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The Effectiveness of Customer Service Policies on Intentions in Business-To-Consumer E-Commerce: A Psychological Contract Perspective

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Abstract

This study examines the influence of customer service policies on consumer purchase intentions in business-to-consumer (B2C) electronic commerce. Prior research findings proposed that practitioners could utilize these policies to influence their customers' purchase intentions. Based on the psychological contract theory, this study conducted an experiment to examine whether customer service policies could influence consumers' intentions through their perceived psychological contract with the vendors.

The experiment found that a customer can form psychological contract beliefs with a vendor based on the vendor's customer service policies, and these psychological contract beliefs may influence purchase intentions through trusting beliefs. These research results should help web vendors realize the importance of customer service policies and improve their website design.

Keywords: psychological contract, trusting beliefs, purchase intentions, service policies and ecommerce.

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Introduction

The US Census Bureau estimated that online retail sales were about \$108.7 billion, and only accounted for 2.6 percent of total retail sales in 2006 (US Census Bureau, 2006). This amount is far less than business analysts had hoped B2C ecommerce would reach since its inception. Researchers attributed lack of trust as one reason for consumers' reluctance to purchase online (Hoffman, Novak and Peralta, 1999). Research results show that to increase a web vendor's trustworthiness, the web vendor needs to show its fulfillment abilities, its benevolence toward consumers and integrity in its actions (Bhattacharjee, 2002; Jarvenpaa, Tractinsky and Vitale, 2000; McKnight, Choudhury and Kacmar, 2002a, b).

Researchers suggested a web vendor can achieve this goal through carefully designed web site (Gefen, Karahanna and Straub, 2003). Suggested important design elements include customer service policies, third party certification seals, and advanced encryption technologies to relay trustworthiness to consumers (Pavlou, 2002; Pavlou and Gefen, 2002). The focus of this research is on customer service policies. There are several types of customer service policies: customer satisfaction policy, product return policies, privacy policy, and product shipping policy. The existence of these policies is suggested to be able to increase consumer trust on a web vendor. However, there is no specific empirical evidence, either from survey studies or from experiment studies, to show that these policies could actually contribute. This raises the questions that whether customer service policies can be useful in influencing consumer online behaviors and how these customer service policies are related to online consumer intentions.

This research proposes that the psychological contract theory can be used to analyze the effectiveness of customer service policies. The psychological contract theory proposes that psychological contract, perceived binding agreement between entities in a relationship, could significantly influence each entity's intentions and behaviors, particularly in the organizational context. Formal, written documents, such as existing policies, protocols, and actual contracts, are important sources of psychological contract. In B2C ecommerce, customer service policies are used to specify what kind of products and services can be expected from a particular web vendor. It might be possible that customer service policies may induce psychological contract beliefs and subsequently these psychological contract beliefs influence customer intentions. This investigation is particularly important to practitioners because they can easily design customer service policies into their

website design if the effect of customer service policies on consumer intentions is indeed valid. Otherwise, web vendors would be better off to invest their capital in other areas of their business.

The rest of the paper is organized as follows: first, current research results about psychological contract is reviewed, and a research model is proposed based on the psychological contract theory; second, results from the analysis of data gathered through a pilot experiment is presented; and, third, discussion, contributions and limitations of the research are presented.

Literature Review

Psychological contract is defined as “an individual’s belief in mutual obligations between that person and another party such as an employer (either a firm or another person)” (Rousseau and Tijoriwala, 1998). This belief is generally formed in an exchange relationship when one party makes a promise and another party accepts it. There are two types of psychological contract, transactional psychological contract and relational psychological contract. Transactional psychological contract is about people’s understandings about mutual obligations in a tangible contractual relationship. Relational psychological contract is about perceived reciprocal, mutual obligations generated based on intangible agreements “that cannot be carefully scripted, concrete, or formalizable” (Bunderson, 2001). In organizational context, contractual relationships may include actual documentation about performance requirements and evaluation, job security, training, compensation and promotion, and intangible agreements may include workplace verbal communications and organizational practices (Rousseau, 1989). Therefore, psychological contract focus on perceived, reciprocal mutual obligations between two parties and could exist without a formal contract (Robinson & Rousseau, 1994).

The foundation of psychological contract is mutuality, which means one party of the exchange relationship believes that there is a mutual understanding regarding each other’s responsibilities and obligations (Rousseau, 2001). This mutual understanding can be developed from three unique organizational sources (Rousseau, 1995). The first source is from a person’s colleagues, such as recruiters, teammates and supervisors. These colleagues may convey certain organizational norms, procedures and practices to the person either explicitly or implicitly. The second source is from the person’s daily observations of the workplace. These observations may form salient beliefs about an organization’s obligations. The third source is from an organization’s formal rules and regulations regarding employment, including various employment policies.

The research on psychological contract primarily focuses on employer-employee’s reciprocal relationships in an organization, especially in a psychological contract breach context. If an employee believes that the employer did not meet its obligations, the employee would consider it as a contract breach, and this contract breach could jeopardize the employment

relationship. Empirical results have shown that psychological contract is related to organizational citizenship behavior, such as advocacy participation, helping and functional participation (Coyle-Shapiro, 2002), job satisfaction (Cavanagh and Noe, 1999), mood (Conway and Briner, 2002) and trust (Robinson, 1996). Information system researchers begin to adopt psychological contract as a new perspective in examining reciprocal relationships in the IT industry, particularly in IT outsourcing and in online marketplaces. In IT outsourcing, perceived outsourcing success is significantly related to a supplier's perceived obligations, such as clear authority structures, effective human capital management, knowledge transfers and building effective interorganizational teams (Koh, Ang and Straub, 2004). In online marketplaces, Pavlou and Gefen (2005) found that a violation of psychological contract could reduce both a bidder's trust in the community of sellers and the bidder's transaction intentions. It remains to be seen whether the psychological contract perspective can be applied in the research context of business-to-consumer ecommerce.

In B2c ecommerce, web vendors frequently make promises in their customer service policies, such as "100% satisfaction guarantee," full refund, quality products, protection of privacy, and correct product information, etc. These promises are usually prominently displayed on their websites. Once aware of these promises, consumers may form beliefs that the web vendors will fulfill their explicit obligations specified in their own policies or implicit obligations which may be based on consumers' experience with other vendors and/or feedbacks from other customers. This research proposes that these beliefs constitute a psychological contract between a web vendor and a customer. In organizational research context, psychological contract could have positive influence on an employee's long term commitment to an organization. In B2C ecommerce context, a customer's psychological contract may have positive influence on the customer's intention to purchase from a web vendor.

Hypothesis 1: A customer could generate psychological contract with a web vendor based on the vendor's customer service policies.

Hypothesis 2: A customer's psychological contract will have a positive effect on the customer's trusting intentions toward a web vendor.

Trusting beliefs are defined as a truster's specific beliefs about a trustee's "competence (ability of the trustee to do what the truster needs), benevolence (trustee caring and motivation to act in the truster's interests), and integrity (trustee honesty and promise keeping)" (McKnight, Choudhury and Kacmar, 2002a, p. 337). These beliefs reflect the truster's salient, subjective assessments of the situation and the truster's interaction with the trustee (Ba and Pavlou, 2002). These assessments reflect a mutually beneficial relationship between the truster and the trustee. The essence of psychological contract is the reciprocal understanding of the obligation between two parties. When such an understanding is in place, it should have a

positive impact on a customer's beliefs that a web vendor would care about the wellbeing of its customers by fulfilling its promises. Therefore, the impact of psychological contract and trusting beliefs is hypothesized as below

Hypothesis 3: A customer's psychological contract will have a positive effect on the customer's trusting beliefs toward a web vendor.

Because of the ample empirical evidence for the direct relationship between behavioral intentions and trusting beliefs, it is not the focus of this research to reconfirm these relationships. However, the validation of a proven relationship could provide additional evidence of nomological validity for the model. Furthermore, the proposed research model emphasizes the significant, additional influence of psychological contract on intention beyond that of trusting beliefs. The validation of the positive relationship between trusting beliefs and behavioral intentions could provide the base to which the influence of psychological will be compared to show their unique and significant influence on behavioral intentions. Therefore, the impact of cognitive trust and cognitive risk on behavioral intentions is hypothesized as below:

Hypothesis 4: A customer's trusting beliefs will have a positive effect on the customer's trusting intentions toward a web vendor.

See Figure 1 for a graphical depiction of the proposed model and hypotheses.

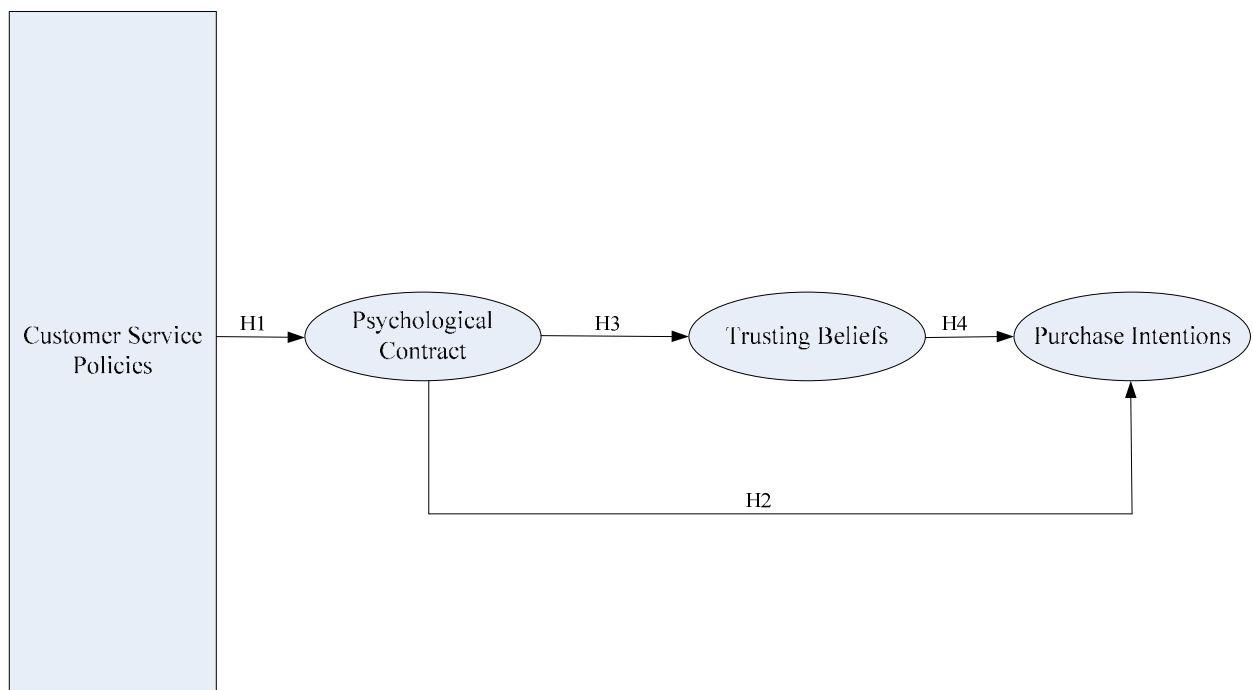


Figure 1 Proposed Research Model

Methodology

Much IS ecommerce research relies on survey data based on consumers' salient perceptions to evaluate the effectiveness of the website design features. Although this approach is effective in terms of revealing whether website design features are associated with people's behavioral dispositions, it could not provide causal evidence of whether these design features would indeed make the difference and by how much. As a result, practitioners are usually left with vague and less actionable suggestions, which would limit the contributions of these studies. Since previous research suggested potential influence for customer service policies, this research follows the SOR (stimuli-organism-response) framework, which implies a person's behavioral response is the direct result of the internal organism triggered by a set of stimuli, and would adopt an experiment approach to verify these suggestions.

A pilot experiment was setup for the purpose of this research. The experiment design is a between subject experiment. Experiment participants were randomly assigned to one experiment condition. Compared with the within subjects experimental design, between subjects design has several advantages. First, assigning subjects randomly into different experiment conditions can eliminate many internal validity threats (Cook and Campbell, 1979). Various solutions can be used to deal with internal validity threats which can't be eliminated by randomization. Second, there is less of a mental work load for participants. A within subject design could easily induce task related emotions and therefore, contaminate the experiment.

Product shipping and return policy were manipulated to elicit customers' psychological contracts with the web vendor. A fake online store selling digital cameras was set up for the experiment. The experiment task is to shop for a digital camera. The digital camera was chosen because of its growing popularity. The experiment website has a clear shipping policy, including information about shipping charges, backorders, packaging, carriers and a paragraph about the policy, and a lenient return policy (30 days return). The control website has a brief shipping policy, lacking the details in the experiment condition, and a strict return policy (7 days return). Both websites were designed similarly, such as headings, product descriptions, buttons and their positions, images (sizes and positions) and colors etc. The navigation structure of these websites would allow an experiment participant to search for a particular product through a search function or through product categories organized by resolution and band. The participants can then browse product information and then proceed to the check out page.

Experiment participants were undergraduate students enrolled in a southeast university. Using college students as participants is deemed appropriate because they are familiar with the online shopping environments (McKnight, Choudhury and Kacmar, 2002a, b). Upon arriving at a lab, each participant was randomly assigned to one of the two design conditions,

and was asked to log into the workstations after seated. All the workstations had the same hardware and software configurations, including computers, monitors, keyboards or mouse. Participants could complete the task at their own pace, and upon completion, were asked to complete an online questionnaire about their beliefs toward the web vendor and their purchase intentions. The experiment took about 30 minutes to finish, including the time to answer the survey questions.

The instruments for psychological contract and trust were chosen from existing literature and modified for this research. Psychological contract is measured by four items, they are: “this store will ship me the right product,” “this store will provide the best quality product to me,” “It is this store’s responsibility to protect its customers' best interests.” and “this store will treat its customer right.” These items are based on a customer’s expectation of a vendor’s obligations, and are in line with the items used in Dyne and Ang (1998) and Coyle-Shapiro (2002). Trusting beliefs were measure with six items, “this store provides good service,” “this store is honest,” “this store is predictable,” “this store cares about customers,” “this store is open and receptive to customer needs” and “overall, this store is trustworthy.” Purchase intention is measured with three items, “I would use my credit card to purchase from this store,” “I am very likely to provide this store with my personal information” and “I intend to purchase a digital camera from this web store.”

Results

A total of 69 subjects participated in the pilot experiment, with 62% men and 38% women. Most of the respondents were between 20 to 23 years old and familiar with the Internet and B2C ecommerce. Participants mostly used the Internet to purchase CDs, concert tickets, text books, and clothing from various online stores.

The manipulation check for this experiment is perceived control. Customers prefer personal control when they deal with self-service technologies (Lee and Allaway, 2002; Faranda, 2001). In B2C ecommerce, letting customers aware of a store’s policies about its products and services could be one way to make customer feel in control. Posting customer service policies makes the process transparent to customers who are eager to know how they will be treated, how their products will be shipped and what to do if something is wrong. All of these could reduce their current feelings of fear, worry or dread over what may happen in the future if they decide to purchase from an unknown web vendor. Table 1 shows the results of the manipulation check and indicates the manipulation is satisfactory.

Table 1 Results of Manipulation Check

Design Manipulations	Treatment Group	N	Mean	Mean Difference	Significance Level
Perceived Control	Experiment	35	5.30	0.53	*
	Control	34	4.77		

The first step in validating the structural assurance model is to examine the convergent and discriminant validity of the constructs. The validities were examined through the principle components analysis (PCA) (Hair, Anderson, Tatham and Black, 1998). Convergent validity can be established if there are no high cross loadings on unintended constructs. The results from PCA (Table 2) show that three factors with an eigenvalue greater than 1 were extracted, and these factors can explain 78% of the total variance. These three factors correspond well to the intended factor structure of structural assurance. Every item loads on its intended construct (>0.68) with no cross loadings greater than 0.50. The internal consistency reliability was assessed by calculating Cronbach's alphas. All of the constructs' Cronbach's alphas are greater than the 0.70 minimum threshold proposed by Nunnally (1978).

Table 2 Principal Component Factor Analysis Results

	Trusting Beliefs	Psychological Contract	Purchase Intentions
ptrust3	0.82		
ptrust4	0.76		
ptrust1	0.71		
ptrust5	0.71		
ptrust2	0.69		
ptrust6	0.68		
pcon3		0.80	
pcon1		0.73	
pcon4		0.70	
pcon2		0.68	
pi1			0.88
pi2			0.85
pi3			0.69
Eigen values	7.84	1.23	1.06
Cronbach Alphas	0.96	0.83	0.83

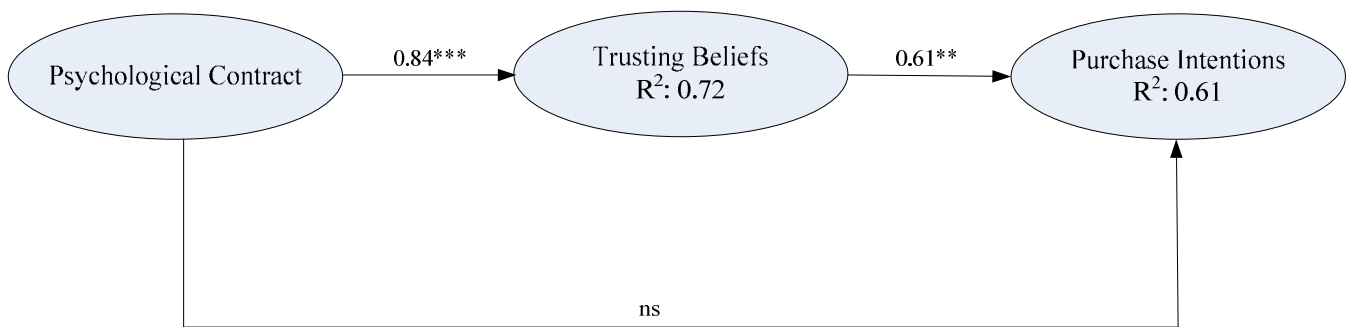
Table 3 shows the experiment results on psychological contract. The results indicate that the existence of customer service policy could induce psychological contract, therefore, hypothesis 1 is supported.

Table 3 Results on Psychological Contract

	Experiment Group	N	Mean	Std. Deviation	Std. Error	Mean difference	Significance Level
Psychological contract	Experiment	35	5.50	1.03	0.17	0.84	**
	Control	34	4.61	1.37	0.24		

The rest of the hypotheses is analyzed by using AMOS 6.0, a Structural Equation Modeling software package. The final analyze results are shown in Figure 2. Model fit statistics (discrepancy ratio, 1.05; AGFI, 0.84; CFI, 0.99; NFI, 0.94; RMSEA, 0.027) indicate that the model fits the data adequately. The value of RMSEA is below the recommended guidelines (0.08) for a good fit. Figure 2 shows that while psychological contract has significant relationship with trusting beliefs (hypothesis 3 supported), its influence on purchase intentions is completely mediated by trusting beliefs (hypothesis 4 is also supported but not hypothesis 2). The existence of psychological contract can explain 72% of the total variance of trusting beliefs, and 61% of the total variance of trusting intentions is explained by trusting beliefs. A competing model, using perceived usefulness and perceived ease of use along with trusting beliefs as predictors, was analyzed to examine whether a model with these two well researched constructs could fit the data better and explain more variance in purchase intentions than the proposed model. After some item trimming, the competing model showed worse fit (RMSEA, 0.075) than the proposed model and the results indicated that the influence of usefulness and ease of use on intentions were completely mediated by trusting beliefs. Perceived usefulness only explained about 21% of the variance in trusting beliefs, which is much less than psychological contract. Additional variance explained the competing model only increased by 0.013.

Figure 2 Results of the Proposed Research Model



Discussion and Contribution

This research adopted the psychological contract theory perspective to justify that psychological contract could exist in B2c ecommerce context and is significant in influence customers’ trusting beliefs. Additionally, this research used an

experiment to verify the positive correlation between commercial enterprise websites' privacy and security policies and consumers' online purchase intentions (Miyazaki and Fernandez, 2001). The success of e-commerce lies in how well web vendors can persuade customers to trust the vendors and subsequently make product purchases. The analysis of the pilot experiment shows that web vendors can influence consumers' trusting intention by carefully crafted customer service policies. However, many web vendors' business practices tend to concentrate on the aesthetic side of interface design, the efficiency of order processing and effective inventory management. Service policies often receive less attention because many customer service policies are either limited in content or just in standard form. This research shows customer service policies indeed play an important role in a customer's decision process. Customer service policies that are generic or limited in content may not be useful in building consumers' perception of web vendor quality (Liao and Cheung, 2001). Therefore, web vendors need to focus more on their customer service policies. These customized customer service policies should be easy to locate, enforceable and verifiable. Web vendors should abide by these guarantees they endorse; otherwise, a breach of trust could result and be detrimental to the web vendor's bottom line. Another contribution is that this study answers the calls to further examine the nature of consumer trust mechanism in the B2C ecommerce context through direct manipulations of a vendor's website attributes (McKnight, Choudhury and Kacmar, 2002a, b).

Limitation and Conclusion

The first limitation is that the analysis results are based on data collected from one pilot experiment. Additional data analysis is necessary to replicate the findings. The second limitation of the proposed research model is that this research does not investigate the effect of contingency constructs such as trust propensity or risk propensity. A closer examination of the moderating influence of these constructs could provide a richer understanding of psychological contract. The third limitation is that this research does not investigate the possibility that the other important intervening constructs might be omitted from the model. However, this might not be a significant issue given that over 60% of the variance of trusting intention can be explained by trusting beliefs and psychological contract.

This paper examined whether customer service policies would be effective in influencing customer intentions through an experiment and adopted the psychological contract theory to analyze the underlining psychological mechanism of customer service policies. The supporting results from this research could further our understanding of online consumer trust. Practitioners can also benefit from this study in terms of building customer trust through carefully designed customer service policies.

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