A Comprehensive Overview on B2C E-Commerce Trust Requirement in Saudi Arabia

Asiri Ahmad Yahya
Department of Information System
UniversitiTeknologi Malaysia
Johor Bahru, Malaysia
Email: a.s.alaseeri [AT] hotmail.com

Halina Mohamed Dahlan
Department of Information System
UniversitiTeknologi Malaysia
Johor Bahru, Malaysia

Abstract—Electronic commerce or e-commerce being applicable for any kind of business, or commercial transaction over internet involves the transfer of private information such as credit-card details across the web-site. Utter secrecy together with absolute trust is essential for e-commerce to protect online shopper from being a victim of cyber-scam. However, despite exponential escalation of ICT in Saudi Arabia the impact on the e-commerce activities is meager due to lack of consumer trust. Saudi Arabia being a major contributor to global economy needs to explore the potential of e-commerce. Developing a B2C e-commerce trust model for Saudi Arabia is ever-demanding. Advancement and successful implementation of such model up to consumers' expectation needs the identification of essential requirements or major influencing factors of people trust in the nation. This paper provides a panoramic overview on the B2C trust development in Saudi Arabia. The past progress, recent advancement and future trends in B2C e-commerce for Saudi is underscored. Trust factors that affect the B2C e-commerce in Saudi Arabia are identified. Eight requirements of B2C e-commerce trust in Saudi Arabia are recognized, which are divided into two categories including the governmental non-governmental variables. It is emphasized that the cited trust requirements are essential to establish an efficient online business strategy in the Kingdom. Flexible government policies, legislation, rules, protection of consumer rights, and banking network system with less internet fees are pre-requisite for e-commerce expansion in the nation. The need for the creation and implementation of a comprehensive model of B2C e-commerce trust in the context of Saudi is proposed and explained. Execution of such model may augment the consumer self-confidence and reliance and hence the growth of e-commerce in Saudi Arabia.

Keywords-component; E-Commerce; trust; Saudi Arabia ; B2C

I. Introduction

Lately, internet has become an integrated part of modern technology and social lives. It made the world very small and consequently the concept of global village is invoked. For example, starting from the air ticket purchase to hotel booking to get even facilities in remote locations, every aspect became simplistic for travelling overseas. Researchers and educationalist often get their study materials over the internet. One can purchase books, articles, and magazines online through various websites such as Amazon, Springer, IOT, Science direct, Com, and eBay. The viability of transferring funds, paying bills and updating personal information through the Internet banking services became feasible. All of these examples make us feel the importance of using Internet in our lives to get our requirements easily. Consequently, online purchase and payment appeared as routine options. However, each and every step of interaction with websites via internet requires utter secrecy and ultimate security, particularly during personal information exchange. Recent exponential escalation in the internet phishing and cyber forgery made the authenticity of a website doubtful. The word "trust" in business is a key element for successful implementation. In this regard, the trust in e-commerce plays a paramount role towards B2C effective interactions.

In the 21st century information technology era human life is characterized by the speedy exchange and sharing of wealth of information. Consequently, the development of high speed secured internet access appears as an absolute necessity in electronic commerce. This in turn provides organizations and individuals the ability to engage into work irrespective of time and place. The internet accessibility not only enhances the activity but also reduces the cost and manpower. This innovative infrastructure brings profits to business through competitive advantage and satisfies the diversified demand of customer with their desired selection. Electronic commerce is not limited to buying, selling, and conducting financial transactions through the Internet. It also includes the buying and selling the same information side-by-side with goods and services (Fingar et al., 2000). In fact, in the global economy, internet mediated e-commerce has major position.

In short, electronic commerce is not only limited to online sales, but also covers many business activities including online purchase, study, video conferencing, preparation of estimates, consultation with users, online bill payment, transaction and remittance, delivery tracking and after-sales service, to cite a few. Moreover, all these activities over internet require efficiency, safeguard and reliability and the main challenge it to improve them up to the level of customers or users satisfaction.

This paper consists of seven sections. Section 2 discusses about the e-commerce development in Saudi Arabia. The trust in e-commerce is exemplified in section 3. Section 4review trust models for business to consumer. The present e-commerce status in Saudi Arabia and the need for the identification of trust factor to create a new model is justified in

Section 5. The methodology for developing an efficient trust model for B2C e-commerce is proposed and the future trends are highlighted in section 6. Section 7 concludes the paper.

2. DEVELOPMENT OF E-COMMERCE IN SAUDI ARABIA

Currently, the development in the global e-commerce is happening in rapid space. Modern Saudi Arabia is witnessing a wonderful integration and homogeneity in the conservative social and technological prowess. Truly, this is leading to a sweeping transformation via the assimilation of technology into the existing societal framework. Several people and businesses are exploiting the internet to sell or buy goods or services. Companies, retailers, individuals, and government organizations are involved in all these trades via computer-mediated networks call web-sites. During past decades the advancement of electronic commerce worldwide is remarkable, especially in the facets of information technology sector. Among other Arab nations, Saudi Arabia occupied the pinnacle centers in terms of e-commerce expansion and reached 17.2 billion riyals. Surprisingly, the number of e-commerce users is raised to 8.2 million which is equivalent to 29% of the population in 2013 (Saudi Arabian Monetary Agency, 2013). Despite such progress Saudi nationals remain skeptic regarding the reliability of internet money transfer. This slowed down the B2C e-commerce in Saudi and appeared as a barrier for further growth. In this view, it is vital to identify the essential requisites of trust to enhance the Saudi Arabian business to consumer e-commerce.

Undoubtedly, e-commerce opened up innovative opportunity to promote the internet shopping environment called online purchase. This in turn, propped up the globalized market economy and in particular the online businesses (Laudon and Traver, 2009). However, very recently it is noticed that the e-commerce activities in the Arab nations are not growing at rapid space because of the emergence of internet phishing (incidents of fraud in cyberspace). These fraud activities over the web-sites elevated the rate of risk of Arab companies suspecting considerable economic losses. In fact, the restoration to the protection of personal data transfer via the use of electronic commerce properly became a serious concern. Consequently, developing internet phishing mitigation in the cyberspace security became demanding. It is also observed by customers towards the risk and phenomena that may occur from imposed confidentiality of private data such as personal identity theft. Thus, a mixture of fear and distrust persists among e-commerce users (Yoon and Occeña, 2009). Overcoming such shortcomings related to internet phishing remains challenging.

Certainly, trust is the foremost factor in e-commerce governance. This dependence is acknowledged as the main feature in academic and professional communities influencing the opinion toward electronic commerce implementation (Lee and Turban, 2001; Salam, et. al. 2005; El-Said and Galal-edeen, 2009). In e-commerce dealings, the opinion and perceptions of consumers' are essential for developing legitimate business confidence. It is the transmittance of self-confidence in the electronic description of the material world.

Fundamentally, electronic-commerce is the utilization of web (cyberspace) to doing business. Specifically, it is the business transactions using the technology resource of electronics based communications and subsequent processing of digitized information to create, and renovate intimate relations among organizations and individuals (Mohapatra, 2013a). This is turn, transforms the societal economy, promotes jobs and business, and adds value to life. According to Eastin, it is the sharing of business data, maintaining the business connections, transaction of business exchanges between stakeholders and electronic information technology (Eastin, 2002; Zwass, 1996).

According to Moodley, e-commerce is any form of manifestation of business or managerial exchange or data trade that occurs via ICT-based computer-mediated network (Moodley, 2004). The most common definition of e-commerce is simply doing business transactions via the internet. Despite its popularity, this description is yet incomprehensive to arrest the current ground-breaking commerce developments. A comprehensive meaning may be: electronic-commerce is the application of the processing of digital information and communicating electronically the essentials of business transactions to produce, change, and renovate interaction for creation of values among different organizations, and among businesses and individuals (Emmanuel, 2000).

Recent growth of e-trade volume clearly demonstrates the escalation of the global economy acceptance on the e-media in the fruition of business and monetary exchanges. As per geographical division of e-trade volume, North America still has the biggest share to the volume of e-commerce on globe. This percentage for the North America alone is 50.9% followed by entire Asia-Pacific region 24.3%, Western Europe 22.1% and Latin America 1.9% as listed in Table 1. For Saudi Arabia, the volume of electronic commerce growth during 2001-2013 is increased from ≈ 4.2 to ≈ 17.2 billion Saudi riyals with an annual expansion rate of 25.8% as depicted in Figure 1.

TABLE 1. GEOGRAPHICAL DISTRIBUTION OF E-COMMERCE OF 2001 AND 2012 (ADAPTED FROM UNCTAD REPORTS).

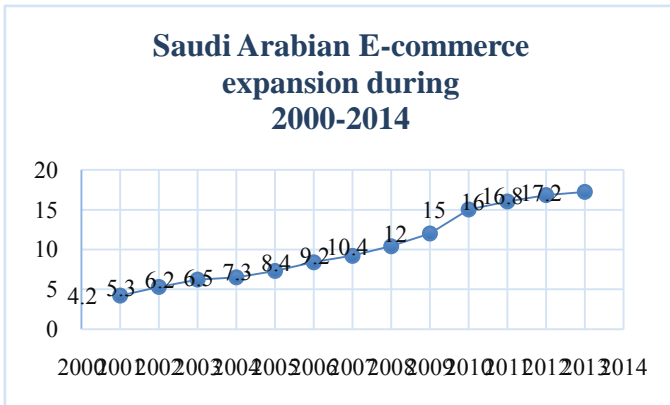| Region	2001		2012	
	Volume Billion $	%	Volume Billion $	%
The world	2893	100	38412	100
North America	2114.7	73.1	19551	50.9
Asia and Pacific	309.5	10.7	9334	24.3
Western Europe	428.1	14.8	8489	22.1
Latin America	26.03	0.9	729.8	1.9
Central and Eastern Europe	11.57	0.4	268.9	0.7
Africa	3.1	0.05	38.4	0.1

Figure 1. Saudi Arabian E-commerce expansion during 2000-2014 (reproduced from Ministry of Communications and Information Technology, KSA, Annual reports).

3. IMPORTANCE OF TRUST IN E-COMMERCE

As mentioned before, trust is vital in numerous socio-economic communications connecting ambiguity and dependence. The reservations stay alive in exchanges over the Web. Several analysts expressed that reliance or trust is a basic element that influences the fruitful expansion of e-commerce (Gefen, 2000). Specialists frequently perplex reliance with notions including integrity (Butler, 1991), faithfulness (Rich, 1997), danger (Sheppard & Sherman, 1998), self-confidence (McAllister, 1995), and collaboration (Burt &Knez, 1996). Overall, the word "trust" frequently refers to different concepts. Trust is a multifarious idiom deliberated in diverse fields such as sociology, psychology, and business, among others.

Sociological research looks trust from social relationship standpoint, where it is enclosed by people, societal connection, and community system. This is indeed a notion, hard to catch and revise. Numerous sociologists contend that without trust current society would collapse (Barber 1983; Good 1988). To build trust, most researchers acknowledged that experience is the fundamental requirement together with the information about past conduct, objectives and reputation (Buskens 1998). Meanwhile, few sociologists admit that trust cannot exist without danger (Lewis and Weigert, 1985). Psychologists often consider trust to involve essentials of threat and susceptibility (Zand 1972). There are several views and definitions of trust in the business concept. It is defined as the readiness to rely on an altering associate with full confidence. Numerous investigations have documented trustworthiness and compassion as significant factors primary to trust. Reliability is the confidence that the seller must have essential skill to complete the assignment efficiently and consistently. Conversely, generosity or benevolence is the faith that the retailer has optimistic attitudes and will act in a favorable way even when there is no accessible promise among the different parties (Moorman et. al., 1993).

Compare to offline business environments trust being highly significant in internet (online e-commerce) is more intricate to build (Roy, 2001). For instance, the majority of people are confident to order products over the telephone or go by a credit card to an unidentified vendor. By chance, if any mistake happens in these processes the service giver can be trusted to rectify such mistakes. However, similar kinds of trust are not evident in online situations as encountered in real life. These make users very much doubtful and vigilant about delivering individual information during internet communications. Consequently, people often get victimized by cyber-scams. Indeed, dealings online are more unfriendly, unidentified, and mechanical than transactions via offline (Head, 2001).

Establishing trust in B2C electronic commerce is very different than in B2B one due to short-persisted relations in the former with more orientation of transaction (Roy, 2001). According to Head, it is essential to distinguish between hard and soft trust. The "hard trust" deals with safety whereas "soft trust" includes confidentiality and superiority of services. "Hard trust" focuses on technological solutions to grant secured connections, where the customers experience positive about the safe and secured information transmission in the a dealing process without being unacceptably trickled to others. For instance, sophisticated encryption methods shield transmitted information. Firewalls and encrypted code can shield personal information of the purchaser once it is store up (Head 2000).

Subjects of "soft trust" are not easily determined by the submission of technologies. "Soft trust" encloses the faith in the confidentiality of individual information and belief in the trader's value of service. Conducting and providing useful services requires the online merchants to collecting the customer's details. These personal details are obtained via the customer interaction during information exchange with the business web-site have huge financial worth to a retailer. It is essential for the customers to trust on the fact that their private information are not misused by the merchant or even sold to the maximum straight selling bidder. Apprehensions regarding information practices allow consumers to safeguarding their individual information or misrepresenting them. This disposes the online seller precious information which is applied to tailoring their services/merchandise to individual clients (Head, 2000).

4. TRUST MODELS FOR B2C

4.1 FOROOZAN MODEL (2012)

Foroozan model for B2C is displayed in Figure 2. It comprised of four stages including professionalism, reputation, trustworthiness, and technological incentives. Each of these elements is explained hereunder.
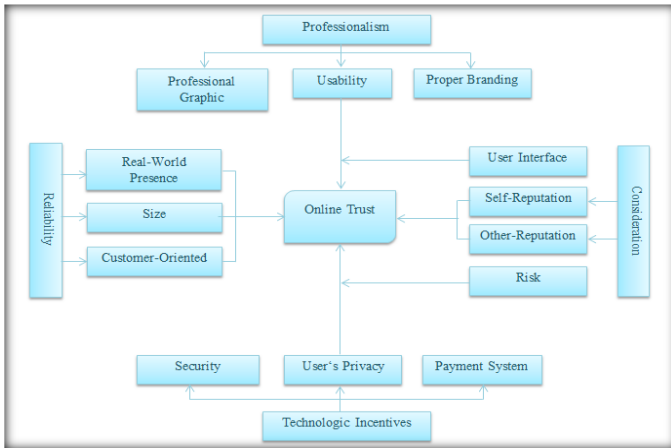
Figure 2. Foroozan model of trust building in B2C e-commerce.

Professionalism: It is one of the important factors to establish client's dependence on trade. However, e-commerce setting being devoid of material qualities the commerce is symbolized by the web-site. Thorough examination of online customer activities evidently demonstrates that the web boundary aspects assist the online business to be professional (Mahmood 2006). Whilst a salesman is usually truant or marginal to the e-commerce web site set ups, the essential goal of trust turns into the business itself. The picture of organization is often revealed by its web-site (Corbit et. al. 2003). Customers construct instinctive choices with emotion considering their view of an online business web-site. The appearance and feeling of a web-site provides an essential reliance for purchasers to form a first intuition of the mercantile. Professionalism consists of web designing called professional graphics, usability, and proper branding as elaborated below.

i.   Professional Graphics (Web Design)

Quality of e-commerce web-site is a significant factor for gaining competitive advantages over other businesses and attracting more consumers (Barnes &Vidgen 2000). Professionalism is acknowledged as a positive characteristic in the merit of an online vendor. Following two factors are decided by the visual blueprint of the web-site:

i)   An attractive and appealing websites (without textual errors, accurate colors, excellent balance between animatronics and applicability) offers the consumers to believe that they are browsing an authenticated professional background. It assists to create reliability of the business behind the web-site.

ii)   Browsing an attractive and user-friendly website promotes the users to expend longer period on the web-site. The longer the users stay the probability of trust attainment of the web-site enhances (Urban et. al. 2009).

It is complicated to offer an absolute definition for professionalism in terms of web-site design. In fact, the meaning of professional design is very broad which can be explained variously by diverse people (Wang &Emurian 2004). One implementation technique for professional design is to use conspicuous graphics. This not only attracts consumer's concentration but also communicate competence or professionalism (Basso et. al. 2001). Use of online sales chat, three dimensional (3D) flash images, clear and systematic appearances of products images together with the blue and white color design represent industrial feeling. Moreover, presenting the merchandise in 3D and a rotational platform enables the client to verify each attribute of the manufactured goods. If these attributes are present in the web-site, the expert feeling can clearly be communicated which in turn would enhance the belief in that web-site (Wang &Emurian, 2004).

4.2 USABILITY

Certainly, the drawing and capability of an electronic commerce web-site are significant to online customers. The description so called "simplicity to use" centers on how straightforwardly consumers can attain their objectives using a computer (Corritore, 2003). The following features are necessary for apparent web-site usability:

i)   Easy understanding of the system structure including its functions, interface, and contents.

ii)   Simple to use.

iii)   Fast and easy for users to browse the web-site in finding an article or service (Mithas, 2003).

ii.   Proper Branding

A brand is a name, symbol, design, term, identity, sign, or amalgamation of these which is used to identify the merchandise or services of one vendor or group of retailers and to distinguish them from their opponents (Rowley 2004). Online commerce must employ well-known brands (Mahmood 2006) because it is an imperative means of reliance. Branded goods with sturdy brand integrity benefit from an immediate trust gained in the online setting (Yakov, 2005). In the expanding B2C e-commerce scenario, online brand trust is definitely considered as an important constituent in enhancing the confidence among the internet shoppers. Several studies revealed that brand trust is a vital issue in motivating purchases over the internet. Consequently, this displays a famous logo and slogan to assist the easy recognition of the reliable business (Wang &Emurian 2004).

Reputation: Business reputation is the foremost vital factor in e-commerce. Only after identifying the reputation, a customer can predict the overall behavior of corporation. Alternatively, the shopper may not have any prior interaction with a business. Thus, there is no way to determine the business reputation except collecting the views of other shoppers in the form of feedback about that corporation (Dolatabadi&Ebrahimi 2010). Online name in e-commerce is generated by assimilating the past knowledge of those agents

formerly interacted (Mahmood 2006). Having a reliable status means a lot to online trades in attracting prospective consumers and developing their confidence. Company repute is built via self and others in the following two ways:

i) Company can make self-reputation by advertising in web portals, announcing in suitable and known sites and also representing about online shoppers web-site.

ii) Other-reputation engrosses the verifications of trustee web-sites and repute methods.

Most online businesses strive to establish a well-built reputation via various marketing and advertising plans. The power of third-party recommendation and second outlooks in this building process can be ignored. The self-promoted repute is less credible than created by other sources of endorsement (Wang &Emurian 2004). Consumers show greater trust in a company when its reputation is perceived positively (Dolatabadi&Ebrahimi, 2010).

Business Trustworthiness: Trust exists if the customer thinks that the retailer has the ability and the incentive to deliver services and products of anticipated quality (Jarvenpaa&Tractinsky 1999). Traits created by the basic elements of trustworthiness differ. In one perspective, attributes that constitute the major components of reliability are the capability, compassion, and integrity (Lee & Turban 2001; Salam et. al. 2005). Capability is comprised of the skillfulness and competences. This enables a group to have control inside some definite area. Benevolence is the extent to which the trusted group thinks that the party wants to do superior things rather than just maximize income. Truthfulness is the party's insight that the trusted group remains truthful to an acceptable set of ideologies (Mayer & Davis 1999). Trustworthiness of online vendors consists of the following characteristics:

i. Real-World Presence

In e-commerce a genuine question occurs to the user mind is related to 'whether a web-site is an addition of a recognizable offline business, or it is the only contact point with an indefinite company (Egger 2001)?' Simply, it is hard to belief an unfamiliar person or to trust something that is present in the cyberspace. Therefore, making associations to a physical reality is a necessary and efficient way for online businesses to improve the perceived reliability of their web-sites. Trust of reputed businesses with material stores could be moved directly from the actual world to the online system. Signs and clues from the real-world existence consisting of corporation's postal address, email-id, and phone number together with chat online increases the trustworthiness (Hussin et. al. 2006).

ii. Size

The store's trustworthiness and impression is often judged by the consumers by looking at its size. An insight of a huge business dimension means that the mercantile has important domination towards the market. In fact, the customers' belief is proportionate to the magnitude of the corporation (Koufaris, 2004). Apparently, the consumers suppose that a big business can offer the services and holdings up to the expectation and need of the customer. In addition, the oversized company is capable of compensating consumer's demand in case of occasional product failure (Dolatabadi&Ebrahimi, 2010).

Technological Incentives: Escalating e-commerce marketing including posters, announcements, and popup for promotion enlarged the traffic in the network. These promotional actions do not really make any optimistic impact to the commerce even if the seller is offering a helpful service along with the greatest feature and cost of their goods. In e-commerce it is very significant to secure customers' private information and give them with confidentiality in transactions using a proper deal management system. E-commerce services aim at attracting new customers as well as maintaining and fulfilling the needs of existing customers by rendering them finest quality services (Ali, 2005). Industrial and technological advancements in providing incentive to customers for contributing in e-commerce are useful in building online trust. Consequently, the internet business keeps on increasing. The following aspects are necessary to developing trust in online business:

i. Security

Since the inception of internet, the security and privacy problems became alarming which appeared worst at present. This is mainly due to the exponential expansion of the internet use. Upon internet shopping the users faced several risks to private safety (Salisbury et. al., 2001). These intimidations have foremost negative impacts on end shoppers, web-sites, trades, and even on those who provider online services (Dolatabadi&Ebrahimi 2010). E-commerce protection mainly deals with two types of concerns including the protection of the commerce network and providing dealing (transaction) safety between the client and commerce. In business to commerce, financial dealing is a significant issue that needs proper and efficient management (Ali 2005). A high level of safety in the internet business practice has constructive influence on customer reliance because the apparent danger in transaction is minimal.

i. Information Privacy of Shoppers

Confidentiality or secrecy so called privacy is the main concern among internet consumers. B2C web-sites use several mechanisms to collect information about their visitors. Explicit means of information assembling in terms of registration forms, web surveys, and implied modes such as the use of file of cookies, are normally used. Information about customer renders vital inputs to selling, marketing, promotion and merchandise related judgments made by merchandisers. Nevertheless, numerous internet shoppers expressed their worries over potential abuse of private

information. These issues are addressed by developing innumerable web sites where the consumer privacy policies are clearly displayed (Ranganathan&Ganapathy, 2002). Confidentiality and safety distress of online dealings greatly influence customers buying activities. An elevated safety and confidentiality in the internet commerce practice positively impacts the customer trust, owing to the minimized threat in transferring private data (Dolatabadi&Ebrahimi, 2010).

ii.   Payment Systems

Mostly, an imbursement mediator is the only party in an e-commerce transaction that verifies the vendor's individuality and location. Payment intermediaries help customers by easing the 'risk of prior performance'. Usually, this leaves the customer in a helpless position in online dealings. Payment intermediaries also facilitate new businesses to surmount the difficulty of establishing initial trust. Currently, Escrow services are one form of imbursement intermediary used in almost all e-commerce. They seize the payments from the purchaser till the shopper receives and accept the merchandise (Patton, 2004). Therefore, payment intermediaries definitely minimize the risk of online transaction. Risk sensitivity is negatively connected with trust awareness (Corbit, 2003). Thus, secured and acceptable technology drivers for the business to consumer e-commerce web-sites are essential to decrease the risk. Otherwise, the purchaser`s belief to e-commerce web-sites goes down.

4.2 Bullington Model

Bullington model (Figure 3) employed precise settings of constructs such as altitudes of computer and internet information, self-efficiency, knowledge, trust and mistrust. The structure of this model is created for the advancement of reliance or disbelieves together with the correlation of these affinities to elevated and little risk mediated transaction behaviors.
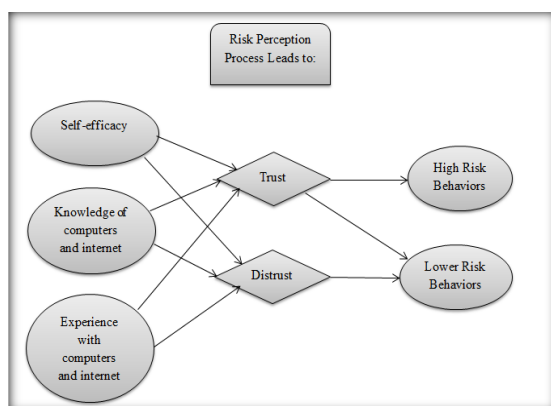

Figure 3. Framework of Bullington model.

Risk Perception as a Component of Trust: Previous researchers addressed 'Perceived Risk' as a descriptive element. Pavlou and Gefen (2004) incorporated 'Perceived Risk from the Community of Sellers' as an element that influenced the 'Transaction Intentions'. Cheung and Lee (2003) projected 'Perceived Risk' as a result of 'Trust in Internet Shopping". Boyle and Ruppel (2004) pointed out that 'Perceived Risk' influences the 'Online Purchasing Intention.' Corritoreet. al. (2003) acknowledged 'Perceived Risk' as a component of a set of private issues decisive for reliance in a web-site. Several researchers suggested that the concept of trust must be expanded to incorporate additional significant function for risk awareness in deciding customers' choice to connect in the web-site dealings. Patrick et al. (2005) asserted that trust depends on the nature of connected risks that are apparent in the circumstances. Therefore, it is supportive to reframing the procedure of threat awareness in online transactions to incorporate exterior criterion and some variables. It also helps researchers to appreciate the character of the judgment procedure.

Disposition to Trust and Distrust, and the Perception of Risk: According to McKnight et al. a significant difference exists between the elements of trust and mistrust. This might have a consequence on personal decision to entering into an electronic commerce dealings. It is further stated that mistrust and trust are based on dissimilar psychosomatic states decided by the stage of perceived hazard in a situation (McKnight, et al., 2003; McKnight, et al., 2004). Much research is needed to explore the types of the awareness of threat in the on-line dealings instead of developing models that embrace 'institutional', more outwardly focused variables, and unitary concepts of trust related to aims of purchasing. In fact, people decision on high or low risk transaction must be scrutinized. In short, a comprehensive model focusing on self-efficiency, computer, and internet knowledge levels, familiarity together with temperament to reliance and disbelieve is needed. It worth mentioning the implication of self-efficacy in trust based transaction.

Self-efficacy: Referring Bullington work Boyle and Ruppel (2004) indentified an important correlation among computer self-efficacy and online shopping intention. It is suggested that a wisdom of self-reliance in one's aptitude to use computers. This can prospectively add to a sense of trust or mistrust as one intermingles with e-commerce web-sites and make a decision whether to buy, or disclose private information. McKnight, et al. (2003) pointed out that the gauges of trust and mistrust must display unlike blueprints of reacting and dissimilar relations with variables connected to e-ecommerce dealings. For instance, the major decisive aspect in the management procedure towards the threat awareness judgment is the knowledge and self-reported acquaintance of computers and the internet-browsing.

Both familiarity and acquaintance direct a person as they assess the level of threat in online dealings. The larger the knowledge in computers and the internet protocols, more comfortable the person feels in e-commerce transactions.

Therefore, the better the intelligence of faith the person would practice. Moreover, little experiences and acquaintance are connected to wisdom of mistrust. Other influential issue involving customer's self-confidence in the aptitude to handle computers is determined by a computer self-efficiency level. Small self-efficiency implies consumer's independency of self-cited height of understanding and practice with computer and web-sites. This often leads to discomfort causing the experience of distrust in an ecommerce transaction engagement. Conversely, high self-efficacy signifies an understanding of reliance.

Lastly, determining of reliance and mistrust must be linked to definite self-experienced shopping performance and an inclination to employ services including online bill payment and net-banking. Perception of faith must be connected to the affinity to appoint in little threat performances. For instance, when browsing for internet shopping, information, or asset related matters. The same thing persists even for elevated threat performances such as online purchase, bill-payment, and net-banking. Mistrust must be linked to an inclination to employ in minor threat related activities.

4.3 Dan J. Kim Model

Kim developed a theoretical framework (Figure 4) regarding the reliance-based managerial procedure a customer uses when making an acquisition from a specified web-site. Customers often operate on information in a less inclusive manner which is imperfect. Consequently, they encounter some form of danger or insecurity in the buying decisions. However, threat is not the only issue customers are receptive to in the context of an online shopping. The apparent profit provides customers with an encouragement for shopping performance (Wilkie, 1973). Integrating alleged risk and apparent benefit a structural framework is developed by Tarpey and Peter (1975).It assumed that customers recognize goods with both positive and negative qualities. Accordingly, customers decide to capitalize on the net valence followed-on from the pessimistic and constructive traits of the judgment. Table 2 provides the salient features of these three models.
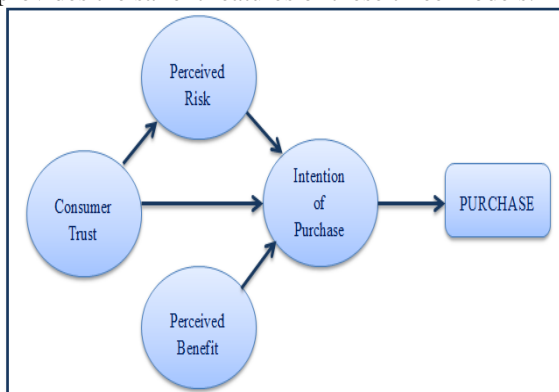

Figure 4. Theoretical framework of Kim model.

Purchase and Intention to Purchase: Several electronic commerce investigations affirmed that customer intents to employ in internet transactions are a noteworthy interpreter of actual contribution in inline purchase (Pavlou, 2006). Some notable work including the Theory of Reasoned Action (TRA) (Fishbein, 1975), Technology Acceptance Model (TAM) (Davis, 1989), and Theory of Planned Behavior (TPB) (Arzen, 1991) has established this fact. The connection between intent and actions depends on the supposition that people attempt to make coherent decisions based on the information obtainable to them. Consequently, a consumer's actions to execute (or not to execute) something is the instant determinant of that customer's real conduct (Arzen, 1991). Based on the intent–actions correlation, it is further argues that performance intention, or aim to buy from a definite seller via the web-site is indeed an interpreter of the customer.

Perceived Risk: Customers' apparent threat is a significant barricade for the consideration of an online purchase. According to Kim, apparent risk can be thought as customers' faith about the possible harmful conclusions with full uncertainty from the internet transaction. In this connection, many types of risk are identified. Bhatnagar (2000) identified three types of predominant risk regarding internet security and privacy including financial, product, and information threat. Merchandise threat is connected with the goods itself. For instance, the merchandise may turn out to be imperfect. Monetary risk, including prospect cost and time is linked not to the merchandise but to the advertising internet channels. For instance, the internet transaction may be replicated because of technical mistake or unintentional double-click the acquisition key. The information risk is connected with operations safety and confidentiality. For instance, the obligation that a customer surrenders the credit-card information during online shopping can stir up uneasiness due to the likelihood of credit-card scam (Fram, 1997).

In the case of a brick-and-mortar sell shop such as Wal-Mart, customers enter into the hoard and frequently feel, handle, and even use the merchandise before ready to buy. This not only decreases the amount of apparent threat but also toughens the purchasers' optimistic views about the store. On the contrary, while buying from online shop a purchaser has to supply considerable private information including telephone number, address proof, and even secret credit-card details. After given that the essential details, the customer can only expect that the transaction may be processed entirely and correctly. Mostly, the shopper has to linger for days waiting till the merchandise or service is send and the deal is finished. Hence, it is quite natural that consumers are conscientious to threat in internet dealings and such danger may affect their judgments about whether or not to participate in online shopping.

Perceived Benefit: Perceived profit is defined as consumers' faith about the degree to which they turn into better off from the online dealings with a definite web-site. Online customers

admit that they buy from the internet to achieve several advantages such as improved expediency, price reductions, time economy, and enlarged diversity of goods selection compared to the traditional mode of shopping (Margherio, 1998). Therefore, the more the customers recognize advantages connected to the internet shopping with a definite web-site, the further is the expectation that they engage in online purchase.

4.4 Belanger Model

Belanger model (Figure 5) studies the comparative significance when buying products and services in the internet. There are four general reliance indexes: third party confidentiality seals, privacy declarations, third party safety seals, and safety characteristics.
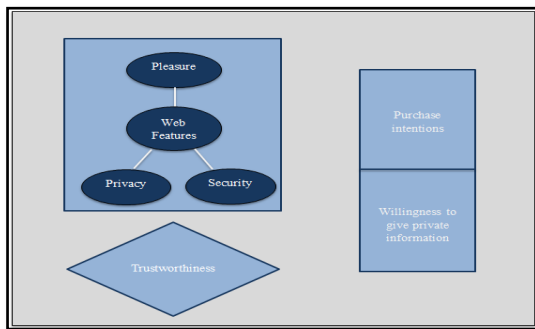

Figure 5. Belanger model architecture.

Privacy and Security:The sponsorship and optimal use of safety, confidentiality, and trustworthiness are significant elements for supporting the expansion of B2C electronic commerce. Two troubles with existing electronic commerce literature include the degree to which confidentiality and safety issues are conceptualized as distinctive, and the shortcomings of appreciative of how they are connected. According to Harris, the interactive poll concerns about the secure storage of information are mixed with allocation sequence under the group of 'privacy' apprehensions. Another common perform is to employ universal terms like protection assurances to symbolize both confidentiality and safety concerns. This conceptual uncertainty often debates on which type (confidentiality and/or safety) of web-site features maximally reduce customer doubts, additionally to how to place and express these characteristics on the web-site (Woodlock, 2000).

It is the readiness of customers to share online information that aids the purchase. Nonetheless, it is obvious that customer concern with confidentiality of information is having influence on the customer online shopping, and that for e-commerce to attain its full prospective. This anxiety still needs to be addressed. For instance, a Business Week/Harris poll of 999 customers in 1998 discovered that confidentiality was the major obstruction preventing them from using web-sites, above the issues of price, simplicity to use, and unwanted market (Green et al., 1998). Confidentiality issues

on the online information exchange including 'spam', handling and tracking, data compilation, selection, and the distribution of information with third parties are the major concerns for e-commerce. These areas of worries are documented by Wang et al. (1998).

Trust and Trustworthiness: Reliance in online purchase not simply involves the relation between the e-commerce and the consumer. However, it also relates between the purchaser and the computer system through which transaction takes place (Lee and Turban, 2001). In Belanger model, reliability is distinct as the insight of self-confidence in the e-commerce trustworthiness and integrity. This description signifies the necessity of electronic-commerce sectors to constantly shield (protect) the personal information of consumers. This also defines its use with integrity to increasing electronic customer faith and aids the assessment of the nature of the relations among credibility, confidentiality, protection, and buying intents.

Design Features:Investigation on generating an enjoyable internet shopping has focused on web-site features that quiet the fears of customers and produce a pleasing and enjoyable experience for the customer. Website interface blueprint issues such as handiness, personalization capabilities, and ease of use are the core of this model (Lohse and Spiller, 1998). Sacharow (1998) integrates these two viewpoints and defines customer online comfort as a balance between leasing the personalization capabilities of the internet browsing enable customers what they want, while concurrently providing them control over who has admission to their personal information.

The model does not demonstrate each supposition with an explicit linkage, but provides a means to systematize the main constructs in this study. For instance, at a macro-level, the web characteristic grouping includes groups of privacy, safety, and pleasure site characteristics. The confidentiality category consists of privacy statements and third party solitude seals. Similarly, properties in the security type include third party safety seals and security features generally established on web-sites (encryption and password protections).

Table 2. Salient features of four trust models (the topic of this paper) which are linked to B2C electronic commerce.

Model	Description
Foroozan (2012)	- Professionalism (Professional Graphics, Usability, Proper Branding) - Reputation - Trustworthiness (Real-World Presence, Size) - Technologic Incentives (Security, User's Information Privacy, Payment Systems)
Bullington (2007)	- Risk perception - Constitution to trust and

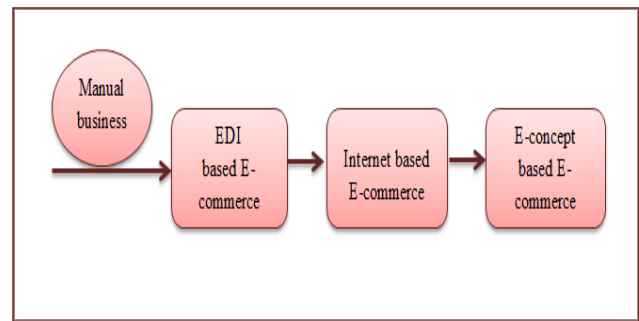|	
	mistrust - Self-efficiency - Experience with computers and Internet - Knowledge of computers and Internet
Dan J. Kim (2008)	- Perceived risk - Consumer trust - Perceived benefit - Intention of purchase
Belanger (2002)	- Privacy - Security - Trustworthiness - Web features

Figure 6. Conceptualization of e-commerce development framework.

5. PRESENT STATUS OF E-COMMERCE IN SAUDI ARABIA

Historically, the electronic trade or electronic commerce began in Saudi Arabia in 1991 when the internet was just made accessible for business purposes. The beginning of selling and purchasing goods by computers and Web was the first venture to e-commerce. Since then, numerous organizations exchanges have occurred in cyberspace. However, the term e-commerce was first coined for the execution of business exchanges electronically by utilizing the main advancements of electronic data interchange (EDI). Figure 6 illustrates the schematic conceptualization of e-commerce advancement. In 2005, the accountability of electronic commerce was reassigned to the Saudi Ministry of Communications and Information Technology. Actually, the official information and familiarity about electronic commerce in Saudi Arabia is up to the public expectations (Mohapatra, 2013b).

Prior to this development, Saudi Ministry of Commerce including members from the Ministries of Commerce, Communication and Information Technology and Finance formed a specialized technical committee for e-commerce deployment. This task force considered associates from the Saudi Arabian Monetary Authority and King Abdulaziz City for Science and Technology (SMC, 2001). The main function of this commission was to improve the domain of electronic commerce and to make the essential moves in keeping pace together. The committees aim was to gain from universal encounters around there, recognize the specific desires and requisites to exploit electronic commerce, catch up to execution of up-gradation, and the plan for occasional reports on the advancement of functioning on a customary foundation.

Eventually, the commission arranged all-purpose structure of map to relate electronic commerce system in Saudi Arabia. This planning structure contained the change of different components included with ecommerce dealings such as IT base, installment system, security needs, enactments and regulations. The plan also included the expansion of ecommerce instruction and training. This data was picked up from the Ministry of commerce. Nevertheless, no additional data regarding a particular task of e-commerce improvement was inputted in the Kingdom. Over the decade, e-commerce allowed the modest online shopping to reach world markets. Currently, the web technology retailers can easily and effectively track client wishes to instantly provide the services independently (Mohapatra, 2013).

In 2007, Saudi Communication and Information Technology Commission (CITC) approved out a widespread study to assess the current state of the internet, and a variety of aspects connecting the internet practice in Saudi Arabia. One of these aspects is e-business alertness and actions. As afore-mentioned, for the trade organizations, they have found that only 9% of Saudi commercial sectors, mostly medium and huge corporations from the manufacturing sector, are "involved in e-commerce accomplishment". It is accounted that only 4 out of 10 private companies possess their own web-site. This percentage takes on a higher proportion for the larger oil, gas, and mechanized companies. For the consumers (customer), they have found that 43% of the respondents were conscious of electronic commerce and only 6% ever bought or sold goods over internet, "mainly airline ticketing and hotel bookings" (CITC, 2007).

TRUST IN SAUDI ARABIA

Customer trust is extremely significant for the long-standing development of several trades. Several investigations have empirically inspected customer reliance for B2C e-commerce services in different nations (Park and Kim 2003; Flavia´n and Guinalý u 2006; Cyr 2008; Kim, Donald, and RaghavRao 2009). However, apart from the study by Kassim and Ismail (2009) experimental study on antecedents of electronic commerce consumer trust in establishing Arab countries is limited. Therefore, the aim of this investigation is

to know the extent of effect the trust factor on e-commerce in Saudi Arabia. An inspection was conducted among B2C electronic commerce consumers in the eastern province of Saudi Arabia via a planned self-administered questionnaire. The outcomes of the survey exhibit that B2C electronic commerce client trust in Saudi Arabia is robustly affected by purchaser approval (Eid, 2011).

According to the outcomes of the study executed by Al-Ghamdi about the promotion of trust on the internet the following things are observed:

(i) The main significant factor that influences consumers' choices to buy from websites in the KSA is the deficiency of confidentiality. This lacking of belief in this regard connects to the online setting in the KSA itself.

(ii) Lacking of trust can be described here as reasonable to use the online setting as a means internet purchase because buying through web-sites is new in the KSA. There is a need of regulation for this new type of business.

(iii) KSA's present communications does not maintain the standard to promote customers to expand the e-commerce.

(iv) Several buyers are afraid that they may not get their purchased goods with the actual appearance or class mentioned in the internet.

(v) The consumers' faith in the brand name goods allows them to go for online shopping due to established trust.

(vi) There is unhelpful awareness connecting the intrinsic threats of using credit cards to reimburse over internet. Yet, this negative insight is gradually shifting. The other difficulty is associated with less number of credit card holders in Saudi Arabia than developed countries.

This work revealed that 62% of the internet consumers possess no knowledge and experience in purchasing goods from Saudi web-sites (Al-Ghamdi, 2012). It is further observed that in order to promote reliance among the Saudi internet shoppers introduction of a conceptual model with five-elements is necessary (Figure 7). Apart from these five parts there are some other major requirements those are incorporated in the present research framework to construct a new model of B2C e-commerce.

These five factors in the model contribute majorly to the trust promotion for internet shopping atmosphere in Saudi Arabia. These five factors are:

(1) Offering Trustworthy and Secure Online Payment Options.
(2) Consumer Protections.
(3) Clarifying Marketplace Rules.
(4) Certification Authority (CA).
(5) Strengthen Delivery Systems.

Figure 7. The five-parts model of Al-Ghamdi

TRUST REQUIREMENTS IN SAUDI ARABIA

There are two types of variables that assist the development of electronic commerce and increase the level of trust among consumers in Saudi Arabia. The governmental variables include the monitoring and supervision of the websites Interface, creation of adequate ICT infrastructure, the issuance of regulations and legislation to regulate electronic transactions and owning home address and the development of postal services. Common variables between the government and business which providing trustworthy, privacy and secure online payment options. In order to improve the current model, we will adopt three additional requirements from the latest trust model in Saudi Arabia (Al-Ghamdi, 2012). The three additional requirements are, consumer protection, clarifying marketplace rules and certification authority. These requirements fall into the governmental requirements category.

MONITORING AND SUPERVISION OF THE WEBSITES INTERFACE BY THE GOVERNMENT

Web interface plays a significant role in e-commerce as it is the first link between a customer and vendors (Fogg et al., 2001). If web interface does not win consumers to believe that vendors are trustworthy, then a transaction will not take place (Ang and Lee, 2000). This view is supported by Kini and Choobineh (1998) who recognize that display modes, information of vendors and visual effects on the screen are important components of trust. McKnight and Chervany (2001) advocate that site quality, a privacy statement, a trusted seal and links to other websites also support trust and intention

to shop online; and Wang and Emurain (2005), are of the opinion that the four dimensions of web interface which enhance trust are graphics, structure, content and social cues.

A security and privacy statement, which is categorized as a part of content dimension by Wang and Emurain (2005) is also important in e-commerce. Consumers are concerned about how vendors collect and use their information. It is reported that 68% of consumers want vendors to disclose where and how their information is being processed (Krebsbach, 2006), and 95% of consumers refuse to provide information if there is no privacy statement (Gauzente, 2004). It is therefore clear that a security and privacy statement on the website is important information for consumers affecting their decision to shop online. In addition, a security and privacy statement should be written in a way that is easily understood by consumers. Therefore, web interface is an important factor affecting shopping intention, trust, security, and control.

Saudis consumers are not hesitant to ask for government's assistance. In fact, government of Saudi continues to play a vital role so that public tends to trust and feel confident on the government. Government can be responsibly for three key functions including facilitation, supervision, and control. In 2006, Saudi Ministry of Communications and Information Technology formed a national blueprint entitled "The National Communications and Information Technology Plan" for ICT sector. Statement of vision of this plan is "the conversion into an information society and digital nation so as to enhance productivity and present communications and IT services for all sectors of society in all parts of the nation and construct a concrete information industry that acts as a chief source of earnings (MCIT, 2006)." Government of Saudi can profit from sustaining electronic commerce by slashing a lot of charge of services, rendering enormous market, fulfilling the needs and claim of consumers', dropping the price of functions and managements (AlGhamdi, 2011).

CREATING ICT INFRASTRUCTURE

A strong ICT infrastructure is often indicated via the widespread availability of internet, especially broadband services irrespective of the location. Web-site users in Saudi Arabia is enlarged from one million (5% of the total population) in 2001 to a predictable thirteen million (46%) during 2011 (MCIT, 2011). Conversely, the subscribers for mobile broadband are 11.5 million of the population, representing a dissemination of 40.5%. The fixed broadband accession rate is at 30.6% of family during the same time period (MCIT, 2011). However, most of the services rendered by these companies are dominantly from the major cities. The majority of small towns and villages are deprived from this kind of internet connections services or effectively without any internet connections (Aleid, 2010). Charges for the connection of internet in Saudi Arabia are considered to be higher than the foremost industrialized nations across the globe (Alfuraih, 2008). Connection fees must to be reviewed

to make it striking for the majority of the families to hook up and promote the internet use.

ISSUANCE OF REGULATIONS AND LEGISLATION

The Saudi government may play a significant function by determining the rules and regulations for electronic commerce structure (Cheeseman, 2001). In addition to concentrating on rules to surmount the disagreement between parties, clear e-commerce regulations for the punishment of computer crimes must be documented. Therefore, government organization must set up online shopping rules, policies, and legislation to shield all concerned parties by assuring trust. Currently, government must play more active and proactive role in addition to the development processes (Polanski, 2002).

The majority of research conducted to study electronic commerce in Saudi Arabia share similar results that the lack of government regulations is vital for the acceptance and execution of e-business in the nation. There are no E-Commerce rules or regulations in Saudi Arabia to date. However, there is a government consumer protection agency that is not actively supportive. Consumers do not trust that this agency can protect them if they complain regarding offline transactions. Therefore, they cannot trust the agency for online protection. The significance of having such regulations for consumer is crucial for conflict resolutions, online business practice and consumer protection for transactions conducted online. Additionally, new regulations for individual online business licensing are needed since current rules insist on renting an office in a merchant location. Many individuals try to sell self-made items, like clothes or art works, online using a website and accepting orders by phone calls or emails. They wait for direct deposit payments in scanned proof and contact the buyer to meet in person for delivery. Such individuals face trust issues because they are not licensed. Buyers are afraid that the online seller is not trustworthy or there is no place to file complaints if necessary (Makki, 2008).

Since the government plays a key role in online privacy and security regulations, consumers are affected by regulations. Consumers need to secure their computers. The government involvement in online security and privacy is also very weak. Victims of identity theft struggle to complain and to resolve their issues. The government should establish E-Commerce rules and regulations for E-Commerce transactions as well as licensing for individuals. It should also play a more productive role in resolving consumer issues. Government agencies should be more involved in helping researchers to study this aspect by providing statistical information to assist in quantitative research (Makki, 2008).

OWNING HOME ADDRESS AND DEVELOP DELIVERY SYSTEM

Since the institution of Saudi Post until 2005, persons do not have addresses and the mail is not transported to homes or offices (Saudi Post 2008). Individuals could get post only by subscribing mail-boxes in the post offices (Alfuraih 2008).

The deficiency of a proficient postal scheme is determined to be disadvantageous to customers. However, delivery system is the chief factor for e-commerce customers' service to obtain their goods timely and at a reasonable cost (Al-Sobhi, 2010). The admission to internet businesses services suffers from the following drawbacks: Saudi Arabian consumers are still encountering three main challenges including the deficiency of an allocated residential address, not receiving their products and services timely, and the higher price of delivery charges. These are the shortcomings for customers to take benefit of electronic commerce services despite their awareness of advantages for internet business.

In 2005, the new scheme for addressing and deliverance to homes and offices was announced and accepted by Saudi Post (Alfuraih 2008 and Saudi Post 2008). 'Wasel' is a mail service that facilitates the consumer to get all their post at their home mail box without cost. The mailbox can be obtained by making a telephone call to Saudi Post or by visiting nearest Saudi post office. One can apply online with home physical address to get the mail box at the residence. Another free service called "Wasel Special" provides the mail delivery including the sending of letters from a home mailbox, deliverance with e-stamp, provisional safe custody, momentary forwarding, relocation of P.O. Box, and e-mail announcement. Presently, this service is available only in the major cities (Saudi Post 2010). Interestingly, the amount of Wasel users arrived at more than 0.5 million (Alriyadh 2010), which amounts roughly 2% of population having personal residential mail-box.

PROVIDING TRUSTWORTHY, PRIVACY AND SECURE ONLINE PAYMENT OPTIONS

The common option in online shopping is the use of credit card. However, acquiring a credit-card from Saudi banks is limited to those having a specific monthly earnings deposited into the consumer bank account. Besides, some citizens possess security concern of using credit card for online shopping.

Saudis tend to avoid the use of credit cards due to the interests, which is forbidden by Islam. There have been several attempts by banks to offer Islamic credit cards. However, such attempts are not sufficient for broader use in E-Commerce. The reasons behind that are the high fees and requirements. Most banks require minimum amounts to be deposited as well as a regular monthly direct deposit, like salaries, in order to get a credit card. Yet, a research by Almousa acknowledged that the majority of Saudi online users who are ready to buy online, more experienced and spend more time online, are residents aged between 18-35 who are either dependents or students (Almousa, 2011). This segment of the Saudi internet users is the most appealing to buy online and should not only be targeted by retailers, but also by banks as well. Most of them prefer prepaid credit or debit cards as the best solutions for online payment. Unfortunately, only a few banks offer such cards with very poor customer service and some of them with hard to achieve requirements. Banks should target young Saudis by offering them easy to get prepaid credit cards. In addition to prepaid cards that can be linked to PayPal, banks should also work on allowing their customers to connect their PayPal accounts to their debit accounts.

Another issue with banks is that they are not cooperative in disputing charges made on their cards. Consumers must file a complaint and pay a fee with a long waiting period to get their money back. This could be one of the inhibitors for some consumers to use their prepaid/credit card for online purchases. Up to date, banks offer online merchant accounts with unfeasible rates, which discourage retailers to use local payment systems with regular ATM cards (Makki, 2008).

Currently, Saudi Arabia is following an electronic payment system called SADAD which was launched in 2004 (SADAD 2004). This is a nationwide e-payment service for different bills. The core authorization for SADAD is to ease and simplify bill payment dealings of end customers through all networks of the banks in Saudi. Nevertheless, SADAD is found to be an expensive solution for small and medium vendors. The price adoption of this system needs sizeable reduction to assist internet vendors for payment. Commonly, SADAD is used in electronic government activities. This would definitely improve the apparent safety and assist to build faith for online vendors once becomes economic.

In order to improve the current model, we will adopt three additional requirements from the latest trust model in Saudi Arabia (Al-Ghamdi, 2012). The three additional requirements are the customer defense, illuminating market rules, and documentation power. These requirements fall into the governmental requirements category.

CONSUMER PROTECTIONS

Presently, there is a customer defense body that regulates conventional trades. However, Saudis are frustrated that this organization is not acting as predictable and does not cover up online trades. An internet shopper protection body does not exist together with the non-existence of national electronic commerce law. In this context, customers are rightly unwilling to buy online. Consumer defense in electronic commerce is very significant and this can be an inner part of electronic commerce law. It is not sufficient to comprise a law that shields customers' rights (including safety of transactions and confidentiality) on document. Customers must also feel convinced that there is an organization that will stand for them along with clear procedures on how to record complaints and look for remedy. It is most significant for a potential client to be familiar with that there are well defined policies and procedures in place with enforceable opportunity and rights, rather than just to know that a customer defense law exists.

CLARIFYING MARKETPLACE RULES

Describing the internet business rules is necessary to help consumers to appreciate their rights and responsibilities. For example, in Canada, clarifying these rules has been positioned as precedence for action in the Canadian electronic commerce plan to create Canada a world leader in the growth and use of electronic commerce by the year 2000. These rules include legal and commercial frameworks, financial issues and taxation and the security of intellectual property. The law for conventional commerce in Saudi Arabia is clear. However, the law for electronic commerce is far from being clear, although Saudi Arabia contributes to the efforts of the United Nations Commission into International Trade Laws (UNCITRAL) (Saudi Ministry of Commerce 2001). There is still a necessity to have chief developments in terms of electronic commerce regulations.

CERTIFICATION AUTHORITY

A plan for creating creditability in the internet surroundings is necessary since users of the web-site will not make online purchase unless they trust the business behind the web-site. Brand name products may not face complexity in achieving the trust of consumers. Certification Authorities assist new and relatively unfamiliar web-sites to construct trust with new consumers. Table 3 illustrates the classification of requirements relevant to e-commerce trust into two categories, one is governmental, and the second is related to non-governmental (business).

Table 3. Categories of variables

Category	Trust Factors
- **Governmental variables**	
Monitoring and Supervision on the Websites by the Government	- Web interface. - Security and privacy statement.
Creating ICT Infrastructure	- Cut contact fees to encourage use of the Internet. - Provide online networks services to the villages and remote areas.
Issuance of Regulations and Legislation	- Set up online shopping regulations, rules, and legislation to shield all business participants by assuring trust.
Owning Home Address and Develop Delivery System	- Face three main challenges include, deficiency of an allocated residential address, not receiving their products and services timely, and the higher price of deliverance.
Consumer Protections	- Clarify the procedures for how to register complaints and requests for compensation.
Clarifying Marketplace Rules	- Clarify internet trade rules to help customers to understand their rights and responsibilities.
Certification Authority	- Creating creditability in the internet setting is essential. - Brand name products may not come across complexity in getting the trust of consumers. - CAs helps new and comparatively indefinite web-sites to build reliance with new consumers.
- **Non-Governmental Variables (Business)**	
Providing Trustworthy, privacy and Secure Online Payment Options	- Cooperation of banks in disputing charges to encourage customers to get credit card. - SADAD is to help and rationalize bill payment dealings of end customers via all networks of the Kingdom's Banks.

TRUST FORMATION FACTORS BASED ON TRUST REQUIREMENTS

Table 4 integrates the trust requirements with trust formation factors from the previous models.

TABLE 4. TRUST FORMATION FACTORS BASED ON TRUST REQUIREMENTS

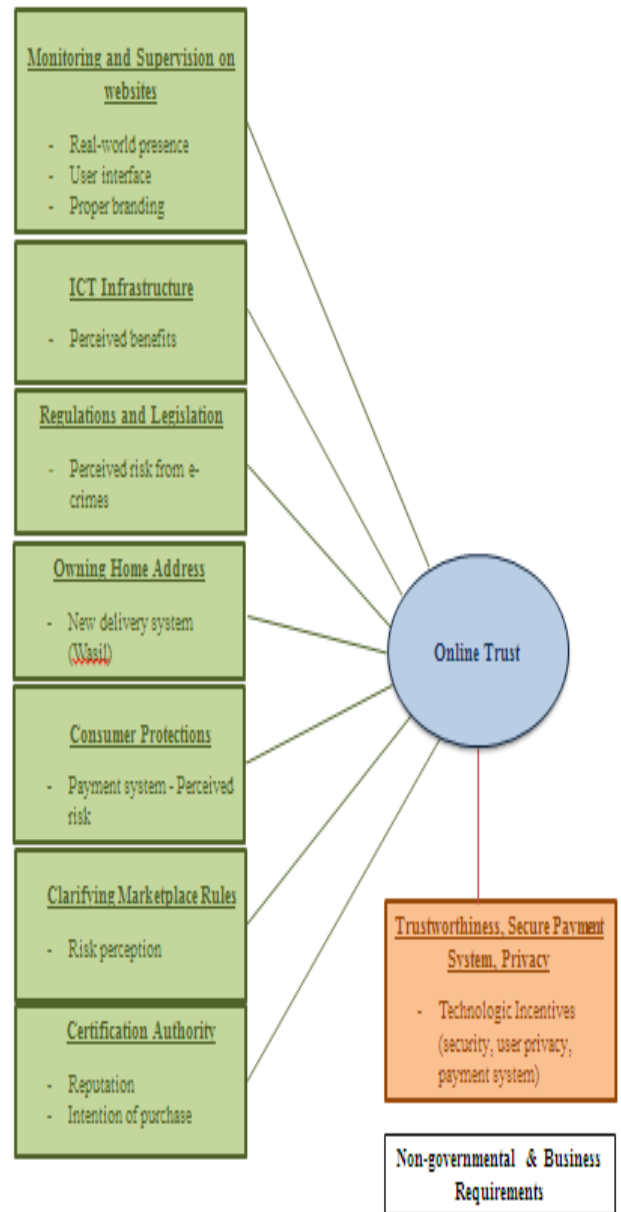| Trust Requirements	Trust formation factors
Monitoring and Supervision on the Websites by the Government	- Real-world presence (Foroozan, 2012) - User interface (usability) (Foroozan, 2012) - Proper branding (Foroozan, 2012)
Creating ICT Infrastructure	- Perceived benefits from lowering prices of using the Internet (Dan J. Kim, 2008)
Issuance of Regulations and Legislation	- Perceived risk from e-crimes (Dan J. Kim, 2008)
Owning Home Address and Develop Delivery System	- New delivery system (Wasil) (Saudi Post, 2010)
Providing Trustworthy, privacy and Secure Online Payment Options	- Technologic Incentives(security, user privacy, payment system) (Foroozan, 2012) - Trustworthiness (Belanger, 2002)
Consumer Protections	- Payment system (Foroozan, 2012) - Perceived risk (Dan J. Kim, 2008)
Clarifying Marketplace Rules	- Risk perception (Bullington, 2007)
Certification Authority	- Reputation (Foroozan, 2012) - Intention of purchase (Dan J. Kim, 2008)

THE PROPOSED TRUST MODEL FOR B2C E-COMMERCE.

Figure 8. The proposed Trust Model for B2C E-commerce.

6. PROPOSED METHODOLOGY

The present research methodology is comprised of careful and systematic development of a new e-commerce model and

its successful evaluation. The principles and framework of various existing model will be systematically analyzed to construct the new B2C model for e-commerce in Saudi

Arabia. The concepts including the pattern, theoretical formulation, model development stages, quantitative or qualitative techniques will be emphasized (Irny and Rose, 2005). According to Henning (2004) the research methodology is considered as coherent assembly of techniques that balances each other and capable to deliver results and findings to answer relevant issues in the context of Saudi Arabian e-commerce. The major goal of this investigation is to determine the influences of trust on business-to-consumer electronic-commerce in Saudi Arabia. Specifically, the proposed research aims to (a) identify the trust factors requirements that affect the B2C e-commerce in Saudi Arabia, (b) to propose a new efficient B2C trust model for e-commerce in Saudi Arabia based on these trust requirements, (c) evaluate the performance and validity of the proposed B2C trust model. This is a quantitative research that will be using the Delphi technique where the data will be collected via authenticated questionnaires.

Figure 9 displays the design stages of proposed model which is adopted from the earlier research framework (Vaishnavi and Kuechler, 2008). This design of research method consists of five phases. First phase is related to the problem the awareness. The second stage in on suggested designing and the third one takes care of developmental phase. Fourth phase deals with the process of assessment where the performance accuracy is determined. The last phase concludes the method.
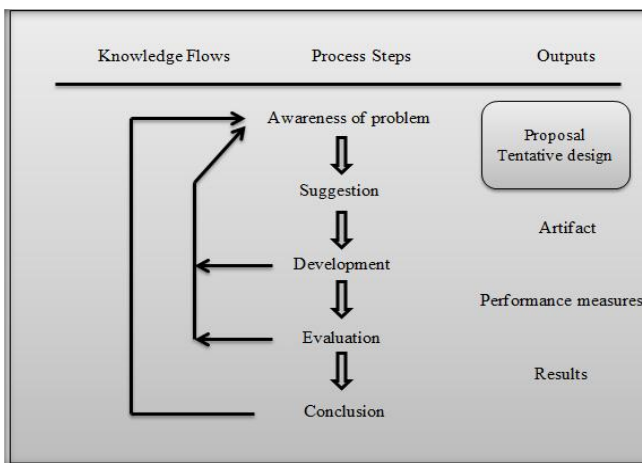

Figure 9.Research operational framework (Vaishnavi and Kuechler, 2008).

It is found that the growth of e-commerce in Saudi Arabia observant dramatically, but the procurement process from websites is low, because the lack of trust in the process of purchasing and delivery. The requirements of trust in Saudi Arabia are identified. It is important to determine the effects of these trust factors requirements on B2C e-commerce in Saudi

Arabia. A B2C trust model is proposed for e-commerce in Saudi Arabia. An evaluation and validation of the model is underway. From the identified trust requirements an appropriate questionnaire covering these requirements need to be designed. The evaluation phase is to test the reliability of the suggested trust requirements in Saudi Arabia. Data collection process will be conducted in Saudi Arabia. The sampling will be performed depends on three age groups of the population, 20-34 years old, 35-49 years old and 50-64 years old. The researcher will distribute 450 samples for all age groups.

Table 5 outline the detail comparison between the trust requirements and trust models factors in the context of Saudi Arabian B2C e-commerce.

Table 5. The comparison between the trust requirements and trust models factors.

		Models			
	Belanger (2002)	Bullington (2007)	Dan J. Kim (2008)	Foroozan (2012)	Al-Ghamdi (2012)
Trust Requirements	Trustworthiness	Risk perception	Perceiv benefits Perceiv risk Intentio purchas	Real-world pre - usabi - Prop brandi - Reputa	- Consumer protections - Providing trustworthy - Delivery system - Certification authority - Clarifying marketplace rules
Monitoring and Supervision on the Websites by the Government				√	
Creating ICT Infrastructure			√		
Issuance of Regulations and Legislation			√		
Owning Home					√

Address and Develop Delivery System					
Customers Securities			√	√	√
Illuminating Regulations of Market-place		√			√
Accreditation Body			√	√	√
Providing Trustworthy, Privacy and Secure Online Payment Options	√			√	√

The first requirement of trust in Saudi Arabia is monitoring and supervision on the websites by the government. The government must be sure about the brand name and its registration in the system and principal office. Saudi government must be responsible for three key functions including facilitation, supervision, and control. Saudi Ministry of Information and Communications Technology (ICT) in the year of 2006 created a national strategy entitled "The National Communications and Information Technology Plan". The prime objective of this plan is the transformation into an information society and digital economy to significantly enhance throughput. This renders communication and IT facilities to every sector throughout the country and builds a firm information industry for major economic development (MCIT, 2006).

Second requirement is the creation of ICT infrastructure for all sectors in the society in entire Saudi Arabia. Presently, most of the services that are rendered by communication enterprises are majorly from the leading cities. Majority of the small townships and villages are deprived of good internet connections or effectively without any internet services (Aleid, 2010). In fact, the charges needed for internet connection in Saudi Arabia are higher than the prominent developed countries across the globe. Communication companies must provide online networks services to the villages and remote areas. They should also review the connection fees to make it more prospective for majority of the nationals to encourage as well as promote the usage of internet (Alfuraih, 2008).

Issuance of regulations and legislation is a third requirement of trust in Saudi Arabia. Government of Saudi has significant role in restructuring the documentations and regulations for indigenous e-ecommerce growth (Cheeseman, 2001). In addition to concentrating on guidelines to resolve the fight among various groups, clear e-commerce regulations for the punishment of electronic crimes must be documented. Therefore, government organization must set up online shopping rules, regulations, and legislation to protect all involved parties by assuring trust. Currently, government must play more active and proactive role in addition to the development processes (Polanski, 2002). The majority of research on Saudi Arabian e-commerce reveals that the deficiency of government regulations is vital for the acceptance and implementation of e-commerce in the nation.

Next, owning home address and developing efficient and effective delivery system. Delivery system is the chief factor for e-commerce customers' service to receive the services timely with cheaper rates (Al-Sobhi, 2010). Regarding the e-commerce services procurement, Saudi Arabian nationals are encountering three foremost challenges including the deficiency of an allocated house address, not receiving their belongings and facilities timely, and delivery amenities are expensive. These are the limitations for users to get benefit of e-commerce related services despite their awareness of several notable advantages.

Fifth, there is a body for consumer security that controls conventional e-commerce in Saudi. However, Saudi nationals are unsatisfied with this body due to their inactive role in covering and encouraging online users in B2C e-commerce. Consumers are not trustful on this agencies protection system and not willing to ask them them or complain for offline transactions. Therefore, the significance of having such regulations for consumer is crucial for conflict resolutions, online business practice and consumer protection for transactions conducted online (Makki, 2008).

The rights and responsibilities of the customers or users can be exemplified provided the rules and regulations in the form of clear guidelines are defined in online market-place. The e-commerce business is expected to grow if the customers and convinced and well understand these rules. Truly, the laws, rules and regulations in Saudi Arabia for traditional commerce are not very transparent or clear. Furthermore, the law for e-commerce in the country is somewhat obscure. Though Saudi Arabia majorly contributes to the efforts of the United Nations Commission into International Trade Laws (UNCITRAL) (Al-Ghamdi, 2012) but more initiatives are necessary to strengthen the e-commerce for rapid economic development.

Certification authority in the online setting is indispensable because website users are not ready for online purchase without established trust of a particular company they are interested in. Products with brand name do not face any difficulty in attaining the reliance of the customers. Certification authority helps novel and comparatively unfamiliar websites to establish trust with fresh users or consumers (Al-Ghamdi, 2012).

Finally, providing trustworthy system with absolute privacy and secured online payment options must be the priority. This requirement is very important to increase the trust level in e-commerce in Saudi Arabia. Saudi banks must increase

consumer awareness about the credit card and its importance to face the security concerns when shopping online. Banks should target young Saudis by offering them easy to get prepaid credit cards. In addition to prepaid cards that can be linked to PayPal, banks should also work on allowing their customers to connect their PayPal accounts to their debit accounts. SADAD is a current e-payment system in Saudi Arabia which was launched in 2004 (SADAD 2004). The central directive for SADAD is to expedite and simplify transactions for bill payment of end users using all banking networks of the Kingdom.

7. CONCLUSION

The need for developing an efficient and accurate B2C e-commerce trust model for Saudi Arabia is emphasized. The past development, major challenges, excitement, applications, recent progress, and future directions of Saudi Arabian B2C ecommerce is highlighted. Salient features of different trust models are described and their critical evaluation is made. It is demonstrated that the advancement and successful implementation a model up to consumers' satisfaction necessitates the recognition of fundamental trust requirements or major influencing factors that affects e-commerce in the nation. Identified B2C e-commerce trust in Saudi Arabia is grouped into governmental non-governmental variables. To establish an efficient online business in Saudi it is important to develop the trust, where flexible government policies, legislation, rules, protection of consumer rights, and banking network system with less internet fees play critical role. Based on the reviewed literature a comprehensive model is proposed. This model must be tested and benchmarked to inspect the validity in the context of Kingdom's B2C e-commerce. This exhaustive and informative review article is hoped to serve as taxonomyfor navigating and understanding the research advancements towards B2C e-commerce trust in Saudi Arabia.

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