**PROJECT MANAGEMENT**

Project management is the application of processes, methods, knowledge, skills and experience to achieve the project objectives.

A project is a unique, transient endeavor, undertaken to achieve planned objectives, which could be defined in terms of outputs, outcomes or benefits. A project is usually deemed to be a success if it achieves the objectives according to their acceptance criteria, within an agreed timescale and budget.

The core components of project management are:

* defining the reason why a project is necessary;
* capturing project requirements, specifying quality of the deliverables, estimating resources and timescales;
* preparing a business case to justify the investment;
* securing corporate agreement and funding;
* developing and implementing a management plan for the project;
* leading and motivating the project delivery team;
* managing the risks, issues and changes on the project;
* monitoring progress against plan;
* managing the project budget;
* maintaining communications with stakeholders and the project organization;
* losing the project in a controlled fashion when appropriate.

**How to determine successful projects**

A project can only be successful if the success criteria were defined from the start.

**Checklist**

Usually there is a list of five or more things that most projects need to satisfy in order to be considered a success.  Here is a list of questions to aid in brainstorming critical success factors:

1. Was the project completed on time?
2. Did it stay within budget?
3. Are the stakeholders satisfied?
4. Did it or can it result in follow-up work?
5. Did it meet the proper performance or specification level?
6. Is the result acceptable to end user/owner?
7. Were the scope changes minimal and/or agreed upon?
8. Did it avoid unnecessary disturbance to the main work flow of the organization?
9. Did it avoid changing the corporate culture?
10. Did it advance the corporate goals of the organization?
11. Did it meet ethical, moral, or safety standards?
12. Were the applicable regulations followed?

**1. Desired outcomes and results listed in the project agreement are achieved.**

Both you and your client should somehow specify the overall results that the project is to achieve. Ideally, the results are described in terms such that you both could readily discern if the results were achieved or not. This outcome is often a measure as to whether the project was successful or not.

2. **The client’s problem is solved.**

More times than people realize, the originally specified project results have little to do with actually solving the most important problem in your client’s organization. That occurs because, as you and your client work together to examine and address their overall problem, you both realize that there is a more important problem to address. At that time, it is wise to change your project plans if both of you agree. Discuss the new results that you prefer and

how you will know whether or not they are achieved.

Still, later on, your client might believe that any agreed-to results that were achieved from the project were not as important as addressing any current, unsolved problems, so your client might still conclude that the project was not as successful as it should have been. Or, your client might believe that any achieved results were actually more useful than addressing the original problem that you discussed, so your client might still conclude that the project

was highly successful.

3. **The project is finished on time and within budget.**

Often, your client has limited resources in terms of money and time. Therefore, any project that did not require more time and money than expected might be considered successful.

That might be true, especially if your client has the philosophy that there are always problems to be solved in any organization and that the project was done as best as could be done.

4. **You and your client sustain a high-quality, working relationship.**

The quality of your relationship with your client is often directly associated with what the client perceives to be the quality of the project. In a highly collaborative approach to consulting, you want your relationship with your client to be as open, honest and trusting as possible. The nature of the relationship supports your client’s strong, ongoing commitment and participation in the project itself, which, in turn, helps to ensure that the project effectively addresses problems in their organization.

5. **Your client learns to address similar problems by themselves in the future.**

This outcome should be one of the major goals for any consultant. However, the exact nature of the problem may never arise in the client’s organization again, so it is often difficult to assess if the client has learned to solve that problem. Also, few consultants are willing to scope a project to the time required to assess whether a client really can solve the same type of problem in the future.

6. **Your client says that they would hire you again (if you are an external consultant).**

One of the most powerful outcomes is that you both are willing to work with each other again. One of the ethical considerations for any consultant is to avoid creating a dependency of the client on the consultant – where the client cannot capably participate in the organization without the ongoing services of the consultant. However, it is not uncommon that the client strongly believes that the quality of the relationship with the consultant is as important as the consultant’s expertise. The client might choose to use that consultant

wherever and whenever they can in the future.

7. **You get paid in full.**

However, you might feel good about the quality and progress of a project only to conclude, later on, if you have not been paid as promised, that the project was not successful.

Other standards to measure project success:

1. **Time frame**: Successful projects should take place as close as possible to the baseline plan. Any deviation or variation is unpleasant.
2. **Cost**: Successful projects should take place as close as possible to the planned budget.
3. **Communication**: Successful projects should take place with least conflict, and most collaboration and ease of communication. This could have subjective measures like project team rating of ease of communication.
4. **Scope**: Successful projects should take place with least unnecessary change, and most effective configuration management.
5. **Stakeholder**: This is subjective, but a successful project should leave the stakeholders satisfied and willing to do further projects.
6. **Quality**: Quality standards can be used to measure the quality of outcomes.
7. **Human Resources**: Successful projects should use least human resources and keep the team members involved and satisfied.
8. **Procurement**: Successful projects should enhance relationship with vendors and other members of the supply chain.
9. **Risk**: Successful projects should take place with minimum risk. We can measure risk by number of risky events that were identified and how each risk was dealt with.

**Causes of Project Failure**

1. Poorly defined project scope
2. Inadequate risk management
3. Failure to identify key assumptions
4. Project managers who lack experience and training
5. No use of formal methods and strategies
6. Lack of effective communication at all levels
7. Key staff leaving the project and/or company
8. Poor management of expectations
9. Ineffective leadership
10. Lack of detailed documentation
11. Failure to track requirements
12. Failure to track progress
13. Lack of detail in the project plans
14. Inaccurate time and effort estimates
15. Cultural differences in global projects

### 1. Poor Preparation

You need to have a clear picture of what you’re going to do, in advance – as much as possible. Otherwise, you may find yourself up stream without a paddle. You need to know what project success looks like at the beginning and don’t lose focus of it. Hence, if you don’t have a clear focus at the at the earliest stage of the process, you are making things harder on yourself. Have a meeting, even if it is lengthy, with stakeholders to discuss their expectations on cost, time and product quality. Know how you will execute your tasks in order to meet everyone’s expectations.

### 2. Inadequate Documentation and Tracking

This is the responsibility of the project manager. Tracking milestones is how you are going to know whether you are meeting expectations. Proper recording and monitoring let the project manager identify where more resources are needed to complete a project on time.

### 3. Bad Leadership

When we see this word, leader, we usually think, the project manager. However, the people at each management-level have a responsible to ensure that the project is successful. Management should not micromanage but provide support to ensure that the project manager can follow through with the expectations placed upon them.

### 4. Failure to Define Parameters and Enforce Them

When you’re a leader, it’s imperative that you’re able to work well with your team. If and when tasks or goals are not met to standard, there should be ramifications. Rank tasks by priority and assign them to the most proficient individual.

### 5. Inexperienced Project Managers

A project manager has a lot of responsibility. You need to assign people to management roles who have matching education and experience. In some cases, and perhaps more often than not, inexperienced managers are given projects. They may be very capable of managing projects, but the key is to keep them at a level where they can succeed. Otherwise, you will set them up for failure. On the other hand, there’s nothing wrong with a challenge, just don’t make it beyond their reach.

### 6. Inaccurate Cost Estimations

There may be times when your cost estimates are completely off. As you know, when resources run-out, the project stops. Prevent this by identifying the lack of resources early on.

### 7. Little Communication at Every Level of Management

Whether it’s between upper management, middle or with the team, it’s disastrous to have poor communication. Everyone should feel free to come forward to express their concern or give suggestions. When everyone is on the same page and there’s transparency, workflow is at an optimum level.

### 8. Culture or Ethical Misalignment

Company culture must be comprised of competence, pro-activeness, and professionalism. If it isn’t, team members will not be motivated to do their best. Basically, everyone involved must be invested in their part of the project to successfully complete it.

### 9. Competing Priorities

When there’re not enough resources, there’s bound to be competition between personnel resources and funding. Having good cost estimations at the start will eliminate this problem.

### 10. Disregarding Project Warning Signs

When a project is on the verge of failing, there will have always been warning signs. Taking action immediately can save the project. Otherwise, the whole endeavor goes down the drain.

**Causes of Troubled Projects**

The top five causes of troubled projects were:

1. Requirements: Unclear, lack of agreement, lack of priority, contradictory, ambiguous, imprecise.

2. Resources: Lack of resources, resource conflicts, turnover of key resources, poor planning.

3. Schedules: Too tight, unrealistic, overly optimistic.

4. Planning: Based on insufficient data, missing items, insufficient details, poor estimates.

5. Risks: Unidentified or assumed, not managed.

**Remember that you can always turn mistakes into learning opportunities**

The top five actions most often taken in a project recovery intervention are:

* Improving communication, stakeholder management (62%).
* Redefining the project—reducing the scope, re-justifying the project financially (60%).
* Adding and/or removing resources (58%).
* Resolving problematic technical issues (49%).
* Replacing the project manager or bringing in a consultant to manage recovery (36%).

#### **Avoiding Failure with Your Projects**

**1. Manage the goal.** In avoiding project trouble, the phrase “a stitch in time saves nine” has never been more correct. Manage scope (do not try to control it), document the decisions (never rely on an understanding), and give users what they need (rather than what they want).  Delivering to the original scope, schedule, and budget is far from a guarantee of a successful project.  It is essential to work with the customer and ensure the project delivers value.

**2. Educate the Customer: Nothing is free.** There are three parameters that control a project—scope, schedule, and budget. Trying to edict all three is the definition of a failure waiting to happen. Only two of these attributes may be set; the other is derived. Educate the customer (and maybe some corporate executive) on these constraints and how they work.

**3. Beware of Technology.** Technology makes almost anything more efficient. However, it is not the answer, it is only a tool.  Before applying it, have the right people and the proper processes in place; otherwise, trouble will come just as before—only faster and much more efficiently.

**4. Select the Correct Methodology.** “We have always done it that way” is the cry of someone without enough drive or imagination to build new, lean, and innovative processes.  Since project are temporary endeavors that create a unique product or service how can one process work for all projects? Match the methodology to the product or service being built.

**5. Negotiate the Solution.**

Negotiation is equal parts art and science. However, applying a process will help teach the art. The key to win-win negotiation is striving to build value for both sides of the negotiation. Achieve this by knowing both parties’ true needs and wants and never negotiating over just one item.  For instance, one strategy to stretch out a deadline with a client would be to add one more item to the negotiation that will not make a huge impact to delivery. For instance, adding an addition low cost product (maybe it has already been designed or built) to the negotiation may provide them enough value to soften the blow of the delay.

Project Assurance methodologies, such as Collaborative Intervention, are based on the following principles or best practices:

* **Identify the real issues**. At the leadership level, you need to develop an executive dialog that allows business and organizational issues to be identified and analyzed with clarity and without emotion. Continue this dialog throughout the implementation process. Remove organizational barriers both within the organization and with third-party vendors. All parties should be aligned with the common goal of project success.
* **Set realistic time frames.** Don’t rely on the existing schedule. Many organizations will set overly optimistic go-live dates in spite of the realities and limitations of the actual project. For example, the design phase extends ... but the time line doesn’t. You must monitor project progress throughout the implementation and start discussions regarding key project dates early in the project’s lifecycle to avoid downstream impacts.
* **Align the work streams.** You need to identify, align and continuously monitor work streams to ensure smooth progress throughout the organization. Understand dependencies between work streams during project plan development to ensure proper resource allocations and project time frames. Continue to monitor the interdependencies throughout the project.
* **Look beyond the indicators.** Contrary to popular opinion, green may actually be red. Realistic monitoring and analysis of progress of the implementation can show that even though all project management indicators are green, warning signs indicate endangered components. If indicators are only addressing past phases, but not addressing readiness for upcoming project tasks and activities, they are definitely trailing indicators and not trustworthy predictions of the future.
* **Manage the expectations.** Critical to maintaining control of the project, you need to manage the confluence of overly optimistic go-live dates against outside influences and interdependencies, such as available resources and realistic expectations. Set realistic expectations upfront and keep expectations current in the mind of project team members so that they don’t lose sight of the forest while maneuvering around a tree.
* **Seek objectivity.** Assessments conducted by an outside expert add both value to the project implementation and protection against the high cost of failure. Expertise delivers the know-how and the objective oversight needed to overcome organizational roadblocks. It also provides you with peace of mind. Assessments should be conducted by an executive project manager or software implementation expert who has managed enough projects successfully to know how to recognize subtle indicators, intervene to accommodate the situation, and adjust expectations accordingly.

**Here are five tips on how to regain control and rescue your failing project.**1) Acknowledge the failure of the project

Many project managers tend to ignore the red flags as they hope they sort themselves out. This kind of thinking is misplaced in project management, as even well-thought-out projects can have external factors derail them easily. While there is a place for optimism, good managers should also be honest with themselves (and others) about the state of a project. Their failure to do this will only doom the project and the project team, if it goes on for long enough.

### 2) Assess the project

Once you acknowledged the failure of the project, you should always assess the status of the project without bias. This can be determined by reviewing all the tasks and activities. By ignoring any previous estimates and concentrating on the project’s current status, you can determine exactly what progress (if any) has been made so far.  
  
The reassessment should include every element of the project, including time, budget, available resources, key skills and people. By evaluating the project this way, you will be assessing from a known baseline and will be better positioned to regain control.

### 3) Reaffirm the project aim

The reassessment phase will allow the project team to see exactly where the project went off course. It's now the project manager's role to remind team members of the original vision. By re-detailing the project requirements and deliverables, you can reignite some of the initial enthusiasm the project had at its inception. This reaffirmation will also help to remind people of the benefits of the completed project, both to the firm and everyone involved.  
  
4) Re-evaluate the remaining resources and create a new plan

At this point, we can agree that the initial project plans didn't work. Therefore, it's time to evaluate the resources you have left, and work out a new schedule. This re-evaluation will lead to a new plan and the development of a new (realistic) time frame to complete the revised project.  
  
By determining what's left of the initial budget, a manager can make the decision whether to reduce scope or reset the schedule. Do you need a larger team? Can you realistically afford better equipment? Is every member of the team aware of what their exact roles and responsibilities are? Have you identified new milestones or re-planned existing ones?  
  
Re-evaluation isn't simply adding on all the available resources; it must be done strategically to avoid repeating the previous failures.

### 5) Change leadership

At the basic level, the failure of most projects can be traced back to a project manager who simply wasn't up to the task. Good project managers have a firm handle on managing the constraints of time, scope, cost and quality. Generally speaking, failure to control at least two of these will definitely cause the project to fail.  
  
An organization’s focus, however, must be on successfully delivering the project for a client. If doing that involves changing the project manager, it should be done swiftly and shouldn't be taken personally.

Obstacles to project recovery are generally related to the original root causes of the trouble. Obstacles most often cited include:

* Getting stakeholders to accept the changes needed to bring the projects back on track—whether they are changes in scope, budget, resources, etc.
* Poor communication and stakeholder engagement; lack of clarity and trust.
* Conflicting priorities and politics.
* Finding enough qualified resources needed to complete the projects.
* Lack of a process or methodology to help bring the project back on track.

Other key success factors cited most often by firms include:

* Bringing in highly experienced program/project managers and giving them the clear authority to implement the changes needed.
* Adding additional, qualified resources.
* Increasing the budget.
* Open communication, including clarifying expectations and rebuilding commitment from key stakeholders.
* Properly re-planning the project.