new thing [Liao et al. 2008]. The personal characteristics of these users would affect perceived usefulness differently, according to involvement level. The related hypotheses are proposed as follows.

- (H6) If the involvement level of a SNS user increases, his or her informational utility increases perceived usefulness.

SNS is accelerating more and more because of appearing micro blog services such as Twitter and Facebook [Youn et al. 2011]. Using SNS for their product promotions, many enterprises nowadays propose closed-type relationship for sharing information for specified users and open-type relationship for permitting information exchanges of all users. SNS draws enormous response from the public since social relationship among users is specified and managed thorough setting relationship [Danah et al. 2007]. Therefore SNS users feed perceived usefulness through relationship utility when using SNS, which could affect brand attitude of a SNS provider. A hypothesis about relationship between perceived usefulness of SNS and brand attitude as follows.

- (H7) Using SNS, perceived usefulness affects brand attitude positively.

3.3 Research Method

To verify TAMS, we should collect data from SNS users. The target of users is supposed to be users that have ever participated in activities of Facebook and Twitter. The questionnaires are designed for 400 users. We use AMOS 7.0 to evaluate suitability of TAMS.

IV. Conclusions

Our proposed model TAMS researches on how the benefits which users get by using SNS exert influence on user-perceived usability. Provided that perceived usability affects mental or informational benefits according to involvement of SNS users, we check how perceived usability or ease of use is connected to brand attitude. Existing researches propose usage motivation, technology innovation, technology accessibility, and technology utilization ability fragmentally as leading variables for SNS usages. In forming relationships between SNS users and enterprises with continuous using, psychological effective profits after this service are at work. Our TAMS discovers how these benefits are usefully perceived by

users, by selecting usage motivations of SNS users and then analyzing effective profits of relationship. From now on, more and more enterprises perform their marketing activities on the social network. For more effective and efficient marketing activities, it is very important to know SNS users. Our TAMS contributes greatly to knowing how useful the usefulness of each SNS users is useful in using SNS.

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소셜네트워크서비스의 관계적 혜택이 이용자의 지각된 유용성 및 브랜드 태도에 미치는 영향

백승희* · 이상원**

요 약

소셜네트워크(Social Network)는 전세계 사용자간의 커뮤니케이션을 지원함으로써 이용자들간의 관계 형성을 통해 다양한 정보의 흐름을 유도하고 있다. 이를 통해 사용자는 다양한 혜택을 누리고 있으며 이는 우리사회에 커다란 영향력을 미치고 있다. 본 연구의 목적은 소셜네트워크 서비스(SNS) 이용자의 SNS 이용 심리 및 태도를 Davis의 기술수용모델(TAM)에 근거하여 연구하고자 한다. SNS 이용자들은 개인의 관심분야와 관련하여 다양한 정보를 생산하고, 확산하고, 획득하는 채널로서 SNS를 활용하고 있으며 이러한 활동에 따른 SNS 이용혜택이 소비자의 지각된 유용성에 어떻게 영향을 미치는지에 중점을 두고 살펴 보고자 한다. 본 연구의 SNS 이용자 혜택은 SNS의 다양한 혜택 중에서도 이용자들 간의 상호작용을 통해 형성되는 관계혜택에 초점을 두고 있으며 이러한 소비자의 관계혜택 중 소비자가 느끼는 심리적 혜택과 정보적 혜택은 SNS이용자의 관여도에 따라 지각된 유용성이 다르게 영향을 미칠 것이라는 가정 하에 이와 관련한 지각된 유용성과 지각된 용이성이 브랜드 태도에 어떻게 연결되는지를 살펴보고자 한다.

※ 주제어: 소셜네트워크, 기술수용모델, 관계혜택, 관여도, 지각된 유용성, 지각된 용이성

* 이화여자대학교 경영학과 석사과정(victory@ewha.ac.kr)

** 원광대학교 정보전자상거래학부 교수(sangwonlee@wku.ac.kr), 교신저자