

# Online Trust Forming Mechanism: Approaches and An Integrated Model

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## ABSTRACT

Based on theories of SET, ECT, TRA, TPB, TAM, and abundant review of literature regarding online trust, the paper discusses online trust forming mechanism: the varied approaches and an integrated model. For the sake of the basic trust construct resulted through combining McKnight et al. trust construct with theoretic expansion, and the three approaches of online trust forming - cycle approach, stage development approach, and factor approach - forwarded by prior researchers, the final model highly integrates to have the beliefs-attitude-intention-behavior logic as the fundamental, common trusting belief (ability, benevolence, integrity), system trust belief, and situational decision to trust as the core, and five influencing factors (trustor factors, trustee factors, system trust factors, interaction factors, and external environmental factors) as the originator. In addition, the model also reflects a dynamic development: initial trust may turn into robust trust after long-term interactions, and the current satisfied exchanges can grow to a new round, leaving the unsatisfied dropped out.

## Categories and Subject Descriptors

J.J.4 [Social and Behavioral Sciences]: Psychology, Economics

## General Terms

Management, Design, Human Factors, Theory.

## Key Words

Trust; Online Trust; Forming Mechanism; Model; Internet; Electronic Commerce

## 1. INTRODUCTION

Online frauds have the worsening possibility, as the "self interest seeking" and "self disbelieved statements" inevitably make online dealers express much stronger speculative intentions in the impersonal Internet environment (Williamson, 1985). Lack of trust in the online market, then was noted as significant impediments to the growth of e-commerce (Luo, 2002). Tan and Thoen (2002) even proposed that e-commerce could only become a success if the general public trusted the virtual environment. Therefore, the importance of initiating, building, and maintaining trust between dealers as key facilitators of successful e-commerce is increasingly being recognized in academic as well as in practitioner communities

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ICEC'05, August 15–17, 2005, Xi'an, China.

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(Grabner-Krautera and Kaluschab, 2003).

However, in order to well establish trust among online dealers, probing into the online trust forming mechanism is of great necessity: How can the trust between two parties transfer into actual exchange behavior? What are the factors leading to online trust?

This paper answers the above questions through discussing the three approaches summarized from reviewing abundant literature, and finally introducing a compounded conceptual model that highly integrate the three approaches as well as a basic trust construct resulted from combining theoretic expansion and McKnight et al model. In section two, related theories like SET, ECT, TRA, TPB are listed as a base, with which help, a basic trust construct is advanced in section three. After respective illumination of the three approaches on online trust formation forwarded by other researchers in section four, the authors present the conceptual model along with explanations in section five. Finally, a short conclusion is followed.

## 2. RELATED THEORY

### 2.1 Social Exchange Theory

Social exchange involves the voluntary actions of individuals, which are motivated by the expectation that future returns received from others will be much larger than current costs input. Social exchange theory (SET) explored by Blau (1964), therefore, is to explain the phenomena through stating the formation of social contracts between two or more parties, where present social costs are invested in exchange for future, non-guaranteed social rewards.

According to the SET, people form relationships on the basis of trust, especially during initial exchanges. It is even the truth on the Internet, where customers typically perceive higher risks compared to conventional shopping environment as a result of long distances, virtual identities, or lack of regulations (Tan, 1999).

### 2.2 Expectation-Confirmation Theory

Expectation-confirmation theory (ECT) is proposed by Oliver (1980) to widely study consumer satisfaction, repurchase intention and behavior. The underlying logic of the ECT framework is: consumers firstly form an initial expectation prior to purchase, and then engender perceptions about its performance after a period of initial consumption. Thus, they may decide the satisfaction level based on the extent to which their expectation is confirmed through assessing the perceived performance vis-à-vis their original expectation. Finally, the satisfied consumers form repurchase intentions.

In online transactions, when the initial trust is confirmed by favorable outcomes and customers are satisfied, a new turn of exchange based on much stronger trust begins. Thus, the ECT explains the repurchase intention as well we long term trust formation.

### 2.3 Theory of Reasoned Action

The theory of reasoned action (TRA) originated by Fishbein and Ajzen (1975) is to analyze the correlation of belief, attitude, intention and behavior. The TRA mainly asserts that beliefs affect the person's attitudes, that is, their favorable or unfavorable evaluations of the others; and attitudes in turn influence behavioral intention, which is a good predictor of actual behavior. In addition, it also supports that the subjective norm concerning the behavior that is the totality of normative pressures coming from the referents who think the person should or should not perform the behavior is an indispensable antecedences of behavioral intention. The normative norm, or normative pressure is mainly derived from external environment.

### 2.4 Theory of Planned Behavior

Although TRA has been evaluated and supported in many contexts, it still shows weakness in explaining the essence of behavior. Ajzen (1985) found attitude and subjective norms could not fully determine intention, and then further proposed

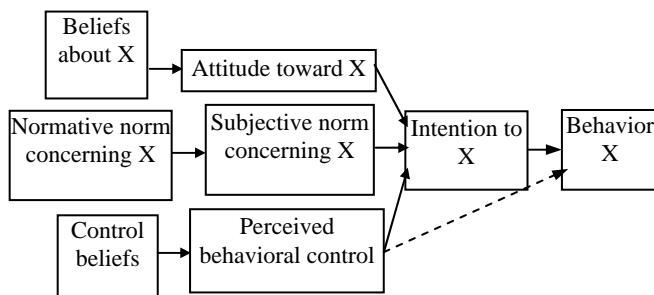


Figure 1. Theory of Planned Behavior

perceived behavioral control, which reflects the degree to which an individual feels that successfully engaging in the behavior is completely up to them. Thus, according to the theory of planned behavior (TPB) expanded by Ajzen (1991), a person's behavioral intention is viewed as a function of three factors: attitude towards the behavior, subjective norms, and perceived behavioral control. The correlation is showed in Figure 1<sup>1</sup>.

## 3. BASIC TRUST CONSTRUCT

### 3.1 Theoretic Expansion VS Mcknight et al. Trust Construct

When the four basic phases of behavioral development: belief, attitude, intention/willingness, and actual behavior drawn by the TRA and TPB come to the case of trust, a preliminary structure from trusting belief, trusting attitude, to trust intention/willingness to trust, and trusting behavior is constituted. In addition to the basic line, according to the TPB, there are still two elements: perceived trust control and subjective norms concerning trust, influencing trust intention. Thus, the theoretical expansion from general behavioral development to trust establishment forms a basic sketch.

Mcknight, et al. (1998) specially developed a trust construct (Figure 2) with the introduction of dispositional trust, system trust and situational decision to trust, which, according to the two scholars, may directly affect trusting intention and behavior. They mainly emphasized the role of dispositional trust, stating that it not only directly affect trusting intention, but also indirectly influence it through the mediation of trusting belief.

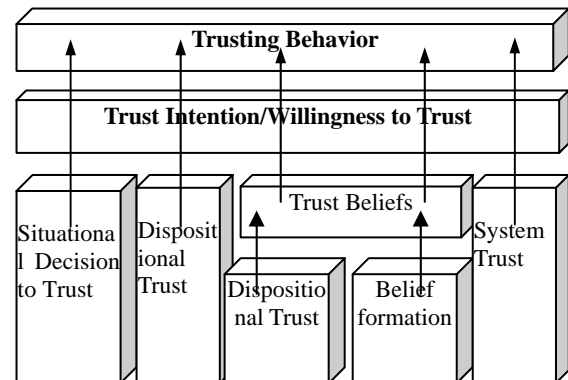


Figure 2. Mcknight et al. Trust Construct

We can amazingly find abundant similarities when comparing the two constructs. They all support the basic belief-attitude-intention-behavior logic. The system trust of Mcknight et al. construct bears the same meaning with the perceived trust control in the theoretic extension, while situational decision to trust plays the role of subjective norm. Therefore, a basic trust construct can be generated to explain the essence of trusting forming.

### 3.2 Construct Factor

Before the basic trust construct is advanced, there is of great necessity to clarify construct factors.

#### 3.2.1 Trusting Beliefs

Trusting beliefs, the factors of trustworthiness, or dimensions of trust, is the extent to which one believes (and feels confident in believing) that the other person is trustworthy in the situation (Mayer et al., 1995; McKnight, et al., 1998). The commonly recognized dimensions of trust are benevolence, integrity and ability (Mayer et al., 1995; Sako and Helper, 1998). In online transactions, researchers also accept the classification (Gefen, 2002; McKnight et al., 2002; Ridings, et al., 2002; Chen and Dhillon, 2003; Murphy and Blessinger, 2003).

According to Mayer et al. (1995, 717, 718, 719), Benevolence is "the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive", integrity is "the trustor's perception that the trustee adheres to a set of principles that the trustor find acceptable", and ability is "groups of skills, competencies, and characteristics that enable a party to have influence within some specific domain".

#### 3.2.2 Attitude towards trust

Attitude towards trust is recognized as a person's positive or negative evaluation of trusting behavior and is composed of a person's salient beliefs regarding the perceived outcomes of performing trust (Ajzen, 1991). Normally, overall trust that refers to the extent to which how general trust can be generated from trusting beliefs is adopted to represent the attitude towards trust.

<sup>1</sup> Notes: the "-->" means that the relationship is not significant.

### 3.2.3 Trusting Intention

Trusting intention, sometimes also called willingness to trust, is the extent to which one party is willing to depend on the other party in a given situation with a feeling of relative security, even though negative consequences are possible (McKnight, et al., 1998). Being the predictor of actual trust behavior, trusting intention is often the assessable final results in researches. In addition, trusting is not ultimate action, but lubricants for further behavior like purchasing or shopping. Therefore, many scholars directly replace trusting intention with willingness to purchase (Jarvenpaa et al., 1999, 2000; Gefen, 2000; Klang, 2001), intention to provide personal information (Klang, 2001; Ridings, et al., 2002), and so on.

### 3.2.4 Dispositional Trust

Dispositional trust, or propensity to trust is a “generalized expectation about the trustworthiness of others” (McKnight, et al., 1998). A person’s concept of trust develops during childhood in interactions between the individual and the care givers/parents (Rotter, 1980). McKnight et al. (1998) distinguish between two types of dispositions to trust, each of which affects trusting intention to a certain degree. First, faith in humanity, which refers to one’s belief that others typically mean well and are reliable. Second, trusting stance, which refers to one’s belief that they will obtain better interpersonal outcomes by dealing with people as though they mean well.

one to anticipate a successful future endeavor (Zucker, 1986; Shapiro, 1987b). McKnight, et al. (1998) proposed that there are two types of system trust: situational normality, and structural assurances. Situational normality is beliefs that success is anticipated because the situation is normal. Structural assurances refer to beliefs that favorable outcomes are likely because of contextual structures, such as contracts, regulations, and guarantees.

Pavlou, et al. (2003) posited a third dimension: facilitating conditions, which are the underlying non-governance mechanisms that support transaction success like shared standards, relationship values, or common beliefs about behaviors and goals.

### 3.2.6 Situational Decision to Trust

Situational decision to trust means the extent to which one intends to depend on a non-specific other party in a given situation (McKnight, et al., 1998). It means that one has formed an intention to trust every time a particular situation arises, irrespective of one’s beliefs about the attributes of the other party in the situation (Riker, 1971). Situational decision to trust differs from trusting stance in that it is an intentional construct and relates only to specific situations (Table 9), not across situations generally. It differs from system trust in that it does not imply structural safeguards. It is simply an individual, situational strategy.

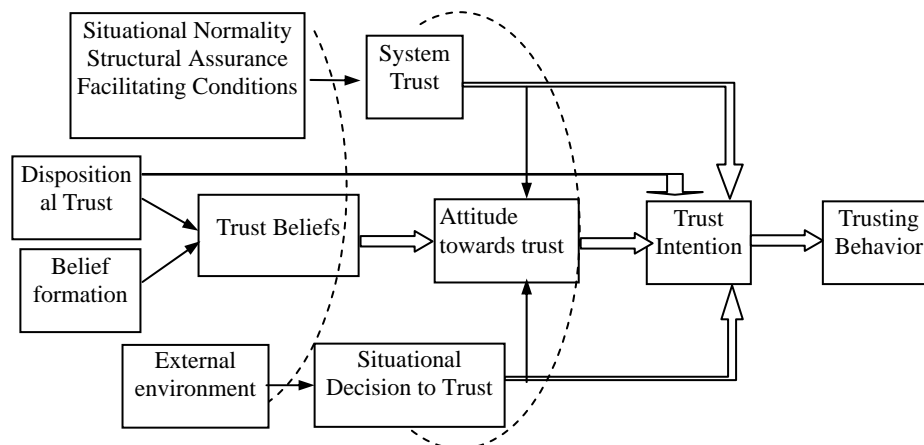


Figure 3. Basic Trust Construct

### 3.2.5 System Trust

System trust, also called institution-based trust, means one believes that proper impersonal structures are in place to enable

## 3.3 Basic Trust Construct

Thus, we depict the basic trust construct.

As the Figure 3 expresses, the fundamental backbone of the construct remains the beliefs-attitude-intention-behavior logic. In addition, two vital influencing factors paralleled with the attitude towards trust: system trust and situational decision to trust, are playing effective role. The antecedents of system trust are perceptions of situational normality, structural assurance and facilitating conditions, while external environment affect situational decision to trust. Consistent with McKnight, et al. (1998), the construct also stresses the role of dispositional trust, whose trusting stance can directly work on trust intention. Finally, the belief formation stands for the varied factors impacting a person to form trust beliefs.

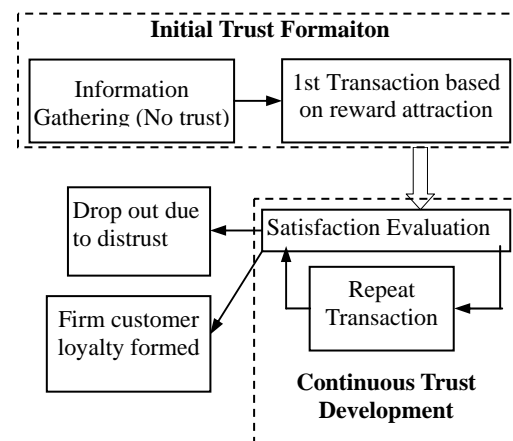


Figure 4. Fung & Lee EC-Trust Life-cycle

## 4. ONLINE TRUST FORMING APPROACHES

Literatures on trust, especially online trust, indicate there are three approaches regarding online trust formation: cycle approach, stage-development approach and factor approach.

### 4.1 Cycle Approach

The cycle approach of online trust formation mainly emphasizes how trust relationship is kept. Based on the ECT, trust relationship persists when the outcomes of prior trust action are satisfactory, and accordingly runs a cycle trend. Conversely, once the evaluation is unfavorable, the exchange will cease due to distrust.

The EC-Trust development model of Fung and Lee (1999) depicted in Figure 4 and the trust cycle model of Deelmann and Loos (2002) in Figure 5 all stress the fact that initial trust whose formation need time and efforts is rather crucial to future exchanges and long-term trust establishment.

According to Fung and Lee (1999), the EC-trust development life cycle starts with the potential customers' initial attempts in the 1st transaction, through which customers will evaluate. A good and satisfying evaluation may result in more transactions and the customer loyalty is formed. A bad evaluation leads to a drop out due to distrust. Moreover, there is an ongoing

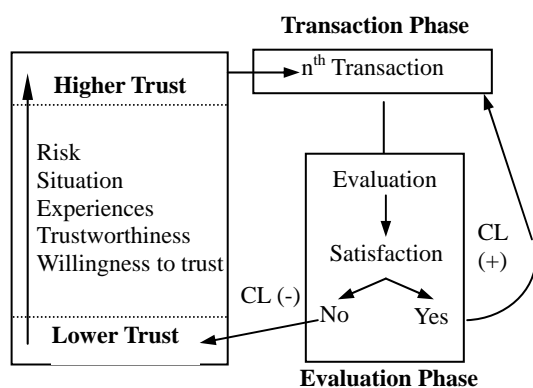


Figure 5. Deelmann & Loos Trust Cycle

evaluation of satisfaction after each transaction during the continuous trust development cycle. The trust cycle of Deelmann and Loos (2002) goes even further, illuminating a generic trust building process: In the beginning the trustor has a willingness to trust. He checks the trustworthiness of the trustee. If the trustee is trustworthy, experiences are checked. After a positive check, the actual situation is investigated. If the situation is satisfying, the trustor will check the risk of the investigated transaction. If the risk is not too high, the trustor trusts the trustee. Due to Deelmann and Loos (2002), All the parameters will be checked and verified permanently under low trust level.

### 4.2 Stage-Development Approach

Stage-development approach pays much attention to the trust in different stages.

Commonly recognized stage-development approach of trust is from Shapiro et al. (1992), who argued that the development of trust occurs in stages with deterrence/calculus-based trust being the base, followed by knowledge-based trust when interactions are more frequent, and the last stage identification-based trust having the highest trust level. Ba (2001) shares the similar idea,

stating that in the beginning of a business relationship, trust is often deterrence or calculus based. As relationship develops, trust moves to the next level: information-based. She proposed the highest level of trust should be transference-based, which is originated from the strong trust the trustor develops towards a third party, and with which the trustor is willing to define the trustworthiness of the others.

In online trust formation, researchers mainly stress the importance of initial trust. Kim and Tadisina (2003) divided the trust development and maintenance into two stages: initial stage and committed stage. They illustrate, trust starts with a customer encountering an e-business. Through analyzing the varied influencing factors, the customer develops initial trust in the initial stage. At a certain point, the level of initial trust may increase and develop into robust trust that may result in a committed relationship with the company. The committed relationship may provide customers with more opportunities (e.g., purchase experience) that would strengthen into robust trust. During the cycle, the level of trust may plummet and customers accordingly depart from the relationships.

The two-stage model of trust in e-commerce vendors proposed by McKnight et al. (2000) holds the similar opinion with the exception that they put much effort in clarifying the diverse antecedents. It depicts a person goes through two stages in his/her potential interaction with a web-based vendor: an exploratory stage and a commitment stage. At the exploratory stage, due to the lack of direct shopping experience in the specific web site, the customer is to decide whether or not to explore the web site to see what it offers. Trusting intention at this stage, therefore, refers to the willingness to explore the web site further. Thus, factors like vendor reputation, trusted third party play important role in deciding the trust formation. When the user decides to pursue the experience, he/she proceeds to the commitment stage, in which intention to

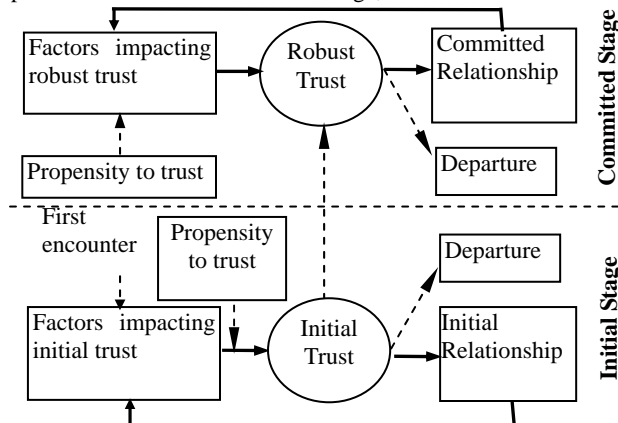


Figure 6. Kim & Tadisina Trust Development Model

purchase, willingness to exchange personal information are to be decided. In this stage, perceived site quality, institution-based trust function effectively.

Though the two-stage approach originated by McKnight et al. (2000) and Kim and Tadisina (2003) are slightly differentiated, they both are meaningful to the advance of integrated model.

### 4.3 Factor Approach

The factor approach mainly discusses the influencing factors of online trust formation.

Cheskin and SA (1999) identified six fundamental factors that communicate trustworthiness: brand, navigation, fulfillment, presentation, technology and seals of approval. After systematic analyses, Yoon (2002) stressed the crucial role of website evaluation in the formation of online trust, and pointed out four factors: transactional security, web-site properties, search functionality, and personal variables. Chen and Dhillon (2003) stood in a higher level, arguing the determinants of consumer trust in e-commerce resided in a range of individual consumer characteristics, website and firm features, and the interactions between firms and consumers. Tan & Theon (2000) proposed the concept of control trust, the trust induced in the trustor by control mechanisms that is the procedures or protocols that monitor and control the successful performance of a transaction, and considered it another way to enable a specific e-transaction, in addition to party trust, or trust in the other party. Pavlou et al. (2003) discussed the role of

institutional trust, that is structural assurances, facilitating conditions and situational normality in online interorganizational relationship.

Kim et al. (2001) addressed the issues of trust in B2C on-line exchanges from a multi-dimensional perspective, including behavioral dimension, institutional dimension, information dimension, transaction dimension, product dimension and technology dimension, through which four different entities, i.e., seller, buyer, third party, and technology, interact to complete the on-line transactions. They further defined the related subdimensions.

As Table 1 shows, factors influencing online trust formation can generally be categorized into four segments: trustor factor, trustee factor, system trust factor, and interaction, in which seven sub-segments are included.

**Table 1. Factors Influencing Online Trust Formation**

Segment	Factors and Related Literature
<b>Trustor Factor</b>	Dispositional Trust (Menon et al., 1999; Cheung and Lee, 2000; Gefen, 2000; Lee and Turban, 2001; Chen and Dhillon, 2003; Kim et al., 2003) Online Experience (Gefen, 2000; Schneiderman, 2000; Kim et al., 2001; Shankar et al., 2002; Sultan et al., 2002; Chen and Dhillon, 2003; Corbitt et al., 2003; Kim et al., 2003) Attitude to Risk (Menon et al., 1999; Kim et al., 2003) Innovation Receptivity (Shankar et al., 2002; Yoon, 2002)
<b>Trustee Factor</b>	I Reputation, Size (Cheskin and SA, 1999; Menon et al., 1999; Jarvenpaa et al., 1999, 2000; Shankar et al., 2002; Kim et al., 2003) Brand (Shankar et al., 2002; Chen and Dhillon, 2003) Commodity Factors (Kim et al., 2001; Yoon, 2002)
	W System Reliability (Cheskin and SA, 1999; Schneiderman, 2000; Yoon, 2002; Kim et al., 2003) Website Design (Cheskin and SA, 1999; Shankar et al., 2002; Yoon, 2002; Chen and Dhillon, 2003) Information Quality (Shankar et al., 2002; Kim et al., 2003) POU, PEU (Kim et al., 2003; Keat and Mohan, 2004)
<b>System Trust</b>	SN Legal and Regulatory Compliance, Confirming to Common Expectation (Murphy and Blessinger, 2003)
	SA Perceived Security (Cheskin and SA, 1999; Cheung and Lee, 2000; Shankar et al., 2002; Kim et al., 2003) Perceived Privacy (Cheung and Lee, 2000; Shankar et al., 2002; Kim et al., 2003) Perceived Legal Bonds (Cheung and Lee, 2000; Schneiderman, 2000; Kim et al., 2001; Pavlou, 2002)
	FC Perceived Cooperative Norms (Pavlou, 2002; Murphy and Blessinger, 2003)
	Interaction Customer Satisfaction, Length of relationship (Chen and Dhillon, 2003)

Notes: I: individual factor; W: website factor; SN: situational normality; SA: situational assurance; FC: facilitating conditions

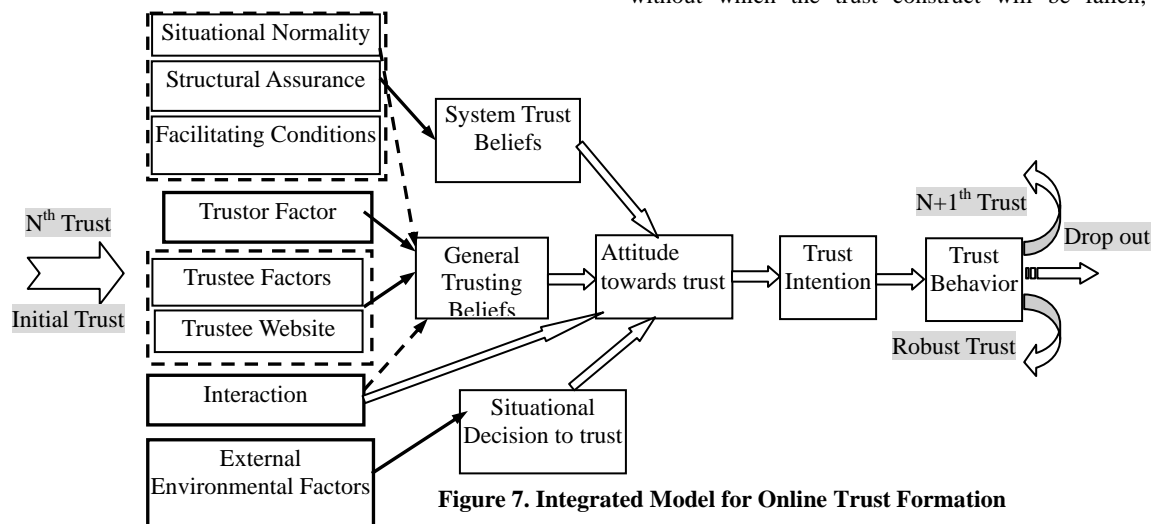
## 5. THE INTEGRATED MODEL OF ONLINE TRUST FORMATION

### 5.1 The Model

Based on the basic trust construct and three online trust

forming approaches, we propose an integrated model for online trust formation.

First, there are three vital ties linking the model: the most fundamental one is the beliefs-attitude-intention-behavior logic, without which the trust construct will be fallen; the five



**Figure 7. Integrated Model for Online Trust Formation**

influencing factors are the originator, from which trusting beliefs can be formed and trusting action can be achieved; the core is common trusting belief, system trust belief, and situational decision to trust. Second, trusting beliefs mediating antecedents and trust intention are three: system trust belief, common trust belief and situational decision to trust. Common trust beliefs are generally recognized as ability, integrity and benevolence (Mayer et al., 1995). Third, five influencing sources respectively impact the three beliefs, and in turn help to form trust intention. In addition, the sources may also divide into subsegments, for example, system trust formation includes situational normality, situational assurances and facilitating conditions. Finally, in the model, a dynamic development is also reflected: initial trust may step into robust trust after long-term interacting experiences, and the current satisfied exchange can grow to a new round, leaving the unsatisfied dropped out.

Therefore, regarding either a new interaction or repeated interactions, the preliminary necessity for trustors is to form the system trust belief, general trusting belief and situational decision to trust respectively through observing system trust factors, trustor and trustee factors, and external environmental factors. Once they formed perceived beliefs, trustors can

further generate the attitude towards trusting behavior. With a positive attitude, trustors will definitely believe the trustee, and engender trust intention, while bearing negative attitude, trustors usually dare not to deal. Pushed by the intentions, trustors may eventually execute actual behavior. One thing worth noting is that attitude, intention and behavior of trust are normally deemed equivalent to attitude to transact, transaction intention and transaction behavior, as final exchanges, instead of trust, is the eventual results. Furthermore, as the figure 7 depicted, in addition to influences towards system trust, system trust factors can also indirectly affect general trusting beliefs. Similarly, The impact of interaction factors on general trusting belief is insignificant.

The model highly integrates cycle approach, stage development approach, and factor approach to explain the online trust formation mechanism. In here, there are two stages: initial stage and committed stage, and five factors: trustor factors, trustee factors, system trust factors, interaction factors, external environmental factors. Significant influencing elements differ in two stages.

## 5.2 The Two-Stage Based Factor Explanation

The two-stage based influencing factors are showed in table 2.

**Table 2. Two-Stage Based Influencing Factors of Online Trust**

	Initial Trust Stage	Committed Trust Stage
<b>Trustor Factor</b>	Demographic Factors; Knowledge of the Internet; Past Online Purchase Experience; Dispositional Trust; Attitude toward risk; Innovation Receptivity; Other Factors	
<b>Trustee Factor</b>	Perceived Reputation; Perceived Size; Perceived Brand Cognition	Perceived Commodity Quality; Perceived Service Level; Perceived Trustworthiness of the Trustee
<b>Trustee Website Factor</b>	Perceived System Reliability (reliable and fast Internet access, few errors); Perceived Interface Design Level (navigational easiness, friendly interface, and linking with other websites); Perceived Information Quality (accuracy, correctness, timeliness)	Perceived System Reliability (correct transaction records and zero-error in services); Perceived Interface Design Level (Interactivity); Perceived Information Quality (usefulness); Perceived Usefulness and Perceived Ease of Use; Perceived Site Quality
<b>SN</b>	Perceived Legal and Regulatory Compliance; Perceived Common Expectation Confirmation	
<b>SA</b>	Perceived Security; Perceived Privacy	Perceived Legal Bonds; Perceived Monitoring; Perceived Accreditation; Perceived Feedback
<b>FC</b>	Perceived Cooperative Norms	
<b>Interaction</b>	NA	Perceived Customer Satisfaction; Relationship
<b>EEF</b>	Social Stability; Market Tranquilization; Overall Technological Environment	
<b>Belief</b>	The system is reliable; the trustee is benevolent, integrity and capable; the situation is general	
<b>Attitude</b>	The trustee is exchangeable	The trustee is trustworthy
<b>Intention</b>	Intention to purchase	Intention to repurchase
<b>Behavior</b>	Initial Purchase	Future Purchase and Long-term Relationship

Notes: I: individual factor; W: website factor; SN: situational normality; SA: situational assurance; FC: facilitating conditions

### 5.2.1 Trustor Factors

Trustor factors include basic demographic factors, knowledge of the Internet, past experience, personality based factors, and others like time pressure, disability.

Among them, the personality based trust propensity, a “generalized expectation about the trustworthiness of others” (McKnight, et al., 1998), risk attitude, which has traditionally been defined in terms of inherent risk seeking, risk averse, and risk neutral, and innovation receptivity play a much more significant role in initial trust formation stages than that in committed stages. In absence of clear recognition towards certain online transactions, a person of risk seeking, with a high trust propensity, or innovators is easy to ascribe trust intention to the transactions regardless of other contexts. Knowledge and

experiences are learned elements: with time processes, knowledge or skills of computer usage, Internet surfing, and encryption technologies adoption accordingly aggrandize, while related experiences achieved (Monsuwé, et al., 2004). Therefore, the impact of knowledge and experiences is stronger in committed stages when comparing with initial ones. Whereas, influences of background based demographic factors like age, gender, education, and income, and other uncertain factors as time pressure or disability show tiny differences in two stages.

### 5.2.2 Trustee Factors

#### 5.2.2.1 Trustee Factors

It is obvious that, during initial interactions, large size, high reputation and widely cognized brand are indispensable and

strongest signals for the trustworthiness of trustees. After the initial interactions from which trustors have obtained experiences and executed direct observations, trustors may have abilities to judge the commodity quality, service level and the overall trustworthiness of the trustee. Therefore, trustee factors are totally dissimilar in two stages: the role perceived reputation, perceived size and perceived brand recognition are obvious in initial stages, while perceived commodity quality, perceived service level and perceived trustworthiness of the trustee are stronger in committed ones.

#### 5.2.2.2 Trustee Website Factors

The common sources of website factors: perceived system reliability, perceived interface design level and perceived information quality show, in different stages, diverse aspects. In initial stage, reliable and fast Internet access is important, and very few errors in all levels are also required (Kim, et al., 2003). Whereas, correct transaction records and zero-error in services are more emphasized in later exchanges. Regarding to interface designing, such functions as navigational easiness, interface friendliness, and linking with other related known websites are easy to perceive in the initial interactions, while trustors may think high of interactivity during committed stage. Accuracy, correctness, timeliness of the information in the website are crucial in initial trust, and usefulness will be mainly deemed afterwards.

Following TAM, we hold that perceived usefulness, the perception of how useful the website is, and perceived ease of use, the perception of how simple the website is to use, will have a positive influence during committed stages (Davis, 1989). Trustors may even make their decision based on the overall perceived site quality.

### 5.2.3 System Trust Factors

#### 5.2.3.1 Situational Normality

Situational normality, has the same two elements regardless of stages: perceived legal and regulatory compliance, and perceived common expectation confirmation. By conforming to the normality, trustees make their potential trustors more comfortable and assured that all is as it should be (Murphy and Blessinger, 2003).

#### 5.2.3.2 Structural Assurance

Structural assurances bear different elements in dissimilar stages. During initial interactions, trustors may judge the trustee through perceived security, which refers to the trustor's perception on the trustee's ability in fulfilling security requirements, such as authentication, integrity and encryption, and perceived privacy that is conceived as the trustor's perception on the ability of the trustee in protecting consumers' personal information collected from its electronic transactions from unauthorized use or disclosure (Cheung and Lee, 2001; Yousafzai, et. al., 2003).

When it comes to committed stage, they turn to check all aspects of structural assurance: perceived legal bonds, the extent to which trustors believe that contracts are able to legally certify that all transactions are performed as specified by a predetermined set of laws; perceived monitoring, the extent to which trustors believe that the third-party monitoring mechanism assure that all transactions in the marketplace are performed as expected; perceived accreditation, the extent to which trustors believe that the accreditation mechanism is able to provide reliable information about the capacity of trustees to

perform as expected, and perceived feedback, the extent to which trustors believe that a feedback mechanism is able to provide reliable information about the trustees' past trading activities (Pavlou, 2002).

#### 5.2.3.3 Facilitating Conditions

We mainly adopt perceived cooperative norms to represent facilitating condition. Perceived cooperative norms is the extent to which trustors believe the trustee will follow the common standards or principle designed by the industry or by both of them.

#### 5.2.4 Interaction

Suggested by ETC (Oliver, 1980), the prior outcomes will directly decide future decision, i.e., the former online interactions may affect afterwards. It centrally expressed in perceived customer satisfaction and length of relationship.

#### 5.2.5 External Environmental Factors

In addition, the general social, economic and technological situation also function. For example, there are two extremes in social disturbance: decrease in social trust and increase in online trust. Post 911 Internet shopping boom is just the case.

## 6. CONCLUSION

Based on theories of SET, ECT, TRA, TPB, TAM, and abundant review of literature regarding online trust, the paper discussed online trust forming mechanism: the varied approaches and an integrated model. Through comparing McKnight et al. trust construct with theoretic expansion, and clarifying such construct factors like trusting belief, attitude towards trust, trusting intention, dispositional trust, system trust and situational decision to trust, the authors firstly propose the basic trust construct. Then three approaches of online trust forming are followed: cycle approach, which emphasizes how trust relationship is kept; stage-development approach that pays much attention to trust in different stages; and factor approach, which mainly discusses the influencing factors. For sake of the formerly built basic trust construct and the summarized three approaches, an integrated model is finally resulted: with the beliefs-attitude-intention-behavior logic as the most fundamental, common trusting belief (ability, benevolence, integrity), system trust belief, and situational decision to trust as the core, and five influencing factors (trustor factors, trustee factors, system trust factors, interaction factors, and external environmental factors) as the originator. In addition, the model also reflect a dynamic development: initial trust may turn into robust trust after long-term interactions, and the current satisfied exchanges can grow to a new round, leaving the unsatisfied dropped out. In order to well explain the model, especially factors, the authors finally drew the two-stage based online trust influencing factor table, and respectively discussed involved subelements of each five factors in different stages.

The model can be divided into two vital segments: the online trust formation sketch and the influencing factors of online trust. Concrete future works mainly focus on the latter part: to design the measurement based on the conceptual model, to analyze different submodels based on b2b, b2c and c2c case, and to verify the model through experiments.

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