Game 1: Market for Smartphones

Introduction

In this experiment, we'll create a ***marketplace for smartphones***. Some of you will play as buyers, and others as sellers. You'll make decisions about buying or selling smartphones, and your choices will determine your earnings—which count toward your participation marks.

Overview

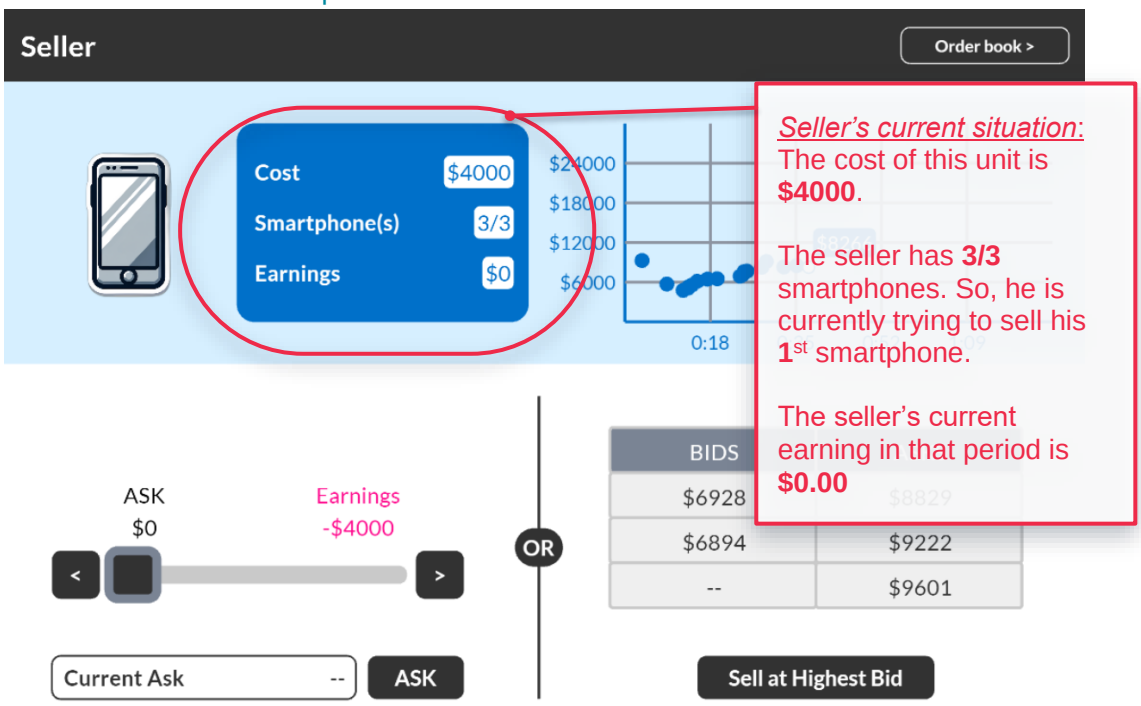
- The experiment has **3 periods**.
- Each market has **20 players**: 10 buyers ● 10 sellers.
- You'll be randomly assigned as a buyer or seller each period.
- Prices at which you buy or sell will determine your earnings.
- Your total earnings will be converted into participation marks (**max. 10**).
- **All participants receive 1 mark for joining**, even if you make no trades.

Your Role

- Before each round, you'll learn if you are a buyer or seller.
- You'll also get information about your costs (if seller) or buyer values (if buyer). **This information is private — only you see it.**

Sellers

- You may sell up to **3 smartphones** each period.
- Sell **one phone at a time** — finish one sale before starting the next.
- Each phone has its own **cost**. Costs may differ for each phone, and each seller has their own unique costs.



Seller Earnings

For each phone you sell:

Earnings = Selling price – Unit cost of the phone

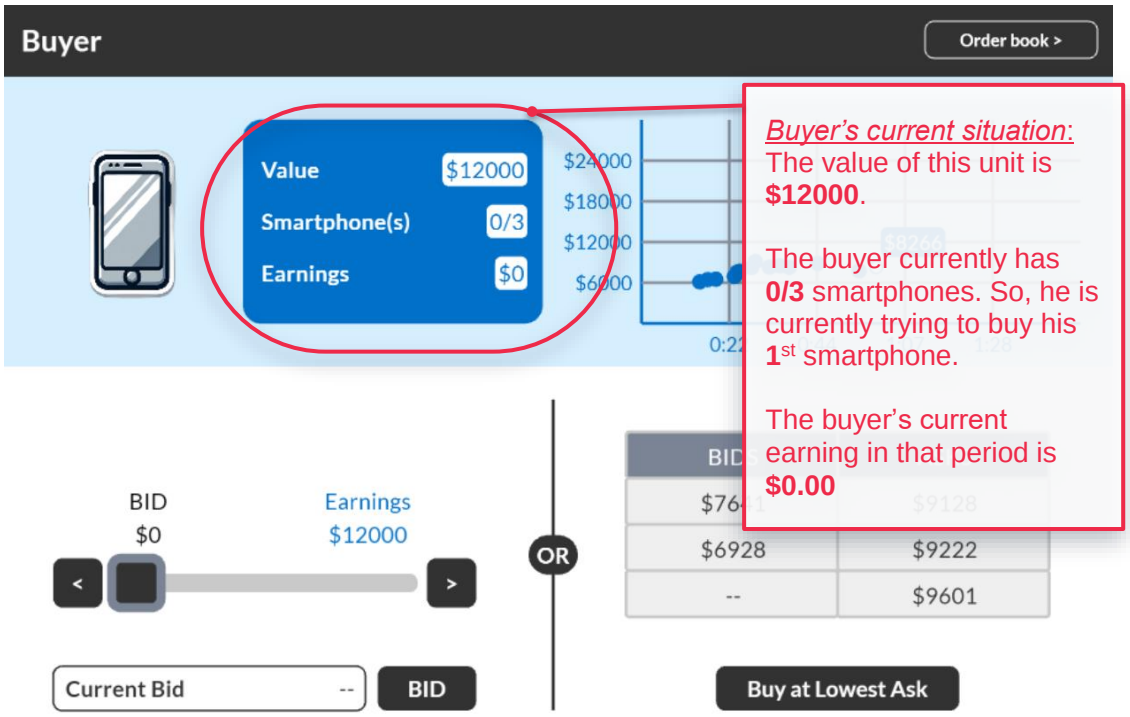
- If you *don't sell*, you incur *no cost* and earn zero.
- If you sell **below your cost**, you make a *loss*.

Example:

- 1st phone: Cost = $4,000, Sold for $6,300. Earnings = $6,300 - $4,000 = $2,300.
- 2nd phone: Cost = $5,500, Sold for $5,700. Earnings = $5,700 - $5,500 = $200.
- If only two sold: Total Earnings = $2,300 + $200 = **$2,500**

Buyers

- You may buy up to **3 smartphones** each period.
- Buy **one phone at a time** — finish one purchase before starting the next.
- Each phone has its own **buyer value** (how much the phone is worth to you). Values may differ for each phone, and each buyer has their own unique values.



Buyer Earnings

For each unit that you buy, you will earn the difference between the buyer value of the unit and the price paid for that unit. For each unit, your earnings are computed as:

Earnings = Value of the Unit – Price paid

- If you *don't buy*, you earn zero.
- If you buy **above your value**, you make a *loss*.

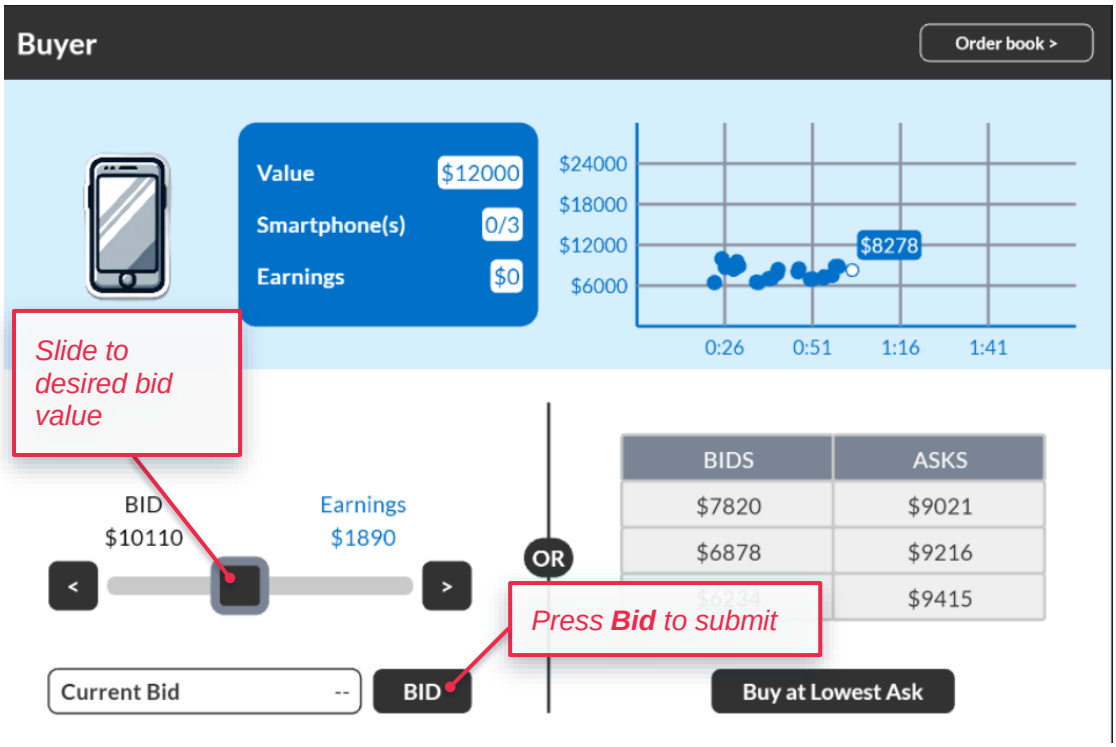
Example:

- 1st phone: Value = $12,000, Bought for $9,200. Earnings = $12,000 - $9,200 = $2,800.
- 2nd phone: Value = $10,000, Bought for $9,600. Earnings = $10,000 - $9,600 = $400.
- If only two bought: Total Earnings = $2,800 + $400 = **$3,200**.

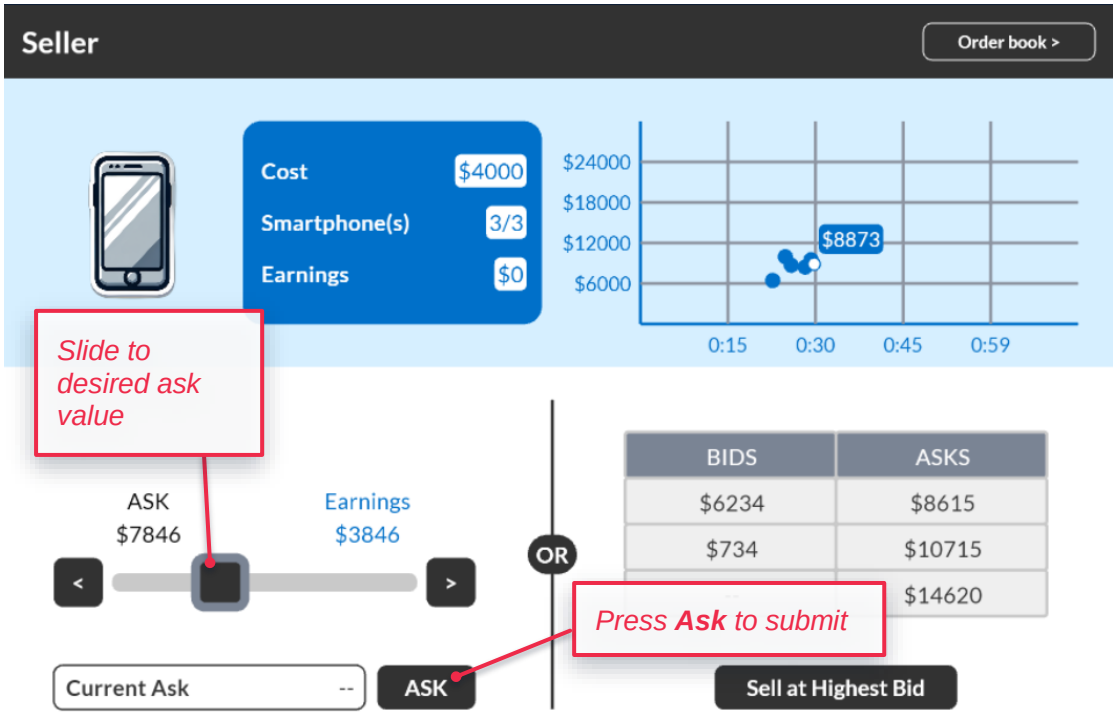
Trading Mechanism

- When the market opens, buyers **submit bids** (prices they're willing to pay) and sellers **submit asks** (prices they're willing to sell at).
- A trade happens:
  - When a buyer accepts a seller's ask.
  - When a seller accepts a buyer's bid.

- As a buyer, you use a slider to choose your bid price, then click **Bid**

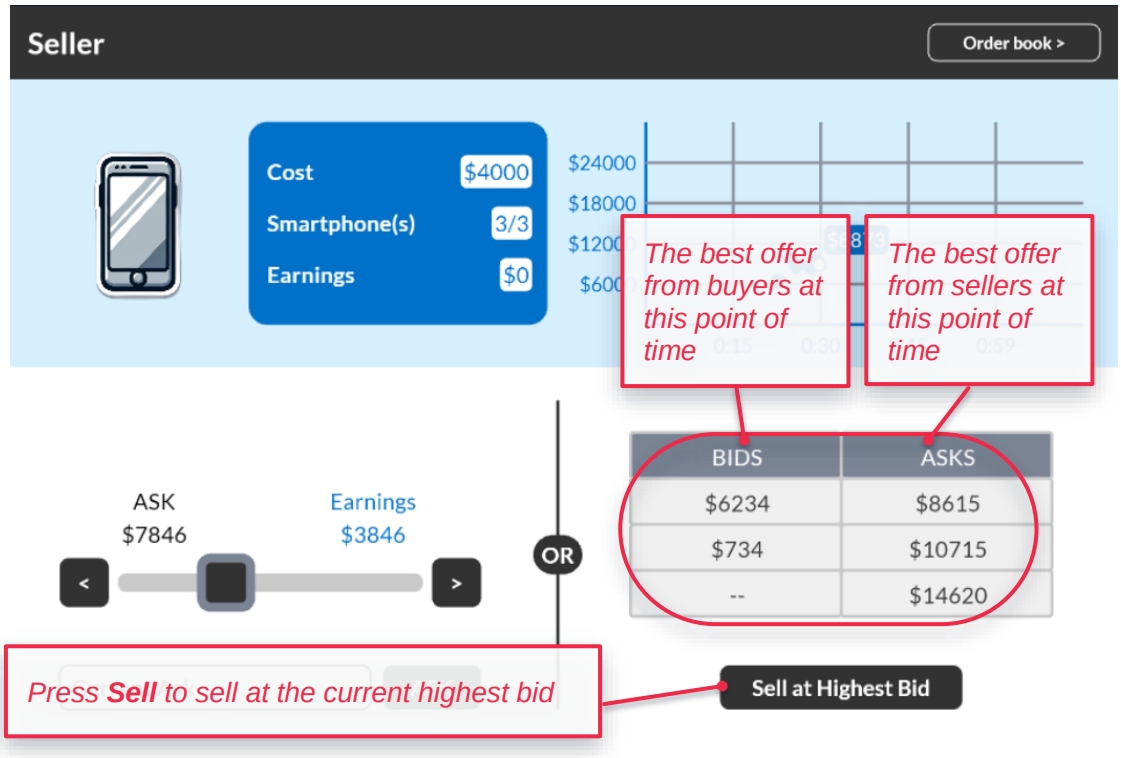


- As a seller, you use a slider to choose your ask price, then click **Ask**



- You can adjust your bids and asks at any time.

- The system always shows:
  - The *highest three outstanding bids*.
  - The *lowest three outstanding asks*.



- Note that *No trade happens as the lowest ask is above the highest bid*.

How to trade:

- To sell immediately at the best price: Click **Sell at Highest Bid** (if bid price ≥ your cost).
- To buy immediately at the best price: Click **Buy at Lowest Ask** (if ask price ≤ your value).

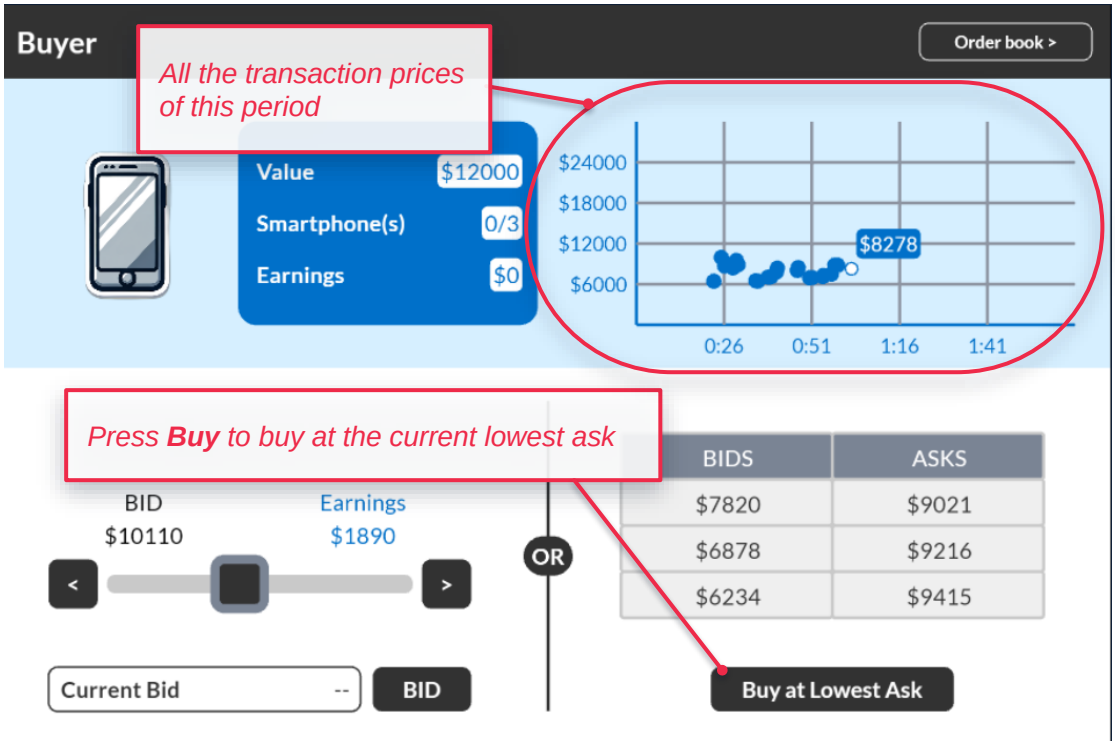
Only trade if the price works for you! If the highest bid is below your cost (as seller) or the lowest ask is above your value (as buyer), don't accept the trade.

To summarize,
You buy a smartphone if:

- You click Buy at Lowest Ask, OR
- A seller accepts your bid.

You sell a smartphone if:

- You click Sell at Highest Bid, OR
- A buyer accepts your ask.



After a trade:

- Both the buyer and seller's previous bids/asks for that phone are cleared.
- All other traders' bids/asks remain.
- Prices of all transactions will be displayed.

Trading period:

- Each round lasts **8 minutes**.
- After trading ends, you'll see a summary page.
- There's a 10-second break before the next period starts.