

# Information and Communications Technology Industry Association of the Northern Territory

Submission to the

**Legislative Assembly of Northern Territory** 

**Public Accounts Committee** 

**Inquiry into Management of ICT Projects** 

## **Submission Authorisation**

This submission has been prepared on behalf of the Information and Communications Technology Industry Association of the Northern Territory.

Submission authorised by	
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# **Executive Summary**

In planning for this submission, the Information and Communications Technology Industry Association of the Northern Territory (ICTIA NT) gathered available facts on the three projects that are currently subject to the Public Accounts Committee inquiry. In doing so, the association identified that there is very little substantiated information available to the public. Most is hearsay. As a consequence, this submission could not be prepared based upon the facts of the specific projects so had to take a more generalist approach and discuss issues that have been frequently identified with Northern Territory Government (NTG) projects as observed by ICTIA NT members.

The ICTIA NT has collectively provided input to projects at all levels and across most agencies. In addition, members have planned for many more projects as a part of the procurement process. These two viewpoints, as contributors and observers, have provided member organisations with the ability to apply their experience in IT projects to identify where and how projects could be improved.

It is frustrating to many of the ICT professionals that their observations often do not have the opportunity to be considered. This opportunity to provide comment to the Public Accounts Committee is most appreciated; the ICTIA NT has attempted to summarise key areas where projects within the NTG can be improved within this submission. The association hopes that this effort can contribute to the improvement in process for future projects and make some difference to the difficulties faced with the subject three projects.

The ICTIA NT has identified six key areas where Northern Territory Government (NTG) projects have scope for improvement. Those areas, and recommendations for improvement, are summarised below. An assessment has been provided on the priority of each recommendation from an impact to the project perspective. Each recommendation has also been provided with an analysis of how the ICTIA NT member organisations can contribute to the improvements.

Key Area	Recommendation	Priority	ICTIA Members Can	
Project Manag	ement			
	Always assign a project manager to a project	High	Supply	
	Resource the project for effective project management	High	Supply	
	Support the project manager	Medium	Advise	
	Regularly review the management of the project	High	Supply	
Governance				
	Establish an effective governance structure	High	Advise	
	Select appropriately for governance roles	High	Supply	
	Instil active governance practices	High	Supply	
	Make informed decisions	High	Supply	
Business Process Reengineering				
	Conduct business process analysis early	High	Supply	

Key Area	Recommendation	Priority	ICTIA Members Can
	Ensure that business needs drive technical change	High	Supply
	Do nothing is Okay	Medium	Advise
Solution Select	ion		
	Empower the evaluation team and decision maker	High	Advise
	Plan the evaluation	High	Advise
	Execute the evaluation plan	High	Supply
Project Resour	cing	<u> </u>	
	Select the right people for the project team	High	Supply
	Support the project team	High	Supply
	Celebrate achievements	Medium	Supply
Methodology			
	Select an appropriate methodology	High	Advise
	Ensure stakeholder buy-in to the methodology	High	Supply
	Apply the methodology to the project	High	Supply
	Review the application of the methodology	Medium	Advise

The main body of this submission nominates the impact of cost, time, meeting user needs and project objectives for each of the above key areas, as requested in the call for submissions.

# **Project Management**

Impact Assessment					
Factor Cost Time User Needs Project Objectives					
Impact	High	High	High	High	

## **Opinions**

There is a common belief that anyone who can manage can perform project management. This often results in inappropriate people assigned to manage projects, or the role of project management assigned to the manager of the business unit receiving the product. Poor choice of project manager can almost certainly guarantee ineffective management and potential project failure.

#### **Arguments**

Project management is a specialist stream of management that requires the right type of person with the right competencies to perform it effectively. Some of the differences that make project management a specialty management category include:

- The temporary nature of a project demands effective competency in team formation and personnel management to ensure that the team rapidly becomes, and then remains, effective. Projects often change team structure as they progress, compounding this management aspect.
- A project manager will normally have multiple reports within the business and project streams. These reports are often groups rather than individuals, for example a Steering Committee.
- Project teams are usually drawn from a range of business areas, with the team members
  retaining their business lines of reporting. Project managers often do not have direct
  authority over the people in their team so have to use alternative methods to get the team
  to deliver to the project priorities.
- The project manager needs to be the source of authority on the application of the methodology to ensure that it is effectively applied.
- The project manager needs to understand in depth the roles within the project team and have a sound understanding of the project's target business area.
- The project manager needs exceptional written and verbal communications competencies to ensure that all stakeholders are kept informed in a language style that they can readily understand.
- Because every project is different, the project manager must be able to adapt their management tools and techniques to suit each project.

If not resourced effectively, a project manager can be distracted on relatively menial project management tasks in support of the methodology and processes. This will usually be to the detriment of their capability to apply optimum management to the project. It is critical that the project be appropriately resourced for the task of project management. For larger projects, this will

usually require the support of a project office or may even demand the establishment of a dedicated project office.

A project manager needs to be competent at project management and in the application of the selected methodology. This will usually be obtained by a combination of formal training and practical experience. Engaging an under-trained or under-practised project manager will directly affect the ability of the project team to deliver. Ideally, the organisation should provide some level of mentoring or support to the project manager from another, preferably more experienced, project manager to minimise the effects of the factors detailed above. This will not only develop the project manager but will optimise the effectiveness of the entire project team.

An effective review process embedded into the project processes will assist in ensuring that the project manager is exercising the management of the project appropriately. It is always better to conduct regular review throughout the project than to get to a point of no return and then commence "post mortems".

- Always assign a competent and suitable project manager to manage a project. Acknowledge
  that the management needs of a project are specialised and particular to that project.
  Ensure that the project manager selected is competent to manage the project. That includes
  competence in the selected methodology as they will be the person who ensures that the
  methodology is applied effectively.
- 2. Ensure that the project is resourced to conduct effective project management.
  - a. Analyse the project. Analyse the project management needs of the project and assign project management effort accordingly. That might be a portion of a project manager up to a team of project managers.
  - b. Assess the competencies. Determine the competencies that will be required to manage the project, including the selected methodology. Compare prospective project managers against that assessment in order to ensure the best possible fit.
  - c. Consider all of the resource needs. Do not expect a project manager to do every aspect of project management; select the best role for the task. Consider either supporting the project from a central project office or resourcing the project to deliver the full project office function, not just project management.
- 3. Support the project manager.
  - a. Management confidence. If the selection process has been correctly applied, senior management will have full confidence in the appointed project manager. They need to ensure that this confidence is communicated to the project team and the target business units.
  - b. Authority. If the project manager needs authority to task people or allocate resources, ensure that they are provided with that authority. If this is not practical, ensure that processes are in place so that the people who hold that authority are able to supply as required to the project manager.
  - c. Mentor. Wherever possible, provide some form of mentoring or guidance to the project manager. With every project being different, there will be unique challenges that will often benefit from the experience of others to help formulate a resolution.

- 4. Regularly review the project management and products.
  - a. Identify and solve the little problems. Regular and effective reviews will often highlight small problems. When highlighted, it is much easier and less costly to fix the problem while it is still small rather than leave it until it becomes a big problem.
  - b. Two heads. Reviews in a trusted environment will often improve the quality of the product. Two people looking at the same thing will usually look from slightly different directions; working through the outcomes from the different approaches will often improve the overall outcome. This becomes a habitual practice when an effective review process is embedded in the project.

# **Project Governance**

Impact Assessment					
Factor Cost Time User Needs Project Objectives					
Impact	High	High	High	High	

## **Opinions**

Project governance is more than nominating some members of senior management to one or more committees. It is a commitment to the successful outcomes of the project and requires consistent effort by all to ensure that the governance is effectively applied. Too often there is a detachment between the project and any governance structures, seemingly as if they have been put in place because they should, not because the people charged with governance responsibility want to exercise that.

It is the experience of the ICTIA NT members that project governance is usually established in principle, but rarely effectively applied to NTG projects.

## **Arguments**

The structure selected for governance of a project must be designed for that project. It must have clear objectives, especially where there are tiered levels defined to avoid duplication or gaps.

Governance is an arm's length form of monitoring and review. People assigned to governance roles must be carefully selected to ensure that they have or can exercise the following attributes:

- Commitment. Every person assigned to a governance role must be committed to that role.
   They must understand why they are there, what is expected of them, and have the commitment to maintain close contact with the project team and their represented part of the organisation to fulfil their duties.
- Understand the project in terms of its part in the business. It is not sufficient to understand the project from an internal objectives viewpoint. Governance roles must be able to contextualise the project deliverables and their impact on the wider business.
- Subject Matter Knowledge. Whilst governance roles do not need to have detailed subject
  matter expertise of either the project processes or the final product, they must have
  sufficient knowledge of the subject matter that gave rise to their appointment to understand
  the project's direction, progress and consequences of the outcomes.
- Authority to exercise their role. Governance representatives will normally be drawn from senior management roles within the organisation, both business and supplier. This usually means that they have the authority to perform the role but it should not be assumed.

Governance structures must be designed so that they can exercise their role with balance. There is little value in setting up a governance group that only represents the business and not the supplier; that group would be incapable of making balanced decisions.

The other aspect where balance needs to be applied for governance bodies is the extent of involvement in the project. There is the need to retain the arm's length principle but that should not

mean only participating in a recurring meeting. Governance roles should be prepared to closely investigate selected aspects of a project, especially if they start to receive indicators of issues or risks materialising. Where the arm's length applies is that they do not involve themselves directly in any remediation, they identify the need and set processes in place so that they can be kept aware of the status.

A governance body has not done its job if the members just turn up to a monthly meeting, get presented with a folder of reports, graphs and diagrams, view presentations from project staff and ask some leading questions. The meeting should be a medium for briefing on progress, but it also needs to be the medium for:

- Briefing others on the actions taken on items from the last meeting.
- Sharing the status of any ongoing remediation or investigative work being undertaken by the members.
- Making informed decisions on any changes requested.
- Ensuring that the project's continuation is justified against real benefits metrics.
- Validating the products and their fit for purpose.
- Forecasting future and wider impacts of the project and developing plans to deal with those.

There are specific responsibilities expected of certain governance bodies for each of the project management methodologies. All members of any governance body need to understand the project management methodology applied to the project and any specific responsibilities for governance that are associated with that methodology. A specific area where the governance bodies need to exercise their executive authority is where approval is needed for the project to proceed. This has different names and different review processes for different methodologies, but might be known as Gates, Stages or Phases. It is critical that the appropriate governance body either confirm that the project remains aligned with the business case and is delivering to expectations at each of those review processes, or has the authority and is prepared to exercise it to stop the project.

Governance bodies need to look broader than just the project team. They have a responsibility to ensure that the funds allocated for the project are being spent appropriately. This extends to the overwatch of management of any contracts that are in place for the project, be those for services or supplies.

Whilst the best efforts might be made to appoint suitable people to the governance roles, there may be practical limitations to who is available and the skills that they may have. When this does happen, it is important during the selection and appointment process to highlight those gaps and identify any ways to address them. For gaps in supplier governance, the project executives should consider sourcing local ICT industry expertise to advise and support the governance roles.

- Establish an effective governance structure. The governance structure must be tailored for the project. It is quite reasonable to look at governance structures that are in place for similar projects, but these should be compared against the project needs and adjusted for best fit.
- 2. Select appropriately for governance roles.

- a. The right people. People cannot be expected to govern effectively if they do not have the competencies required to do so, the commitment to the project and an understanding of what is expected of them.
- b. Fill the gaps. If the best available people lack some competencies, decide a plan to address those gaps. This might include sourcing external expertise.
- c. Balance. Ensure that there is balanced representation to enable responsible and inclusive decision making.

#### 3. Instil active governance practices.

- a. Culture. Develop a culture where those in governance appointments actively fulfil the requirements of the role and take ownership for it. That extends beyond the strict project boundaries and includes the enabling aspects such as contracts management.
- b. Continuous justification. Continually measure the project against the expected outcomes and take early action where deviation is likely. Be prepared and have the authority to stop the project if necessary.
- c. Quality. Monitor quality and be prepared to take action if the quality is above or below expectation. Understand the concept of "good enough" and monitor to ensure that the project does not over-achieve and exceed costs.

#### 4. Make informed decisions.

- a. Know the methodology and responsibilities. Know the methodology that the project is working under, know the review processes and timings for that methodology and be in a position to make informed decisions at those key decision points such as gates, stages and phase reviews.
- b. Set Expectations. The governance body should make it clear to the contributors what their information needs are and when information is required. Equally, prompt feedback on the relevance and suitability of information should be provided to the suppliers.
- c. Authority. The governance body must have the authority for the decisions that it needs to make and must exercise that authority effectively. This should apply to placing projects on hold or stopping a project where applicable.

# **Business Process Reengineering**

Impact Assessment					
Factor Cost Time User Needs Project Objectives					
Impact Medium Medium High High					

## **Opinions**

Genuine business process reengineering and the accompanying change management are rarely, if ever, conducted on NTG projects. The common practice is to use technology to automate or increase the throughput of current processes, not to look at the processes themselves and how they can be improved. There is a commonly used term "the Territory way" that typifies this attitude. The way things are done now should always be challenged, even if the outcome is that the current way is the most cost-effective.

## **Arguments**

Effective business process reengineering (BPR) is based upon the following critical success factors:

- Organisation wide commitment. BPR outcomes can directly impact an organisation's
  processes, technology, job roles and workplace culture. Changing one or more of these at
  the one time can be high risk. The risk can only be mitigated though the commitment of the
  entire organisation to the changes, from management sponsoring the changes and
  championing the cause, from process users having the vision to see the benefit of change
  and by resourcing the change with both budget and a team to manage change.
- BPR team composition. A BPR team must be formed early and be active throughout the project. The team must comprise competent, motivated and empowered people who understand and are trusted by the business. They must work as a team, be lead effectively and able to communicate with and encourage the business through the change. They may form a part of the project team or may be a separate entity reporting into the project team.
- Business needs analysis. The core of BPR is the conduct of a thorough and open business
  needs analysis. This must be planned, with the plan including: identifying any specific
  problem areas, confirming any particular goals, and defining business objectives. With the
  focus of the plan, the team can then prioritise their analysis and ensure alignment with the
  organisation's strategic objectives. The analysis should be as much about identifying
  redundant or unnecessary business processes as improving essential processes.
- Sufficient IT infrastructure. Too often the IT solution tends to drive the business processes where genuine improvement needs the opposite. The outcomes of the business needs analysis should identify the IT infrastructure required to support the changes. Where there are deficiencies, a decision needs to be made whether to procure the appropriate IT infrastructure or not proceed with the process improvement. The two are intrinsically linked but it should always be the BPR that drives the IT needs.
- Effective Change Management. BPR will involve changes in behaviour, culture, processes
  and technology. That change is unlikely to result in the desired outcomes if it is not
  effectively planned, managed and monitored. Managing the change will require the BPR

- team to consider engaging change managers as that area of management is not one that would normally be found in a business unit. The human element of the change will ultimately drive the success or failure; the best systems and the best processes are useless if the people refuse to use them.
- Ongoing continuous improvement. Given the extent of change that will be the outcome of BPR, it is not normally practical to make all of the changes in a short period of time. Rather, the BPR team should take a long term view and engender a culture of continuous improvement as one of its early objectives. Often the supporting IT infrastructure will demand that some of the changes are either concurrent or very closely coupled, however this does need to be balanced with the change management plan to ensure successful change. Making continuous incremental change also allows for review and rework to improve the changes that have been applied. Further, if the changes arise from the business and they see that their suggestions are being applied, that supports the human change management objectives.

BPR is often seen by the process users as threatening. The worst case outcome is that their work will be deemed unnecessary and therefore their job will be at risk. That threat manifests itself in resistance to change and potential animosity towards the BPR team. The unfortunate reality is that successful BPR will usually identify redundant processes and that will affect process users. To minimise the impact, the BPR team needs a strong change management plan and should draw upon the experience of BPR professionals in the planning and execution of that plan.

An outcome of rushed or partial analysis may be a decision to automate everything or to change the systems that are currently in use. That is not effective BPR. If business change is going to achieve maximum return on investment, effective and thorough BPR must accompany any decision to introduce or change technology. Management must encourage the BPR team to look for processes that can be removed from the business systems if they don't add value. At the very least, every process should be questioned for relevance.

- 1. Conduct business process analysis early. When considering change, one of the first activities should be to assemble a BPR team and conduct business process analysis. The outcomes of that analysis should be a critical input to the Cost Benefit Analysis that is used to determine the viability of the change.
- 2. Ensure that business needs drive technical change. Change for the sake of change is a costly exercise with dubious benefits. No change, whether business process or technical, should be contemplated unless there is a business benefit to be gained. The best way to assess the business benefit is to conduct a business process analysis.
- 3. Do nothing is Okay. There will rarely be a situation where there are no possible improvements that can be made to a business unit. There will more likely be the situation where the cost of change exceeds the benefits that can be gained. In either situation, it is quite Okay to decide to do nothing. In fact the responsible choice would be to do nothing and to close down a project at the conclusion of the analysis phase.

## **Solution Selection**

Impact Assessment					
Factor Cost Time User Needs Project Objectives					
Impact	High	High	High	High	

## **Opinions**

The processes used to make decisions on major systems for introduction into NTG do not appear to always be fully considered. If they have been through a stringent evaluation process, the outcomes of that suggest that the evaluation process may need improvement.

## **Arguments**

Superficially, solution selection is a simple matter of choosing between three options and then selecting the best within those options. Those three options are:

- Do nothing
- Buy off the shelf (Commercial off the shelf or COTS)
- Custom build

The Do Nothing option is straightforward and is a valid business decision so will not be discussed further. The remaining discussion will only consider the change options (COTS and Custom Build).

The reality is that there are many more factors that need to be considered within the change options. These include:

- Fit. How closely will the solution as implemented match the business needs? This is a fundamental question that must be answered. If there is any deviation in fit from the business case, this must be assessed and, if the solution is still considered viable, the business case re-worked to take account of the difference. This consideration is based upon the assumption that a Business Process Review has been conducted and a Business Case developed in order to gain system owner approval to proceed to solution selection.
- Cost. Cost considerations of solution selection should always be the Total Cost of Ownership (TCO). Typical TCO components for each change option are:

Component	COTS	Custom
Development of functional requirements specification	✓	✓
System design	*	✓
System evaluation	✓	×
Initial licence	✓	×
Development, system test, deploy	×	✓
Customisation, including system test	✓	*
User acceptance testing	✓	✓
Organisational change management, including training	✓	✓
Infrastructure	✓	✓

Implementation	✓	✓
Business support and maintenance	✓	✓
Supplier support and maintenance	✓	✓
Future changes	✓	✓
Annual operations	✓	✓

- Implementation Services. Both change options will require some level of implementation services from the supplier. Some of the considerations when evaluating implementation services are:
  - Where are the services able to be supplied (local, national or offshore)
  - Are implementation services and their support mechanisms available during business hours
  - Are the implementation services skill sets specialised or generalist. If specialist will they continue to be available when and where required for the forecast life of the product
  - What sort of organisation structure will need to be procured to deliver the implementation services, including internal resource effort and governance
  - What amount of control is the client able to influence over the implementation services (timing, effort, priority, extent)
  - Are there competencies expected of the client resources and do the client personnel possess those competencies. If not how can this be supplied
  - For COTS only, can the system be customised as required to achieve the forecast business benefits for the estimated cost or will there be a compromise to business process. If there is a compromise, the business case will need to be re-worked to evaluate that compromise
  - o Is the time that it will take to implement acceptable
- Supplier Support and Maintenance Services. Both change options will require some level of ongoing support and maintenance services from the supplier through its operational life.
   Some of the considerations when evaluating support and maintenance services are:
  - Where are the services able to be supplied (local, national or offshore)
  - Are support and maintenance services available during business hours
  - Do the SLAs for responses to critical incidents align with business hours
  - Are the support and maintenance services skill sets specialised or generalist. If specialist will they continue to be available when and where required for the forecast life of the product
  - What sort of organisation structure and competency sets will need to be established or modified to meet the internal first line support services
  - What amount of control is the client able to influence over the long term product enhancement supplied under the maintenance service (define, demand, prioritise, timing)
- Timing. A 50% solution implemented rapidly might never achieve the business benefits that justified the project. Similarly, a 100% solution that will take three years to implement might be similarly unacceptable. The timing for implementation of the options under consideration will usually involve some sort of compromise. Often the time already spent on the project to get to a system selection point has possibly exceeded expectations so the tendency is to make a quick decision and get something in as soon as possible. Where this

- conflict occurs is an appropriate time to have governance bodies involved to ensure that the optimum option within limitations is achieved from a timing perspective. There is no point deciding to implement a system on the basis of hoping that the implementation might be quicker than the supplier has advised; that is rarely likely to produce an acceptable outcome.
- Training. There is no point in implementing a great new system and just expecting that the
  direct stakeholders will be able to efficiently and effectively use it. Solution selection must
  consider:
  - What are the initial user training needs; how and where can they be delivered
  - As staff turnover occurs, what are the ongoing user training needs; how and where can they be delivered
  - What are the other training needs for system administrators, reporting, database administration, etc; how and where can this be delivered
- Lessons Learned. Have similar project or similar solutions been implemented in other
  agencies within NTG or in complementary organisations in other jurisdictions or large local
  government bodies. What did they learn from the experience that can be applied to the
  selection process.
- Decision makers. The people appointed to conduct the evaluation and make the decisions on solution selection must be competent to do so. That may require the provision of specialist advice and guidance to fill any gaps. The system owner is ultimately responsible for the solution selection decision and must ensure that the people that are appointed to evaluate and recommend are competent to do so, or have the support of trusted advisers to address competency gaps. The system owner will usually require the advice and guidance of technical people to support the decision making. The solution selection process is a project within itself and should be resourced and managed as a project.

- 1. Empower the evaluation team and decision maker. The selection of the decision maker for solution selection will usually be a straightforward matter of appointing the system owner. That cannot assume that the system owner is capable of making the decision without support so careful consideration must be given to the support that is provided, usually in the form of an evaluation team. The evaluation team must be capable of conducting an impartial and independent evaluation. That demands a combination of business and technical competencies and will rely heavily on the experience of the evaluation team members. Those team members need to conduct a self-assessment in order to determine the need for any additional advisers or experts to support any competency gaps and ensure that those additional resources are available when needed.
- 2. Plan the evaluation.
  - a. Plan the plan. The evaluation team must plan for the evaluation and validate that plan. The validation must ensure that the evaluation plan:
    - i. Includes all factors for consideration.
    - ii. Defines how the activities are to be conducted and recorded.
    - iii. Defines the measurement criteria and any tolerances.
    - iv. Is totally aligned to the Business Case.
    - v. Demonstrates impartiality and transparency.

- b. Review the plan. The evaluation plan should be reviewed and validated by the business and technical governance representatives.
- c. Resource the plan. The review and approval process must ensure that the evaluation team is resourced with the right mix to execute the plan and record the outcomes.
- 3. Execute the evaluation plan. When the plan is approved, it must be strictly followed in the execution in order to verify the evaluation process. That is inclusive of the process of making recommendations and final decision making.

## **Project Resourcing**

Impact Assessment					
Factor Cost Time User Needs Project Objectives					Project Objectives
Impact		High	High	High	High

## **Opinions**

Project teams are no different to operational business units in that they need to have the correct combination of competencies in the right proportions in order to function effectively and deliver the required outputs. They need to be effectively managed to ensure that their capabilities are optimised. The composition of project teams could benefit from needs analysis and planning at project inception so that they are able to perform to expectation.

#### **Arguments**

In the same way that project management is a specialist stream of management, project teams are unique in their nature and need careful consideration in selecting the people and the structure to ensure that they will deliver as expected. Some of the factors that make project teams different from operational workgroups include:

- Every project is different. That makes the work that the team is required to do less predictable so they will always be working to a plan with forecast outcomes rather than any direct benchmarks. Some people cope well in this environment of uncertainty, others don't.
- The temporary nature of a project demands a different type of person to the one who fills a routine and predictable job. They need greater flexibility and adaptability, and will often be required to perform work that is outside of their strict role description.
- It is a common practice to temporarily assign people to a project team but for them to retain their permanent line management and reporting. This may mean that they are reporting to a manager but performing work for a project manager. This may create some complexities in task assignment, especially where one person may be allocated to more than one project at the one time.
- In small project teams, each person on that team may be the only one with that competency set. This may cause complications as workloads peak and trough and place limitations on people's ability to plan their personal life for leave and the like. This limitation and the pressure on the individual as a consequence is not something that many can rapidly cope with.

A common characteristic of projects is that they are under severe time pressure from the outset. The consequence of this is that a newly formed team is going to be expected to be fully productive immediately. The people who make up this team need to be able to manage this pressure and be able to recover from lost time rapidly. By the time that a new project team has gone through a rapid induction process they will usually be behind schedule. That is a difficult way to have to get to perform.

Effective project managers will recognise and address the issue with project teams, but there is only so much they can do if the people who comprise the team are not suited to project work. In a project with members who have had little experience in project work, turnover is going to be expected and must be factored into the capacity planning. Every time that there is turnover, delays will result as the new team member gets inducted and the team readjusts.

- Select the right people for the project team. Selection of the project team is not just about
  the skills and knowledge. It is selecting the people who have the competencies to perform
  in a project environment. If those people are not immediately available the plan will either
  need to be delayed until they can be sourced or modified to schedule time for induction,
  plan for lower efficiency and allocate contingency for turnover.
- 2. Support the project team.
  - a. Project manager. Ensure that the team is effectively managed by assigning a competent project manager and enable them the authority to effectively exercise that management.
  - b. Conduct induction. Plan for and conduct an initial induction session for the project team. That induction should address the team needs as well as preparing the team to deliver by ensuring that they know the project and the methodology. Have a process in place for induction of new team members who are appointed after the project team has completed initial induction to minimise the time expected for new staff to become effective.
  - c. Mentor. Wherever possible, provide some form of mentoring or guidance to the project team. With every project being different, there will be unique challenges that will often benefit from the experience of others to help formulate a resolution. At the very least, provide some form of pairing arrangement within the team so that the person having issues knows that they have someone to immediately turn to.
- 3. Celebrate achievements.
  - a. Reward good outcomes. With the time pressures of projects, the project team is often under continual pressure for what is perceived as under-performance if the project schedule is at risk. In order to offset the impact of this negative feedback, every opportunity should be taken to recognise and reward the positive outcomes of the project team.
  - b. Establish and use feedback loops. Almost as important as rewards for positive outcomes is the ability to know what is going on and what to expect. This is often entrenched in operational teams because they have been going for so long and they are in the habit of weekly meetings, regular staff newsletters and the like. Particularly in the initial stages of a project, everyone is so busy that they often overlook the provision of feedback or make the mistake of assuming that, if they know about it, everyone does. From the outset, procedures and practices to ensure that the project team receives continual feedback will assist in forming the team and then ensuring that they are working in context of the whole project, not just on their specific tasks.

# Methodology

Impact Assessment					
Factor Cost Time User Needs Project Objectives					Project Objectives
Impact		High	High	Medium	High

## **Opinions**

The ICTIA NT believes that selection and application of an appropriate methodology is critical to the success of a project and can often be attributed as the root cause for previous NTG project failures.

## **Arguments**

Projects are fundamentally different from operations or business as usual activities. Some of the factors that make them different are:

- A project has a finite duration that is bounded by set start and end dates.
- The goal of a project will be to introduce one or more changes to the way that the business is performed.
- A project is staffed for a temporary period by people with cross-functional competencies.
- Every project is unique. It will have similarities to other projects but will also be different.
- Due to the uncertainty of change, projects carry greater risks than business as usual.

These unique attributes have given rise to research to identify how to increase the likelihood of success of projects. The outcomes of this research has been a number of methodologies for managing projects, as well as recognising that project management is a role that has specialist competencies, that are not necessarily required in line or operational management. The two areas have tended to be merged into project management methodologies that cover both the science of management of projects and the art of project management.

Whilst one project management methodology might be better suited to one project than another, there is rarely a single project management methodology that is the only one that will work for a specific project. It is the mix of art and science that needs careful consideration.

Factors that should be considered when selecting a project management methodology include:

- Size and scale of the project. Some methodologies are better suited to large projects where others to small. When considering if a project is large, small or where it sits in the continuum, both the size of the project (budget and quantity of people and other resources involved) and the scale (extent of change within the organisation) must be evaluated.
- Complexity. Are the products to be delivered complex, high risk and leading edge or are they simple, predictable and routine?
- Tolerance. Is there any scope for variation in quality or standards for the products or must they be absolutely failsafe (are we building a billy cart or a space shuttle)?

- Project governance maturity of the client organisation. Is the client organisation one who
  regularly governs similar or more difficult projects or is this going to be a revolutionary
  change?
- Accountability of the client organisation. Who will benefit from the project outcomes? Who will pay for the project? Is the client organisation publically accountable?

There is no intent here to try to recommend a particular methodology for any set combination of factors. The key point to note is that the selection needs to be based upon analysis of facts that are readily available, including the analysis of potential methodologies.

Selection of a methodology is only a start point. Having a defined methodology will only benefit the project if:

- The stakeholders understand and support it.
- It is applied appropriately to the project at all levels.
- It is regularly reviewed to ensure that it remains the best fit or is modified in a controlled manner.

- Select a methodology that is appropriate for the project and the organisation. Even if an
  organisation has a preferred project management methodology, it should always take the
  time to analyse the project and project management methodologies to ensure that they
  select the most appropriate one. The analysis process and outcomes should be
  documented.
- 2. Ensure stakeholder buy-in to the selected methodology.
  - a. Why. Share the outcomes of the methodology selection process with the stakeholders so that they understand and agree with the rationale behind the selection process.
  - b. What. Do not assume that the stakeholders know the methodology. Conduct an analysis of stakeholders to determine any gaps in competency. Source or develop training in order to ensure that all stakeholders are competent in the methodology. Acknowledge that project staff turnover is likely and provide induction to the methodology for people who join the project after the initial training has been conducted.
  - c. Listen. Be prepared to modify the methodology if there are good reasons provided by the stakeholders during the training. Ensure that they know they can contribute to the decision.
- 3. Apply the methodology to the project.
  - a. Ownership. Ensure that the governance bodies know what reporting and management outputs to expect of the methodology and are active in ensuring that these are maintained.
  - b. Capacity. Ensure that the project office is resourced to apply the methodology. This includes any toolsets and supporting resources that assist in the application of the methodology.

- c. Live it. The project team needs to learn to use the methodology to support them in their execution and see it as a support mechanism, not an encumbrance.
- d. Check. Appoint quality reviewers to the project to ensure that the methodology is being applied effectively. Give the reviewers the authority to enforce governance body decisions.
- e. Reward success. Recognise and encourage successful application of the methodology that achieves positive outcomes.
- 4. Review the application of the methodology.
  - a. Formal reviews. Set, conduct and act upon the outcomes of formal reviews of the methodology. The timing for formal reviews might be set on a frequency or activity basis and should be conducted at all levels.
  - b. Invite improvement. Encourage a culture of continuous improvement throughout the project team by welcoming and being seen to appropriately consider and act upon ad hoc or scheduled suggestions for improvement to the methodology.