

## ESD.34 System Architecture

### Opportunity Set #1 - Definitions

**Deliverables due: January 11th, during class.**

#### Learning Objectives:

- Develop reference definitions in your context
- Articulate the meaning of "Principle"
- Practice the "ID, create, search, synthesize" critical thinking process

#### **1. Answer the following questions:**

For each definition you must

- Make up your own definition first
- Find several other definitions and cite the sources
- Compare and critically analyze all the definitions
- Synthesize your final definition

For each definition, write an illustrative example of something that fits the definition (e.g. is a system).

**1.a. What is a System?**

**1.b. What does it mean to be Complex (in the sense of a technical system)?**

**1.c. What is Value?**

**1.d. What is a Product?**

#### **2. Principles, Methods and Tools**

Fill in the matrix with one example of related principles/methods/tools for each of the architecture of products, product development process and product organizations. For example, a principle for a product architecture might be: "Each product exists as part of a larger system when delivering value." (Don't use this one)

#### Deliverables:

For each question, prepare a single powerpoint chart. Bring it to class, and I will ask you to read out your input. Also submit by class an electronic PowerPoint version to the class server as OS1IAP2007\_groupN. Include the list of group members on the first page of the submission.