

Development Of Facilitated E-Auction System For Growing Economy

By

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Abstract

Dealers can purchase items in either physical or electronic auction environments, but the experience of purchasing items online differs greatly from the experience of purchasing the items in the live auction lane. To what extent do dealers value the benefits of the physical auction environment, such as the ability to personally inspect items, get a sense for the "buzz" of the market, and network with other dealers and consignors? Conversely, to what extent do they value the benefits of the electronic auction environment, such as greater items selection and increased convenience? This research has developed a consultancy solution that addressed the problems arising from physical or e-auction. The research presented the results of a study designed to shed light on such questions to the dealers about their preferences for physical vs. electronic auction environments. The developed system is based on findings on survey responses received from many dealers. In some cases results suggest that dealers prefer the physical auction to electronic auctions based on some reasons. Those reasons that made dealers prefer physical auction have been considered in this electronic systems. The system is designed to detect shill bidding in online and provide a friendly and responsive customer support system. The expert system tool was used in order to achieve our desired motives. The developed system is interactive in nature and user friendly.

Introduction

Online auction has generated new interest among dealers of various items. Several views commonly proposed to explain dealer preferences for physical or electronic auctions and they are supported by results, in this research. The two main reasons why dealers prefer the physical auction to electronic auctions are the ability to: (a) physically inspect items, and (b) receive purchased items quickly. These two main reasons that favor physical auction have been transformed to favor e-auction also. This transformation upgrades the usefulness and importance of e-auction thereby increases the dealers' preference. The social aspects associated with interacting

with other dealers and the auctioning staff at the physical auction are also moderately important in explaining dealer preference. However, other possible explanations for why dealers might primarily prefer the physical auction are not on the other side of the coin. The primary reasons why dealers prefer electronic auctions are: (a) there is increased variety of items available in electronic auctions, and (b) buyers belief that items can be represented adequately electronically. The increased convenience of electronic auctions was recognized, but it was not a factor in explaining dealer preferences, because all dealers (regardless of whether they preferred physical or electronic auctions) found electronic auctions to be convenient. The results suggest that there are differences in preferences based on whether a dealer is a franchise type, independent dealer, or a wholesaler. Franchise dealers were more likely to prefer electronic auctions compared to independent dealers and wholesalers. Franchise dealers were more appreciative of the expanded variety of items available electronically and were more positive about electronic vehicle representation. Wholesalers, on the other hand, were more interested in the social and networking aspects of the physical auction. The results also revealed generational effects: younger dealers tended to be more favorable about electronic auctions compared to older dealers. The results provide insight into the changing nature of the automotive auction industry and highlight strategic implications for auction companies regarding how to best serve their dealer customers.

Background Studies

In developing economy today, online auction is not trustworthy as it does not ensure warranty of items auctioned since these items are not assessed prior to auctioning. This is because most of the auctioneers are more concerned about their selfish gain, they tend to accept items or goods to be auctioned from anybody notwithstanding the quality or the source of items and as a result they cannot grant

warranty on any of the items as they don't have confidence in them. Again, because there is no room for proper assessment and verification of items before payment in the former systems, the customers sometimes end up getting items less than the standard ordered or not getting items paid for and correcting such mistakes takes more time and money. Furthermore, there is an uncertainty in the online auction transactions due to incomplete or distorted information provided by sellers in online auction. Many sites allow users to hide their identities easily by providing wrong information and it make easier to create fake accounts.

Materials and Methods

Increasingly, the wholesale item remarketing industry is migrating from physical to electronic forums. Although the physical item auction remains the primary mechanism by which used items are exchanged in the wholesale market, electronic auctions are becoming more and more prominent. Several players in the market, including the major auction companies, Internet-based auction companies, and large-volume sellers, are operating electronic auctions to either complement or compete with the traditional physical automotive auction. This gives item dealers a choice for how they use wholesale item auctions to acquire used items: dealers can purchase items in either physical or electronic auction environments. Of course, the experience of purchasing item online differs from the experience of purchasing the item in the live auction lane, and both environments have their pros and cons. To what extent do dealers value the benefits of the physical auction environment, such as the ability to personally inspect items, get a sense for the "buzz" of the market, and network with other dealers and consignors? Conversely, to what extent do they value the benefits of the electronic auction environment, such as greater selection and increased convenience? The purpose of this research study is to shed light on these questions by surveying dealers regarding their preferences for physical vs.

electronic auctions. This has created ideas for making those physical preferences to be included in the e-auction method. It therefore, minimizes the negative aspect of e-auction. The research discusses several views that might explain why dealers prefer physical auctions to electronic auctions, or vice versa. The summary of different views on physical auction include: (a) Sensory aspects involving(i)- the need to physically inspect items.(ii)- the need to experience the “buzz” of the market.(b) Social / Relational aspects involving(i)- the need to talk to other dealers and/or the auction staff.(ii) - the need to have a personal relationship with the seller.(c) Synchronism aspects involving (i)- the need to receive purchased items quickly.(ii)- the need for complete purchasing administration quickly (e.g., financing, any arbitration, etc.). (d) Identification and Control aspects involving(i) - the need to observe who else is bidding on item.(ii)- the need for a dealer to hide that he is bidding on item. The summary of different views on e-auction include: (a)The increased variety of items available to dealers in electronic auctions.(b) The convenience of electronic auctions.(c) The capacity to represent items electronically.(d) Improved ability to monitor and manage bidding and purchasing activities online. Just as there are views that might explain preference for the physical auction, there are also theories that might explain preference for electronic auctions. The first view relates to *the increased variety of items available to dealers in electronic auctions*. Dealers who use electronic auctions are not limited to only those items available in their local geographic areas. Instead, they can participate in sales and purchase items from around the country. This may enable them to purchase a wider variety of items or to locate hard-to-find units. This type of increase in product variety is a well-documented benefit of electronic commerce, as the Internet allows consumers to purchase products that would otherwise be unavailable to them.

This benefit may extend to automotive auctions and explain why dealers might prefer electronic auctions. The second view relates to *the convenience of electronic auctions*. Dealers can participate in electronic auctions and purchase items without having to leave their home or office. The convenience associated with electronic auctions may explain why dealers have a preference for them. Convenience is commonly used as an explanation for the use of electronic commerce. The third view relates to *the capacity to represent items electronically*. If a dealer believes that electronic auctions provide adequate information about items, then he is more likely to favor electronic environments. It is even possible that electronic auctions may provide better item information than the physical auction. There are several products for which electronic representation may provide as much or more product information as physical representation. The last view relates to improvements in a dealer's *ability to monitor and manage his bidding and purchasing activities*. The electronic environment may make it easier for dealers to keep track of which items he has already bid on, which he would like to bid on, and which he has already purchased. One of the benefits of electronic commerce, and of information technology in general, is the ability to keep records of transaction activity (Zuboff, 1988).

System Development And Problem Solving Strategies

The system gathers information on previous auction bids to form a knowledge base that will aid in determining the users auctioning pattern. This will help in detecting shill bidding. Also the problem solving techniques will be used to determine the highest bidder in an auction.

Database Design And Specifications

MySQL database was used in the design of the new system database. The structure of the tables in the database is as follows: admin_login, bid, bidders, bidding, products. Some of the structures for the database tables used are as follows:

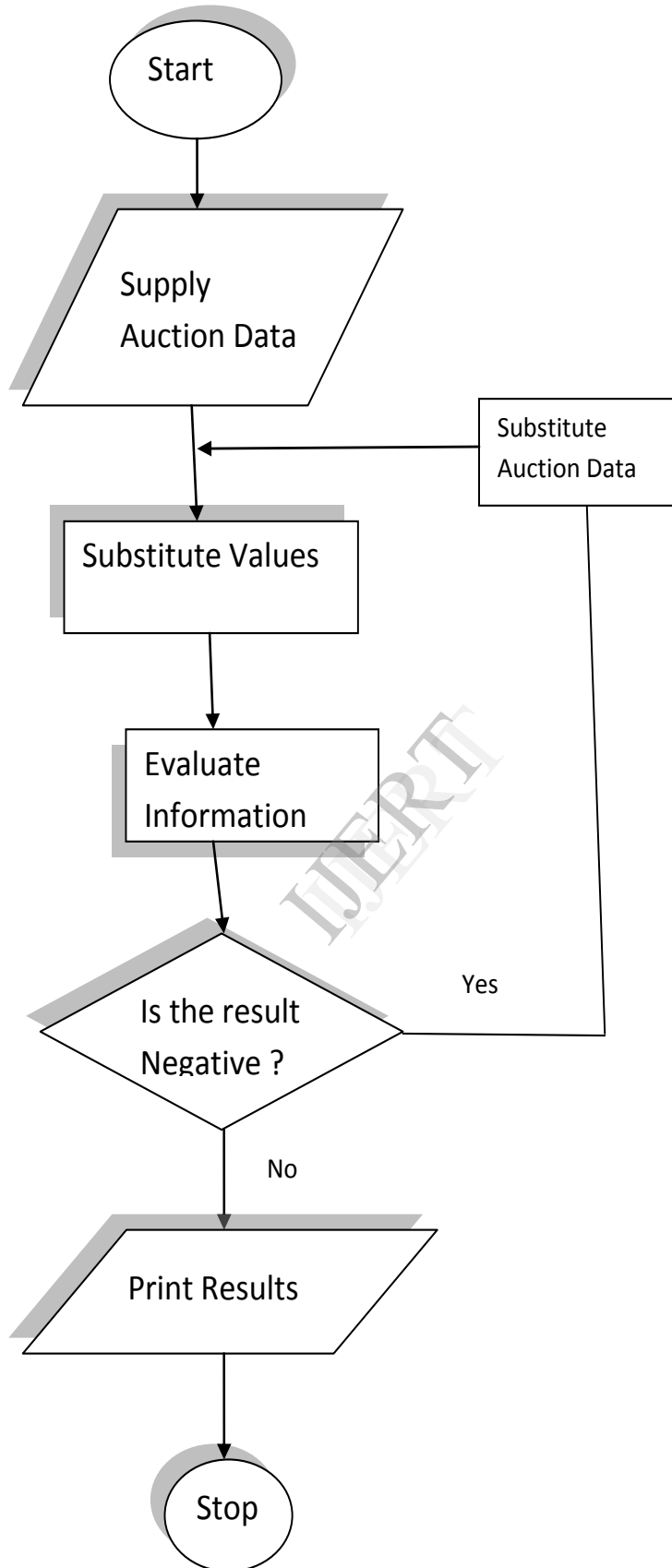
Structure of admin_login Table

Field	Type	Null	Key
Username	varchar(12)	NO	PRI
Password	varchar(12)	YES	

Structure of Products for database Table

Field	Type	Null	Key
Category	varchar(50)	YES	
Products	varchar(100)	YES	
Snum	int(6)	NO	PRI

The program was designed using Top – Down Approach. It makes use of the fundamental program solving techniques. The software is structured in such a way that each subsystem is selected and executed independently. The task is divided into several modules, which come together to give the solution to the problem. The modules are as follows: sign up, product upload, auction sales, product advert, closed bid, login, admin, delete.



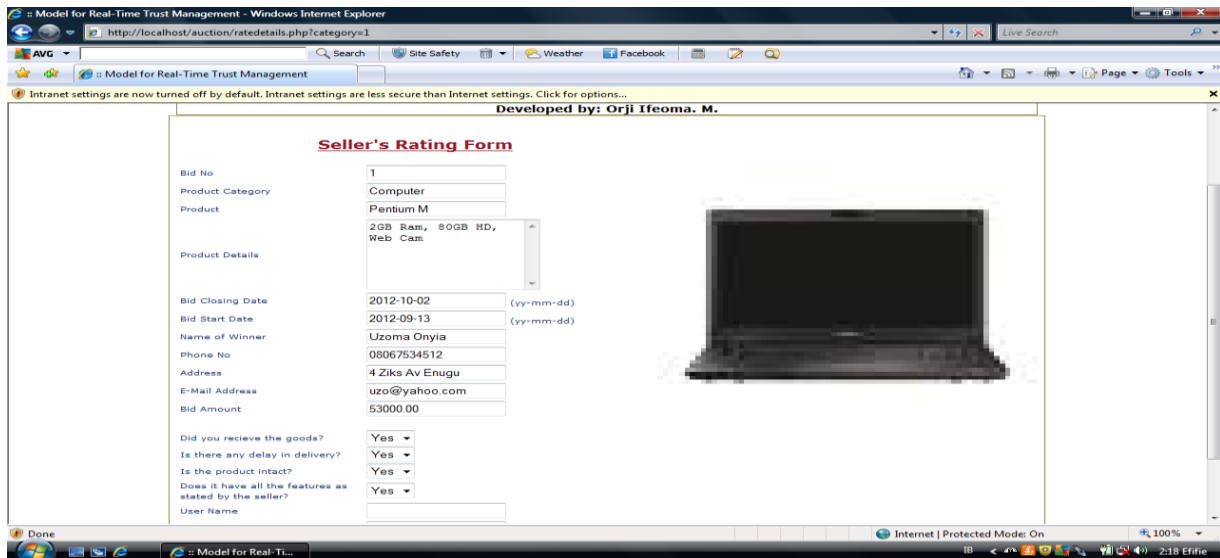
System Flowchart

Results and Discussion

The system also provides an avenue where the bidder that won the auction needed to answer certain question when received his/her goods. Based on this, the system will use bayesian probability game model in rating and assigning category where each seller belongs such as trustworthy, not trustworthy and highly trustworthy. Furthermore, there is a platform for advertisement of goods to potential buyers and all payment are made online through the use of credit card, hence the system is integrated credit card payment system. All transactions are verified before concluded. Here, the problems and weaknesses of the present system were identified. In the present system, the major problem observed is that of security and trust as buyers cannot have proper assessment of items before purchasing it.

Product Upload Form

Product Category	<input type="text" value="Computer"/>
Product	<input type="text" value="Pentium V"/> ▼
User Name	<input type="text"/>
Password	<input type="text"/>
Bid Closing Date	<input type="text"/> (yy-mm-dd)
Bid Start Date	<input type="text" value="12-09-16"/> (yy-mm-dd)
Product Details	<input type="text"/>
Advert Rate	<input type="text"/>
Picture	<input type="text"/> <input type="button" value="Browse..."/>
<input type="button" value="Submit"/>	



This research has designed a system that has a strong security and trust in it. The system is capable of creating an online transaction for customers to view all products that are available for auctioning. It has been able to create an online procedure for customers to upload their products for auctioning. There is platform for customers to post their bids and also advertise their products. The bidders have access to view auction details while shilling biddings are detected easily. The bidders history is made available while database for managing the auction sales is maintained with bidders information

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