



Project Management – Avoiding Project Failure

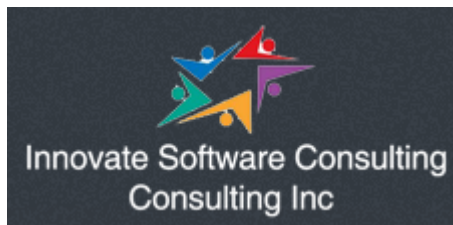
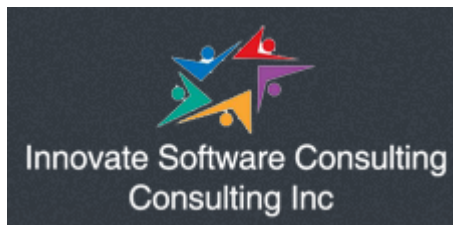


Table of Contents

<i>Introduction</i>	3
<i>Project</i>	4
<i>Project Management</i>	4
<i>Project Management Methodology</i>	5
<i>Defining Project Failure</i>	5
<i>Causes of Project Failure</i>	6
<i>Defining Project Success</i>	7
<i>Key Performance Indicators (KPIs) as measurement for Project Success</i>	7
<i>Project Success Factors and Project Success Criteria</i>	8
<i>Earned Value Management (EVM) as a method of measuring Project Success or Failure</i>	9
<i>Return on Investment (ROI) as a measurement of Project Success/Failure</i>	10
<i>Conclusion & Summary</i>	11



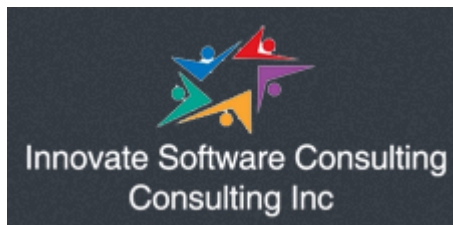
Introduction

Project management has become increasingly important in the development of any nation. Various organizations have used project management techniques as a means of bridging the gap between failure and success in implementation of projects. Despite this increasing awareness of project management by organization, projects still fail. Although projects are said to be important, its implementation can be an uphill task. Various researchers have discussed project management as a technique to help prevent against failure in projects. Others have established checklists to help prevent failure. Despite the increased project management awareness and these checklists, some projects still fail (Atkinson (1999)).

All projects are constrained by inherent risks; knowledge of these risks will play an important role in achieving success and avoiding failure. Usually projects consist of three stages consisting of the approval, execution and evaluation stages. If any of these stages is not managed properly it may result to the failure of the entire project.

Failure or Success in projects is a multi-dimensional issue and may be influenced by so many factors. Some projects may have failed in project management practices including cost overrun, scope creep, delay in schedule, and other projects may fail in procurement practices. Despite these failures in the following areas the project may still be perceived as successful by the end users.

Usually, projects are designed to meet stakeholder's objective. These objectives define the criteria for success of that project, and projects not satisfying these objectives are deemed to fail. Effective communication and clarity in the stakeholder's objective is vital to the project manager.



Project

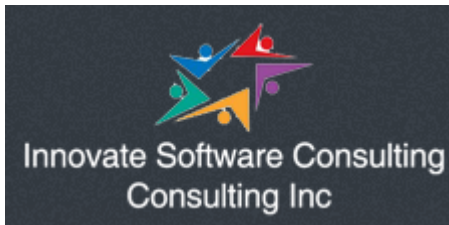
Gary & Larson (2008) defined project as “a complex, non-routine, one-time effort limited by time, budget and resource, and performance specifications designed to meet customer needs” (p. 5). This is in contrast to how an organization generally works on a permanent basis to produce their goods and services. For example the work of an organization may be to manufacture a vehicle on a continual basis, therefore the work is considered functional as the organization creates the same products or services over-and-over again and people hold their roles on a semi-permanent basis.

A project can be defined as having constraints (usually centered around time and resources, but also including all aspect of the process and the outcome); projects are processes that in many circumstances are core business for organization.

Project Management

Project management is a task derived from an organization that enables professional project managers to use their skills, tools and knowledge to plan, execute and control a unique project within a limited lifespan by meeting the specification requirements of the organization. Since the outcomes of the capital projects have strategic implications on the success and profitability of the business, the ability to deliver based on pre-determined objectives should be critical to the company's success.

And yet one-third of all the oil and gas projects exceed budget and time projections by more than 10 percent. Failure to deliver big projects on budget and on schedule is highly publicized and damage the companies profile with capital markets that predictability and strong returns. Continual use of traditional project management techniques will not alter this



trend. Companies that want to change and improve on their performance with critical capital projects will need to adopt new techniques.

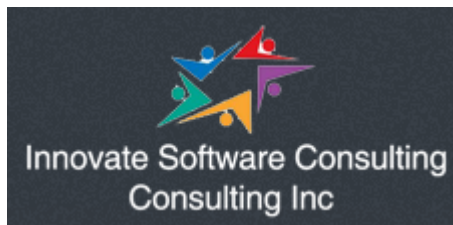
Munns & Bjeirmi (1996) also defined project management as a process used as a control to achieve the project objectives by utilizing the organizational structure and resources to manage a project with the application of tools and techniques, without disrupting the routine operation of the company.

Project Management Methodology

Generally, projects are split into three phases Initiation, implementation and closure. Every stage of a project has multiple checkpoints which must be met before the starting of the next stage. The degree to which a project will be managed depends on the size of the project. For a complex project in a large organization that involves a number of people, resources, time and money, a more structural approach is needed, and there will be more steps built into each stage of the project to ensure that the project delivers the anticipated end result. For a simple project in a small organization, agreed milestones, a few checklists and someone to co-ordinate the project may be all that is required.

Defining Project Failure

Failure is define as unsuccessful project that fails to perform a duty or an expected action, non-occurrence or non-performance. Whereas success can be defined as the achievement of something desired, planned or attempted (Cambridge Dictionary, 2007). It is also said that success is an event that accomplishes its intended purpose (dictionary.com, 2007). Anything short of that is failure. Project failure is an unpleasant event that cost large amount of money to the organization.

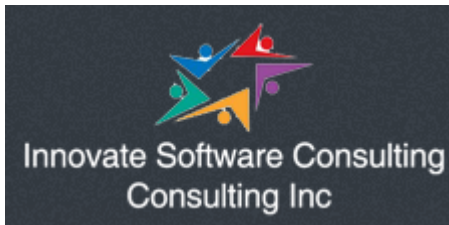


Causes of Project Failure

Research carried out by Pinto & Mantel (1990) on the causes of project failure and reveals a good explanation that encompasses both internal efficiency and external effectiveness. They state that project failure is a vague concept, which has evoked much as to its definition, as the case with the definition of project success.

A project is considered a failure “whenever a project does not meet the expectations of the stakeholders”. This has lots of impact to both the organization and all stakeholders to the project. They include: cost and time overruns, quality degradation, frustration and stress, sometimes resulting to people quitting, low corporate market value, low public opinion and negative media campaigns. The total effect can be very costly to the organization; at times even force the company into closure. Bienkoski (1989) identified ten factors that can lead to project failure and they are:

- Lack of change management - happens when there is no method to handle or recognize changes.
- Communication - causes delay or even failure since team members do not have the information they needed, issues or changes do not get escalated, project reporting is sluggish
- Inadequate resources - Task take longer than expected to complete, deadlines and milestones get missed, and project completion date comes into jeopardy, one end of working more than necessary (double shift) to get the work done
- No one is in control, not even the project manager, who is assigned to the project but not given the free hand to manage the project. This is most problem encounters in matrix organization
- Project lacks structure caused by things such as critical tasks being under rated
- Inaccurate estimates. A top- down plan causes constraints on the prediction of the cost of the project
- Poor risk management - The project initiation stage is not properly planned
- Insufficient non-resources are not allocated to the project; for instance, it is not possible for a project to succeed if the right resources are made available for that project
- Incompetent project management skill
- Project changes from its original objective and goals. This can occur due to additional requirement from the client



Defining Project Success

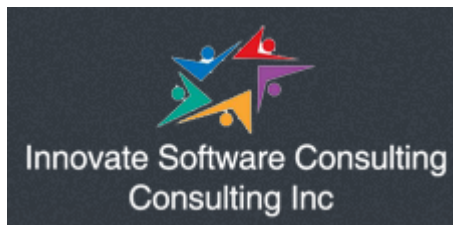
Lewis (2005) states that project success can be defined as meeting the required expectation of the stakeholders and achieving its intended purpose. This can be attained by understanding what the end result would be, and then stating the deliverables of the project. Shenhar et al. (2001) state the opposite: that project success is commonly judged by time and budget goals criteria, whereas in some cases this does not apply to some projects.

Project success can only be defined if executives are able to consider the contribution of benefits and if the project is able to achieve these measures in relation to resources, competencies and complexity within the project parameters.

Key Performance Indicators (KPIs) as measurement for Project Success

Dvir et al. (2003) state that the ranking of success is a one-sided judgment, as the definition of success is difficult to define, because it has different meanings for different people; thus, the criteria of success should reflect the diverse interest and view that lead to a multi-dimensional and multi-criteria approach.

A project manager's main responsibility is to make sure that he delivers change only where is necessary, otherwise he is doomed to find strong resistance from almost all organizational departments (Kerzner, 2001, p. 158) which ultimately could lead to project failure. A more structured approach to project success is grouping the criteria into categories. Wideman (1996), describes four groups, all of them time dependent: "internal project objectives (efficiency during the project), benefit to customer (effectiveness in the short term), direct contribution (in the medium term) and future opportunity (in the long term)" (pp. 3-4).



The characterization of 'time dependent' is based on the fact that success varies with time.

Looking at the future benefits of the organization can be really difficult, because in some cases they don't even know what they want, yet it is vital to know what the project is trying to achieve after completion time so that success criteria are clearly defined in the early stages.

The process of developing KPIs involves the consideration of the following factors:

- KPIs are general indicators of performance that focus on critical aspects of output or outcomes
- Only a limited, management number of KPIs is maintainable for regular use. Having too many (complex) KPIs can be time-and resource-consuming
- The systematic use of KPIs is essential as the value of KPIs is almost completely derived from their consistent use over a number of projects
- Data collection must be made as simple as possible.
- A large sample size is required to reduce the impact of project specific variables. Therefore, KPIs should be designed to use on every building project.
- For performance measurement to be effective, the measures must be acceptable, understood and owned across the organization
- KPIs will need to evolve and it is likely that a set of KPIs will be subject to change and refinement
- Graphic delays of KPIs need to be simple in design, easy to update and accessible.

Following have been identified as the measurement of project success: Cost, time, quality, commercial profitable/value, environmental performance, user expectation/satisfaction, health and safety and participants' satisfaction. This will help in explaining what the project success might mean to different stakeholders.

Project Success Factors and Project Success Criteria

Muller & Turner (2007) defined the two components of project success in relation to the use of project management as follows:

- Project success factors are the elements of a project that can be influenced to increase the like hood of success; these are independent variable that makes success more likely.



- Project success criteria are the measures by which judge the successful outcome of a project; these are dependent variable which measure project success.

One of the vaguest concepts of project management is project success. Since each individual or group of people who are involved in a project have different needs and expectations, it is very unsurprising that they interpret project success in their own way of understanding.

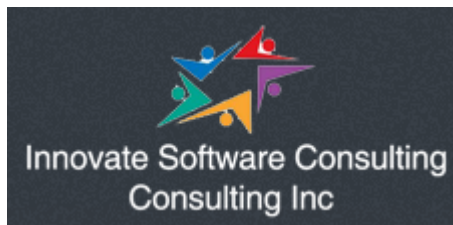
"In the same way that quality requires both conformance to the specifications and fitness for use, project success requires a combination of product success (service, result, or outcome) and project management success" (Duncan, 2004).

It is clear now that critical factors can lead to a series of events which ultimately meet the overall success criteria of the project, so they should not be used as synonymous terms. Project success can be seen from two different perceptives, the micro and macro viewpoint. This can help in better understanding of what project success means to different people.

Earned Value Management (EVM) as a method of measuring Project Success or Failure

Earned value (EV) is a management tool for tracking and communicating a project status. Earned value management (EVM) will let you know the actual state of the project by comparing the current project performance against plan. Knowing the project's performance will help in taking action needed to ensure that the project is completed on time and within budget.

Earned value management (EVM) is defined as, "A methodology used to measure and communicate the real physical progress of a project taking into account the work completed, time taken and the cost incurred to complete the work", whereas field operative defines it as, "the physical work accomplished plus the authorized budget for this work. The

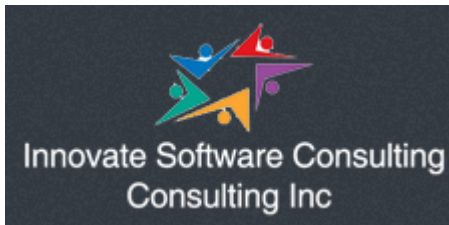


sum of the approved cost estimates, (which may include overhead allocation) for activities, (or portions of activities), completed during a given period, usually project-to-date. Therefore earned value differs from the usual budget verses actual cost incurred model, in that it requires the cost of work in progress to be quantified. The project manager needs to agree the project scope, create a work breakdown structure (WBS) and assign budget to each work package, the lowest level of the WBS, then create a schedule showing the calendar time it will take to complete the work. The overall plan is baseline (plan value) and used to measure performance throughout the project.

As each work package is completed (earned), it is compared with planned value showing the work achieved against plan. A variance to plan is recorded as a time or schedule deviation. It is necessary to obtain the actual the actual costs incurred for the project from the organization's accounting system. The cost is compared with the earned value to show an overrun or under run situation. Earned value provides the project manager with an objective way of measuring performance and predicting future outcomes. This can also help in reporting progress with greater confidence and highlight any overrun earlier. It also enables the management team to make cost and time allocation decisions

Return on Investment (ROI) as a measurement of Project Success/Failure

Projects are not approved and funded on the basis of their estimated costs and/ or execution plans. Projects are only approved because of the value it creates or benefit(s) derived from it is more than the cost of the investment. Also, project sponsors are measured by and rewarded based upon the successful delivering of the promised benefits for which the project was initiated.



Therefore in the word of financial analysis, return on investment (ROI) is a tool that can be use in measuring or comparing capital expenditures, such as investment in capital and mega projects. These can be large projects that have a pre-determined useful life against which projected returns can be easily compared. Some large scale projects can effectively be quantified in terms of ROI, more often user experience improvements are an ongoing and iterative process.

Conclusion & Summary

It is critical for a project manager to understand what the stakeholders consider as a successful project. In order to avoid any surprises at the end of the project, there is an urgent need to identify the different perspectives of what success means before the project goes live. It is also vital to remember that success criteria are the standards by which a project will be judged, while success factors are the facts that shape the result of projects.

Success criteria have changed considerably through time and moved from the classic iron triangle's view of time, cost and quality to a broader framework which includes benefits for the organization and user satisfaction.

A common factor is senior management support for the project and it is recognized as one of the most important factors of all. In conclusion, early definition of success criteria can ensure an undisputed view of how the project will be judged and early detection of success factors will guarantee a safe path to deliver success.