

11 Evaluation

Regardless of the size or complexity of the project, a measurement of the project's success against well-defined criteria is necessary. Establishing criteria helps with the measurements taken during the project and after the project has finished. These measurements include determining whether key performance milestones are being met, how well managed the project is, and whether the specified project outputs have been delivered and the outcomes realised.

This section of the *Tasmanian Government Project Management Guidelines* includes:

- Project performance measures, including:
 - Examples of performance measurements that may be used to evaluate a project's performance
 - The importance of establishing baseline measurements
 - The need to determine if a project is under control
 - A definition of a successful project
 - A number of ways in which the success of a project can be assessed
- The crucial role of the Steering Committee, particularly in achieving success
- Minimising project failure

“Evaluating the performance of a project is important because:

- What gets measured gets done
- If you don't measure results, you can't tell success from failure
- If you can't see success, you can't reward it
- If you can't reward success, you're probably rewarding failure
- If you can't see success, you can't learn from it
- If you can't recognise failure, you can't correct it
- If you can demonstrate results, you can win public support”⁹

11.1 Project Performance Measures

Project management involves three stages of measurement:

- Pre-project measurements generate the baseline metrics

(Refer to *Section 11.1.1: Establishing baseline metrics*)

⁹ Orr, Ken (2004) *Pushing the envelope: managing very large projects*. Arlington, MA: Cutter Consortium, 2004

- Measurements taken during the project reveal whether key performance milestones are being met

(Refer to *Section 11.1.2: Determining if a project is in control*)

- Post-project measurements reveal whether the completed project has delivered the specified project outputs and that Target Outcomes are realised

(Refer to *Section 11.1.3: Assessing if a project has been successful*)

These measurement stages are described in detail in the following sections. As a general rule, evaluation of project performance can occur by way of:

- An ongoing basis throughout the project by the Project Manager, Project Team members and the Steering Committee formally and informally assessing the project's performance
- Independent external assessment of project performance by suitably qualified personnel
- A review undertaken at the end of a phase to enable the Steering Committee to determine if the project should proceed to the next phase
- An external one-off review to determine if the project should continue - this type of review is normally commissioned by the Steering Committee if it has concerns whether the project should be aborted
- Reviews conducted at the end and/or after the project is completed

11.1.1 Establishing baseline metrics

It is important to establish pre-project measurements (metrics) for the criteria that will be used to evaluate a project. These metrics should include evaluating how successfully the project was executed, and to what degree the project achieved the level of planned change.

The baseline metrics should be documented in the *Project Business Plan*, and should include:

- Project management methodology to be used during the project
- Output development methodology to be used during the project
- Project objectives
- Target Outcomes and planned performance measures, including baseline information*
- Project outputs and their defined fitness-for-purpose (level of quality)
- Milestones based on the planned schedule of work
- Project budget and planned expenditure

*A key measure of the success of a project is the degree to which the Target Outcomes are realised. As far as possible, the planned Target Outcomes should be documented and stated in measurable terms so that their realisation can be evaluated effectively at a later date. For example, if a project is justified in terms of improved efficiency, the precise areas in which these efficiencies will be obtained should be documented. For

instance, a project may improve the efficiency of a process by cutting the amount of time taken to finish particular tasks or could avoid certain tasks. If a project is justified in terms of cost-savings, precise areas where these savings will be achieved should be documented so their realisation can be evaluated at a later date. Quantifiable measures include avoided cost, increased revenue and greater or improved efficiency.

(Refer to *Section 2: Planning and Scoping*)

11.1.2 Determining if a project is in control

Project control is the process whereby evaluation is made to determine the degree to which the *Project Business Plan* is being met. The focus is on:

- Actual application of project management methodology compared to the planned approach
- Actual application of the output development methodology compared to the planned approach
- Achievement of project milestones against planned dates
- Quality of the outputs produced against planned fitness-for-purpose criteria
- Actual project costs within those budgeted
- Resources being allocated as planned

Evaluation can occur by way of:

- Ongoing basis throughout the project by the Project Manager, Project Team members and the Project Sponsor/Steering Committee formally and informally assessing the project's performance
- Individual external assessment of project performance by consultants
- Review undertaken at the end of a phase to enable the Steering Committee to determine if the project should proceed to the next phase
- External one-off review to determine if the project should continue - this type of review is normally commissioned by the Steering Committee if it has concerns whether the project should be aborted

For this reason, a Project Manager's *Status Report* to the Steering Committee must always include reporting against the agreed performance measures for the project, to enable them to monitor effectively the project's management and progress. Control can be demonstrated by showing the existence of a *Project Business Plan*, *Project Execution Plan* or *Outcome/Benefits Realisation Plan*, and the satisfactory achievement of results against these plans.

Despite the best of intentions, it is inevitable there will be changes needed during the life of a project. Sometimes there will be valid reasons for including changes. On other occasions, it may be appropriate to defer a change until after the completion of the project. There are also changes that originate from outside the Agency/organisation that will affect the project.

Occasionally, in urgent or emergency situations, it may be necessary to implement project changes before undergoing the necessary approval processes and updating the project documentation. Until the changes have been approved and reflected in the project documentation, the project is, by definition, out of control.

11.1.3 Assessing if a project has been successful

A project can be considered successful if:

- Project objectives have been met
- Target outcomes are realised
- Project outputs are delivered on time and to the agreed quality
- Costs are within those budgeted
- Current requirements of all stakeholders are met

This type of evaluation is usually conducted at the end of the project. The *Project Business Plan* should detail the types of review, when they should take place, who is responsible for arranging and managing the reviews, who will undertake the reviews and who is responsible for accepting the reports produced by the process. Ideally, an independent body conducts these types of review and the cost for the reviews should be included in the project budget.

(Refer to the *Project Management Template: Project Review and Evaluation*, or for small projects the *Project Management Template: Project Review and Closure*)

A review conducted at the end of a project is a useful way of identifying issues and concerns that may be relevant to other projects. Often projects that have radically gone wrong are audited, but many useful lessons can be gained from reviewing any project. Depending on the needs or requirements of the Steering Committee and Project Sponsor, one or more of the following may be assessed:

- Performance against objectives, Target Outcomes and outputs
- Performance against budget and schedule
- Quality or fitness-for-purpose of the outputs
- Effectiveness of the methodologies applied
- Lessons learnt by Key Stakeholders
- Any other criteria, such as critical success factors, as determined by the Steering Committee, Project Sponsor or other funding or governing body

These review methods can be grouped into five categories. The Steering Committee and/or Project Sponsor may choose to evaluate either all categories or selected categories:

- Project performance review
- Project output quality review
- Project outcome realisation review
- Project management methodology review
- Project output development methodology review

Project Performance Review

This type of review can include evaluating the performance of the project against the baseline measures for:

- Achievement of objectives
- Realisation of Target Outcomes
- Number of outputs delivered and accepted
- Budget - actual expenditure versus project budget
- Schedule - actual achievement of milestones versus planned

The only qualitative measure in this review should be the achievement of the project objectives. Other criteria, determined by the Steering Committee, Project Sponsor or other funding or governing body, could be included in this type of review.

Project Output Quality Review

During the project or at the end of the project, an evaluation of the quality or fitness-for-purpose of the outputs is needed to assess stakeholder satisfaction with the outputs delivered by the project. The fitness-for-purpose criteria developed before the start of the project should be used as a baseline when conducting this type of review.

Despite the Project Team applying a well-accepted methodology in developing the outputs and developing technically 'correct' outputs, it is important to assess if the stakeholders are satisfied with the outputs that were produced. As such, this type of review often is done better from an objective point of view, and conducted by someone external to the organisation. The results can be fed into a future continuous improvement project.

Project Outcome Realisation Review

Some time after the project outputs have been delivered, an evaluation of the project is needed to assess if the desired outcomes were attained. The Target Outcome metrics, developed before the start of the project, should be used as a baseline when conducting this type of review. The Target Outcomes should be quantitative. Other outcomes/benefits can be evaluated, but would be qualitative.

The timing of this review will depend on the target dates for achievement of the Target Outcomes. The *Outcome/Benefits Realisation Plan* should include a plan for conducting this review.

Project Management Methodology Review

Prior to the Project Team and Steering Committee being disbanded, an evaluation of the project to assess the effectiveness and appropriateness of the project management methodology applied is useful. This type of review captures valuable learnings for future projects. It is a review of the processes adopted for the project and not a review of individual performance.

When listing project management problems as part of the review, a distinction should be drawn between defects because project management processes were carried out improperly and defects because the project management process itself was flawed.

Project Output Development Methodology Review

Prior to the Project Team and Steering Committee being disbanded, an evaluation of the project to assess the effectiveness and appropriateness of the development methodology

used to develop the project outputs is useful. This type of review captures valuable learnings for similar projects conducted in the future. Again, it is a review of the processes adopted for the project and not a review of individual performance.

11.2 The Crucial Role of the Project Sponsor/Steering Committee

The Project Sponsor and Steering Committee members should realise that, ultimately, the success of the project is their responsibility. Only they can redefine the scope, or decide to close the project if it becomes clear the project objectives are unattainable. They should remember that the Project Manager and Team may be too involved with the project to give adequate advice all the time on this issue, and they should keep a close eye on the project's progress in meeting the success criteria defined above. They should also recognise that they have an important role in defining success measures, and these measures may be assessable throughout the course of the project, not just at the end.

11.3 Minimising Project Failure

There are many reasons why projects fail. Gantthead lists the following top 10 reasons why projects fail:

1. "Inadequately trained and/or inexperienced project managers
2. Failure to set and manage expectations
3. Poor leadership at any and all levels
4. Failure to adequately identify, document and track requirements
5. Poor plans and planning processes
6. Poor effort estimation
7. Cultural and ethical misalignment
8. Misalignment between the Project Team and the business or other organization it serves
9. Inadequate or misused methods
10. Inadequate communication, including progress tracking and reporting"¹⁰

All of these causes would be substantially addressed by the application of project management tools and techniques. Projects that are not considered successful can be quite demoralising for those involved. However, they are generally useful (if expensive) learning exercises. All large-sized organisations have some examples of projects that can be considered failures.

(Refer to the *Project Management Fact Sheet: Why Project Management?*)

Gartner has observed that using a project office is 'best practice' for delivering successful projects. The project office acts as a competency centre for project management focusing on implementation of a standard methodology, resource

¹⁰ www.gantthead.com/article.cfm?ID=187449

evaluation, project planning, consistent project management practices, and project review and analysis.¹¹

Project Services, Inter Agency Policy and Projects Unit, Department of Premier and Cabinet, is an example of such a centre in the Tasmanian State Government.

¹¹ Light, M & Berg, T (2002) 'The Project Office: Teams, Processes and Tools'. *Gartner [ID No. R-11-1530]*: pgs 3, 6-7