

COURSE PROJECT

Group Project Assignment:

The goal of the project is to outline the product/service design, process design, competitive strategy, and analyze and select a production location or locations where you will produce your product or service. Additionally, you will need forecast the demand for your product/service and plan the capacity of your production facility, determine what your production facility will look like and how it will function.

Specifically, you will need to include the following:

1. A detailed description of your product or service.
(Note: Project proposal presentation on October 22, 2008)
2. How did you select your product or service?
 - a) Idea development
 - b) Product screening (example of break-even analysis)
 - c) Preliminary design and testing
 - d) Final design and productivity measurement for your product
 - e) Description of resources necessary to manufacture your product
3. How do you plan to gain a competitive advantage in the market place? Make sure to cover your competitive priorities (which of these will your company concentrate on?)
 - a) Cost
 - b) Quality
 - c) Time (speed)
 - d) Flexibility
4. Develop a process plan that you will follow to manufacture your product or produce your service. Specifically, include a detailed description and diagram of the process. If you are manufacturing a product, what type manufacturing process will you use (i.e., batch, line, continuous), and why? Additionally, briefly outline your plan for how to achieve continuous improvement and breakthroughs.

5. Outline your supply chain strategy (i.e., what processes you outsource and why) and discuss how it will impact your facility location decision. Also, discuss the effect of the JIT on your supply chain strategy.

6. What will your inventory strategy be, and how will you utilize “lean manufacturing” concepts in your facility (be specific). Additionally, discuss what you hope to accomplish through the use these techniques? Additionally, discuss to what extent will you utilize a “team” approach in job design (# of workers in the team and how they interact) and why.

7. Forecasting steps
 - a) Decide what to forecast.
 - b) Evaluate and analyze appropriate data (feel free to utilize past production demand data from a similar company or product).
 - c) Select the forecasting model (quantitative, not qualitative) and defend your selection.
 - d) Generate forecasts.
 - e) How will you check accuracy of your forecasts?
 - f) Will you forecast for seasonality and if so, how?

8. Show forecasts as attachments.

9. Determine the necessary production capacity of your facility based on your demand forecasts and breakeven point (BEP).

10. Develop a diagram of the facility layout and justify your layout choice (use the objectives of facility layout as the basis for your layout justification). Show how the product/service flows through the facility from raw materials to finished product.

11. Space & Equipment required for each function
 - a) Diagrams should reflect space requirements (machine, operator, and WIP).
 - b) Discuss what happens at each station.
 - c) Show output at each station (pieces per hour, customers per hour, or similar measure).

12. How will you measure and control quality (what you will measure, data you will need to collect, quantitative methods you will use to analyze the data)?

Self Assessment:

Students are also required to write a one to two-page self-assessment based on their group project, answering the following questions:

1. What were your roles and responsibilities on the group project? How were they decided?
2. What did you learn about project management by doing the group project?
3. What did you learn about teamwork by doing the group project?
4. What would you have done differently? What will you remember to do on the next project you work on after this experience?
5. Briefly assess each team member's performance. If you had to give them a grade, what would it be? If you had 100 points to allocate to your team, how would you allocate them?

Note:

1. Both group report and individual report are due on January 7, 2009 at the beginning of the class.
2. The schedule for course project presentation is described in syllabus. Each team is to give a presentation of at most 20 minutes, plus 5 minutes for set-up before the presentation and 5 minutes for questions after the presentation. Each team member must have taken part in the presentation.