

ONLINE AUCTION FORMATS

MS&E 239 Class Presentation

Krishnamurthy Iyer

Oct 7 2011

ONLINE AUCTION

- Widely used market model
- Factors favoring use:
 - Easy to operate – bid with a click
 - Well defined rules – easy to understand, easy to provide proof of sale
 - Enables fast price discovery

ONLINE AUCTION

Two examples:

- eBay
- Swoopo



eBay

eBay

- Online marketplace – meeting point for sellers and buyers
- Founded in 1995
- 97 million active users in Q2'11
- Business model:
 - Insertion fee: (fee to list an item) \$0.10 – \$2
 - Final value fee: for each sale, eBay takes 5% – 13%
- Net revenue from marketplace in Q2'11: ~\$1.2 billion

eBay AUCTION FORMAT--OVERVIEW

- Form of a “Second-price auction”
 - Seller posts an item, and sets a fixed time limit
 - Each buyer makes a bid
 - When time runs out, highest bidder wins and pays second highest bid (+ some fee)
- Sellers can set reserve price
 - Highest bidder gets the item only if her bid is greater than reserve price.
 - If second highest bid is less than reserve, then she pays the reserve price.



Batman 251 F++ (6.75)9/73 Joker cover & story! Neal Adams cover&art! No Reserve!

 Like

Item condition: --

Time left: 21h 57m 24s (Oct 04, 2011 23:22:21 PDT)

Bid history: [11 bids](#)

Current bid: **US \$25.00**

Your max bid: **US \$**

(Enter US \$26.00 or more)

Place bid

[Add to Watch list](#)

Shipping: **\$3.50** Expedited Shipping | [See all details](#)

Delivery: Estimated between **Sat. Oct. 8** and **Tue. Oct. 11** [?](#)

Returns: 7 days money back, buyer pays return shipping | [Read details](#)



eBay Buyer Protection

Covers your purchase price plus original shipping.

[Learn more](#)

 Zoom

 Enlarge

EXAMPLE

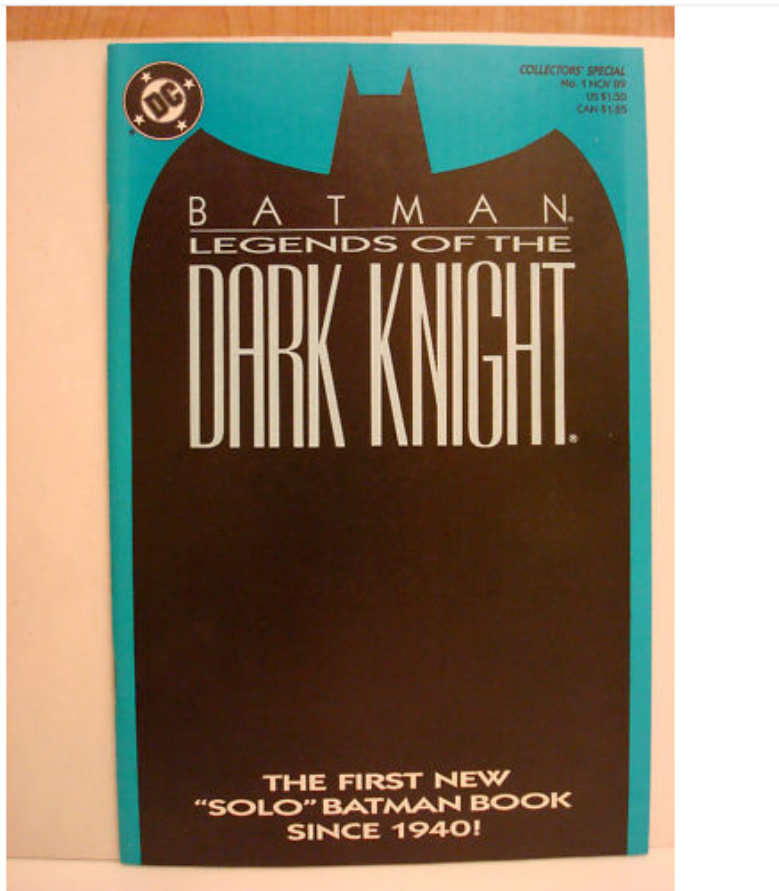
- Suppose seller posts an item with a reserve price \$1, and let bidding increments be \$0.1
- Let bidder A bid \$5
 - eBay displays current winning bid as \$1
 - Current winner as bidder A
- Suppose bidder B comes and bids \$2
 - eBay displays current winning bid as \$2.1
 - Current winner as bidder A

EXAMPLE

- Next, suppose bidder C bids \$7
 - Ebay displays current winning bid as \$5.1
 - Current winner as bidder C
- Current winning bid
 - = reserve price, if no other bid is higher than reserve;
 - = Smallest bid greater than second highest bid.

COMPLICATIONS

- Product quality
 - Sellers build reputation through feedback from buyers
- “Buy it now” option
 - Buyers may not bid, but instead choose to pay higher price for guarantee of getting the item



Batman Legends of Dark Knight #1 ('89) VF/VF+ blue

 Like

Item condition: --

Time left: 4h 24m 13s (Oct 04, 2011 05:41:16 PDT)

Bid history: [0 bids](#)

Starting bid: **US \$0.99**

Your max bid: **US \$**

(Enter US \$0.99 or more)

[Place bid](#)

Price: **US \$1.99**

[Buy It Now](#)

[Add to Watch list](#)

Shipping: **\$2.99** Expedited Shipping [See discounts](#) | [See all details](#)

Delivery: Estimated between **Thu. Oct. 13** and **Fri. Oct. 14** [?](#)

Returns: 7 days money back, buyer pays return shipping | [Read details](#)




eBay Buyer Protection

Covers your purchase price plus original shipping.

[Learn more](#)

 Zoom

 Enlarge



Swoopo

SWOPO

- Launched around 2005, with current name from 2008
- Employs a form of “penny auction”
- Bidders buy bids, and each bid increments the price by a fixed increment.
 - Each bid costs \$0.60
 - Each bid increases price by 1c-12c
- Auction is timed, but each bid extends the auction by 10-20s
- When auction ends, highest bidder wins.

PENNY AUCTION: EXAMPLE

- Suppose the item to be sold is 1\$
- Ignore bidding fee (bids cost \$0). But you must pay what you bid (even if you lose).
- You can bid repeatedly; each bid increases price by 1c.
- How would you bid?

PENNY AUCTION: EXAMPLE

- Two bidders A and B
- Suppose A has bid $1c$, and B has bid $2c$.
- A has two choices:
 - If A does not increase her bid, loss = $1c$
 - If A bids $3c$ and wins, profit = $97c$.

Hence, A bids $3c$

PENNY AUCTION: EXAMPLE

- But B can use the same argument:
 - Do not increase bid: loss = $2c$
 - Increase bid to $4c$: profit = $96c$
- B increases bid to $4c$ and the bidding up continues.
- What happens when bids reach $1\$$?

PENNY AUCTION: EXAMPLE

- Suppose A has bid 99c, B has bid 100c
 - A does not increase bid: loss = 99c
 - A increases bid to \$1.01: loss = 1c
- A will increase bid to \$1.01 (and this continues forever)
- Bidders may end up paying much more than \$1 for getting \$1
- In practice, bidders stop because of budgets, and because bids are costly.

PENNY AUCTION: EXAMPLE

- In penny auctions, the market organizer can make huge profits.
- Example (from Wikipedia):
 - MacBook Pro (worth \$1799) sold for \$35.86
 - But Swoopo made \$2151 from bidding fees alone.

CRITICISM

- Gambling
 - “Entertainment”
- Legality?
 - Swoopo is currently inactive, possibly due to legal challenges.
 - Many similar websites are in operation

THANK YOU