



## Creating sanity from chaos

In reality many businesses, like custom architectural millwork, produce an endless series of unique projects. These firms are true job shops where no two jobs are identical. Given this discontinuity, management must make sanity out of chaos. After all, chaos causes waste, and customers don't pay for that.

The lack of product and physical process repetition makes these operations ideal candidates for project-based thinking. Managers in such situations can benefit from the techniques employed in large capital projects to increase the level of sanity and ultimately of control.

### What is project management?

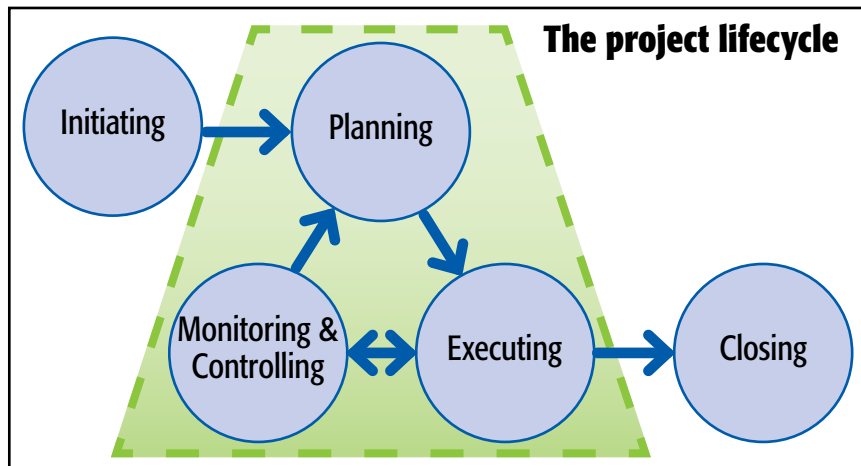
According to the Project Management Institute, project management is "the application of knowledge, skills, tools and techniques to project activities to meet the project requirements." In layman's terms, PM enables you

to make a project proceed on time, within budget and meet the customer's expectations. Its purpose is to overlay a predefined thought and action process over an ever-changing environment.

Sound PM aims to make a project happen under control through front-end and continual planning. How your organization actually machines, sands, assembles and finishes the necessary work is up to you. Whatever that production process, PM provides a well-delineated path to success first created in advance and then constantly updated rather than brainstorming along the way. In short, PM puts the horse before the cart.

The core of PM's philosophy is to plan, implement, review and realign with the realization that change is inevitable. This management cycle of Plan-Do-Check-Act was developed by quality theorist Edwards Deming. Deming is best known for putting Japan's industrial revolution on the path to success

A rational approach to management can bring order and a successful outcome.



The generic project lifecycle illustrates the expansion of the Plan-Do-Check-Act cycle. Without the monitoring/controlling feedback loop, managing a project to the finish line can be difficult.

following World War II. He believed in managing proactively and intelligently to bring future performance in line with an evolving plan rather than reacting from the seat of your pants. The end goal remains the delivery of the project's original expectations.

In earlier versions PM focused on the impact of three elements — scope, time and cost — on project performance. Any change to one of these three constraints affected one or both of the others. As practiced now, PM concentrates on the original elements plus three new ones: quality, risk and customer satisfaction.

This additional complexity calls for more intensive application of Deming's PM cycle and the need for more advanced planning. The result is now an improved, well-conceived plan instead of a back-of-the-envelope, reactive plan developed in the heat of the moment.

### **Project Lifecycle 101**

The generic project lifecycle shown in the graphic illustrates this expansion of the Plan-Do-Check-Act cycle. The first step now is initiating. Next you carry out the project, a three-element cycle consisting of planning, executing and monitoring/controlling.

Remember that changes do happen, changes can impact any constraint, and expecting things to go right 100 percent of the time is unrealistic. Without the inclusion of the monitoring/controlling feedback loop, managing a project proactively towards the finish line is difficult at best.

Culminating the project is the closing process i.e., cleaning up the inevitable odds and ends and getting paid.

Typically most time and effort expended on a project occur during the executing phase when activities and tasks are completed along with the monitoring/controlling step as you keep everything on track. For that reason, the majority of people believe these processes to be the most important in PM. Yes, you will definitely spend most of your time there since nothing would get done if you didn't. But these two steps pale in importance to initiating, planning and closing. Let's see why...

### **Initiating**

In the initiating process you establish the scope of the project and its objectives, define success criteria, estimate resource requirements

and execute the contract with your customer. In many ways, initiating is planning at a conceptual level.

Clearly defining customer expectations is the critical element in this step. Often customers cannot explain what they want. In that case you must work with them to develop a preliminary project scope. Only then can you create a preliminary budget, a milestone-level schedule, and other knowledge

necessary to avoid future mistakes.

In short, a sound initiating process prepares the way for the next step.

### **Planning**

Planning takes initiating to the detail level. But it's more than putting together a MS Project schedule or a budget in Excel. During this critical step you must focus on:

*continued*

- Developing accurate specifications of objectives and deliverables
- Identifying process and schedule dependencies
- Calculating complete budgets and predicting cash flow requirements
- Determining specific resource (people, materials, hard assets) needs
- Assessing the risks/opportunities

and their ramifications,

- Collaborating with team members
- Establishing the thresholds for quality and acceptance

The idea is to increase the accuracy of the information you assembled in the Initiating phase.

One key purpose of the planning step is to describe the project's big picture plus to define the implications of changes and delays on cost and timing.

In this step you also *form and inform* your team. Assigning the correct levels of authority and responsibility to those involved can mean the difference between smooth sailing and disaster.

### Closing

Closure occurs on the customer's terms. This truth confirms the importance of establishing the definition of project success during the initiating phase. Delivery is more than just physically shipping or installing a project and awaiting payment.

PM's philosophy is to plan, implement, review and realign with the realization that change is inevitable.

The responsibility for closing is, of course, yours. First you must demonstrate that the success criteria have been met. Next, if a contract is involved, you must obtain official acceptance from the customer. Third, you should determine your internal performance against budgets, schedules and other metrics. Such a post-project audit provides invaluable lessons learned and enables final Check and Act steps that improve your performance on the next project. This final step should include reassigning your team to their next project.

*Bottom Line:* Even in the most chaotic production environments, a rational approach to management — a predefined process — can bring order and a successful outcome. Give the concepts embodied in Project Management a try in your business. ●

*Art Raymond is a manufacturing consultant specializing in furniture, cabinets, millwork, fixtures, and other secondary wood products. His firm, A. G. Raymond & Co., has developed management and technical solutions for manufacturers around the world. Contact him at 919/831-0070, by email at araymond@raymondnet.com, or on the Web at www.raymondnet.com.*