## Priceline and E-Bay



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## Two Popular Services

- Different Techniques
- Both want to get as much of your consumer surplus as possible.

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## Priceline and Consumer Surplus

- Priceline offers goods for sale on the web (an airline trip, for instance). They would ideally like to get people to bid $\theta$.



## Priceline and Consumer Surplus

- Priceline offers goods for sale on the web (an airline trip, for instance). They would ideally like to get people to $\theta$.
- They offer you a take-it-or-leave-it deal. Your bid will be accepted or rejected.

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## How much should you bid?

- If you bid $\theta$, you may pay too much.
- If you don't, you might not get the fare.


## How much should you bid?

- If you bid $\theta$, you may pay too much.
- If you don't, you might not get the fare.
- Thus the take-it-or-leave-it option.
- Without that, bid $\$ 1$.
- If that is rejected, bid $\$ 2$, etc.


## How much should you bid?

- I The right bidding strategy
- I depends on your estimate of any
-     - given bid being accepted.
- Without that, bid \$1.
- If that is rejected, bid $\$ 2$, etc.

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## An Example

- Charles Upton offers a Wonder Widget ${ }^{\circledR}$ on E-bay.
- He sets a reservation price (\$50)
- He requires bids in $\$ 5$ increments

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## Bidder 2

- For Bidder 2

$$
\theta_{2}=\$ 200
$$

- He bids $\$ 195$, and is told the high bid is $\$ 95$ (his).


## E-bay and Vickery Auctions

- E-bay uses a Vickery Auction. The highest bidder gets it at the second bidder's price.
- You have an incentive to bid $\theta$.


## An Example

- Charles Upton offers a Wonder Widget ${ }^{\circledR}$ on E-bay.
- Bidder 1 logs on.

$$
\theta_{1}=\$ 100
$$

- He bids $\$ 95$, and is told the current high bid is $\$ 50$ (his)

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You
$\theta=\$ 300$

- You bid $\$ 295$, and are told the current high bid is $\$ 195$ (yours).


## Bidder 4

$$
\theta_{4}=\$ 250
$$

- Bidder 4 logs on, is told the current high bid is $\$ 195$.
- He bids $\$ 245$ and the bid is rejected, for the current high bid is automatically raised to $\$ 245$ (yours).
- Assuming no other bidders you will get it for that price.

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## A Warning

- There are other strategic issues in both Priceline and E-bay.
- This is by no means a complete introduction.
- Use these two services at your own risk.

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## An Example

- Unlike Priceline, you have no incentive to bid less than $\theta$.

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