Abstract – The e-commerce business has demonstrated to be an alternative for customers who gradually have transformed their traditional business activities. However, the lack of trust creates a barrier in the adoption of online shopping due to the customers being unable to touch or interact with a product or service before making the decision to purchase it. This study examines the concept of trust from different perspectives in order to determine how this complex concept can be applied in online trust. An online model of building trust and decision making process are analyzed which allow one to know how the trust is forming over the time and which are the factors that have a significant impact on online trust in e-commerce environment.

Keywords - E-Commerce, E-Trust, Online Shopping, Building trust.

I. INTRODUCTION

Advances in technology and the use of the internet in our daily lives have changed the way in which the businesses transactions and operations are being developed all around the world. With the adoption of e-commerce, businesses can sell products and services over the internet 24 hours a day reducing costs related to personnel and retail space and attracting new consumers. However, since the transactions are performed without personal contact and handling products, consumers in the e-commerce environment are more exposed to issues related to fraud or theft of credit card details, sharing personal information with other entities, not receive the right products, and difficulty in returning product by errors in the request (Bhathagar et al., 2000; Constantinides, 2004). In addition, an analysis developed by Hoffman et al. (1999) described that 63% of users do not provide real personal information to websites due to their not knowing how their data will be used and also to avoid any risk. Thus, trust is the most important factor in any commercial transaction conducted over the internet where consumer confidence needs to be cultivated to continue with the growth of the business (Chellappa and Pavlou, 2002). Without consumer trust, e-commerce will never reach its full economic potential (Ferraro, 1998).

The remainder of the paper is organized as follow: Section 2 defines e-commerce concept and its advantages and disadvantages. Section 3 describes in detail the trust definition from different perspectives and disciplines. Section 4 presents a brief analysis on online trust and the factors that are associated to e-commerce. Also a model has been included to understand how the trust is being built in this type of environment. Section 5 includes a brief explanation about how the decisions to make online transactions are generated. Section 6 describes a case study as an example the trust online. Section 7 includes recommendations which can be addresses in the future work in this area and the last section contains a brief summary of the findings in this paper.

II. E-COMMERCE

A. What is E-Commerce?

E-commerce as defined by (Hutt and Speh, 2004) is the process of buying and selling of goods and services over the internet using computers in order to transfer
funds through digital communications. In short, e-commerce constitutes a medium of buying and selling of products and other online services using internet (see fig. 1.).

Internet shopping (or e-commerce) differs from traditional commerce in terms of the quantity and quality of information it offers to customers and because it requires the development of customer loyalty and trust in this marketplace. Combining the open system environment of the Internet and the intensive communications requirement of being a remote shopping innovation, the adoption of Internet shopping becomes more complex and difficult to expect (Slevin, 2000). Technological advance is not the unique requirement to adopt the online shopping, there are other factors related to customers as trust in the company and, especially, the shopping channel in which they are going to develop the transaction should be also taken into account.

B. Types of E-Commerce

The e-commerce business is very complex and can be applied for different purposes, several models have been identified such as: B2B (Business-to-Business), B2C (Business-to-Consumer), C2B (Consumer-to-Business), C2C (Consumer-to-Consumer), B2G (Business-to-Government) and M-commerce (Mobile Commerce). According to Hutt and Speh (2004), B2C provides the following facilities:

- **Product information**: Information on new and existing products is available on websites.
- **Sales**: Products are sold from the websites and allow the user to track their order.
- **Service**: Electronically users can receive a feedback about any problem with the order.
- **Payment**: Electronic payment is used to complete these transactions.

C. Pros and Cons with Purchasing Online

E-commerce is continuously growing and according to Hansen et al. (2005), people purchase online for the following reasons:

- **Convenience**: Easy and fast without moving out of the home.
- **Greater supply**: Offer more variants of products.
- **Lower prices**: Online stores are able to cut expenses.
- **Price comparison**: Consumers can compare competitors’ prices on products and services.
- **Saving time**: Transaction can be completed in seconds.

Although there are many reasons for opting online purchase, some negative aspects have been identified by Windham and Orton (2000) as follow:

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**Fig. 1. E-commerce process (2010)**
- Consumers can not appreciate the real shopping experience of touching things and trying items on.
- Returning products is a possibility because they have not met the consumer’s requirements.
- Customers are not familiar with or trust the company’s brand, so they are hesitant to perform online commerce.

In general, the physical experience of shopping in a traditional store is absent in e-commerce, so the lack of trust is the main reason for not purchasing products or service online.

III. TRUST

According to the Oxford English Dictionary (1971), trust is defined as ‘‘confidence in or reliance on some quality or attribute of a person or thing, or the truth of a statement’’ (p. 3423). Nissenbaum (2001) suggested a definition for trust as “An extraordinarily rich concept, covering a variety of relationships, conjoining a variety of objects. One can trust (or distrust) persons, institutions, governments, information, physical things, systems, and more”. In this section a general overview of trust from the disciplines of philosophy, psychology, management, and marketing is provided to illustrate the nature and concept of trust.

A. Psychology

From a psychological perspective, researches on trust focus on individual personality differences and development throughout the life (Lewicki and Bunker, 1996). In general, trust is difficult to define trust because it can apply to different types of relationships, varies across contexts, and is multi-dimensional (Deutsch, 1958; Rotter, 1980). Game theory perspective has allowed analyzing the interpersonal trust concept where the trust is determined by communication, experience and motivation (Deutsch, 1958; Kee and Knox, 1970). Other psychological findings suggested that the trust is affected by elements of risk and vulnerability (Zand, 1972).

B. Sociological

Researchers examine the trust from the perspective of social relationships that are created between people (Barber, 1983; Good, 1988). Many sociologists manifest that trust is an essential element in any relationship and without trust; modern society would not be possible (Barber, 1983; Macy and Skvoretz, 1998). Most researchers agree that building trust is a challenging process where experience is critical and information about past behavior, goals and reputation are required (Barber, 1983; Good, 1988; Buskens, 1998; Seligman, 1998). In addition, trust is commonly viewed as a dynamic process which must be built over time and is dependent on situational context (Lewis and Weigert, 1985; Good, 1988; Buskens, 1998; Macy and Skvoretz 1998). Some sociologists also believe that trust cannot exist in the absence of risk (Seligman, 1998).

C. Management

From management’s perspective, trust has been studied intensively in organizational contexts. In this sense, Wang and Emurian (2005) have defined the organizational trust as “the belief that the decision makers will produce outcomes favourable to the persons interests without any influence by the person” (Driscoll, 1978). Another role of trust that was recognized it to reduce the cost of both intra- and inter-organizational transactions (Uzzi, 1997). Moreover, management researchers generally consider that business performance can be improved with trust development.

D. Marketing

In the discipline of marketing, findings about the trust have been generated related to the distribution channels (e.g., manufacturer–retailer) and buyer-seller relationships. In this context, there is a particular area of research which focused on how to maintain long-term relationships in distribution channel considering that arrangements about the costs were relatively high. Kumar (1996) and other
researchers suggest that trust should not be considered as a power by the contrary as a tool which helps to manufacturers or retailers to gain more tangible benefits and develop their full potential, thus facilitating long-term commitments.

E. Business - Economics

Risk occurs as a topic in business-economic related literature. As a reported by Dowling and Staelin (1994), risk is defined as a consumer’s perception of the uncertainty and adverse consequences of engaging in a commerce activity. Furthermore, researchers agreed that risk and uncertainty are primordial factors to achieve trust (Lewicki and Bunker, 1996; Mayer et al. 1995). So, the level of trust requested or needed in online environment has an intimate relationship to the degree of risk which is presented in business transactions (Konrad et al. 1999; Povey 1999). In general, across all the studies performed by other disciplines, they agree that trust can be perceived only in an uncertain and risky environment and it is developed over the time.

Although these multi-disciplinary perspectives on trust have added richness to the e-commerce environment, but they have expressed inevitable differences of opinions over its nature. Most researchers conclude that trust is important in a range of organizational activities and processes such as team work, goal setting and cooperative behaviors.

IV. ONLINE TRUST IN E-COMMERCE

According with Mayer et al (1995), “online trust is the willingness of a consumer to be vulnerable to the actions of an online store based on the expectation that the online store will perform a particular action important to the consumer, irrespective of their ability to monitor or control the online store”. This definition provides a complete view of the trust applied to different operations and transactions online. Trust is more difficult to build and more critical in online, than offline, business environments (Hodges 1997; Ratnasingham 1998; Hoffman et al. 1999; Roy et al. 2001). Online transactions are characterized to be more impersonal, anonymous and automated compared with offline transactions (Head et al. 2001).

In e-commerce environment, consumers do not know in which way their personal information will be used. They only believe in that their private data will not be abused by the vendor. Due to this issue, consumers sometimes decide to protect their personal information by providing falsified personal details. However, hiding important details deprives the online vendor of valuable information that could be used to tailor their products or services to individual customers using the supplied data. Conforming to the research developed by Milne and Boza (1999), it suggested that consumer trust levels vary by industry and depends also on how much information is captured and whether it is shared. Additionally, Simmons (1993) claimed what trust level varies across organizations, cultures, and even in each person. Thus, Milne and Boza (1999) have recommended that online trust can be increased through honest divulgation of information and the use of information practices that assure the consumer's private data.

A. EC-Trust Parties

In the B2C e-Commerce environment, three main parties interact to determine consumer trust levels. These trust parties are:

- **Consumers:** They have significant experience in the traditional market, but may not be as familiar with online marketplace (Erickson 1963; Bowlby 1973). Therefore, they try to establish trust before interacting with a vendor in order to acquire their products or services.

- **Vendors:** Trying to build trust among consumers in order to sell their products or services. Vendors may have both physical and an online presence which results to be more successful compared to solely
operate in the electronic marketplace. (Head et al. 2001).

- **Referees:** Corresponds to third-parties who provide independent recommendations on the trustworthiness of vendors. In this way, trust seals are an important mediating factor in building online consumer trust.

### B. EC-Trust Lifecycle

Many researchers hold that the trust is a dynamic process that may increase or retreat over time and with experience (Ravald and Grönnroos 1996; Roy et al. 2001). Head et al. (2001) distinguished four phased lifecycle for developing online consumer trust: chaos, establish, enhance, and maintain where, all of them are linked in a sequential and interactive way and evolve over time (Lewicki and Bunker, 1996). The Online Trust Building Model proposed by Head et al (2001) outlines the phases of consumer online trust and integrates the necessary interactions between consumers, vendors and referees to progress from one trust phase to another (see fig. 2.).

In the first stage of online shopping process, consumers may feel a sense of chaos in the e-Commerce market, due to they fear that their personal information may be stolen or that online businesses may be fraudulent. These considerations suggested that the security mechanisms applied on the websites have been not effective. With appropriate motivation, trust can be established over time, as consumers become more familiar with the new technology and the marketplace. If trust is established and the initial transactions with vendors met consumer expectations, then consumer trust is reinforced and further enhanced (Roy et al. 2001). As consumers continue to experience successful transactions, trust is maintained. However, consumers continuously receiving positive recommendations from referee, negative reviews or remarks may still influence consumer perceptions of vendor trust.

Trust also involves vulnerability, so when people trust in online environment, they are exposing themselves to risk. If consumers experience a violation of trust, they may easily revert back to the chaos state where trust may be more difficult to reestablish (Head et al. 2001). Lewicki and Bunker (1996) proposed that violations of trust will have different outcomes in different phases of the trust lifecycle. So, the model shows that the gap of trust will send a consumer back to a state of chaos. Nevertheless, if the relationship between the consumer and vendor is strong (at the maintain stage) and the violation is not perceived to be intentional, then trust violation consequences may be less severe, possibly reverting to a previous phase (such as establish or enhance).
C. Contributing Factors of EC-Trust

Trust is essential in the electronic commerce. Sanner (1997) identified three bases upon which the trust can be built. The first base is personality-based trust, which in general is associated to the characteristics of the person to be trusted. The second base is related to the knowledge level of the other party. The third base is institutional, where trust is based on established parameters and mechanisms that regulate the relationship between the parties who are involved in a transaction (see fig. 3.).

A. Personality-based trust

Known also as propensity to trust, it is defined as the tendency to depend on something from others in different situations (Mayer, et al., 1995; McKnight et al., 1998; Kacmar et al., 2002). This form of trust is based on a belief is influenced by cultural background and personality type. So, these beliefs play an important role in the initial stages of a relationship (Mayer, et al., 1995), which will be more or less stable depending on nature of the interaction (McKnight et al., 1998).

Some researchers revealed that propensity to trust is directly applied to trust in the ecommerce. Thus, an online shopping research over Amazon.com suggested that inexperienced online consumers should consider the propensity to trust on others as a primordial factor to start a business relation online. So, in the absence of social cues and experience with an online retailer, new consumers have to base their trust essentially on their socialized propensity to trust (Gefen, 2000). In addition, other studies were carried out in U.S.A., Singapore, and China which indicated that propensity to trust positively affects the consumer's trust in electronic commerce (Teo, et al., 2007).

B. Knowledge-based trust

Knowing the other party sufficiently well gives the capability to predict their behavior (Lander, et al., 2004). So, this knowledge of each other is acquired in two different stages: first-hand and second-hand knowledge. A familiarity with the online vendor is the base of the first-hand knowledge where interaction with a particular party allows increasing the consumer trust on Internet stores and starts with “relationship exchanges” which encompasses money and personal information (Hoffman et al., 1999). Furthermore, the second-hand knowledge is associated with factors like familiarity, reputation, brand, and website quality which have a direct repercussion on trust, due to face-to-face communications and physical interactions are not present (Bunduchi, 2005).

- Familiarity

Antecedents such as familiarity between parties suggest that the development of trust is accumulated over time and requires interaction history (McKnight et al., 1998). Familiarity allow reducing social uncertainty with the increase of comprehension of current actions of the commerce online, while trust help to have a better understanding of the future activities of the other party (Luhmann, 1979). In e-commerce, familiarity involves a growth of
accumulated knowledge gained from previous successful interactions on website (Gefen, 2000). Thus, consumer trust will be increased by the level of familiarity with a trustworthy online vendor.

- **Reputation**

  From consumer perception, reputation is defined as the belief that a store is honest and protects its consumers (Doney and Cannon, 1997). When consumers have not had a previous experience with a vendor, sometimes hearing positive experience from others can help them to change their perceptions of risk and insecurity about the online transactions and so helps foster consumer trust. There are possibilities of finding online vendors with a good reputation which are seen as trustworthy while there are others which are untrustworthy due to bad reputation (McKnight et al., 1998). In this way, Amazon.com reputation has increased its sales (Barnes and Vidgen, 2002). Some empirical studies related to online shopping with books or travel indicated that, online trust is directly impacts for the reputation of online vendor (Jarvenpaa, 2000).

- **Brand**

  In agreement with the researcher Kotler (1991), the term brand can involve a name, symbol, or design, or combination of both which allow identifying the goods and services that correspond to one seller or group of sellers and differentiate them from those of competitors”. In E-commerce, brand has been analyzed as a surrogate for trust (Delgado-Ballester and Munuera-Alemman, 2001; Ha, 2004; Ha, 2005) and has been used as the function for building trust–based relationships with customers (Berry, 2000). Therefore, brands give some benefits to the customers because they increase consumers trust on the products that they cannot touch or manipulate and at the same time help customers to have a better understanding of the product buying’s process (Yousafzai et al., 2005).

  In addition, brands allow simplifying the decision-making process, helping the shoppers to dispel doubts about the quality and functionality of products (Dayal et al., 1999). So, the risk level for consumers in making business with online vendors is decreased when a known brand is used in online transactions (Cao and Gruca, 2004) which contribute in the building trust process (Dayal et al., 1999). In this context, there are many well-known brands on the Internet which are trusted by consumers (Urban et al., 2000). Thus, brand should be a relevant factor for initializing online trust in new customers.

- **Website quality**

  Sinha et al. (2006) pointed out that website quality should be examined in accordance with the quality of content, structure and navigation, and functionality.

  **Content** refers to the information showed on the website which should be engaging, relevant, informative, useful and appropriate for the consumer.

  **Structure and navigation** includes organization's information on the site and the instructions that help users move through sections on the site in a quick and easy way to check in depth the website content. So, websites are qualified as consistent and effective when they have a good structure and navigation.

  **Functionality** involves the use of technology on the site in order to provide some features as content's load quickly, live links, and any new technology used to increase functionalities and give more relevance to the site.

  In offline shopping, consumer trust depends on the salesperson expertise, likeability, and similarity to the consumer (Doney and Cannon, 1997). However, online environments substitute the physical salesperson with help buttons and search features that allow increasing the consumer trust in the shopping experience (Lohse, 1998). So, a well-designed website should provide consumers enough information about buying decisions, user-friendly navigation, and instructions to complete a successful ordering process. An empirical study indicated that website quality has a
positive impact on trust from Internet users (Corbitt et al., 2003). In general, the formation of consumer trust in online environment will depend on the quality of website.

- **Customer service**

  Customer service is defined as the process that focuses on achieving users expectations by executing actions that users required in the proper time (Wagenheim and Reurink, 1991). Conforming to some researchers, maintaining consumer retention can be reached by responding to services or products failures in a fair manner in order to meet the consumer’s expectations in an effective way (Huppertz et al., 1978; Oliver and Swan, 1989). These findings suggest that purchase intentions will remain stable, and possibly increase, when service recovery is effective. However, a poor customer service effort could affect the future intentions to buy something from the failing firm, due to the firm does not reaching the customer expectations and it dramatically reduces the trustworthiness of the firm.

C. Institutional-based trust

McKnight et al. (1998) proposed a definition of institution-based trust which is focusing on customer's beliefs about impersonal situations and favorable conditions that allow them to feel safe and comfortable during the online transaction’s execution. Some trust building strategies related to security, privacy and third party assurance are proposed based on structural-assurance mechanism.

- **Perceived security**

  Many researchers have recognized security as one of the major barriers in the adoption of e-commerce (Furnell and Karweni, 1999). From computing perspective, this term has been defined as protection mechanism against threats that cause economic hardship in the form of modification, disclosure of data, denial of service, fraud and abuse (Kalakota and Whinston, 1996). In the context of electronic commerce, transactions can be vulnerable to theft of credit card information, or stealing of personal information which occur via false or defective authentication. So, security controls are required to ensure timely and accurate completion of transactions, prevent fraud and third-party manipulation, ensure smooth transactions, and safeguard transaction authentication. All these aspects are basic conditions that have to be taken into account and have to be managed for technological and organizational support in order to achieve a successful e-commerce. Findings on this factor suggested that trust in e-commerce depend on the security level perceived by the users during online purchase (Chellappa and Pavlou, 2002; Yousafzai et al., 2005; Wang et al., 2004). In this context, while the perception of security risk decreases, trust in online environment should increase.

- **Perceived privacy**

  Privacy involves the protection of accessing, using, and disclosure of private personal information collected about consumers in order that it cannot be shared with other websites (Friedman et al., 2000). Many surveys show that consumers are concerned about the way in which organizations are managing their personal information. So, the privacy goal is synthesized in increasing the autonomy and/or minimizing vulnerability. In online environments, opposite to offline environments customers perceived an insignificant control over information privacy. Reaching full potential in e-commerce requires that privacy can be analyzed and addressed in the correct way. Some empirical studies related to e-commerce argued that the perceived privacy is an indispensable factor in this kind of business and is positively associated to the inspiration of the trust (Liu et al., 2004; Wang et al., 2004; Yousafzai et al., 2005). In this way, online vendors should be able to protect the customer's personal information and prevent credit card misuse during shopping online.
Third-party assurance

In the electronic commerce context, certifying third parties or intermediary mechanisms such as TRUSTe, BBBOnLin, CPA WebTrust, Verisign, insurance, etc., can help to create the required trust between the online vendor and its consumers. Without the intervention of these parties there is no way to guarantee the quality of the online content, and the influence of the websites behavior. E-commerce industry has contributed to the development of third-party certification as a mechanism to help consumers feel more secure when conducting online transactions. So, these third-party intermediaries are used to protect consumers by reducing risks and inspiring trust (Tang et al., 2003). In addition, e-commerce defines insurance in terms of financial compensation in order to fully cover the cost of a credit card purchase when something goes wrong or cover other issues which involve destruction of data by mistake (Friedman et al., 2000). Therefore, using insurance on e-commerce environment should impact in a positive way the consumer trust (Gefen et al., 2003; Kaplan and Nieschwietz, 2003).

V. E-COMMERCE DECISION PROCESS AND SOCIAL INFLUENCE

In this section we describe a customer’s decision making process in E-commerce and examine how social influence affects each decision making step.

We also examine how data about the social influence can be captured by E-commerce platforms and be used to test the customer’s decision.

A. Social Influence

In E-commerce, social networks play an important role on consumer’s final purchase decision due to reviews written and shared by previous customers and evaluated by new customers on websites help to customer to decide about a specific product or service. As reported by Lee et al. (2006), many online shoppers decide to wait for others consumers’ opinions on the internet, in order to analyze their comments and recommendations about their experience purchasing something. These comments will allow new consumers to feel confident with the buying process, reducing the risk of buying a new product or service on internet. In addition, Bearden et al. (1986) observed that during the buying of new product, two kinds of social influence are present: normative social influence (or subjective norms) and informational social influence. Normative social influence is related to the social pressure that can be applied on new customer to influence in their decision to adopt a new product or a service. Informational social influence analyzes the experience of early customers from their publications in social networks which will allow them to decide whether to buy or not a new product. Thus, informational social influence is a learning process that helps customers to feel more confident about the product that wish to buy (Lee at el., 2006).

In this section an approach is presented which allow measuring the benefits and repercussions that social influence could have between consumers of an online shopping environment. First, trusted sources provide high quality reviews and personalized comments about a determined product in order to convince online shoppers to buy them. Second, a company producing a product may get customers’ direct and detailed responses and be in a better position to predict market trends. Third, marketing based on a social network can try to identify opinion leaders who have a vast experience in E-commerce websites in order that they can influence in a positive way on the site and maximize its effectiveness. Many studies on this topic (Kempe et al, 2003; Hill et al., 2006; Engel et al., 1990) have demonstrated that marketing based on social network provide more benefits in terms of cost and effectiveness compared with the traditional direct marketing, which manages customers as an independent decision maker without taking into account the effect of the influence of their social network.
Therefore, influential consumers can have a direct impact on viral marketing, propagating a cascade of influence through a social network in which friends will voluntarily share their experiences or can recommend to other friends, the product or services that they previously have used (Kempe et al, 2003). Thus, a company can avoid marketing directly with a specific consumer who is influenced by friends and not going to buy a new product unless he has have a recommendation or advice for purchasing it. Therefore, the construction of a social network with influential customers has been a key issue for marketers as well as sociologists which require interaction between consumers to create more social nodes.

Over the internet, there are some online communities such as Epinions.com which encourage users to provide trust data. In this type of social networks, users explicitly can express their trust to other participants, leading to the construction of personalized webs of trust. Many e-commerce websites such as Amazon.com allow a consumer to buy a product as a gift for friends and to recommend it to other friends in order to build a trust network. In addition, each consumer can write product reviews and also express how useful were the reviews written by other consumers which will be used as feedback for new customers.

B. Example E-Commerce Decision Making Process

In general, decision making process associates the following stages: Need recognition, Information search, Evaluation, Purchase and after purchase evaluation in which a consumer has to make one or more decisions (see fig. 4.). In order to describe the image, an example has been included to achieve a better understanding of each
Consider a customer Jane who wants to buy a book about “social networks” in an online shopping site.

**Decision 1:** Jane has the necessity to buy a book related to “social networks.” She is thinking if she should go to Amazon.com where she shops often, or she should try another online store such as Barnes & Nobles. In addition, she is considering the possibility to visit a Web-based community site such as Epinions.com in order to search in advance information about the product that she needs at the moment.

**Decisions 2 & 3:** She decided to start her research in Amazon.com. She searches for a book about “social networks” considering some details, such as, editorial reviews, sample pages, customers’ reviews about a few books and compares all those information with her preferences (e.g., not too thick, soft cover, and for a beginner, price, customers’ reviews and reviews’ ratings, as evaluated by other customers). At this point, she has to determine which book to buy and decide if she would like to rate some reviews that were helpful in making a purchase decision or make a comment related to one of them.

**Decision 4:** After she found the book that she needs to buy, she has to decide if she should buy the book at Amazon.com or she should try to find the same book in another store, which might potentially offer better shipping options or lower prices.

**Decision 5:** When she decides to place an order at Amazon.com, this website automatically recommends her a set of books which are related with the same topic that she needs and those some customers frequently purchased together. In this way, she has to decide whether she is going to buy some of the recommended books or not.

**Decision 6:** After checking the recommended books, she is not interested in buying any of them and finally she buys the book that she found at the beginning. Then, Amazon.com shows a form which allows the customer to write a review to share her opinion about her buying experience, to help other customers in their decision making process. She also decides to rate some reviews that influenced her purchase decision of the product based on the reviews’ accuracy or honesty which will help other users in their online buying process.

**Decision 7:** Then Amazon.com platform gives her possibility to rate the book that she bought. So, if she decides to rate her book, she can receive more personalized recommendations from Amazon.com. When she rates products that she had purchased, most often will help in her future purchasing. At some decision steps, current Web-based decision support systems help customers in their decision making process taking into account details such as user preference, which is calculated from historical purchase behavior, click stream information, rating of purchase products, or demographics.

Nowadays, e-commerce companies have attempted to collect data about social influence by encouraging a customer to write and rate reviews (e.g., a decision step 3 and 6), as consumers are far more likely to believe in information and opinions from trusted acquaintances than their own decision.

**VI. CASE STUDY: EBAY**

Recently, researchers in HCI and human factors have begun to study trust in an on-line context. A case study have been proposed about one of the most trusted e-commerce site on the internet, eBay which manages a combination of feedback and comments that help users build credibility and establish positive reputations on products. Moreover, a framework of trust-inducing features has been included which study the design and interface elements that are necessary to perceived website credibility.

A study performed in the summer of 2004, by the Ponemon Institute and TRUSTe suggested that eBay is one of the most trusted e-commerce websites on the internet. Tedeschi (2004) argued that
according with New York Times report, eBay’s has approximately 114 million of registered users in its platform, and 90% of them are buyers. Much electronic commerce users who generally use these systems to make their transactions, base their experience on other users’ ratings of sellers, vendors and manufacturers before having their own online experience. According with the features in e-commerce, eBay has implemented a feedback platform to provide buyers and sellers a method of rating the purchasing process which allows determining whether a customer should or not do business with a particular user. So, the combination of seller feedback and comments are the essential tools or guides to help users build credibility, establish positive reputation and an in-house customer support team create a safe environment whereby users feel protected (Greenspan, 2004). In its simple terms, eBay defines feedback as the set of comments and ratings left by other eBay members about their experience of buying or selling something. For each transaction, the buyer and seller can rate each other by leaving feedback. Each feedback consists of a positive (+1), negative (-1), or neutral rating (0), and a short comment (see fig. 5.).

eBay’s site provides users information related to vendors ranking score which is useful during the online shopping process because it allows them to do the initial filtering decision regarding the products that they can look for, vendors in which they should trust, offerings that they can analyse and scores generated by previous users who purchased goods from the vendor previously. Thus, feedback policies used by eBay are a standard way for validating the quality of the individual with whom you are considering having a transaction. So, feedback is an essential component of the individual’s online reputation. For instance on eBay’s site, there is a section titled “building your reputation,” which contains information related to “Your feedback profile made up of comments and ratings from users who have traded with you where your feedback profile is the most important aspect of your reputation at eBay.

VII. FUTURE WORK

The challenge of establishing consumer trust and their effects in e-commerce poses problems that need further research. While trust is an essential factor in e-commerce which is seen as an issue in online buying behavior, more work needs to be done to determine how trust can be built in the consumer and communicated to the online vendor. Therefore, researchers can look for strategies that allow communicating the trust and credibility through the Web interface or providing other solutions to increase the user awareness level.
Although establishing initial trust is crucial in any online transaction, more research has to be focused on understanding how trust in e-commerce can be developed and then maintained over time. In addition, the paper makes a brief analysis of antecedents of trust but a comprehensive study should be executed to have a better comprehension of these antecedents in the e-commerce context from both the initial and long-term trust perspectives.

Moreover, reputation systems provide guidelines related to the development of online trust. However, future research should be done to address the limitations of reputation systems and the role they play in long-term trust building. Furthermore, more work is also required to look in detail how the dynamics of trust formation allow establishing a network of trust between parties of an online community or participants of a reputation system in order to assess the validity of such a trust-building mechanism.

VIII. CONCLUSION

The Internet has made possible to conduct business-to-consumer transactions across an open network which although has many benefits it also raises many concerns (Chao, H., 2008). Researchers hold that the lack of trust may be the most significant long-term barrier for realizing the full potential of electronic commerce (Keen 1997; Hoffman et al. 1999; Roy et al. 2001). Trust can trigger increased purchasing to the extent that it reduces the complexity and perceived risks of purchasing (Gefen, 2000). However, as a relatively young research field, research on trust in e-commerce environment is still in the stage of borrowing different constructs from other theories and developing theoretical frameworks. Sometimes researchers neglect some important factors that are relevant to understand trust-related behaviors.

In this paper, a new conceptual model for online trust and decision making process in E-Commerce were analyzed to help to further our understanding of online trust, and also provide online vendors methods for building consumer trust. First, the Online Trust Building Method proposed by Head et al (2001) illustrates the phases of consumer online trust and outlines the necessary interactions between consumers, vendors and referees to progress from one trust phase to another. However, this method only considered the impact and influence of trusted third-party referees and their seals-of-approval as mediators for building online consumer trust, so viewpoints of multiple stakeholders such as customers, employees, suppliers, distributors, partners, stockholders, and regulators should be taken into account to develop a better comprehension of the trust online from its initial stage. Second, a framework for decision making E-Commerce was presented where social influence was the main feature that supports this model which considers that consumers who may not have complete information about a product or service often make use of previous customers’ opinions. It has become apparent that the customer decision process is influenced by information from trusted people, not from product manufacturers or recommendation.

Although some issues were covered in this article, some of the trends and important issues in e-commerce have been addressed for future research. In general, two important concepts related to e-commerce were analyzed in the present paper which corresponds to web navigation and development of trust online. In e-commerce, online vendors need to have a user-friendly website where the process of navigation and search require minimal effort and users feel comfortable and confident interacting with it. However, having a user-friendly website is not enough; it requires cultivating a climate of trust and confidence among its users. Therefore, ease of navigation and establishing a climate of trust, are determinant factors for e-commerce success.

IX. REFERENCES


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List of illustrations:


Figure 3. Chao-Jung, H. (2008), Factors in Online trust. In: Dominant Factors for Online Trust, p. 169.
