Satisfaction or Attitude is Matter?  
The Fully Mediating Effect of Attitude  

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**Keywords:** Attitude, Expectation confirmation theory, ECT-IS model, fully mediating effect.

**Abstract.** Continuous intention is one of key indexes to measure the success of enterprise information system. Hence, it is important to predict user’s continuous intention to prevent disasters caused from poor continuous intention behavior to company. Expectation Confirmation Theory Information System (ECT-IS) model, continue intention is predicted by satisfaction. This research argues satisfaction can be fully mediated by attitude. Furthermore, continuous intention can be predicted and facilitated by attitude. Research result showed attitude can predict continuous intention, meanwhile, enhancing explanatory power of continuous intention. Research result showed attitude fully mediating between satisfaction and continuous intention. Research results suggest top managers should pay attention and allocate resources to boost user’s attitude rather than rescue multifarious trivial dissatisfaction deviations. Dissatisfaction deviations were diminished into elevated attitude. Ultimately leads to optimal usage of the IT system.

**Introduction**

Attitude is personal affective response toward an object or event. Such as loyalty is one of affective attitudes. Ajzen argued attitude is an aggregation of affective feeling to respond favorably or unfavorably to an object, or event (Ajzen 1988). And Robbins and Judge also revealed attitudes had three main components of affective feeling, cognitive evaluation and behavior action (Robbins & Judge 2007). Srinivasan (2002) claimed loyalty is a favorable attitude. The affective attitude concept was confirmed by Engel and Blackwell declared loyalty included three primary elements of preference, affective attitude and behavior response (Engel & Blackwell 1982). With loyalty has been recognized as a major key to predict repurchase behaviours for a company’s profitability index (Srinvasan 2002; Oliver 1999), it can be analogized that affective attitude can precisely predict continuous usage which result in a successfully IT system.

Continuous usage has been wildly used to measure the success and effectiveness of Information System, IS (Gelderman 1998). Poor continuance usage could bring company disaster. One of the famous examples was the case of Fox Meyer Drug; a $5 billion pharmaceutical company that had file for bankruptcy as a result of poor continuance intention usage of ERP system. Some of failures of noted cases such as Dell Computer, Boeing, Dow Chemical, Mobil Europe, Applied Material, Hershey and Kellogg’s. It was reported that 40% of ERP implementations only achieve partial and 20% of ERP adoptions are reported as failure (Negahaban, 2008; Thomas, 2004).

Affective attitude could fully mediating between satisfactions and continue intention. Oliver revealed (1981) user’s satisfaction was a short unstable emotion which soon diminished into a long term enduring affective attitude. Ajzen (1988) revealed affective attitude is was accumulating feeling which resulted from satisfaction and lead to continuous intention. With the rational of affective attitude works as an accumulating container after satisfaction, meanwhile works as a predictor to predict continuous intention. This research argue affective attitude fully mediating between satisfactions and continue intention which could illustrate how to achieve success for large IT system of ERP.
Research result shows affective attitude fully mediate between satisfaction and continuous intention. It implies in management meaning of IT system of ERP as a compulsory system thought, it still can be a user preferred system with affective attitude. Affective attitude toward the system resulted from user satisfaction and then works as a driver to stimulate system optimizing and maximum usage by aroused continuous intention.

Bhattacherjee (2001b) encouraged future researchers to find out more additional factors which influencing continuous intention. This research suggest to add affective attitude into to ECT-IS mode as a more enhanced ECT-IS model to enhance explanatory power of continuous intention. Two models of enhanced ECT-IS model with affective attitude and the original ECT-IS model without affective attitude are verified by empirical data collected from 295 ERP end users scattered in 17 companies. This research verifies the signification of continuous intention’s explanatory power between two models by Fisher’s Z transform. Statistical explanatory power of continuous intention in enhanced ECT-IS model is significantly higher than the original ECT-IS model.

**Literature Review**

Attitude can precisely predict IT system success through continuous usage. Olive (1980) claimed affective attitude is recognized as one of most immediate predictors of behavioral intention. Affective Attitude is a stable cognitive which is different from satisfaction. (Oliver 1999) Antecedence before attitude is satisfaction which finite users’ complex emotional response from confirmation then soon decays into users’ affective attitude. (Oliver, 1981) Affective attitude is resulted from satisfaction because customers with affective attitude believe that firms will continuous offer their best products (Oliver, 1999). So, it can be concluded that affective attitude is the key stable cognitive deposition container to take in user’s satisfaction surplus from confirmation and then works as a preciously predictor to foresee customer loyal intention behavior. This research adopts this logic to argue affective attitude should be added back in ECT-IS model to predict user’s maximized continuous intention usage for IT system success.

Among previous studies of satisfaction and continuous Intension, Expectation Confirmation Theory Information System (ECT-IS) is one of the most popular theories (Bhattacherjee,2001a, 2001b). ECT-IS stating user satisfaction leads to continuous intention when her/his initial expectation of products or services is confirmed (Oliver 1980; Spreng 1996). As this research focus on success IT model through affective attitude hence, ECT-IS model is extended.

Bhattacherjee proposed ECT-IS model as following figure 4. (Bhattacherjee 2001a, 2001b)

![Definition of Research Hypotheses](Figure 1. Expectation confirmation Theory, ECT-IS, by Bhattacherjee 2001b.)

**Definition of Research Hypotheses**

Base on above literature review, this research propose an enhanced model of IS continue intention model and hypothesis as below figure:
Expect confirmation direct impact perceived usefulness. Perceived usefulness was adjusted higher as a result from positive confirmation experience (Bhattacherjee 2001b).
H1: expectation confirmation is positively associated with Perceived Usefulness of IS use.
H2: Expectation confirmation is positively related with Satisfaction
H3: Perceived usefulness is positively associated with Satisfaction
H4: Perceived usefulness is positively associated with Continue Intention.
Satisfaction and affective attitude were two different stages of affect. (Oliver 1981). Affective attitude was a stable enduring cognitive which different from short term satisfaction (Oliver 1999). Satisfaction was users’ finite complex emotional response derived immediately from confirmation then soon decays into users’ overall attitude (Oliver, 1981).
H5: Satisfaction is positively associated with affective attitude
Intention was the function of affective attitude (Ajzen & Fisbein 1980; Ajzen 1988) affective attitude could explicitly predicted intention behaviour (Ajzen & Fishbeien, 1977). Affective attitude was a stable enduring affect to act the particular intention (Zmud, 2000), simultaneously, affective attitude was the key of repurchase (Donio’, 2006). Intention of continuing was solely determined by personal affective attitude (Karahanna 1999). Hence, this research hypothesis 6th as
H6: Affective attitude is positively associated with IS continuous intention.
Oliver revealed (1981) user’s satisfaction was a temporary emotion soon diminished into a stable enduring affective attitude. Ajzen (1988) claimed affective attitude was an accumulating affect which resulted from satisfaction and lead to continuous intention. It can be inferred that affective attitude replaces satisfaction to predict continuous intention, that is, the correlation between satisfaction and continuous intention will get diminished once affective attitude is added. Hence, this research hypothesis H7 as
H7: Satisfaction is no directly associated with IS Continuous Intention.

Research Methodology
This research use electronic survey via e-mail to collect data. The sample populations were individual users of enterprises which ERP system just went live within one to fourth years. The samples population included departments of production, finance, marketing, procurement, material control. Samples lists of implementation bases were provided by SAP and Oracle Taiwan branch offices. Data Analysis
The revised investigations were mailed to end user in organizations, 316 were returned. 21 of 316 observations are dropped because of missing data of incomplete questionnaires. A total of valid questionnaires 295, valid return rate was 34.6%. Demographic data about the respondents in the final sample are as below.

Structure Model Test Results
First step was to test hypotheses signification for research model. Enhanced model as below
figure 3, path coefficients of H1, H2, H3 are 0.7, 0.65, 0.29 (t value are 12.10, 9.25, 4.69 all significant at 0.001 levels). Hence H1 of expectation confirmation was positively associated with perceived usefulness of IS use. H2 of expectation confirmation was positively related with satisfaction. H3 of perceived usefulness was positively associated with satisfaction are supported at significant level of 0.001. H4 path coefficient was 0.19 with t value 3.03 which means hypothesis 4th of perceived usefulness was positively associated with continue intention was supported at significant level of 0.01. H5, H6 was 0.85, 0.74 with t value are 13.30 and 6.92. H5 of satisfaction was positively associated with affective attitude and H6 of affective attitude was positively associated with IS continuous intention are supported at significant level of 0.001.

Conclusion and Discussion

In management meaning imply for large IT system of ERP, manager shall focus on how to increase employee affective attitude toward overall IT system. Affective attitude is an enduring emotion which implies commitment of employees toward system. Affective attitude is the employee commitment to IT system which results to strong continuous intention. With strongly affective attitude, large IT system can be preferred and loved. With preferred and loved of IT system, business performance of enterprise will be elevated by optimal usage.

Second, affective attitude gives significant explanatory power to continuous intention, which implies affective attitude is one of primary key impact factors, contributes to continuous intention. Hence, affective attitude can predict continuous intention more precisely than satisfaction does. The research result provides support to reasons why manager shall focus on affective attitude because it influences continuous intention greatly rather than satisfaction.

Affective attitude fully mediate between satisfaction and continuous intention, imply affective attitude take over every satisfaction. In management meaning, it means dissatisfaction deviation was diminished into elevated positive affective attitude; hence, occasionally deviation of dissatisfaction can be cover by affective attitude. Research result suggests CIO of enterprise shall focus on elevating affective attitude instead of multifarious trivial dissatisfactions deviation event handling.

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