



**MONDAY** 

MORNING **ECONOMIST** Weekly Article

#### MONDAY MORNING ECONOMIST STUDENT HANDOUT

# So, What (Economics Concepts) Can We See?

# Part One. Multiple Choice Ouestions (15 minutes)

Why do rival businesses like Home Depot and Lowe's often choose to locate near each other rather than spread across town? Today's article shows how clustering can create a stable (though not always efficient) outcome. Students will examine how location, competition, and product differentiation shape the strategies firms use and the tradeoffs faced by consumers.

Instructions: Read So. What (Economics Concepts) Can We See? from Monday Morning Economist and then answer the following multiple choice questions.

- 1. What tools does JoseMonkey often use to pinpoint locations in videos? A. Instagram and TikTok

  - B. Yelp reviews and Amazon Maps
  - C. Google Earth and OpenStreetMap
  - D. Street directories and library archives
- 2. According to the article, about what percentage of Lowe's stores have a Home Depot within 5 miles?
  - A. 25%
  - B. 40%
  - C. 70%
  - D. 90%
- 3. Why is it surprising that Lowe's and Home Depot often locate so close together?
  - A. Because it increases construction costs B.
  - B. Because customers dislike having multiple options nearby
  - C. Because they sell identical goods and should merge
  - D. Because cities are large enough that they could spread out across town
- 4. In Hotelling's beach example, why do the two ice cream vendors eventually end up side by side in the center?
  - A. To share costs of umbrellas and supplies
  - B. Because people prefer to sit in the middle of the beach
  - C. To minimize the walking distance for customers
  - D. Because the center location is the only stable outcome where neither can gain by moving
- 5. Why might big-box retailers like Lowe's and Home Depot prefer to cluster even when plenty of land is available?
  - A. To hide from zoning officials
  - B. To hedge against long-term uncertainty in city growth and protect against rivals
  - C. To discourage professional customers from shopping
  - D. To lower their construction costs

| What do you think? When stores or restaurants you like cluster near each other, it can be    |   |  |  |  |  |
|--|---|--|--|--|--|
| convenient (one trip, more choices), but also frustrating (traffic or fewer options in other |   |  |  |  |  |
| parts of town). Do you think the benefits outweigh the drawbacks of this strategy?           |   |  |  |  |  |
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# Part Two. Beach Clash of the Cones (15 mins.) Step 1— Beach Vendor Simulation Intro

It's a perfect summer day! You've finally got a break from work and family responsibilities. With a little cash in your pocket and plenty of sunshine, you head to the beach to relax. The sand is warm under your feet, the waves are rolling in, and you're ready to stake your claim. Grab your "beach towel" sticky note and place it wherever you'd like along the beach, you've just found your spot for the day.

# Step 2—Activity- Mapping the Beach

Instructions: On the diagrams below, sketch where the ice cream carts set up during each round of the simulation. Place a 'A' and a 'B' on the diagram to show their approximate placement. After each round, record how many customers went to each cart.

| Round 1: One vendor chooses a spot. Did any students not "buy" the ice cream? Who had    | Round 1  Beach |  |  |  |  |
|--|----------------|--|--|--|--|
| to walk the farthest? Round 1: Vendor A sold ice creams.                                 |                |  |  |  |  |
| Round 2: A second vendor sets up. Which customers go where?                              | Round 2  Beach |  |  |  |  |
| Round 2: Vendor A sold, Vendor B sold  |                |  |  |  |  |
| Round 3: Vendors move to compete. Where do they end up?  Round 3: Vendor A sold,         | Round 3  Beach |  |  |  |  |
| Vendor B sold  Step 3—Answer the following:  |                |  |  |  |  |
| What pattern did you notice about where vendors chose to locate?                         |                |  |  |  |  |
| 2) Why do vendors end up next to each other, and most likely in the middle of the beach? |                |  |  |  |  |
| 3) How does this reflect Hotelling's Law <sup>1</sup> ?                                  |                |  |  |  |  |
| 4) Why might clustering close to competitors make sense for businesses?                  |                |  |  |  |  |
|  |                |  |  |  |  |

Hotelling's Law explains why businesses selling similar products often cluster together, even if it looks like bad strategy. Introduced in 1929, it's illustrated by two ice cream vendors on a beach: the vendor on the end keeps moving toward the middle to capture more customers until both end up side by side. This creates a stable outcome for the vendors, though it's less convenient for customers spread out along the beach.





# Part Three. The Battle of the Burrito District: A Consumer Preference Role-Play

Imagine walking down the street to grab lunch and realizing all the burrito places are bunched together: Chipotle on one corner, Qdoba across the street, and Moe's just down the block. At first, that feels strange. Wouldn't it make more sense for each one to spread out across town and claim their own customers? But businesses often cluster like this on purpose. It's a strategy based on how competition and customer choices work.

| ☐ Divide Roles   |   | <b>nstructions:</b> Explore how consumer preferences and business locations affect competition. |  |  |  |  |
|--|---|---|--|--|--|--|
|  | ☐ Divide Roles  |   |  |  |  |  |
|  | be Business Owners of unique  | and recognizable competitive  |  |  |  |  |
| firms.<br>○ Half the class will  | be Consumers with specific pre  | ferences  |  |  |  |  |
| ☐ Round 1: Initial Location  | ·   | referrees.  |  |  |  |  |
|  | decide where to locate in the cl  | assroom.  |  |  |  |  |
| <ul> <li>Consumers walk t</li> </ul>   | o the business that best match  | es their preference card.   |  |  |  |  |
| Round 2: Relocation  |   |   |  |  |  |  |
|  | nove to try to capture more cus   |   |  |  |  |  |
|  | t their choices based on locatio  | n and preference.   |  |  |  |  |
| <ul> <li>Record What Happened</li> <li>Use the tables below to track how many customers each business received in each round.</li> </ul> |   |   |  |  |  |  |
| Round 1 Results: Business Own  | ners/Consumers  |   |  |  |  |  |
| Your Business/Selected<br>Business   | Location Chosen<br>(front/middle/back, etc.)  | Customers Served/Business<br>Selected   |  |  |  |  |
|  |   |   |  |  |  |  |
| Round 2 Results: Business Own  | ners/Consumers  |   |  |  |  |  |
| Your Business/Selected<br>Business   | Location Chosen<br>(front/middle/back, etc.)  | Customers Served/Business<br>Selected   |  |  |  |  |
|  |   |   |  |  |  |  |
|  |   |   |  |  |  |  |
|  | <b>ng based on your assigned r</b><br>business owner, what was you<br>u change it between rounds? | r strategy when deciding  |  |  |  |  |
| 5) Answer one of the followi<br>A. Business Owner- As a k<br>where to locate? Did yo   | ousiness owner, what was you<br>u change it between rounds?<br>mer, what mattered more to yo      | r strategy when deciding<br>Why?  |  |  |  |  |

7) How do **branding**, **price**, and **quality** allow similar businesses to survive side by side?





# **Appendix A. Part 3 Consumer Preference Role Cards** (print and cut) *Each card includes a tie-breaker rule. Give each consumer one card.*

| Bargain Hunter: Choose<br>any store showing<br>Lowest Price or Student<br>Discount; otherwise<br>nearest.                                  | In a Hurry: Choose<br>Fastest Service tag;<br>otherwise nearest.<br>Tie-breaker: shortest<br>line (fewest customers).         | Quality First: Choose<br>Premium Quality tag;<br>otherwise nearest.<br>Tie-breaker: brand you<br>like more.                       |  |
|--|---|---|--|
| Prefers Starbucks, but<br>switch if another coffee<br>shop is 2+ steps closer.<br>Tie-breaker: Comfiest<br>Seating.                        | Prefers Taco Bell, but if<br>another burrito shop is<br>3+ steps closer, switch.<br>Tie-breaker: Lowest<br>Price.             | rito shop is CVS; if none, closest ser, switch. pharmacy.   |  |
| Avoid Crowds: Choose<br>nearest store with ≤ 5<br>customers; otherwise<br>next nearest.<br>Tie-breaker: Premium<br>Quality.                | Veg-Friendly: Must<br>choose a store with<br>Veg-Friendly/Gluten-Fre<br>e; if multiple, nearest.                              | Chipotle Loyalist:<br>Choose Chipotle<br>regardless of distance. If<br>no Chipotle, closest<br>burrito shop.                      |  |
| Closest Wins: Always<br>choose the nearest<br>store. Tie-breaker:<br>choose the store with<br>Fastest Service.                             | Spice Fan: If a burrito<br>shop has New<br>Limited-Time Item,<br>choose it; otherwise<br>nearest burrito shop.                | Go with Friends: Join the store where most classmates (from your table group) went, if within 3 steps of your spot; else nearest. |  |
| Dunkin' Devotee:<br>Choose Dunkin'<br>regardless of distance. If<br>none, closest coffee.  | Quiet Vibes: Avoid the<br>store with most<br>customers; pick the<br>nearest alternative.<br>Tie-breaker: Comfiest<br>Seating. | Short Walk: Will walk up<br>to 6 steps; farther than<br>6 → next-closest.<br>Tie-breaker: Lowest<br>Price.                        |  |
| Rewards Seeker: Choose<br>a store with<br>Rewards/Loyalty;<br>otherwise nearest<br>preferred category<br>(burrito → coffee →<br>sandwich). | Prefers Starbucks, but<br>switch if another coffee<br>shop is 2+ steps closer.<br>Tie-breaker: Comfiest<br>Seating.           | In a Hurry: Choose<br>Fastest Service tag;<br>otherwise nearest.<br>Tie-breaker: shortest<br>line (fewest customers).             |  |





**Appendix B. Part 3 Business Owner Cards** (print and cut) *Print enough to provide each owner one card.* 



Chipotle – burritos & bowls



**Qdoba – burritos & queso** 



Moe's – burritos & "Welcome to Moe's!" vibe.



Taco Bell – value menu, late hours



Starbucks – premium coffee, comfy seating



Dunkin' - quick coffee, value focus



est. 1946





CVS - pharmacy + convenience



Walgreens – pharmacy + convenience



Domino's - fast delivery pizza



Little Caesars - hot-n-ready pizza



Smoothie King – smoothies, "fitness" positioning



Jamba - smoothies, fruit-forward









Subway - customizable sandwiches



Jersey Mike's – quality subs, sliced fresh



Jimmy John's – "freaky fast" subs



Local Taquería – authentic menu, family-owned





# Appendix C. Differentiation Tags (Business Owners choose 1 in Round 2)

| Lowest Price<br>Today  | Most<br>Convenient<br>Parking (easy<br>access, large lot) | Strong Wi-Fi<br>Connection<br>(appeals to<br>students/remot<br>e workers) | Healthiest<br>Menu Options<br>(low-calorie,<br>organic<br>choices) |
|--|---|---|--|
| Locally-Owned<br>/Community<br>Vibe<br>(authentic,<br>supports local<br>economy) | Best Value<br>Combo Deals<br>(bundles, BOGO<br>specials)  | Family-Friendly<br>Environment<br>(kids' meals,<br>safe<br>atmosphere)    | Open Late  |
| New  | Comfiest  | Veg-Friendly /  | Drive-Thru   |
| Limited-Time   | Seating / Study   | Gluten-Free   |  |
| Item   | Spot  | Options   |  |
| Premium  | Rewards/Loyalty   | Student   | Fastest Service  |
| Quality  | Points  | Discount  |  |





# **TEACHER GUIDE**

Teachers may choose to use all or part of this lesson. Each part is meant to exist on its own. The approximate time to complete each section is provided and will vary.

KEY CONCEPTS: Monopolistic Competition, Product Differentiation, Consumer Preferences, Clustering/Spatial Competition, Competition

# NEW SLIDES RESOURCE! Click **HERE** to access the lesson slides

**Related FEE.Org Commentary:** How the Free Market Handles Monopoly (The market process, competition, monopoly, and how firms play to win.)

#### National Voluntary Content Standards in Economics & Benchmarks.

**Standard 1: Scarcity** – The concept of limited desirable locations illustrates how firms compete for prime spaces to attract customers.

**Standard 2: Decision Making** – The article shows how both firms and consumers make choices about location, branding, and convenience to maximize their outcomes.

**Standard 7: Markets - Price and Quantity Determination -** The lesson demonstrates how competition influences where businesses locate and how consumers decide between similar products.

**Standard 9: Competition and Market Structure** – The activity and article highlight monopolistic competition, explaining how clustering and differentiation shape firm behavior and consumer choice.

#### Glossary of Key Terms to Know in this Lesson:

**Hotelling's Law** – A principle that explains why businesses selling similar products often cluster close together, since moving apart risks losing customers to competitors.

**Spatial Competition** – Competition based on location, where distance and convenience influence customer choices

**Clustering** – The tendency of competing businesses to locate near each other, creating stability for firms but sometimes less convenience for consumers.

**Monopolistic Competition** – A market structure with many firms offering similar but not identical products, competing through branding, price, and quality differences.

**Product Differentiation** – The unique features or qualities (like price, menu, service, or brand image) that make one business's product stand out from another's.

**Consumer Preferences** – The tastes, priorities, and trade-offs that guide a customer's choices, such as valuing brand loyalty, price, or distance.

# So, What (Economics Concepts) Can We See?

# Part One. Multiple Choice Questions (15 minutes)

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  - B. To hedge against long-term uncertainty in city growth and protect against rivals\*
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  - D. To lower their construction costs

**What do you think?** When stores or restaurants you like cluster near each other, it can be convenient (one trip, more choices), but also frustrating (traffic or fewer options in other parts of town). Do you think the benefits outweigh the drawbacks of this strategy?

**Suggested Answer:** Yes, the benefits often outweigh the drawbacks because clustering makes it easier to compare options in one trip and gives me more choices in the same area. Even though it can create traffic or leave some neighborhoods without options, the convenience of having multiple stores together usually saves time and gives me better deals.

# Part Two. Beach Clash of the Cones (15 mins.)

**Objective-** Students will experience why businesses often cluster by modeling Hotelling's Law with ice cream vendors on a beach.

#### **Materials:**

- Tape line on the floor (the "beach") or whiteboard diagram
- Sticky notes (to represent beach towels and ice cream carts)
- Student handouts with diagrams and response spaces
- Tokens (optional, to represent purchases)

**Teacher Instruction:** Read aloud the scenario to set the stage. Have students place their "beach towel" sticky notes anywhere on the beach (line on floor/board). Encourage them to spread out naturally.

# **Step 1— Beach Vendor Simulation Intro**

[READ ALOUD] \* It's a perfect summer day! You've finally got a break from work and family responsibilities. With a little cash in your pocket and plenty of sunshine, you head to the beach to relax. The sand is warm under your feet, the waves are rolling in, and you're





ready to stake your claim. Grab your "beach towel" sticky note and place it wherever you'd like along the beach, you've just found your spot for the day.

# Step 2—Activity: Mapping the Beach Round 1 (Vendor A only):

- Select one student as Vendor A and give them a colored sticky note.
- Vendor A chooses where to set up on the beach.
- Ask: "Did any students not 'buy' the ice cream? Who had to walk the farthest?"
- Record sales (all consumers technically buy, but distance varies).
   Suggested Answer: Vendor A serves everyone, but students at the far ends walk the farthest.

# Round 2 (Vendor A + Vendor B):

- Introduce Vendor B with another sticky note.
- Vendor B chooses a location.
- Students "buy" from the closer vendor.
- Ask: "Which customers go where?"
- Record results for both vendors.

**Suggested Answer:** Students on the left go to the left vendor; students on the right go to the right vendor.

### Round 3 (Vendors adjust):

- Allow Vendors A and B to move closer (if they choose) to maximize customers.
- Students move again to their closest option.
- **Teacher Tip:** If a student tries to crowd out or cover the other vendor's spot, pause the activity and say something like: "Hold on. Remember, in real markets businesses can't just shove each other out of the way. They've signed leases, own property, and have legal protections. You can adjust your location, but you can't remove someone else's spot. This is like property rights in economics: each firm protects its own ground, and competition has to happen through legal moves like price, quality, or branding; not by pushing the other store out."

This moment reinforces the role of property rights in keeping competition fair and orderly. Without them, aggressive tactics could replace the kind of stable equilibrium Hotelling's Law describes.

Ask: "Where do they end up? How many customers does each serve now?"
 Suggested Answer: Both vendors cluster in the middle. They split the market equally, and neither gains by moving again.

# Step 3 — Debrief Questions with Suggested Answers

1) What pattern did you notice about where vendors chose to locate? **Suggested Answer:** Vendors moved closer to the center over time. They shifted positions to capture customers from both sides.

2) Why do vendors end up next to each other, and most likely in the middle of the beach?

**Suggested Answer:** If one vendor is off to the side, the other can move slightly closer to capture more customers. The middle is the only spot where neither gains an advantage by moving—this is the equilibrium.





3) How does this reflect Hotelling's Law?

**Suggested Answer:** Hotelling's Law predicts that competitors selling the same product will cluster together in the middle of a market space, creating stability for them even if it's less convenient for consumers.

4) Why might clustering close to competitors make sense for businesses? **Suggested Answer:** Clustering reduces the risk of losing customers to rivals, increases visibility (customers know where to find multiple options), and hedges against changes in different parts of town. Businesses may also benefit from shared traffic since customers expect choices in one location.

Part Three. The Battle of the Burrito District: A Consumer Preference Role-Play Objective: Show how location (distance) and differentiation (brand/price/quality) shape competition—and why clustering can be a stable strategy.

#### **Materials**

- Printed- **Consumer Preference Cards** (1 card from <u>Appendix A.</u> for each student selected as a consumer; roughly half the class, or up to 16 students)
- Printed- **Store Signs/Business Owner Cards** (1 card from <u>Appendix B.</u> for each student selected as a business owner; roughly half the class, or up to 16 students)
- **1 token** (use pennies, beans, stickers, or small pieces of paper, etc.) per student (this token represents a purchase)
- Printed <u>Appendix C.</u> **Differentiation Cards** for business owners in round 2 of Part Three simulation activity.
- Student Handout (pages 1–3 of this lesson, printed for all students)

#### **Lesson Sequence & Teacher Instructions**

#### 1. Set the Scene (2–3 mins.)

- Read aloud the student introduction about walking into the "Burrito District" with multiple shops close together.
- Frame the activity: "Today you'll role-play as either businesses or consumers to see how preferences and locations affect competition."

**[READ ALOUD TO STUDENTS]** Imagine walking down the street to grab lunch and realizing all the burrito places are bunched together: Chipotle on one corner, Qdoba across the street, and Moe's just down the block. At first, that feels strange. Wouldn't it make more sense for each one to spread out across town and claim their own customers? But businesses often cluster like this on purpose. It's a strategy based on how competition and customer choices work.

# Setup (2 minutes)

- 1. Divide Roles (2 mins.)
- 2. Assign half the class as Business Owners (Appendix B cards).
- 3. Assign half as Consumers (Appendix A cards).
- 4. Give each student their role card secretly.





#### Round 1: Initial Locations/Baseline Choice (5 minutes)

- 5. Owners stand with their store "signs" anywhere in the room (representing Main Street).
- 6. Consumers walk to the business that best matches their preference card.
- 7. Freeze and tally: each business records how many customers they served; consumers record which business they chose.

**Mini-Debrief (1 minute):** Where did owners cluster? Who won on pure distance vs. brand loyalty?

# Round 2: Relocate + Differentiate (7 minutes)

- 8. Owners may move to a new location.
- 9. Business Owners draw 1 Differentiation Tag (Appendix C) to advertise.
- 10. Consumers re-decide using their card rules (brand loyalty, distance, price/quality trade-offs, etc.).
- 11. Freeze and tally results again.

# **Student Reflection Questions**

- 5) Answer one of the following based on your assigned role:
- A. *Business Owner-* As a business owner, what was your strategy when deciding where to locate? Did you change it between rounds? Why?

**Suggested Answer:** As a business owner, my strategy was to locate where I could capture the largest number of nearby customers. In Round 1, I picked a spot without knowing where others would be. By Round 2, I moved closer to my competitor so I wouldn't lose customers to them—clustering in the middle made sure I had access to both sides of the "market." I changed locations between rounds because staying off to the side meant I risked losing too many customers.

B. Consumer- As a consumer, what mattered more to you: your favorite brand or the closest location? Explain.

**Suggested Answer:** As a consumer, the closest location usually mattered more because I didn't want to "walk" farther than necessary. Even if I liked one brand better, I often chose the closer option since it was more convenient. However, if the brand I preferred offered something special—like better quality or a discount—I was willing to go a little farther to get it.

- 6) What are the downsides for consumers when businesses cluster? **Suggested Answer:** When businesses cluster, consumers on the "edges" have to travel farther to reach them, which is less convenient. It can also lead to traffic congestion or longer lines since so many people go to the same area. Even though there are more choices once you arrive, the extra time, distance, and hassle can make shopping less efficient for customers.
  - 7) How do **branding**, **price**, and **quality** allow similar businesses to survive side by side?

**Suggested Answer:** Branding, price, and quality give customers reasons to choose one business over another even if they are located right next to each other. For example, one store might be known for lower prices, another for higher quality, and another for a strong brand identity or customer experience. These differences create loyal customer groups and allow similar businesses to survive side by side without one driving the other out.



