

Global Supply Chain Management Simulation

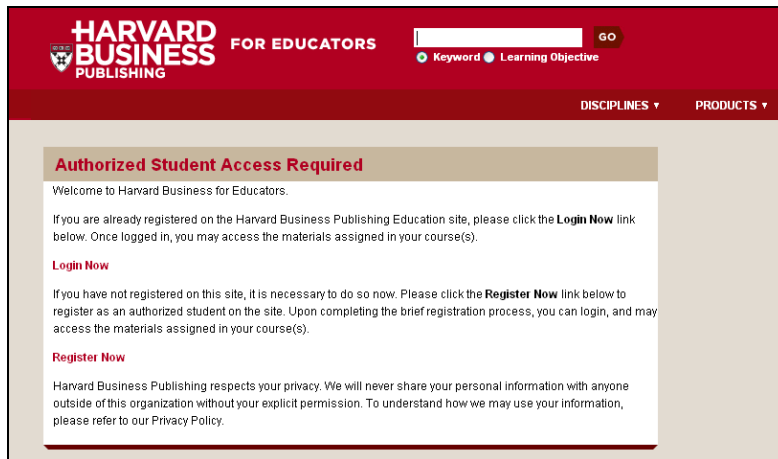
Simulation Manual

Contents

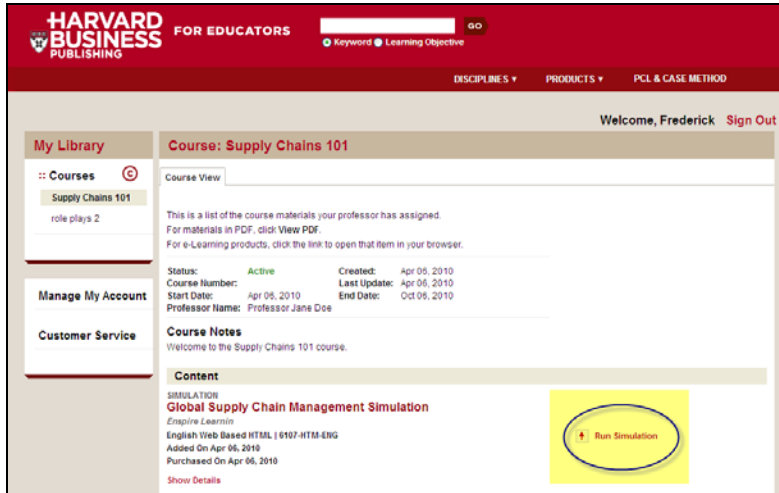
1) Log-in Instructions	1
2) Preparing to Play	2
3) How to Play The Global Supply Chain Management Simulation	3
Introduction	3
Design Room	4
Forecasting Room.....	5
Production Room.....	6
Board Room.....	8
4) Computer Technical Requirements	9

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.



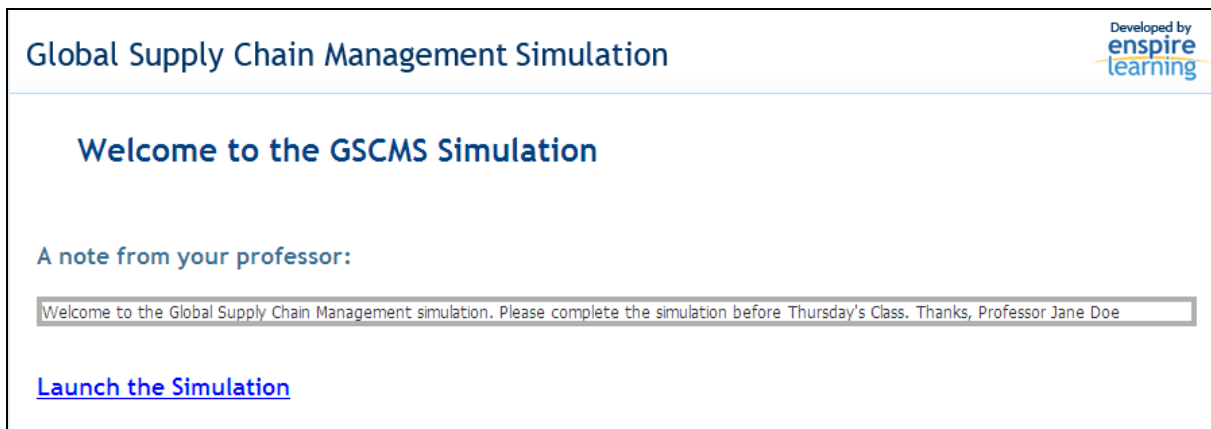
Once you have logged in, you will be presented with the course page. You'll see the Global Supply Chain Simulation listed in the Content area. Click "Run Simulation" to launch the simulation.



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

Global Supply Chain Management Simulation Developed by
enspire
learning

Year

- Introduction
- Design Room**
- Forecasting Room
- Production Room
- Board Room

Scorecard

Year One
Profit: \$0K
Votes:

Year Two
Profit: \$0K
Votes:

Year Three
Profit: \$0K
Votes:

Year Four
Profit: \$0K
Votes:

Select Option

To select an option, click on the white fields to the left of the text

WiFi
[View Discussion](#)

Color
[View Discussion](#)

Stylish
[View Discussion](#)

Infrared
[View Discussion](#)

Submit Options →

Estimated Model Demand Without Options, Monthly Units (K)

Forecaster	Tim	Stacey	Joe	Isabelle	Yi	Ruth	Consensus
Model A	63	54	64	59	64	56	63
Model B	36	18	38	28	38	22	33

Estimated Impact Of Selected Options on Demand (K)*
** Impact of option is same for both models*

Monthly Impact Est.

Tim: 0 K
Stacey: 0 K [View Graph for Model A](#) →
Joe: 0 K
Isabelle: 0 K
Yi: 0 K [View Graph for Model B](#) →
Ruth: 0 K
Consensus: 0 K

Estimated Impact of Selected Options on Per-unit Profit (\$)

	Base Model A	Base Model B	Impact Per Unit * <i>* Same for both models</i>	Model A with option	Model B with option
Price	\$ 200	\$ 240	\$ 0	\$ 200	\$ 240
Cost	\$ 130	\$ 150	\$ 0	\$ 130	\$ 150
Profit	\$ 70	\$ 90	\$ 0	\$ 70	\$ 90

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

Global Supply Chain Management Simulation Developed by **enspire learning**

Year

- 1 Introduction
- 2 Design Room
- 3 **Forecasting Room**
- 4 Production Room
- 5 Board Room

Scorecard

- Year One: Profit: \$0K, Votes:
- Year Two: Profit: \$0K, Votes:
- Year Three: Profit: \$0K, Votes:
- Year Four: Profit: \$0K, Votes:

Forecasting Room

Congratulations, the design options for the two mobile phone lines have been specified. You will now have to predict the total demand for each product line.

Your forecasting team members have come up with a consensus for what they believe demand will be for the mobile phone lines.

However, the board of your company is interested in your personal estimates as well.

The numbers you will forecast after entering the forecasting room will not affect your production schedule, but they will help you later as you determine where and how to source your products.

Enter Forecasting Room

Back

Forecasting Room

	Model A	Model B
Unit Price	\$ 245	\$ 285
Unit Cost	\$ 175	\$ 195
Unit Profit	\$ 70	\$ 90
Markdown Price*	\$ 157.5	\$ 58.5
Monthly holding cost	\$ 3.5	\$ 3.9

* costs are an estimate from our lowest-cost contract manufacturer. * At the end of the year, all models left in stock will be sold to a consolidator at this price.

Monthly Estimated Demand May-Dec.

	Model A	Model B	
Tim	77 K	50 K	Model A:
Stacey	48 K	12 K	
Joe	63 K	37 K	Std.Dev.: 13 K
Isabelle	39 K	8 K	Model B:
Yi	60 K	34 K	
Ruth	49 K	15 K	Std.Dev.: 17 K
Consensus	65 K	35 K	

Enter Your Demand Estimates*

Model A <input type="text" value="K"/>	Model B <input type="text" value="K"/>	Submit
--	--	---------------------

* This is your forecast for what monthly demand will be each month from May through December. There is no demand expected prior to May.

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

Global Supply Chain Management Simulation Developed by **enspire learning**

Year

- 1 Introduction
- 2 Design Room
- 3 Forecasting Room
- 4 Production Room**
- 5 Board Room

Scorecard

- Year One**
Profit: \$0K
Votes:
- Year Two
Profit: \$0K
Votes:
- Year Three
Profit: \$0K
Votes:
- Year Four
Profit: \$0K
Votes:

Production Room
Choose the suppliers that you want to engage below

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lead Time	Capacity	Set-up Cost	Unit Cost
FarFar Away <input type="checkbox"/>													4 mth	60 K	\$ 1000 K	\$ 175 \$ 195
Far Away <input type="checkbox"/>													3 mth	60 K	\$ 2000 K	\$ 175 \$ 195
Pretty Close <input type="checkbox"/>													0 mth	35 K	\$ 1000 K	\$ 185 \$ 205
Ve-Ri-Fas <input type="checkbox"/>													0 mth	40 K	\$ 2000 K	\$ 185 \$ 205

	Projections											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Model A												
Product Receipt (K)	0	0	0	0	0	0	0	0	0	0	0	0
Est. / Actual Demand (K)*	0	0	0	0	55	55	55	55	55	55	55	55
Est. / Actual Inventory (K)*	0	0	0	0	-55	-55	-55	-55	-55	-55	-55	-55
Model B												
Product Receipt (K)	0	0	0	0	0	0	0	0	0	0	0	0
Est. / Actual Demand (K)*	0	0	0	0	28	28	28	28	28	28	28	28
Est. / Actual Inventory (K)*	0	0	0	0	-28	-28	-28	-28	-28	-28	-28	-28

*Numbers are estimates for months preceding the current month

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.

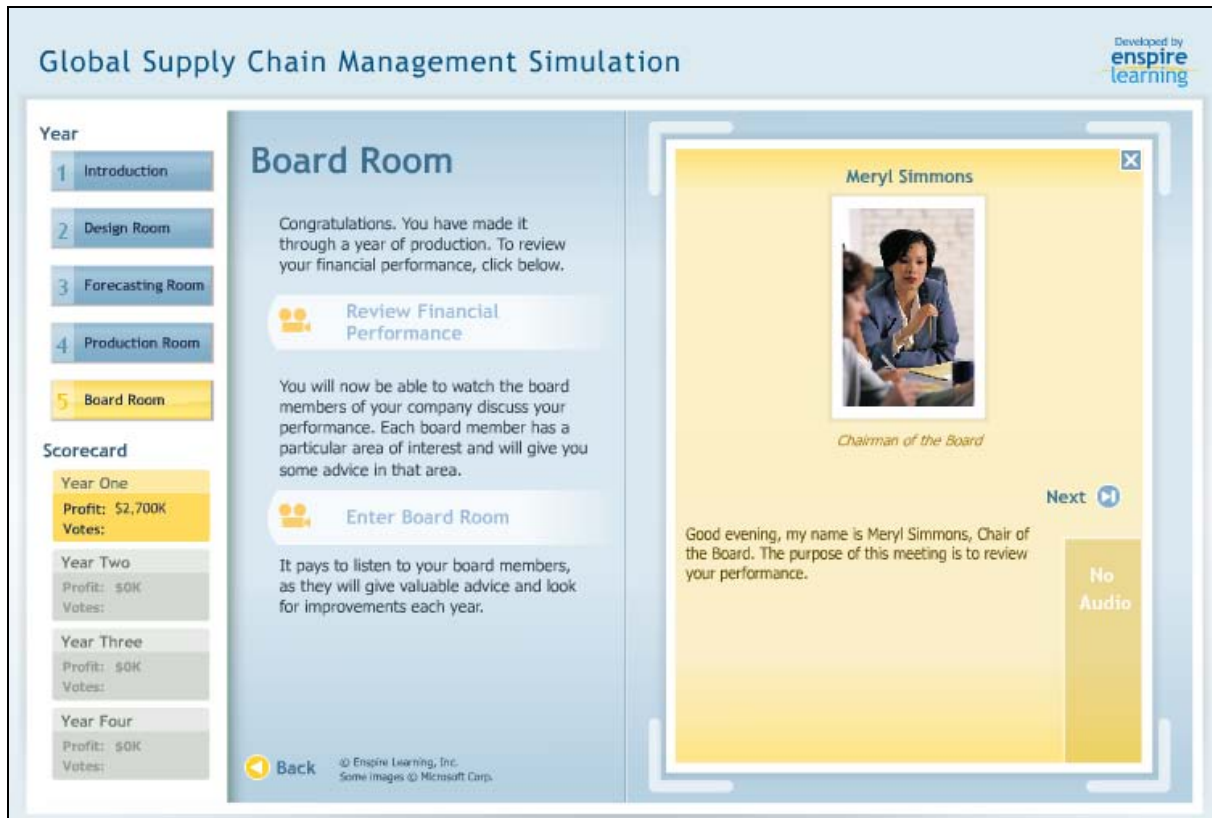
As you progress in the production room month-by-month, you notice demand changes. Pop-up windows appear as you continue to click “Advance One Month” to present you with an opportunity to hold a tradeshow conference and with news headlines indicating the direction demand will take for the following months.

- 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



Global Supply Chain Management Simulation

Year

- 1 Introduction
- 2 Design Room
- 3 Forecasting Room
- 4 Production Room
- 5 Board Room

Scorecard

Year	Profit	Votes
Year One	\$2,700K	
Year Two	\$0K	
Year Three	\$0K	
Year Four	\$0K	

Board Room

Congratulations. You have made it through a year of production. To review your financial performance, click below.

Review Financial Performance

You will now be able to watch the board members of your company discuss your performance. Each board member has a particular area of interest and will give you some advice in that area.

Enter Board Room

It pays to listen to your board members, as they will give valuable advice and look for improvements each year.

Meryl Simmons
Chairman of the Board

Good evening, my name is Meryl Simmons, Chair of the Board. The purpose of this meeting is to review your performance.

Next

No Audio

Back

© Enspire Learning, Inc.
Some images © Microsoft Corp.

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