Building trust in e-commerce from an Islamic perspective: A literature review

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Abstract. Studies indicate that trust has a significant impact on users' acceptance of e-commerce. Discussion on the role of trust in e-commerce environment can be largely found in the literature; however, it scarcely looks at the issue from the Islamic perspective. As religion is one of the factors that helps to gain trust among Muslim internet users to conduct e-commerce, it is therefore pertinent to explore how to build online trust through an analysis of the essential requirements of e-commerce from the perspective of Islamic law of contract. Library research is employed by the means of investigating classical and contemporary literature to search for information on essential requirements underpinning e-commerce contract. Review of existing literature sheds light on some conditions related to offer and acceptance (form), buyer and seller (parties), and object and price (subject matter) of sale contracts concluded via online environment. An appraisal of these issues will justify the validity of e-commerce in Islamic law, thus enhancing the level of online trust among Muslim users.

Keywords: trust, e-commerce, Islamic law of contract, Shari'ah.

1. INTRODUCTION

The advancement of Internet has changed the way people perform business and commerce, from a traditional to an online environment. Nowadays, people can purchase and sell various items via Internet. The uptake of these online transactions is hugely determined by the presence of trust (Salam et al., 2005). Indeed, lack of trust is one of contributing factors to the hesitance of people to conduct transactions over the Internet (Lohse et al., 2000). Both academics and practitioners have extensively discussed the issue of trust in e-commerce. Nevertheless, studies on this issue from the Islamic perspective are still lacking. Thus, it is pertinent to understand Shari'ah-compliant way of doing e-commerce to secure trust among Muslim users.

2. AN OVERVIEW OF E-COMMERCE

E-commerce can be simply described as the process of buying and selling over the Internet. Success of e-commerce has been associated to the establishment of trust among the online users. Beatty et al. (2011) stipulate that any e-commerce vendor that fails to establish a trusting relationship with their customers is doomed. One of the reasons for trust to be predicated as a

crucial issue in online environment compared to hand-to-hand transactions because parties involved in online transaction are physically apart, they cannot rely on things like physical proximity, handshakes or body-signals; thus creating a perception that e-commerce environment is inherently insecure and cannot be trusted. Head and Hassanein (2002) state that virtual environment entails risks and opportunities for fraud. Further, lack of trust is one of the frequently cited reasons for the hesitance of customer to conduct online transactions (Yang et al., 2009).

3. TRUST IN THE CONTEXT OF E-COMMERCE

Despite many studies addressing the concept of trust, yet, there is no universally accepted scholarly definition given to trust. This is due to the fact that it is somehow complex (Holsapple & Sasidharan, 2005) and has a dynamic and multi-faceted character (Mayer et al., 1995). Nevertheless, Chopra and Wallace (2003) advocate that trust should reflect the union of three elements; a trustee to whom the trust is directed, confidence that trust will be upheld and a willingness to act on that confidence. Hence, trust is defined as willingness to rely on a specific other, based on the confidence that one's trust will lead to positive outcomes. On the same note, Limbu et al. (2012) regard trust as willingness of trustor to rely on trustee based on the confidence and faith that the trustee will act accordingly.

Moreover, Grabner-Kräuter et al. (2006) and Mior Ibrahim et al. (2009) suggest that it should consider characteristics of trustor and trustee, and context characteristics perspectives. Grabner-Kräuter et al. (2006) also opine that trust can be conceptualized as the interpersonal trusting relationships between trustors and trustees. As risk and uncertainty are always involved in online purchasing, developing confidence level of the trusting parties is important because any of them may be subjected to the violation of trust during the transactions. For example, in addition to having trust in the quality and satisfactory condition of the purchased products, online buyer has to have trust their deliverability. Proceeding section delineates models of trust and its role in the context of e-commerce.

4. TRUST MODELS IN E-COMMERCE

Factor-based Model (Mayer et al., 1995) identifies three main characteristics of a trustee namely (i) ability – belief in skills, competencies and expertise of the trustee; (ii) benevolence – the degree of belief to which a trustee, aside from wanting to make a legitimate profits, wants to do good to the trustor; and (iii) integrity – the trustor's perception that the trustee adheres to a set of principles that the former finds acceptable (e.g. keeping promise). In another model, Sutcliffe (2002) shed lights four dimensions of trust which are merchant trust, content trust, product trust and process trust. Merchant trust refers to the trust attributes on the e-commerce website that give impact to the merchant/seller such as business identification, contact person, privacy policy and third party endorsement. These attributes motivate buyers to stay longer and establish transaction with the website. Content trust involves attributes such as layout, structure, ease of navigation and technical competence that are very crucial to the website. Product trust focuses on the trust attributes on the website that give impact to the product such as brand, features, descriptions and price. Process trust refers to attributes such as on-order guide, purchasing process, payment option and delivery arrangement that give impact to the transaction process provided in the website.

Study by Cheung and Lee (2000) suggest that consumer trust in online shopping can be predicted by two sets of antecedent factors which are vendor trustworthiness and external environment. Vendor trustworthiness relates to the vendor's perceived integrity and competence, and vendor's security and privacy controls. External environment encapsulates the need for third-party recognition and legal framework in establishing online trust among the shoppers.

It is apparent from these models that establishing trust is dependent upon various factors which can be summarized into (i) trusting the parties involved in online transactions. Trustor and trustee need to possess necessary characteristics (e.g. integrity, identification and reputation) that may reflect their ability and eligibility to commit online transactions; (ii) trusting in the promises made by trustor (e.g. to buy and pay) and trustee (e.g. to deliver product) which will bring them into the state of agreement upon a set of principles deemed acceptable for them; and (iii) trusting in the ways of how online transactions are accomplished in terms of providing secured and reliable systems to support online activities.

In an attempt to establish trusting relationship between online consumers, Abbass and Ibrahim (2011) propose a model where identity of each buyer and seller is validated using a unique number known as Assurance Key (AK). AK will be uniquely generated by Trusted Third Party (TTP) for every registered consumer, and it is a combination of reference number of state, continent and image of the registered consumer's face. The buyer or seller is requested to snap and upload his picture to the system, which will be matched to the AK. Once the identity is verified, buyer or seller will be allowed to carry out his transaction as electronically reliable consumers. Otherwise, data will be sent to TTP for verification and image update.

Interestingly, religion is also found to play a significant role in shaping online trust among the users. Daniels and von der Ruhr (2010) indicate that religious customs, messages and traditions are important determinants of trust. Similarly, Barnes (2009) suggests that religious faith increases benevolence, which in turn influences trusting beliefs and online behavioral intention. In their study, Siala et al. (2004) concludes that religious affiliation shapes the establishment of online trust particularly among Muslims. Hence, they prefer to buy online from sellers whose characters are in accord to Islamic principles. Next section discusses e-commerce and its requirements from the Islamic perspective.

5. E-COMMERCE IN ISLAMIC LAW

From Islamic perspective, e-commerce denotes same connotation as of the conventional way of commerce. The former, therefore, must also conform to all requirements and principles of Islamic law of contract such as free from any element of usury (*riba*), gambling (*maysir*), uncertainty (*gharar*) and coercion (*ikrah*). These Shari'ah requirements aim at protecting interests and eliminating harms of parties involved in a transaction, thus promote justice, which is one of the main objectives of Shari'ah (*maqasid al-Shari'ah*). As e-commerce involves trading between buyers and sellers, it needs to fulfill essential requirements and conditions of Islamic law of contract, namely (i) offer and acceptance (form), (ii) buyer and seller (contracting parties) and (iii) object and price (subject matter), hence deems valid. The following section delineates each of these requirements and its conditions as well as issues pertaining to e-commerce in Islamic law of contract.

5.1. Form (offer and acceptance)

Form of contract consists of offer and acceptance, where an offer refers to the initial proposal made by either party in a contract – seller or buyer. Meanwhile, an acceptance is a statement made by the other party involved in the contract expressing his consent to the terms of offer (Al-Zahrani, n.d.). The majority of Muslim scholars agree that besides words, offer and acceptance occur in a form of writing or conduct (known as *mu'atah*), where neither seller nor buyer expresses the offer and acceptance or only one party says the offer and the other accepts through actions. Nevertheless, they disallow the offer that is in a question form, such as "will you buy from me" or "will you sell the good to me" because of uncertainty of the phrase (Ibn Qudamah, 1968; Al-Kasani, 1986; Al-Hattab, 1992).

Muslim jurists have stipulated some conditions for the validity of offer and acceptance namely connectedness, clarity and conformity (Al-Zuhayli, 2001). In normal contexts,

contracting parties are physically present in one meeting session (*majlis al-'aqd*) to negotiate terms of the contract, so that offer and acceptance are connected, clear and consistent. Concerning e-commerce, there are two scenarios in which offer and acceptance may take place (Al-Zahrani, n.d.; Alzaagy, 2007), namely (i) parties are virtually present in the space (though they are at different locations) and the offer and acceptance occur in one meeting place via instant writing such as chatting, or via electronic communication such as tele-conference. According to the Council of Islamic Fiqh Academy (2000), the contract shall be deemed a contract between present parties, for it takes the ruling of constructive meeting place in concluding the contract; and (ii) parties cannot see or hear each other physically or virtually, and offer and acceptance happen through computer screens such as interactive websites and emails. The Council (2000) also resolved that the contract is complete when the offerer communicates the offer to the offeree and the offeree notifies his acceptance to the offerer. The ruling is based on the opinion of classical jurists regarding the conclusion of contract between inter-absentees, such as through a letter or a messenger. Despite the time and space intervals, the meeting place deems unified as the messenger or the letter constitute "a representative" acting and offering on behalf of the seller (Al-'Ajluni, 2002).

In e-commerce, we need to determine when the constructive meeting session begins and ends. Some scholars opine that meeting session starts immediately upon a seller advertising an item on the website (Al-'Ajluni, 2002; Al-Momani, 2004). Al-Zahrani (n.d.) argues that the session shall be established once a buyer shows his interest in trading by clicking on the advertised item on a seller's website, and then proceeds to "check out" basket after knowing the specifications and the price. So, the offer occurs when the seller asks confirmation, such as "do you agree?" Meanwhile, acceptance takes place when the buyer confirms the transaction and continues with the payment, thus the contract is concluded.

Al-Zahrani's (n.d.) opinion is more acceptable and practical as advertising items for online shopping is similar to normal shopping in the store, where a seller put the goods on shelves and a customer has an opportunity to look at them and the price tags. The offer and acceptance will not happen until and unless the customer picks the goods and proceeds to the counter. Based on this explanation, although the offer and acceptance in e-commerce are in various forms including oral (via chatting or telephone), written (via email or messenger), and conduct (via clicking confirmation button on website), they are valid as long as they are connected, clear and corresponding to each other.

Technically, the validity of offer and acceptance can be enhanced further via the application of session keys (Muhammad et al., 2011). It is asserted that authentication protocols by using session key can be used to resolve the issue of time validity for an online transaction. Session key ensures the security of a communication session between two computers or stations. The session begins when a connection is established at both stations and terminates when the connection is ended. Typically, one station requests a connection with another specified station, and if the latter replies agreeing to the connection, both of the stations take turns exchanging commands and data.

5.2. Contracting parties (buyer and seller)

All contracting parties according to Shari'ah, whether in traditional trading or e-commerce, must perform a contract based on a free or mutual consent (Vohrah & Aun, 2010). It is also known as consensus of both parties without any form of coercion, either directly or indirectly, or else, it would be a voidable contact (Abdul Jalil & Rahman, 2010). Allah says: "*O you who believe, do not devour each other's property by false means, unless it is atrade conducted with your mutual consent*" (Quran, 4:29). Having a mutual consent is significant to eliminate the issue of anonymity between the contracting parties. From the technical view point, the issue can be resolved through the application of digital signature (Muhammad et al., 2011). A digital

signature provides a mechanism in which identity of the sender is not tampered or changed during the communication with the receiver. It replicates the traditional signature that uniquely identifies the signature's owner. Moreover, it cannot be copied or fabricated by the unauthorized party which means that the sender cannot easily deny the online transaction committed.

Moreover, both contracting parties must have legal capacity (*ahliyyah*) and authority (*wilayah*) to execute the contract. It refers to the quality by which a person becomes fit to obtain what he is entitled to, or for the discharge of legal obligations to which he is liable in the view of Islamic law. Abu Zahrah (1996) defines legal capacity as eligibility of a person to acquire rights for himself and exercise them; and authority as power of executing the contract. Legal capacity is categorized into two, namely acquisition of rights (*ahliyyat al-wujub*) and execution of rights (*ahliyyat al-ada'*). The former refers to the eligibility of a person to acquire rights for and upon him while the latter is the eligibility of a person to execute or discharge his rights and duties in a manner recognized by the law. Every individual in Islamic law is borne with the acquisition of rights. It is granted to human beings regardless of sex, race, age, and physical ability or disability. On the other hand, the executive rights have several phases. At the 1st phase, i.e. from birth until seven years old (before the age of discernment), a person does not any execution right at all. At the 2nd phase, i.e. from the age of discernment to the age of prudence, a person cannot enter into a contract except with his guardian's permission. A person acquires complete execution of rights when he reaches the third stage, i.e. the age of prudence until death. At this stage, he has attained certain level of intellectual maturity and competence, hence is eligible to perform contractual dealings independently.

In addition to legal capacity and authority, both contracting parties must perform a contract based on a mutual consent. Islam highly emphasizes on the requirement of mutual consent between the parties involved, and prohibits taking property of others without legal right. Allah says: "*Eat not up your property among yourselves unjustly except it be a trade amongst you, by mutual consent*" (4:29). The Prophet has also been reported to say: "*Sale is but based on mutual consent*". These evidences clearly inform that free willingness of parties involved is indispensible in a transaction, without which the contract is null and void. Thus, any factor that breaches this requirement might render the invalidity of the contract. Coercion, for instance, renders the contract to be invalid due to lack of free will in the transaction.

The question, however, arises in e-commerce as how to determine the legal capacity of contracting parties. As e-commerce normally occurs between either an individual or a company with a website; in the case where the buyer is a company, therefore the determination of its legal capacity depends on the certificate of approval from the relevant authority. Meanwhile, if the buyer is an individual, determining his legal capacity is less hassle because his modes of payment – such as via debit or credit cards – shall prove that he has attained the legal age and has an authority in executing the transaction.

5.3. Subject matter (object and price)

From the Shari'ah viewpoint, the subject matter, which constitutes object and price, must fulfill several criteria mainly lawful, valuable, in existence, deliverable and precisely determined for a contract to be valid. Concerning price, the mode of payments in e-commerce needs an appraisal from the Islamic perspective, as there are different e-payment systems available including direct online credit/debit payments, mediated credit/debit payments, stored-value money and electronic bill payments (Ozkan et al., 2010).

Credit card, in particular, is an essential mode of payments in e-commerce. It represents a loan relationship between card bearer and issuer. In Islam, the issuer is not entitled to receive more than the amount taken to purchase goods to avoid interest (i.e. *riba al-nasi'ah*). Nonetheless, the issuer can charge a fix amount of fees known as administrative expenses or

service charges if they are not increasable due to the increased amount of purchase (Muhammad et al., 2011). The Council (2000) issues a resolution pertaining to the use of credit card; (i) it is not permitted to issue uncovered credit cards or to deal in them if there is a condition that fixes usurious increase even if a user intends to pay up within a given free period; (ii) it is permitted to issue uncovered credit cards as long as there is no condition that fixes usurious increases to be added to debt; and (iii) it is impermissible to use credit cards for buying gold, silver or currencies. Therefore, Monirul (2004) suggests that it is allowed to issue and use credit card for e-commerce transactions as long as it is consistent with the Shariah requirements and principles.

Furthermore, since e-commerce transactions usually involves objects being delivered in the future, hence items such as gold, silver and currencies cannot be traded to avoid interest (i.e. *riba al-buyu'*). This is because the tradability of these *ribawi* items should fulfill two conditions, (i) equal value; and (ii) hand-to-hand, if they are within the same genus, and hand-to-hand only if they are from different genus based on the narration of the Prophet (pbuh) (Muslim, n.d.). Pertaining to future delivery of all non-ribawi goods, particularly those delivered via postage, Haqqi (1999) argues that the transaction is neither future sale (*bay' al-salam*) – if the payment is immediate via debit or credit cards – nor sale of debt with debt – if the payment is deferred through cheque or bank transfer. Instead, future delivery of goods in e-commerce is due to the nature of transaction itself, which happens between inter-absentees, hence entailing an intermediary, i.e. mail carrier to deliver goods to the buyer. Consequently, time gap between payment and delivery of the goods does not invalidate the e-commerce transactions.

6. CONCLUSION

E-commerce is allowed from the Islamic perspective as long as it complies with requirements stipulated by Islamic law of contract namely (i) form, (ii) contracting parties and (iii) subject matter. This is to ensure that the main objective of commerce in Islam which is protecting interests and eliminating harms of parties involved in a commercial-related transaction, could be successfully achieved. Based on this objective, it can be postulated that Shari'ah-compliant e-commerce could influence the presence of online trust among online users in this Internet-enabled environment. This hypothesis could be supported by findings of previous studies (Siala et al., 2004; Barnes, 2009; Daniels and von der Ruhr, 2010) that religious-related elements are important determinants for the establishment of online trust, particularly among Muslim. This study enriches the existing body of knowledge by providing a conceptual understanding of trust from Shari'ah perspective, which can be a focus of further study in the future.

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