Customer Coproduction and Customer Citizenship Behavior in e-Commerce

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Abstract

As customers' participation in B2C e-commerce increases, customers are getting more involved in the delivery of services, which may even go beyond the completion of service transactions. To examine such proactive extra-role online customer behavior, we delve into organizational citizenship behavior framework, which has been recently extended to examine customer citizenship behavior (CCB) in the service market area. Although CCB is vital for online retailing success, MIS and e-commerce research efforts have generally focused on the customer's customer coproduction that are customer in-role behaviors. Moreover, although the effect of information created by anonymous strangers on other customers increase, interpersonal trust research have focused on only the relationship between a seller and a customer. Therefore, this study attempts to answer two research questions: What are motivational factors that affect CCB? How differently do the two kinds of interpersonal trusts (trust in online retailer and trust in customers) influence customers?

Keywords:

Customer Citizenship Behavior, Customer Coproduction, Extrinsic Motivation, Intrinsic Motivation, Perceived Usefulness, Perceived Playfulness

Introduction

As Internet technologies allow customers to be more involved in online transactions on e-commerce websites, online retailers are increasingly engaging their customers in the production and delivery of their services, which includes implementing online communities, actively soliciting customers' feedback and tracing deliveries online. Since it is apparent that retailers increasingly conceptualize customers as "partial employees" and human resources (Bowen & Schneider & Kim 2000) and view effective management of customers as strategic advantage (Lengnick-Hall 1996), customers' coproduction and voluntary behaviors have become interesting topics of research. With the emphasis shifted towards the customers' perspective to obtain online success, recent research shows that organizational citizenship behavior (OCB) framework has been extended to incorporate customers' citizenship behavior (CCB) [15].

OCB is commonly defined as discretionary behaviors that are not formally recognized by the organization's reward system but promote organizational effectiveness [27]. Early conceptualizations focus on behaviors that are directed at other workers or at the organization in general [30]. Recently, the conceptualization of OCB has expanded to include behaviors directed at customers but fell short of examining behaviors of customers who are actively participating in the organization's service delivery. This proactive customer behavior is termed CCB and is cited to important in effectively promoting an organization's products and services [37], improving service encounters that leads to enhanced satisfaction and service quality perceptions (Kelley & Skinner & Donnelly 1992,), and providing vital information about service delivery and innovation to other individuals [31].

However, MIS and e-commerce research has generally focused on investigating in-role behaviors such as intention to use, visit and purchase. Although in-role behavior is important to understand why customers use online websites, it is relatively unknown to researchers in B2C e-commerce why consumers intend to make CCB (which is proactive and considered as extra-role behavior).

The expansion of the consumer participation is changing people's behavior. People make decisions based on online information [14] and rely on other consumer opinions to make decisions [9]. The effect of the consumers, however, could be different depending on how much other users believe them. The researchers of e-commerce focus on interpersonal trust between online retailers and consumers. This study extends the interpersonal trust to the relationship between previous consumers and potential consumers.

Theoretical Background

Customer Coproduction and Customer Citizenship Behavior

Interest in organizational citizenship behaviors (OCB) has been triggered by empirical results that show a weak link between job performance and job satisfaction [19]. OCB enhances work group attractiveness and cohesiveness and subsequently decreases voluntary turnover [13] and increases organization's effectiveness [e.g., 29]. Researchers have found that OCB is strongly related to job satisfaction since it can be dispensed at the free-will of

employees [e.g., 28], which is unlike other in-role behaviors. With the stronger realization of the role of customers for organizational success, the conceptualizations of OCB and OCB measures have shifted from behaviors directed at other coworkers or at the organization in general to behaviors directed at customers [34].

As service firms view consumers as potential partners in service delivery, researchers have developed a better understanding of how firms can motivate their customers as partners in service delivery [21. Groth [15] clearly differentiated in-role and extra-role customer behavior in service delivery. Customers who participate in service delivery engage in behaviors that are typically viewed as in-role behaviors. Their participation determines the success of the service outcome (i.e. providing personal details and following instructions to complete the transaction). On the other hand, there are other voluntary extra-role behaviors (CCB) that go beyond the expectations of customers with a particular service context. This can be in the form of recommending friends to use the service or actively participating in the online forum, which is not required for the successful completion of service transactions. When customers perform proactive, voluntary and discretionary extra-role behaviors towards the organization and its customers, they are termed to be engaging in CCB.

Although these CCBs are vital to the success of online retailing websites, much e-commerce and MIS research has focused on passive in-role behaviors such as intention to use and intention to purchase [7]. This study is an attempt to modify Groth [15] study by examining intrinsic/extrinsic motivates and interpersonal trust in online retailing context. Customer coproduction in online retailing is in-role behavior including visiting the website, finding adequate information to make a decision, and providing personal information etc.

TAM

\ website is in essence an information technology and an illumination of the technology perspective in explaining why people adopt technology is necessary. As such, CCB in the online retailing context should be explained in part by the technology acceptance model. The technology acceptance model [7] is an adaptation of the theory of reasoned action which specifies two beliefs, perceived usefulness and perceived ease of use as determinants of attitude towards usage intentions and IT usage. The technology acceptance model (TAM) has been shown to be a parsimonious yet robust model of technology acceptance behaviors. It has been validated in a wide variety of IT [12], across levels of expertise [33] and across countries [e.g. 32]. Perceived ease of use is the degree to which the user believes the target system to be free of effort [8]. Perceived usefulness is the user's subjective probability that using a system will increase his or her performance [8]. The perceived usefulness is an extrinsic source of motivation which is perceived to help achieve valued outcomes that are distinct from the activity itself, such as improving job performance.

Although TAM has yielded many competing models and factors, perceived usefulness is the single dominant motivational force which has consistently explained the largest variance in behavioral intention to accept the wide range of ICT such as email, voice mail, text editors, computing resource center and even e-commerce websites [12]. The construct of perceived usefulness (the extent to which an individual believes would enhance his or her job performance) in the TAM has its roots in the cost-benefit paradigm from the utilitarian tradition of economics and behavioral decision theory. Such subjective utility frameworks suggest that users will weigh anticipated costs against anticipated benefits when deciding to engage in human action. The cost-benefit paradigm is taken from the classical utilitarian tradition of economics which advocates that users are rational, self-interested and always seeking to maximize utility [4]. Behavioral decision theory also suggests that if the costs exceed the benefits in a person's motive and choice criteria, it can affect the user's decision to engage in the associated economic and social actions. In B2C context, the perceived usefulness is the degree of which a person believes that using this website would enhance his/her coproduction and CCB.

Flow Theory

As CCB is a proactive and voluntary behavior, we would also expect it to be explained by intrinsic motivation, which refers to the perceptions of pleasure and satisfaction from performing the behavior, which is not reflected in TAM. Playfulness is an intrinsic motive, which is shaped from the individual's experiences with the environment [25]. The majority of the research on playfulness as the individual's interaction state is based on the Csikzentimihalyis's flow theory [6]. Flow is the term used to describe the "holistic sensation that people feel when they are acting with total involvement" and is a result of interactions between individuals and the environment [6]. According to flow theory, flow can occur when an activity challenges an individual enough to encourage playfulness and exploratory behaviors, without the activity being beyond the individual's reach [5]. According to Webster et al [35], flow is associated with technology use behaviors such as experimentation and voluntary use. Moreover, when in the flow state, an individual may have more voluntary interaction with his or her environment [25]. Therefore, customers who have more positive playfulness belief in online retailing should view its coproduction more positively than those who interact less playfully. Although individuals may not expect CCB to necessarily prompt high levels of fun, playfulness is still expected to influence CCB since the construct playfulness also involves exploration, discovery and challenge. Internet-based consumer behavior has addressed primarily the flow aspects of the online shopping experience to build customer loyalty, which subsequently enhances voluntary behaviors such as CCB [1].

Trust

Internet users perceive significant risks and uncertainties in transacting with an unknown seller via an internet web site [18]. Recent studies show that trust is essential for the success of e-commerce activities [18] and trust in the vendor is central to e-commerce [11]. Trust is important because it helps consumers overcome perceptions of uncertainty and risk and engage in trust-related behaviors with online retailers such as coproduction and CCB [24]. Trusting beliefs means the confident truster perception that the trustee (in this context, a specific online retailer) has attributes that are beneficial to the truster. According to [23, 24] propose interdisciplinary conceptual typology about trust in e-commerce. They investigate the various definitions of trust and categorized it into four second-order categories of competence, benevolence, integrity, and predictability. Among them, competence, benevolence, and integrity appear to be most frequently used. This study adopts the concept of trust as an individual's belief concerning the extent to which a target is likely to behave in these ways.

In previous models interpersonal trust have focused on the relationship between vendors/sellers and consumers. With the exponential growth of e-commerce, however, consumers create a huge amount of information, which influences other consumers [9; 14]. Recent evidences suggest that consumer reviews have become very important for consumer behavior such as purchase decisions.

Previous researchers, however, point out that the customers are anonymous posters and strangers, so there is possibility of sellers to write the information [22]. Sometimes, the seller (e.g., csource.com, half.com) license consumer reviews form intermediaries such as Epinions.com and decide when to post them on its website .Consumers could think that sellers may engage in management of the information. Although these points come out, trust in customer has not been treated in studies.

According to social exchange theory, people form exchange relationships on the basis of trust. In the interpersonal exchange perspective between a previous customer and a potential customer, CCB could be information sharing activity. Therefore, a customer who believes other customers in the website makes more CCB than a customer who does not believe them. In the interpersonal relationship perspective between online retailer and CCB, a customer who believes an online retailer makes voluntary behaviors such as CCB for the retailer than a customer who does not.

RESEARCH MODEL AND HYPOTHESIS

As online retailers are interested to find out the motivators of CCB, the dependent variable is the intention of performing CCB, which is defined as the subjective probability that the customer would engage in providing feedback, recommendations and help customers [7]. The conceptual model proposes that CCB is influenced by intrinsic motivation and extrinsic motivators: perceived

usefulness and perceived playfulness. Figure 1 shows the conceptual model as well as the propositions of this study.
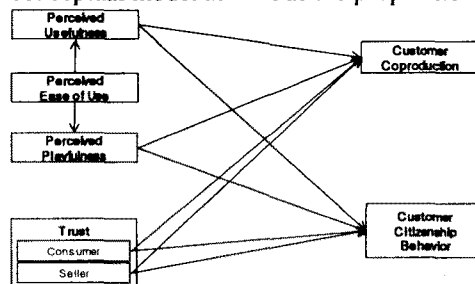

Figure 1 - Proposed Research Model

Perceived Usefulness

According to social exchange theory [2], social phenomena are conceived as sets or joint outcomes of voluntary individual actions induced by rewards and benefits, such as perceived usefulness. Previous research presents empirical evidence for the influence of extrinsic benefits to affect voluntary behavior. Social exchange theory [2] advocates that individuals desire equitable and fair exchanges. If a consumer perceives that the website is useful and feels that he or she has received a higher output/input ratio than the online retailer, then helping the online retailer by voluntary behaviors such as CCB is one way the output/input ratio can be equalized [17]. This extrinsic motivation would then influence customers to behave voluntarily such as to recommend the retailer's website, help other people to use the retailer's website through the online forum, and provide feedback to the website. Perceived usefulness is salient belief that is formed from the individual's subject online experience with the website and defined as the customer's subjective probability that using the retailer's website will increase his or her performance as a shopper [8]. Based on TAM [7; 8], when the website is perceived to be easy to use, its usefulness increases. Therefore, we hypothesize:

Hypothesis 1: Perceived usefulness of the retailer's website is positively related to CCB.

Hypothesis 2: Perceived ease of use is positively related to perceived usefulness.

Perceived Playfulness

When engaging in CCB, customers not only purchase products but also perform proactive behaviors such as sharing information to other customers through online reviews, which is more tedious and thus requires intrinsic motivation. When customers perceived that shopping and staying in the website is playful, they will stay on the website for a longer period of time [35] and loyalty towards the website will increase. When in the playful state, attention is focused on an involving activity. The customer can become absorbed and focused in navigating on the website and sharing their purchasing experience and related information to other users of the website. This is in line with Moon and Kim [25] who suggests that individuals who perceive using the website to be playful may perform more voluntary interactions with his or her environment [25]. Therefore, under high levels of playfulness, customers

would be more likely to perform CCB [1]. Moon and Kim [25] also reasoned that a website which is easy to use is more likely to stimulate playfulness.

Hypothesis 3: Perceived playfulness is positively related to CCB.

Hypothesis 4: Perceived ease of use is positively related to perceived playfulness.

Trust

While CCB is perceived as voluntary behavior for the company, CCB is perceived as social exchanges between consumers. In the website, a lot of exchanges happen among consumers in various types. For example, online reviews and 'help others find this it' make indirect exchanges while 'comments' of consumer reviews, discussion board, and email exchanges could make direct exchanges. These activities are all citizenship behavior which related to helping other customers to make decisions, giving feedbacks, and making recommendations. Trust provides the basis for these exchanges.

Hypothesis 5: Trust in customers is positively related to CCB.

The belief of vendor is central to e-commerce [11] because of the absence of any practical guarantee that the e-vendors will not engage in undesirable opportunistic behaviors , such as unfair pricing, violations of privacy, conveying inaccurate information, unauthorized tracking of transactions, and unauthorized use of credit card information, to mention a few. Previous studies have shown the relationship between belief of vendor and intention to use [11].

Hypothesis 6: Trust in online retailer is positively related to customer coproduction.

Trust characterizes confidence and beliefs about their exchange partners [36]. According to OCR literature, employee's manager largely represents the organization to employee [20]. If an employee has strong beliefs about the manager, his/her trust ensures that voluntary behaviors like OCBs will be reciprocated in the long run [e.g., 36]. In the view point of a partial employee, trust in online website will encourage customers to exhibit more discretionary and voluntary behaviors such as CCB.

Hypothesis 7: Trust in online retailer is positively related to CCB.

Purchase is an exchange between an online retailer and a customer. So, trust in seller will give direct impact while trust in customer will not. If he/she does not trust the seller, then they will not buy any product. If he/she does not trust the customer, the impact of other customers' experiences and recommendations could be reduces. Thus, purchase decision will depend on the exchange partner (the seller) more than on other customers.

Hypothesis 8: Trust in online retailer is more positively related to customer coproduction than trust in customer.

RESEACH METHODOLOGY AND ANALYSIS

Measurement Development and Data Collection

Measurement items were adapted from various sources literature. Items were used to measure perceived usefulness and perceived ease of use was adapted from Davis [7]. Items for trust in seller and trust in customer were adapted from McKnight et al. [24]. Customer coproduction and CCB were assessed with a modified measure developed by [15]. The unit of analysis in this study is the individual user of online shop. The population of interest is individuals who use it for their purchases. The sample consisted of 167. Seventy five percent of the respondents were male. All of the subjects have experienced online shopping and the mean of online purchasing frequency is 3.38 times per year.

Measurement Assessments

Three types of validity were used to validate our measurement model: content validity, convergent validity, and discriminant validity. Content validity deals with how consistent the measurement items are with the extant literature. It is assessed by examining the process by which scale items are generated. The definitions of all constructs were proposed based on the review of theory and research in IS, Organization, and other disciplines. The convergent validity was examined by composite reliability and average variance extracted from the measures [16]. Our composite reliability values range from 0.839 to 0.952 (Table 1). The values were above the conventional level of 0.7 [3]. Average variances extracted by our measures range from 0.603 to 0.869 (Table 1), which are above the acceptability value, 0.5 [10].

Table 1. Confirmatory factor analysis

Measures	Items	Compositie Reliability	Average Variance Extracted
Perceived Usefulness(PU)	4	0.923	0.750
Perceived Playfulnessfulness (PP)	3	0.942	0.845
Perceived Easy of Use (PEU)	3	0.952	0.869
Trust in Seller (TS)	5	0.886	0.610
Trust in Customer (TC)	3	0.839	0.636
Customer coproduction(CC)	5	0.894	0.631
Customer Citizenship Behavior(CCB)	6	0.901	0.603

Finally, the discriminant validity of our instrument by looking at the square root of the average variance extracted as recommended by [1]. The square root of the average variance extracted for each construct was greater than the levels of correlations involving the construct (Table 2).

Table 2. Correlation between Constructs

	PU	PP	PEU	TS	TC	CC	CCB
PU	0.87						
PP	0.50	0.92					
PEU	0.71	0.40	0.93				
TS	0.26	0.16	0.34	0.78			
TC	0.46	0.38	0.39	0.30	0.80		
CC	0.69	0.47	0.53	0.48	0.38	0.79	
CCB	0.53	0.45	0.26	0.31	0.59	0.49	0.78

Results

The proposed hypotheses were tested with PLS [3]. The results of the analysis are depicted in Figure 2. Hypotheses 1, 2, 4, and 6 were supported.
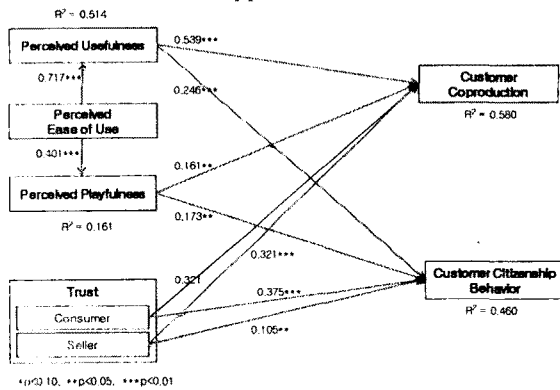

Figure2 – Results of Proposed Research Model

Perceived usefulness of the retailer's website and perceived playfulness are positively related to CCB (H1, H3). H2 and H4 are supported as they have been in many previous studies.

Trust in customers and trust in online retailer are positively related to CCB (H5, H6). The significant relationship between trust in customers and CCB is much stronger between trust in seller and CCB. Trust in customers does not influence customer coproduction significantly however trust in online retailer influence customer coproduction (H7). Therefore, it shows that trust in online retailer is more positively related to customer coproduction than trust in customer (H8).

DISCUSSION, IMPLICATIONS AND FUTURE DIRECTIONS

Results in this study shows that intrinsic/extrinsic motives have positive relationship with customer coproduction and CCB. Trust in retailer influences CCB and trust in customers is also important antecedent of CCB. Extrinsic motive (perceived playfulness) is more important to customer coproduction and CCB than intrinsic motive (perceived playfulness). Trust in customers is more important to CCB than trust in online retailer.

This research has delved into OCB and CCB literature to investigate extra-role CCB behaviors of online retailers' customers. Having elucidated the proactive nature of CCB behavior, this study has argued that extrinsic and intrinsic motivation is vital for customers to engage in CCB behavior. Empirical validation of the model can yield insight whether perceived usefulness or perceived playfulness is stronger in influencing CCB. Examining the motivators of CCB behavior is beneficial for online retailers as customers can be effective promoters of the retailers' websites by voluntarily contributing of their own experience and knowledge to other customers.

Although CCB could be important in MIS and e-commerce, current research has focused on in-role behaviors (e.g., use, visit and purchase). This study could extend the domain of B2C customers' behaviors from in-role behaviors to also include extra-role behaviors. On the other hand, in the service marketing literature, the technical factors such as perceived usefulness literatures are lacking. This study can address the limitations of these research areas. Moreover, this study could extend the interpersonal perspective from the relationship between an online retailer and a customer to the relationship between customers and a customer.

Based on our findings, as customers' power increase in e-commerce, trust in customer is also expected more important. What kinds of antecedents could influence trust in customers could be an interesting topic in future research.

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