

Player Manual for Beergame

Last Modified March 1, 2006

Game Link: <http://iops.tamu.edu/faculty/anarayanan/beergame>

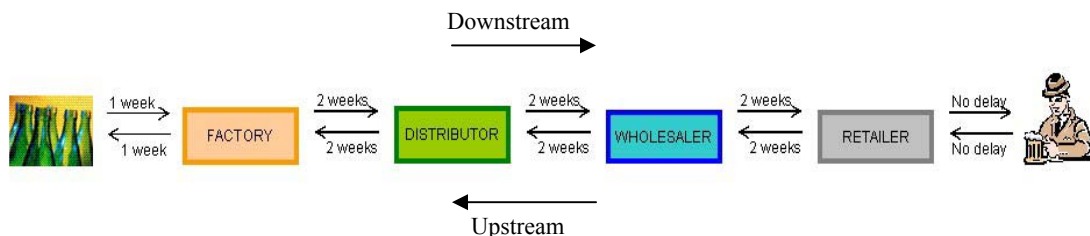
Objective of the Game: Is to satisfy the demand of the customer, while keeping the cost low. There is a cost for holding inventory and a cost for not satisfying demand (backorder). The demand for the product remains until it is satisfied i.e. backorder persists until it is fulfilled.

Each player would be given an information card as shown below,

465-Spring06
Game number : 1
Position : RETAILER
Password : 7z3m

The information card contains details regarding the group (e.g. 465-Spring06), game (e.g. 1), position (e.g. Retailer) and password. Using this information a player could start/login into his game.

When a player clicks on the link to play the game, he would see the entire list of groups registered to play this game. The player would be directed to click on his group (e.g. 465-Spring06), which would direct him to the list of games. Each player would be assigned to a position in a game. When the player clicks on the game button, he would see a snapshot of the supply chain as shown below,



This picture would vary according to the game settings. The traditional supply chain partner positions include factory, distributor, wholesaler and retailer. Sometimes there might be less than 4 supply chain partners in a game. The two types of flows in this supply chain include product and information. There may be delay in these flows, which could be 1 or 2 weeks or in some cases no delay. Shipment (product flow) is made downstream and information is transmitted upstream in this supply chain.

As soon as a player clicks on his position, he/she would be asked to login using the password given to them. After validating the login, the player is transferred to their game screen. The game screen consists of 4 regions, namely order input screen, past information (10 weeks) about their position, status information of the supply chain partners and plot and settings screen.

Input Screen for Wholesaler
For Week 19

Demand from Retailer : 9	Beginning Inventory : 21
On Backorder : 0	Incoming Shipment : 0

Total requirements : 9	Total available : 21

Units Shipped to Retailer this week: 9
Ending inventory 12

Enter the number of units to be purchased from Distributor :

Wholesaler INFORMATION FOR THE LAST TEN WEEKS

Week	Inv/Bk	Incom. ship	Outg. ship	Orderplaced	Current cost
9	16	0	8	13	148
10	18	20	18	0	166
11	22	14	10	2	188
12	10	0	12	8	198
13	23	13	0	4	221
14	18	0	5	5	239
15	17	2	3	0	256
16	20	8	5	0	276
17	24	4	0	6	300
18	21	5	8	9	321

Status of other Supply Chain Channel Members
This page will be refreshed every 30 seconds

When all the players have completed the order for the current week, the player will automatically receive a link to proceed to next week

Week 19

Factory : **Has not ordered**

Distributor : **Order placed**

Wholesaler : **Has not ordered**

Retailer : **Order placed**

Inventory and Order Status plots For Wholesaler

Supply Chain Settings for Wholesaler:
Holding cost : 1
Backorder cost : 2
Downstream Player : **Retailer**
Upstream Player : **Distributor**
Shipping Delay : **2 wks** (Distributor -> Wholesaler, Wholesaler -> Retailer)
Information Delay : **2 wks** (Wholesaler -> Distributor, Retailer -> Wholesaler)

Created by Chalam

1. Order input screen

This screen provides information regarding the current demand (from downstream partner) and current incoming shipment (from upstream partner).

For a player:

Total demand = Current demand + Backorder

Available to ship in a week = Incoming shipment + on hand inventory

If Available to ship > Total demand,

Ending inventory balance = Available to ship – Total demand

If Available to ship < Total demand,

Backorder (unsatisfied demand) = Total demand – Available to ship

All these calculations are done automatically. The player just has to **decide how much to order** from his upstream partner. This decision affects the cost of his

system, which depends on the inventory/backorder he carries. He can use the data in the other screens namely, past information and plots to aid his decision.

2. Information for the Last ten weeks

This screen displays the information for the last 10 weeks (if available), it includes data regarding inventory/backorder, incoming shipment, outgoing shipment, order placed and current cost (cumulative).

3. Status of the other supply chain channel partners

This is a unique feature of this game, which displays the status of the other supply chain partners for the current week. This part of the screen gets refreshed automatically every 30 seconds. As soon as all the partners complete the order processing for the current week, the player would see a button appear in this part of the screen. By clicking the button, a player could proceed to fulfill his order for the next week. This helps in controlling the flows in the game without the intervention of an external authority.

RETAILER STATUS

End Of Week 20

1 Your order(to the Wholesaler) for the Week 20 is 4
Your shipment(to the Customer) for the Week 20 is 8
You have a backorder of 12 at the end of Week 20
Current cost of Retailer : 194

PLEASE WAIT FOR ALL THE OTHER PARTNERS TO COMPLETE THEIR WEEKLY ORDERING AND SHIPPING POLICIES.
Once completed you will see a link in the bottom window to proceed to next week 21. Please click that to proceed.

All have completed the order process for Week 20

Please to proceed

Thank You.

3 By clicking we proceed to the next week in the game, the whole player screen refreshes

Retailer INFORMATION FOR THE LAST TEN WEEKS

Week	Inv/Bk	Incom. ship	Outg. ship	Orderplaced	Current cost
10	-1	12	12	12	88
11	-1	8	8	0	90
12	9	18	9	5	99
13	11	10	8	3	110
14	15	12	8	5	125
15	7	0	8	0	132
16	4	5	8	8	136
17	-1	3	7	9	138
18	-4	5	5	9	146
19	-12	0	0	40	170

Inventory and Order Status plots For Retailer

Supply Chain Settings for Retailer:
Holding cost : 1
Backorder cost : 2
Downstream Player : Customer
Upstream Player: Wholesaler
Shipping Delay : 2 weeks (Wholesaler -> Retailer)
Information Delay : 2 weeks (Retailer -> Wholesaler)

4

4. Plots and supply chain settings

Using the buttons in this screen, a player could view the demand, inventory/backorder and order plots for the “**entire duration of the game**”. The supply chain settings for the player is also displayed in this screen, which includes the holding cost/unit/week, backorder cost/unit/week, information regarding the upstream and downstream partners along with their delay (shipping and information) information.

If you have any concerns or questions regarding this game, please contact your Instructor or Chalam (chalam@tamu.edu).