

The Information Quality Dimensions and trust classifications in E-Commerce

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Article Info

Volume 81

Page Number: 5878 - 5889

Publication Issue:

November-December 2019

Abstract

Information being the main commodity in EC possess risks. This has create the needs to explore the relationship of information quality (IQ) dimensions and trust in EC. The online description contains information cues may have huge influence on what the sellers are trying to sell over the e-commerce (EC) websites. This study has discussed the four (4) trust forms derived from trust literature, namely institutional-based, calculus-based, knowledge-based and identification-based. Then, they are inferred into four (4) trust classifications (technology, people, product/service and process) from the EC literature with related IQ dimensions identified within each classifications. The whole syntheses outcome was developed based on the systematic literature review driven by content analysis. It provides basis for finding the effects of information cue quality towards influencing online trust in an exploratory study that investigates the online purchase decision in e-commerce websites in Malaysia.

Article History

Article Received: 5 March 2019

Revised: 18 May 2019

Accepted: 24 September 2019

Publication: 27 December 2019

Keywords: e-commerce; information quality; trust; systematic literature review; literature review; content analysis.

1. Introduction

E-commerce is one of the first commercial website in the World Wide Web since 1994, as the result of the rapid growth of the Internet. The main revolution of information technology is through E-commerce when it has revolutionised the way trading is conducted [1]. Many researches postulate that in the near future all commerce business shall be e-commerce business by the 2050 [2]. In line with this, many organizations' website needed improvements and concentration is on upgrading existing websites to be e-commerce-ready [3], [4], [5]. E-commerce means exchanging goods and services on the Internet as on-line shopping [6][7][8]. E-commerce websites as discussed by [8] and [9], are interactive buying-selling channel, especially for the B2C, as the companies perceived that by leveraging the existing corporate websites, many business objectives will be achieved [9] [10] [11].

Barriers to entry on the Internet are becoming almost non-existent due to the emerging of platforms such as

free online marketplace [12]. The challenge is, however, more towards the barrier in describing the product physically, to introduce a new way of experiencing product "physically" online, credibility and describing the durable products, which cannot be easily described or sampled online [13], [14], [15]. The online description contains information cues such as product dimensions and condition, posted price, third party warranty, seller's reputation, background information and as well as offer's terms and conditions. It might be difficult to know whether the sellers' claim is indeed true as the buyers could not use their senses to touch, feel, smell and taste the product until they are evaluated physically [13].

The success of a website is not only sales volume but rather on make repetitive purchase, that generates sales, therefore success in e-commerce context [16]. The measurement of success in e-commerce website is widely done and gaining popularity amongst researchers (e.g. [17], [18]). The issue of privacy and trust in affecting the success of the e-commerce website brought upon by [19] is still an interesting recent and future research

undertakings (e.g. Lankton, McKnight, & Thatcher, 2014; Jones & Leonard, 2008; Y. H. Kim & Kim, 2005). According to Pennington et al. (2004) and Chatterjee & Datta (2008), factors such as “store trustworthiness, perception of risk, reputation, and store size have been shown to influence willingness to purchase”. Yet, not many vendors or sellers able to understand well the “system trust” concept [19], and successfully leveraged the trust mechanisms and other facilities to improve buyers’ perception towards purchasing online [14], [24], [25].

As mentioned earlier, information is the major asset at stake when conducting online transactions [16]. The body of knowledge of finding the type of information that should or should not be put on EC websites is mainly contributed by the classic work pioneered by the pure Information Quality (IQ) researches back in the 1970s [26]–[28]. The most significant work known so far by [29] has been referred by many studies in pure IQ area (e.g. [30]. However, it was the work from [31] that demonstrated the assessment of IQ in Information System (IS).

Therefore, the sole influence of information as main commodity in EC has to be explored in terms of how it influence buyers’ purchase intention through trust in EC websites. To understand well of the relationship/context between them, we conducted content analysis to generate findings and put them into this study context.

2. Materials and Method

This section describes the overview of the Information Quality Dimensions proposed by the best previous studies in the literature. Then, it is followed by elaborating the Trust forms and classifications in e-commerce and the relationship between them using systematic literature review driven by content analysis, as part of the qualitative methodology.

Information Quality

The characteristics of the information whether being complete or incomplete, ambiguous or clear are some of the aspects that lead to affecting future behaviours in online environment. Information has become the subject of analysis for the past 100 years and can be manipulated to reduce uncertainty [32]. Many definitions of information emerge depending on the situation. However given the scope of information use in e-commerce environment, it is related to uncertainty in decision making whether to buy or not to buy product or services. According to Pavlou, Liang, & Xue (2007, p. 107), uncertainty is “defined as the degree to which the outcome of a transaction cannot be accurately predicted by the buyer due to seller and product related factors.”

Another definition of uncertainty takes on the same perspective, in which the possible states of the outcome resulting to dispersions of individuals’ belief towards certain situation [34]. Therefore, information within the context of this study is defined as a message that is received, processed and used by users that reduces uncertainty in e-commerce environment. Other various definitions of information for example by Buckland (1991, p. 354), found in the literature: “(i) information-as-process; (ii) information-as-knowledge and (iii) information-as-thing”; “the negative measure of uncertainty...and an economically interesting category of goods,” (Arrow, 1984, p. 138); and “...information as data plus the context of its interpretation and/or use, and, finally, knowledge as a stock of information internally consistent and relatively stable for a given community” (Gasser, Twidale, & Smith, 2007, p. 1721).

When buyers are uncertain about future events, for example the honesty of the seller and the quality of the product, they will look for purchase information in order to reduce the uncertainty [23]. Within e-commerce context, complex transactions involve interaction or assimilation of the information of seller, product, process of purchasing and the system or the website provider [16], [23], [38]. Obviously risk is involved when the lack of knowledge will result to the “the potential for loss when uncertain future events may cause economic harm” [39]. Therefore, it can be concluded that, information will help to reduce the uncertainty [40], in order to mitigate potential risk when purchasing in e-commerce environment. Information asymmetries also happen between seller and buyer, in which exists the gap between the real information and the availability of it within online marketplace. For example, in “some markets, information is available but sellers are not willing to reveal it to buyers” (Leickly, 2004, p. 288). These “uninformed or misinformed buyers make poor decisions about a product’s value” [41]–[43]. This uncertainty or information asymmetry hinders transactions between high quality buyers and sellers. When this happens, sales transactions volume will get affected, thus reducing the success of the online marketplace.

IQ have been studied well under Information System (IS) and Computer Science (CS) research communities. In a review of the literature within 1989-1999, seven most systematic and demonstrated concise set of criteria or data quality metrics have been analysed [46]. The study found seven definitions of information quality from each of the framework. From these definitions, it all points to the need to meet the expectations and requirements of the end-users (See Table I). From these definitions, IQ can be defined as coming from both two perspectives, i.e. information consumer perspective and data perspective [47].

Table 1: Information quality Definitions in major Literature within 1989- 1999 [46]

Authors	Information Quality Definitions
K. T. Huang, Lee, & Wang (1999, pp. 43)	"Information quality can be defined as information that is fit for use by information consumers"
Kahn & Strong (1998, pp. 98)	"Information quality is the characteristic of information to meet or exceed customer expectations."
Kahn & Strong (1998, pp. 100)	"Quality information is information that meets specifications or requirements."
Lesca & Lesca (1995, pp. 45)	"Information quality is the characteristic of information to be of high value to its users"
Brien (1991, pp.7)	"The degree to which information has content, form and time characteristics which give it value to specific end users."
Gerkes (1997, pp. 23)	"Quality of information can be defined as a difference between the required information determined by a goal and the obtained information. In an ideal situation there will be no difference between the required and obtained information. A qualitative measure for information quality is expressed by the smaller the difference the greater the quality of information."
Eppler (1999, pp. 140)	"Information quality is the characteristic of information to meet the functional, technical, cognitive, and aesthetic requirements of information producers, administrators, consumers, and experts."

From the perspective of information consumer, [54] and [55] argue that ultimately the consumer will decide whether the information is fit or not to be used. However, as a human and taken into consideration of the processing of the information in the computer environment [29], "information consumers are not very capable of finding errors in information and altering the way they use the information" (Ives & Olson, 1984, p. 588). Therefore, data perspective then emerges as the most objective way to describe IQ, when the information meets the specifications or requirements [49].

Many have successfully proven IQ dimensions within their respective context of studies although there are still much work needed in understanding IQ in online interactions. Work done by [47], [57] and [58] argue that the classic work done between 70's to 90's concentrate much on the dimensions on IQ from the context driven and much less in user-driven context. In a recent study by [26] also stated the literature discusses knowledge gap in IQ research asserted that more research is needed to address the user-driven context.

For the purpose of this study, IQ is defined from the information consumer perspectives. The IS or technology used can suggest the best information best suit the needs and as well whether it can fulfill the objective given the condition, behavior and other external factors during the specific moment when the decision is made. Major works of IQ in IS research within the period of 2000-2009 can be seen as discussed in [59]. Although most of the studies suggest the concentration in organizational settings [58], [60], [61], recent IQ researches are getting into new context of applications, for example in blog [55], social media [62], knowledge management and decision making [40], Web 2.0 services [63], [64], online shopping [18] and cloud computing [65]. This is line with the

advancement of the Internet technologies when personal information search over the internet are becoming popular [26], [41].

Information Quality in E-commerce

Multiple variables have been applied and redefined in the e-commerce studies (e.g. [12], [57], [59], [66]) since the proposition of the success metrics in IS Success Model (ISSM) by [67] and demonstration of them on e-commerce case studies [68]. [66] attempted to apply communication aspect in defining the IQ in e-commerce context, meanwhile [18] argued that design of a website will ultimately defines the quality of the interactions in the e-commerce website. Within mobile shopping environment, attempts made have proven that the applicability of the model is undeniably vast, when IQ being part of the measurement [69]–[71]. Another study by [22] compares IQ measurement used in DeLone and McLean's original model between prominent IQ researchers' ([30], [48], [49], [60]) and further developed a framework to measure IQ in e-business. Another latest attempt by [62] developed IQ dimensions used in Social Media context. Although they use similar approach and classification framework by [72]–[76], nonetheless Social Media has different intentions from e-commerce. Other studies also demonstrated the measurement of success using slightly different approach from DeLone and McLean's theory. For example, Chae (2007) argued that IS Success Model should assumes the qualities' constructs to automatically generate user satisfaction. Therefore, it suggested that a new construct - Perceived IT Value (PITV) to be included in IS Success Model [73].

Non IS Success Model of e-commerce studies mostly embark on marketing approach in determining the success (e.g. Liang & Chen, 2009; K. Wang & Lin, 2012; Pearson et al., 2012). Success is defined as loyalty.

Therefore, marketing researchers are moving into efforts to find and test the factors that lead to customer satisfaction and loyalty. It yields the theory that suggests Quality>Value>Satisfaction>Loyalty chain [76]. For example, K. Wang & Lin (2012, p. 205) confirmed that “service providers should also value the quality of perceived playfulness, which reflects user engagement and enjoyment of the services, beyond usefulness alone”. This area of studies, however demonstrated the need to include IQ as one of the main premise in their models [74]. Therefore, suggesting the importance of it in e-commerce studies to measure the success.

By taking into consideration of the vast publications and successful attempts of studying IQ in ISSM, EC scholars follow the path and made succesful attempts to

provide empirical evidence to support the theory. The convention that IQ is needed to influence decision purchase can be seen in work done for example by Jinshuan, Lei, & Xiaoxiang (2014), Hsu, Chang, Chu, & Lee (2014), Liang & Chen (2009) and others.

Table II presents the summary of findings for selected studies and as well as success measure, specifically IQ tested within their model. It can be seen that since the introduction of the updated model, the measurement of the IQ dimension have not changed significantly. Each of the studies used their own interpretation of the IQ in ISSM within e-commerce, taking a different approach from the DeLone and McLean 1992's original model. This has set a ground work for this study to explore the effects of these dimensions in a different settings, as explained in the next section.

Table 2: Exemplary of IQ Measuements Studied within e- Commerce success Studies

Measuring Quality Dimensions		[78]	[16]	[67]	[68]	[57]	[12]	[59]	[18]	[17]
Information Quality	Completeness	x	x	x				x		
	Ease of understanding	x		x				x	x	
	Personalization/ Customizability	x	x	x	x				x	
	Relevance	x	x	x			x	x		x
	Security	x		x					x	x
	Variety	x			x		x			x
	Accuracy	x	x			x				
	Up-to-date/Currency	x				x	x		x	x
	Preciseness	x							x	x
	Timeliness	x	x							x
	Comparability		x				x			x

Trust Creation in E-commerce

Trust is important to be developed within buyer-seller relationships [42]. In the highly uncertain e-commerce environment, it is important not to neglect the importance of trust [24]. Liang & Chen (2009, p.972) indicated that “trust is a conviction when the customer develops a tacit understanding with a seller, and a seller can be relied upon to behave in such a manner that the long-term interest of the customer will be served”. Within the context of this study, trust can be defined as a “consumer’s confidence in an online service provider’s reliability, benevolence and integrity. If the information provided by the web retailer is ambiguous, inaccurate or incomplete, it will cause doubts in the consumer’s mind about the retailer engaging in harmful opportunistic behaviours and therefore, reduce trust” (McKnight, Choudhury, & Kacmar, 2002, p. 340).

Trust which is not easy to be developed overnight, takes much than single interaction. According to Clarke et al. (2006), repetitive business interactions between

buyers and sellers help buyers evaluate the sellers credibility and benevolence, creating the sense of relationship, preference. Furthermore, it creates a sense of attachments between buyers and sellers as the result of frequent and personalised communications. On top of system quality that provides secure platform for business interactions to occur, the quality of information and service are equally as important [81].

Classification of Four Types of Trust in E-Commerce

Information signals in order to channel trust, according to Spence (2002), is a positive perception about quality of the information displayed in reducing information asymmetry. In order to build trust, sellers may use reputation building tools such as advertising, warranties, or website design to send signals or portray a positive image [79]. Trusting intentions, as posits by McKnight et al. (2002) will be influenced by disposition to trust, institution-based trust, and trusting beliefs. Firstly, institution-based trust is “the sociological dimension of trust. It refers to an individual's perceptions of the

institutional environment, for example the Internet, in this case safety and security. In this context, institution-based trust depends on structural assurance and situational normality. Structural assurance is the belief that structures ensure regulations, guarantees, promises, and legal remedy, and situational normality is the belief that the environment is in proper order and success will occur. Secondly, disposition to trust means a general propensity to trust others, which can also influence an individual's beliefs and intentions towards a particular seller" (Jones & Leonard, 2008, p. 90). Thirdly, trusting beliefs is "one's confidence in the trustee (i.e., the buyer or seller). Trusting beliefs center on competence (ability to do what is needed), benevolence (motivation and care to do what is needed), and integrity (honesty)" (McKnight et al., 2002, p. 336).

According to [34], [82], there are other forms of trust; calculus-based, knowledge-based and identification-based. Firstly, calculus-based is described as the willingness to be in the vulnerable state or risk to be cheated by an opportunistic behaviour in order to gain transactions with the seller, with the hope that if the seller cheat, his or her reputation is at stake, therefore may cause loss of future business [83]. Second classification is based from Social Exchange Theory [84], knowledge-based is trust in seller which build up upon the information about seller's past transactions. Based on that, buyer can make prediction in the seller's future behaviour. Finally, identification-based is based on the perceived similarities with the seller, buyer trust that seller will protect the consumer's interest [85].

However, according to trust scholar Luhmann (1979), one must also recognize another form of trust, which is institutional-based trust, that is similar with calculus-based of trust [87]. The fourth category, institutional-based is the trust that the retailer follows specific rules and laws to perform the transactions and make sure everything (the system) has already put in place unless the retailer violates any irregularities arises. The similarity between both of them is that, the buyer trust that the retailer will make sure everything is in order and follows certain law and rules to conduct transaction, with the hope that no opportunistic behaviour from the retailer side in order to encourage more future transactions [87].

Meanwhile, within the scope of trust when using an online marketplace, buyers must depend on technology and people to deliver the success outcome of the e-commerce transactions. According to McKnight, Carter, Thatcher, & Clay (2011), trust can also be originated from **1).technology** or **2).people**, as user depend on them to complete a transaction. Trust in technology is reflected in three beliefs, which are (i)helpfulness, (ii)functionality and (iii)reliability [88]. "Functionality refers to whether one expects a technology to have the capacity or capability to complete a required task. Helpfulness excludes moral agency and volition (i.e., will) and refers

to a feature of the technology itself. Reliability suggests one expects a technology to work consistently and predictably" (McKnight et al., 2011, p. 12). Meanwhile, they define trust in people which involves characteristics such capability, integrity, benevolence, reliable, helpfulness, etc.

On the other hand, the e-commerce satisfaction, which promotes trust in e-commerce environment can be found within two main aspects - the product and service advertised, and the process and system used to support the delivery of the product and service [16]. This notion is also supported by other scholar, as **3).product/service** possesses its own uncertainty [42], [43], [89], one must consider "buyers' trust in sellers is focused on whether sellers faithfully describe product quality, and the vulnerability is primarily about product misrepresentation due to lack of seller integrity" (Gefen et al., 2008, p. 279). Therefore suggesting, product/service information can become part of aspects that creates trust.

Next, the **4).process** of purchasing in a form of system utilised to provide assistance to product purchase also possesses its own risk, especially when the personal details are involved [90]. When the customer bought product from online, the satisfaction of the processes and system in the e-commerce may have little influence towards the quality of the product [16]. For example, this is true for the service-related product that are provided in digitized format for example music streaming services that depends on the system or process to deliver its core services depending on the availability of the system. Therefore, "the system is some sense is the product and system use is the service" (Molla & Licker, 2001, p. 137).

Content Analysis Method

The literature reviewed for the study include theoretical studies on information quality (IQ) dimensions in e-commerce studies, and as well as specific studies on how trust in e-commerce namely; technology, people, product/service and process are inferences into four forms of trust namely; institutional-based, calculus-based, knowledge-based and identification-based.

Content analysis method is used to analyse the IQ dimensions and trust forms under various e-commerce success studies. The systematic literature review has set a ground work for this study to explore the effects of these dimensions in a different e-commerce settings in order to arrive at possible solutions and conclusion. Systematic reviews of literature are driven by content analysis and can form the bases of meta-analyses of data from different publications. Content analysis is applied in many research area in information studies, either as a method by itself or in combination with other method [56], [58].

Following the suggestion by [91], we reviewed seven criteria for defining a text, the common form of data for content analysis. The criteria are cohesion, coherence, intentionality, acceptability, informativity, situationality, and intertextuality. However, the criteria deemed fit for our analysis are 1).coherence, 2).intentionality, 3).acceptability, and 4).situationality. In this study, we reviewed 101 literature found in journals, proceeding, books, theses and others.

For coherence, the literature linkages are established through relationships that may not share same keyword or term, however match with our understanding (coherence). The idea and concept discussed in the literature must represent the similar intention for it to convey meaning related to our study's purpose (intentionality). Within our study domain, the context of the discussion in the literature is expected to be useful or relevant (acceptability). The situation surrounding the literature affects its production and determines what is appropriate for the situation and the culture (situationality), in this context, e-commerce [27], [92].

For the present study, content analysis is used to employ many analytical techniques to generate findings and identify them into study context. Content analysis uses a set of categorization procedures for making valid and replicable inferences from data to the context of our study. Firstly, inferences technique conducted in this context is the procedure to categorize trust definition in e-commerce (technology, people, product/service, process) "coherence" and have "intentionality" to trust forms as discussed in trust literature (institutional-based, calculus-based, knowledge-based and identification-based). Secondly, the study postulated that the characteristics of trust classifications in e-commerce to be associated with the IQ dimensions through defining the dimensions within literature using criteria of "acceptability" and "situationality". These criteria are deemed acceptable with the notion of IQ dimensions used, are within the the same usage context in e-commerce studies.

3. Result and Discussion

Drawing from the literature and the definitions of each trust forms (institutional-based, calculus-based, knowledge-based and identification-based), when comparing the four classifications of trust (technology, people, product/service, process) as suggested above with e-commerce IQ dimensions, it is postulated that the characteristics of the trust classification to be associated with the IQ dimensions used is within the context of e-commerce studies.

The IQ dimensions which correspond to each trust classifications are obtained from multiple studies which have empirically tested them within their context of study. This study has used content analysis, i.e. inferences technique to categorize trust definition in e-commerce

(technology, people, product/service, process) which are "coherence" and have "intentionality" to trust forms as discussed in trust literature (institutional-based, calculus-based, knowledge-based and identification-based).

To give a clear definition of the inferences proces, Table III presents the list of trust classification with the exemplary of corresponding IQ dimensions found in the literature. For example, trust in Technology is based on trust in retailer that the retailer follows specific rules and laws (structural assurance) to perform the transactions and make sure everything (the system) has already put in place. Buyers also believe that no irregularities will happens (situational normality) and transactions will happen smoothly and successful within the environment of the Internet. An example of information within the scope of technology that can promote trust in technology is the *compatibility* and *functionality* of the technology used for example the usage of mobile phone and mobile connectivity. In some cases, mobile browser compatibility information for product browsing is provided for the benefit of the users [71], [93]. Typical examples in real-world setting is the URL address of the e-commerce website that supports mobile browsing is indicated by "m.lazada.my" or a pop-up notification prompting the user to install apps on their mobile phone to make sure the future browsing is without any hassle.

4. Conclusion

To summarize, this study has described the relationship between trust and IQ dimensions. Based on the existing trust literature, the content analysis provides a summary of trust definitions by [34], [79], [82] and [86] into four (4) distinct forms which are knowledge-based, identification-based, calculus-based and institutional-based. The four trust forms are then inferred into four (4) distinct trust classifications in technology and people [88], product [42], [43], [89] and process [16], [90]. Based on this synthesis, the study further infers the trust classifications with a list of IQ dimensions identified within e-commerce context. The result of IQ dimensions supports in defining the description of each trust level and forms needed towards online shopping sustainability.

Furthermore, the definition much assists developer to determine the trust measurement of each IQ dimension, which type of IQ related to which type of trusts. The dimensions' list was developed based on the systematic literature review driven by content analysis and provided basis for exploratory study that investigates the quality of information cues posted online in e-commerce websites in Malaysia.

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Appendix (Table 3) Exemplary of Iq Measurements Studied within E- Commerce success studies

Trust Classifications	Trust Forms	Exemplary Studies	Type of Studies	IQ Dimensions Studied
Technology	Institutional-based	1. Mcknight et al. (2011) based on McKnight et al. (2002) 2. Al-Haraizah (2013) based on Connolly & Bannister (2007) 3. Ratnasingam (2004) based on Jamieson (1996); Bhimani (1996) 4. Lankton et al. (2014) based on McKnight et al. (2002) 5. J. Lee & Moray (1992) 6. Cassell & Bickmore (2000); W. Wang & Benbasat (2005)	1. Spreadsheet software (tested using e-commerce measures) 2. G2C e-government services 3. B2B e-commerce 4. Database software (tested using e-commerce measures) 5. Unspecified 6. Software agents in online environment	1. Helpfulness, Reliability, Functionality 2. Reliability, Functionality 3. Confidentiality, Integrity, Authentication, Non-Repudiation, Access Controls, Availability 4. Helpfulness, Reliability, Functionality 5. Responsiveness 6. User-Friendly, Caring
People	Knowledge-based, Identification-based, Calculus-based	1. Al-Haraizah (2013) based on Chow & Chan (2008) 2. [104] based on McKnight et al. (2002) and [105] 3. Ratnasingam (2004) based on Mayer, Davis, & Schoorman (1995); Lewicki & Bunker (1996); Sako (1998) 4. Lankton et al. (2014) based on Mayer et al. (1995) 5. Pennington et al. (2004) 6. Bente et al. (2012)	1. G2C e-government services 2. B2B e-commerce 3. B2B e-commerce 4. Database software (tested using e-commerce measures) 5. B2C e-commerce 6. C2C e-commerce	1. Helpfulness, Affective, Reliability, Good relationship 2. Competence (Ability, Competence, Calculus, Cognitive), Predictability (Integrity, Affective, Reliability), Goodwill (Benevolence, Openness, Concern, Identification) 3. Integrity, Ability, Benevolence 4. Reliability, Reputation (e.g. Vendor origin i.e. alma matter, same group or community), Trusting Belief (Competence, Benevolence, Integrity), 5. Goodwill (shown through seller's photo), Reputation
Product	Calculus-based, Identification-based	1. Chatterjee and Datta (2008) based on Choudhury & Sampler (1997) and Williamson (1975) 2. Xiao & Benbasat (2011) 3. Hong & Pavlou (2010)	1. B2C and C2C e-commerce 2. B2C e-commerce 3. B2C and C2C e-commerce 4. B2C and C2C e-commerce	1. Completeness, Latest (Timeliness), Accuracy, Tangibility, Comparable to other competing product 2. Adequacy, Availability, Tangibility, Transparency 3. Reliability,

		4. Dimoka & Pavlou (2008)		Conciseness, Completeness, Consistency, Comparable to other competing product, 4. Preciseness, Reliability, Consistency, Adequacy, Ease of Understanding, Usefulness
Process	Institutional-based, Calculus-based	1. Chatterjee and Datta (2008) based on Choudhury & Sampler (1997) and Williamson (1975) 2. Egger (2000) 3. Hoffman, Novak, & Peralta (1999) 4. Valk and Rozemeijer (2009)	1. B2C and C2C e-commerce 2. B2C e-commerce 3. B2C e-commerce 4. B2B e-commerce	1. Transparency, Access Controls, Security, Helpfulness, Availability, User-Friendly 2. System's Likeability, Acceptability, Learnability, Consistency, Flexibility, Error Tolerance, Security, Usability, Trustworthiness, Appeal 3. Privacy, Access Controls, Security, Transparency 4. Transparency, Access Controls, Security, Helpfulness, Availability, User-Friendly