Dynamic Pricing Auctions and Revenue Optimization Strategies

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Introduction

Successful businesses understand the need to refine their pricing structures for goods and services. As a result, pricing is the method by which a company determines the selling price of its goods and services; it is also a form of marketing. Most businesses need to consider quality, production costs, and competition when setting prices. Most companies today use dynamic pricing since they do not have set rates for their goods or services (Nair, 2019). Simply put, dynamic pricing refers to a pricing approach in which prices are highly flexible to reflect fluctuations in supply and demand. Different groups of clients, different times of day, and different traits and purchasing patterns of individuals all play a role in the pricing changes. There are two scenarios in which a company may decide to change the prices of its products. To maximize profits is the primary, and increasing sales is the second, goal of any business. Although this was once only an e-commerce phenomenon, brick-and-mortar shops are increasingly adopting the technique. The use of dynamic pricing is not unique to the online retail sector.

In general, shops would rather not set initial selling prices for their goods if doing so would need frequent price adjustments to reflect the ever-changing nature of the market. A business might employ any number of dynamic pricing systems for determining the cost of its goods and services, all of which would be adjusted to reflect changes in the market. Surcharges and congestion charges will be the main topics of this paper (Nair, 2019).

The auction's top or low bidder becomes the transaction's buyer or seller, respectively. There are wide varieties of auctions, but the open ascending auction is the most typical. This is an open bidding auction where participants try to outbid one another. The auctioneer won't know what people will pay until they call out their bids or those of their proxies. So, in this work, we explore the interplay between a wide range of pricing models and a selection of auction techniques.

Surge pricing and Congestion pricing

Auction, in the context of business, typically refers to a market mechanism for selling and valuing goods through competitive bidding. Some businesses, including banking, e-commerce, and gaming, regularly use auctions. In liquidating the debtor's assets, an auction was organized to realize a profit (Besbes et al., 2021). Auctions are also utilized in the financial sector when selling highly competitive financial aid items, as they include the collection of trading restrictions unique to the sector. In the

realm of online business, auctions do have their place.

By charging more for temporary spikes in demand, congestion pricing (also known as value pricing) aims to balance supply and demand. Customers known to be flexible with their consumption patterns are targeted in the hope that they will shift their use to off-peak times when the resource or service is reportedly less expensive (Besbes et al., 2021). The primary goal of this plan is to reduce or do away with traffic congestion and enhance air quality. This pricing model is commonly used by the travel and tourism industry during high travel times. During this time of year, utility companies are notorious for setting extremely high prices. During times of peak demand, prices are intentionally raised to curb overuse.

The economics of traffic congestion are thought to be better managed by congestion pricing, which is a demand-side approach. The major consequence of price hikes during peak demand is to warn customers of the greater degree of market congestion (Manville, 2021). Congestion pricing is based on the idea that customers will use more of a product and waste more resources if they do so at peak times. High consumer demand causes a product's price to spike. It happens when demand for a product dip at a specific time in the market. The popular Uber business model is an example of this principle in action, as it allows for rapid adjustments to service costs in response to changing market conditions at specific times of the day.

Both surge and congestion prices raise prices for goods or services. Although surge pricing is implemented at times of high demand, it is still more expensive than congestion pricing, which deters consumers from making purchases during peak hours (Besbes et al., 2021). There is significant demand for the associated commodities and services under both pricing models at the time of introduction. The key difference is that congestion pricing is implemented to reduce demand and discourage consumers from using a product or service. Reducing traffic congestion in the marketplace is the primary focus. The driving force behind pricing changes is consumer demand rather than market forces. If more people want to buy a product, the price will rise to reflect it (Manville, 2021). Whether prices go up or down, market forces will dictate how everything in the market operates.

English Auction and Dutch Auction

Product prices at Dutch auctions are typically set by considering all bids and determining the highest possible selling price. An investor takes part in the auction by placing a bid, either for a single item or a set number of items. Before an auction starts, beginning prices for items are low to draw a bid. The sale usually occurs when an item's first bid exceeds its reserve price. Unlike Dutch auctions, where prices start low and rise to a ceiling, traditional auction markets typically see prices rise steadily from a low starting point to a high selling point. In a Dutch auction, the price that most people bid on is used as the offering price, and the whole amount being offered is sold for that price (Malekovic, et al., 2020). The prices of the goods do not have to be the highest or lowest possible.

When selling its securities, the US Treasury typically conducts a Dutch auction. The United States Department of the Treasury regularly conducts online auctions of Treasury bills, notes, and bonds to solicit investment to decrease the national debt. At first, the issuer accepts the offers with the lowest yields because it is in the issuer's interest to pay as little as possible to investors (Malekovic, et al., 2020). On the other hand, the primary function of the English auction is to sell assets by soliciting bids that progressively increase in value. The bids accepted are always above a certain floor price; hence, any bidder who attains the floor price gets the product, and no other bids are accepted. Accordingly, the highest bidder receives the item or goods.

English auctions are more open and public than other types of auctions, notably sealed auctions (Pop et al., 2020). The bidders' names and the total sum of all offers are always known to everyone participating in the bidding process. Because of this, the highest bidder is selected, and the value is realized. It happens when no additional offers come in at the stated price from the bidding procedure. The resulting bidding process requires that all bids be presented and processed in a sequential, increasing fashion. For instance, if bids are accepted in $40,000 increments, the initial offer would need to start at $40,000 and go up by the same amount once each round of bidding is complete. The highest bidder usually receives the item at auctions, such as those featuring famous people or works of art (Pop et al., 2020). Both silent and live auctions are similar in that both result in value creation when an item is sold, or a winning bid is made. Specifically, the prices sought after in English auctions tend to be greater than those sought in Dutch. Auctions in the Netherlands are not mandated to be open and honest like their English counterparts.

Sealed Auction and Vickery Auction

In a sealed bid price auction, potential buyers or bidders enter their bids anonymously, allowing sellers to pick the highest bidders for specific items (Bag et al., 2019). In contrast, the winning seller or bidder typically pays the second-best price in a Vickery auction. Hence, is frequently done to encourage potential purchasers to offer more than the thing is worth. Whereas in a Vickery auction, the value is produced when the second-best price is paid, in a sealed bid auction, the sellers create the value by choosing the highest bid. Expensive artworks, luxurious automobiles, and other rare and valuable objects are regular fare at the Vickery sale.

Buyers' bids are utilized to establish the final selling price in the Sealed Bid First Price auction, and sellers get to choose the highest bid from among all submitted offers (Bag et al., 2019). In a Vickery auction, the second-best price payout is typically used to entice purchasers. An element of exaggeration permeates the entire Sealed Bid First auction, in contrast to the more transparent Vickery auction, where purchasers can assess the item's value and make fair bids. Both forms of auctions can place bids and conduct the sale in private.

Auction for Federal government and profitable business

Treasury auctions are often held for T-notes, T-bonds, and T-bills. Using a Dutch auction, the Treasury would issue T-bills. The lowest bidder would win with a starting bid of $25 and a minimum of $60,000. If there were two bids, one for $28 and the other for $40, the lower bidder would be the winner. One advantage of this method of bidding is that, unlike open auctions, participants in a sealed-bid situation are not privy to the prices offered by other buyers. In addition, it is a terrific method for the Treasury to acquire better prices because of the predicted dividend investors will receive (Canavari et al., 2019). In an ideal situation, the winning bidder would be the one who offered the lowest yield. Additionally, some U.S. government agencies hold auctions regularly, but the General Services Administration conducts most of them. The General Services Administration handles the other federal departments' auctions. The General Services Administration frequently posts online auctions for gently used items, inviting the public to purchase to speed up the process. The agency sets the prices for the items on the website, and the items typically sell on a first-come, first-serve basis. The General Services Administration likely uses a Dutch auction since the prices are determined by the agency, which acts as the auctioneer in this case. Because of the time constraint, the Dutch auction method is optimal for generating widespread excitement and fostering healthy competition in the market.

However, the for-profit Deluxe Corporation intends to auction off its luxury vehicles. The ultimate goal is to fetch the highest possible price for the sold items. To accomplish this, the corporation is searching for an English auction where the vehicles are sold to the highest bidder. Due to the high level of competition, the corporation anticipates that the auction will generate far more revenue than originally anticipated (Canavari et al., 2019). Even if you are looking for a Vickery auction, Deluxe Corporation may provide it. The objective is to provide a baseline for future pricing projections. Bidders who can submit offers within the target price range and in a reasonable amount of time should be encouraged to do so.

Auction for Wells Fargo

The case study reveals a number of problems within the banking sector of Wells Fargo & Company. The company's reputation suffered irreparable damage as a result of these extra ethical issues. According to him, the banking segment took the brunt of the damage at the corporation, and getting rid of it would help the business bounce back. It was clear that not everyone had issues with Wells Fargo's banking services, thus a large number of bids were anticipated at the auction. Wells Fargo hopes to maximize their return on investment by holding an auction for the business.

The banking sector is experiencing significant difficulties as a result of its home lending commitments, which have led to numerous foreclosures. The company's reputation is so bad that it's hard to keep it afloat without losing money. In the event of a damaged reputation or failing business,

companies like Wells Fargo who seek to arrange auctions in order to sell a section of their firm must proceed with caution. In light of the organization's problems, especially its ruined reputation, the winning bid at auction may be fairly low. An English auction is a type of auction where prices could potentially be substantially lower due to the bidding procedure. If one want to avoid ridiculously low bids, the optimal auction format is called a Vickery auction, in which the company itself establishes the baseline for the expected price. It will also reduce the time needed for the bidding procedure.

Conclusion

A well-thought-out pricing strategy is a vital part of any successful advertising campaign. To maximize profits, one want to avoid pricing his goods too low. Overcharging, however, will result in a lack of interest from potential customers. Finding the best pricing strategy requires first exploring and evaluating all available strategies. Prices have been the driving force behind human interaction since the first traders landed. It's no secret that companies across all sectors spend a great deal of time and effort trying to figure out how to price their goods and services competitively.

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