



DETAILS OF A PLAYER WINDOW

The screen shots of player window and details are explained in this document. The player considered here for explaining the entire procedure is the retailer.

| | A | B | C | D | E | F | G | H | I | K | L |
|----|------|------------------------|----------------------|--------------------|----------------|--------------------|-----------------|----------------------------|------------|----------------------------------|------------|
| | Week | Replenishment quantity | Inventory @beginning | Inventory position | Customer order | Allocated quantity | Inventory @ end | Order placed to wholesaler | Back Order | Allocated Quantity for Backorder | Done/Empty |
| 3 | | | | | | | 60 | | | | |
| 4 | 1 | 0 | 60 | 60 | 18 | 18 | 42 | 20 | 0 | 0 | Done |
| 5 | 2 | 0 | 42 | 62 | 15 | 15 | 27 | 13 | 0 | 0 | Done |
| 6 | 3 | 0 | 27 | 40 | 22 | 22 | 5 | 30 | 0 | 0 | Done |
| 7 | 4 | 20 | 25 | 55 | 23 | 23 | 2 | 25 | 0 | 0 | Done |
| 8 | 5 | 13 | 15 | 40 | 13 | 13 | 2 | 12 | 0 | 0 | Done |
| 9 | 6 | 30 | 32 | 44 | 17 | 17 | 15 | 5 | 0 | 0 | Done |
| 10 | 7 | 25 | 40 | 45 | 24 | 24 | 16 | 5 | 0 | 0 | Done |
| 11 | 8 | 12 | 28 | 33 | 20 | 20 | 8 | 30 | 0 | 0 | Done |
| 12 | 9 | 5 | 13 | 43 | 9 | 9 | 4 | 9 | 0 | 0 | Done |
| 13 | 10 | 5 | 9 | 18 | 19 | 9 | -10 | 20 | 10 | 0 | Done |
| 14 | 11 | 30 | 20 | 40 | 31 | 20 | -11 | 25 | 11 | 10 | Done |
| 15 | 12 | 9 | -2 | 23 | 21 | 0 | -23 | 25 | 23 | 9 | Done |
| 16 | 13 | 20 | -3 | 22 | 21 | 0 | -24 | 22 | 24 | 20 | Done |
| 17 | 14 | 25 | 1 | 23 | 11 | 1 | -10 | 16 | 10 | 24 | Done |
| 18 | 15 | 25 | 15 | 31 | 29 | 15 | -14 | 22 | 14 | 10 | Done |
| 19 | 16 | 15 | 1 | 23 | 26 | 1 | -25 | 23 | 25 | 14 | Done |
| 20 | 17 | 6 | -19 | 4 | 17 | 0 | -36 | 13 | 36 | 6 | Done |
| 21 | 18 | 11 | -25 | -12 | 29 | 0 | -54 | 19 | 54 | 11 | Done |

Fig.1.Screen shot of typical player window

Details of Player spreadsheet in Figure 1.

There are 10 columns in player spreadsheet.

Column “A” (Week) - It shows the ongoing week of the game.

Column “B” (Replenishment Quantity) - It shows the quantity received from upstream.

Column “C” (Inventory @ beginning) - It shows total quantity on hand for the particular ongoing week.

Column “D” (Inventory Position) - It shows inventory @ beginning + order placed in previous week

Column “E” (Customer order) - It shows demand that comes from downstream (For retailer the demand comes from customer).

Column “F” (Allocated Quantity) - It is the shipment quantity from upstream to downstream.

Column “G” (Inventory @end) - It shows total quantity on hand at the end of the week.



Column “H” (Order placed to Wholesaler) - It shows quantity that is considered as demand from downstream to upstream.

Column “T” (Backorder Quantity/Lost Sales) - It shows shortage quantity that is to be fulfilled later or the shortage quantity which could not be fulfilled by the echelon to the downstream.

Column “J” (Done/Empty) - It shows the game status for that week; Whether the player has placed the order or not. “Done means the order has been placed”.

By considering all these parameters, the retailer takes decision and place orders to the wholesaler

In Figure 1 the spreadsheet below has 4 tabs.

- Contact
- Game
- Get Information
- Chat

Details of the Contact tab:

The Contact tab consists of two options

- Give Contact Information: At the beginning of the game the player has to click on this option, one GUI will be appear as shown below and he/she has to enter their email id and mobile number and click on the submit button so that the information provided by the player get saved.

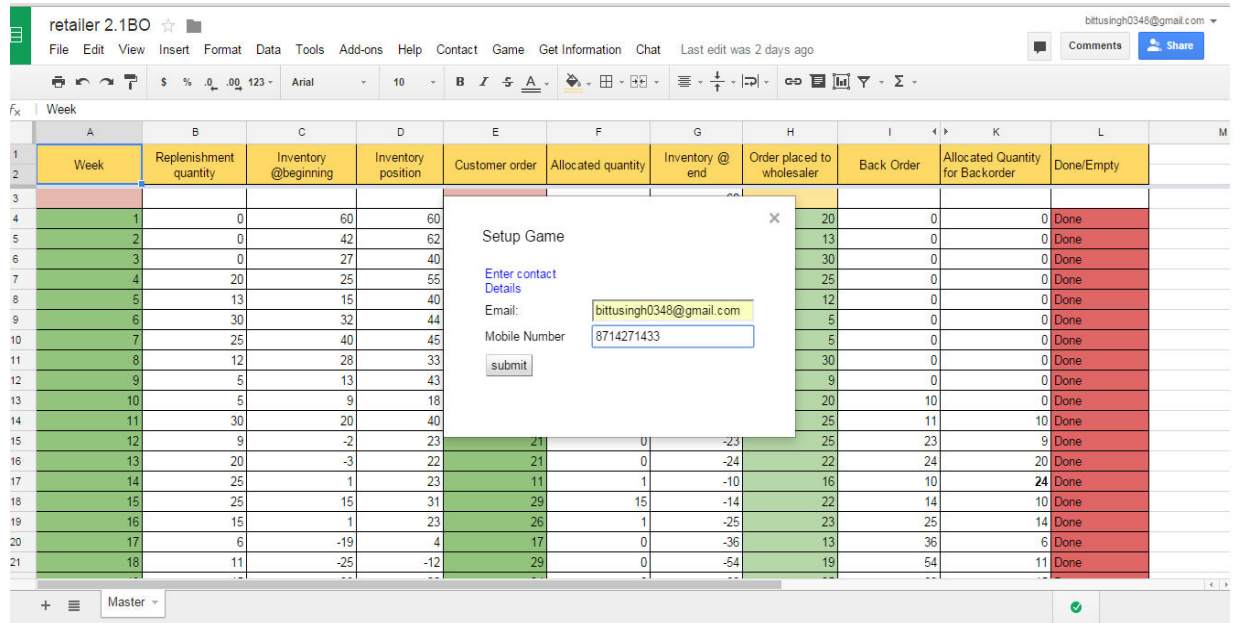


Fig.2.Screen shot of typical player window with GUI to provide contact details

- Get Contact Information: Click on this option for getting contact details of all players/partners present in the serial supply chain as shown below.

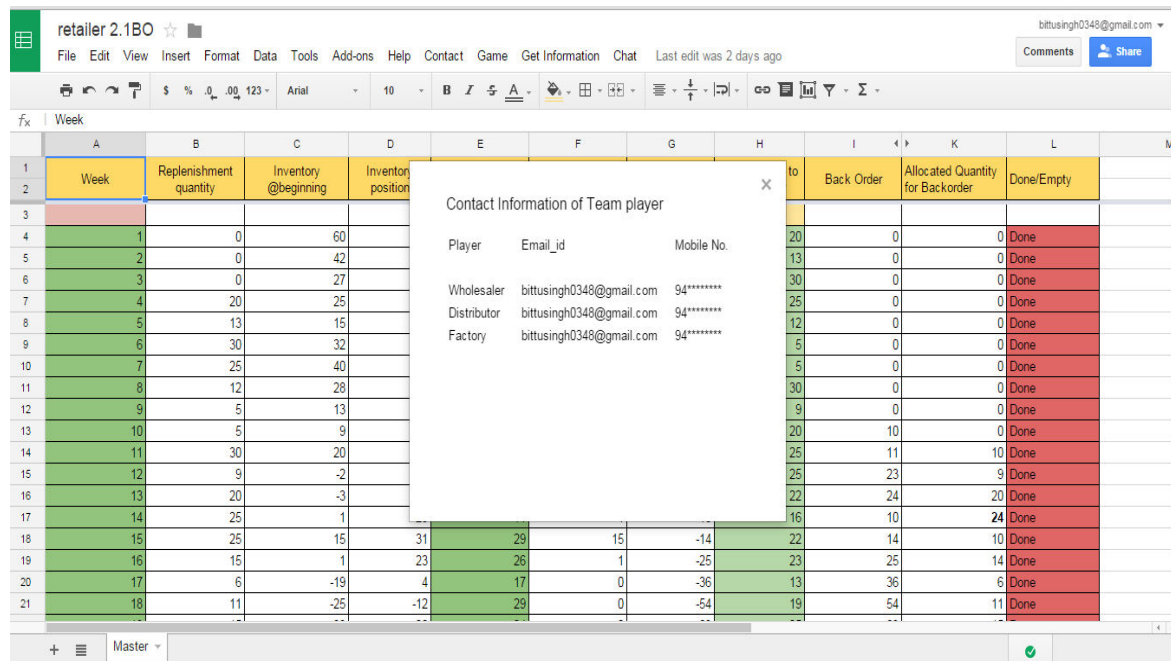


Fig.3.Screen shot of typical player window with contact details of other players



Details of the Game tab:

Click on the Game tab in order to view the three listings available

| | A | B | C | | F | G | H | I | J | |
|----|------|------------------------|----------------------|--------------------|----------------|--------------------|-----------------|----------------------------|------------|------------|
| 1 | Week | Replenishment quantity | Inventory @beginning | Inventory position | Customer order | Allocated quantity | Inventory @ end | Order placed to wholesaler | Back Order | Done/Empty |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| 22 | | | | | | | | | | |

Fig.4.Screen shot of typical player window with Game tab

The three options available in Game tab are:

- **Play:** Clicking on this icon permits the player to place the order to the upstream for each week. A GUI appears by clicking on to the Play option where a space is provided for each players to enter their decision.

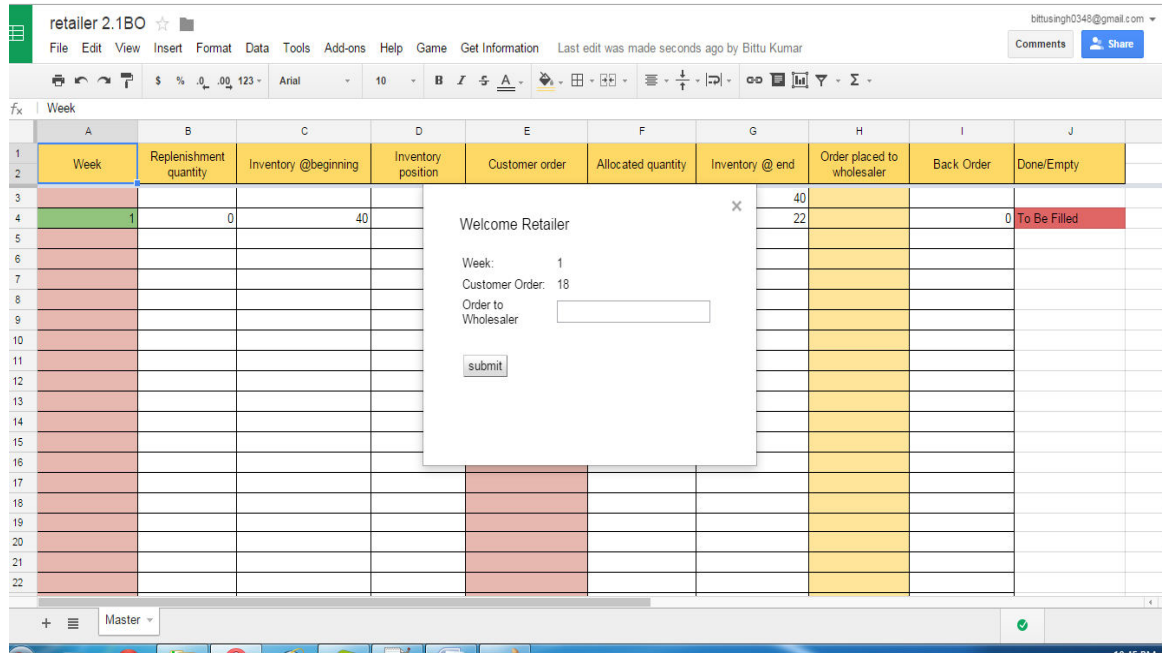


Fig.5.Screen shot of typical player window for placing order to upstream

- Performance: Performance tab provides the facility to view the performance evaluation of the supply chain. The Player can see the performance during the game. A GUI which shows the different performance measures of the supply chain is shown below in Figure 6.

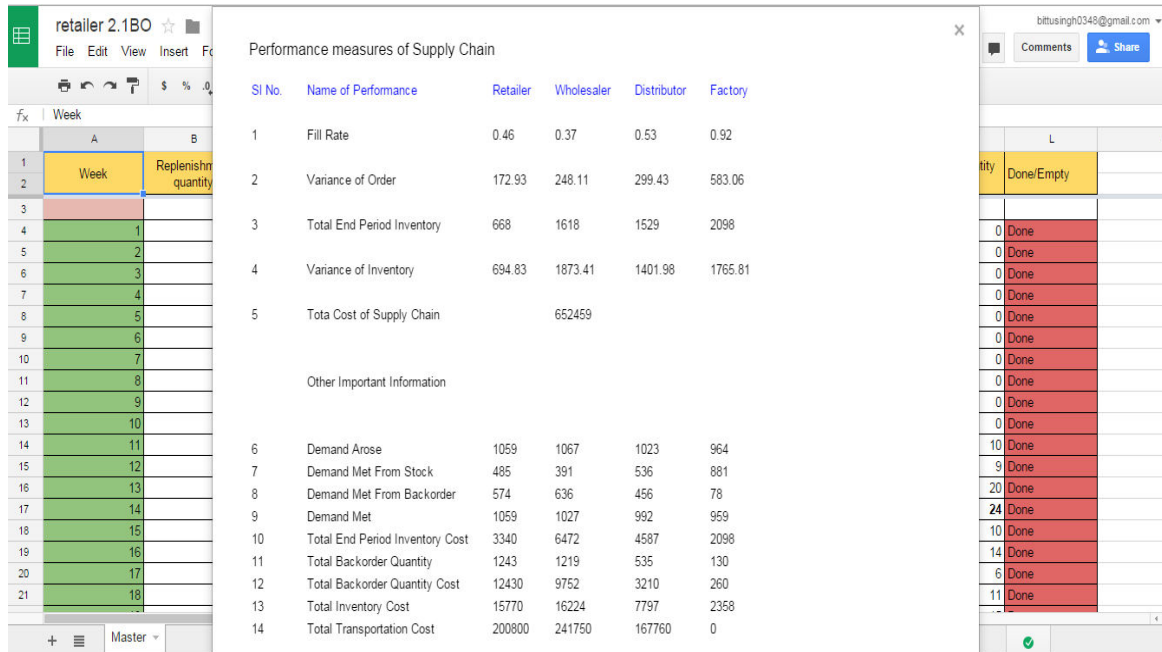


Fig.6.Screen shot of GUI indicating performance measures

- Graph: The software also provides the facility for the players to view the order graph of each player present in the supply chain during the game. By clicking on to the Graph icon a GUI will appear as shown below in Figure 7.

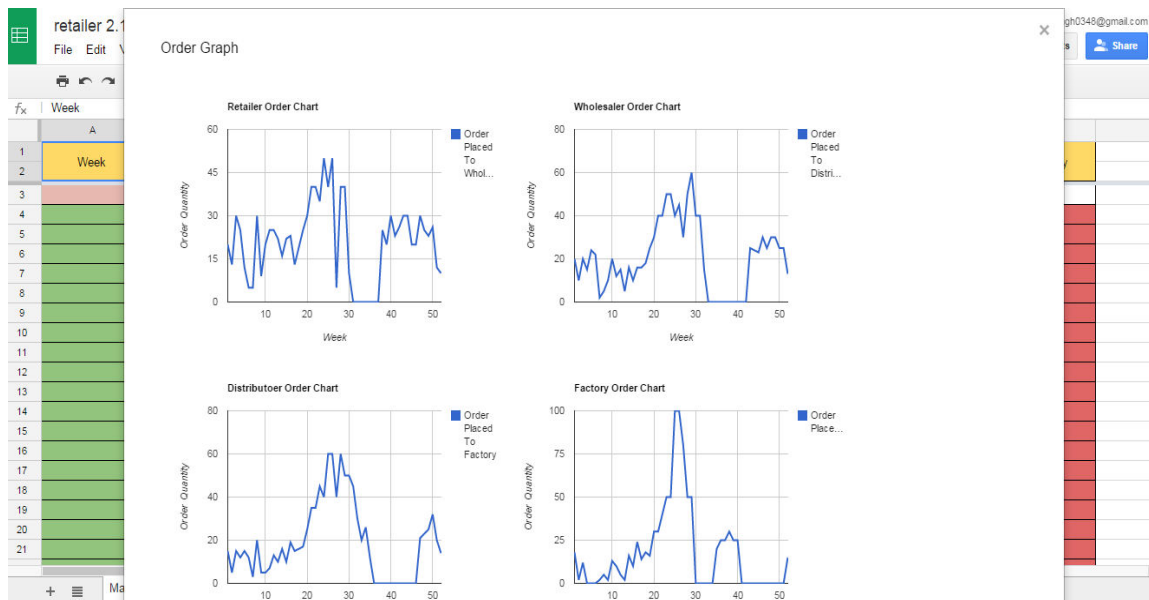


Fig.7.Screen shot of Order Graph

Get Information tab:

There are 2 options provided under the get information tab and they are:

- Parameters: The GUI provides information like initial inventory of each player, lead time and cost details.

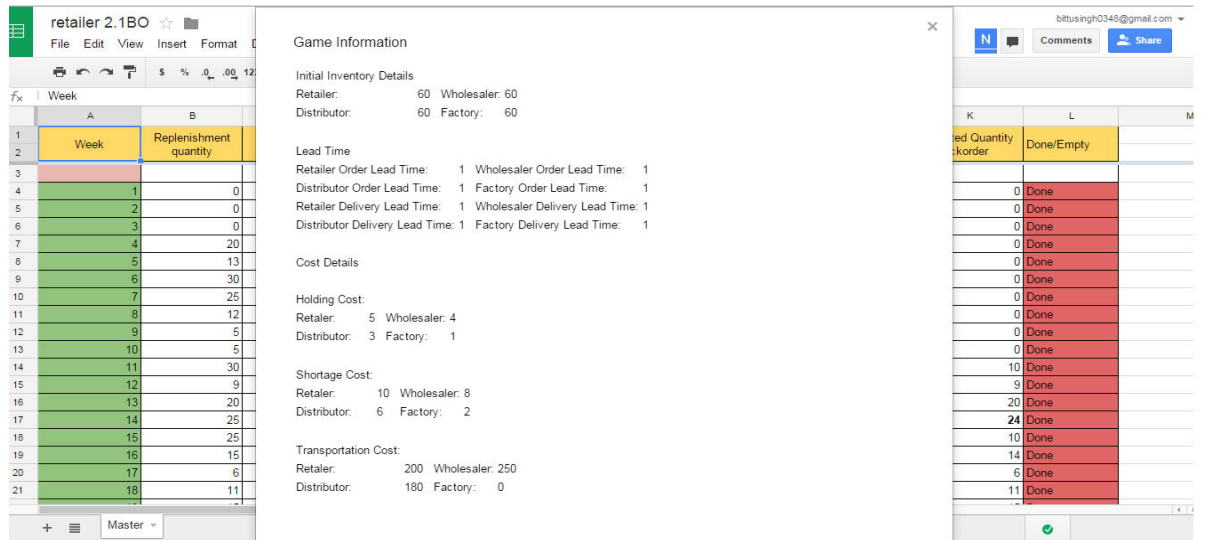


Fig.8.Screen shot of Game Parameters

Chat:

By clicking on to the chat option the player is able to communicate with the other players on real time basis. There is a space provided in the GUI for the player to enter the text message which he/she wants to communicate with his/her co-player. As soon as the player clicks on to the submit button an email to the corresponding player is send and thus the other player gets notified with the required information or chat message.



The screenshot shows a Google Spreadsheet interface for a supply chain role play game. The spreadsheet is titled "retailer 2.1BO" and is shared with "bitusingh0348@gmail.com". The interface includes a menu bar (File, Edit, View, Insert, Format, Data, Tools, Add-ons, Help, Contact, Game, Get Information, Chat) and a toolbar with various editing and formatting tools. The spreadsheet data is organized into columns: A (Week), B (Replenishment quantity), C (Inventory @beginning), D (Inventory position), E (Customer order), F (Allocated quantity), G (Inventory @), H (Order placed to), I (Back Order), J (Allocated Quantity for Backorder), and K (Done/Empty). A chat window is overlaid on the spreadsheet, showing a "Select Player" dropdown menu set to "Wholesaler" and an "Enter Message" field containing "hiiii". A "Submit" button is visible below the message field. The spreadsheet data shows a sequence of weeks with various inventory and order values, and a "Done" status in the final column.

| Week | Replenishment quantity | Inventory @beginning | Inventory position | Customer order | Allocated quantity | Inventory @ | Order placed to | Back Order | Allocated Quantity for Backorder | Done/Empty |
|------|------------------------|----------------------|--------------------|----------------|--------------------|-------------|-----------------|------------|----------------------------------|------------|
| 1 | 0 | 60 | | | | | | 0 | 0 | Done |
| 2 | 0 | 42 | | | | | | 0 | 0 | Done |
| 3 | 0 | 27 | | | | | | 0 | 0 | Done |
| 4 | 20 | 25 | | | | | | 0 | 0 | Done |
| 5 | 13 | 15 | | | | | | 0 | 0 | Done |
| 6 | 30 | 32 | | | | | | 0 | 0 | Done |
| 7 | 25 | 40 | | | | | | 0 | 0 | Done |
| 8 | 12 | 28 | | | | | | 0 | 0 | Done |
| 9 | 5 | 13 | | | | | | 0 | 0 | Done |
| 10 | 5 | 9 | | | | | | 10 | 10 | Done |
| 11 | 30 | 20 | | | | | | 11 | 10 | Done |
| 12 | 9 | -2 | | | | | | 23 | 9 | Done |
| 13 | 20 | -3 | | | | | | 24 | 20 | Done |
| 14 | 25 | 1 | 23 | 11 | 1 | -10 | 16 | 10 | 24 | Done |
| 15 | 25 | 15 | 31 | 29 | 15 | -14 | 22 | 14 | 10 | Done |
| 16 | 15 | 1 | 23 | 26 | 1 | -25 | 23 | 25 | 14 | Done |
| 17 | 6 | -19 | 4 | 17 | 0 | -36 | 13 | 36 | 6 | Done |
| 18 | 11 | -25 | -12 | 29 | 0 | -54 | 19 | 54 | 11 | Done |

Fig.9.Screen shot of spreadsheet with chat option