Global Supply Chain Management Simulation

Due: 11:30 am of Monday, November 1.

This assignment is to be completed in groups. See the special instruction below (in the "Important Notes" section) on how to play the simulation as a team. You have almost a week and a half to complete the simulation, but start early since team coordination may require planning. There are two deliverables, both to be submitted on Canvas.

Overview

In this online simulation you are given a role of a supply chain manager who makes key decisions in design and production of two mobile phone models ("Model A" and "Model B"). The exercise spans four simulated years. Each year you make a series of decisions, doing so in the following four "rooms" in succession: (1) Design Room, (2) Forecasting Room, (3) Production Room, and (4) Board Room.

- In the *Design Room* you select value-adding options for the phones, aided by expert inputs (provided by computer) on how your choices would impact sales.
- In the *Forecasting Room* you come up with your own demand forecast of products with the options you have chosen in the Design Room.
- In the *Production Room* (the most important step in the simulation) you make a detailed production schedule for each month of the entire year, from January to December. You select which combination of suppliers to contract with for which period of time, based on supplier characteristics such as production cost and lead time. There are four supplier candidates with different characteristics (pay attention to lead times).
- In the *Board Room* you will receive feedback on your decisions by 5 company board members.

More details are provided in the accompanying document Global SCM How to Play Manual.

As you play the exercise, we strongly recommend that you take notes on why you made certain decisions and what results you would anticipate. **Expect to spend 3-5 hours to complete the simulation**, including the time it takes to discuss your strategies with your teammates and record your decisions. After you complete the simulation, you might need some more time to put together your report.

Deliverables

Each team should submit the following two items to Canvas by 11:30am on Monday, Nov. 1.

- 1. Global SCM Simulation Record Sheets.docx file that contains your answers (see below).
- 2. A PowerPoint file that contains detailed supporting information (for example, numeric tables with descriptions and screenshots displaying your decisions) explaining how you evaluated your choices in each room each year.

Important Notes

- 1. Read the accompanying document Global SCM How to Play Manual carefully.
- 2. Use the link on the Canvas assignment to log on to the simulation website (Harvard Business Publishing). The link under Study.net won't work, you must use the one in the Canvas Assignment description. You should be automatically registered on the website and see a red button to "Run Simulation."
- 3. Since this is a team exercise, all members of the same team should submit identical decisions on the simulation website after decisions are agreed upon. This can be done in two ways:
 - a. Each member of the team logs into the HBP website individually and submits the agreed-upon decisions. This option makes sense if not all members of the team can get together and therefore you have to coordinate remotely through separate simulation accesses.
 - b. Designate one member of the team and ask them to submit the agreed-upon decisions using their link. This option makes sense if all team members can work together in the same room/Zoom in front of a single (shared) screen.

Work with your course project team members. If you choose to do individual simulation accesses, we will check that the simulation decisions are the same.

- 4. Click on "Run Simulation" link to start the simulation. The interface should be pretty intuitive, you input your decisions on each page and use the buttons on the top right to move the simulation forward.
- 5. You may find the Newsvendor Model useful for your analysis. The accompanying Excel file *NewsvendorMeasureCalc.xlsx* lets you compute the profit-maximizing order quantity and the resulting expecting profit, given the mean and standard deviation of the normal demand distribution, underage cost, and overage cost. If you feel that other models or tools that you are familiar with are more appropriate, please use them instead of the Newsvendor Model.

- 6. You are most likely to develop code or Excel sheets to evaluate the consequences of your decisions in each room. In the PowerPoint slides that you are required to submit as a deliverable, it may be a good idea to include tables or plots generated from these that would allow you to explain your decision logic.
- 7. After submitting your decision in each room inside the simulation, you will be prompted to write a short statement about the strategy you employed to make the decision. Discuss with your teammates about what to write. Simultaneously, enter the copies of your decision and the statement in the provided Word file *Global SCM Simulation Record Sheets.docx* which you will submit on Canvas; your assignment grade will be partly based on these responses.

Good luck!