14.27 — Economics and E-Commerce

Lecture 7 - The Shift Away from Auctions

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Tendency towards concentration in online auctions

Forces for or against concentration

- switching costs
 - some cost to both buyers and sellers of switching to different platform:
 - * establishing reputation
 - * setting up account
 - * learning to use software
 - tendency towards concentration
- \bullet variety
 - tendency for buyers to want to concentrate on forum with most listings for greatest variety
- prices
 - sellers want platform with fewest sellers because prices will be higher
 - sellers want platform with most buyers because prices will be higher
 - buyers want platform with most sellers because prices will be lower
 - buyers want platform with fewest buyers because prices will be lower
 - there are all sort of like positive and negative network externalities
- fixed costs and traditional scale economics
 - both are low, which would tend to encourage entry
- transportation costs for consumers
 - low, which would tend to discourage entry
- visibility and brand recognition
 - might cause tendency towards concentration

Ellison, Fudenberg, Mobius

- note: a very stylized model that does not incorporate all of the richness above
- their argument: in a simple model with two undifferentiated auction sites, there is a tendency towards concentration, but both auction sites can survive if they are close enough in size.
- intuition: holding B/S constant, larger sites are more efficient because prices are closer to deterministic. i.e., high-valuation buyers are more likely to win if there are more buyers & sellers, so more purples to be divided between buyers and sellers.
- also, buyers and sellers take into account their market impact when they move, so a buyer can be worse off than buyers in the other market but still not want to move because a move will make the other market worse still.

Comments

- a number of these arguments work equally well for any kind of two-sided market, not only auction sites (but some are specific to auction sites)
- market impact effect can matter even at some place like eBay, which has millions of buyers and sellers, because it's actually lots of largely independent markets
- interestingly, for eBay, one force pushing towards concentration, EFM effect, does dependent on auction mechanism. as auction mechanism becomes less important, will the tendency towards concentration diminish?
- why hasn't eBay lost to other sites in at least some of those markets then, if they're largely independent? switching cost could play a role if some people operate in multiple markets. also, eBay has lost out to some specialty auction sites, especially B-to-B.

eBay's shift away from auctions –Einav, et al.

- 2002: eBay first offered Buy-It-Now option
- three hypotheses:
 - there's been a compositional shift of sellers and types of products on eBay
 - demand shift: consumer tastes have changed –online auctions are not as fun and novel as they used to be
 - the "price discovery" benefits of auctions have declined over time
 - * online search has made it easier to find prices for comparable items
 - * eBay itself has created thick national markets for lots of things that didn't exist before, which provide a lot of price information
- want to examine these hypotheses
 - patterns in data (2009)
 - * auction are more likely for "idiosyncratic" (defined in two ways here) products:

	listings in auction format
had "used" in listing	79%
had "new" in listing	44%
individual item from seller	75%
duplicate item from same seller	57%

* auction are more likely for inexperienced sellers

	listings in	auction	format
business		35%	
occasional		87%	

* auctions are more successful

	listings that were successful
auction	49%
Buy-It-Now	42%

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- * auctioned items sell for less
- this cross-sectional glimpse of data suggests that a compositional change could be driving this shift
- closer look, in particular at time series:
 - * increase in share of Buy-In-Now transaction volume from 2005-2009: 33%
 - $\ast\,$ can decompose the 33% by looking across different types of sellers and across product categories:
 - \cdot amount due to product category shifts: 2.5%
 - \cdot amount due to type of seller shifts: 2.8%
 - \cdot amount due to changes within seller-product groups: 27.2%
- this analysis suggests a change in incentives faced by sellers, or learning
- noted "auction discount", actually been growing
 - * 2003: <5%
 - * 2009: 16%
- why auction discount? we saw a simple model that suggested sellers should do better with an auction, even with a modest market size and perfect knowledge of valuation distribution –but that model did not have transactions costs. if there are transactions costs that must be borne by the buyers, their bids will be accordingly lower.
- why is the discount changing?
 - * demand shifting
 - * degree of competition changing
 - * can use variation in sellers' pricing for individual items to estimate listing-level (residual) demand curves for both auctions and posted prices
- final note: authors do not have much to say about the third hypothesis, that "price discovery" has become less important over time
- interesting to ponder how one might find evidence for or against this

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