# TIM 105, MOT I, Homework 7:

# Project Planning and Project Management

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**Reading**: U&E, PD&D, 4th Edition, Chapter 16 (Project Planning), Chapter 15 (Product Development Economics)

**Homework Problems: (Due Thursday, 17 November, 2016)**

1. **R&D and Product Management at Microsoft (continued from the midterm).**

* Go the course TIM105 website (<https://tim105-fall16-01.courses.soe.ucsc.edu/handouts>) and locate the following three TIM101 Microsoft presentations:

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| i) | **Dr. Roy Levin** | *“Managing Innovation at Silicon Valley”* |
| ii) | **Debbie Janes** | *“Goal Alignment at Microsoft”* |
| iii) | **Jeffrey Murray** | *“Microsoft Office: Delivering World Class Software”* |

* For each presentation, extract at least three key lessons which are relevant to (1) topics covered in TIM 105, and (2) your analysis of Microsoft in Problem 1 of the midterm exam. Present your results in the form of a suitable table (of your own design!).

1. **Agile Project Management at Cisco and Seagate.**

Go the course TIM105 website (<https://tim105-fall16-01.courses.soe.ucsc.edu/handouts>) and locate the following TIM101 presentations:

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| i) | **Alireza Ataei and Ben Rus** | *“Project Management at Cisco”* |
| ii) | **Kevin Mann** | *“An Agile Approach for Implementing Enterprise Software”* |

Then answer the following questions (**your answers must be presented in a properly designed/structured table**):

* What are the two main project management methodologies used at Cisco? Briefly describe each methodology, including the pros and cons for each. Also, indicate the type of projects for which each method is best suited.
* What kind of agile development methodology is used at Seagate? How is it different than the traditional Waterfall project development methodology? What are the advantages of an agile development methodology?
* Compare and contrast the agile development methodology used at Cisco to the agile development methodology used at Seagate.
* Relate the agile development methodologies used at Cisco and Seagate to the project management and prototyping methods discussed in class and in the U&E text.

1. **Project Planning for Your Company’s Proposed New Product.**

Proceed as follows:

* Schedule a time to meet for the purpose of creating a detailed project plan for your company’s proposed new product.
* (before the group meeting) Assess the current state of the work done by the group and identify any backlog (e.g., conceptual design) from the previous stages. Bring your assessment to the group meeting.
* Conduct a group meeting (2-3 hours) to develop (in a time-efficient manner) a comprehensive project plan (Activities Matrix, GANTT, PERT, CPM for the remaining weeks of your project. The major remaining activities are: product platform/line strategy, economic/financial analysis, and failure modes and effects analysis. In addition, you may choose to include some supporting “pieces” such as a prototyping strategy, concurrent engineering, design for manufacturability and producibility, etc. Your plan should also include any backlog (e.g., conceptual design) from Phase II. Lastly, assign roles and responsibilities to each group member for completing all of the tasks in the project plan.
* Turn in a concise, well-written “problem solution” documenting all the work done and by whom. This solution should include your problem-solving process and clearly show its implementation.
* Note: to get credit every member of the group must participate in the group meeting, and must turn in a solution.

1. **Financial Modeling for New Product Development.**

An important issue in new product development that we will be addressing in the near future is the construction of detailed Excel-based financial models to analyze the cash flows involved in developing a new product. The first step in this process is for you to develop proficiency in Excel within the context of financial modeling. To this end, locate the “Financial Modeling” tutorial on the course website, then complete the first two steps in the tutorial (Pages 1-7), and submit a **well-structured** and **clear** write-up of your implementation of Steps 1 and 2 in the tutorial. Your write-up must include the relevant Excel spreadsheets as supporting evidence.

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**Project Phase III (Due Tuesday, 22 November, 2016):**

* The major Phase III activities are: product platform/line strategy, economic/financial modeling, and failure modes and effects analysis (FMEA). In addition, you may choose to include some supporting “pieces” such as a prototyping strategy, concurrent engineering, design for manufacturability and producibility.
* Implement your plan for Phase III, which should also include completing any backlog (e.g., conceptual design) from Phase II. The Phase III Project Report is due on Tuesday, 22 November, 2016.
* Meet with and provide the instructor or TA with a comprehensive project update on Tuesday, 11/22/16. Please include a table showing **all work** done up to the present, and clearly indicating each individual team member’s contributions to date, as well as proposed future work.
* Project Presentation: Each group will make a very short 5-6 minute presentation (using no more than 6 slides, including title slide) of their project on Tuesday, 29 November, 2016.