

## PHASE 3 ~ DESIGN FOR MANUFACTURING

### Deliverable 16 ~ Change Management

Due Date: <http://rrg.utk.edu/resources/BME469/assignments.html#Deliverable16>

**INSTRUCTIONS.** Develop a change management system, or change control log, for your product development. Your change management system is due electronically to Dr. Jeff Reinbolt (reinbolt@utk.edu) and it should be updated accordingly and included in your design history file as well.

#### Purpose

Any design project is rarely developed as it was planned to be at its conception. Sometimes, changes are necessary to allow a project to move forward, or to improve certain aspects of the design process or final product. Budget overruns, scheduling deviations, and other problems can become a reality unless these changes are properly handled. Change management helps you control the inevitable changes of course in a project's progress. It ensures that corrective actions are agreed on, communicated, and understood by all participants and provides you with a mandate to proceed or abort a project before valuable time and resources are wasted. Change management also helps you keep a good project on track and improves your chance of success by giving you the flexibility to adapt to changing needs or circumstances.

#### Critical Information

The basic steps in change management are:

- Raising the change request. A team member sees a need for change, determines whether the change is viable, and then files an official change request.
- Logging the change request. Record the change request in a log so that you can track it.
- Distributing the change request. Get a copy of the request to all affected individuals.
- Analyzing the impact of the change. Each affected individual reviews the proposed change and analyzes the impact of changes to cost, time, and quality of deliverables.
- Evaluating the change request. The individual impact analyses and original change request are evaluated.
- Closing the change request. After the team has reached a decision, it must log the results and call the change request officially closed. If the change is rejected, this is the last step in your change management procedure.
- Implementing changes. If the change is accepted, the team now adjusts the project plan to begin implementing the change. Inform all affected parties of the change, how it will affect them, and when the change will go into effect. All team members must be notified of the change and any resulting impact on schedule, budget, deliverables, or procedure.

- Withdrawing change requests. A change request can be withdrawn anytime prior to implementation of the change. If this happens, inform the affected parties, make a note of the withdrawal in the change log, and close the request.

### **Change Management System (Change Control Log)**

The team must devise a mechanism (e.g., Google Doc table, Excel spreadsheet, MS Project) for completing the following:

- Define the change.
- Evaluate the impact of the change.
- Determine actions for implementing the change.
- Communicate the change.

An example change control log may look like below:

<b>Change Request #</b>	<b>Change Description</b>	<b>Re-quester</b>	<b>Date Re-quested</b>	<b>Decision</b>	<b>Status</b>	<b>Data Imple-mented or Can-celed</b>	<b>Addi-tional Com-ments</b>
<i>The unique number assigned to each re-quest</i>	<i>Brief de-scription of the re-quested change</i>	<i>Name of the person requesting the change</i>	<i>The actual date the change was re-quested</i>	<i>Record the approval (or not or on hold) decision</i>	<i>Record information on the sta-tus (in progress, completed, canceled) of the change request</i>	<i>The actual date the change was im-plemented (or can-celed)</i>	