



Antecedent of purchase intention: online seller reputation, product category and surcharge

Antecedent
of purchase
intention

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Abstract

Purpose – This paper aims to examine the antecedent of purchase intention: online seller reputation, product category and surcharge.

Design/methodology/approach – This paper uses five experimental designs to explore the seller reputation, product category and surcharge effects in Internet shopping. The authors chose one seller of low reputation and one seller of high reputation from Yahoo Mall. ANOVA are used to evaluate the results.

Findings – Sellers of high reputation can post higher surcharges to increase the total price paid by the buyer, but sellers of low reputation cannot do so (experiment 1). Moreover, partitioned price will decrease purchase intention for sellers of low reputation more than for sellers of high reputation (experiment 2). Consumers take the longest time to make purchasing decisions when buying credence goods (experiment 3) or buying from sellers of low reputation (experiment 4). The effect of surcharge levied by sellers of low reputation is weakened for consumers with low (vs high) shipping-charge skepticism (experiment 5).

Practical implications – This study is helpful to online sellers if they can identify their reputation, product category and those consumers who have shipping-charge skepticism, they can create extra profit through surcharge practice.

Originality/value – The authors' investigation extends the literature on consumers' price processing by identifying the important moderators (seller reputation, product category, and elaboration) and probing into the decision process (via the response time). The results suggest prescriptive strategies for online sellers.

Keywords Surcharge, Product category, Seller reputation, Shipping-charge skepticism, Purchase intention, Product differentiation, Buyers, Vendors, Buyer-seller relationships

Paper type Research paper

Introduction

Nonstore retailing has been growing much faster than store retailing. On the internet and in catalog, there are a lot of product category and their prices presented in the form of a base price and a small surcharge (such as a \$35.00 base price for a cloth and a \$3.00 shipping and handling surcharge) (Morwitz *et al.*, 1998; Xia and Monroe, 2004). Research suggests that consumers often ignore the surcharge, especially when it takes much effort to process (Morwitz *et al.*, 1998). On the other hand, shipping and handling charges, moreover, are considered a main reason why online shoppers abandon their



shopping carts and discontinue the purchase process (Campanelli, 2002). Cheema (2008) found that seller reputation moderates the impact of surcharges on purchase. Huang *et al.* (2011) also found that the seller's reputation positively affects the probability of auction success. Jun and Jaafar (2011) found that only marketing mix and reputation significantly influence consumers' attitude to adopt online shopping in China. However, there has been little research to date on the interaction effect of product category and surcharges on the internet and in catalog.

This study provides a start by demonstrating that product category also moderates the impact of surcharge on purchase. Studying the moderating role of product category in the internet allows us to bridge this gap in prior research. The interaction of surcharges and seller reputation and that of surcharges and product category are investigated across five studies. In study 1, we explore the effects of reputation, product category, and surcharge on purchase intention. On the internet and in catalog, sellers may include the surcharge in the base price and try to attract consumers by offering "free" shipping and handling. Separating the total cost into a base price and one or more surcharges has been labeled price partitioning (Morwitz *et al.*, 1998). Thus, for a robust study, we explore this effect with partitioned vs consolidated prices (study 2). We next highlight this process in great detail across two studies. Goods/services have search, experience, and credence qualities. The quality of search goods/services can be learned at almost zero cost in the internet. While the purchase of experience goods/services is required to assess their quality. Moreover, it is difficult to assess and interpret product attributes and benefits for credence goods/services (Brush and Artz, 1999). Thus we explore how elaboration (response time) mediates the effect of product category on purchase intentions (study 3). Firms with a good reputation are perceived to be reluctant to jeopardize their reputation by acting opportunistically (Chiles and McMackin, 1996). Thus we explore how elaboration mediates the effect of reputation on purchase intentions (study 4). Moreover, Schindler *et al.* (2005) proposed that consumers who are skeptical about the purpose of the surcharge infer a profit-making motive for the seller, while non-skeptics infer a cost-covering motive. Hence we demonstrate how consumers' shipping charge skepticism moderates the effect of the reputation and surcharge interaction on purchase intentions (study 5).

Reputation

In online auction, reputation is typically the key indicator of trust (Tan and Thoen, 2000). A favorable web site reputation can reduce the uncertainty of new users and helps build initial trust (McKnight *et al.*, 2002). According to Spence's (1973) signaling theory, a company's reputation is a signal because reputation is an unobservable characteristic, subject to manipulation. Wagner *et al.* (2011) also found that trust during the project collaboration has a stronger influence on the future of buyer-supplier relationships than fair economic rewards or reputation. Thus we manipulate trust through seller reputation based on user feedback (Doney and Cannon, 1997; Cheema, 2008). Feedback mechanisms act as credible reputation-creating devices (Resnik *et al.*, 2000) and lead to credibility-based trust (Doney and Cannon, 1997). Firms with a good reputation are perceived to be reluctant to jeopardize their reputation by acting opportunistically (Chiles and McMackin, 1996). Suspicious buyers may infer negative motives when they notice high surcharges (Schindler *et al.*, 2005). In sum, reputation

significantly affects consumers' trust in sellers (Casalo *et al.*, 2007). Sellers of high reputation are trusted more, and we expect seller reputation to moderate the effect of surcharges on purchase intention:

- H1.* High surcharges will decrease purchase intention for sellers of low reputation than for sellers of high reputation.

Product category

Previous studies on information asymmetry have suggested that products or services have search, experience, and credence qualities (Brush and Artz, 1999; Lovelock, 2001). Search goods are those products with attributes that potential buyers can be determined prior to purchase. Experience goods are dominated by attributes that cannot be known until the purchase and use of the product or for which information search is more costly and/or more difficult than direct product experience. Credence goods are those that are difficult to evaluate even after some trial has occurred. All goods/services can be placed on a continuum ranging from "easy to evaluate" (search goods) to "difficult to evaluate" (credence goods) (Nelson, 1970).

The offerings that service firms must provide in an offline context vary according to the search, experience, and credence categories (Brush and Artz, 1999). Dimoka *et al.* (2012) described how information signals (diagnostic product descriptions and third-party product assurances) reduce product uncertainty. A higher price is usually taken as an indication of higher quality, even though the significance of such perceived correction may vary across product categories (Lichtenstein and Burton, 1989). The quality of search goods/services can be learned at almost zero cost in the internet, hence high surcharges will decrease purchase intention. Experience goods are dominated by attributes that cannot be known until the purchase and use of the product or for which information search is more costly and/or more difficult than direct product experience. While the purchase of experience goods/services is required to assess their quality and credence qualities require additional information for their values to be assessed. For experience and credence goods/services, however, a somewhat personalized approach by the provider is required, which will lower the opportunity for customers to compare offerings on the basis of price (Brush and Artz, 1999). Given the difficulty of assessing and interpreting product attributes and benefits for credence goods/services, a base price plus a high surcharges may be particularly important signals of high quality and other characteristics to consumers, it also will reduce the level of product uncertainty and will not decrease purchase intention to a greater extent for this type of products. Hence, high surcharges will decrease purchase intention for experience goods/services than for credence goods/services. Thus, we have the following hypotheses:

- H2.* Product category will moderate the effect of surcharge on purchase intention.
- H2a.* High surcharge will decrease purchase intention for search goods/services than for experience goods/services.
- H2b.* High surcharge will decrease purchase intention for experience goods/services than for credence goods/services.

Study 1: effects of reputation, product category, and surcharge on purchase intention

Pretest, manipulation, and measurement

In all, 105 Tatung University students participate in three pretests. In pretest 1, we chose the ten most satisfactory sellers and the ten least satisfactory sellers from Yahoo Mall. Using the seven-point scale (1 = very low, 7 = very high) to evaluate their reputation. There were significant differences ($p < 0.01$) between these two groups. From these two groups we chose one seller of low reputation ($M = 2.31$) and one seller of high reputation ($M = 6.18$). In pretest 2, surcharges was divided into four groups \$1, \$10, \$30, and \$50. A seven-point scale (1 = very low, 7 = very high) was used to evaluate. There were significant differences ($p < 0.01$) between \$1 and \$50 groups. Thus \$1 was chosen as a low surcharge and \$50 as a high surcharge. In view of the difficulty in evaluating the level and Lovelock's (2001) study, we used the seven-point scale (1 = strongly disagree, 7 = strongly agree) to evaluate the selected nine products in pretest 3. Finally we chose the cell phone (experience goods), clothing (search goods), and health food (credence goods) as our experimental product categories. In main test, we adopted five items scale to measure purchase intention (Dodds *et al.*, 1991) and used the seven-point scale to evaluate (Appendix, Table AI).

Participants, method, and design

In main test, we adopted a 2 (surcharge: high or low) \times 2 (reputation: high or low) \times 3 (product category: search, experience, or credence goods) full factorial between-subject design with random assignment (Figure 1). In all, 300 Tatung University students participate for credit. In one scenario, participants were considering to purchase a cell phone from a high reputation seller on Yahoo Mall. With the total price fixed at \$750 (base price \$749.00 plus surcharge\$1.00). Finally they wrote their purchase intentions. We manipulated the surcharge and found there were significant differences ($M_{low-sur.} = 5.75$ vs $M_{high-sur.} = 3.21$; $F(1, 198) = 74.92$, $p < 0.01$). We also manipulated the seller reputation and found there were significant differences ($M_{low-rep} = 2.42$ vs $M_{high-rep} = 6.03$; $F(1, 198) = 61.58$, $p < 0.01$). Finally we manipulated the product category and found there were significant differences. The Cronbach's α of purchase intention = 0.973. No differential effects were observed on gender (48 percent female), age (mean age 21 years).

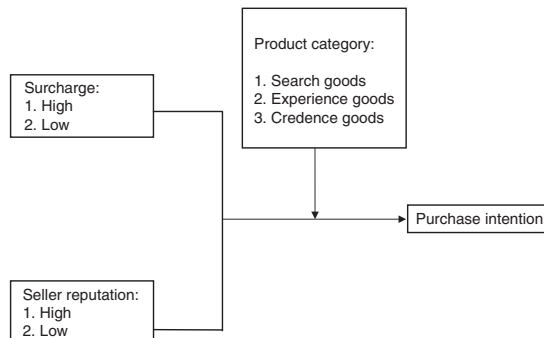


Figure 1.
Study 1 conceptual framework

Results

Supporting *H1*, the reputation \times surcharges interaction is significant ($F(1, 288) = 34.51, p < 0.05$) (Table I). Figure 2 shows participants primed with high surcharge will decrease purchase intention for sellers of low reputation ($M = 1.97$) than for sellers of high reputation ($M = 2.96; F = 7.95, p < 0.05$). Supporting *H2*, the product category \times surcharges interaction is significant ($F(2, 288) = 4.50, p < 0.05$). Figure 3 also shows participants primed with high surcharges will decrease purchase intention for search good ($M = 2.54$) than for experience good ($M = 2.98; F(1, 298) = 3.54, p < 0.05$), so *H2a* is supported. Participants primed with high surcharges will also decrease purchase intention for experience good ($M = 2.98$) than for credence good ($M = 4.69; F(1, 298) = 7.54; p < 0.05$), so *H2b* is supported. The product category \times reputation \times surcharges interaction is significant ($F(2, 288) = 8.65, p < 0.05$).

Study 1 reveals that high surcharges hurt low-reputation sellers (but not sellers of high reputation). Moreover, study 1 also reveals that high surcharges hurt sellers of search goods/services or experience goods/services more (but not those of credence goods/services). Ideally, one way for sellers of low reputation, providing search

Source	Type III sum of squares	df	Mean square	<i>F</i>	Significance
<i>Dependent variable: purchase intention</i>					
Product category	21.727	2	10.863	9.642	0.000***
Reputation	218.453	1	218.453	193.893	0.000***
Surcharges	43.320	1	43.320	38.450	0.000***
Product category \times reputation	20.447	2	10.223	9.074	0.000***
Product category \times surcharges	10.140	2	5.070	4.500	0.000***
Reputation \times surcharges	38.880	1	38.880	34.509	0.000***
Product category \times reputation \times surcharges	19.500	2	9.750	8.654	0.000***
Error	324.480	288	1.127		
Total	3128.000	300			

Note: *** $p < 0.01$

Table I.
ANOVA results

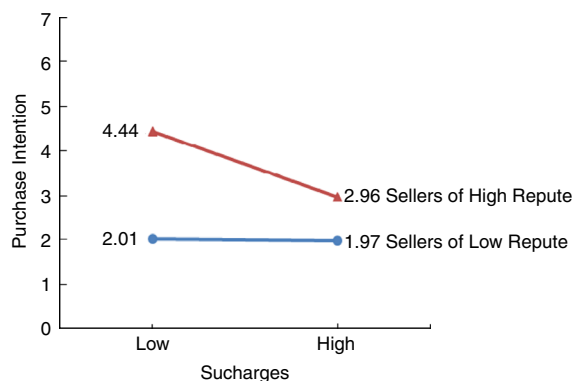


Figure 2.
Seller reputation
moderates the effect of
surcharge on purchase
intention

goods/services or experience goods/services to minimize the deleterious effect of high surcharges would be to absorb the surcharges into the base price and offer a consolidated price to the consumer. To do a robust test, we explore the price format (partitioned or consolidated price) in study 2.

Study 2: effects of reputation, product category, and price format on purchase intention

Pretest, manipulation, and measurement

We adopted the pretest results of seller reputation and product category in study 1. The price format was manipulated. Half the participants saw a consolidated amount (which included “surcharges, taxes, and regulatory cost recovery fees”), while the other half saw a partitioned amount – a base price and a surcharge for “surcharge, taxes, and regulatory cost recovery fees.” This study was a 2 (price format: consolidated or partitioned price) × 2 (seller reputation: high or low) × 3 (product category: search, experience, or credence goods/services) full factorial between-subject design with random assignment (Figure 4). In all, 300 Tatung University students (not participate in experiment 1) participate for credit. Purchase intention is the same as in study 1.

Figure 3.
Product category moderates the effect of surcharge on purchase intention

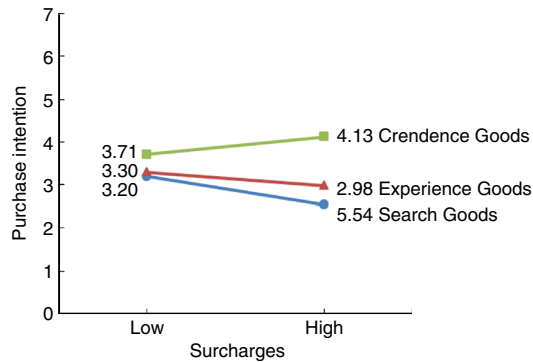
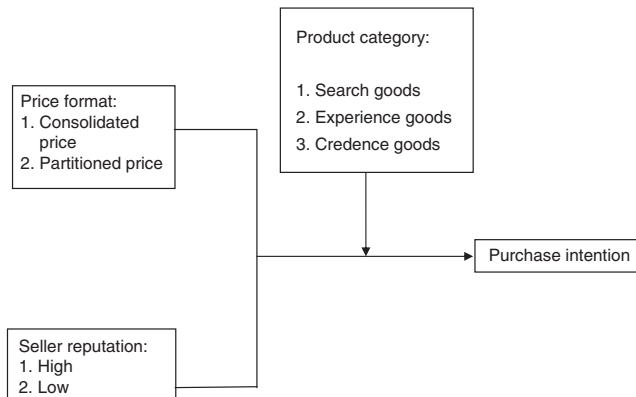


Figure 4.
Study 2 conceptual framework



Results

We manipulated the reputation and found there are significant differences ($M_{\text{low-rep}} = 2.54$ vs $M_{\text{high-rep}} = 5.93$; $F(1, 198) = 58.39$, $p < 0.05$). We also manipulated the product category and found there were significant differences. The Cronbach's α of purchase intention = 0.948. No differential effects were observed on gender (46 percent female), age (mean age 21 years).

The reputation \times price format interaction is significant ($F(1, 288) = 8.58$, $p < 0.05$) (Table II). Figure 5 shows participants primed with partitioned price will decrease purchase intention for sellers of low reputation ($M = 2.32$) than for sellers of high reputation ($M = 3.95$; $F = 7.12$, $p < 0.05$). Participants primed with sellers of low reputation and a consolidated amount were significantly more likely to purchase ($M_{\text{cons.}} = 2.96$) than were those who saw a partitioned amount ($M_{\text{part}} = 2.32$; $F(1, 148) = 6.57$, $p < 0.05$). On the contrary, for the company of high reputation, price format did not affect purchase intention ($M_{\text{part}} = 3.95$ vs $M_{\text{cons.}} = 4.45$; $F(1, 148) = 0.89$, ns).

Supporting *H2*, the product category \times price format interaction is significant ($F(2, 288) = 8.10$, $p < 0.05$). Figure 6 shows participants primed with partitioned price will decrease purchase intention for search good/service ($M = 2.82$) than for experience

Source	Type III sum of squares	df	Mean square	<i>F</i>	Significance
<i>Dependent variable: purchase intention</i>					
Product category	31.807	2	15.903	23.541	0.000***
Reputation	129.363	1	129.363	191.492	0.000***
Price format	50.430	1	50.430	74.650	0.000***
Product category \times reputation	23.847	2	11.923	17.650	0.000***
Product category \times price format	10.940	2	5.470	8.097	0.000***
Reputation \times price format	9.651	1	9.651	8.582	0.000***
Product category \times reputation \times price format	22.230	2	11.115	9.802	0.000***
Error	166.329	288	0.578		
Total	3705.000	300			

Note: *** $p < 0.01$

Table II.
ANOVA results

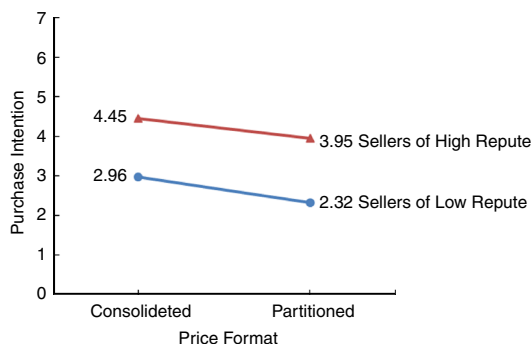


Figure 5.
Seller reputation moderates the effect of price format on purchase intention

good/service ($M = 3.52$; $F(1, 298) = 6.58, p < 0.05$). Participants primed with partitioned price will decrease purchase intention for experience good/service ($M = 3.52$) than for credence good/service ($M = 4.48$; $F(1, 298) = 6.47, p < 0.05$). It demonstrates that product category will moderate the effect of price format on purchase intention. Surcharge levied by sellers of search goods/services or experience goods/services therefore get noticed, and partitioned price leads to negative inference, thereby lowering purchase intention. In contrast, partitioned price offered by sellers of credence goods/services are less likely to be noticed and therefore less likely to affect purchase intentions.

Study 3: response time mediates the effect of product category

Participants, method, and design

Another 120 Tatung University students participate for extra credit. Here we adopted the pretest results of surcharges and product category in study 1. The study was a 2 (surcharge: low or high) \times 3 (product category: search, experience, or credence goods) full-factorial between-subjects design with random assignment (Figure 7). In scenario 1, participants wanted to buy a new designer clothing (search goods) from a seller on Yahoo mall as a present for their favorite mother's birthday, which would be coming up next month (the delay was included to avoid concerns about shipping times). They saw a picture and a brief description of the designer clothing, which noted that similar designer clothing retailed for \$100 in stores. The surcharge is \$1. Finally they wrote their purchase intentions. We adopted the pretest results of surcharges and product category in study 1. A manipulation check revealed that \$1.00 was perceived to be lower than \$50.00 ($M_{low-sur.} = 5.58$ vs $M_{high-sur.} = 3.34$; $F(1, 116) = 58.12, p < 0.05$). We also manipulated the product category and found there were significant differences. The Cronbach's α of purchase intention = 0.973. No differential effects were observed on gender (48 percent female), age (mean age 20 years).

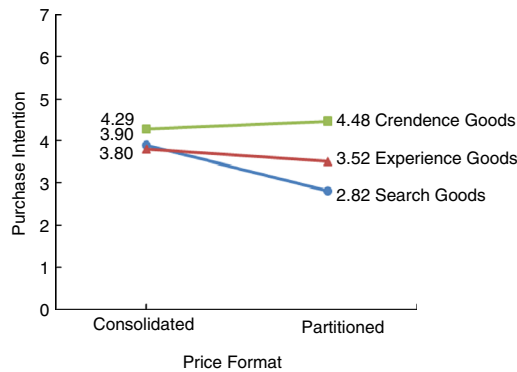


Figure 6.
Product category moderates the effect of price format on purchase intention

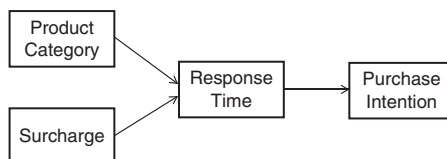


Figure 7.
Study 3 conceptual framework

To measure the response time, we asked participants to note at the top of the page the time at which they started (from a digital clock showing hours, minutes, and seconds). At the bottom of the page they noted the times at which they ended. The difference between the start and stop times gave us the response time. A similar technique was used by Shiv *et al.* (2005), as confirmed in personal communication with one of the authors.

Results

The product category \times surcharges interaction on response time is significant ($F(2, 116) = 6.81, p < 0.05$). Participants took a longest time to buy credence good ($M = 85.28$ seconds) than for experience good ($M = 74.57$ seconds; $F(1, 36) = 8.94, p < 0.05$). Participants took a longer time to buy experience good ($M = 74.57$ seconds) than for search good ($M = 60.15$ seconds; $F(1, 36) = 7.49, p < 0.05$). It means that response time should mediate the (moderating) effect of product category. Adding the response time \times surcharges interaction to a model containing the product category \times surcharges interaction should significantly weaken the latter, supporting a process of mediated moderation (Muller *et al.*, 2005). Indeed, the response time \times surcharges interaction affects purchase intentions ($F(1, 116) = 13.54, p < 0.01$) and weakens the product category \times surcharge interaction effect ($F(2, 116) = 6.81, p < 0.05$). The response time does not affect purchase intentions for credence goods (low surcharge: $F(1, 18) = 0.11, ns$; high surcharge: $F(1, 18) = 0.14, ns$). However, the response time has different effects on purchase intentions across surcharge levels for product category. Participants primed with search goods and a low surcharge take a shorter time and increase purchase intentions (unstandardized $b = 0.21, F(1, 18) = 13.54, p < 0.01$). But, participants primed with search goods and a high surcharge take a longer time and decrease purchase intentions ($b = 0.16, F(1, 18) = 22.34, p < 0.01$). This results in the response time \times surcharge interaction is significant ($F(1, 36) = 27.15, p < 0.01$). Participants primed with experience goods and a low surcharge take a shorter time and increase purchase intentions (unstandardized $b = 0.29, F(1, 18) = 11.47, p < 0.01$). But participants primed with experience goods and a high surcharge take a longer time and decrease purchase intentions ($b = 0.14, F(1, 18) = 19.47, p < 0.01$). This results in the response time \times surcharges interaction is significant ($F(1, 36) = 23.85, p < 0.01$). From this study, we found that consumers buy credence good, elaboration (longer response time) increases purchase intentions for low surcharges but decreases purchase intentions for high surcharges.

Study 4: response time mediates the effect of seller reputation

Participants, method, and design

Another 120 Tatung University students participate for extra credit. Here we adopted the pretest results of seller reputation and surcharges in study 1. The study was a 2 (surcharge: low or high) \times 2 (reputation: low or high) full-factorial between-subjects design with random assignment, see Figure 8. Participants read one scenario in which

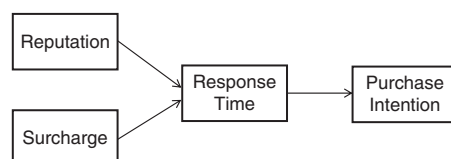


Figure 8.
Study 4 conceptual
framework

they wanted to buy a new designer clothing from a seller (high reputation) on Yahoo mall as a present for their favorite mother's birthday, which would be coming up next month (the delay was included to avoid concerns about shipping times). They saw a picture and a brief description of the designer clothing, which noted that similar designer clothing retailed for \$100 in stores. The surcharge is \$1. Finally they wrote their purchase intentions. We manipulated the surcharge and found there were significant differences ($M_{\text{low-sur.}} = 5.58$ vs $M_{\text{high-sur.}} = 3.34$; $F(1, 116) = 58.12$, $p < 0.01$). We also manipulated the seller reputation and found there were significant differences ($M_{\text{low-rep.}} = 2.52$ vs $M_{\text{high-rep.}} = 5.89$; $F(1, 116) = 52.45$, $p < 0.01$). The Cronbach's α of purchase intention = 0.942. No differential effects were observed on gender (47 percent female), age (mean age 20 years). To measure the response time, we adopted the same method in study 3.

Results

The reputation \times surcharge interaction on response time was not significant ($F(1, 116) = 0.18$, ns). Adding the response time \times surcharge interaction to a model containing the reputation \times surcharge interaction should significantly weaken the latter, supporting a process of mediated moderation (Muller *et al.*, 2005). Indeed, the response time \times surcharges interaction affects purchase intentions ($F(1, 116) = 12.23$, $p < 0.005$) and weakens the reputation \times surcharges interaction ($F(1, 116) = 2.82$, $p = 0.15$). Next, we explored how response time affects purchase intentions. Primed with sellers of high reputation, the response time does not affect purchase intentions (low surcharge: $F(1, 28) = 0.08$, ns; high surcharge: $F(1, 28) = 0.10$, ns). Participants primed with sellers of low reputation and a low surcharge take a longer time and increase purchase intentions (unstandardized $b = 0.18$, $F(1, 28) = 13.54$, $p < 0.01$). On the other hand, participants primed with sellers of low reputation and a high surcharge take a longer time and decrease purchase intentions ($b = 0.15$, $F(1, 28) = 22.34$, $p < 0.01$). Primed with sellers of low reputation, this results in response time \times surcharges interaction is significant $F(1, 56) = 29.15$, $p < 0.01$). From this study, we found that when consumers buy from sellers of low reputation, elaboration (longer response time) increases purchase intentions for low surcharges but decreases purchase intentions for high surcharges.

Study 5: shipping charge skepticism moderates the reputation \times surcharge interaction

Consumer skepticism research has focussed on consumer skepticism toward advertisements (Hardesty *et al.*, 2002). Extending this line of research, we investigate the notion that some consumers may be highly skeptical of direct marketers' offers due to their underlying beliefs regarding the perceived fairness of shipping charges. As Hardesty *et al.* (2002) note, persuasion knowledge encompasses consumers' beliefs about marketers' motives, strategies, and tactics. High-shipping charge skepticism consumers naturally tend to seek, acquire, think about, and reflect back on information when processing information. In contrast, low-shipping charge skepticism consumers are more likely to rely on others (e.g. celebrities or experts), cognitive heuristics, or social comparison processes. Schindler *et al.* (2005) propose that consumers who are skeptical about the purpose of the surcharge infer a profit-making motive for the seller, while non-skeptics infer a cost-covering motive. Consistent with these processing differences, we expect that low-shipping charge skepticism consumers will be more likely to decide on the basis of seller reputation, since they are more likely to purchase

from sellers of high reputation. In contrast, high-shipping charge skepticism consumers will be more likely to decide on the basis of the offer (surcharge level) when they do pay attention to surcharges. Specifically, among high-shipping charge skepticism consumers buying from sellers of low reputation, those facing high surcharges will be less likely to buy. Thus:

H3. Consumers' shipping charge skepticism will moderate the interaction effect between surcharge and seller reputation outlined in *H1*.

H3a. Among low-shipping charge skepticism consumers, surcharges will not affect purchase intentions.

H3b. Among high-shipping charge skepticism consumers, high surcharges will decrease purchase intention to a greater extent for sellers of low reputation.

Participants, method, and design

We adopted a 2 (seller reputation: high or low) \times 2 (surcharge: high or low) \times 2 (Shipping charge skepticism: high or low) full factorial between-subject design with random assignment, see Figure 9. In all, 200 Tatung University students participate for credit. Participants (mean age 21 years, 46 percent female) rated how likely they will buy and also completed the one item shipping charge skepticism measure. A median split classified participants as having low- or high-shipping charge skepticism. Their skepticism was significantly different (1 = not at all, 7 = at all; $M_{\text{low-skep.}} = 2.68$ vs $M_{\text{high-skep.}} = 4.39$; $F(1, 198) = 56.58$, $p < 0.01$).

Participants read one scenario in which they were considering the purchase of a notebook computer from a catalog. With the total price fixed at \$750 (base price \$749 plus surcharge \$1.00). We manipulated the surcharge and found there were significant differences ($M_{\text{low-sur.}} = 5.75$ vs $M_{\text{high-sur.}} = 3.21$; $F(1, 198) = 74.92$, $p < 0.01$). We also manipulated the catalog's reputation and found there were significant differences (1 = do not trust at all, 7 = trust a lot; $M_{\text{low-rep.}} = 2.98$ vs $M_{\text{high-rep.}} = 4.67$; $F(1, 198) = 61.58$, $p < 0.01$).

Results

The surcharge \times reputation \times and shipping charge skepticism interaction is significant ($F(1, 192) = 10.99$, $p < 0.01$). *H3a* is supported, low-shipping charge skepticism participants use the catalog reputation as a cue to make their decisions

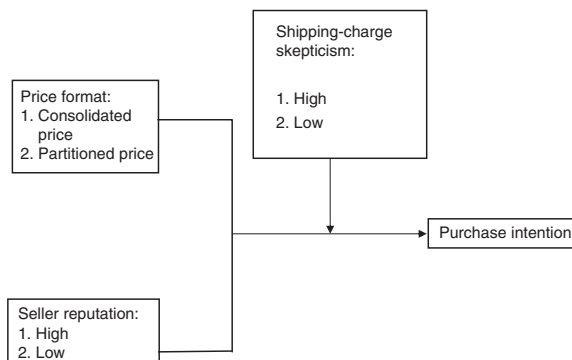


Figure 9.
Study 5 conceptual
framework

($M_{\text{low-rep}} = 3.29$ vs $M_{\text{high-rep}} = 4.98$; $F(1, 192) = 29.12$, $p < 0.01$) and are not affected by the surcharge ($M_{\text{low-sur}} = 3.85$ vs $M_{\text{high-sur}} = 4.31$; $F(1, 192) = 1.35$, ns). For low-shipping charge skepticism participants, the reputation \times surcharge interaction is not significant ($F(1, 192) = 0.48$, ns). In contrast, high-shipping charge skepticism participants primed with a low-reputation catalog offering a low surcharge are more likely to buy ($M_{\text{low-sur}} = 4.12$ vs $M_{\text{high-sur}} = 2.38$; $F(1, 192) = 21.35$, $p < 0.01$). Primed with catalog of high reputation, surcharge does not affect purchase intentions ($M_{\text{low-sur}} = 4.61$ vs $M_{\text{high-sur}} = 5.03$; $F(1, 192) = 1.42$, ns). Supporting *H3b* also, the reputation \times surcharge interaction for high-shipping charge skepticism participants is significant ($F(1, 192) = 17.01$, $p < 0.01$). We also found that *H3* is supported. That is, shipping charge skepticism moderates the reputation \times surcharge interaction; this interaction is significant for high-shipping charge skepticism consumers but not for low-shipping charge skepticism consumers.

Conclusions

From Table III, we find all the hypotheses are supported. This study provides the practitioners in the internet business a way to benchmark and improve their performances. First, sellers of high reputation can post higher surcharges to increase the total price paid by the buyer, but sellers of low reputation cannot do so (study 1). Moreover, partitioned price will decrease purchase intention for sellers of low reputation than for sellers of high reputation. For the company of low reputation, participants who saw a consolidated amount were significantly more likely to purchase than were those who saw a partitioned amount (study 2). In contrast, price format did not affect purchase intention for the company of high reputation. Second, a base price plus a high surcharges will not decrease purchase intention to a greater extent for credence products. On the contrary, search goods/services, and experience goods/service internet retailers should not post higher surcharges. Meanwhile, in contrast to search goods/services sellers and experience goods/services sellers, credence goods/services sellers can benefit more by offering a partitioned price (study 2). Third, consumers take a longest time to make purchasing decisions when buying credence goods (study 3) or buying from low-reputation sellers (study 4). These potential buyers are hesitate to make a decision in online shopping transactions due to perceptions of uncertainty caused by imperfect information, fears of seller

Hypotheses	Results
<i>H1</i> : High surcharges will decrease purchase intention for sellers of low reputation than for sellers of high reputation	Supported
<i>H2</i> : Product category will moderate the effect of surcharges on purchase intention	Supported
<i>H2a</i> : High surcharges will decrease purchase intention for search goods/services than for experience goods/services	Supported
<i>H2b</i> : High surcharges will decrease purchase intention for experience goods/services than for credence goods/services	Supported
<i>H3</i> : Consumers' shipping-charge skepticism will moderate the surcharge \times seller reputation interaction outlined in <i>H1</i>	Supported
<i>H3a</i> : Among low shipping-charge skepticism consumers, surcharges will not affect purchase intentions	Supported
<i>H3b</i> : Among high shipping-charge skepticism consumers, high surcharges will decrease purchase intention for sellers of low repute	Supported

Table III.
Summary of hypotheses results

opportunism, and information privacy and security concerns. Developers of online web sites need to create an environment more conducive to buyer confidence. For example, internet developers can create functions that help sellers efficiently provide more complete and detailed information about their products and services. Online seller can use credible celebrity or expert to deliver their products or services messages in web site that can promote online trading. Seller opportunism can be frustrated by mechanisms such as purchase refund policies and seller authentication. Fourth, high-shipping charge skepticism consumers facing sellers of low reputation are less likely to purchase given high surcharges (study 5). Hence, sellers of low reputation should use surcharge-free practice.

In addition to extend the Cheema's (2008) study, this experimental research also identifies the important moderator (product categories). That is, high surcharges will decrease purchase intentions for search goods/services than for experience goods/services. It also will decrease purchase intentions for credence goods/services than for search goods/services. It also find that consumers take a longest time to make purchasing decisions when buying credence goods and that the response time mediates the moderating role of product category. Moreover, it demonstrate that search goods/services sellers and experience goods/services sellers can avoid the detrimental effects of high surcharges by offering a consolidated (vs partitioned) price. Finally, we show that elaboration of the offer facilitates the moderating role of reputation, as evidenced by the significant effect of surcharges for high-shipping charge skepticism consumers who face sellers of low (but not high) reputation. Referring to the viewpoints from Corley and Gioia (2011), this study reveals these conclusions what we otherwise had not seen, known, or conceived. Being novel and interesting, these conclusions are a revelatory insight. This research improves the current research practice of informed scholars and can further delineate or understand the phenomenon of product category in the internet. After all, this study would enable internet theories with more scientific and practical utility. Our research is attuned to identifying or anticipating theoretically and pragmatically relevant domain – the effect of product category, seller reputation, and surcharge in the internet.

This study has some limitations. First, although online shoppers aged between 20 and 39 are the highest-spending age bracket who spend an average of NT\$10,661 in 2009 (www.taiwannews.com.tw/etn/news_content.php?id=1008102), this research data were collected from a self-selecting group of internet or catalog users in Tatung University who may not represent all consumers. However, to purchase the stimuli (clothing, cell phone, and health food) may need some expertise, university students may be appropriate. Second, this study was limited to internet or catalog users in Taiwan, and cultural differences in other countries and societies may limit the study's generalization. Future research might take some of the following directions. Second, this study focussed on products priced from \$30 to \$750: clothing (search goods), the cell phone (experience goods), and health food (credence goods). The effect of surcharge may vary for more expensive products (e.g. cars or homes). The surcharge often accounts for a small percentage of the cost for expensive products and may catch little attention. Future research could try to address such issues. Second, future research could focus on other individual characteristics, such as high product involvement, that may decrease attention to surcharges and enhance the moderating effect of seller reputation. Third, one may expect this effect of reputation or product category to be weakened as consumers gain additional interactional experience with a store seller. Therefore, future research might extend to store retailing boundary.

References

- Brush, T.H. and Artz, K.W. (1999), "Toward a contingent resource-based theory: the impact of information asymmetry on the value of capabilities in veterinary medicine", *Strategic Management Journal*, Vol. 20 No. 3, pp. 223-250.
- Campanelli, M. (2002), "Who pays to get it there? Net profits: your site's shipping and handling charges can make or break an online sale", *Entrepreneur*, Vol. 30 No. 2, pp. 34-36.
- Casalo, L.V., Flavian, C. and Guinaliu, M. (2007), "The influence of satisfaction, perceived reputation and trust on a consumer's commitment to a website", *Journal of Marketing Communications*, Vol. 13 No. 1, pp. 1-17.
- Cheema, A. (2008), "Surcharges and seller reputation", *Journal of Consumer Research*, Vol. 35 No. 1, pp. 167-177.
- Chiles, T.H. and McMackin, J.F. (1996), "Integrating variable risk preferences, trust, and transaction cost economics", *Academy of Management Review*, Vol. 21 No. 1, pp. 73-99.
- Corley, K.G. and Gioia, D.A. (2011), "Building theory about theory building: what constitutes a theoretical contribution", *Academy of Management Review*, Vol. 36 No. 1, pp. 12-32.
- Dimoka, A., Hong, Y. and Pavlou, P.A. (2012), "On product uncertainty in online markets: theory and evidence", *MIS Quarterly*, Vol. 36 No. 2, pp. 395-426.
- Dodds, W.B., Monroe, K.B. and Grewal, D. (1991), "The effects of price, brand and store information on buyers' product evaluations", *Journal of Marketing Research*, Vol. 28 No. 3, pp. 307-319.
- Doney, P.M. and Cannon, J.P. (1997), "An examination of the nature of trust in buyer-seller relationships", *Journal of Marketing*, Vol. 61 No. 2, pp. 35-51.
- Hardesty, D.M., Carlson, J.P. and Bearden, W.O. (2002), "Brand familiarity and invoice price effects on consumer evaluations: the moderating role of skepticism toward advertising", *Journal of Advertising*, Vol. 31 No. 2, pp. 1-15.
- Huang, Y.T., Chen, J.R. and Lu, W.C. (2011), "Effects of seller reputation on success at online auctions: an empirical study", *International Journal of Management*, Vol. 28 No. 3, pp. 621-629.
- Jun, G. and Jaafar, N.I. (2011), "A study on consumers' attitude towards online shopping in China", *International Journal of Business and Social Science*, Vol. 2 No. 22, pp. 122-132.
- Lichtenstein, D. and Burton, S. (1989), "The relationship between perceived and objective price-quality", *Journal of Marketing Research*, Vol. 26 No. 4, pp. 429-443.
- Lovelock, C.H. (2001), *Services Marketing: People, Technology, Strategy*, 4th ed., Prentice Hall, Upper Saddle River, NJ.
- McKnight, D.H., Choudhury, V. and Kacmar, C. (2002), "The impact of initial consumer trust on intentions to transact with a web site: a trust building model", *The Journal of Strategic Information Systems*, Vol. 11 Nos 3-4, pp. 297-323.
- Morwitz, V.G., Greenleaf, E.A. and Johnson, E.J. (1998), "Divide and prosper: consumers' reactions to partitioned prices", *Journal of Marketing Research*, Vol. 35 No. 4, pp. 453-463.
- Muller, D., Judd, C.M. and Yzerbyt, V.Y. (2005), "When moderation is mediated and mediation is moderated", *Journal of Personality and Social Psychology*, Vol. 89 No. 6, pp. 852-863.
- Nelson, P. (1970), "Information and consumer behavior", *Journal of Political Economy*, Vol. 78 No. 2, pp. 311-329.
- Resnik, P., Zeckhauser, R., Friedman, E. and Kuwabara, K. (2000), "Reputation systems", *Communications of the ACM*, Vol. 43 No. 12, pp. 45-48.
- Schindler, R.M., Morrin, M. and Bechwati, N.N. (2005), "Shipping charges and shipping charge skepticism: implications for direct marketers' pricing formats", *Journal of Interactive Marketing*, Vol. 19 No. 1, pp. 41-53.
- Shiv, B., Carmon, Z. and Ariely, D. (2005), "Placebo effects of marketing actions: consumers may get what they pay for", *Journal of Marketing Research*, Vol. 42 No. 4, pp. 383-393.

-
- Spence, M. (1973), "Job market signaling", *Quarterly Journal of Economics*, Vol. 87 No. 3, pp. 355-374.
- Tan, Y.H. and Thoen, W. (2000), "Toward a generic model of trust for electronic commerce", *International Journal of Electronic Commerce*, Vol. 5 No. 2, pp. 61-74.
- Wagner, S.M., Coley, L.S. and Lindemann, E. (2011), "Effects of suppliers' reputation on the future of buyer-supplier relationships: the mediating roles of outcome fairness and trust", *Journal of Supply Chain Management*, Vol. 47 No. 2, pp. 29-46.
- Xia, L. and Monroe, K.B. (2004), "Price partitioning on the internet", *Journal of Interactive Marketing*, Vol. 18 No. 4, pp. 63-73.

Web reference

Available at: www.taiwannews.com.tw/etn/news_content.php?id=1008102 (accessed 22 March 2013).

Further reading

- Ba, S. and Pavlou, P. (2002), "Evidence of the effect of trust in electronic market: price premiums and buyer behavior", *MIS Quarterly*, Vol. 26 No. 3, pp. 243-267.
- Bertini, M. and Wathieu, L. (2008), "Attention arousal through price partitioning", *Marketing Science*, Vol. 27 No. 2, pp. 236-246.

Appendix

Variables and items

Reputation (with seven-point scale: 1 means very low, 7 means very high)

I think the following reputation of seller in Yahoo Mall is:

1. Ten name (10 seller name chose from the most satisfactory sellers)
2. Ten name (10 seller name chose from the least satisfactory sellers)

Surcharge (with seven-point scale: 1 means very low, 7 means very high)

I think the following surcharge is:

1. \$1
2. \$10
3. \$30
4. \$50

Product category (with seven-point scale: 1 means strongly disagree, 7 means strongly agree)

I think the following products is very difficult in evaluate:

1. Clothing
2. Furniture
3. Cell phone
4. Restaurant
5. Health food
6. Medical care
7. Ball-point pen
8. Tea drink
9. Sporting events

Purchase intention (with seven-point scale)

1. The likelihood of purchasing this product is: (very low to very high)
2. If I were going to buy this product, I would consider buying this model at the price shown (strongly disagree to strongly agree)
3. At the price shown, I would consider buying the product (strongly disagree to strongly agree)
4. The probability that I would consider buying the product is: (very low to very high)
5. My willingness to buy the product is: (very low to very high)

Table AI.
Operationalization
of variables

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