

Class	Date	Module and Description	Readings	Cases	Hand-In
		Part I. Operations Strategy: Concept & Competencies			
1	Jan. 6	<input type="checkbox"/> Course overview <input type="checkbox"/> Framework for operations strategy <input type="checkbox"/> Tailoring operations strategy	Chapter 1 of <i>Operations Strategy</i>	Swiss Watch Industry (Ch. 1, p. 32)	Student info form (last page of this syllabus)
2	Jan. 13	<input type="checkbox"/> Competition and competencies <input type="checkbox"/> Managing tradeoffs <input type="checkbox"/> Competitive cost advantage analysis	Chapter 2	American Connector Corp. (case pack)	American Connector (case pack)
		Part II. The Resource View: Tailoring Real Assets			
3	Jan. 20	<input type="checkbox"/> Capacity sizing and investment <input type="checkbox"/> Capacity expansion and timing	Chapters 3 (skip 3.7) & 4 (skip 4.6)	Harley-Davidson (Ch. 11)	Project proposal (see detailed info in back)
4	Jan 27	<input type="checkbox"/> Capacity flexibility <input type="checkbox"/> Strategic sourcing and supply mgt	Chapter 5.1-3 and 5.7 Chapter 7 (skip 7.5)	Eli Lilly (case pack) Sun Microsystems (case pack)	Lilly (case pack)
5	Feb 3	<input type="checkbox"/> Capacity location <input type="checkbox"/> Global networks and offshoring	Chapter 6	Mexico or China? (Ch. 6, p. 230)	
		Part III. The Process View: Tailoring Activity Networks			
6	Feb. 10	<input type="checkbox"/> Operational hedging <input type="checkbox"/> Risk management <input type="checkbox"/> Structured contracts	Chapter 9	Seagate Technology (Ch. 12) Bose (Ch. 7, p. 272)	Seagate Technology
7	Feb. 17	<input type="checkbox"/> In-class midterm <input type="checkbox"/> Demand and revenue management			
8	Feb. 24	<input type="checkbox"/> Mass customization & technology <input type="checkbox"/> Concept “cost to serve”	Chapter 5.4-5.6	Peapod (Ch. 13)	Project progress (see detailed info in back)
9	Mar. 3	<input type="checkbox"/> Improvement and learning <input type="checkbox"/> Global standardization/automation	Chapter 10.1-10.5	ITT Automotive (case pack)	
		Part IV: Summary			
10	Mar. 10	<input type="checkbox"/> Course Summary and WrapUp <input type="checkbox"/> Final project Presentations			Project (format as described on p. 8)

CONTACT INFORMATION

Instructor: Jan A. Van Mieghem, Phone: (847) 491-5481, (847) 869-6703
Office: Leverone 565 (MEDS Dept) Fax: (847) 467-1220,
Email: VanMieghem@northwestern.edu Office Hours: Wed 1-3pm or call me
Course website: www.kellogg.northwestern.edu/faculty/VanMieghem/ftp/454/454CoursePage.htm

1. Course Description and Objectives

THE GOAL OF THIS COURSE is to learn how operations strategy can add value by tailoring a set of core principles to a specific business setting.

CONTENT: The course provides you with a framework to 1) formulate an operations strategy and 2) analyze, value, and optimize the key decisions involved in operations strategy. Our key evaluation metric will be how operations strategy impacts the net present value of the firm. The key decisions studied are choosing competitive operational competencies and benchmarking; capacity expansion, timing, flexibility, and location; sourcing and contracting; risk management and operational hedging; revenue management; improvement and learning.

RELATIONSHIP TO OTHER COURSES: This operations elective course builds on the core operations class and also assumes you are familiar with the basics of finance, economics, and strategy. The strategic decisions studied in this course require a detailed analysis and understanding of the underlying operations. Thus this course has a greater amount of concreteness and detail than a competitive strategy class. Yet it is the highest-level elective in the operations major and can be supplemented by more specialized electives such as *supply chain operations*, *service operations*, or *analytic spreadsheet modeling*.

APPROACH: Each topic will be discussed using a combination of models, case-discussions, readings and speakers. The anticipated mix for the course is 50-50 qualitative-quantitative. In a typical week we will cover one major case in-depth, supplemented by mini-lectures, presentations and qualitative discussions of other examples. Many of these cases can be approached from the position of the general manager and therefore all the functional issues should be addressed. In addition, the most difficult activities for the general manager generally involve implementation. As a result we will also spend time in class on the general manager's view and the tasks required implementing the recommended solutions.

PRE-REQUISITES: The core operations class and a genuine interest in operations and financial valuation (the latter implies an interest in quantitative analysis).

INTENDED AUDIENCE: Students interested in (1) operations and supply chain management, (2) general management, and (3) management consulting. It may also be of interest to private equity and entrepreneurship given that operations typically employs the greatest number of employees and requires the largest investment in assets.

2. Grading and “Rules of the Game”

GRADING: The grade you receive for the course is intended to certify your demonstrated proficiency in the course material. Proficiency will be estimated by measuring your performance in:

1. Course contribution:	Individual	15%
2. Midterm exam:	Individual	35%
3. Final project:	Group plus Peer Review	25%
4. Case submissions:	Group plus Peer Review	25%

1. INDIVIDUAL CONTRIBUTION = Your contributions to create and enhance a *positive learning environment* for this course. To create this environment, computers should only be used in class for “honest note taking” because other use only creates distraction. Grading will be based on the quality and impact of your contributions, not on quantity (although a minimum amount of the latter is necessary to deliver on the former.)

VOLUNTARY: In-class contribution will consist of voluntary contributions and occasional cold calls, usually to answer opening questions. Please leave your name-card up for the entire duration of each class and keep the same seat for the duration of the quarter. (Although cold calling may increase anxiety, the GMA suggests that “supportive” cold calling encourages you to be better prepared for class and as a result improves the overall class discussion.) A thorough preparation of the assigned materials is all that is necessary for such leadoff questions. If you feel uncomfortable with being called on in class please let me know in advance so that we can agree on an alternative mode of interaction.

ATTENDANCE AND CLASSROOM ETIQUETE: While I hope you will find it valuable to attend class and will decide to do so, attendance is *not* mandatory. There is no penalty for missing classes, except that it will of course reduce your opportunities for earning class participation points. When you attend, you will be expected to fully follow the principles of the Kellogg code of classroom etiquette (http://www.kellogg.northwestern.edu/stu_aff/policies/etiquette.htm). In addition, to maintain a positive learning environment, the use of your computer in the classroom is interpreted as your honor statement that you are only taking “honest notes.”

2. FINAL PROJECT = an opportunity to apply course concepts and to perform an in-depth analysis of operations strategy issues that are of interest to you. Please read the *Guidelines for Final Project* later in this syllabus.

3. MIDTERM EXAM = to be done individually, in-class, closed-book. It will consist mainly of a series of short conceptual questions. Its primary objective is for you to review, synthesize, and internalize the course content. To help achieve that objective, you may individually prepare a single-sided 8.5x11 sheet *hand-written* summary that you can bring to the exam. Sample exam questions are available on the course home page.
4. CASE SUBMISSIONS = the required case write-ups are to be done in group. Please read *guidelines for case write-ups* later in this syllabus.

GROUPS should have five students, each of them bringing different strengths to the table. To increase the learning from the skills and knowledge that each person brings to the group, groups must be balanced. For example, groups must balance 6Qs, 4Qs, TMPs, and MMMs, as well as geographical origins to benefit from cross-learning and multi-disciplinary experiences. You will have an opportunity to form groups during the first class.

5. HONOR CODE

A. FOR SUBMISSIONS Submission cases may not be discussed with anyone outside your study group nor may you use other sources without acknowledgment. It is important that everyone has a level playing field so this also means that materials from previous years or websites cannot be used. I'm sure you understand. It also is extremely important and part of the honor code that each member of a group makes a material contribution to each case analysis of the group. *If any individual has not contributed for a particular write-up, s/he should not append his/her name to the case report but can submit a separate report his/her own. It will also be the group's responsibility to ensure that this happens.* Only one written report will be due per group per assignment.

B. HONOR CODE FOR FINAL PROJECT You should make very clear what part of your write-up is based on your own thinking and what part summarizes pre-existing outside sources. *It is extremely important and part of the honor code that you explicitly identify and cite all significant external sources that you build on in your report.* This applies in particular to papers you may have written for other Kellogg classes, to documents you may have received from the company you are analyzing, interviews with industry experts, etc. Building on external sources is by no means a "bad thing"—solid work is typically aware of and builds on what others have done. Ideally though, you should take this external information and add the filter of your own critical thinking and the concepts studied in this class to synthesize it, critique it, etc.

C. MIDTERM EXAM: to be done individually without any discussion or cooperation of anyone else.

D. PEER EVALUATIONS Given the importance of group work in this class, each member should make every effort to contribute and carry his/her part of the load. Your grade will reflect peer evaluations to be done at the end of the course.

E. Other parts of the honor code:

- For **standard violations of academic integrity**, please see <http://www.northwestern.edu/uacc/defines.html>
- For a **detailed discussion on plagiarism**, please see <http://www.northwestern.edu/uacc/plagiar.html>

3. Text and Course Materials

- ☐ Required materials are available at the bookstore:
 - OPNS 454 Course-pack (external cases that are not in the textbook)
 - Textbook *Operations Strategy: Principles and Practice* by J.A. Van Mieghem. Publisher: Dynamic Ideas, Charlestown, MA. 2008
- ☐ Any additional readings are downloadable from Blackboard (and from the book website)

There are other textbooks that can give complementary viewpoints on operations strategy:

1. *Operations Strategy: Competing in the 21st Century*. S. L. Beckman and D. B. Rosenfield. McGraw-Hill, 2007.
2. *Operations, Strategy, and Technology: Pursuing the competitive edge*. R. Hayes, G. Pisano, D. Upton and S. Wheelwright. Wiley, 2005.
3. *Operations Strategy* by Slack and Lewis. Prentice Hall, 2003.
4. *Manufacturing Strategy* by Hill. Irwin McGraw-Hill, 2000.

Other business books that may be of interest to students taking this course:

1. *Supply Chain Management* by Chopra and Meindl. Prentice Hall, 2003.
2. *Clock Speed* by Charles H. Fine
3. *Mass Customization* by B. Joseph Pine
4. *Balanced Sourcing* by Laseter. Jossey-Bass Publishers, 1998.

4. Guidelines for Case Write-ups

FORMAT: A case write-up is not to exceed two pages of typed text plus maximally three supporting exhibits. *Hand in a hardcopy before the start of the class when the write-up is due.* (Exhibits must be relevant and described in the text.)

STRUCTURE OF CASE WRITE-UP: A good paper should clearly and succinctly state:

1. Your recommendation in the first paragraph to provide the reader with a framework (if a lengthy description of the recommendation seems necessary, append it to the report).

2. To stay in line with the objective of the course, the second part of the write-up should always qualitatively analyze and assess the operations strategy of the company (“the big picture”).
3. The remaining part of the write-up should explain your quantitative analysis (in words), what the key sensitivities are, and use it to justify your specific recommendation taking into account both the desirable and undesirable consequences of adopting it. If there are options under consideration in the case that you reject, a clear rationale for your decision should be provided.

Keep in mind that you write to someone who knows all the facts in the case—no need to repeat them. A good report is not a chronology of analysis, but a clearly articulated statement of recommendation and support. Finally, the case write-up should answer the key questions in the case (and *not* be just an answer to the guiding questions that come with the case).

MAIN EXPECTATION: **each** case write-up must have (1) an analysis and assessment of the big picture of the current operations strategy and (2) a quantitative analysis that must be used to justify your specific operations strategy recommendation as it pertains to the problem of the case. There are many ways to Rome: many analyses may work and choosing an appropriate one is part of the assignment. (In real life, nobody will tell you in advance what to do either.)

5. Guidelines for Final Project

The final project is typically done in group, but adjustments can be made if needed.

You can choose from two possible types for your final project (see sample outlines below and on the course website):

1. “Case study”: Identify an organization (one familiar to you or your group would work well) whose operations strategy you can analyze and improve, or
2. “White paper”: A research-oriented paper on a specific topic in operations strategy or a novel practice in industry that directly relates to operations strategy. The paper describes risks, benefits and best practices along with industry examples of each.

KEY EXPECTATIONS:

- The project has a strong operational component
- The project is interesting and has a generalizable learning point. Aim for a project in which you and your audience will learn something new.
- The analysis uses or extends concepts discussed in class, and includes both qualitative and quantitative analysis.

A one page project proposal is due in week 3 to ensure that you have selected a project; a two page project progress report is due in week 8. The project is due in the last week 10.

Based on your proposals, I will select three or four groups to present their projects in class. The objective of this selection will not be to choose what I consider are the “best” proposals but to

ensure that a variety of issues related to operations strategy get presented in class. The group making presentations will not be required to write a detailed report. They can submit their presentation materials for grading. Each group will have 20 minutes to make their presentation, followed by 5min Q&A. All other groups will be required to submit a project report.

Option 1: case study of specific organization

Identify an organization (one familiar to your group would work well) where you can test and extend issues in operations strategy. Examples of such projects include (samples are available on course webpage):

- capacity expansion of the Breadsmith bakery chain,
- improving customer service at Northwestern Memorial Hospitals's HIV clinic,
- sourcing and production planning at a high-speed garage door manufacturing plant,
- customer service strategy at a high-end hotel chain.

FORMAT: The maximum length is 8 pages of text, formatted as described above, plus maximally 4 pages of supporting exhibits. Your report should be in the form of a mini case, consisting of two parts:

1. The actual case (similar to the cases you typically read; max 4 pages):
 - Describe your unit and its competitive identity and environment.
 - Describe the organization's current business strategy.
 - Describe the operating strategy, its capabilities (in terms of cost, time, quality, and flexibility) and processes.
 - Describe the strategic issues and challenges.
 - Provide data (the best cases stand out because they support their recommendations both qualitatively *and* quantitatively)
2. Your analysis and recommendation (similar to the write-up you typically do; 4 pages max). This should not be a detailed description of everything you have done but a *specific* set of observations and recommendations.
 - Evaluate current operations strategy using course concepts
 - Identify + analyze potential improvements
 - Recommend an improved strategy that addresses the issues and challenges.
 - Discuss implementation steps.
 - Last paragraph = describe the main learning point from the project.

Option 2: white-paper on a specific issue or practice in operations strategy

Identify and analyze a current issue or novel practice in operations strategy. Examples of such projects include (samples are available on course webpage):

- Survey of contemporary approaches to build flexible capability: use of modular facilities in pharmaceutical industry, platform strategies in the automobile industry,
- revenue management techniques in transportation,
- A study of the operations strategy for retail banking,
- capacity options in the airline freight industry,

- operations strategy issues in a specific industry.

FORMAT: The **maximum length is 8 pages of text** plus maximally 4 pages of supporting exhibits. Your report should contain:

1. An executive summary no longer than 250 words.
2. A description of the operations strategy issue or practice
3. Major benefits of the practice.
4. Major risks/cost of the practice
5. Key issues in designing and implementing the practice
6. Which companies is this practice ideally suited for? Which companies may it not be suitable for?
7. Examples of companies that are successfully using the practice.
8. Examples of companies that have been unsuccessful in their implementation of the practice and possible reasons.
9. Last paragraph = describe the main learning point from the project.

OVERALL FINAL PROJECT REQUIREMENTS

1. Week 3: hand in a one-page, bullet-point *Project Proposal* listing:
 - ☐ Title of project + indicate case study or white paper
 - ☐ Short description of content of project
 - ☐ Project planning: what has been done, what needs to be done
 - ☐ Assessment:
 - Is project in line with class? Specify the class topics (as defined on page 1 of this syllabus) that this project will relate to and to what extent.
 - Is project on track? Any difficulties?
2. Week 8: hand in a two page project progress report describing the specific problem you are addressing, outline of what will be in the final report, and indication of what has been done and what still needs to be done. Add questions you may have for me.
3. Week 10: electronically submit via Blackboard your project in a single file and named **“Groupx_FinalProject_project-title”**. (Fill in for x your group number and your project title.) Presenters submit their **Powerpoint file** and give a 20 min presentation, followed by 5 min for Q&A. An opportunity for you to hone your public speaking skills and to disseminate your insights to the class.

6. Detailed topics and assignments

- All cases must be read before the class they are to be discussed in (*whether a submission is required or not*).
- Lectures will follow the book which aims to give you the theory and practice behind our topic. As such it contains more than we will cover in class, but have no fear: Only content covered in class will be tested on the exam. Each assigned chapter is perhaps best scanned before class and read afterwards to reinforce the class discussion.
- Any other readings can be read as time allows. They further elaborate on ideas that will be discussed in class but need not be read before class. You will find it useful to read them as we go along but they can be read at your convenience.

Part I: Strategy & Operations

Week 1: Introduction & A Framework for Operations Strategy

Content: What is operations strategy? Introduce a framework to describe a company's operations strategy. The key premise is that an operations strategy must be evaluated in terms of the performance it delivers. This performance depends on the activity network and the asset bundle that operations puts in place. We will discuss the goal of operations strategy and a framework to think about operations strategy.

Apply the operations strategy framework and tailor it to specific business situations. We will use the Swiss Watch Industry mini-case as our main discussion vehicle.

Read:

- Chapter 1
- Swiss Watch Industry, mini-case 1 in Chapter 1. Be prepared to discuss the accompanying questions.

Hand-in: student information form (at end of this syllabus)

Week 2: Competition, Competencies and Operations

Content: Discuss how the concepts of operational trade-offs and competency focus relate to strategic positioning and operational efficiency and how they can be used--qualitatively and quantitatively—to evaluate a firm’s operations strategy in a competitive setting. That analysis then guides the design of a defensive strategic response based on process and resource capabilities.

Read: • Chapter 2

Prepare:• American Connector Company (A), Case (No. 9-963-035)

Hand-in write-up of **American Connector**. The objective of this case is to operationalize the concepts of strategic positioning and operational efficiency to evaluate current strategy and design a competitive response.

Guiding questions:

1. Evaluate ACC’s operations strategy (using the framework of Chapter 1) and contrast it with DJC’s.
2. Perform a detailed quantitative analysis of the cost differential ΔC . Based on that analysis, how serious is the threat of DJC to American Connector Company and what do you recommend?

The case situation is similar to the interior aircraft manufacturer example in the textbook. This case asks you to push the quantitative analysis of ΔC . This requires some detective work and estimation, given that not all data is available. The idea is to do your best in estimating financial performance, using case data where possible and supplement it with justified estimates where needed.

- Calculate the overall cost difference between DJC’s plant and ACC’s Sunnyvale plant. Consider both DJC’s performance in Kawasaki and its potential in the United States.
- What accounts for these differences? How much of the difference is inherent in the way each of the two companies competes; that is, how much is a function of the strategic competitive positioning decision? How much is due strictly to the differences in the operational efficiency; that is, how much can cost be improved *without* impacting the ability to offer its strategically chosen value proposition? Break up the cost differential between DJC and ACC for each line in the COGS and determine what amount is due to (i) volume being different from targeted volumes, (ii) operational inefficiency, and (iii) strategic positioning.

Part II: The Resource View: Tailoring Real Assets

Week 3: Capacity Sizing and Timing

Content: A major part of operations strategy is deciding on a capacity strategy. This includes deciding on the sizing, timing, type, and location of each asset change. Such decision can be made both offensively and defensively. This class will discuss and contrast various approaches to changing capacity. We will explicitly investigate the use of capacity to affect responsiveness and as a competitive weapon to affect entry by new competitors. The second part of the class will focus on capacity timing: Which strategies can a company use to decide when to expand or contract capacity? What are the key drivers influencing that decision? How to model/optimize timing?

Read:

- Chapters 3 (skip 3.7) & 4 (skip 4.6)

Prepare:• Harley-Davidson Motor Company, *Case in textbook*.

The objective of this case is to investigate various approaches to change capacity and to distill the key drivers that guide the appropriate capacity strategy. You should complement your qualitative analysis with an NPV analysis. (This is a very realistic case and to capture some issues you will have to make some extensions to the basic NPV analysis, as described in Appendix 3A of the textbook.)

Hand-in your project proposal following the guidelines earlier in syllabus on p.8.

Week 4: Capacity Flexibility and Strategic Sourcing

Content: Once a company decides it needs to build new capacity, it must decide on what type of capacity. This involves deciding on the type of technology and facility. This class will discuss when and why product-dedicated or product-flexible technology is more appropriate. We also will explore what flexibility means and the various approaches to achieve it and be better positioned to respond to changes in demand, supply or processing.

The second part of the class will focus on strategic sourcing. Deciding on which suppliers to use for particular goods or services and on how to manage the supplier relationship over time is called strategic sourcing. Read the Sun case, which will be our vehicle to discuss various forms of supplier relationships and a framework for strategic sourcing

Read:

- Sun Microsystems (A), *Stanford Case*.
- Chapter 5.1-5.3 and 5.7 (other sections will be covered later in the course)
- Chapter 7 (skip 7.5 which will be covered later in the course)

Prepare:

- Eli Lilly & Co: The Flexible Factory Decision (1993), *HBS Case*.

Hand in a write-up of **Eli Lilly**. The objective of this case is to value flexibility and investigate when and why dedicated or flexible capacity is more appropriate and to connect the technology & facility strategy with new product introduction plans. Guiding questions:

1. Describe and evaluate Lilly's operations strategy (using the framework of Chapter 1)
2. What type of flexibility does the "flexible facility" provide?
3. From a qualitative perspective: What is the value of this flexibility to Lilly? How much is Lilly paying for the flexibility? What are the strengths of the specialized facility?
4. *Quantify the financial value of flexibility, incorporating technical risk (i.e., likelihood of NDA approval of technology) and other relevant factors and options as outlined in the case and the Kellogg addendum. Let your analysis drive your recommendation: What facility strategy do you recommend for Eli Lilly's new product plans?*
5. Looking forward, how does each facility option affect Lilly's cost structure and capacity management rules? How does each affect their process development capabilities?

A few guidelines for your analysis:

1. The focus of the case is on valuation (=quantification of benefits) of capacity strategies for technical risk, for which you can limit yourself to performing a PV of cost analysis. Do clearly discuss your approach in the main text. Discuss qualitatively how your recommendation would impact the revenue side.
2. Implications of product line breadth on flexible plant cost: you can assume that there is a broad product line of existing and future products besides Alphetine, Betazine, and Chlorozine which will be the focus of our financial analysis. You don't need to model those other products explicitly; rather, the cost assumptions in the Kellogg addendum implicitly assume that there are other products in the portfolio.

Week 5: Capacity Location, Global Dual Sourcing, and offshoring

Content: Which factors should be considered when designing and managing a global operational network? How can the concept of *total landed cost* help making such decisions?

We will play an in-class simulation game of the global dual sourcing problem described in Min-Case 6. The objective is that each group identifies how to best manage a global network and the key challenges faced in such setting. In the debrief, we shall discuss theory and hear about practice from speakers from Deloitte's Strategy & Operations Practice.

Read: • Chapter 6

Prepare: • Mini-case 6: "Mexico or China? Managing a Global Network" p. 230

Part III: The Process View: Tailoring Activity Networks

Week 6: Risk Management and Operational Hedging

Content: Risk management as a process with focus on operational risks and methods to mitigate that risk. Specific attention will go to supplier contracting (using the Bose mini-case) and structuring the network (using the Seagate case) to provide an optimal hedge against demand risk. We will survey other means of "operational hedging" and the settings in which they are most effective.

The Bose min-case will guide our discussion of risk sharing/transfer through contract design.

Read: • Chapter 9

Prepare: • Mini-case 7: Bose 301 SE (p. 272) to analyze contract design: prepare the questions in the case for class discussion.

- Seagate Technology: Operational Hedging, *Chapter 12 in textbook*.

Hand-in a write-up of **Seagate Technology**. The objective of this case is to analyze and optimize the impact of each asset's (location) capacity on the overall profitability of the processing network. Specifically, investigate whether Ron should approve the current capacity proposal or whether he should adjust it. Based on that analysis, recommend a "capacity portfolio" and discuss why it provides optimal risk mitigation. (Note: you must invest in capacity *before* knowing the actual demand scenario.)

Week 7: Midterm Exam, followed by Demand and Revenue Management

Content: After the in-class midterm exam, we will survey the increasingly important practice of “revenue or yield management” to increase revenues and profits in customer service operations.

Prepare: Review all materials and practice for the midterm exam!

(Background reading: • Chapter 8)

Week 8: Demand Management using Mass Customized Service & Technology

Content: A key operations strategy decision is to design efficient and effective processes to serve each customer. The challenge is particularly high in the setting of Peapod, which provides customized service to a large customer base. We investigate various processing network designs and fulfillment strategies to provide mass customized service. This class also discusses how information technology (Internet) facilitates such service. We use the concept “cost-to-serve” to assess the attractiveness and long-term feasibility of mass customized service. That analysis then suggests how to improve profitability over time.

Read: • Chapter 5.4-5.6

Background reading: • Which e-business is right for your supply chain? Download article 11 from www.kellogg.northwestern.edu/faculty/vanmieghem/articles.htm

Prepare: • Peapod: Mass Customized Service, *Chapter 13 in textbook*. (Guiding questions come with the case.)

Hand-in your project progress report following the guidelines earlier in syllabus on p.8.
--

Week 9: Improvement and Innovation

Content: Every organization must build capabilities for future growth. Such capabilities include processes for new product and process development, for learning, and for building a global culture. The ITT case is our vehicle to discuss how organizations use their total process skills in bringing products to market strategically. What impact do geographic and cultural differences have on this capability? How can the learning curve be used as a tool to manage and predict improvement?

Read: • Chapter 10.1-10.5

Prepare:• ITT Automotive, *HBS* case. (I will assign role playing in class.) Consider:

1. What are your recommendations regarding the issue of standardizing process technology across all plants? Are there motives behind this proposal other than those stated in the case?
2. As Jergen Geissenger, how would you go about implementing your recommendations? How would you overcome resistance from the plants? As Steve Dickerson, the plant manager of Asheville, North Carolina, what line of reasoning would you use to convince senior managers that full automation is the less desirable alternative?
3. As Klaus Lederer, what option would you like to see pursued? How do various options fit into the broader corporate strategy of ITT Automotive?

Part IV: Summary

Week 10: Wrap-Up & Project Presentations

Content: Wrap-up and course summary. Final Project presentations.

All groups hand-in their final project write-up. (See <i>Final Project Requirements</i> p 8)
--

Student Information Form

Please complete this and hand it to me at the end of the first class. Thank you.

1. Name:.....
2. Most recent employer:.....
3. Position:.....
4. Future career interests:
5. List any operations strategy activities you have been involved with.
6. What are your main objectives for taking this course?
7. What else would you like to share about yourself?