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The Effects of Relationship Commitment and Trust on Business to Consumer Electronic Commerce - The Case of Taiwan

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ABSTRACT

Electronic commerce has gained strong momentum across various industry sectors since the release of the commercial browser of Netscape. However, the sharp meltdown of dot com companies in the past three years inspires us to investigate the causes of failures and the factors of success. We postulated that there is a lack of relationship commitment and trust among the electronic commerce partakers. This paper focuses on the business to consumer segment of the electronic commerce regarding the effects of relationship commitment and trust. After surveying more than 250 online consumers in Taiwan, we found that the commitment and trust factors play vital role in customer retention that support our hypotheses.

INTRODUCTION

Electronic commerce (EC) is an emerging concept and technology that innovates the process of buying and selling or exchanging of products, services, and information via computer networks including the Internet. The dramatic growth of EC has been facilitated by the expansion of access to computers and the Internet in workplaces, homes, and schools. In 2001, Boston Consulting Group predicted that business to consumer (B2C) in Asia Pacific would be a \$14 billion business in 2001, up from \$68 million in 2000. Due to the huge opportunities and many potential benefits, a lot of businesses jump into the EC bandwagon.

According to Taylor Nelson Sofres Interactive (TNSi) 2001 reports, the Internet users had reached 40% of the population in Taiwan. Further, the below 20 years and 20~29 years are the largest percentage of age groups using the Internet. In the TNSi 2001 reports, the percentage of the Internet users in the below 20 years group is 77% and the percentage of the Internet users in the 20~29 years group is 73%. The results of TNSi 2001 report are the same as the 2000 findings done by the yam.com, a portal web site in Taiwan. About the online shopping in the TNSi 2001 reports, the percentage of Internet users who have bought goods or services online during the past month is 8%. Meanwhile, in Taiwan, 12% of all Internet users and 5% of all populations plan to shop online in the next six months. Therefore, there are many potential benefits in B2C EC in Taiwan.

EC has many potential benefits to organizations, individuals, and society. However, consumer online shopping revenues and related corporate profits are still meager (Hoffman et al., 1999). There are some interesting findings in the TNSi 2001 reports that main reasons for consumers not buying online are that they worry about the security problems and that they don't want to give credit card details. Other reasons for consumers not buying online are that they do not trust online brands and that e-business companies lack trustworthiness.

Turban et al. (2000) described that EC has the technical limitations and non-technical limitations. In other words, there are number of barriers in EC. Such factors as the lack of standard technologies for secure payment and the lack of profitable business models play important roles in the relative dearth of commercial activity by businesses and consumers on the Internet compared to what analysts expect in the near future (Hoffman et al., 1999). Because EC lacks security and reliability, many EC experts portray trust as a critical success factor in EC (Ratnasingham, 1998; Hoffman et al., 1999; Turban et al., 2000; Heen et al., 2000). Trust is the foundation of commerce. However, trust can be decreased by the user uncertainty regarding the use of technology, by the lack of initial face-to-face interactions, and by the lack of enthusiasm among the parties.

Past research has focused on the theoretical relationship generally based on trust and security. The purpose of this paper is to explore the other factors in the B2C EC in Taiwan. Morgan and Hunt (1994) proposed a KMV model, and they positioned the relationship commitment and trust as the key constructs. With these constructs, we attempt to explore the links between switching costs, customer skills, communication, relationship benefits, and propensity to leave. EC represents the future of commerce, with the Internet the most obvious driver. And, it is believed that by the end of 2003 most of the major EC companies will start to generate sizable profits. For this reason, the establishment of such links is important for the purpose of improving the customer retention and making long-term profits in B2C EC.

LITERATURE REVIEW

To examine the effects of factors of switching costs, customer skills, communication, and relationship benefits on the factor of propensity to leave through the key mediating variables of relationship commitment and trust, we develop and test the research model shown in Figure 1.

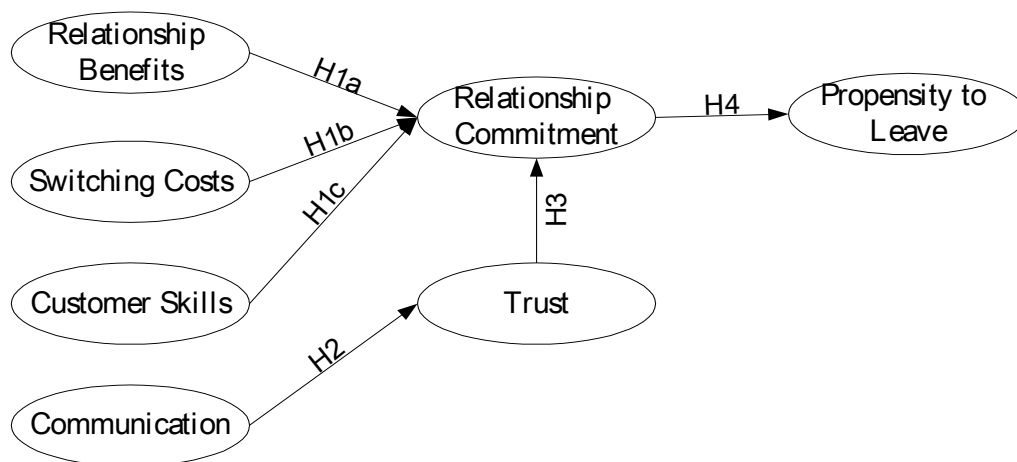


Figure 1: Research Model

The operational measures and definitions are explained below. Theoretical hypotheses are derived from the research model are depicted in the next section.

Trust: Trust is defined as “when one party has confidence in an exchange partner’s reliability and integrity” (Morgan and Hunt, 1994). Trust is a willingness to rely on an exchange partner in whom one has confidence (Moorman et al., 1993). Both definitions also highlight the importance of mutual confidence. The importance of trust is based on the potential use of the technology to increase information sharing. Trust increases the probability of a trading partner’s willingness to expand the amount of information sharing through EDI and explore new mutually beneficial arrangements (Hart and Saunders, 1997). As trust declines, people are increasingly unwilling to take risks and demand greater protections against the probability of betrayal. In electronic commerce, security and reliability refers to positive trust that is shown in the consistency and assurance between what a trading partner says and actually does (Hart and Saunders, 1997). Therefore, trust among the trading partners in electronic commerce reinforces the prospect of continuity in a relationship and a commitment.

Relationship commitment: Relationship commitment is defined as “an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it” (Morgan and Hunt, 1994). Commitment is seen as central because it not only leads to such important outcomes as decreased turnover (Porter et al., 1974), higher motivation (Farrell and Rusbult, 1981), and increased organizational citizenship behaviors (Williams and Anderson, 1991), but it also results from such things that can be influenced by the firm as recruiting and training practices (Caldwell et al., 1990), job equity (Williams and Hazer, 1986), and organizational support (Eisenberger et al., 1990).

Switching costs: An assumption in literature is that a terminated party will seek an alternative relationship and have “switching costs,” which lead to dependence (Heide and John, 1988; Jackson, 1985). Heide and John (1988) described that switching costs are exacerbated by idiosyncratic investments, that is, investments that are difficult to switch to another relationship. Also, Dwyer et al. (1987) proposed that the buyer’s anticipation of high switching costs gives rise to the buyer’s interest in maintaining a quality

relationship. As to the switching costs are actually very low in the Internet, the switching costs lead to an ongoing relationship being viewed as important and generating commitment to the relationship. Therefore, relationship commitment results when customers perceive the costs of terminating the relationship are high.

Customer skills: In a computer-mediated environment, individuals have the potential to control their interaction with the medium and the commercial Web site (Nel et al., 1999). Therefore, the person becomes absorbed in the activity, while increasing his awareness of his own mental processes (Csikzentmihalyi, 1975). In EC, companies offer information support and service, together with transaction facilities, to a worldwide customer audience and reap benefits from the global scope of the site (Quelch and Klein, 1996). This is to say, web site is one of the products in business. Hennig-Thurau (2000) proposed that customer skills are attributed to the company efforts of providing an easy access web site. The development of customer skills has a positive impact on the commitment which customer feels toward the company. It is important in successful commercial web site design that there is a joyful experience of the surfer during the interaction with the e-business site. Consequently, the more skills one acquires online, the less important are the functional barriers to the online shopping (Hoffman et al., 1999).

Communication: Communication can be defined as “the formal as well as informal sharing of meaningful and timely information between firms” (Anderson and Narus, 1990). Communication, especially timely communication, fosters trust by assisting in resolving disputes and aligning perceptions and expectations (Morgan and Hunt, 1994). New types of communication now available through the Internet offer a number of promising new possibilities for EC. But there are numerous empirical studies proving that customers make their particularly negative experiences the subject of personal communication in their social surroundings and Internet (Stauss, 2000). For this reason, communication is important to increase the trust and to boost customer relationship.

Relationship benefits: One of the benefits of doing business over the web is that it enables companies to better understand their customers’ needs and buying habits, which in turn enables them to improve and frequently customize their future marketing efforts. As Webster (1991) explains to industrial marketers, “the firm’s procurement strategy may be the most important ingredient in its ability to deliver superior value to its customers”. Also, Gale (1994) described that companies succeed by providing superior customer value. In the B2C EC, because partners that deliver superior benefits will be highly valued, customers will commit themselves to establishing, developing, and maintaining relationships with such partners (Morgan and Hunt, 1994). Therefore, it is important for customer retention that customers receive superior benefits from their partnership-relative to other options. For example on such dimensions as product price, service satisfaction, and product performance, will be committed to the relationship.

Propensity to leave: Propensity to leave is the perceived likelihood that a partner will terminate the relationship in the reasonably near future (Bluedorn, 1982). We posit that the strong negative relationship exists between organizational commitment and propensity to leave the organization (Mathieu and Zajac, 1990). The negative relationship also exists between commitment and propensity to leave the e-business company (Morgan and Hunt, 1994).

HYPOTHESES

The customer's evaluation of post-purchase phase and his or her satisfaction and commitment is mainly determined by the benefits, delivered by the product itself, especially in the consumer goods sector (Lohrum, 2000). In the virtual Internet world, therefore, the relative and absolute levels of benefits for customer will have influence on the customer's relationship commitment. Once the consumers have been drawn to the site and they have been engaged with suitably interactive and valuable content, the customers will produce switching costs with the web site (Kiani, 1998). This can take place by keeping the site "fresh" through continuously renewed content and providing content that is inherently changeable in an ongoing basis, such as real-time news and stock quotes. As to the switching costs are actually very low in the Internet, the switching costs lead to an ongoing relationship being viewed as important and generate commitment to the relationship. Control is facilitated by the medium adapting to feedback from the individual, and also by providing explicit choices among alternatives (Webster et al., 1993). The higher customer skills have, the higher control is. Thus, the following three hypotheses are proposed:

H1a: There is a positive relationship between relationship benefits and relationship commitment.

H1b: There is a positive relationship between switching costs and relationship commitment.

H1c: There is a positive relationship between customer skills and relationship commitment.

Internet communication occurs when customers spread their opinion about products, services and companies multi-directionally on their homepages, and when they communicate on these topics within an interactive newsgroup dialogue or e-mail. The Internet provides the real time communication with regard to the individual needs of a particular customer. Anderson and Narus (1990) found that the communication was positively related to trust from both the manufacturer's and distributor's perspectives. We believe that the communication factor will be positively related to trust factor in the B2C EC. Therefore, we propose the following hypothesis:

H2: There is a positive relationship between communication and trust.

Relationships characterized by trust are so highly valued that parties will desire to commit themselves to such relationships (Hrebiniak, 1974). And, Social exchange theory explains this casual relationship between commitment and trust through the principle of generalized reciprocity, which holds that "mistrust breeds mistrust and as such would also serve to decrease commitment in the relationship and shift the transaction to one of more direct short-term exchange" (McDonald, 1981). Thus, the following one hypothesis is proposed:

H3: There is a positive relationship between trust and relationship commitment.

A shaky relationship with customer is costly to business (Morgan and Hunt, 1994). Developing a new customer is even more costly than retaining a current customer. Therefore, we posit that customer retention can be achieved through fostering current relationship commitment. Hence, we propose the following hypothesis:

H4: There is a negative relationship between relationship commitment and propensity to leave.

RESEARCH METHODOLOGY

Questionnaires were written and registered on a commercial web site, which is specialized in online survey in Taiwan. We also posted the survey invitation on the BBS of university. Prizes such as digital cameras, DVD players, and gift cards were offered as rewards to attract the respondents. The respondents are required to have experience of online transaction to be able to participate in the survey. All the respondents were assured that their responses would be kept confidential. A total of 263 questionnaires were completed and returned. About 51 percent of the respondents were male. Over 66 percent of respondents were 20 year-old or above. In addition, the respondents had a high education background; more than 75 percent had Bachelor degrees. The complete demographics are listed in Table 1.

RESULTS AND DISCUSSION

The proposed research model suggests that relationship benefits, switching costs, customer skills and communication to the relationship commitment and trust, and trust to relationship commitment is positive and that there are positive relationship between relationship commitment and propensity to leave. The results show that relationship benefits, switching costs, and customer skills were significantly related to relationship commitment, supporting H1a, H1b, and H1c. The communication was significantly related to trust, supporting H2. Also, the trust was significantly related to relationship commitment and the relationship commitment was significantly related to propensity to leave, supporting H3 and H4. Thus, the results of this study confirm the literature findings.

New types of communication now available through the Internet offer a number of promising new possibilities for EC. As such, the content of Internet customer communication can take quite different forms. In general, customers articulate praise and complaints when they ask for help and assistance. However, customer praise is relatively rare. Complaints are often accompanied by a call to boycott the company or by suggestions of ways in which to put the company under pressure (Stauss, 2000). In this study, we find that there is a significantly positive relationship between communication and trust. A suitable communication for the customers will add the customer's trust, which will positively affect the relationship commitment, and will indirectly influence on the propensity to leave. Therefore, in order to avoid serious damage to existing and

Table 1: Demographic Data

Data	Category	Frequency	Percentage	Cumulative
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				Percentage
Gender	Female	129	49.0	49.0
	Male	134	51.0	100.0
Age	<=14 years/old	4	1.5	1.5
	15-19	17	6.5	8.0
	20-24	152	57.8	65.8
	25-29	72	27.4	93.2
	30-34	11	4.2	97.3
	35-44	6	2.3	99.6
	>=45	1	.4	100.0
Education	Junior High	4	1.5	1.5
	High School	3	1.1	2.7
	Junior College	23	8.7	11.4
	Bachelor Degree	169	64.3	75.7
	Graduate Degree	64	24.3	100.0
Disposable Income per month in New Taiwan dollar (1 US \$≈34.5 NT \$)	<=5000	50	19.0	19.0
	<=10000	100	38.0	57.0
	<=20000	51	19.4	76.4
	20001-30000	26	9.9	86.3
	30001-40000	21	8.0	94.3
	40001-50000	5	1.9	96.2
	50001-60000	6	2.3	98.5
	60001-70000	2	.8	99.2
	70001-80000	1	.4	99.6
>=80001	1	.4	100.0	
Experience of Using the	<=6 months	8	3.0	3.0
	6-12	13	4.9	8.0
	1-2 years	28	10.6	18.6

Internet	2-3 years	39	14.8	33.5
	3-4 years	53	20.2	53.6
Time Spent on the Internet	<=2 hours	8	3.0	3.0
	2-5 hours	32	12.2	15.2
	6-10 hours	54	20.5	35.7
	11-15 hours	32	12.2	47.9
	16-20 hours	23	8.7	56.7
	21-25 hours	26	9.9	66.5
	26-30 hours	16	6.1	72.6
	>=30	72	27.4	100.0
	Frequency of Online Shopping	Once in three months	159	60.5
Once in a month		76	28.9	89.4
Once in two weeks		18	6.8	96.2
Once in a week		3	1.1	97.3
2 to 5 times a week		3	1.1	98.5
More than once daily		4	1.5	100.0
Place of Online Shopping	Domestic	202	76.8	76.8
	Abroad	12	4.6	81.4
	Both	49	18.6	100.0

potential customer relationships, managers must monitor these communications carefully, analyze them and reply appropriately.

Moreover, consumers today want more control over their time. Technology enables consumers to get things done more quickly and when they want to. However, there is a key point in the design of web site. Berthon, et al. (1996) described that web sites, which facilitate high flow will be visited more regularly and for longer duration. Transaction sites should be easy to use, have user-friendly interfaces, and have the short and clear purchasing flows in the design and operation. A good web site design will smooth away the customers' limitations of technology, enhance the customer skills, and will add the commitment between customers and businesses. Thus, the managers must ensure that the stated objectives of a web presence are not thwarted by the design.

Relationship commitment is the key variable to avoid propensity to leave. To maximize the switching costs and the relationship benefits will enhance the relationship commitment. About relationship benefits, business can offer the products at the right price; justify customer services and promote the product performance to maximize the relationship benefits. In general, it is more costly to develop a new customer than to retain a customer. And finally, customers who have switching costs with the business develop higher level of relationship commitment. Therefore, business and manager must think highly the relationship benefits, switching costs, customer skills and communication in the B2C application.

CONCLUSION AND FUTURE RESEARCH DIRECTIONS

The research framework adopted in this paper is based on the prior approach of Morgan and Hunt (1994). The survey results from B2C consumers support the hypotheses stipulated in the framework. This study confirms that the research model is useful and robust in revealing and explaining relationship benefits, switching costs, customer skills, communication, relationship commitment and trust in response to customer's propensity to leave. In addition, relationship commitment and trust are the critical variables in affecting the propensity to leave.

According to the results of our study, relationship commitment is explained by direct effects of relationship benefits, switching costs, communication and trust. Through the relationship commitment, all the antecedents to the relationship commitment and trust will indirectly influence on the propensity to leave. We also find that trust has indirect effect on propensity to leave through relationship commitment. Therefore, relationship commitment is important in developing B2C EC marketing strategies. Marketing managers should consider the long-term commitment and mutual trust in their marketing strategic plan. IS managers can design a easy navigation systems with multiple communication medium such as online chat and prompt e-mail reply to build up customer trust.

Many collaborative efforts can be done by multiple departments along with the causal relationship paths in the framework. Finally, even much research is needed to identify other success and failure factors, we can begin to see relationship commitment and trust can be assessed, enhanced and utilized in the B2C EC. Though to improve customer retention and to reduce the propensity to leave are important, we still need to promote the products and services to attract more profitable transactions.

There are many issues for further research, both in investigating how to improve the relationship commitment and trust and in examining other outcomes of developing relationship commitment and trust. Our results show that the relationship commitment, switching costs, customer skills, and communication are the antecedents of relationship commitment and trust in the B2C application. A future study can possibly to explore other factors that may affect on the relationship commitment and trust, such as opportunistic behavior, product performance, and shared value.

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