



Online Auction Management System For Buyers And Sellers To Reduce Negotiation Period

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Abstract- An auction is a system that helps in buying and selling of goods at online platform through bidding. The person with higher bid tends to buy at the final stage of the bidding. The buyers and sellers compete with each other at every bidding to obtain the goods at a reasonable price. This process involves fixing an amount for the product and proceeded that the buyers sets an amount by bidding. The bidding process stops when the last bidder tends to accept the fixed amount at the higher price than the other bidders. This allows to have the a reasonable price for both the buyers and sellers to obtain the maximum desired cost for the goods. The bidding system is nothing but the set of agreements and understanding of the partnerships. There are two types of auction namely english auction and dutch auction. Thus the proposed system enhances a online platform for buyers and sellers to have higher productivity cost and to eliminate the negotiation period.

Keywords : Bidding, buyers and sellers, higher price, time saving, online platform.

I.Introduction

Due to increased digital environment, the buying and selling products in the online platform plays a vital role in the modern world. The most important reason is that it provides cost saving and reduce the transportation charges among the buyers and sellers [1]. This tends to reduced the advantages that are taken by the intermediators. To enhance the e- business applications the online auctions are developed. This online auction system helps the buyers and sellers in a convenient way. This system is simple as used by everyone with easy accessible [2]. This online auction system helps them to overcome several geographical barriers and constraints and leads to purchase and sell products from anywhere through the internet. Thus this is a global market to buy and sell the products with higher productivity. It uses decision making tools that leads to have higher yield [3]. The another method involved in the decision making tool is the process of shilling rate. The shilling is the process of evolving fake bids on the behalf of seller's side that tends to increase the price of the product. This is the artificial inflation technique to avoid several consequences that tends to collapse the auction system [4]. This also leads

to increase the higher number of bids per seller ratio. Proper evaluation of buyers and sellers using the decision making assistance tools helps in the selection and choice of diverse goods. This is also referred as open house auction that tends to enhance the interest of antique lovers to buy and sell products at anywhere across globally [5]. This is a website which provides an open forum for the buyers and sellers to come closer and together to buy and sell the products at a fair price with cost and time saving.

II. Proposed system

This online auction system enables the sellers and bidders to buy and sell the products using a bidding system. This is done by registering in the online e-platform for both the buyers and sellers. The online auction system involves various stages such as bidder login, seller login, admin login, report monitoring and generation through the SMS notifications. It offers the consumers to afford the products at a lower cost with greater productivity. The seller's choice and certainty based on seller rating, seller scores and seller's shipping operations. The product certificate, description of selling and buying product characteristics, product usage and book source value are important parameters for buying and selling in the online auction system. Thus the online auction system records each and every bid that gives the complete information about the buying and selling product.

III. Methodology

The online auction system involves certain stages to buy and sell the products through the online systems. This tends to be done at a higher care to provide the auction to obtain a reasonable price for the products. These stages are done in an online web portal to avoid several malfunctioning and various consequences in the selling and buying of goods [6]. This involves bidder login, seller login portal, admin login portal, report generation system and all the above stages are depicted through the SMS notifications [7].

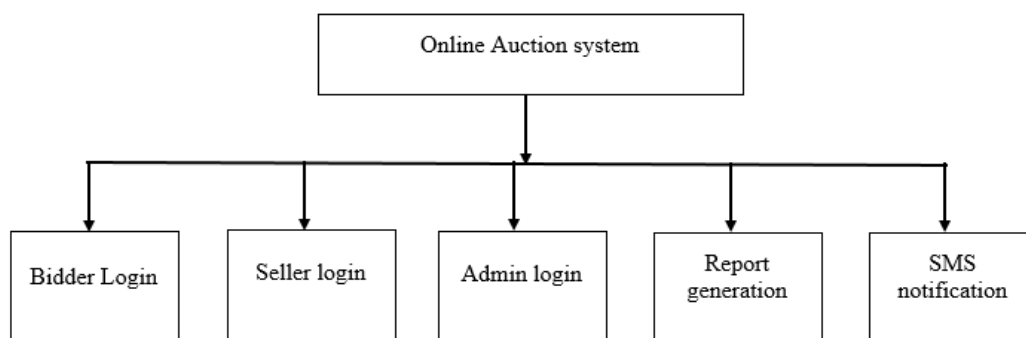


Fig 1: Stages of online auction system

The figure 1 shows the stages of the online auction system. This is a kind of two-way communication system between the seller and the buyers to enhance the trading globally [8]. This online auction system helps to connect the traders and buyer to connect from various corners across the country. This auction system leads to the reduction of transportation and bargaining time. The travelling expenses can be reduced with the bidding time [9].

This global auction system tends to have an overall record for the products from manufacturing to reaching the buyers because it needs the complete details of the product description [10]. This auction system plays a significant role in the selling and buying of the products with affordable price.

Stages of online auction system

1. Bidder login : In the online website, the bidder login provides the complete details about the products that are listed down. The listed products with bidding done by others are denoted in the bidder login. Thus the bid needed to done by the user can be recorded in the bidder login system.
2. Seller login : In the seller login, the seller add the the necessary information about the products and allowed them for bidding from the buyer’s side.
3. Admin login : The admin login is the most important stages in the online auction. The administrative module functions and monitors the fake calls and unwanted messages that cause several malfunctioning and consequences in the system.
4. Report generation : In report generation, the admins stores the report of the buying and selling products through the online platform. The stored report is used for future references. It also holds the stages of bidding and information regarding the sellers and the buyers.
5. SMS Notifications : The above process are done and recorded and send the imformation to both the two ends such as the buyers and sellers as SMS notification. This leads to avoid too many noise as compared to the conventional systems. In the conventional system, there may arrise several confusions reagrdin the bidding system. This may reduced in the online bidding system. This involves no restrictions regarding the time schedule such that the seller and buyer can bid at any time and from anywhere globally through the global systems i.e. it is done at a global level with two way communications.

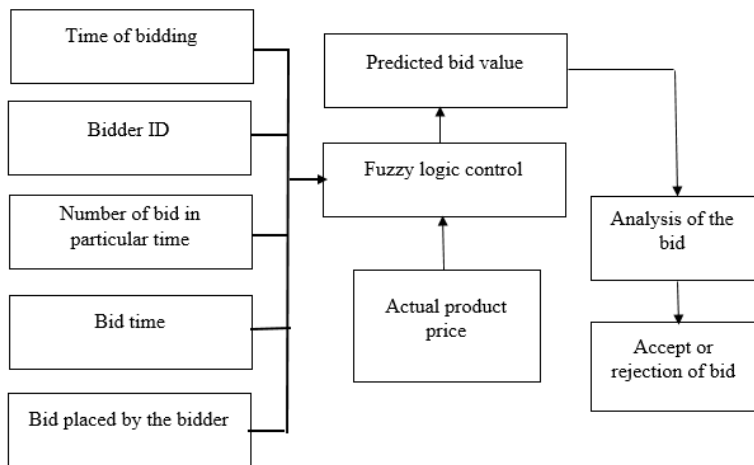


Fig 2: Proposed system

The figure 2 shows the proposed online auction system. The system involves the fuzzy logic control for prediction and analysis of the accurate auction data with comparison with actual product value with the expected bidding value [11]. The fuzzy logic controller are based on the fuzzy sets as it is a natural learning process in the the artificial intelligence. This system enebles to work similar to human

knowledge based on training and testing the expected values. It is based on the empirical values. It compares the actual value to the desired value by training and testing process [12]. The process involved in the system are fuzzification, fuzzy rule base, interfacing engine and defuzzification.

The analysis of the bid is done through the expected and the predicted value in the dataset. The bidding is done based on the actual price of the product. The bidding stops at the highest price declared for the product. The online portal records the complete details about the bidding system and the bid is done at any desired time for the product [13]. The stages of the bidding is done at the initial stage and then proceeded to the fuzzy logic controller. The fuzzy logic controller compared the original value to the expected value by the testing and training process through the algorithm [14]. After the complete analysis and control of the bidding system, if the bid was appropriate without any fake news or fake messages, it is proceeded and accepted. If there may any malfunctions in the bidding system, the auction is rejected completely. If the bidding gets rejected, the buyer must take the bid again with same procedures [15]. The accepted bid is continued with the purchase of the product at the desired time. This system helps to reduce the computational time.

IV.Simulation Results

The online auction system is developed and functioned using the fuzzy logic control. This system enables a two way communication from buyer to the seller and a user friendly application of the bidding system. The application records the complete details regarding the information of the auction system and bidding. The figure 3 shows the homepage of the auction system



Fig 3: Homepage of the auction system

The auction system gives the complete details of the product descriptions and saves it as reference for the future usage. The product descriptions are stored with the product certificate and license with manufacturing descriptions. The auction system is then followed by the bidding system.



Fig 4: Login and registration form

The figure 4 represents the login and registration process which is done to store the complete details of the buyers and the sellers to avoid fake news and messages. This stores the data in the application to analyse the number of bids taken by the particular individual and the products that are stored and purchased at the particular intervals of time. The login credentials are stored in the database and used for the further references. These references are necessary to evaluate the functioning and analysis of the bidding.



Fig 5: Bidding form in the online portal

The figure 5 demonstrates the bidding form in the online auction portal. This includes the stages of bidding with the buyer and sellers bidding and rise and fall of product price.

In the bidding portal, the system enables the product with the stages of bidding done by the buyers and sellers. This is a two-way communication with the buyers and sellers to improve the overall price of the product at a reasonable cost. The rise and fall of the system is due to the bidding system and the nature of the buyers and the sellers. Thus by using the online auction system, the buying and selling of the products become more flexible and liberal without any wastage of time.

V.Conclusion

The proposed online auction system is done to enhance the buying and selling of products with more convenient through globally. This tends to help the buyers and sellers to have the product at the desired reasonable cost to obtain more beneficial to the both ends of the system. The bidding system enhances to obtain the cost at a appropriate price level.Hence the obtained system is more robust, convenient and easy to use and handle.

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