## **ESD.34 System Architecture**

# **Opportunity Set #3**

Deliverables due: January 19th, during class.

# **Learning Objectives:**

The goal of this assignment is to abstract the individual PDPs gathered by each of your group's members into one generic reference PDP which can serve as a basis to derive specific PDPs (like the ones in your companies). The generic PDP should be applicable to complex (in the large, evolving) systems.

#### **Instructions:**

It is important to thoroughly understand the common best practices in PDP (ID). Based on the PDP in Ulrich and Eppinger, consider how one for a large, complex, evolving system should look. (Create) Then examine the PDP's from your companies. (Search) What do they have in common? Where and why are they different? Synthesize a generic PDP in as much detail as possible while still keeping it generic (Synthesize).

### **Deliverables**

- Compare the elemental steps that are common to the company PDP's (there may be 20 to 40 of these). Identify the steps that are common to all or most of your PDP's. (Prepare an excell chart with columns labeled <u>Step Name</u>, <u>A few</u>, <u>Most</u>, <u>All</u> and list the steps with an X in the column indicating how often they occurred).
- One synthesized reference PDP model per team. (1 chart, plus explanation annotations if necessary). Show enough detail so that each of the main steps is labeled, and some breakdown or explanation of each.
- Description of how the company specific PDP's differ from the reference process (1-2 charts). What are the factors that drive these differences?
- Bring transparencies (!) of the charts to class, and submit the PowerPoint electronically before class to the class server OS3IAP2007\_groupN. Include the list of group members on the first page of the submission.