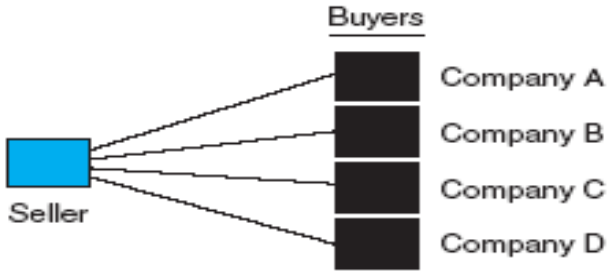
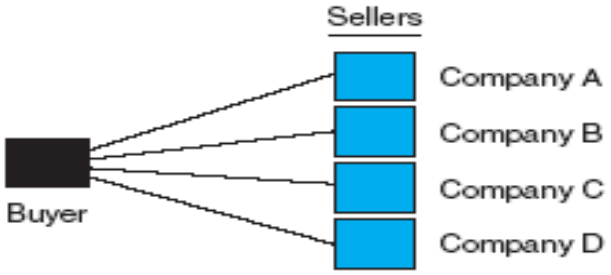
Concepts, Characteristics, and Models of B2B EC

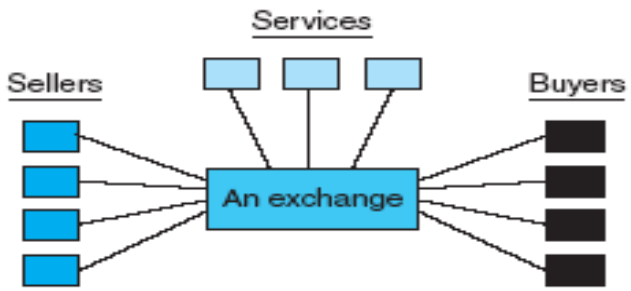
EXHIBIT 5.2 Types of B2B E-Commerce



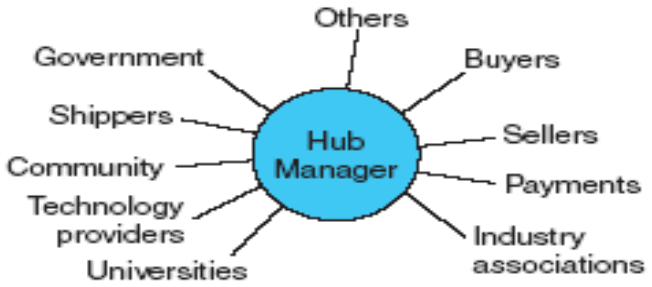
(a) Sell-Side B2B



(b) Buy-Side B2B



(c) Electronic Exchange



(d) Supply Chain Improvements and Collaborative Commerce

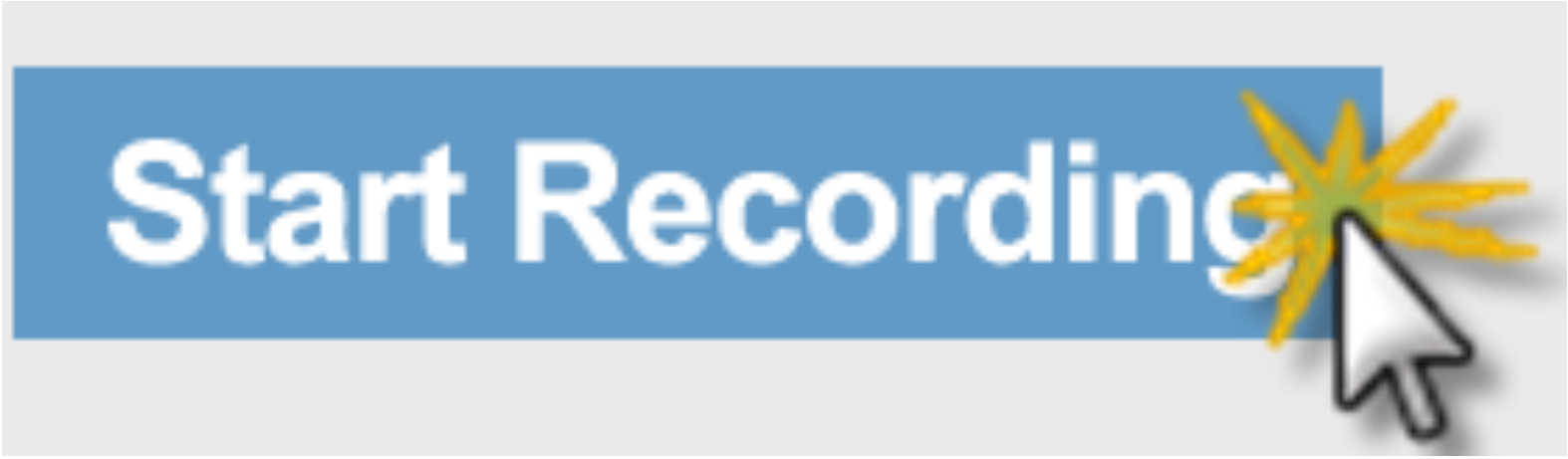
Week 4:

What is it Like to Work in a Real Supply Chain?

Beer (Root) Game Introduction

MIS 3537: Internet & Supply Chains

Prof. Edward (Ed) Beaver


Start Recording

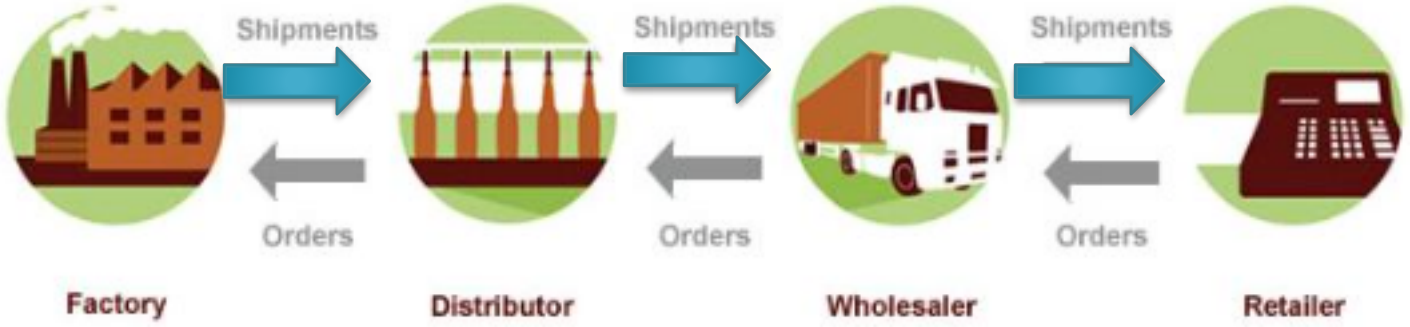
Learning Objectives

- Have some fun with the beer game
  - 'Experience' working in a simulated supply chain
  - 'Real' introduction to Bullwhip Effect
  - Have fun in class while learning

The beer game

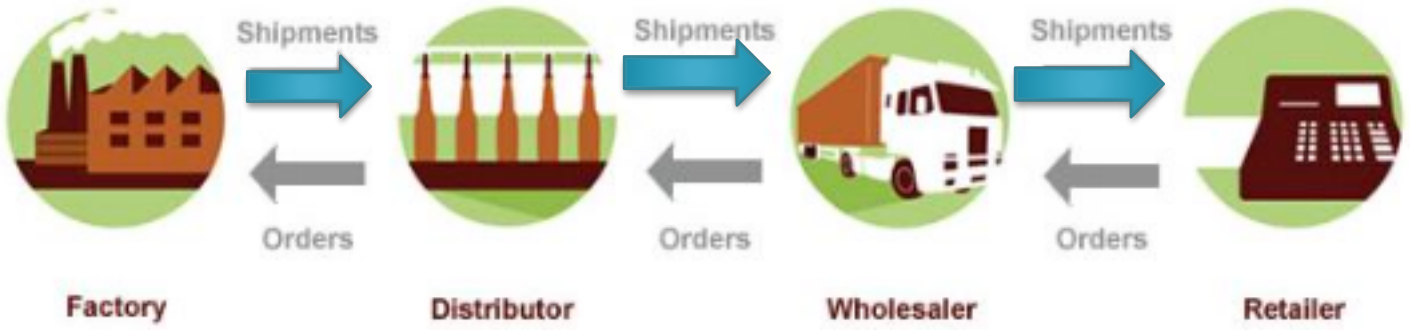
- Originally conceived at MIT
- A very good exercise in understanding the bullwhip effect
- The structure and rules…

Game Roles (SC Players)



- Factory (1): Manufactures syrup
- Distributor (3): Bottling and package (case)
- Wholesaler (10): Local warehousing
- Retailer (10,000): Sale to customer

Game Flows



- Types
  - Physical
  - Information (orders)
- Frequency: once per period (week)
- Delays (displayed on the ordering box)
  - 2 weeks order to ship
  - 2 weeks ship to delivery

The rules of the game

- You, the player, can play one of the four roles; you are the manager at the
  - Retailer
  - Wholesaler
  - Distributor
  - Factory

- The factory has access to unlimited amounts of raw materials, labor etc.

The Rules: Routine

- Each week you will receive orders from downstream
- You '**must**' ship the order if you can. If you can't – it goes into backlog and **must** be shipped in later week when stock is available.
- Each player replenishes stock from ordering from the partner upstream (except factory which produces)

The rules: Decisions

- Each player must work with these parameters
  - Order: the order amount received from the next level along your supply chain
    - A retailer's orders are dependent on the perceived demand; a wholesaler's order amount is based on what demanded by the retailer and so on.
  - Inventory: the numbers in stock
  - Backlog: unfulfilled orders from past week(s)

The rules: On the Clock

This Week (Intro)

- You'll have as much time as you need
- Proceed to next week when all orders have been placed
- Two Weeks 'Intro'

Next Week (Round 1)

- There will be a timer (upper right of screen)
- If counter is zero without your input, system will reuse previous decision

The rules: Silence

- You may **not** speak to each other or communicate in any way. Only place orders and ship product.

The rules: Winning

How do you win?

Lowest Total Cost for entire Supply Chain (inventory cost + backorder cost)

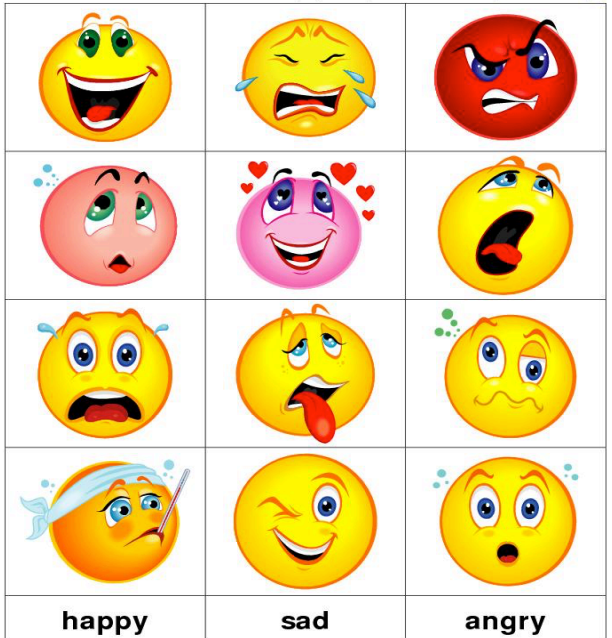
- Inventory cost: For every item in the inventory, the holding entity (retailer, etc.) is charged $ 0.50

- Backorder cost: For every item unfulfilled, the entity unable to fulfill the order is charged $ 1.00

Let's play the game!

Your thoughts

- Any Questions about the Logistics, Process of Playing the Game?
- Which role are you playing?
- How are you Feeling?



Next week (February 20)…

- In class Beer Game:
  Complete Round One

Follow Up

- Each team Decides Change to make for Round 2 *(by February 25)*
- Each team on their own completes Round 2 with the change *(By March 20)*
- Beer Game Write-up *(By March 20)*

Extra – Future Slides

Your thoughts

- Which role did you play?
- What were your individual costs? What was the total supply chain cost?
- Share your thoughts about the game
- What could have helped you bring down the costs?