

Internet auction sellers: does size really matter?

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Abstract

Internet marketing is a field which is continuing to grow, and the online auction concept may be defining a totally new and unique distribution alternative. Very few studies have examined auction sellers and their Internet marketing strategies. This research examines the Internet auction phenomenon as it relates to the marketing mix of online auction sellers. The data in this study indicate that, while there is great diversity among businesses that utilize online auctions, distinct cost leadership and differentiation marketing strategies are both evident. These two approaches are further distinguished in terms of the Internet usage strategies employed by each group.

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Introduction

Internet usage at all levels continues to grow, and online purchases by both businesses and consumers are booming (Sheehan and Doherty, 2001). One area of e-commerce that has exploded in sales and customer interest is online auctions. Auction sites are increasing in both popularity and diversity of offering, and clearly represent a huge growth opportunity for marketers. Third-party auction houses such as Amazon.com and eBay accounted for 15 percent of all consumer e-commerce spending in the first six months of 1999, almost \$1.5 billion (Oberndorf, 1999). Even more ambitious growth is predicted by the Cambridge, MA firm, Forrester Research, Inc. It expects consumers to spend \$19 billion on online auctions by 2003 (Freedman, 2000).

Detractors say that auctions account for just 1 percent of annual US retail sales, hardly a threat to existing brick and mortar businesses. But even they cannot argue that the expected growth in this area will likely change the marketing strategies of both small and large businesses. At the same time, research about online auction sellers has been limited primarily to descriptive statistics reported in the popular business press. Theoretical research on online auctions is even scarcer. In particular, no one has examined the concept of company size as it relates to online auctioneers. Given that the Internet was predicted to level the playing field for small businesses, issues of company size and size-related differences in auction seller practices should be highly relevant.

Thus, the research question investigated in this paper is, "To what extent do online auction sellers vary in size, and to what extent do their size differences influence their strategic use of online Internet auctions and their attitudes toward them?" The paper is organized in the following manner. First, background on online auctions is provided, including information on the varieties, benefits, and uses of online auctions. Next, a discussion of company size as it relates to Internet usage is presented. Exploratory research hypotheses are then proposed regarding Internet auction sellers' attitudes toward and usage of online auctions. The study methodology, including discussion of sampling frame and measures, is then



discussed. Small versus large online auction sellers are then analyzed, and the results of an exploratory study of eBay sellers are provided. Finally, implications for e-commerce firms and future research on auction sellers are presented.

The online auction marketplace

Internet auctions can be characterized in two ways: third-party auction sellers such as eBay, Amazon.com and Yahoo! that auction off goods for others (either individual sellers or corporate chains), and direct auction sellers which create their own auctions online via their company Web sites. A substantial number of retailers and catalog firms are taking advantage of the boom in these online auctions to unload merchandise and increase sales, and growth in the online auction category is now well documented. Catalog companies (e.g. The Sharper Image, Ross-Simons, and CompUSA) and store retailers (J.C. Penney, Circuit City) are all successfully auctioning products (Oberndorf, 1999). For example, Penney's 37 outlet stores use the online auction to sell overstocked merchandise (Collett, 2000).

Use of the Internet as a tool for communicating directly to customers is increasing as well (Riedman, 1999; Sheehan and Doherty, 2001). Furthermore, Internet users value the medium as a tool for learning about a company's products and services (Kehoe *et al.*, 1998), not just for buying. Web sites can provide nearly all the functions of traditional marketing communications except perhaps personal selling, and often at much lower costs. For example, media advertising is cost prohibitive for many small and medium-sized firms, and larger firms dominate the traditional advertising media. Creating and maintaining an effective company Web site is possible for both small and large sellers. This suggests that company size or resources may no longer be a primary competitive advantage.

In the business-to-business sector, more than 20 percent of organizations surveyed reported buying goods and services via online auctions in the previous quarter (Faloon, 2001). Price competition in this sector is so severe that industrial goods suppliers are often cutting prices by 20 percent or more on individual

items, and 6-15 percent on large orders (Woolley, 1998). This evidence suggests that sales volume may play a key role in the online auction arena, especially if significant discounting of market prices occurs. Again, sales volume issues suggest that company size may play a factor in online auction selling.

Benefits of online auctions to sellers

For sellers, the benefits of auctions consist of selling merchandise quickly, easily, at low cost, and at sometimes premium prices. Even old, damaged, returned, and refurbished merchandise can be unloaded. Furthermore, new markets are established and a company's customer base can be enlarged. The widespread availability of outsourcing various online auction services has probably contributed to this growth in online auction selling. Everything from software applications to fulfillment services, to setting up front- and back-end operations can be bought from companies like Bidland.com, AuctionWatch.com, and SellXS.com for a small fee or percentage of sales (Reda, 2000; Warner, 2000). Another company, Andale, will set up a seller's auction listing, process credit card payments, and assist with inventory and accounting as well (Freeman, 2000). Even vendors such as Microsoft and IBM are adding auction modules to existing e-commerce software programs (Oberndorf, 1999).

Based on the available research, Internet auction sellers have cited the following reasons for using online auctions:

- To unload discontinued, returned, damaged, or overstocked goods (Collett, 2000; Reda, 2000).
- To test prices in order to see what the market will bear (Collett, 2000).
- To acquire new customers (Machlis, 1998) and keep new customer acquisition costs low (Warner, 2000).
- To sell quality, designer goods at a discount, appealing to the "price-only" shoppers (Warner, 2000).
- To generate excitement about an online site and to involve customers in an interactive sense (Oberndorf, 1999).
- To connect with buyers in real time (Reda, 2000).

- To complement traditional brick and mortar businesses and enhance retail store values (Colombo, 2000).
- To give seasonal products a broader year-round appeal (Lewis, 2000).

Benefits of online auctions for buyers

For buyers, online auctions represent 24-hour availability seven days a week, instant gratification, and interactivity (Hoffman and Novak, 1996). This interactivity sometimes allows customers more control over price and product/service customization. Increased learning about a product category may also be a positive outcome (Hoffman and Novak, 1996; Van den Poel and Leunis, 1999). Consumer search costs can be reduced dramatically even while the number of available options increases, adding to both convenience and savings (Machlis, 1998). In addition, purchasers may pay lower prices, with industrial buyers saving 6-15 percent or more by opening up their purchasing processes to online auctions (Woolley, 1998). As a result of these benefits, the number of online auction purchasers is expected to increase to 6.5 million in 2002 (from 1.2 million in 1998). eBay alone has 38 million buyers and sellers who trade on its site (Hof, 2001).

The size and nature of online auction sellers

An increasing number of retailers, manufacturers, and liquidators are using eBay to unload returned and refurbished merchandise, not just to sell discounted goods. The corporate giants in the consumer electronic, computer, and automobile industries have been drawn to eBay because of the explosive growth in online auctions. For example, eBay currently lists more than 130,000 computer items, 6,000 cameras, and over 7,000 sweaters (Freedman, 2000).

Even so, some smaller auction sites have adopted niche-marketing strategies in order to survive. For example, the Boyds & Bears Auction Board (www.bearauction.com) sells more whimsical gifts, while Phoebus Auction in Virginia specializes in upscale classic collectibles and antiques (Millman, 1998,

p. 77). In total, however, both the depth and breadth of product lines available via Internet auctions are still increasing. Clearly, large differences in the size and scope of online auction sellers exist.

The Internet was supposed to allow both small and large businesses to compete successfully online, yet only 30 percent of small companies even have some sort of Web sales capability, according to the US Small Business Administration (Freedman, 2000). Among sellers who do engage in online auctions, either directly or via third party auction houses, small companies have a presence, but variations in company size and strategies often exist.

For example, online auction sellers consist of both "microbusinesses" and large corporate sellers. Microbusinesses refer to a relatively new class of "tiny enterprises" or entrepreneurs who have successfully maneuvered the online marketplace (Freedman, 2000). Sometimes a single individual operating out of a home – with no inventory, overheads, or business acumen – can set up online selling opportunities simply by using third party auctions or setting up their own auctions using available services. Even small businesses with online sales capabilities could be threatened by the low cost and rapid response of microbusinesses if they do not adequately differentiate themselves (Freedman, 2000).

The corporate merchants have been drawn to eBay because of the explosive growth in the online marketplace (Wingfield, 2001). These large corporations (e.g. JCPenney, Circuit City, Disney, IBM, US Postal Service, Xerox) differ from microbusinesses not only in terms of company size, but also in terms of product offering. And even though eBay charges corporate sellers the same amount as small sellers to list items, eBay also gives some of its big sellers promotional perks that its smaller sellers do not receive. For example, Sun, Xerox, and IBM are all given top billing in eBay's computer area, and Disney has a special area on the eBay site to merchandise Disney products (Wingfield, 2001). Despite complaints from some smaller vendors, eBay continues to assert that it treats all sellers fairly and that average prices and profits are rising. Ultimately, both small and large auction sellers are exposing their products to millions of customers in order to achieve their business objectives.

It has been argued that, in online selling, size does not matter. Clearly, many of the aforementioned benefits related to online auctions could apply equally to small and large online sellers. The effects of firm size have been the focus of a great deal of research in strategy, organizational behavior, and entrepreneurship, however. And many significant differences between small and large companies have been discovered. The emergence of e-commerce, in particular online auction selling, may mitigate some of these effects. Furthermore, company size, if it does have an impact, may not be in the traditional ways (e.g. resource availability, customer responsiveness, strategy type, formalization, centralization, etc.).

Existing studies have examined the relationship between company size and multiple uses of the Internet (e.g. e-mail, home pages, industry analysis, etc. (Haynes *et al.*, 1998)) or the perceived benefits of the Internet across firms of various sizes (information access and dissemination, increasing sales, customer support, etc. (Auger and Gallagher, 1997)). In the specific case of online auctions, however, company size issues have been examined only in relation to Internet buyers rather than sellers. For example, in a survey conducted by the National Association of Purchasing Management and Forrester Research, large-volume buyers used online auctions to buy goods and services more than twice as much as small-volume buyers did (Faloon, 2001). Yet no research to date has examined size-related differences among firms engaged in Internet auction selling.

Research propositions

Based on the existing research about online auction sellers and company size differences in Internet environments, several relationships are suggested. First, the literature suggests that a relationship exists between the amount of business a company derives from Internet auctions and the size of the company in terms of its annual sales volume. Second, the marketing practices of a company relative to the items it sells and the distribution channels it generally uses will vary based upon the annual overall sales volume of the company. And third,

companies of varying size relative to their annual sales volume will have differing attitudes relative to various aspects of using online auctions. These attitudes center both on the strategic value of online auctions and various strategies for using online auctions as a distribution and sales alternative. Hence, the following exploratory research propositions are presented:

- P1. A significant relationship exists between the proportion of a company's sales volume derived from online auctions and the overall size of the company.
- P2. Marketing practices of online auction sellers will vary based upon the company size.
- P3. Attitudes about online auction selling among Internet auction sellers will vary based upon the proportion of their business that is derived from online auctions.

Study method

Questionnaires were e-mailed to 375 eBay auction sellers. Sellers were chosen via a quota sample across all 21 major categories listed in the "browse" for buyers section of the eBay Web site. The selection of the number of sellers in each category was proportional to the number of items for sale in each category during Spring 2001. Since the research focused on "experienced" eBay sellers, sellers were selected only if they:

- (1) had at least 200 feedback comments;
- (2) accepted credit cards for payment; and
- (3) had some special graphic or standard marketing copy created for their eBay listing.

These three criteria were chosen in order to differentiate one-time or "occasional" sellers from frequent and experienced sellers.

To increase response rate, the questionnaire was included in the body of each e-mail, so respondents only had to reply and add their responses. Respondents were also offered summary results of the study, to allow them to assess their own business relative to the responses of other online Internet businesses in the study. A response rate of 20 percent was achieved, for a total of 75 responses.

A brief message was included in the e-mail indicating that the data would remain confidential. This survey was conducted prior to eBay's change in policy regarding the accessibility of vendors.

Measures

The survey asked online sellers about the size and nature of their online auction business. Specifically, the study examined other distribution channels used to sell products (e.g. retail stores, catalogs), the type of merchandise sold via Internet auctions (e.g. normal stock, discontinued items, clearance goods), and respondents' attitudes regarding online auction sales.

To measure seller attitudes, respondents were asked to indicate their level of agreement or disagreement with various statements about Internet auction selling. A five-point Likert-type scale was used (see Appendix). Examples of the statements include "Internet auctions are best used for clearance items", and "Payment is not a problem with Internet auction sale".

The size and scope of the online auction companies were also measured. Each seller indicated: first, the percent of their sales volume derived from online auctions (0-25 percent, 26-50 percent, 51-75 percent, and 76-100 percent); and second, their total annual sales revenue (less than \$25,000, \$25,000-99,000, \$100,000-249,000, and \$250,000 or more).

Sample characteristics

The sample respondents reported selling products online in 11 different eBay product categories (see Table I). The largest group sold antiques (21.3 percent), followed by collectibles (13.3 percent), computers (10.7 percent), photography and electronics (8 percent), sports (8 percent), jewelry (6.7 percent), toys (6.7 percent), clothing (6.7 percent), books (5.3 percent), movies (4 percent), and pottery (1.3 percent). A miscellaneous category accounted for 8 percent of the sellers. Only 27 percent of the respondents sell on eBay only, but 44 percent of them are engaged in Internet sales other than online auctions.

The respondents also sell different types of merchandise via online auctions, with 41 percent of them selling "normal stock", 37 percent selling limited edition items, 28 percent

Table I Characteristics of the sample

	Percent
Type of product normally sold on Internet auctions:	
Antiques	21.3
Collectibles	13.3
Computers	10.7
Photography and electronics	8.0
Sports	8.0
Jewelry	6.7
Toys	6.7
Clothing	6.7
Books	5.3
Movies	4.0
Pottery	1.3
Type of merchandise sold via Internet auctions:	
Normal stock	41.0
Limited edition items	37.0
High demand products	32.0
Overstock items	28.0
Discontinued products	26.0
Clearance items	23.0
Special sales products	21.0
Size of sample Internet auction sellers:	
Total sales volume	
Under \$25,000	36.0
\$25-99,000	17.0
\$100-249,000	19.0
\$250,000 or more	17.0
Proportion of Internet auction sales volume:	
1-25	8.0
26-50	21.0
51-75	20.0
76-100	51.0

selling overstock items, 26 percent discontinued products, 23 percent clearance items, 21 percent special sale products, and 32 percent high demand products. Some sellers checked more than one of the above categories because they sell several types of merchandise via Internet auctions.

The respondent sample is quite diverse relative to size. The smallest firms (sales revenue under \$25,000) comprise 36 percent of the sample. Those with sales of \$25,000-\$99,000 represented 17 percent of the sample, and 19 percent had sales of \$100,000-\$249,000. The largest firms (\$250,000+) were 17 percent of the sample, and 11 percent of the

respondents declined to provide their annual sales revenue. Another aspect of size, percent sales volume derived from online auction sales, was slightly less diverse. Over half of the sample (51 percent) derives 76-100 percent of their business from online Internet auction sales. Other categories were 1-25 percent of sales volume at 8 percent, 26-50 percent of sales volume at 21 percent and 51-75 percent at 20 percent. Overall, a broad spectrum of online auction selling and seller types appears to be represented in the sample.

Results

Table II presents a cross-tabulation of the percentage of sales volume via Internet auctions and company size (measured as annual sales revenue). As indicated in Table II, a significant relationship exists between these two company characteristics (Chi-square = 22.13, $p \leq 0.01$). Smaller online auction sellers (i.e. lower annual sales revenue) generally do a larger portion of their total sales in online auction sales. In fact, two-thirds of small auction sellers (less than \$100,000 in sales) conduct 76 percent or more of their total sales volume via Internet auctions ($27/40 = 67.5$ percent; see Table II). Similarly, the larger firms do relatively smaller percentages of their sales volume in online auction sales. Hence, research *P1* is supported.

To investigate the marketing practices of Internet auction sellers, questions were asked regarding other outlets they use to sell their products and the type of merchandise they typically sell via online auctions. The respondents indicated whether various product or marketing practices were typical of their online auction sales. These responses are

presented in Table III and are categorized by company size (annual sales revenue).

As shown in Table III, there are significant differences in four marketing practices among online auction sellers of different size. All but the very smallest firms (i.e. less than \$25,000 in annual sales) tend to use other Internet sites to sell their products. Only the very largest firms in the sample, with over \$250,000 in sales, generally use retail stores as an alternative sales strategy. Relative to other distribution alternatives such as catalogs or wholesale transactions, there appears to be no significant difference in usage relative to size differences. Similarly, there is no significant difference in the size of firms who sell on eBay only, although some variation across sellers does exist.

Regarding the type of merchandise sold in online auctions, the data indicate that firms that do \$25,000 or more in Internet auction sales are more likely than smaller firms (sales less than \$25,000) to sell "normal" merchandise. Similarly the larger firms are also more likely to use online auctions for "special sale" merchandise. Hence one might conclude that firms of all sizes are likely to sell items that are discontinued, overstock, in high demand, or limited edition products. Based on the above results, there is limited support for *P2*.

Means for each of the ten attitude statements about online auctions were calculated. Table IV presents the means for the total sample, as well as individual means for groupings representing various levels of sales volume accounted for by Internet auction sales. A review of the means for the total sample reveals that online auction sellers generally agree that:

- online auctions are best for clearance items;
- often online auction prices are somewhat discounted;
- it is easy to satisfy online auction customers;

Table II Internet auction sales volume compared to company size

Percent of sales volume via Internet auctions	Total company size				Total
	Less than \$25,000	\$25,000-99,000	\$100,000-249,000	\$250,000+	
0-25	1	0	0	5	6
26-50	5	2	5	3	15
51-75	3	2	3	2	10
76-100	18	9	6	3	36
Total	27	13	14	13	67

Notes: Chi-square = 22.13; $p < 0.01$

Table III Marketing practices of Internet auction sellers related to company size

	Company size (revenue)	Percent	Chi-square	Significance
Usually sell normal merchandise	Less than \$25,000	37.0	6.14	0.10
	\$25,000-99,000	69.2		
	\$100,000-250,000	64.3		
	\$250,000+	69.2		
Usually sell overstock merchandise	Less than \$25,000	18.5	2.35	NS
	\$25,000-99,000	30.8		
	\$100,000-250,000	35.7		
	\$250,000+	14.3		
Normally sell discounted merchandise	Less than \$25,000	14.8	4.66	NS
	\$25,000-99,000	46.2		
	\$100,000-250,000	28.6		
	\$250,000+	23.1		
Normally sell special sale merchandise	Less than \$25,000	7.4	7.39	0.06
	\$25,000-99,000	30.8		
	\$100,000-250,000	42.9		
	\$250,000+	23.1		
Normally sell high demand merchandise	Less than \$25,000	29.6	0.88	NS
	\$25,000-99,000	30.8		
	\$100,000-250,000	42.9		
	\$250,000+	38.5		
Normally sell limited edition items	Less than \$25,000	4.1	0.33	NS
	\$25,000-99,000	46.2		
	\$100,000-250,000	35.7		
	\$250,000+	38.5		
Also sell on other Internet sites	Less than \$25,000	14.8	12.62	0.01
	\$25,000-99,000	53.8		
	\$100,000-250,000	64.3		
	\$250,000+	53.8		
Also sell in retail stores	Less than \$25,000	14.8	8.36	0.00
	\$25,000-99,000	23.1		
	\$100,000-250,000	14.3		
	\$250,000+	53.8		
Also sell in catalogs	Less than \$25,000	0.0	3.25	NS
	\$25,000-99,000	7.7		
	\$100,000-250,000	0.0		
	\$250,000+	7.7		
Also sell wholesale	Less than \$25,000	11.1	3.57	NS
	\$25,000-99,000	30.8		
	\$100,000-250,000	14.3		
	\$250,000+	30.8		
Sell eBay only	Less than \$25,000	40.7	4.6	NS
	\$25,000-99,000	15.4		
	\$100,000-250,000	21.4		
	\$250,000+	15.4		

- payment for auction sales is not a problem; and
- small and large companies can both compete equally well using Internet auctions.

The respondents more strongly agree on two issues: first, that online auctions are a good way to find new customers, and second, that feedback ratings are critical to online auction success. They disagree, however, with attitude

Table IV Attitudes about Internet auctions relative to Internet auction sales volume

Attitude variable	Online auction sales		F-value	Significance
	volume (%)	Mean ^a		
Best for clearance items	Overall	3.35	4.23	0.01
	0-25	3.33		
	26-50	3.38		
	51-75	2.27		
	76-100	3.76		
Discount prices	Overall	3.43	4.24	0.01
	0-25	4.00		
	26-50	3.75		
	51-75	2.27		
	76-100	3.66		
Find new customers	Overall	4.25	1.26	NS
	0-25	4.00		
	26-50	4.56		
	51-75	3.73		
	76-100	4.37		
Higher profit margins	Overall	2.72	0.56	NS
	0-25	3.00		
	26-50	2.63		
	51-75	2.33		
	76-100	2.87		
Hard to do both auction and fixed price	Overall	2.35	1.36	NS
	0-25	2.00		
	26-50	2.56		
	51-75	1.87		
	76-100	2.50		
Easy to satisfy Internet auction customers	Overall	3.20	2.22	0.10
	0-25	3.67		
	26-50	3.25		
	51-75	2.53		
	76-100	3.37		
Sell in Internet auctions without inventory	Overall	2.12	4.04	0.01
	0-25	1.33		
	26-50	2.75		
	51-75	1.27		
	76-100	2.32		
Feedback ratings critical	Overall	4.41	2.41	0.10
	0-25	4.83		
	26-50	4.56		
	51-75	3.73		
	76-100	4.55		

Notes: ^aHigher means indicate stronger agreement

statements saying that online auction sales represent higher profit margins, and that it is difficult to conduct online auctions and fixed price sales simultaneously. Similarly, they generally do not think that online auction sellers can operate without any inventory.

An analysis of variance was conducted to compare mean attitude agreement across sellers with varying proportions of sales volume accounted for by online auctions. Several significant differences were found. Internet auction sales volume level seems to significantly

influence attitudes regarding selling clearance items via online auctions, the extent to which online auctions sell at discount prices, the ease of satisfying online auction customers, the importance of feedback ratings for online auction sellers, and the ability to sell on online auctions without any inventory. With significant differences indicated for five of the ten attitude statements, there is limited support for *P3*.

While the results above suggest that attitudes about online auctions vary somewhat across companies with varying proportions of online auction sales, interpreting differences in the mean attitude scores is more difficult. Regarding clearance items sold via online auctions, only the midrange (51-75 percent of sales volume) sellers do not generally agree that Internet auctions are best for clearance or closeout type items, that the sales prices on online auctions generally represent a discount, and that it is easy to satisfy Internet auction customers. This group of respondents may have a unique perspective about online auctions based on some factor other than the proportion of their volume derived from Internet auction sales.

The other two attitude statements with significant differences among sellers with varying online auction sales volumes relate to feedback ratings and selling without inventory. The midrange sales volume group (51-75 percent) again appears to be less in agreement regarding the importance of feedback ratings, but at least still in agreement. Regarding the ability to sell via online auctions without an inventory, all of the online auction sellers do not believe it is possible to sell without any inventory, with both the midrange sellers (51-75 percent) and the lowest volume sellers (0-25 percent) holding that opinion most strongly.

Discussion and implications

This exploratory examination of eBay sellers indicates that online auction sellers clearly vary in terms of company size and scope. In addition, company size and reliance on Internet auctions are significantly related. For example, smaller online auction sellers rely on auctions

for a significantly larger proportion of their total annual sales volume than larger sellers.

The size of an online auction seller appears to be significantly related to a number of Internet marketing practices as well. Specifically, total company sales volume was related to the type of merchandise sold via auction as well as the alternative distribution channels used to sell goods. For example, only 4 percent of the smallest auction sellers (less than \$25,000 annual revenue) sell "limited edition" goods online, whereas almost 40 percent of the largest sellers (\$250,000 or more in annual revenue) sell "limited edition" items. Similarly, over 40 percent of the smallest online sellers use eBay as their exclusive distribution outlet, but only about 15 percent of the largest sellers use eBay exclusively. In fact, over 53 percent of the largest eBay sellers use traditional in-store retailing in addition to auctions. Thus, the size of an online auction seller is related to the proportion and type of Internet business conducted.

Further research is needed to establish differences among small versus large online auction sellers with respect to other key variables. For example, examining the relationship between seller size and market performance (e.g. profits, market share, growth), competitive strategy used (e.g. differentiation, cost leadership, focus), or even marketing budget allocation (e.g. marketing research, interactive marketing, media advertising) should be of great interest to current and future online auction sellers.

The findings regarding online auction seller size and the percentage of sales volume conducted on the Internet suggest several different strategic approaches for smaller sellers. Growth for small sellers could be accomplished in several ways. First, smaller online sellers could move beyond auctions and establish alternative distribution channels such as catalogs, or even open retail outlets. Limited resources may prevent a move into "brick and mortar" retailing, but this could be a long-term growth strategy. Second, small sellers could begin selling on more auction sites, adding other third-party auctions to their eBay sales, or even establishing their own auction site. Since less than 15 percent of the smallest online auction sellers reported selling on other Internet

sites (see Table II), this is clearly a viable option for many small eBay sellers. Finally, these small sellers could increase the variety and quantity of goods presented on eBay. This might require additional inventory investments for some sellers, but it could be a viable option for some. Since two-thirds (18 of 27) of the smallest online sellers (less than \$25,000 sales revenue) relied on auctions for more than 76 percent of their total business, it could be argued that growth for small sellers may come only by reducing their reliance on Internet auctions.

Of course, given the exploratory nature of this study, no causal inferences can be assumed. That is, it cannot be said that the size of the online auction seller dictates the use of various marketing practices. It could just as easily be said that the use of various Internet marketing practices leads online auctioneers to various levels of sales revenue. Future research will have to establish the cause and effect relationships.

The findings regarding online auction sellers' alternative distribution methods suggest that retail stores are options for only the larger sellers, likely due to the extreme financial commitment and risk. Catalog and wholesale selling, on the other hand, appear to be embraced more by online sellers of all sizes. In other words, auction seller size and catalog and wholesale selling are not significantly related. This is likely due to the lower costs and ease of entry associated with these forms of selling.

These findings suggest a possible "hierarchy of distribution commitment" for small businesses, with auction sales as a first step, followed by catalog or wholesale distribution (or both), then the addition of other Internet sites. Traditional in-store retail distribution is likely the last step for smaller businesses. At the same time, a reverse hierarchy may exist for a larger business with an established retail presence. Once retail outlet sales are established successfully, additional growth via Internet auctions and catalogs can occur. This "hierarchy of distribution commitment" hypothesis should be the subject of future Internet research.

Several interesting findings emerge when the attitudes of various online auction sellers are examined. First, regardless of their proportion of Internet auction sales volume, the online sellers surveyed here disagree that Internet

auction sales represent higher profit margins. Yet at least one previous report of eBay sellers cited profit margins (measured as return-on-assets) ranging from five to 15 times the average return of conventional small businesses (Freedman, 2000). Of course, this evidence was primarily anecdotal and reported in the popular business press, but this contradictory finding only further strengthens the case for more Internet auction research.

When examining sellers' attitudes regarding the importance of customer feedback, small online auction sellers appear to place great value on feedback from and close contact with their customers. This attitude statement not only exhibited the highest level of agreement among all sellers ($m = 4.41$), but the highest group mean was among the smallest auction sellers ($m = 4.83$ among sellers with less than \$25,000 in sales). It is possible that small auction sellers emphasize customer feedback even more than some traditional small businesses. For example, a recent study by Coviello *et al.* (2000) investigated various marketing practices by firm size. They found that, although smaller firms emphasize direct relationships with customers, they tend to rely primarily on financial indicators of performance rather than competitive- or customer-based measures. In addition, smaller firms appear to make less use of customer-based information despite their greater access to customers. Of course, these authors did not specifically investigate online auction companies, so direct comparisons may not be appropriate. Still, this example suggests that more Internet auction-specific research is necessary for better theory building and Internet practices.

References

- Auger, P. and Gallaughier, J.M. (1997), "Factors affecting the adoption of an Internet-based sales presence for small businesses", *The Information Society*, Vol. 13 No. 1, pp. 55-74.
- Collett, S. (2000), "J.C. Penney to add online service", *Computerworld*, Vol. 34 No. 4, pp. 18-19.
- Colombo, G. (2000), "Internet-only selling will fail", *Sales and Marketing Management*, Vol. 152 No. 8, pp. 32-6.
- Coviello, N.E., Brodie, R.J. and Munro, H.J. (2000), "An investigation of marketing practice by firm size", *Journal of Business Venturing*, Vol. 15, pp. 523-45.

- Faloon, K. (2001), "B2B adoption of online activities expanding", *Supply House Times*, Vol. 44 No. 7, p. 30.
- Freedman, D. (2000), "Can you survive the eBay economy?", *Inc.*, Vol. 22 No. 3, pp. 88-95.
- Haynes, P., Becherer, R.C. and Helms, M.H. (1998), "Small and mid-sized businesses and Internet use: unrealized potential?", *Internet Research: Electronic Networking Applications and Policy*, Vol. 8 No. 3, pp. 229-35.
- Hof, R.D. (2001), "The people's company", *Business Week*, December 3, pp. 14-21.
- Hoffman, D.L. and Novak, T.P. (1996), "Marketing in hypermedia computer-mediated environments: conceptual foundations", *Journal of Marketing*, Vol. 60 No. 3, pp. 50-68.
- Kehoe, C., Pitkow, J., Sutton, K., Aggarwal, G. and Rogers, J.D. (1998), "GVU tenth WWW user survey", available at: www.gvu.gatech.edu/user_surveys/survey-1998-10/tenthreport.html
- Lewis, D. (2000), "Retailer thinks auction will smooth waters", *Internet week*, Vol. 832, October 9, p. 78.
- Machlis, S. (1998), "Online auction services thriving", *Computerworld*, Vol. 32 No. 24, pp. 1, 17.
- Millman, H. (1998), "Online auctions are changing the face of retail landscape", *InfoWorld*, Vol. 20 No. 10, p. 77.
- Oberndorf, S. (1999), "Getting a piece of the action", *Catalog Age*, August, pp. 5-7.
- Oliver, R.W. (1999), "Channels unlimited", *Management Review*, Vol. 88, October, pp. 12-13.
- Reda, S. (2000), "Retailers migrate to on-line", *Stores*, September, pp. 138-40.
- Riedman, P. (1999), "Marketers score with integration", *Advertising Age*, available at: www.adage.com
- Sheehan, K.B. and Doherty, C. (2001), "Re-weaving the Web: integrating print and online communications", *Journal of Interactive Marketing*, Vol. 15 No. 2, pp. 47-59.
- Van den Poel, D. and Leunis, J. (1999), "Consumer acceptance of the Internet as a channel of distribution", *Journal of Business Research*, Vol. 45 No. 3, pp. 245-56.
- Warner, M. (2000), "Going pro on eBay", *Fortune*, Vol. 141 No. 7, pp. 250-2.
- Wingfield, N. (2001), "Ebay watch: corporate sellers put the online auctioneer on even faster track", *The Wall Street Journal*, A1, June 1.
- Woolley, S. (1998), "E-muscle", *Forbes*, Vol. 161 No. 5, p. 204.
- Guay, D. and Ettwein, J. (1998), "Internet commerce basics", *Electronic Markets*, Vol. 8 No. 1, pp. 12-15.
- Jasper, C.R. and Ouellete, S.J. (1994), "Consumers' perception of risk and the purchase of apparel from catalogs", *Journal of Direct Marketing*, Vol. 8, Spring, pp. 23-36.
- Shankar, V., Rangaswamy, A.I. and Pusateri, M. (1999), "The online medium and customer price sensitivity", working paper, Smeal College of Business, Penn State University, PA.
- Shop.org (1999), "Online retailing to top USD36 billion in 1999", Shop.org, available at: www.nua.net/surveys/?f=VS&art_id=905355034&rel=true
- Spence, H.E., Engel, J.F. and Blackwell, R.D. (1970), "Perceived risk in mail-order and retail store buying", *Journal of Marketing Research*, Vol. 7, August, pp. 364-9.
- Standifird, S. (2001), "Reputation and e-commerce: eBay auctions and the asymmetrical impact of positive and negative ratings", *Journal of Management*, Vol. 27 No. 3, pp. 279-95.
- Van den Poel, D. (1996), "Mail-order versus retail store buying – the role of perceived risk and risk reduction strategies", *International Review of Retail, Distribution and Consumer Research*, Vol. 4, October, pp. 351-71.

Further reading

- Akaah, I.P. and Korgaonkar, P.K. (1988), "A conjoint investigation of the relative importance of risk relievers in direct marketing", *Journal of Advertising Research*, August/September, pp. 38-44.
- Festervand, T.A., Snyder, D.R. and Tsalikis, J.D. (1986), "Influence of catalog versus store shopping and prior satisfaction on perceived risk", *Journal of the Academy of Marketing Science*, Vol. 14, Winter, pp. 28-36.

Appendix. Internet auction survey items

I. Proportion of sales from online auctions item

Question: What percentage of your sales volume represents sales via Internet auctions?

- _____ 0-25 percent
 _____ 26-50 percent
 _____ 51-75 percent
 _____ 76-100 percent

II. Distribution channels used to sell products item

Question: Please indicate any other ways you sell your products: (check all that apply).

- _____ Internet non-auction sales
 _____ Retail store
 _____ Catalog
 _____ Wholesale
 _____ Other
 _____ eBay only

III. Type of merchandise sold via Internet auctions item

Question: Please indicate the type of merchandise you normally sell via Internet auctions (check all that apply).

- _____ Normal stock/normal price
 _____ Clearance

- _____ Overstock
- _____ Discontinued
- _____ Special sale items
- _____ Other

IV. Attitudes about online auction selling item

For each of the following questions, please indicate the response that most closely describes your organization:

- (1) Strongly disagree
 - (2) Moderately disagree
 - (3) Neither agree nor disagree
 - (4) Moderately agree
 - (5) Strongly agree
- _____ Internet auctions are best for clearance/closeout/overstock items.
 - _____ Internet auctions generally sell items at discount prices.
 - _____ Internet auctions are a good way to find new customers.
 - _____ Internet auctions represent sales with higher than normal profit margins.

- _____ It is hard for the same company to run Internet auctions and fixed price sales.
- _____ Internet auction customers are easy to satisfy.
- _____ Reputation and feedback ratings are critical to Internet auction sales success.
- _____ I can sell on Internet auctions without having the item in my inventory.
- _____ Payment is not a problem with Internet auction sales.
- _____ Small businesses can compete as well as large businesses with Internet auctions.

V. Company size in terms of annual sales revenue item

Question: Please indicate the annual sales revenues for your company.

- _____ Under \$25,000
- _____ \$25,000-99,000
- _____ \$100,000-249,000
- _____ \$250,000-999,000
- _____ \$1-5 million
- _____ Over \$5 million