

# Introducing Types to Potential Online Trustors and Antecedents to Technology Trusting Beliefs in the Context of Malaysian B2C e-Commerce

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**Abstract**—Nowadays there is a constant growth in domain of business-to consumer (B2C) electronic commerce (e-Commerce). Meanwhile, this domain is facing some serious challenges and problems that are, in a wide context, associated to trust, and more particularly initial trust issue. This is because these problems are diagnosed on both potentials online consumers or trustors' types; potential netizens and potential consumers. Thus, this paper attempts to shed a light on those problems, as well as willing to distinguish between those types. Besides, trust is a crucial concept that requires more demonstration. Whereby, new kinds of trust are recently introduced to demonstrate more about this concept. Since, the antecedents of the interpersonal trusting beliefs can either contribute to the technology trusting beliefs, as being one of the introduced kinds of trust, then this paper also will investigate those antecedents in the context of initial trust in B2C E-Commerce in Malaysia.

**Index Terms**—B2C e-Commerce, initial trust, potential online trustors' types, technology trusting beliefs.

## I. INTRODUCTION

Although, the global sales of electronic commerce are achieving a tremendous growth, B2C E-Commerce did not reach its potential yet [1], [2]. In this domain, dual essential parties exist; sellers or web vendors and buyers or online consumers. Since there is a great number of B2C E-Commerce websites or sellers, then probably the issue is not related to a shortage of competitors' number rather than, the number of online transactions that can affect B2C E-Commerce global sales, and must be done by online community or population. To date the most important motivation of such a kind of community in order to be engaged in an online transaction is trust [3]. Meanwhile, trust is a changeable process that has many phases [4], where, among these phases, initial trust is recognized as the most significant one [5].

Initial trust refers to the trust of a trustor who has no prior transaction with a trustee [6]. Such a trustor is recognized as a potential online trustor to a trustee, where others might be experienced or repeat consumers to that trustee [6], [7]. Based on previous E-Commerce initial trust studies [2], [8], [9], a potential online trustor might be either; a potential

Internet user, who never transacted online yet, or a potential online consumer, who has a prior online transaction or experience but with another trustee. Hence, potential online trustors are classified in this paper into two types; potential netizens (Internet users), and potential consumers (online consumers). Thereby, this paper attempts to shed a light on problems that are related to both of those potentials' types, as being the involved participants within the scope of initial trust.

## II. PROBLEMS ASSOCIATED TO POTENTIALS

Online population, including Internet users and online consumers, is visiting and exploring commercial websites. However, the majority of that population, comprising Malaysians either, remain netizens, who never transacted online yet with any of those websites [2], [10] - [15], or become online consumers but transacting only with a few number of those websites. This is because online population do not have initial trust in a trustee [2], [5], [6], [9], [16] - [18]. Besides, since these two parts of online population are identified as potential online trustors' types, then such problems are associated to initial trust. Therefore, there is a need to investigate initial trust issue thoroughly, but perhaps, in this paper, it is preferable to begin investigating the whole trust, as being the overall issue.

## III. TRUSTING BELIEFS KINDS AND DIMENSIONS

Trust is defined in this paper as the belief that a trustee will behave in a dependable manner in an exchange relationship [6]. Recently, trusting beliefs have been classified into two kinds; interpersonal trusting beliefs, and technology trusting beliefs [19]. Trusting beliefs express that a trustee has features which can be useful to a trustor [18]. The most popular interpersonal features or beliefs' group of dimensions are; competence, integrity; and benevolence [20] - [22]. Competence means the ability of a trustee to fulfill the needs of a trustor [5]. Integrity means the confidence of trustor that a trustee relies on a group of experienced criterion or ethical rules to conduct the interaction with its consumers [23]. Benevolence means the confidence of trustor that a trustee has favorable trend towards its consumers beyond its revenue incentive [22].

Parallel concepts of those features or beliefs are applied to the introduced technology trusting beliefs are; functionality, reliability, and helpfulness, to reflect respectively, competence, integrity, and benevolence beliefs in the

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technology or system of a trustee [19]. According to Mcknight definitions of those beliefs; functionality refers to the extent to which a person believes that the technology will have the required characteristics or functions to finish a person's job(s). Reliability refers to the extent to which a person believes that the technology will always work correctly, or work in a cohesive flawless style. Helpfulness refers to the extent to which a person believes that the technology will supply enough and efficient help, ordinary through a help feature [24].

#### IV. PROBLEM BACKGROUND

##### A. *Trusting Beliefs Kinds and Trust Concept*

Indeed, trust is a crucial concept in B2C E-Commerce [25]. However, the majority of previous research of this domain treated the concept of trust as one dimension [2]. Likely, the parsimonious treatment to trust concept can diminish the probability to find out richer insights about the perceptions of trustors [2], [26]. Hence, the researchers of B2C E-Commerce have applied multi dimensions (competence/ability, integrity, and benevolence) of trust notion in the context of trust [27] – [30], and initial trust [31], [32]. Nonetheless, those dimensions are solely representing the interpersonal trusting beliefs of a trustee, while the technology trusting beliefs are ignored.

Actually, it has been found that the interpersonal beliefs of an online vendor lacks of deep understanding about trustors' perceptions toward a trustee [33]. Consequently, Lankton & Mcknight introduced recently two new online trust kinds; Interpersonal trust and Technology trust, and their findings indicated the importance to distinguish between those kinds of trust in social networking domain [19]. Meanwhile, the domain of social networking is exploiting the same environment of E-Commerce, which is in this paper the Internet. Besides, a firm that gains benefits of social networking domain such as Facebook.com, simulates the segment of B2C E-Commerce, due to its utilization for a website to communicate with its clients or customers. Whereby, similar concerns of B2C E-Commerce have been assigned to those clients such as information privacy and trust, as well as, similar antecedents to both trusting beliefs' kinds such as reputation and privacy variables [19]. Thus, such an introduced classification to trusting beliefs into Interpersonal trusting beliefs and Technology trusting beliefs, can be applied to the domain of B2C E-Commerce, where, "nothing is more important than trust in the system" [34].

Nevertheless, limited research [24], [35] conducted on the trust in technology. Probably, this is because until now, trust in technology, is under exploratory of information systems research [19]. Besides, the technology trusting beliefs are recent and have been introduced in the social networking domain. Whereas, addressing technology trusting beliefs may help to demonstrate more about the perceptions of potential trustors, and help them to place trust in a trustee. Therefore, based on the literature, there is a lack of B2C E-Commerce trust research that have addressed antecedents to the technology trusting beliefs, including the context of initial trust.

##### B. *Initial Trust*

Actually, initial trust is the most important phase in trust development lifecycle [5]. Although, trust has been considered as key or vital to E-Commerce [36], establishing trust has to be even more fundamental [5]. However, relatively to trust, initial trust has received a massive fewer attention by researchers of B2C E-Commerce [2], [8], [9], where different variables may or may not contribute [6], [7]. Besides, some factors may play different roles during the changeable process building of trust [2].

Moreover, since the overall declared problems exist at the side of both types of potential online trustors (netizens and online consumers) comprising Malaysians, then it is more worthy to focus on the initial trust phase. Actually, the desired job that needs to be done by those potentials is doing an online transaction with a trustee, but to help them finish such a job and pass over their diagnosed problems, initial trust is required [37]. Thus, additional research on initial trust issue probably can help to solve B2C E-Commerce barriers. Therefore, there is a need to investigate more about initial trust and its antecedents, in the context of B2C E-Commerce in Malaysia.

What is more, some prior empirical studies of B2C E-Commerce initial trust domain used to mix both of potential online trustors' types together during the analysis phase [2], [8], [9]. Some others have distinguished only between repeat and potential trustor [6], [7]. Such a distinguish may demonstrate more about potential trustors' perceptions towards a trustee. Whereby, potential consumers at least have a prior experience with other trustees, and somehow considered familiar to online transactions. Where in somewhat similar situation, familiarity has a significance influence on the purchase intention [7]. Probably, such experience may help those consumers to expect and compare about an online transaction procedure more than potential netizens. Maybe, this because commercial websites, in basis, to somewhat extent have some similar procedures when conducting online transactions. These slight or few similarities may imply different perceptions to each of potential online trustors' types, where different factors may play different roles in the situation of potential and experienced consumers to a trustee [2]. Thus, different perceptions might be perceived by each of potentials' types, as well as, different factors' significances or roles may contribute to each of them and to those various perceptions as well. However, up to the researchers' knowledge, none of B2C E-Commerce initial trust research distinguished between potential netizens and potential consumers yet, as being the types of potentials online trustors. Therefore, this paper attempts to distinguish the influence of initial trust antecedents on each of potentials' types.

Finally, the interpersonal trusting beliefs of a trustee used to be applied to initial trust in B2C E-Commerce domain [16], [30]. Thus, the trusting beliefs of a trustee's technology, as being a kind of trusting beliefs, can also be applied to initial trust as well. Such a demonstration of trust concept may help to illustrate more about potential online trustors' perceptions towards a trustee. Therefore, this paper attempts to investigate initial trust antecedents' influence on technology trusting beliefs.

## V. INITIAL TRUST ANTECEDENTS

The introduced constructs, which are shown in figure 1, perform the proposed model of this paper, which will investigate the following factors that influence solely both types of potential online consumers (potential netizens and potential consumers), as being the involved parts of online population in the scope of this paper.

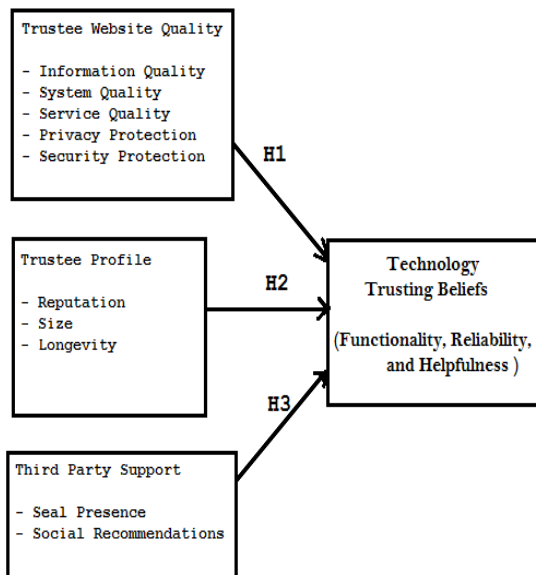


Fig. 1. Model of initial trust influence on the technology trusting beliefs.

### A. Trustee Website Quality

Trustee website quality, reflects a potential online trustor's perceptions toward the website of a trustee in terms of information quality, system quality, service quality, privacy protection, and security protection. All of these variables are recognized to be close to each other and associated to the quality of a trustee's website [38] – [40]. Such variables have been joined into various constructs associated to the trustee website quality construct such as 'Website Quality' [30], [41] - [43]. Measuring website quality as a construct found to be a useful instrument to assess the perceived capability and quality of a commercial website [43]. Likely, online trustors' perceptions of a trustee website quality can influence their beliefs of trust [43], [44], as well as initial trust [5], [18], [30]. Thus, the perceived level of a trustee website quality would influence the technology trusting beliefs, as being a kind of trust, of potential online trustors in unfamiliar trustee.

Therefore, it is hypothesized that:

H1: The high perceived level of a trustee website quality would positively influence the technology trusting beliefs of potentials in a trustee.

### B. Trustee Profile

Trustee Profile, is defined as, the perception of potential online trustor toward a trustee in terms of reputation, size, and longevity. Those trust predictors are considered close to each other [45], and all of them have been joined into various groups related to trustee profile construct such as 'Company

Profile' [30], [41]. Probably, the perception of online trustor's toward a trustee profile has the ability to impact their beliefs of trust [46] and initial trust [2], [17], [30], [41] as well. Hence, the perceived level of a trustee profile would influence the technology trusting beliefs, as being a kind of trust, of potential online trustors in unfamiliar trustee.

Therefore, it is hypothesized that:

H2: The high perceived level of a trustee profile would positively influence the technology trusting beliefs of potentials in a trustee.

### C. Third Party Support

Third party support, refers to the perceptions of potential online trustor toward a third party support in terms of seal presence and social recommendations. These trust predictors are related to a third party support construct, and also close to each other. This is due to their representation for an independence third party [44] of trust parties other than trustor and trustee, as well as they are shared in their foundation as being a kind of transference based trust [2]. Besides, most of them have been joined into various groups related to third party support construct such as 'Perceived Reference Power' [2]. Probably, the perceptions of online trustor's toward a third party support have the ability to impact their beliefs of trust [44], as well as initial trust [2]. Hence, the perceived level of a third party support would influence the technology trusting beliefs, as being a kind of trust, of potential online trustors in unfamiliar trustee.

Therefore, it is hypothesized that:

H3: The high perceived level of a third party support would positively influence the technology trusting beliefs of potentials in a trustee.

## VI. CONCLUSION

The clarified problems that are related to potential online trustors could be solved by helping them to place initial trust in a trustee. Such a kind of help needs to be done by understanding more about their perceptions towards a trustee. To do so, the introduced classification for potential online trustors into two types may clarify additional discrimination of those potentials. Thus, this paper may contribute to the overall knowledge, by addressing the influence of initial trust antecedents on each of potentials' types separately. In addition, the adopted classification of trusting beliefs kinds might be efficient to demonstrate trust issue in the domain of B2C E-Commerce. The modernity of technology trusting beliefs may make this paper contribute to to the overall knowledge as well, by addressing the influence of the proposed antecedents to those beliefs. Therefore, conducting this research may perform the originality within introducing the two specified contribution to the knowledge of B2C E-Commerce domain. Whereas, this research will be conducted using the context of Malaysia.

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