

INDIVIDUAL CASE ASSIGNMENT INSTRUCTIONS

TO: MGMT3306 STUDENTS

The purpose of this assignment is to identify and apply Operations and Supply Chain Management concepts/tools to solve operational problems and improve operational performance. To this purpose, you should find an interesting operational problem from the real business world and think about how you can apply the concepts/tools that you learned in this course to solve the problem.

More specifically, each individual should:

- Find an operational problem from the real business world (from his/her own work or from any company)
- Identify specific Operations and Supply Chain Management concepts/tools that can be applied to the problem
- Apply an appropriate Operations and Supply Chain Management concept/tool or a set of appropriate concepts/tools to propose a solution to the problem
- Analyze the expected results that may be obtained when the solution is implemented.

The report should be 8 - 10 pages in length including the cover and appendices, with 1" margins on all sides, double-spacing, and 12 point font. The cover of the report should include title, class code and name, section number, your full name, and date of completion.

The report **must** follow the outline below:

1. Executive summary (no more than one page)

- Summarize what is the problem, what Operations and Supply Chain Management concepts/tools have been applied to the problem, and what are the expected results of the proposed solution.

2. Background information

- Clearly state whether the problem is from your own work or from business articles/cases. If it is from business articles/cases, provide its source (title, author, name of the journal, date published).
- Briefly introduce the company background (e.g., name, products, business size, location, internal/external interesting facts, etc).

3. Problem Description

- Describe the problem clearly and specifically.

- You should focus on a *single* **OPERATIONAL** problem, although you can introduce several other issues for informational purposes. General management problems are not acceptable.
- The problem may involve either operational decision-making or process improvement.
- This section must include a problem statement starting with, e.g., “This paper considers the problem of determining ...”, “The main problem of the firm is how to ...”, etc, either in the beginning or at the end of the section.

4. Operations and Supply Chain Management concepts/tools that can be applied

- Describe *what* specific Operations and Supply Chain Management concepts/tools can be applied to the problem and *why* they are appropriate to the problem. This section should make it clear that you understand the concepts/tools you are about to use.

5. Application of Operations and Supply Chain Management concepts/tools

- Choose an Operations and Supply Chain Management concept/tool or a set of concepts/tools among the ones provided in section 4 and apply it to propose a solution to the problem.
- In this section you “must show your calculations”, which means that you must use **real or estimated/simulated data** in solving the problem or analyzing the process. It is NOT acceptable to provide only general descriptions of how the concepts/tools can be applied.

6. Analysis of expected results

- Analyze the expected results of the proposed solution. You should **compare** between before and after the implementation of the proposed solution and justify the proposed solution clearly.
- The expected results may include cost/revenue impact and/or improvement of operational performance such as throughput time, throughput rate, and inventory. You must be specific to receive full credit.

7. Conclusion

The meaning of an operational problem will become clearer as you study this course (see the textbook contents). An operational problem may involve process design and improvement, supply chain management, capacity planning, inventory management, quality management, project management, production planning and control, forecasting, facility location and layout, supplier management, purchasing, distribution, etc.

You are strongly encouraged to find a problem from your own work, so that you may apply to your work the concepts/tools that you learned from this course. If you choose to find a problem from business articles/cases, you can find one from any journals/newspapers such as The Wall Street Journal, Bloomberg Businessweek, Forbes, Harvard Business Review, and so on. Or you can surf the Internet to find an interesting article/case.

The Operations and Supply Chain Management concepts/tools that can be applied to your problem may include process flowchart, theory of constraints, decisions trees, inventory models, six-sigma tools, critical path method, MRP, scheduling, lean manufacturing, Kanban production control method, forecasting methods, systematic layout planning, assembly line balancing, factor rating system, centroid method, learning curves, simulation, waiting line models, work measurement techniques, group technology, mass customization, etc.

Best regards,

Jie Yang