**TIM 125/225, MOT II: Homework 2**

**Supply Chain Strategy, Performance, and Drivers; Demand Forecasting**

**Planning**: Create a time-schedule for doing the readings and for working on the problems and project. Submit this schedule with your solutions. Also, track how well you follow your schedule, and make notes regarding obstacles and problems to being “on track”. You should do a first pass on each problem before Tuesday’s class.

**Reading**:

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| --- | --- |
| **SOURCE** | **ASSIGNMENT** |
| TIM-125/225 Canvas website: *Handouts* | “*Apple's Supply-Chain Secret? Hoard Lasers*" |
| C&M, SCM, 4th edition | Chapters 2, 3, 7 (Demand Forecasting);  Chapter 16.1, 16.2 (Information) |

**Problems (due Thursday, 24 January, 2019)**:

You need to use the structured problem-solving process in all your work.

1. **Amazon.com** (Note: Parts of this problem might have been done in HW#1; include them in your solution)
2. Using appropriate diagrams (stage representation, etc.) briefly explain how Amazon’s supply chain works?
3. How would you characterize the competitive strategy of Amazon.com? What are the key customer needs that Amazon aims to fill? Where would you place the demand faced by Amazon on the implied demand uncertainty spectrum? Why?
4. What level of responsiveness would be most appropriate for Amazon’s supply chain? What should this supply chain be able to do particularly well? (Visit the Amazon web-site and perform “experiments” when solving this problem.)
5. How can Amazon expand the scope of strategic fit across the entire supply chain?
6. **Toyota:** (can be done in collaboration with your project team; also for discussion in class on Tuesday 01/22/2019):
7. Answer the same questions posed above, in 1 A-D (above), for Toyota.
8. How can the four key drivers be used to create strategic fit with Toyota’s competitive strategy?
9. **Apple:** Read the “*Apple's Supply-Chain Secret? Hoard Lasers*" article(available on the TIM-125/225 Canvas website):
10. Extract five (5) key lessons learned from this article, with respect to Apple’s SCM strategy.
11. Use these lessons to discuss how Apple achieves strategic fit.
12. **Demand Forecasting for Tahoe Salt:** Use Excel to work through the static forecasting for the Tahoe Salt problem (4th Edition, Chapter 7). Your results should match the given solution.

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**Project Phase 1 (project review with instructor on Tuesday, 22 January, 2019):**

Remember to use a structured problem-solving **process** in all your work.

Checklist for Phase 1:

1. **Firm-up the project proposal**. This proposal should include a clear statement of the goals and objectives of the project and a (tentative) supply chain infrastructure (**stages, processes, and network**) for your actual product.
2. The project leader and the team should develop the appropriate organizational structure (including responsibilities), task decomposition matrix, GANTT, and PERT charts for the project; and continuously update these items over the quarter.
3. Develop an appropriate business model for the Supply Chain for your product. (Suggestion: Review your work in HW’s 1 and 2 in order to help you get started on this task.) You may need to revise your supply chain infrastructure so that it is consistent with your SC business model.
4. Develop the overall supply chain strategy for your product, and clearly state the logic/basis used to derive this strategy.
5. Design the high-level structure for the 4 key drivers (inventory, etc.) of the supply chain for your product.
6. Develop an actionable time-phased plan for the software development part of your project.
7. Create and **implement** a process to obtain credible demand data for your product.