

RESCUE OF HIGH-VISIBILITY PROJECTS

David V. Tennant, PE, PMP
Windward Consulting Group, LLC
www.windward.ws ♦ 770-846-0828

ABSTRACT

This paper looks at the reasons that projects fail and which techniques can be used to rescue projects that have gone significantly off-track. While there are many reasons that lead to project failure, this presentation will focus on several key faults.

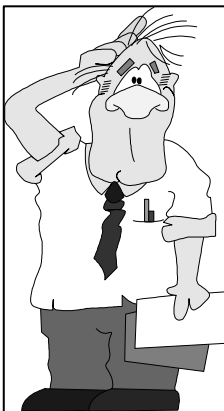
In addition to failure triggers, real project problems will be discussed. Once the causes of project failure have been provided, practical and useful approaches to rescuing problem projects will be presented. Key topics include: knowing when to elevate problems to upper management/client, and strategies to obtain consensus in the new plan.

INTRODUCTION

Everyday one can read about projects that failed to meet expectations (performance), missed a critical deadline (schedule) or went over the estimated cost (budget). These three criteria are known as the triple constraint and it is the yardstick by which all projects are measured. In order to be successful, all projects must meet these three criteria (not just one or two of them!). Let's look at three examples of actual problem projects:

(1) A nuclear power plant is completed seven years late and 600 percent over budget. It's performance is exemplary, but it missed two of the triple constraints.

Primary causes: added regulatory requirements (Federal), extended construction times due to additional safety and permitting issues, protests and continuous court challenges, plus the added negative publicity of the Three Mile Island accident.



(2) Two weeks before turning over a software project to the client with 500,000 lines of computer code, it is discovered there are 25,000 "bugs." The project is already \$500,000 over budget and 4 months behind schedule.

Primary causes: Lack of a quality testing program, ignoring warning signs, lack of coordination with client; and, continuous scope changes.

(3) A major communications manufacturer embarks on a 25-project program consisting of R&D, expanded plant capacity, new manufacturing techniques, construction, and environmental controls. After 1 year, the program is \$80-million over budget and several months behind schedule.

Primary causes: Lack of adequate planning, wrong people in charge, poor financial controls, ignoring risks, and departmental friction.

All three of these projects were directed by smart people, but each project failed to meet its targeted goals. In the first case, most of these issues were beyond the control of the project team; and, perhaps the project should have been shelved until the national *political* environment was more favorable. In the second and third cases, the project teams did have control and ultimately realized that intense corrective actions (i.e. management controls) were required.

CAUSES OF PROJECT FAILURE

There are a variety of reasons that projects get off-track. The following list provides some insight regarding key problems that cause or contribute to project failure:

1. Continuous scope changes
2. Poor planning
3. Inadequate or the wrong resources
4. Lack of management support
5. Poor communications
6. Wrong person (people) in charge
7. Lack of accountability
8. Departmental conflict
9. Poorly defined roles and responsibilities
10. Objectives not clear
11. Changes in goals or objectives
12. Dysfunctional organization
13. Failure to heed warning signs
14. Unrealistic expectations

It is appropriate to note that generally, projects fail due to several of these items at play simultaneously during a project's lifespan. In order to keep this paper within a reasonable length, we will focus on six key causes from the above list (items 1, 2, 6, 12, 13, and 14).

SIX KEY PROJECT PROBLEMS (AND SOLUTIONS)

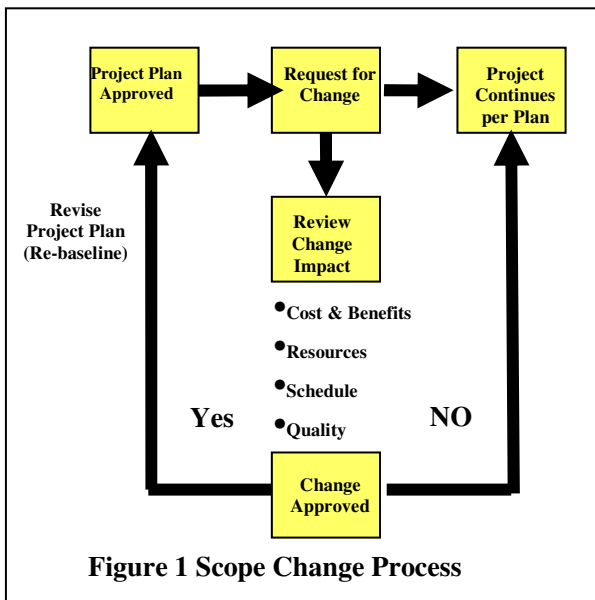


Figure 1 Scope Change Process

1. CONTINUOUS SCOPE CHANGES.

Generally, continuous scope changes are at the top of any project failure list. However, it is important to recognize that all projects will have changes.....this author has *never* seen any project finish exactly as it was originally conceived or planned. There will always be scope changes; the solution is to effectively manage those changes. For example, there should be a process in place to evaluate and obtain approval for any suggested scope change.

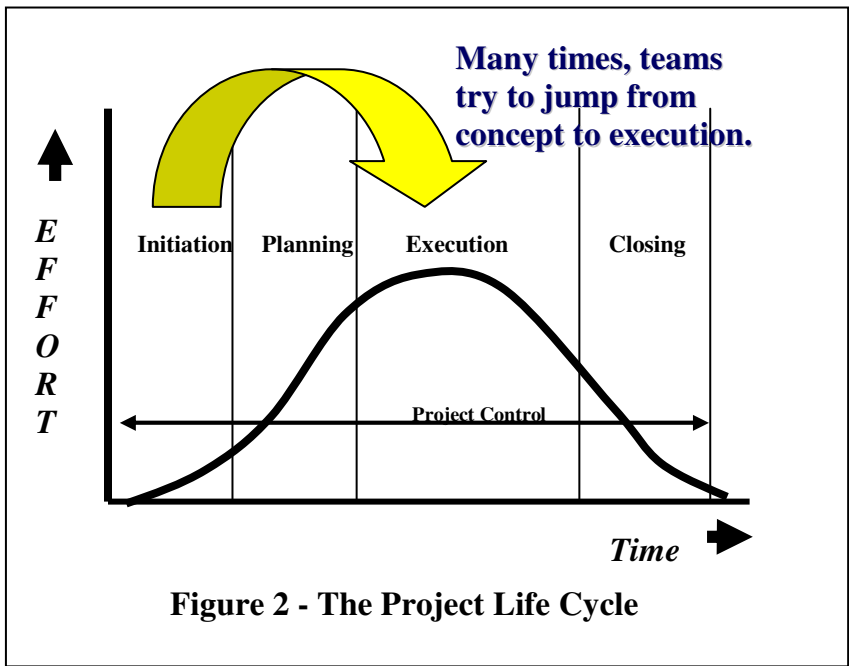
Usually, companies have a predetermined number that triggers the evaluation process: say, any change greater than \$5,000. An effective process the author has developed is shown in Figure 1.

Essentially, any change that is proposed by the client, sponsor, team member, etc. should go through an evaluation to determine the impact to costs (will we need more money?); resources (do we have the right people?); schedule (will the change help or hurt our time-line?); and quality (will the proposed change enhance the quality or performance?). Also, depending on the type of project, you may wish to add “safety” to the evaluation. Once the evaluation has been completed, and assuming the project sponsor agrees with the change, written approval should be sought (an actual signature) that authorizes additional time, resources or dollars. This increase in scope should now be added to the original schedule and budget (revise the project plan). You now have appropriate authorization to modify your plan and proceed accordingly. Conversely, If the answer is “no” (i.e. the change is disapproved) you will need to document why the change was denied and save this as evidence. If the change is disapproved, then clearly, the change is not implemented and you continue on per the original plan. You should develop a standard template or form to be used for all scope changes. There are many websites that offer standard templates for free.

2. POOR PLANNING. PMI guidelines suggest that project planning should cover nine areas. It is interesting that firms have their own ideas about what constitutes a project plan. If the author were to ask you to show me a “typical” project plan from your company, what would this be? Many firms consider a project plan to simply consist of a budget, schedule, and technical description. Yet, this only addresses two of the nine areas. Therefore, all project plans (no matter how big or small the project) should cover the management of nine areas identified below:

Cost (budget)	Time (schedule)	Quality
Resources	Risks	Procurement
Communications	Integration	Scope

It is important to note that most project failures do not occur because of technical problems; generally, failures are caused by managerial and planning issues. Figure 2 illustrates that project teams have a tendency to minimize planning and jump into execution. The author’s



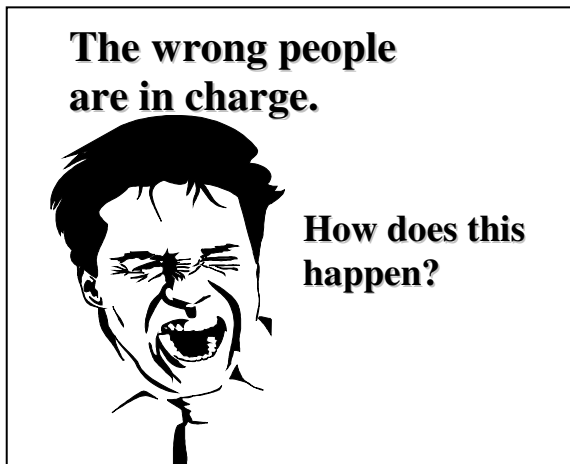
experience has been that additional planning time usually saves time during the execution phase.

If you are asked to rescue a project that is in trouble, request a copy of the project plan. Most likely, only a few of the nine items have been addressed. Those items typically ignored include Risks, Scope control, Communications, and Integration.

A final thought on this topic: include your client,

sponsor, and key suppliers in the project planning sessions. Buy-in by these “partners” will serve to streamline project issues and obtain their approval sooner rather than later. No one likes to be hit with project surprises. If the stakeholders are included in the planning process, they are less likely to be surprised.

3. THE WRONG PERSON (or people) IN CHARGE. A person managing a high-visibility project must have a broad set of skills in their toolbox.



There are many factors that are at play in selecting project leaders—sometimes it is the wrong factors. Perhaps the project leader is well liked or being mentored by senior management; they may have strong *technical* skills or perhaps this person just happens to be available.

In reality, the project leader *must* demonstrate some of the following qualities: strong communicator, constructively resolves conflict, ability to make decisions, attention to detail, ability to budget and be in tune with

the organization (i.e. politics). Essentially, a generalist is probably the best person to lead a high-visibility project. There is the argument that highly technical people do not generally have good management skills. And, this is generally correct. However, this does not mean that technical experts cannot learn to manage. It is a matter of obtaining new skills such as budgeting skills, learning to communicate both orally and in writing; and, learning to motivate and delegate. These are skills all successful managers possess.

4. DYSFUNCTIONAL ORGANIZATION. There are times when the best project team, superior planning, and motivation are not enough. The author has found that many times the organization is at fault. In rescuing problem projects, there is generally a component of the company’s organizational structure that is not conducive to effectively planning or implementing projects. Some of these problem areas include: lack of defined roles and responsibilities, departmental infighting, lack of coordination across functional areas, “turf” disputes, lack of executive support, inadequate systems support (e.g. budgeting or scheduling software), and lack of understanding how project management is supposed to work. It is common to see *all* of these forces at work and it is not surprising that major projects are off course. If part of the firm’s core business is project management, then these sore spots will be a continuous problem until the organization is fixed.

There are many firms that think training in PM is the solution for people to effectively manage projects. However, to truly invest in better PM takes three items: (1) people, (2) process, and (3) training. Therefore, while training is important, it is only 1/3 of the equation. The type of people selected to manage projects is key (especially the soft skills as discussed in section 3) combined with appropriate training. However, a component that is generally missing is the process or methodology. A process is the roadmap or step-by-step cookbook that will guide project teams from concept through to completion for any project. Some of the contents of a

detailed process include how to initiate projects, who approves them, how to manage scope, who is in charge, how accounts are opened/closed, etc. Another tool to improve management of project across the organization is the Project Management Office (PMO). Depending on the size of the organization, this may be used to plan all major projects and provide support in the form of qualified project managers, schedulers, estimating assistance, etc. A PMO is not a small effort and requires significant evaluation as to what role it will play (or not play). Usually, functional managers consider the PMO a threat to their authority and will generally resist its implementation. However, a PMO that is properly planned and utilized can be a very effective tool. In summary, if your projects are continuously going off track, even with strong project teams in charge, there may be organizational issues to investigate and resolve.

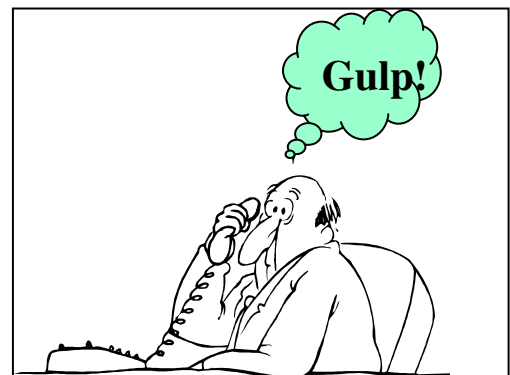
5. FAILURE TO HEED WARNING SIGNS. Before a project is clearly “in the ditch” it will always give warning signs. The most common signals are missed milestones (deadlines), going over the budget (small increments, at first); and, the worst sign that things are getting bad is when team members start to jump ship (lack of confidence in management). Projects that are in trouble are not healthy one day and then magically “in the ditch” the next day. The adept project manager should always be looking for signs that things “aren’t quite right.”

It is human nature to try to minimize looming problems, or to think that “these are small problems that can be fixed before the next status report.” Unfortunately, in projects, the little issues generally add up exponentially to big problems. There are several techniques that can assist in avoiding or minimizing problems. These include using Earned Value analysis and performing risk reviews.

Earned value analysis is a technique that allows the project manager to monitor both the budget and schedule using analytical formulas. Most projects begin to display trends as early as 20 percent into its life-cycle. Therefore, the earlier that warning signs appear, the more time the team has to address and fix them. Caution: Earned Value is a technique that is useful for long-term projects (say 6 months or longer). Because you are looking for trends, it would not be practical to use EV techniques for a project that only lasts 60 days.

The other technique that can assist in avoiding problems is the use of regular project risk reviews. This is a simple, but often overlooked, technique that attempts to identify major problems that *may* be on the horizon. Once identified, the potential problems or “risks” are prioritized and mitigation strategies developed. Risk reviews must occur on a regular basis throughout a project as circumstances change, new issues arise and old issues fall away. The author would suggest that regular risk reviews is probably one of the strongest tools that a team can utilize to minimize or eliminate problems.

6. UNREALISTIC EXPECTATIONS. There will be times when the project team is doomed to failure before the project begins (and they don’t even realize it). Most projects strive to meet project goals and requirements. However, it is the unknown requirements (expectations) that are harder to pin down. For example, a client may desire delivery in a time-frame that is not possible. Or, the project sponsor has a pre-determined budget with which you



must comply (even if it is impossible). Other expectations will be product features that the client expects, but has not communicated to the project leader. Key to preventing this type of scenario is doing adequate “due diligence” up front during the project requirements phase. It is necessary that the client’s hidden agendas, expectations and unknown requirements become known. Alternatively, it is necessary that unrealistic deadlines and budgets be strenuously resisted at the outset.

When taking over a project, it is necessary that the project leader develop a new project plan (covering the nine key areas). It is also necessary to obtain client and sponsor buy-in by having them sign-off on the new plan. This puts them on notice that a new roadmap will be followed with a new budget and schedule. Most likely, the project was already off budget and schedule; so it would be unrealistic to expect you to finish the project within the original targets. This is not saying it is impossible, but unlikely. The project leader will need to do a very quick and in-depth evaluation to determine what is realistically feasible. However, it is important to have the sponsor or client accept the new plan.

DEALING WITH PROBLEM ESCALATION AND THE MEDIA. Hopefully, you will never be subjected to dealing with the media. In this age of technology, more people are turning to Bloggers to get “the real news” and information not carried by the mainstream media. Bloggers can be very hurtful to both organizations and people. One way to mitigate blogging is to develop your own company blog site to quickly put out news flashes and counter what other bloggers are saying. This gives you the advantage of posting information first.

In dealing with the traditional media, the key points include: have only one, credible spokesperson. Do not outright lie; the truth always comes out sooner or later. If the answers to questions are not known, this should be communicated along with the efforts being expended to find answers.

If we can escalate project problems to the right executives in the early stages, hopefully, the problems can be minimized long before any open publicity. It is appropriate to note that most company projects will not gather media attention unless there is public money attached (e.g. Big Dig) or public safety may be compromised (a nuclear emergency).

YOUR RESPONSE TO A CRISES OR PROJECT RESCUE SITUATION. Should you find yourself in a disaster situation, here are things to address:

1. Use risk management techniques to prepare for problems
2. Surround yourself with good people you can trust and who exhibit good judgment
3. Hold people accountable
4. Do not try to manage an emergency by long distance—get to the source of the problem by going there
5. Maintain relationships with stakeholders (a crises is no time to start looking for friends)
6. There should be only one person in charge
7. Set up a war-room
8. Avoid “groupthink” (i.e. pressure to conform to group decision making)
9. Create a sense of urgency
10. Be decisive

11. Exude credibility and integrity (caution: trust and credibility are hard to obtain. Once lost, they are gone forever).
12. Communicate clearly and effectively

Here is what to expect from a personal standpoint:

- You don't always get to pick which disaster you are assigned to
 - Disaster recovery is extremely stressful
 - You will not get much sleep until the project is stabilized
 - Multi-tasking is an understatement
 - You will have to provide continuous updates
 - You may have to deal with the media (they want answers "now")
 - You may have to replace (i.e. fire) some of the team
 - You may experience personnel turnover
 - You will be between a rock and a hard place
 - Be adaptable to changing conditions
-
- Finally, (and most importantly): A crisis is a test of leadership.

SUMMARY

There are many reasons why projects fail. However, there are many techniques that can help project teams recover from disaster. Keys to success include putting the right person in charge, performing rigorous risk reviews, developing a new project plan that covers the nine areas of PMBOK and constant communications.

It is important to recognize where a project stands in the project life cycle and what the client's definition of *successful* project recovery means. Does successful recovery mean the deliverable works? Or, that the original budget and schedule are adhered to without loss of performance? These are items that need to be clearly understood by all parties: what is the definition of success? Important note: There is never a guarantee that a project can be rescued; sometimes they have progressed too far.

While project recovery is a strong test of a Project Manager's leadership; the best will always rise to the occasion.