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Impact of Electronic Commerce Customer Relationship Management on Competitive Advantage: A Research Model and Issues

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Abstract

The paper presents a theoretical discussion of how experts on information systems and the Internet should inform business representatives about the theoretical impact of Internet network use on competitive advantage. Its objective is to propose a model to test the effect of Internet's web tools and trust on the link between customer relationship management (CRM) and competitive advantage. Internet's web tools such as level of informational web site, level of transactional web site and level of security on the web can support the formation and maintenance of customer relationship because they facilitate the way organizations partner, interact and empower. In other words, Internet's web tools can let organizations to build tight trusted relationships with their trading customers who should become loyal to them, rather than to select customers on a transaction by transaction basis from a large pool of non-loyal ones.

1. Introduction

Electronic commerce (E-commerce) is maintaining business relationships by means of Internet networks. In fact, E-commerce is a rapidly growing area enjoying considerable attention in conjunction with the emergence of the Internet [29]. Electronic Commerce creates new forms of market, such as electronic matching of sellers and buyers, or enabling a direct exchange between sellers and buyers [1]. The term electronic commerce encompasses many activities carried out through computer networks and the Internet, including interorganizational commerce, intraorganizational transactions, and transactions involving the individual consumer [34].

Many recent studies have predicted that Internet generated revenue will reach more than US\$1000 billion in total by 2003 [14]. Such predictions indicate the importance that is attached to the Internet as a way of supporting business activities. The Internet itself can be regarded as the latest super-diffusion technology [11]; an amalgamation of many networks that has become

available for commercial purposes. Indeed, numerous firms have already experienced its considerable benefits [18]. One of the consequences of the development of the Internet has been the emergence of the World Wide Web, an Internet service that organizes information according to hypermedia and hyperlink paradigms [34]. The Internet's Web is the prime driver of contemporary E-commerce [35]. Given the rapid penetration of the Internet, and in particular of the World Wide Web, many companies have been involved over the last five years in planning and experimentation aimed at leveraging this new technological infrastructure for business purposes [4]. Today, the World Wide Web seems to offer the most potential as a tool for conducting business activities [4]. Firms not only use the Internet to support the exchange of goods, services, information and transactions but certain firms also expect to improve long-term relationships with customers.

There is no widely accepted definition of customer relationship management (CRM) in the scientific community. For the purpose of this paper this definition of customer relationship management will be used: it means being willing and able to change your behavior toward a customer based on what the customer tells you and what else you know about that customer [24]. In fact customer relationship management lets firms to initiate, establish, maintain, and enhance relationships with individual and organizational customers, at a profit, so that the objectives of the parties involved are met; this is achieved by a mutual exchange and fulfillment of promises. The dominating perspective within inter-organizational relationship research has been to assume that customer relationship management has a positive correlation with competitive advantage via customer loyalty.

The general assumption is that the deployment of the Internet's tools would increase switching costs and create strong competitive advantage. Switching costs encompass all the costs incurred by a customer in changing to a new supplier [25]. Firms not pursuing cost-based competitive advantages through the Internet will be left behind [31]. Competitive advantage analysis has provided the foundation for many researches on customer relationships

management [32].

Trust may have an impact on the link between electronic commerce customer relationship management and competitive advantage via customer loyalty because trust is precursor to customer loyalty. Trust has been conceptualized as existing when one party has confidence in an exchange partner's reliability and integrity [5]. Becoming a trusted partner of a customer is a key to maintaining customer relationship management. Trust can be achieved by providing the customer with valuable information using a high quality web site. Certain authors speculate that in the early stages of Internet development, trust is a critical factor in stimulating purchases over the Internet [16] mainly because of security issues, which is one of the Internet's tools used to promote commitment to customer relationship management.

Internet's web tools would not only assist in customer relationship management initiation, it would help in its improvement, and even enhancement, of relationship which leads to increased competitive advantage via customer loyalty [3]. But Loyalty can't be addressed with technology [26]. It isn't simply a matter of having better security or database systems [26]. Without the glue of loyalty via customer relationship management and improvement, even the best-design electronic commerce model will collapse [27]. The effective management of the combination of the Internet's web tools, trust and customer relationship management factors will bring competitive advantage via customer loyalty to firms. In the rush to build Internet for business purposes, it is mistake to think that only a web site is sufficient to retain customers because loyalty is a relationship phenomenon rather than a technological phenomenon. To increase the loyalty of customer via Internet's web tools, you must first use the technology to build lasting trusted long-term relationships.

The objective of this paper is to demonstrate how trust can be applied to support electronic commerce customer relationship management in order to create competitive advantage via customer loyalty. This article consists of two main parts. First, a conceptual model explaining the theoretical linkage between customer relationship management and customer loyalty will be presented and explored. In addition, the impact of Internet's web tools and trust on the linkage between customer relationship management and customer loyalty will be explained. Second, we present theoretical propositions that will underlie future empirical studies examining the impact of trust on the link between electronic commerce customer relationship management and customer loyalty in many industries.

2. Conceptual Constructs

A consideration of the study's objective will help to identify its key constructs, such as: the customer

relationship management construct which will play the role of independent variables, competitive advantage construct via loyalty will be the dependent variable, Internet's web tools construct will be considered as the first group of moderating variables and trust will represent in the model, the second group of moderating variables. Each of them is discussed below.

2.1 CRM construct components

Relationships are developed between organizations for the exchange of products, services, resources, information and so on [21]. Customer relationship management is generally viewed as processes to exchange goods and services for some form of compensation. Customer relationship management can be based upon networks. Another type of coordination among organizations has been suggested: network [21]. Networks are groups of organizational actors who participate in a general pattern of interaction [21]. Networks can be groups of organizations, but also groups within organizations. The different organizational actors can have their own particular interests, and can be allied to different network-organizations [21]. The primary goal of customer relationship management is to let companies to achieve - through empowerment, interactive management, and partnerships – competitive advantage via loyalty in relation to companies outside the network. Then customer relationship management is heavily dependent upon: empowerment, interactive management and partnerships. Each of them is discussed below.

2.1.1 Empowerment

Empowerment generally refers to the process firms adopt to encourage and reward employees who exercise initiative and make valuable creative contribution [12], or do everything that is possible to help customers solve their problems. Most business representatives prefer to deal with regular customers because they are easy to serve and because they understand the firm's preoccupations [8].

2.1.2 Interactive Management

Interactive management is the key aspect of customer relationship management functions [12]. It comprises all actions designed to transform the prospective client who enters into contact with the business representative into an active and effective customer [12]. It is based on the reciprocity that constitutes one important dimension of customer relationship management [6]. Feedback is part of the core of interactive management [13]. Indeed, [13] consider customer feedback as the step of the customer relationship process assessment and define it as the best way for firms to keep in touch with their customers' perceptions.

2.1.3 Partnerships

Partnerships are created when suppliers work closely with customers and add desired services to their traditional product and service offerings [13]. This means resale of your firm's products and services by your customers. It also means joint development of products and services with customers. To get effective partnership with customers, some suppliers create joint ventures with customers. In other cases, customers refer to your firm's products and services when they sell their own products and services. [33] has developed an integrated model devoted to relationship phases. In this model, partner selection is considered as the first step in the relationship process.

2.2 Competitive advantage components

Competitive advantage is the method by which an organization attempts to achieve its mission, aims and objectives [8]. To establish and maintain a distinctive competitive advantage, a firm needs to follow six main principles: 1) it must start with the right goal; 2) a company's strategy has to allow it to deliver a value proposition, or set of benefits, different from those that competitors offer; 3) strategy needs to be reflected in a distinctive value chain; 4) robust strategies involve trade-offs; 5) strategy defines how all the elements of what a company does fit together; 6) finally, strategy involves continuity of direction [25].

Most businesses would prefer their customers become more loyal since it creates customers who are less sensitive to the business efforts of competitors [8]. Similarly, [7] suggested that loyal customers are less likely to switch to a competitor solely because of price, and loyal customers also make more purchases than comparable non-loyal customers. Some researches concluded that building a relationship with loyal customers should be a strategic advantage focus of most firms [7].

2.2.1 Loyalty construct

The development of loyalty involves building and sustaining a relationship with a customer that leads to the customer's repeated purchases of products or services over a given period of time. For the purposes of this research, loyalty will be considered as the final result of effective customer relationship management. The purpose is to link loyalty to the emerging theory of customer relationship management [19]. Although many authors, such as [10], distinguish between brand loyalty, store loyalty, salespeople loyalty, product and service loyalty, and so on, in this study the concept of loyalty will be considered as the combination of all these various types. Indeed, some authors, such as [13], have studied the impact of relationship marketing on customer loyalty but have not made any distinctions between different types of loyalty. They have merely specified that their conception of loyalty went beyond the idea of industrial loyalty. A final point to make is that the variable that has been

chosen to measure the competitive advantage in this study is "customer loyalty."

2.3 Internet's Web Tool components

Internet's web tools range from simple, associatively linked collections of static hypertext documents to interactive, integrated, customizable solutions and agent-based negotiation support; and since the Internet's web tools were initially developed to address the development of B2C transactions, they can also be effectively applied in B2B settings as well [15]. Today, there are essentially three variables that encompass the construct of Internet's web tools: the level of informational web site, the level of transactional web site and the level of security on the web.

2.3.1 The level of informational web site

Commercial web sites provide company information and enable communication with the firm [34]. The informational web site consists of the new Internet-based channels through which companies can display information about themselves and the products and services they offer. Companies can display catalogues of their products. A first category of products which can be efficiently displayed on the web site are products which can be digitalized and transmitted through computer networks. Electronic books, music and video tracks belong to this category. Secondly, the Internet can be used to provide information to customers about physical products such as cars, hardware or perfume etc...

2.3.2 The level of transactional web site

The transactional web sites allow customers or trading partners to make a purchase or check the status of an account [34]. The transactional web site consists of the new Internet-base channels through which firms can exchange formal business transactions such as orders, invoices, payments, etc [17]. The transactional web site also encompasses e-mail, two-way interactive communication, virtual community and multimedia capacities because the Internet is a fully interactive communication medium. Therefore firms may use the high level of transactional web site to interact and exchange valuable ideas and experiences, influence opinions, negotiate potential collaborations, engage in relationships, and create different types of communities. In short, the level of transactional web site refers to the extent to which organizations engage in online exchange or communication with others without feeling affected by the constraints of distance and time.

A cookie is a piece of information that allows a Web site to record one's comings and goings. Cookie can help web sites to remember information about customers and respond to their preference. Cookie can facilitate electronic transactions on the web with customers. That means web site containing cookie may enable customers to log in without having to enter a password at every visit.

2.3.3 The level of security on the web

One of the greatest concern about doing business on the Internet deals with the level of security in transactions [30]. In the first phase of development, the Internet has not yet been extensively used as a transaction space because of its underdeveloped security aspects [35]. The growth of the electronic commerce is tempered by organizational concern over security and the risk of making transaction process. The perception of unsatisfactory security on the Internet is one of the primary reasons hindering electronic commerce customer relationships management. Despite advances and endeavors in Internet security mechanisms like cryptography, authentication, confidentiality, integrity, non-repudiation, etc... companies are still concerned about using an impersonal transaction medium like the Internet for secure transactions [30].

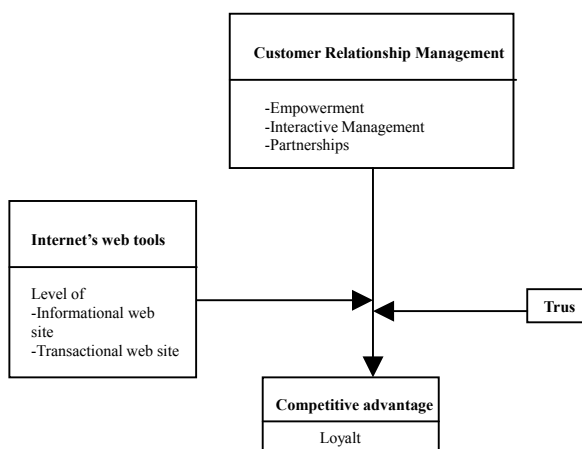
The perceived security of online transactions varies based on the specific payment procedure or money-transfer between organizations. For example, the perceived security of giving corporate credit card information directly over the Web is likely to be different from the risk of setting up a third party account and using that account number in transactions [30]. The parties involved in electronic commerce customer relationship management have to develop together effective security means and to share information about risk in order to motivate their customer participation to online transactions. Also both parties need to secure their web site during their exchange.

2.4 Trust

Trust is defined as the firm's belief that another company will perform actions that will result in positive outcomes for the firm as well as not take unexpected actions that result in negative outcomes [2]. Trust is also defined as a willingness to rely on an exchange partner in whom one has confidence [20]. Some companies figure out that building trust leads to more enduring relationships and more profits while a quick sale may simply let a customer leaves the relationships [27]. In inter-organizational relationship context, long-term trust of the seller has been found to be more important than short-term one [16].

The importance of trust becomes evident as a moderator of risk when buyers moves away from buying systems based upon a single transaction to one of repeat purchasers. If the trust is present, such customer relationship management is the basis for a formidable and durable strategic advantage which is measured by customer loyalty in this study [8]. After adopting a specific and more sophisticated measure of loyalty, [8] verified that trust has a causal impact on loyalty. Consistent with conventional logic, we have confirmed that the trust held by a buyer toward a seller is an important antecedent of loyalty, for at least some buying situations in a business environment [8].

2.5. The Conceptual Model



3. Theoretical Propositions

3.1. Theoretical impact of CRM on Customer Loyalty

Berry identifies empowerment as one of the major emerging perspectives in building relationship, this latter leads to customer loyalty [6]. Empowerment means workers can strive to meet customer requirements and needs and resolve problems; that can lead to spontaneous, creative rule breaking to turn a potential frustrated customer into a loyal one [8]. High employee turnover discourages management from investing much in hiring, training, and other relationship-building activities; this, in turn, leads to ineffective loyalty [5]. High employee turnover negatively affects customer retention or loyalty [5]. Recent literature positions employee retention as an antecedent of customer loyalty [5]. It seems that low employee turnover positively impacts customer loyalty.

Proposition 1a: The customer relationship management component of empowerment will have a positive and direct effect on customer loyalty.

Berry has noted that for a relationship to exist it has to be mutually beneficial [6]. The interactive management is the dominant business function for building relationship [6] which leads to customer loyalty. Interactive management occurs in the moment of truth when the customer interacts with the organization; it is in these moments of truth that relationships, leading to customer loyalty, are built [6]. Customer Relationship Management is a continuous process, requiring a company to solicit customers' feedback to ensure that their needs are being addressed; a feedback system should let a firm communicate with loyal customers [13]. The feedback

system shows its commitment to learning about and responding to customer concerns [13]. Exchange of regular communication, based on feedback, should determine whether these individuals, groups or organizations as a whole, are able to collaborate [21] and to still loyal to each other. Clearly, feedback refers to situations in which parties share and exchange information to achieve mutual goals in order to maintain their loyal endeavor.

Proposition 1b : The customer relationship management component of interactive management will have a positive and direct effect on customer loyalty.

[23] placed partnership at the extreme end of his loyalty scale, considering it to be the stage when a durable and close relationship between supplier and customer is developed. [33] outlined an integrated model of the relationship marketing process in which the selection of a partner was the first step of effective customer relationship management leading to customer loyalty. Furthermore, the perception of [28] regarding the linkage between partnerships and customer loyalty is the following: customer relationship management was effective when the first step of its process dealing with a partnership leads to the creation of valuable exchanges for both parties involved in the exchange. Obviously, these valuable exchanges were measured in the present study by customer loyalty.

Proposition 1c : The customer relationship management component of partnerships will have a positive and direct effect on customer loyalty.

3.2 The impact of the level of informational web site on the link between CRM and Loyalty

[34] show that a majority of firms list their expertise on their web site, including such material as curriculum vitae, important references, and employees' accomplishments. Companies which take such steps empower their employees when they have to negotiate with external customers. This empowerment process has repercussions on the relationships which the employees initiate and maintain with their customers in order to get their loyalty. Companies' contact employees are able, via the web site, to access information about their company and its products and services. A web site, then, is a tool for employee empowerment. This employee empowerment has beneficial effects which affect external customers and ultimately lead directly to their loyalty. Once employees are well informed about their company's web site content, the customers will most likely be satisfied with their services and so loyalty will develop.

Proposition 2a : The level of informational web site will be positively associated with the link between the

customer relationship management component of empowerment on the one hand, and customer loyalty on the other.

The use of electronic feedback links between firms can reduce the costs of maintaining relationship which impacts on customer loyalty. Informational web sites are used not only to facilitate interaction and feedback but also to tightly couple processes at the interface between stages of the link between customer relationship management and customer loyalty. The time taken to download graphics must also be taken into account when considering the degree to which web sites support the link between interactive management and customer loyalty. If customers have to wait too long before they can actually begin to use a vendor's web site because the graphics are too heavy, it will discourage them from exploring the web site further. A customer's frustration at moments like these will prevent the development of an interactive management. On the other hand, if the web pages appear rapidly, customers will feel like exploring the whole site in order to learn more about the company. As such, they will be ready to become involved in a durable relationship with the owner of the site, and thus loyalty will develop.

Proposition 2b : The level of informational web site will be positively associated with the link between the customer relationship management component of interactive management on the one hand, and customer loyalty on the other.

According to [22], informational web site is international by definition because web sites allow a company to attract international consumers. To this argument it is added that business globalization is supported by such an opportunity. Partnerships between firms from different countries are a common occurrence. Another argument is that a web site presented in many languages and available 24 hours a day will help to develop stronger links between companies and their customers. Ozer' [22] arguments mentioned above enable us to understand the reasons why informational web site should foster the link between partnerships and customer loyalty. A further explanation of this theoretical link is that a company's web site which presents its partners' logos induces the partners to stay for a long time with this particular company. The same thing occurs when a company presents on its web site the accomplishments of its partners. Companies also have the option of including on their web site, by external hyperlinks, connections to their partners' web sites. Companies which display their partners' web sites on their own web site will encourage them to be loyal.

Proposition 2c : The level of informational web site will be positively associated with the link between the customer relationship management components of partnerships on the one hand, and customer loyalty on

the other.

3.3 The impact of the level of transactional web site on the link between customer relationship management and loyalty

In fact, one study has claimed that companies often empower one or several employees to answer questions or to make comments online [9]. These actions are carried out by e-mail or through online discussion (online conferences, forums, or chat rooms) and allow companies and customers to make the most of the online contact time provided by the Internet to share their views. Companies empower their employees who react online promptly to customer complaints. The companies provide appropriate training for their employees in order to be able to offer various services, solutions, or products during interactive online contact with the customers and to modify, on the screen, the customer relationship management statements that companies use to convince customers to buy on the basis of customers' reactions and views. The home page tries to convince customers to accept the firm's position in regard to certain circumstances [9]. The use of these different tools should create customer loyalty. Likewise, these methods give value to employees and empower them during their contact with customers thus leading to an increase of customer loyalty.

Proposition 3a : The level of transactional web site will be positively associated with the link between the customer relationship management component of empowerment on the one hand, and customer loyalty on the other.

There are forms on the Internet's web that enable the customers to evaluate and appreciate the service offered by the business representatives. Feedback is one of the major components of the definition of interactive management, which leads to customer loyalty and at present, there is no better tool than the web to enable customers to give feedback. The interactive management is based on one-to-one dialogue between business representative and customer, web site tools, such as forums, news groups or chat rooms should support these dialogues; this way of interacting with customers should increase their loyalty.

Proposition 3b : The level of transactional web site will be positively associated with the link between the customer relationship management component of interactive management on the one hand, and customer loyalty on the other.

The business representatives share ideas, influence views, and establish partnership potential, through news groups, forums, and e-mail, with their customers. Such ways of doing business leads firms to develop customer loyalty. Firms involved in virtual exchange, via

transactional web site, should be motivated to become loyal to another if the partnership is based on a "win-to-win" relationship. When firms are committed to a partnership, they will include on their web site a link to the site of their partner. Such a web site will contain forms, e-mail, and so forth, which favor transactions. It is to be expected that this kind of relationship should result in loyalty. In conclusion, the partnership supported by the transactional web site should increase the loyalty between partners.

Proposition 3c : The level of transactional web site will be positively associated with the link between the customer relationship management component of partnerships on the one hand, and customer loyalty on the other.

3.4 The impact of the level of security on the web on the link between CRM and Loyalty

Firms that empower their employees to respond and listen to customer needs and requirements have satisfied customers, and develop strong relationships that lead to customer loyalty [13]. The company's web site protected by a secured firewall can be used to enhance the communication and collaboration among authorized employees. When the secured firewall protects the company's Internet, it becomes Intranet. The firewalls protect the intranets from unauthorized outside access. Only authorized employees are able to use them because they are limited to information pertinent to the company and contain exclusive and often proprietary, sensitive and strategic information. Company that uses the intranet (the secured private internet) to support their employees will increase their customer loyalty.

Proposition 4a : The level of security on the web will be positively associated with the link between the customer relationship management component of empowerment on the one hand, and customer loyalty on the other.

Using secure web technology such as digital signatures and digital certificates can help a company to establish and maintain interactive management relationships leading to customer loyalty. Digital certificates are used for many different types of online transactions, including electronic mail and electronic funds transfers. In fact a web site's digital certificate is a business assurance that the web site is this one of his customer and not an imitator. Because digital signatures offer a way to verify party's identity, buyers and sellers can use them to verify each other before beginning their interactive management, making it a bit easier for them to become loyal to each other.

Proposition 4b : The level of security on the web will be positively associated with the link between the customer relationship management component of

interactive management on the one hand, and customer loyalty on the other.

Businesses engaging in online partnership need to feel that their transactions are secure from prying eyes and safe from alteration. For example, a business-to-business extranet web site is a secured business network of several partners that become loyal to each other. Because of the security issue, organizations that are willing to do online business have to make concerted efforts to allay fears by offering clear security guidelines to their partners and vice versa. Both partners involved in a customer relationship management must develop effective security together and share information about risk in order to motivate participation in online transactions and to trigger their loyalty.

Proposition 4c : The level of security on the web will be positively associated with the link between the customer relationship management component of partnerships on the one hand, and customer loyalty on the other.

3.5. The impact of Trust on the link between electronic commerce customer relationship management and Loyalty

Trust is the necessary component that binds two parties together, moderates their risk, and implicitly guarantees their future benefits [8] such as loyal to each other. Parties can use trusted extranet to support their employees to share contract information and shipment and payment status. When customers trust an on-line business representative, they will share sensitive information with him; that information enables the company to form a more intimate relationship with customers, offering products and services tailored to their individual preferences, which in turn increase trust and strengthen loyalty [27]. Such way of doing business can quickly translate into a durable advantage over competitors [27]. Also, the internal management of production, inventory, procurement etc... can be supported by the trusted intranet functions and these functions can also be seamlessly integrated with the extranet. Parties can trust extranet connectivity because it provides secured connectivity between a corporation's intranet and the intranet of its supplier. The trusted environment of the extranet allows groups of employees to collaborate, sharing information exclusively and exchanging it securely. Since an extranet allows connectivity between businesses through the Internet, it is an open and flexible platform suitable for customer relationship management which yield customer loyalty.

Proposition 5a: Trust will be positively associated with the link between electronic empowerment and customer loyalty.

In the setting of electronic commerce, parties must trust each other before they interact and exchange.

Customer loyalty stems from continued interaction between the parties in the relationship. As long as the businesses provide interactive management of value based on their Internet's web tools to their customers, they are likely to be treated as trusted companies. In fact, business is based on trust between two parties, whether the business is conducted in person, by phone, or over a web site. The customer can get a sense of the company and the person from face-to-face discussions or from the appearance and location of the office; but this element of trust is difficult to reconstruct in electronic interactions because all the customer knows about the supplier is what can be seen on the web site. Therefore, creating trust via the Web depends on fostering interactive management through electronic means of well-established Internet's web tools. When companies treat the web as more than just a communication tool, the trust between companies will grow, a customer relationship management will be developed and maintained, and customer loyalty will be developed.

Proposition 5b: Trust will be positively associated with the link between electronic interactive management and customer loyalty.

Trust can be seen as a belief, sentiment, or expectation about a partner that results from a partner's expertise, reliability, or past behavior [8] [7]. The partnership relationship is characterized by a high-level of trust [7]. Companies are fascinated by international partnership opportunities on the Web, but they are skeptical about actually purchasing from overseas sites [16]. The international aspect of the Internet further challenges engendering trust in a partner relationship. [8] verified that trust has a causal impact on loyalty.

Proposition 5c: Trust will be positively associated with the link between electronic partnerships and customer loyalty.

4. Conclusion

The objective of this paper is to propose a model to test the effect of Internet's web tools and trust on the link between customer relationship management and competitive advantage via customer loyalty. Internet's web tools such as level of informational web site, level of transactional web site and level of security on the web can support the formation and maintenance of customer relationship because they facilitate the way organizations partner, interact and empower. In other words, Internet's web tools can let organizations to build tight relationships with their trading customers who should become loyal to them, rather than to select customers on a transaction by transaction basis from a large pool of non-loyal ones. The quality of web site infrastructure can directly influence the type of customer relationships management developed between firms who desire to be loyal reciprocally.

One more issue that is central to electronic commerce is the level of trust that is necessary before businesses may commit to an electronic commerce customer relationship management leading to customer loyalty. First of all many authors argued that the construct of trust is an important element of long-term buyer-seller relationships in a business environment [8]. Also, customer loyalty is a relationship built on trust between the buyer and the seller [7]. Second, trust is not only a short-term issue but the most significant long-term barrier for realizing the potential of electronic commerce on the Internet [16]. Lastly, with trust as a precursor, a customer becomes loyal to a firm [7]. In fact, trust has a direct or indirect impact either on the Internet's web tools or on the customer loyalty or on the customer relationship management or on the relations among these three constructs.

The theoretical discussion of this study will allow experts on information systems and the Internet to inform business representatives about the theoretical impact of trust on electronic commerce customer relationship management. These experts have to demonstrate to the business representative methods of fixing customer loyalty objectives when they are theoretically supported in their customer relationship management tasks by the level of informational web site, the level of transactional web site and the level of security on the web provided by the Internet to their companies.

Future research is necessary because the theoretical propositions presented in this paper must be tested. In fact, continual research is needed because Internet technology evolves so rapidly and said evolution will likely effect the relationships tested by this model's propositions. Additional research should also expand the range of Internet's web tools variables and examine their effects on the link between customer relationship management and organizational performance.

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