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AN EXPLORATORY STUDY OF BEFORE-INTERACTION TRUST TRANSFERENCE IN MULTICHANNEL RETAILERS

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Abstract
An increasing number of conventional retailers are acquiring e-commerce capabilities in addition to their physical outlets to compete with purely online retailers. It is thus of interest to retailers how trust is transferred from the offline channel to the online channel. This study adopts the social capital theory to examine the factors that influence online trust in multichannel retailers at the before-interaction stage. We survey 247 actual customers of a supermarket who have not interacted with the supermarket’s Web site. This paper posits that online trust is affected by offline trust, perceived online reputation of the retailer in providing products online, and perceived assurance. Surprisingly, customers are found to be more influenced by their perceptions of the retailer’s online reputation in providing products online than their offline trust in the retailer before they interact with the retailer’s Web site. Perceived assurance is found to play a peripheral role in determining online trust.

Keywords: Trust transference, social relations and networks, offline trust, online trust

Introduction
The notions that the Internet would make distance irrelevant and that retailers would no longer need to establish a physical presence in a geographical location to do business have been consigned to the past (Otto and Chung 2000). With the dotcom crash, retailers are recognizing that success in the “new economy” requires strategies that bridge physical and online channels (Gulati and Garino 2000). The combination of these channels affords a variety of potential synergies that can benefit a firm’s customers and enhance the firm’s overall sales. Indeed, brick-and-mortar companies that have implemented e-commerce capabilities are striving to leverage their existing advantages such as consumers’ trust in their services at their physical stores. However, as we have seen in many cases such as Barnes & Noble, consumers’ offline trust does not directly and easily transfer to online trust in the first place, although trust is consistently viewed as a critical success factor in e-commerce (Torkzadeh and Dhillon 2002). Therefore, we seek to examine the factors that affect the formation of online trust in the context of multichannel retailers who maintain both an offline presence and an online presence. In particular, we explore two specific research questions.

1. What are the critical factors in the formation of consumers’ online trust in a multichannel retailer before they have any interaction with it online?
2. To what extent does offline trust affect online trust for customers who have not interacted with the retailer’s Web site?

To address these questions, we have conducted an extensive literature review on trust research in Information Systems and other disciplines, and adopted the social capital theory as the theoretical basis of our study. We focus on online trust at the before-interaction stage to focus on the trust that customers may have developed of a retailer before having any direct online interaction with it.
The contributions of the study are three-fold. First, this study provides new insights in online trust by examining the transference of trust in the context of multichannel retailers, an area that has not received sufficient attention (Xu et al. 2004). Many previous studies have identified various antecedents of trust mainly in the context of purely online retailers (e.g., Koufaris and Hampton-Sosa 2004). Stewart (2003) found that transference of trust occurs when a picture of the retailer’s offline presence with the address is shown at the Web site. However, this study failed to examine the direct transference between offline trust and online trust. Second, our study enhances the research on trust by examining trust from the social capital theory as this perspective has often been neglected even though social relations and networks are crucial to trust formation (Granovetter 1985). Third, the findings of this study at the before-interaction stage could help multichannel retailers learn how to encourage existing customers of their offline physical stores to start purchasing online.

The remainder of the paper is organized as follows. The next section reviews the relevant trust literature. The theoretical perspective is then discussed. The subsequent section presents the research model and the hypotheses. The research methodologies used in this study are introduced, and the results of the data analysis reported. The last section discusses the implications for practice and research, offers some directions for future research, and presents the concluding remarks.

Literature Review

Although trust has been defined and operationalized in numerous ways in many disciplines (e.g., Bhattacherjee 2002; Doney and Cannon 1997; Mayer et al. 1995; Pennington et al. 2004), there is no unified definition. In this paper, we adopt McKnight et al.’s (2002) definition that trust is the truster’s perceptions about the trustee’s attributes of integrity, benevolence, and competence because the definition articulates the cognitive basis on which people build their trust at the before-interaction stage.

While extensive research has been done on trust (see Table 1), our literature review shows two areas in online trust research that may be lacking: effort in examining how online trust is formed in the context of multichannel retailers, and how trust is developed through different interaction stages.

Context of Trust

The table adapted from Komiak and Benbasat’s (2004) study provides a systematic way to classify the previous studies on trust. As evident from the references in Table 1, which also concurs with Xu et al. (2004), most research on trust in e-commerce has

<table>
<thead>
<tr>
<th>Entities</th>
<th>Before-Interaction</th>
<th>Initial-Interaction</th>
<th>Repeated-Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multichannel Retailers</td>
<td>Stewart 2003; Xu et al. 2004</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
been conducted in the context of purely online retailers. Consequently, with the overemphasis on purely online retailers, how multichannel retailers leverage trust for their virtual presence has been overlooked. What is known, however, is that multichannel retailers work by exploiting synergies between the available physical and virtual channels to provide better service to customers (Gulati and Garino 2000), and multichannel retailers need to obtain online-offline synergy and transference of trust from the offline channel to the online one (Stewart 2003).

Previous studies (e.g., Stewart 2003) have argued that trust transference for e-commerce Web sites can occur through the offline context and trusted Web sites. To induce the transfer of trust from the offline context, the retailer’s offline presence at a certain geographical location can be a property that increases online trust. Taking this observation a step further, findings show that pictures of a retailer’s physical presence together with its address enhance online trust (Stewart 2003). However, it is not clear whether customers regard the pictures as just another online artifact which assures safe transaction similar to a third party’s seal or they actually transferred their trust in the offline stores of a retailer to the online Web site of the same retailer. In other words, it is left unexplored whether customers’ offline trust from their actual interaction with the physical store of the retailer transfers to their online trust in the Web site of the same retailer and if so, to what extent. We seek to bridge this gap in the existing research.

**Interaction Dimension of Trust**

Trust is developed through interactions (Bigley and Pearce 1998), which can be examined at three stages: before-interaction, initial-interaction, and repeated-interaction (Komiak and Benbasat 2004). Before-interaction trust refers to the trust developed before the truster has any interaction with the trustee (Bigley and Pearce 1998). Initial-interaction trust refers to the trust developed when the truster interacts with the trustee for the first time (McKnight et al. 2002), while repeated-interaction trust refers to the trust developed through multiple interactions with the trustee (Bigley and Pearce 1998). Studies on before-interaction trust in the context of purely online retailers have emphasized the importance of perceived reputation (Ba and Pavlou 2002) and control mechanisms (Tan and Thoen 2002) such as third party seals to build trust to engage in a transaction. As for research on initial-interaction trust, studies examining the context of purely online retailers have generally found online trust to be influenced by information obtained during the first interaction with the retailer, perceived reputation, size, and system trust. For repeated-interaction trust, the factors encouraging further online experience with a retailer are familiarity (Gefen 2000) and satisfaction with past outcomes (Walczuch and Lundgren 2004).

Although there is a study indicating that trust transference takes place at the initial-interaction stage (Stewart 2003), there has been no study to investigate trust transference at the before-interaction stage as well as throughout the three interaction stages. As a step toward addressing this limitation, we focus on trust transference at the before-interaction stage in the context of multichannel retailers in this study.

**Theoretical Perspective**

Since our focus is on consumer trust at the before-interaction stage, the customers we survey obviously have not had prior online interactions with the retailer, and our topic of interest clearly becomes the sources of consumers’ online trust in a multichannel retailer. Since trust is known to be embedded in the social relations of customers, it would be largely affected by the customers’ social relations and networks (Granovetter 1985) at this stage. To the best of our knowledge, however, the existing trust research has neglected the influence that relations within a consumer network and relations between consumers and a retailer may have on online trust. Drawing on the social capital theory (Coleman 1988) and aligning it with the concepts in Yamagishi and Yamagishi’s (1994) paper, we attempt to derive the antecedents of online trust and further understand the relationship between offline trust and online trust.

**Interpersonal Trust**

Researchers have distinguished between two types of trust: interpersonal trust and assurance (Yamagishi and Yamagishi 1994). Interpersonal trust is based on the inference of the trustee’s traits (i.e., competence, benevolence, and integrity), and rests on the information obtained from direct relations with the trustee or from relations with other people regarding the behavior of the trustee. In the context of a multichannel retailer, customers who have not interacted with the Web site can be largely influenced by the information provided by their social networks. Social capital theory illustrates the importance of information channels in the
social relations of customers. This theory states that informal channels of communication are the primary means of disseminating market information when the services are difficult to evaluate (Coleman 1988). Transference can be a means by which trust in an entity can be established via a trusted source before one has any interaction with the entity (Doney and Cannon 1997). Information from a trusted source can help influence a customer’s trust in the online presence of a multichannel retailer as he could then infer the traits and intentions of the retailer’s online presence.

One’s social network also includes one’s relation with retailers. In making offline purchases from a retailer over time, a direct relationship with the retailer is developed. However, since customers in the before-interaction stage have no direct information on a retailer’s Web-mediated commerce, their offline experience with the retailer would be another channel of information. If customers trust the offline presence, it is highly likely that they would trust the online presence as well.

**Assurance**

Assurance is defined by Yamagishi and Yamagishi as an expectation of benign behavior for reasons other than the goodwill of the trustee. This is based on the knowledge of the incentive and deterrence structure surrounding the relationship. Their concept of assurance is very similar to Doney and Cannon’s (1997) calculative process of forming trust, Lewicki and Bunker’s (1995) calculus-based trust, and Shapiro et al.’s (1992) deterrence-based trust. In these studies, the researchers argue that trust exists because the truster knows that the trustee fears the consequences of untrustworthy behavior. Social capital theory also iterates the importance of effective sanctions for actors to achieve their goals (i.e., perform successful e-commerce transactions). With sanctions in place, customers believe that multichannel retailers are constrained to behave in a trustworthy manner even amid the uncertainty inherent in online transactions, and as such, their online trust increases.

**Model and Hypotheses**

Based on the theory, we have constructed our research model and developed our hypotheses as shown in Figure 1. The dependent variable of interest to multichannel retailers is the intention of purchase, which is defined as the likelihood that a customer will purchase from an e-commerce Web site (Fishbein and Ajzen 1975).

**Online Trust and Purchase Intention**

As trust has been previously defined as the truster’s perception that the trustee possesses characteristics that would benefit the truster (Mayer et al. 1995), we define online trust as the customer’s belief of the competence, benevolence, and integrity of the multichannel retailer’s Web site (McKnight et al. 2002). Online trust positively affects intention to purchase because the customer believes that the vendor is able (because of competence) and willing (due to benevolence and integrity) to deliver the products purchased. As such, if customers place their trust on the retailer online, they rule out possible but unfavorable online actions of the retailer (Luhmann 1979), leading to higher online purchase intention. Hence, we hypothesize

**H1**: Online trust is positively related to online purchase intention.

**Perceived Online Reputation of Retailer in Social Network**

Customers who have not interacted with a multichannel retailer through its Web site would largely rely on the indirect information existing in their social networks. Reputation is imperfect and indirect information about a potential partner’s traits (Yamagishi and Yamagishi 1994), and is not as reliable as the concrete knowledge accumulated from a history of direct interactions with a partner. However, having access to reputation is better than having no information at all (Granovetter 1985). This information can form a basis for customers to infer the traits and intentions of a multichannel retailer’s online presence.

Perceived online reputation of a multichannel retailer within a customer’s social network is the favorability of the indirect information regarding online purchasing from the retailer obtained through the customer’s social relations and network (adapted from Yamagishi and Yamagishi 1994). Customers would normally seek more specific information if it is available, and would prefer to obtain such indirect information from their social relations and networks rather than rely on brand image, which is more general (Granovetter 1985). Perceived online reputation encapsulates the influence of positive referrals, defined as the extent to
which people in the customer’s social network provide positive information about purchasing online from the retailer, and negative referrals, defined as the extent to which people in the customer’s social network provide negative information about purchasing online from the retailer (Richins 1984). How information in social relations can affect trust can be explained using attribution theory (Kelley 1967). One’s trust may be affected by what someone else has mentioned about the online presence of the multichannel retailer. Positive or negative attributions can form, depending on the information being disseminated. These attributions would subsequently affect online trust toward the retailer. Hence, we hypothesize

**H2:** Perceived online reputation of a retailer within a customer’s social network is positively related to online trust.

**Perceived Assurance**

We define perceived assurance as expectation of benign behavior from the multichannel retailer based on the sanctions available to customers to impose on the retailer (Shapiro et al. 1992). Besides the reputation effects from customers’ social relations and networks, knowledge of certain existing measures available to a customer to punish the multichannel retailer may also serve to form online trust toward the retailer (Yamagishi and Yamagishi 1994). Empirical studies have shown how customers impose sanctions on companies that violate their goals and values (i.e., Singh 1988). When customers know they can impose sanctions on the retailer, they believe that the retailer fears the consequences of being untrustworthy and would be constrained to behave in a trustworthy way. There are three kinds of sanctions applicable for multichannel retailers: indirect, online direct, and cross-channel. These sanctions can occur through customers’ direct relations with the retailer or through their social relations and networks. Indirect sanctions refer to private measures (when customers speak to social contacts about bad experiences or decide not to purchase online again from the retailer). Online direct sanctions are online measures that customers may use to contact the retailer directly to seek redress for disappointing purchases (i.e., e-mailing the retailer’s Web site or posting bad feedback at the Web site). Cross-channel sanctions, which are unique to multichannel retailers, allow customers to go to the retailer’s physical stores to seek resolution of problems with their online purchases. As such, perceived assurance is based on the effectiveness of indirect sanctions, online direct sanctions, and cross-channel sanctions. If the level of perceived assurance is high, consumers would have greater online trust in the retailer (Lewicki and Bunker 1995). We hypothesize,

**H3:** Perceived assurance is positively related to online trust.
Offline Trust, Online Trust, and Internet Purchasing Experience

Offline trust is defined as the customer’s belief of the competence, benevolence, and integrity of the multichannel retailer’s physical stores (McKnight et al. 2002). Balance theory (Heider 1958) suggests that if a customer has high levels of trust in the physical stores, he is also likely to have a high level of trust in the retailer’s Web site. We hypothesize

H4: Offline trust is positively related to online trust.

One factor which may influence this transference is customers’ online shopping experience. When customers do not trust the Internet shopping medium, they do not trust online retailing generally (Lee and Turban 2001). With increasing online purchasing experience, one may accumulate greater trust in the online shopping medium (Walczuch and Lundgren 2004), and the possibility of distrust of the online shopping medium offsetting the transfer of trust is diminished. Therefore, Internet purchasing experience could be a positive moderator of the relationship between offline trust and online trust. We hypothesize

H5: Internet purchasing experience is a positive moderator of the relationship between offline trust and online trust.

Methodology

Procedure and Data Collection

We collected our data in May 2005, using a survey administered to actual customers within the offline physical stores of the target retailer who had never accessed the retailer’s Web site. The target retailer in this study is a multichannel supermarket in Asia. Partnering with a nationwide broadband network, this retailer was the first supermarket in the region to offer its merchandise in cyberspace in 1997. The survey was administered to 247 customers and the demographic profile of the customers is given in Table 2. Customers shopping for their groceries were asked if they could assist in completing a questionnaire. A S$10 shopping voucher was promised as an incentive for completing the questionnaire.

Measurement of Variables

We drew on the existing literature to measure the variables of this study in order to support the specification of potentially strong metrics (Moore and Benbasat 1991). Constructs with no existing instruments were developed, and their content validity was verified by discussion with experts in their respective areas of specialization (i.e., faculty members). For all variables given in Table 3, ratings were made on a seven-point Likert scale. The questionnaire items are listed in Appendix A.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Frequency</th>
<th>Percent</th>
<th>Demographics</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>5</td>
<td>2.0</td>
<td>Internet Purchasing Experience</td>
<td>5</td>
<td>15.9</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>17.1</td>
<td>3-4 years</td>
<td>36</td>
<td>14.6</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>16.7</td>
<td>1-2 years</td>
<td>44</td>
<td>17.9</td>
</tr>
<tr>
<td></td>
<td>66</td>
<td>26.8</td>
<td>7-12 months</td>
<td>10</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>16.7</td>
<td>6 months or less</td>
<td>38</td>
<td>15.4</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>20.7</td>
<td>None</td>
<td>79</td>
<td>32.1</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>68</td>
<td>27.6</td>
<td>5 years or more</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>178</td>
<td>72.4</td>
<td>3-4 years</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1-2 years</td>
<td>12</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7-12 months</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 months or less</td>
<td>48</td>
<td>19.5</td>
</tr>
</tbody>
</table>
Table 3. Constructs and Measures

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Reflective/ Formative</th>
<th>Sub-Constructs</th>
<th>Reflective/ Formative</th>
<th>Measurement Sources (Adapted)</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Purchase Intention</td>
<td>Reflective</td>
<td>–</td>
<td>–</td>
<td>Davis (1989)</td>
<td>1</td>
</tr>
<tr>
<td>Online Trust</td>
<td>Reflective</td>
<td>–</td>
<td>–</td>
<td>Bhattacherjee (2002)</td>
<td>4</td>
</tr>
<tr>
<td>Offline Trust</td>
<td>Reflective</td>
<td>–</td>
<td>–</td>
<td>Bhattacherjee (2002)</td>
<td>4</td>
</tr>
<tr>
<td>Perceived Online Reputation in Social Network</td>
<td>Formative</td>
<td>Positive Referrals</td>
<td>Reflective</td>
<td>Gremler and Gwinner (2000)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative Referrals</td>
<td>Reflective</td>
<td>Gremler and Gwinner (2000)</td>
<td>3</td>
</tr>
<tr>
<td>Perceived Assurance</td>
<td>Formative</td>
<td>Indirect Sanctions Effectiveness</td>
<td>Reflective</td>
<td>Developed for this study</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Online Direct Sanctions Effectiveness</td>
<td>Reflective</td>
<td>Developed for this study</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cross-Channel Sanctions Effectiveness</td>
<td>Reflective</td>
<td>Developed for this study</td>
<td>3</td>
</tr>
</tbody>
</table>

To establish the conceptual validity of the constructs with multiple indicators, judges were asked to sort the various items into construct categories (Moore and Benbasat 1991). Labeled sorting was carried out by four IS Ph.D. students to check for convergence and divergence of items within categories. There were no major problems, thus indicating that the constructs possessed adequate conceptual validity. Pretests were carried out on a small sample of 20 IS graduate students before the instrument was launched to the sample of the target population.

For the reflective constructs, convergent validity was determined by examining composite reliability and average variance extracted (AVE) from the measures (Hair et al. 1998). The composite reliability measures were all higher than 0.90, which was far above the 0.7 recommended by researchers (Chin 1998). AVE measures ranged from 0.77 to 0.98, which were above the acceptability value of 0.5 (Fornell and Larcker 1981). Discriminant validity was verified by checking the square root of the AVE as recommended by Fornell and Larcker (1981); the square root of the AVE was greater than the levels of correlations involving the construct (see Table 4). The factor analysis also shows clean loadings for all the items, showing favorable discriminant validity (see Appendix B). Checking the variance inflation factors, the constructs displayed no sign of multi-collinearity. For the formative constructs, factor scores of the sub-constructs were used as indicators. To check the validity of formative constructs, item weights which could be interpreted as beta coefficients in a standard regression were examined (Chwelos et al. 2001). Table 5 shows the weights and t-statistics for the formative constructs. Each item weight had significant t-statistics.

Table 4. Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>PR</th>
<th>NR</th>
<th>CCS</th>
<th>IS</th>
<th>ODS</th>
<th>OffT</th>
<th>OnT</th>
<th>OPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR</td>
<td>0.977</td>
<td>-0.510</td>
<td>.393</td>
<td>.221</td>
<td>.278**</td>
<td>.157*</td>
<td>.766**</td>
<td>.593**</td>
</tr>
<tr>
<td>NR</td>
<td>-0.510</td>
<td>0.990</td>
<td>-0.381</td>
<td>-0.232</td>
<td>-0.259**</td>
<td>-0.278**</td>
<td>-0.614**</td>
<td>-0.394**</td>
</tr>
<tr>
<td>CCS</td>
<td>.393</td>
<td>-0.381</td>
<td>.976</td>
<td>.247</td>
<td>.332**</td>
<td>.339**</td>
<td>.465**</td>
<td>.301**</td>
</tr>
<tr>
<td>IS</td>
<td>.221</td>
<td>-0.232</td>
<td>0.913</td>
<td>.648**</td>
<td>.082*</td>
<td>.199**</td>
<td>.182**</td>
<td></td>
</tr>
<tr>
<td>ODS</td>
<td>.278</td>
<td>-0.259</td>
<td>.332</td>
<td>.648</td>
<td>0.963</td>
<td>0.178**</td>
<td>0.258**</td>
<td>0.218**</td>
</tr>
<tr>
<td>OffT</td>
<td>0.157</td>
<td>-0.278</td>
<td>.339</td>
<td>.082*</td>
<td>0.178**</td>
<td>0.882</td>
<td>0.317**</td>
<td>0.161*</td>
</tr>
<tr>
<td>OnT</td>
<td>0.766</td>
<td>-0.614</td>
<td>0.465</td>
<td>0.199**</td>
<td>0.258**</td>
<td>0.317**</td>
<td>0.957</td>
<td>0.605**</td>
</tr>
<tr>
<td>OPI</td>
<td>0.593</td>
<td>-0.394</td>
<td>0.301</td>
<td>0.182**</td>
<td>0.218**</td>
<td>0.161*</td>
<td>0.605**</td>
<td></td>
</tr>
</tbody>
</table>
Results and Data Analysis

We tested the proposed hypotheses with partial least squares (PLS-Graph Version 3.00). This technique allows latent constructs to be modeled either as formative or reflective indicators, and it is suited for theory development (Chwelos et al. 2001).

Figure 2 shows the results of the PLS analysis. The findings support most of the primary hypotheses of the study (H1 through H4). Perceived online reputation in social network, perceived assurance, and offline trust are positively related to online trust (H2, H3, and H4). Perceived online reputation in social network exerts the largest positive effect on online trust, with a path coefficient of 0.769. The positive significant relationship between offline trust and online trust shows there is trust transference from the offline channel to the online channel. Although the path coefficient of perceived assurance on online trust is small (0.030), the effect is strongly significant with the t-stat at 2.91. Approximately 68 percent of online trust is accounted for by these three independent variables. The positive effect of online trust on online purchase intention is significant (H1), and it accounts for 36.7 percent of the variance in online purchase intention. The moderating effect of Internet purchasing experience on the relationship between offline trust and online trust is insignificant and does not support H5.
Because PLS estimates the measurement model and relationships between constructs simultaneously, the item weights of formative constructs display the importance of their impact on online trust in the multichannel retailer. These weights can be interpreted in the same way as beta coefficients from a multiple regression analysis (Chwelos et al. 2001). The two sub-constructs of perceived online reputation in social network—positive referrals (0.758) and negative referrals (-0.372)—significantly affect online trust. All three sub-constructs of perceived assurance are positive and significantly contribute to online trust.

Discussion and Implications

The study has examined the factors that affect the formation of online trust for customers of a multichannel retailer who have never accessed its Web site. First and foremost, the findings show that the higher offline trust customers have, the greater their online trust will be. Second, trust transference takes place not only from the offline channel, but also mainly through perceived reputation in customers’ social relations and networks. Third, perceived assurance occurring through social relations plays a significant but peripheral role in influencing the online trust of customers. This underscores the importance of the social relations and networks perspective.

Trust Transference

In the multichannel retailers’ context, trust transference can either occur via customers’ social relations and networks or through their experiences with the offline channel. Interestingly, our results reveal that customers rely more heavily on their social relations and networks than on their offline experiences with the multichannel retailer to form their online trust. This is demonstrated in the path coefficients of perceived online reputation (0.769) and offline trust (0.166). As the nature of online shopping entails risk, customers would seek out the online reputation of the retailer through their social relations before they make actual purchases online even though they might have favorable offline purchasing experiences with the retailer. Previous literature on trust iterates that customers would seek out retailers with a good online reputation so that they can perform successful transactions with them (Koufaris and Hampton-Sosa 2004; Yamagishi and Yamagishi 1994). As such, Barnes & Nobles (which has a long history of serving customers offline) has been experiencing challenges in competing with Amazon.com due to Amazon.com’s strong online reputation in customers’ social relations and networks.

With our finding on the significance of trust transference from the offline channel and from customers’ social relations and networks, the following implications for both practitioners and researchers can be derived. As evident from the results of the study, positive and negative referrals both affect online trust, and they do so significantly. Multi-channel retailers may thus want to implement referral programs online, where existing customers who have purchased online can share their positive experiences with their contacts in their social networks and are given the option to provide positive referrals to others through system-generated e-mail. Multi-channel retailers can intensify their referral programs to increase online trust.

Existing retailers operating both offline and online channels need to leverage their customers’ offline trust to achieve greater success in the online channel. When these retailers promote their online Web sites, they should capitalize on and emphasize the competence, benevolence, and integrity of their offline presence. This may require heavy investments in advertising on traditional mass media channels. To stimulate online purchases, a single-channel membership program can be launched or enhanced allowing customers to enjoy discounts and earn loyalty points from their online purchases as well as offline purchases. With the extension of membership programs online, existing multichannel retailers can lock in customers by understanding their purchasing behavior offline and online, and can further improve their relationship with their customers.

For purely online retailers, there is always room for competition against multichannel retailers by means of referrals. As Jeff Bezos, CEO of Amazon.com, noted, “Word of mouth remains the most powerful acquisition tool we have, and we are grateful for the trust our customers have placed in us” (Jelassi and Enders 2005, p. 278). Thus, purely online retailers should leverage their online reputation instead of resorting to setting up a physical presence to compete with multichannel retailers.

For researchers, this study makes a significant contribution in examining customer trust transference at the before-interaction stage in the context of a multichannel retailer. The existing literature has mainly examined trust in the context of purely online retailers, and hardly, if ever, examined trust transference at the before-interaction stage in the context of multichannel retailers. In our attempt to bridge the research gap, we have produced results showing that trust can, in fact, be transferred from the offline channel to the online channel even before a customer’s first online interaction with a multichannel retailer. However, our study demonstrates the importance of word of mouth over trust transference in determining online trust.
Perceived Assurance

Effective sanctions provide customers with reasons to trust aside from favorable characteristics of the retailer (Yamagishi and Yamagishi 1994). Customers of multichannel retailers believe that fear of punishment arising from untrustworthy behavior ensures that retailers behave in a trustworthy manner (Doney and Cannon 1997, Shapiro et al. 1992). This study has elucidated three sanctions that can be imposed through customers’ social relations within their social networks and their direct relations with the retailer under the construct of perceived assurance. All three sub-constructs of perceived assurance have emerged as significant. The largest weight on the sub-construct of online direct sanctions effectiveness illustrates that it is key in determining perceived assurance, which in turn affects online trust. Customers would only resort to indirect sanctions, that is, warning other customers not to purchase from the retailer online (the second sub-construct), and cross-channel sanctions, i.e., going to a physical store of the retailer to resolve the issues of their online purchases (the third sub-construct), if the online direct option is not available. This finding has two main implications for multichannel retailers.

First, as customers value the ability to resolve issues in their online purchases with the retailer in the direct online mode, it is important to provide online customers with adequate means of imposing online direct sanctions in the event of a disappointing purchase. While our finding shows that perceived assurance may be of peripheral importance in affecting online trust, this could simply be because perceived assurance is not so important to customers at the before-interaction stage. The effect on online trust would be larger at the repeated-interaction stage when customers actually experience problems with their online purchases. Moreover, our finding of perceived assurance having peripheral influence on online trust could be due to customers feeling that there is a limited extent of punishment they can impose on the retailer. If so, to increase online trust through perceived assurance, retailers should work on how they could offer customers the ability to directly impose sanctions in the event of a disappointing purchase. If customers could feel that retailers have indeed much to lose from an untrustworthy transaction, the relationship between perceived assurance and online trust would be stronger (Lewicki and Bunker 1995).

Second, while customers may choose online direct sanctions over indirect sanctions through spreading negative information about the retailer online, the second option, if taken, has serious implications as online reputation is vital to the success of e-commerce Web sites (Koufaris and Hampton-Sosa 2004). A multichannel retailer might want to encourage customers to choose instead to go to its physical stores to get any discrepancies in their purchases rectified. This indicates that multichannel retailers should have greater integration between their offline and online operations to increase their assurance and thereby increase online trust.

Limitations and Directions for Future Research

Despite several significant findings, we acknowledge a number of limitations in this study. First, this study has focused only on the context of a supermarket offering groceries and daily necessities. It would be difficult to generalize the results to multichannel retailers offering different products and services. Future research can replicate the study on other types of multichannel retailers to examine product type and store type as covariates of online trust.

Second, as the customers in our sample were surveyed within physical stores, sampling bias could exist. The findings show that the positive effect of positive referrals was much stronger than the negative effect of negative referrals on perceived online reputation. This is inconsistent with previous research on brand evaluations (see Mizerski 1982). The stronger effect of positive referrals could be due to the loyalty of existing customers who are not as affected by negative referrals. Future research can replicate this study for customers in the general public.

Third, Internet purchasing experience was not a significant moderator of trust transference across the offline and online channels. This could be due to the Internet purchasing experience of the sample not being representative of the customer population. We acknowledge that more than 50 percent of the sample had at least 6 months of online purchasing experience. Since a substantial proportion of the sample had prior online purchasing experience with other retailers, they already possessed high trust in the online shopping environment.

Fourth, this study has not examined how trust is transferred during initial interaction and how it evolves during repeated interactions. Investigating these issues using actual customers can yield more insights for multichannel retailers. Finally, trust in the Internet shopping medium is not directly examined in this study although we examined Internet purchasing experience as a surrogate measure. Future research can differentiate online trust of the retailer and trust in the Internet shopping medium, and examine the relationship between these two constructs.
Concluding Remarks

How trust is transferred from the offline channel to the online channel in the context of a multichannel retailer is of emerging interest to researchers as well as practitioners (Xu et al. 2004). This study has shown that offline trust is positively related to online trust even before customers have interacted with the retailer’s Web site. Besides trust transference from the offline channel, online trust is dominantly influenced by perceived online reputation, which is the favorability of indirect information about online purchasing from the retailer. Perceived assurance, which is the customer’s expectations of benign behavior based on sanctions imposed through the customer’s social relations, has been found to exert a significant but peripheral influence on online trust. We strongly believe that these findings can help both researchers and practitioners in not only enabling multichannel retailers to leverage their offline operations but also giving pure online retailers clues on how they can compete against multichannel retailers for greater success in the online channel.

References


Appendix A. Questionnaire Items

Intention to Purchase (OPI)
1. I am likely to start purchasing from coldstorage.com.sg in the future.

Offline Trust (Physical Stores) (OffT)
1. Cold Storage would act in my best interest (i.e., look out for my welfare when I purchase groceries from it).
2. Cold Storage would keep its commitments to me (i.e., fulfill money-back guarantees and other sales policies, etc.).
3. Cold Storage would have the ability to meet most of my needs as a customer (i.e., possess good knowledge about its products and services, etc).

Online Trust (coldstorage.com.sg) (OnT)
1. coldstorage.com.sg would act in my best interest (i.e., look out for my welfare when I purchase groceries from it).
2. coldstorage.com.sg would keep its commitments to me (i.e., fulfill money-back guarantees and other sales policies, etc.) when I purchase groceries from it online.
3. coldstorage.com.sg would have the ability to meet most of my needs as a customer (i.e., make appropriate changes to my online orders when necessary, etc.).

Positive Referrals (PR)
1. My referral sources encourage me to purchase online from coldstorage.com.sg.
2. My referral sources recommend that I purchase online from coldstorage.com.sg.
3. My referral sources share with me their positive opinions of purchasing online from coldstorage.com.sg.

Negative Referrals (NR)
1. My referral sources discourage me from purchasing online from coldstorage.com.sg.
2. My referral sources suggest that I purchase online from other Web sites instead of coldstorage.com.sg.
3. My referral sources share with me their negative opinions of purchasing online from coldstorage.com.sg.

Examples of indirect sanctions:
1) Decide not to purchase online from the retailer again.
2) Speak to your friends and relatives about your bad experience with the retailer.
3) Persuade friends and relatives not to purchase from the retailer, etc.

Indirect Sanctions Effectiveness (IS)
1. I believe that the various private actions are effective in punishing coldstorage.com.sg if it should show untrustworthy online behavior toward me.
Examples of online direct sanctions:
1) Emailing the retailer to dispute your purchase.
2) Giving feedback in the feedback form at the retailer’s Web site.

Online Direct Sanctions Effectiveness (ODS)
1. I believe that the various online direct actions are effective in punishing coldstorage.com.sg if it should show untrustworthy online behavior toward me.
2. I believe that the various online direct actions are effective in rectifying problems that I might have with my online purchases from coldstorage.com.sg.

Cross-Channel Sanctions Effectiveness (CCS)
1. I believe that I can take care of problems related to my online purchases whenever I complain at Cold Storage’s physical stores.
2. I believe that I can effectively settle disputes of my online purchases whenever I complain at Cold Storage’s physical stores.
3. I believe that I can settle unsatisfactory issues related to my online purchases whenever I complain at Cold Storage’s physical stores.

Appendix B. Factor Analysis

<table>
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<tr>
<th>Component</th>
<th>OnT OOP</th>
<th>ODS</th>
<th>CCS</th>
<th>NR</th>
<th>PR</th>
<th>OPI</th>
<th>IS</th>
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