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Winter 12-9-2003

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# Delivery in Online Sales: The Role of Communicating Quality and Price Positions

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## Abstract

E-retailing, though growing rapidly, is still a very small proportion of total retail sales. One issue inhibiting sales over the internet is delivery. Many customers are not happy paying what they often perceive to be excessive delivery charges. However, the average customer on the internet is not highly price oriented, so resistance to paying delivery charges may occur because customers do not believe that they are receiving any value for this additional cost. Our research looks at the impact on willingness to pay delivery charges of different price levels and a message informing the customer that the delivery time specified is considered good service by industry standards. This simple message seems to focus customer thinking on value received (better quality service), and lowers resistance to paying delivery charges. Thus, explicit reference to the quality of the delivery service, where companies actually have good delivery, seems to be a useful message to include when customers are considering information about delivery charges.

## 1. Introduction

E-retailing (B2C) is growing rapidly, but the proportion of on-line retail sales still constitutes only a small percentage of total retail sales, and is likely to remain a small part of the total for some time. Frequently services, particularly delivery, are a problem. Some observers claim that e-retailers offer consumers better service than stores, but they may be talking mainly about “service” in terms of using customer information to get the sale [22], rather than more traditional after-sales service elements such as delivery, returns, etc. Anecdotal evidence indicates that many consumers are quite unhappy with service by many e-retailers [6].

Some observers have begun to point out that this service element may be a critical issue in adoption of interactive shopping [5, 11, 17]. Certainly, in other distance shopping formats, service plays an important role. For example, catalog purchasers typically report that they are concerned about service attributes such as delivery time, handling of complaints and problems, and order placement [4, 9, 15]. Clearly, understanding consumer views about service issues such as delivery will

be important as e-retailers work at improving sales over the internet [7, 12, 13].

Although delivery is a critical element of B2C retail services, only a few studies look at delivery issues in much detail. One survey shows that Dutch consumers are more likely to use the internet for product reservation than for purchase of products which require delivery, even though all the products in the study could be delivered digitally over the internet [21]. For physical products which require delivery, the tendency against actual purchase is even stronger [14]. Price may be an issue, since generally, once delivery charges are included, stores are cheaper than online retailers [1].

This study in Singapore looks at customer willingness to pay for delivery of products available on-line. As a managerial issue, this is important, because internet B2C suppliers have not yet found ways to make delivery cheap. They either have to charge customers a relatively high delivery price, or absorb a lowered margin. Which strategy works better depends on customer willingness to pay – if customers are highly price sensitive, as some discussions on e-retailing claim, then charging customers higher delivery prices will not work very well. However, some work indicates that consumers on the internet do not seem to be highly price sensitive [e.g., 3]. Then a proper strategy would be to demonstrate to them why the high prices are worth paying – if they see value, they are more willing to pay.

## 2. Delivery, Value, and Price Sensitivity

Service is a key element in consumer choice in retail buying, and much modern retailing is based upon the concept that consumers buy service as much as products when they purchase from a retailer [2]. Certainly, consumer demand for better service has played an important role in development of the modern retail sector in the more advanced economies of East Asia [e.g., 8, 20]), as well as in developing economies [e.g., 19]. Thus, one important reason for dissatisfaction among consumers who have tried buying over the web, and for discouraging non-buyers from trying, is the service component.

Frequently, service on the web is not up to standards that consumers expect from fixed stores, and consumers who want good service as a component of what they buy may not choose to shop online because of this. For

example, Van den Poel & Leunis [21] showed that consumers reported much higher likelihood to purchase either a small radio or a TV in specialty stores, which provide high service levels. Supermarkets and internet came out about equally, far behind specialty store, and catalog sales were very unlikely to be used for these products. Specialty stores (first) and catalog sales (last) did not change their relative positions among heavy vs. light internet users.

In Singapore, some studies indicate that consumers generally expect fairly low service performance from internet retailing, including poor perceptions of the delivery service component [17]. For example, one survey showed that prompt delivery of books and CDs ordered over the internet was not considered very likely. Of course, this would not be very critical if it was not important to consumers, but prompt delivery scored moderately highly in their list of concerns. Another survey cited in that report showed that delivery was a top concern for clothing ordered over the internet. Asked about whether better services would encourage more on-line purchase, most consumers said yes [17].

Eastlick & Lotz [5] demonstrate that attitudes toward service are one element which influences adoption of interactive shopping. Karlsson and Rosen [7] note many cases of internet stores that have failed primarily because of inability to meet customer expectations about delivery. In Singapore, Speece [17] shows that perceptions of delivery, among other service issues, differs strongly among respondents who bought books / CDs on the internet and those who did not. Shoppers who did not order over the internet had lower expectations of prompt delivery than those who did, but were more strongly concerned about delivery.

Given that consumers want high quality delivery if they buy over the internet, would they be willing to pay for it? Generally, Asian middle class consumers are strongly value oriented [e.g., 16, 18], which means they are willing to pay reasonable prices if they perceive that they have received some benefit. In other words, "Value (unlike quality) involves a tradeoff of give and get components" [23, p. 14; parentheses in the original]. Components of value include intrinsic product or service attributes, as well the extrinsic attribute price. Discussing value segments, Lichtenstein, Ridgway, and Netemeyer [10] note that price plays a negative role, but is not the most important thing considered.

In value oriented service evaluation, a buyer may set an acceptable quality level, then look for the best price within that level. Or, buyers may decide a budget, based on their ideas of price points representing required quality, then look for the best quality at that price. On the surface, it may sometimes be difficult to distinguish value orientation from either strong quality or strong price orientations. When value consumers have a large budget, the weight of price seems to decline. People buy higher quality and are willing to pay more. With smaller budgets, price assumes a correspondingly larger role. Nevertheless, value oriented consumers are still making the tradeoff, not simply choosing highest quality or

lowest price. In addition, when consumers perceive several options to be very similar, price may be the only criteria on which they can distinguish. They do not insist on lower prices because they are highly price conscious, but rather, because they do not perceive that they are gaining any value for the higher prices.

The profile of customers on the internet is usually strongly middle class and above, making it unlikely that most such consumers are truly strongly price oriented. Rather, they are probably value oriented, but may not like to pay much for delivery because they perceive delivery service quality on the internet to be poor. Karlsson and Rosen [7], for example, show that customers of online grocery stores are not willing to pay much for delivery alternatives which they perceive as being unattractive, but they are willing to pay more for preferred delivery modes.

Delivery time is one key issue. For example, Persson and Wikstrom [13] quote a customer in an in-depth interviews as saying "the delay is the biggest drawback with the internet ..." (p. 4). Many customers expect lower prices to compensate for the perceived poor service: "... for a good price, I am willing to accept a wait of a couple of days or more" [13 p. 4]. Noack [12] cites examples showing that customers are willing to pay for what they perceive as good delivery service. Frequently commentators on internet delivery view such data and recommend that internet companies should minimize delivery time [e.g., 13], and one strategy is to set up logistics to get very rapid delivery [12].

However, simple communication with customers during the ordering process may have some impact on their perceptions of delivery service quality, and thus, on their willingness to pay delivery charges. If consumers compare access to products in a physical store, when they get it right away, to purchase over the internet, delivery quality may be perceived as poor, because they do not get the product immediately. Pointing out the quality of delivery time relative to most other internet sellers may be able to shift the comparison, so that consumers feel that they are getting some value (additional quality in delivery) compared to most internet stores. To demonstrate that simple communications may indeed be able to influence willingness to pay in this way, we looked at this issue in a consumer survey in Singapore.

### 3. Methodology

While developing the survey instrument, we conducted in-depth interviews with three consumer stores selling common consumer goods on the internet in Singapore. Each had online sales which managers considered to be growing well, but which still constituted only a few percent of total retail sales for the store. They all stressed that delivery costs were relatively high, and considered that prices were probably higher online once delivery costs were factored in. These stores talked about delivery times ranging from 1 to 3 days normally, but more likely to be around 3 days rather than quicker. Thus, the time which was considered pretty good by

industry standards in the experimental manipulation was determined in this consultation with online retailers.

The key elements affecting consumer decisions to buy online were developed from the literature, as noted above. One questionnaire section asked respondents to rate the importance on a 1 to 5 scale of a number of elements including delivery, price, and other service elements. Another section asked about willingness to buy given a delivery time and a delivery charge. Respondents were asked this for both local and overseas orders, taking 2 days and 1 – 2 weeks, respectively. Delivery prices were stated at three different price levels, each one in a separate questionnaire, so that any one respondent only ever saw a single price for local and a corresponding single price for overseas delivery. (E.g., the low local delivery charge was listed with the corresponding low overseas delivery charge.)

Half of the questionnaires at each price level included a message informing the respondent that the stated delivery time is considered fast by industry standards, vs. a control with no comment about delivery time. Thus, there were six questionnaire versions (Table 1). Each had a quota of 50, so that a total sample of 300 was obtained by mall intercept at several locations in Singapore. A screening question eliminated anyone who was not an internet user. The sample is relatively young, mostly under 30, with high education on average, and is fairly consistent with the characteristics of heavy users of the internet according to other surveys.

**Table 1: Six Questionnaire Versions**

	delivery charges		
	low	medium	high
local purchase	S\$ 3	S\$ 4 – 8	> S\$ 8
overseas purchase	S\$ 15	S\$ 16 – 20	> S\$ 20
no message version: Assuming that for local delivery a product costs S\$ 50, and takes 2 days to deliver. How willing are you to pay S\$ 3 for delivery charge?			
with message: Assuming that for local delivery a product costs S\$ 50, and takes 2 days to deliver, which is considered fast by industry standards. How willing are you to pay S\$ 3 for delivery charge?			
the overseas versions say 1 – 2 weeks delivery.			

Consistent with the profile of internet users usually cited in most Asian countries, the sample was predominately young and male. Sixty percent of the

respondents were men. The age group from 18 – 24 accounts for two thirds of the sample, and another twenty percent were between 25 – 30. Ninety-five percent of the sample was ethnic Chinese, which under-represents other ethnic groups in Singapore, but is perhaps consistent with strong internet usage.

#### 4. Results

Security of the transaction, delivery reliability, and convenience were considered the most important issues. Delivery time was of mid-level importance, not much different from a set of issues also including return policies, reputation of online stores, low price, and modes of payment. Physical viewing of products was considered the least important of the issues listed in the questionnaire, but even this was considered somewhat important, scoring above the midpoint of the 1 to 5 scale toward the important (Table 2).

**Table 2: Importance of Elements in Decision to Purchase Online**

	mean	standard deviation
security of transaction	1.52	.87
delivery reliability	1.61	.84
convenience	1.68	.85
return policies	1.90	1.01
reputation of online stores	1.92	.98
delivery time	2.01	.96
low price	2.09	1.04
modes of payment	2.22	1.00
physical viewing of goods	2.43	1.19

scale: 1 = very important; 5 = not important at all  
notes: differences of approximately .14 are significant (p = 0.05). A blank line separates means which are significantly lower than the mean above (p = 0.05).

Table 3 indicates that the means of willingness to pay for delivery of orders from overseas follows a standard demand curve. There is more resistance when delivery charges are higher. However, resistance to the charges is significantly reduced for high and medium level delivery charges when the message is included pointing out to customers that the delivery time is considered good by industry standards. In other words, the message seems to focus customer attention on the value that they receive for the price, and they are more willing to pay when they explicitly see the value.

**Table 3: Mean Willingness to Pay Overseas Delivery at Three Price Levels, by Message about Delivery Quality or Control**

delivery prices	no message		with message		row sig (no-with)
	mean	std dev	mean	std dev	
low	3.00	1.20	2.88	1.26	.626
medium	3.90	1.07	3.20	1.05	<b>.001</b>
high	4.02	.98	3.44	1.21	<b>.010</b>
column sig. (low-med)	<b>.000</b>		.176		
(low-high)	<b>.000</b>		<b>.019</b>		
(med-high)	.582		.310		

scale: 1 = very willing, 5 = not willing at all.

Table 4 shows similar results for local delivery charges. The same downward sloping demand curve is evident, with more resistance to higher prices. Here, since local charges are lower, resistance only becomes large for the high level of delivery charges, but again, at this high level, including the message reduces resistance to paying. Clearly, willingness to pay, at least at higher price levels, depends on customers explicitly recognizing that they gain some value for what they pay. When it is explicitly pointed out to them that the delivery service is high quality, they are more willing to pay.

**Table 4: Mean Willingness to Pay Local Delivery at Three Price Levels, by Message about Delivery Quality or Control**

delivery prices	no message		with message		row sig (no-with)
	mean	std dev	mean	std dev	
low	2.50	1.13	2.48	1.18	.931
medium	3.16	1.06	2.98	1.08	.401
high	4.10	1.07	3.46	1.01	<b>.003</b>
column sig. (low-med)	<b>.003</b>		<b>.024</b>		
(low-high)	<b>.000</b>		<b>.000</b>		
(med-high)	<b>.000</b>		<b>.030</b>		

scale: 1 = very willing, 5 = not willing at all.

To test the joint impact of message and price level, as well as to control for price sensitivity, ANOVA was run, with willingness to buy as the dependent variable. Price level, message, and the importance of price (noted in Table 2) were the independent variables. Results indicate that price level for delivery charges is significant ( $p = .000$ , and  $p = .000$ ) for both local company delivery and foreign company delivery, respectively. In each case, the results show a standard downward sloping demand curve, consistent with basic economic theory. The parameters indicate more willingness to pay as delivery charges decline, and more willingness to pay local charges, where the amount is lower than for overseas (Table 5).

Price importance was also significant ( $p = .037$  and  $.011$  for local and overseas delivery, respectively). The similar negative coefficients in each case indicate that more price sensitive customers are less willing to pay the delivery charges. This, of course, is consistent with the definition of price sensitivity and most other research.

The key issue here is that the message about delivery quality was also significant in each case ( $p = .029$  and  $p = .000$ , respectively, for local and overseas delivery). The positive coefficient for no message indicates less willingness to pay. Thus, a simple message pointing out that the delivery time is considered high quality in the industry was able to reduce resistance to paying delivery charges.

**Table 5: ANOVA Results of Joint Impact of Message, Price Level, and Price Importance on Willingness to Buy**

	local		overseas	
	sig.	parameter	sig.	parameter
model	.000		.000	
message none message	.029	.602 0 *	.000	.532 0 *
delivery price level	.000		.000	
low		-1.005		-.592
medium		-.518		-.288
high		0 *		0 *
price importance	.037	-.127	.011	-.159
R squared	.225		.147	
adjusted R- sq	.209		.129	

\* signifies the statistical base category; other categories are relative to the base.

## 5. Conclusion

Although delivery is a critical element of B2C retail services, only a few studies look at delivery issues on the internet in much detail. This study in Singapore focuses customer willingness to pay for delivery of products available on-line. It examines three different price levels, each one in a separate questionnaire, and information informing the respondent that the stated delivery time is considered fast by industry standards, vs. a control with no comment about delivery time. Results clearly show that customer willingness to pay can be influenced by the message that they see at the time they consider the delivery charges.

These simple results have important implications for e-retailers. Delivery has been a barrier to the development of ecommerce, partly because customers frequently resist paying extra delivery charges. However, this resistance is frequently misinterpreted as strong price sensitivity. It is not. Rather, the resistance to delivery charges seems to represent unwillingness to pay when customers see no value in what they are paying for. They are willing to pay when they see some value received in exchange for the price. This is characteristic of value oriented middle class consumers throughout Asia.

Thus, the e-retailer's task is to shift the customer's focus when they consider delivery charges. Frequently, the comparison may be: "slow if ordered online, compared to fast if bought in a store." Resistance to delivery charges is bound to be high in such a comparison. The consumer is being asked to pay more for worse service. A simple message about the quality of delivery time can apparently shift the focus more toward "faster delivery at this site, compared to slower delivery at other sites." Here, the consumer is being asked to pay for better quality, something which many value oriented consumers are quite willing to do. In fact, given that delivery charges might be similar for various delivery times on different sites, the consumer may perceive this as similar price for better service – a very attractive proposition to value oriented customers.

Of course, additional research is needed to confirm that such results would hold in a variety of e-retailing situations. And it would be very useful to examine how to best present messages to get the customer to shift focus from the web – store delivery time comparison to the better quality web – worse quality web contrast. Nevertheless, these results do suggest that one relatively simple way to help reduce resistance to delivery charges in e-retailing is to include a message about the quality of services at the time when consumers consider the delivery charges.

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