IS 335: Information Technology in Business
Reading Preparation Assignment
Chapter 4
Enterprise Architecture Textbook

Read Chapter 4, "Enterprise Design Methodology" of *Design of Enterprise Systems: Theory Architecture, and Methods*, pp. 75 – 98

Read the below questions and be prepared for class discussion based on those questions.

1. Compare and contrast phase, techniques, and activities.
2. List the three components of an optimization problem.
3. Argue whether it is possible to have an optimal enterprise design.
4. Explain why it is difficult to define an objective function for an enterprise design problem.
5. Select an enterprise system you are familiar with and describe in words what would be an objective function, decision variables, and constraints for the design of that enterprise system.
6. Explain the difference between an optimizing and a satisficing solution.
7. Compare and contrast an ill-defined problem from a wicked problem.
8. Describe how the four problem solving steps can be applied to design a new inventory control system for a manufacturer.
9. Explain why the problem-solving technique is iterative. Why would a single iteration usually be insufficient?
10. Contrast convergent thinking and divergent thinking.
11. Explain why the waterfall methodology has largely fallen out of favor with most companies?
12. Compare a traditional waterfall design methodology to an iterative methodology. What are the advantages/disadvantages of one approach versus the other?
13. What is the purpose of the CMMI model and what does it tell us about a company's methodology?
14. Judge how important it is to get stakeholders involved in a development project.