

# Online Auctions: Are Relationships Doomed?

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## Introduction

Is the era of seller pricing setting coming to an end? Will auctions be the primary mode of setting price? Where will relationships and the IMP model fit into an auction driven pricing setting mechanism? The performance of online auctions has excited purchasing managers who are looking to reduce their costs. The leading web auction sites such as eBay ([www.ebay.com](http://www.ebay.com)), Priceline ([www.priceline.com](http://www.priceline.com)) and Freemarkets ([www.freemarkets.com](http://www.freemarkets.com)) have shown the business how to use the Internet to shape the price paid for goods and services. Since eBay launched its pioneer person-to-person auction site in September 1995, online auctions actually have become an important type of web-based business and seem to be becoming more popular. According to a Jupiter Communication's ([www.jup.com](http://www.jup.com)) [1] prediction, the number of online auction purchasers in the United States will grow from 1.2 million in 1998 to 6.5 million in 2002, representing about 11% of the total online shopping population. Forrester Research ([www.forrester.com](http://www.forrester.com)) [2] provides a more optimistic prediction as they predict that the number of online auction buyers will grow from 3 million in 1998 to at least 14 million by 2003. In addition to the growing number of users, the estimated number of auction sites has increased dramatically as now more than 1,660 auction sites [3] are listed on the online auction portal web site Internetauctionlist ([www.internetauctionlist.com](http://www.internetauctionlist.com)). The number of auctions is expected to continue to increase. We review the existing auction business models and then investigate the dynamics between competitors and how auctions may impact alliances and buyer-seller relationships. We conclude the paper with some thoughts on how relationships and the IMP will evolve.

## Background

A brief discussion of auction sites and relevant background material is presented below.

- **Market size:** How large can the online auction market become? Based upon the prediction of San Francisco Internet market watcher Keenan Vision Inc [2], the overall revenues that online auctions (including P2P, B2P, and B2B) may generate 29% of all e-commerce. This translates into \$129 billion by 2002, up from 3.8 billion at the end of 1998.
- **Market Segmentation:** The online auction market can be broken down into three subgroups based upon the roles of buyers and sellers
  - Person-to-Person:** Host auction sites mainly provide sellers and buyers with a public marketplace to trade online, and sometimes also help both parties to deal with the transactions, including billing, shipping and handling. i.e., eBay and Yahoo! ([www.auctions.yahoo.com](http://www.auctions.yahoo.com)).
  - Business-to-Person:** Host auction sites not only can provide a digital marketplace for business suppliers to sell their excess inventories or refurbished goods to end users, but also can serve as retailers that actually get involved in the distribution of auctioned items. I.e., uBid ([www.ubid.com](http://www.ubid.com)) and OnSale ([www.onsale.com](http://www.onsale.com) or [www.egghead.com](http://www.egghead.com)).
  - Business-to-Business:** Both of sellers and buyers are business units, and the purpose of executing an auction can be for re-sale of

those items to individual customers or for their own procurement. I.e., ComAuction ([www.comauction.com](http://www.comauction.com)), TradeOut ([www.tradeout.com](http://www.tradeout.com)), and ZoneTrader ([www.zonetrader.com](http://www.zonetrader.com)). Although the revenues of person-to-person auctions from eBay-like auction sites accounted for 70% of the 1.4 billion in goods sold online in 1997, Forrester Research predicts that the segment of business-to-person will make up 66% of the 19 billion Net market in 2003. As for the business-to-business segment, growth is even faster, from 8.7 billion in 1997 to 52.6 billion in 2002. About 52% of online business will be transacted via auction [4].

- **Auction Types:** The auction types can be classified along the following two dimensions: auction style, and auction process. The existing auction styles include [5]: 1) English/Yankee, with transparent and increasing bids, 2) Dutch, where the price starts off at a relatively high level and is continually discounted until the item is purchased, and 3) Vickrey, a sealed-bid auction where the winner only pays the second-highest bidder's price. Among those styles, English/Yankee is the most popular and prevalent format. The major auction sites such as eBay, Amazon, and yahoo all use this format. The auction processes include: [6]
- Standard, an auction where sellers first post the bidding items and decide quantities, then the buyers win the bids by increasing the bidding price, i.e. Skyauction ([www.skyauction.com](http://www.skyauction.com)) and DoveBid ([www.dovebid.com](http://www.dovebid.com)). 2) Reverse, with the desired items and the maximum price buyers are willing to pay are posted and sellers compete each other by providing more attractive prices or products, i.e. eWanted ([www.ewanted.com](http://www.ewanted.com)) and Respond ([www.respond.com](http://www.respond.com)). 3) Group Buying, an auction type that allows scattered buyers to pool their purchasing power and to create a virtual purchasing center with the clout to ask for lower prices from business suppliers, i.e. Accompany ([www.accompany.com](http://www.accompany.com)), PointSpeed ([www.pointspeed.com](http://www.pointspeed.com)), and Shop2gether ([www.shop2gether.com](http://www.shop2gether.com)).
- **Revenue structure:** In the person-to-person segment, leading online auction sites such as eBay achieve its profit targets by charging sellers both for listing fees and a percentage fee on successful transactions [7]. For other smaller auction sites, transaction fees are the major revenue generators. However, in order to draw net traffic in the short term, new entrants such as Excite's Classified2000s network ([www.classifieds2000.com](http://www.classifieds2000.com)) employ a "free" strategy to try to compete with the industry giants. Advertising revenues is the main source of revenue for these sites. In the business-to-business segment, some auction sites only charge a percentage of the transaction fees.

Some auction sites take a more active role to increase their revenues by providing integrated trading information and e-business solutions. FreeMarkets ([www.freemarkets.com](http://www.freemarkets.com)) [8] is an outstanding example as it provides buyer clients a very complex, tailored package of services including managing and coordinating a large number of purchases. The process starts with the buyer providing a request for proposal (RFP) that specifies the sometimes hundreds of individual parts that it needs, when they are needed, and other details of the transaction. FreeMarkets then works with the clients to identify qualified suppliers for each individual purchase. These qualified suppliers then are invited to a transparent, real-time auction held by FreeMarkets

### ***Business Models of Major Players***

In order to portray the various dimensions of the online auction market we have selected eBay, Priceline and FreeMarkets as examples of the different approaches to auctions.

- eBay:** eBay's auction model can be described as a standard, transparent, and P2P auction. Individual sellers post their auction items first; then potential buyers bid for them in a visible environment. Therefore, the more bids coming in, the higher the price. eBay's success is achieved through its broad auction product lines and its known brand name. At the time of writing this paper, based upon its own online statistics report on its homepage, eBay has 4,632,169 items for sale in 4,372 categories. According to the recent Weekly Flash from Media Metrix [9], eBay's daily reach topped 6.5 percent, outdoing the number-two site, Amazon, by 58 percent. The number of unique visitors was 1.782 million on an average daily basis. These figure suggests that eBay's brand name may occupy a large share of online shoppers' share of mind. High traffic volume helps eBay increase market efficiency, which allowing more sellers and buyers to find their matched counterparts easier with a one-stop shopping process. An important characteristic of eBay's business model is that it does not become involved in the monetary or logistical aspects of the transactions between two parties thereby saving them the costs and problems of supporting the exchange. The real benefit of this model is that eBay is a pure web-based company. In order to prevent Internet fraud and maintain registered users' loyalty, eBay also has developed a "Feedback Rating" system that discloses each user's trading record commented on by his/her trading counterparts. This system helps buyers improve their decision-making and increase the odds of participating in a successful auction. Nevertheless, Internet fraud is still a problem for the site.
- Priceline:** In contrast to eBay, Priceline's auction model is a reverse, private, B2P auction. Privacy and efficiency are the strengths of this model that pleases both buyers and sellers at the same time. The attribute of privacy protection initially helped Priceline build its firm relationship with suppliers by providing them with an anonymous forum to sell their goods and services at a discount. This is especially important to some big suppliers such as full-service air carriers, or travel agents that do not want their online auction offerings (mostly discounted) to interfere with their regular business. Anonymity of suppliers may not influence buyers' willingness to participate in such online auctions; however, it does increase sellers' incentive to participate. Protecting the privacy rights of customers can be an important strategy for increasing their propensity to use a particular site to buy and sell goods [8]. From the customer's point of view, "Name-your-own-price" is definitely a buyer-driven strategy and a big attraction. In addition to naming their own price on certain items, customers actually implicitly improve market efficiency. During the process of the reverse auction, a customer can set up the price he/she wants to pay for a wanted item. If he/she can't get the deal at the first time, one may adjust his/her price for the second round or the third round. The dynamics of price adjustment that is agreed on by both of seller and buyer helps decide the real value of the goods/services [9] [10]. Thus, the chances of goods/services being over-valued or under-valued are reduced. The site gathers demand and matches it with supply. Similar to eBay, Priceline does not need to deal with the logistics issue. "*Our model is, 'Let's deliver prices, not products,' and 'If we can deliver prices, we can deliver savings, we can let the retailers essentially be the logistics systems for the products,'*" says Jay Walker, Vice-Chairman & Founder of Priceline [11]. Another aspect of Priceline's success is its scalability. Besides selling air tickets, Priceline surprisingly expands its reach to some products that are considered more challenging to sell online. For example, gasoline, groceries, and mortgages. Jay Walker has pointed out that, "*The WebHouse Club demonstrates vividly that priceline.com's name-your-price model is scaleable across almost any product category*" [12]. As of the time of writing, WebHouse Club has more than 200,000 customers in key markets such as Boston, Washington D.C., etc [10] According to Dan Schulman,

president and COO of Priceline, the company currently has more than 4 million customers [13]. In addition, Priceline sells over 80,000 tickets each week, and now accounts for more than 3% of all the leisure airline tickets sold in the United States.

- **FreeMarkets:** Dissimilar to the two auction sites mentioned above, FreeMarkets conducts a reverse, private, and B2B auction. Since business buyers are very different from individual consumers, FreeMarkets excels in this B2B field by offering more complete auction services. The process begins when FreeMarkets first helps the corporate-procurement organizations of manufacturers develop a “Request for Quotation (RFQ)”, scout potential suppliers to form a bidding consortium, and then help train those suppliers on how to use the free bidding software provided by FreeMarkets to compete with each other in real-time [14]. In order to provide successful auctions, and to maintain a happy and loyal customer base, FreeMarkets continues to help buyers choose the best suppliers, often recommending rejection of the lowest bid in favor of bids from suppliers with better delivery systems or long-term relationship potential [15]. Instead of defining itself as an auction site or a technology provider, it is ambitious in acting as a business partner to buying firms, and it does carefully select suppliers to meet the buyers’ needs. *“Although managing long-term supplier partnerships is critical in some supply industries, buyers need an analytically rigorous way of choosing and benchmarking those suppliers,”* and *“Partnership in purchasing is not partnership without measurement of supplier performance and open information,”* says Glen Meakem, FreeMarkets’ co-founder and CEO [16]. Why do business buyers want to pay over tens of thousand dollars per year to procure industrial material through FreeMarkets’ services when they can bid on other auction sites such as iMark ([www.imark.com](http://www.imark.com)) or MaterialNet ([www.materialnet.com](http://www.materialnet.com)) for free? The figures below reveal FreeMarkets’ secret of success. According to the report on FreeMarkets’ homepage, in 1999, it auctioned more than 2.7 billion worth of purchase orders and saved buyers an estimated 2% to 25%. For Fortune 500 companies such as Siemens, Caterpillar, and United Technologies, 2% of cost savings may be several million to billion dollars that may turn their income statements from net loss to net profit. To sustain its success, FreeMarkets is expected to enlarge its database of qualified suppliers all over the world, and to work even closer with buyers to identify their needs and to obtain more cost reductions.

## **Auctions and Relationships**

There is no doubt that auctions will impact procurement in a major way, however, the scope of this impact is not known. Professor Hal Varian, suggests that, “Where C.E.O.’s once devoted their energies to cutting costs, clever marketing and enhanced innovation, in the Network Economy their efforts must focus on creating compelling and cost-effective market mechanisms. Designing the right kind of auction will have as big an impact on the brand, customer loyalty and profit margins as designing the right kinds of products”. He goes on to say, “Everything’s negotiable” [5]. The procurement literature is full of articles discussing and speculating on the future of the procurement function [17][18]. Given the breadth of this topic we focus on what may be the impact of auctions on deep buyer-seller relationships.

Figure 1 depicts the price setting tools that may be used given different industry and product characteristics. In the E-marketplace, buyers use commodity/service exchanges to create a market not unlike farmers market that is focussed on an industry or a group of products. It is likely that auctions may be used in the e-marketplaces. In February 2000, General Motors, Ford and DaimlerChrysler announced that they were collaborating to create what may be one

of the largest marketplaces if they can bring their supplier networks into their exchange. A recent article in Business Week noted that, “The new E-malls could disrupt decades-old relationships –and fast” [19] Exchanges will be a force in procurement development in the future as diverse firms as Microsoft and bCentral have announced an exchange targeting small business firms [20]. While Oracle, Chevron and Wal-Mart are forming an exchanged for the convenience store industry [21]. The powerful firms leading exchanges can be expected to leverage their buying power to not only save on transaction cost but press for lower prices.

The E-catalog (office supplies, MRO, computers etc.) describes a sellers line and allows a buyer to quickly search alternative sources. Auctions could be used to reduce price of standard items.

E-search is useful to search for product information, new technologies, suppliers and channels especially when the market is fragmented and the needs may require a custom designed solution. Auctions are less likely to be effective in fragmented markets where a custom solution is required.

In the fragmented industry where standard products are required using an auction to generate a lower price for the buyer. Sellers can use auctions to move surplus inventories. Auctions will be a powerful tool for both buyers and seller in this type of market.

Given that auctions are perceived to be a new way to not only reduce transaction cost but to generate lower prices it is hard to imagine the buyers will not be tempted to use them as a major procurement tool. Where will relationships fit into this new auction world?

Drawing upon a model of buyer-seller commitment [22] we have developed the first attempted at a model that will give us some insight into when buyers will stay with a relationship and when they are likely to go to pure auction. Figure 2 depicts the model.

#### *Performance*

Performance is how the firm meets or exceeds the needs and expectations of the buyer. It includes both product and service attribute within a price context. In other words, the value delivered to the buyer.

#### *Criticality*

Criticality is the significance of the product or service within the value creating system of the buyer. Pencils are not likely to be critical in the operation of a firm but a high performance coating system can have an important impact on the efficiency of an automobile production line.

#### *Trust*

Trust has been researched and speculated about for years. Our definition of trust is the belief that one relationship will act in the best interest of the other partner [23].

#### *Clalt*

Anderson and Narus [24] Wilson [22] defined Clalt as the quality of the outcome against the best available alternative partner. If Clalt is small then the temptation will be to use an auction to reduce price. A large Clalt will push the buyer to develop a relationship. Price will be negotiated.

#### *Communication*

Communication is the timely sharing of meaningful and timely information [22][24]. Good communication impacts Clalt by reducing the transaction costs of doing business through information availability thereby increasing the gap between the firm and alternative suppliers.

#### *Cooperation*

Cooperation is the willingness to work together with the partner to achieve mutual goals or singular outcomes. It involves coordination of plans and activities. Good communication is essential for cooperation to be effective.

#### *Adaptation*

Adaptation is a core concept in the IMP Group model. It is the altering of a firm's way of doing business to accommodate the needs of a partner [25] [26]. Trust, cooperation and criticality influence adaptations.

#### *Investments*

Investments that are relationship specific bond the partners together. Adaptations influence the need to make an investment. Trust allows the firm to make an investment protected by the belief that the partner will not take advantage of them

#### *Relationship/Auction*

The outcome of the model is the strength of the desire to work in a relationship or use auctions to acquire the goods. It could be expressed as the probability that relationship will be the operating mode.

## **Conclusion**

It is difficult not to believe that auctions to buyers are like blood in the water to sharks. Cost reduction is a the strong forces pushing the use of auctions. However, as outlined in the model there are counter forces that lead to relationship development. We believe that relationships as we know them will come under price pressure and be eliminated in some areas as the savings through lower price offsets the relationship advantage.

Purchasing professionals is one force slowing the rate of adoption of auctions. They are concerned about their role in the firm, as an auction model needs fewer purchasing people. Buyers like dealing with known suppliers as it reduces risk. In conversation with some buyers they seem to want to have their cake and eat it too. They said that they used auctions to test the market but selected their preferred suppliers, as there was not an obligation to take the lowest bid. Major changes in procurement are taking place as e-procurement evolves. These changes will be an exciting time for practitioners and academics.

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Figure 1 Four different e-procurement tools address different supply characteristics

Consolidated	<b>E_marketplace</b>	<b>E-catalog</b>
<b>INDUSTRY</b>	<b>E-Search</b>	<b>E-auction</b>
Fragmented		
	Custom	Standard
	<b>PRODUCTS</b>	

Source Booze Allen & Hamilton

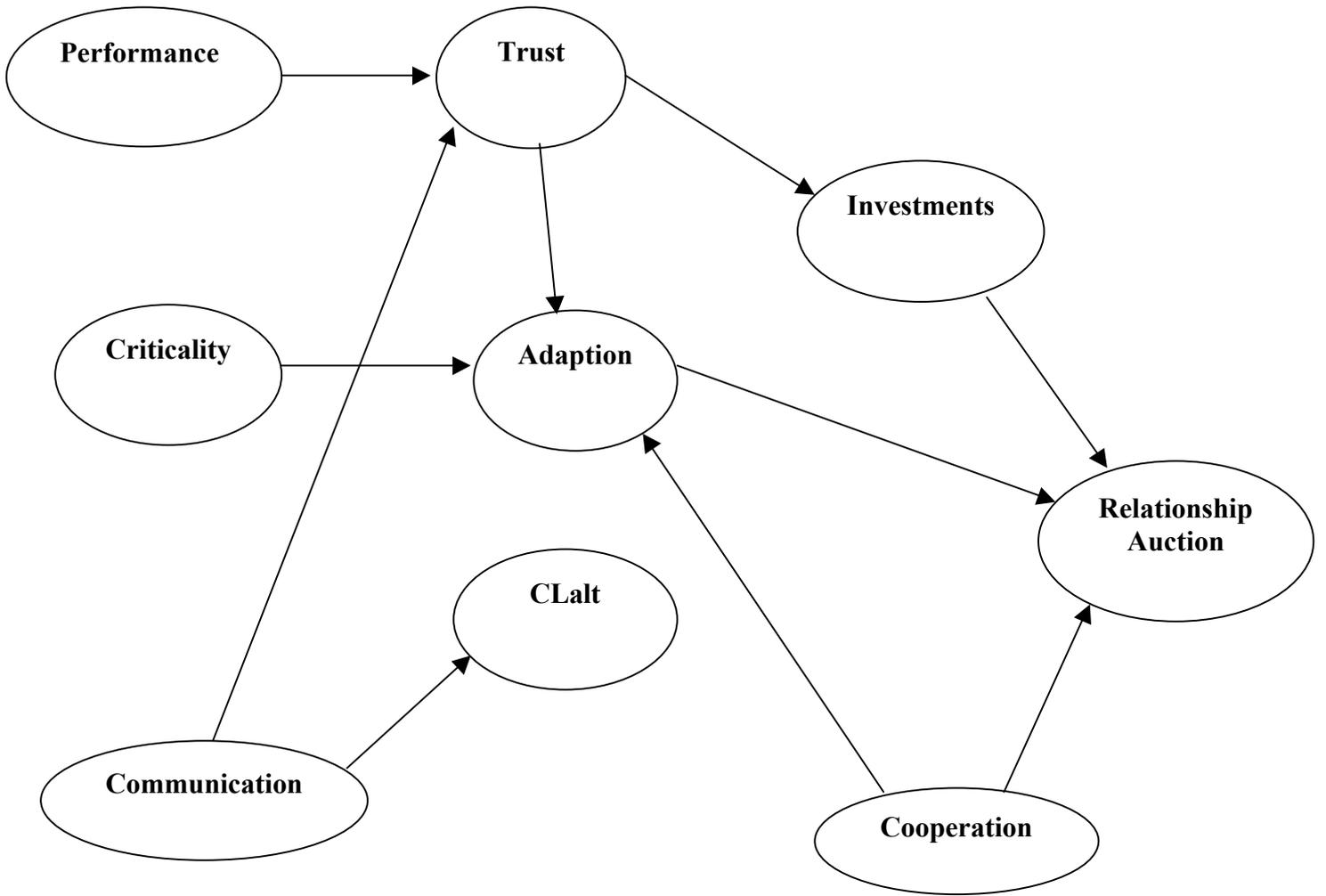


Figure 2 A model to predict the use of auctions or relationships