## MODERN PROJECT MANAGEMENT

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nce the exclusive domain of engineering disciplines, Project Management has moved onto business' Main Street. People from many walks of life are now routinely called on to be members of project teams and are often asked to assist with or assume the role of Project Manager. And no one is more surprised than these new inductees to the world of professional Project Management. Interest in the topic is reaching new heights with no sense of decline in sight. That makes this a perfect time to reflect on what modern Project Management has become and why it is such a critical issue for business organizations of all types.

Project Management is a discipline for planning, leading, organizing and controlling a well-defined collection of work. This discipline must be repeatable and explainable. It is not an art form invented by each practitioner, nor is it a science with explicit formulas and rules. Despite these restrictions, however, an organization's approach to Project Management must be consistent so that knowledge and experience may be shared across project boundaries.

### What is a project?

A project is a...

...discrete effort comprised of a planned set of work activities applied against a specific scope that yields a well-defined final product or process. Simply, projects are the life-blood of an organization. They provide the vehicle to plan, create, enhance or maintain products and services for internal and external customers. Projects are not just used to create something new, they are also necessary to retire existing products or services. Projects may be grouped into three major classes . . . Continuing Efforts, Repeating Efforts and Single-Time Efforts.

### **Continuing Efforts**

Many traditional organizations were founded on performing a very stable set of processes in a highly repetitive and consistent manner. These factory or "assembly-line" activities remain a staple of many organizations. They are called *Continuing Efforts* because they change little from day to day. The strength of these projects is in their stability and predictability.

The core concepts of Project Management were created specifically for Continuing Efforts. Born from Industrial Engineering and Operations Management, this bias is easily seen in the highly granular planning documents and risk assessment methods that require predictability.

These projects are a by-product of the "industrial" or "mass production" influence on business thinking. Traditional Project Management techniques were and still may be used to identify the optimum performance of ongoing or operational processes. While these projects continue to add significant value to many organizations, new investments for products and services are increasingly targeted toward Single-Time Efforts. And organizations are finding significant

differences between the two types of projects.

### **Single-Time Efforts**

Modern organizations are discovering that the majority of their attention must be given to projects that will be done *only once* within a reasonably short period of time. These Single-Time Efforts are intended to meet the needs of demanding customers and

a dynamic, competitive business environment. Single-Time Efforts begin with a large number of unknowns and require a substantial *discovery* process.

Each Single-Time Effort concludes in a unique or highly customized result that is

produced by a unique collection of people using new methods and often unfamiliar technology. Examples of Single-Time Efforts include moving an organization to a new location, creating a new customer product, changing an existing customer product, acquiring new technology or installing a new software product.

### **Repeating Efforts**

Found squarely between yesterday's dominant, stable Continuing Efforts and today's dynamic Single-Time Efforts are *Repeating Efforts*. These projects are found where organizations have been able to define "general procedures" that may be followed loosely when performing similar types of projects. They lack the absolute precision and predictability of Continuing Efforts but also work within a realm of reasonable knowns.

These projects are often seen when organizations standardize specific practices to promote consistency. They include construction, surgical procedures, operational guides and maintenance activities.

#### The Differences

All three project types tend to exist simultaneously in most organizations. On the surface, it would seem that solid Project Man-

training agement could then be applied universally across the project types. The problem, however, is the natural characteristics of each type are often diametrically posed to the realities found in another type.

Single-Time Efforts typically follow custom processes, employ new or emerging technology, face unknown scopes, depend on multi-discipline workers from many organizations and produce custom end products.

Most organizations have created management processes, including how they relate to projects, based on the assumptions of stability and predictability. Single-Time Efforts are any thing but that.

Continuing Efforts assume a stable business process, established technology, known scopes, "task-based" workers, and very predictable results. The primary focus of a Continuing Efforts is the efficient, repetitive and accurate execution of a defined process. Planning for a Continuing Effort yields a base-line strategy produced from stable estimates. Business management attention is oriented toward the occasional exception or crisis.

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The focus of a Single-Time Effort includes the discovery, design, construction and implementation processes. Single-Time Efforts demand a highly dynamic, progressive planning process that responds quickly to new discoveries and unanticipated realities. Because of the pace of Single-Time Efforts, end business leaders must play an proactive, rapid, direct role in major project decisions.

While Single-Time Efforts are getting the majority of attention and financial investment from most organizations, they are not really a "new" type of project. They traditionally exist just prior to launching a new Continuing Effort. During the Industrial Age, these "one-of projects" were referred to as "Research and Development." The modern challenge for Project Management is to control yesterday's uncontrolable R&D environment ... and do it as a significant, critical and mainstream business process. This will require a new process for Project Management and a rethinking of many traditional techniques.

### **Management Contrasts**

One of the greatest impacts to a "projectized organization" is the shift required in management thought. The principles remain the same, but the target is new. Management is often explained using the PLOC Model of plan, lead, organize and control. In an operational or industrial setting, these management components are used to describe the relationship between the manager and their people. In modern Project Management, the PLOC Model describes a manager's relationship to a project. The greatest culture change for any organization is typically this shift from managing the people who do work to managing the work itself. In a Single-Time Effort environment, people require far less supervision. In fact, excessive people management gets in the way of project progress. Consider these contrasts:

#### **PLANNING**

Traditional - Planning for an operational environment consists primarily of establishing the schedules people work, assigning individual tasks, scheduling vacations and adjusting for expected and unexpected time away. Plans for Continuous Efforts may assume highly stable end-products, a well-defined process and task-based workers. This yields plans that are very predictable early on and highly stable over time. Many of the Project Management techniques and current day expectations were based on these assumptions.

Staff planning for a Single-Time Effort is complicated by dynamic teams comprised of people who typically do not report administratively to the Project Manager. Matters become seriously complicated when these people are available on a limited, unpredictable basis. These children of the information age are also gifted in many work skills and experiences. Due to their breadth of knowledge, they are constantly innovating and adding to their skills. Once assigned to a project, these people cannot be easily replaced due to their personalized relationship to the project.

This concept is diametrically opposed to the "interchangeable cog" nature of the Continuing Effort and Repeating Effort's task-based worker.

**Modern** - Project planning focuses on breaking down the total effort into assignable units, estimating this work, defining the most efficient order in which the work should be performed, and then deploying available staff to specific work packets for specific windows of time.

Perhaps the most significant influence of modern project management is on project plans and the planning process. Because

Single-Time Efforts projects are only performed once, and in many cases have never been done before, it is impossible to create final, stable plans early in the life of the project. While preliminary and highly speculative projections may and should be produced, these early plans must be repeatedly "re-baselined" as new information becomes available. A complete discovery process is typically required before stable plans are feasible. Because of their experience with the early, stable plans of Continuing Efforts, many organizations falsely assume they may simply "command" early planning data for Single-Time Efforts. This often dooms a project to failure as it is operating with an totally invalid set of expectations and strategies.

#### **LEADING**

**Traditional -** Leading any human organization requires managers, working in a benevolent manner with their subordinates, helping them learn how to accomplish assigned work. In Repeating Effort and Con-

tinuing Effort, the manager is often the task expert and is fully qualified to perform any work within their managerial domain. If not, they can easily retain an advisor

or consultant who fills this role. These traditional supervisors and managers are expected to make the hard decisions, even when others do not agree with their conclusions.

Modern - Due to the complexity and diversity of skills needed to perform Single-Time Efforts, it is impractical for the Project Manager to be the task expert of all work that must be done. When these managers attempt to blindly dictate direction, they are quickly exposed by their impractical or unreasonable edits. Instead, modern managers

work to solicit individual contributions, create consensus within the project team, facilitate group decisions and create an environment where it is possible for people on the project to accomplish their work with a minimum of distractions.

The modern Project Manager plans, organizes and controls the project *with* the team not *for* the team.

#### **ORGANIZING**

**Traditional** - The operational manager is primarily concerned with creating a structure within his or her control that monitors the work flow. They must insure the proper number and alignment of employees to accomplish the work in a consistent manner. Well-defined career paths are established with the promise of a "in-line" promotion for length of service. A manager's personal ranking in an organization is often directly related to the number of people in their employ.

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In this setting, the traditional manager often has both *administrative* and *functional* authority over their employees. Adminis-

trative duties include the "care and feeding" of their employees such as salary administration, training plans and employee evaluations. Functional authority is the right to assign work to an individual and have that work be accountable back to the boss.

When this view dominates an organization, it creates serious conflicts for managers of Single-Time Efforts.

**Modern** - A modern Project Manager must establish clear roles and responsibilities needed for the success of their project. A project staff often includes many people who do not report administratively to this manager and may even be at a higher corporate level. Organizing a project structure begins with defining what is expected of the Project Owner along with each member of the Project Team. The Project Manager must also define and explain the responsibilities they will have to the project.

Further, these managers typically have only functional authority over their team. This "authority" is often compromised by the priorities, views and occasional interference of the actual administrative managers. It becomes illogical and unfair to hold a Project Manager responsible for deliverables and dates when they have such limited and tainted authority over their team.

Even more vexing is the tendency of out-of-control organizations to improve the "look" of productivity by deploying the same people to multiple simultaneous projects. This practice usually causes organizations to have 200 to 400 percent more people deployed to projects than they have available to work on projects. And these same organizations have the audacity to seem surprised when projects take longer to complete than expected.

Organizations must address this condition with well-defined roles, clearly stated responsibilities, full release of people to a project and a corporate resource management process that insures team members are never over-deployed to multiple projects.

#### **CONTROLLING**

**Traditional** - Controlling an operational organization includes establishing organizational performance goals and then determining what each individual's contributions should be. Individual goals are assigned and measure to insure the employee is meeting

their goals. Control is usually established around target performance over a standard period of time, such as a quota measured within an hour, day or week.

Modern - Single-Time Efforts are measured based on creating quality, not quantity. It is critical to first verify the completion of promised deliverables. Objective criteria for completeness and quality must be met before a deliverable is considered "done." Performance and productivity may then be measured by comparing planned hours, durations, start dates and finished dates against the actuals. However, instead of comparing performance against the original plans created during the first days of a project, measurements must be against revised and relevant baseline plans.

### **Summary**

Due to these factors, organizations must rethink how they will manage Single-Time Efforts. They should define a *Project Management Framework* that is distinctive from more traditional operations practices. This framework must define a *Project Life-Cycle* along with processes and information required to plan and monitor projects.

Failure to recognize the new assumptions of Project Management results in applying traditional practices in illogical and unsuccessful ways.

Because of the importance of projects, creating and implementing a modern Project Management process has become a key issue for both technology and general business units of an organization. It is a partnership that defines a way of doing business so that projects deliver needed results and provide a meaningful return on the organization's investment.

# The Tryon and Associates Approach

Tryon and Associates has offered Project Management training and consulting since 1985 to some of the largest (and some of the smallest) organizations in the United States, Canada and Europe. Our courses originally targeted the Information Technology industry, where single-time efforts are the norm. Since 1990, however, our seminars have been used by organizations who specialize in research and development, product development, marketing, general business and plant operations. While many of these companies continue to perform continuous efforts, they are shifting their focus to single-time efforts.

The **Tryon and Associates** curriculum has been crafted just for this expanded audience with concise, focused material that provides the type and level of knowledge needed to perform these modern projects. **Managing Single-Time Efforts** proves valuable for every segment of an organization that is part of the project effort. Designated Project Managers, Team Members and interested management continue on to the planning, control and assessment tools of **Project Management Fundamentals**.

The right amount of education in a compressed period of time for the complete project audience. . . and at an affordable cost.

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