IT PROJECT MANAGEMENT

Muhammad Hamza Ihtisham


Controlling Your Software Project

Managing Changes to the Software Project

Introducing the Controlling Process Group

- The controlling process group is used to measure and compare where you are with where you planned to be. The controlling process group is concerned with monitoring and controlling the following factors:
- Scope
- Schedules
- Costs
- Risks
- Communication
- Team member performance
- Contract administration
- Quality

Controlling the Project Scope

As the project manager, it is your responsibility to remain constantly aware of all the details surrounding the scope of the project. The best way to get off to a good start in this department is to clearly and thoroughly define the scope at the start of the project.

Examining the project scope

- As an example, at the start of the project when you are beginning to gather project requirements, you and your client may agree that the project scope is to generate a software program that constructs online report card applications for a local school system. Initially, you and the client agree that the project should include methods for
- Allowing each teacher to document scores for individual students
- Preventing a teacher from adding or changing scores of students who
- are not in his or her class
- Enabling teachers to print individual reports for their classes
- Sending automatically generated reports to the principal
- Generating reports that show trends in students' scores, as well as class
- room averages
- Allowing teachers to input scores for both midterm and final grades
- Permitting parents to log on to view daily homework assignments

Later, after facilitating several of the efficient customer meetings that you documented:

- Generating communication to parents when a student's average score for any class goes below a predefined level
- Generating e-mails to the principal and department chair whenever a teacher has a classroom average that reaches a predefined level (for instance, the average student grade in one teacher's class is 72 percent)
- Allowing teachers to input documentation from parent/teacher conferences
- Allowing teachers and guidance counselors to document student behavior problems
- Forcing teachers to change their passwords every 30 days
- Creating a password-controlled, secure area where parents can log on to view their child's grades and progress
- Dialing the pizza parlor on the corner to have them automatically deliver a large sausage and mushroom pizza to the teacher's lounge each Friday (just wanted to see if you were alert)

Creating and following a change control system

Your change control system may consist of tools, such as a database or spreadsheet to record your proposed changes, and you may also have a change control board (CCB) to review and approve changes in your firm

Table 13-1 Change Control Spreadsheet

Change Request	*Owner*	*Accept/ Reject*	*Factors*	*Date in Test Environ-ment*	*Date in QA*	*Date in Produc-tion*
Add functionality for secure e-mail of student progress reports	Sara K.	A		05/02	05/15	05/17
Remove `Discipline` field from teacher conference page	Amanda M.	R	Would affect other areas using `Discipline` field	N/A	N/A	N/A
Create report to notify principal of teacher's average classroom grade of 72%	Adam D.	A	Approved by client, stakeholder, and sponsor	08/22	08/30	08/30

Creating and following a change control system

- Don’t forget to include emergency change requests in your change control system.
- If you’re creating software in the healthcare industry, an emergency change may be anything that, if left alone, could affect patient care or patient safety.
- In some firms, an emergency change is anything that, left alone, may cause the organization to lose money.
- The project team members need to understand the attributes that cause a change to be considered an emergency.

Determining the value of the proposed change

- When project changes are proposed, you need to determine the cost of implementing the change, as well as the value that the proposed change will add to the project.
- For example, if it will cost $500 to implement a change but that change will add a value of $10,000 to the overall project, you may have a better chance of getting that change approved than if the cost of your change is $10,000 and only brings $500 in added value.

Correcting mistakes

- **During the planning processes, spend the appropriate amount of time gathering project requirements.**

  You may be tempted to hurry through this phase so that you can quickly get to the fun stuff, but the time you spend here will save you time later.

- **Follow your well-defined communication management plan.**

  You can avoid many mistakes if you proactively communicate with the appropriate stakeholders.

- **Create a comprehensive risk management plan.**

  When potential risks materialize, you will be ready to deal with them instead of being caught by surprise.

- **Define and document your scope management plan.**

  Your project team will be less likely to misunderstand the scope and potentially make mistakes if the scope is clearly defined, documented, and communicated.

Controlling Project Costs