Global Supply Chain Management Simulation

Simulation Manual

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1) Log-in Instructions

You should have received a course URL from either your Professor or directly from Harvard Business Publishing. Clicking on that URL will bring you to the login page for the Harvard Business Publishing website. If you already have a login, click Login Now to use it to enter the course. If you do not have a login, please click Register Now and complete the brief registration.

Once you have logged in, you will be presented with the course page. You’ll see the Global Supply Chain Simulation listed in the Content area. Click “Run Simulation” to launch the simulation.
2) Preparing to Play

Once you launch the simulation you will be taken to the “Prepare” screen. Here you will either see a link to “Launch the Simulation” or a note that your Professor has not yet opened the simulation for use. You may also see a short note written by your Professor.

Additionally, you can download this Simulation Manual from the Prepare screen and you can also watch a short overview movie about the simulation.

Once you have launched the simulation you will be presented with the main simulation interface.
3) How to Play The Global Supply Chain Management Simulation

Introduction

In this game, you are in charge of the product introduction of two models of mobile phones. You will manage the design, forecast the demand, and choose the production schedule for the two models over four years. Hopefully, your strategy for managing the supply chain will lead to successful commercialization of the new products.

Each year you will go through four rooms: the design room, the forecasting room, the production room, and the board room. Since the period for the simulation is four years, you will visit each room four times.

At the beginning of the game, you will be asked to enter a team name that will be used to identify your group during the discussion at the end of this game.

As you play the exercise, we strongly recommend that you take notes on why you made certain decisions and what results you would expect. This will allow you to respond to questions the board members may ask about your choices.
Design Room

At the beginning of each year, you will enter the design room. While the main design for each model has been completed, you have the duty each year to select among four options and determine the final configuration of the two models.

- Click on “Meet the Team” to get an audio-visual introduction to four of the six members of your forecasting team.
- Click on “Enter Design Room” to proceed into the design room.

The options that you can choose from in the first year, for instance, are SmartWifi (a wireless application protocol), a color display, a stylish look, and infrared capabilities. Each year, two of the four options remain the same from the previous year while two options are different.

- To choose an option, click on the check box next to the option. After choosing an option(s), you will notice that the demand and profit per unit data on the right side changes. It is advisable to listen to the forecasters' opinions on each option, to do so click “View Discussion” directly underneath each option.

There are three sets of data that you should pay attention to. The first set, located at the top, is the “Estimated Model Demand Without Options.” The numbers in this set
do not change when you select options; however, the estimates do change from one year to the next.

The second set of data, located at the middle, is the “Estimated Impact of Selected Options on Demand.” On the left-half you see estimates on demand impact. On the right-half you are able to view estimates on the actual demand (not demand impact) in graphical form for both models.

- To see the graph of demand estimates for Model A, for instance, click on “View Graph for Model A.” To discard the graph, click on “Hide.”

The third set of data, located at the bottom, is the “Estimated Impact of Selected Options on Per-unit Profit.” In black numbers, to the left, you see the price, cost, and profit for the base models. In the center column you see the profit impact per unit in red numbers, which change based on the options you select. To the right you see the price, cost, and profit for the models with the options you select.

- Once you determine the combination of options you want, click on “Submit Options.”

**Forecasting Room**
Next, you will enter the forecasting room, where you will make a prediction of what you think demand for the two cell phone lines will be for the year.

- Click on “Enter Forecast Room” to see the forecast room.

At the top of the forecasting room, you see unit price, cost, profit, markdown and holding costs for each model. In the middle are your forecasters’ individual estimates of monthly demand, as well as the consensus, mean, and standard deviation for each model. You have all the information you need to make the best prediction of demand.

- Click into the box for Model A, and enter in the numerical value for your demand estimate for Model A. Repeat the process for Model B. Then click on “Submit” to proceed to the production room.

Production Room

Next, you will enter the production room. Of the four rooms of the simulation, this one is most important.

- Click on “Talk to Procurement” to view an audio-visual presentation by your procurement manager, Carey Holder. He will give you important information on unit production costs, lead-time, setup costs, and production capacity for
each of four suppliers, as well as advice on how to determine the best combination of suppliers.

- Click on “Enter Production Room” to proceed.

You see your potential suppliers organized into four rows; the rows are subdivided into 12 months. To the right of each supplier row is information on lead-time, capacity, setup costs, and unit production costs. First, you decide what suppliers you want to use. You can spread your production over any combination of four suppliers.

- Click on the check box next to the supplier’s name. This will pop up a window so that you can give variables to the procurement officer. To enter how many Model A units you want produced through that supplier, click the box for Model A and enter in the numerical value. Repeat the same process for Model B. Pay attention to the capacity. Click “Next” to proceed.

Second, you decide in what month to start production.

- Click on the month you want to start production. Keep in mind that the demand for your products does not start until May. Pay attention to the lead-time. Click “Next” to proceed. You will click “Next” one more time to close the pop up window and return to the production room.

- Repeat the process if you want to add more suppliers. You can change your order at any time by selecting the “Change” button next to the supplier name. Once you have determined the right combination of suppliers, click on “Advance One Month” at the very bottom of the room. Your procurement officer will make a final check with you.

- Click on “Advance One Month” to proceed to the next month.

As you progress in the production room month-by-month, you notice demand changes. Pop-up windows appear as you continue to click “Advance One Month” to present you with an opportunity to hold a tradeshow conference and with news headlines indicating the direction demand will take for the following months.

- To close an event pop up window, continue to click “Next” until the window disappears.

You can respond to changes in demand and inventory by changing the production orders with your suppliers. To do so, click on the “Issue Change Order” button at the bottom of the production room. Every change will create an additional cost.

- In the month of December, click on “Advance One Month” to proceed to the board room.
Board Room

At the end of each year, you enter the boardroom. In the left most panel of the screen is the “Scorecard” to display profit and board votes for each year. Board votes are not added until you walk through the boardroom and hear what each member has to say.

- Click on “Review Financial Performance” to view revenues and costs for each model, as well as total gross margins.
- Click on “Enter Board Room” to proceed to the audio-visual presentation by the board members.

There are five members of the board, and each member evaluates your work based on some aspect of your performance. Some members ask you questions, and each board member decides whether to give you a vote of confidence for your performance. Only your initial answer to a board member’s question will be recorded in the results shown to your instructor.

- After having gone through the boardroom presentation, click on “Continue” at the bottom of the middle panel to proceed to Year 2, where you start again in the design room. For direction in the design room, refer to the information under the design room heading near the top of this document.
You are manager for a span of four years. At the end of the fourth year, the board gives you a final vote, based on what you have learned during the four years.

4) Computer Technical Requirements

- Computer with minimum 1024x768 screen resolution
- High speed internet connection (DSL / cable modem quality)
- Windows 2000, XP, Vista, Windows 7 / Macintosh OS 10.x operating systems
- Preferred browsers: Internet Explorer 7+ / Firefox 3.0+ web browser with javascript and cookies enabled
- Flash Player 9+ browser plug-in