The Role of Client Engagement in Successful Project Delivery - 15599

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ABSTRACT

Projects, managed using one of the standard methodologies, are the primary vehicle used by most organizations to effectively deliver their strategic objectives in a timely and high quality manner. Most projects at ANSTO with a strong nuclear technology component require the active engagement of the end user, sponsor and subject matter experts for making key decisions during the project delivery phase to ensure best value for the organization. In 2009, after a review of ANSTO's project governance and management processes, a number of changes to the governance of internal projects were made. This included the establishment of a project governance structure that includes a two-point accountability framework, where the Project Client, together with the Project Manager is held accountable for the project delivery. While the two-point project accountability framework is not a conventional approach in project management, the experience from the project managers and stakeholders at ANSTO indicates that it provides a robust, consistent and practical approach for managing projects. The challenges of the two-point accountability framework are primarily related to the clarity of roles and goals, particularly from the Client perspective. This is an area that needs further attention. Overall, this approach allows better coordination of input from the project sponsors, end users and subject matter experts for day-to-day decision making through the lifecycle of the project.

INTRODUCTION

The Australian Nuclear Science and Technology Organization (ANSTO) is Australia's national center for nuclear science and technology. ANSTO operates Australia's only nuclear reactor - the 20 MW(t) OPAL research reactor at its Lucas Heights site, approximately 45 km southwest of Sydney. ANSTO is a corporate Australian Federal Government entity tasked with delivering specialized advice, scientific services and products related to nuclear science and technology to government, industry, academia and other research organizations. Supported by the reactor, ANSTO has a large research component with over 400 researchers, a commercial radiopharmaceutical production process that provides over 10,000 patient doses per week to Australian Hospitals and number of enabling business units including Engineering and Capital Programs, HR, Finance, and Information Technology. The corporate management structure of ANSTO reflects its nature as a diverse public sector organization.

ANSTO is currently going through a significant capital expansion phase which includes the development of an expanded Mo-99 production facility, a new Synroc Waste conditioning Facility, and expansions in waste processing and handling capabilities. Each year ANSTO invests significant capital funds to achieve its strategic objectives. Projects are the primary platform to develop capacity and capability to deliver on ANSTO's key commitments to its stakeholders; therefore, the management of projects is a core business for ANSTO. Most major capital projects at ANSTO are delivered by an internal engineering services section - the Engineering and Capital Projects (ECP) Section. In addition to Project delivery, the ECP Section also supports the organization in smaller one-off engineering jobs, systems safety & reliability analysis and design approvals.

Project Management is a mature discipline with well-established principles, supported by a number of processes and methodologies and based on the Project Management Body of Knowledge (PMBoK). Benefits of adhering to a standard Project Management Methodology are well understood; projects, managed using one of the standard methodologies, are the primary vehicle used by most organizations to effectively deliver their strategic objectives in a timely and high quality manner. While project management deals with effectively deploying approved resources to achieve agreed deliverables, project governance deals with establishing the structures, people and processes within an organization

to ensure successful delivery of projects. Project governance comprises the accountability and responsibility framework for management of projects. It defines the handling of accountabilities and responsibilities for strategic decision making related projects and establishes a space for the Project Management function to operate.

DELIVERY OF MAJOR PROJECTS AT ANSTO

Over the past decade, ANSTO management structure has changed from a strong functional management style to a hybrid functional - matrix management style. Consistent with this approach, the governance of major projects at ANSTO has also seen a significant transformation. Up until 2009, the structure for delivery of projects was largely determined by the Project Sponsors (generally Senior Executives with overall responsibility for capital expenditure) according to the needs and organizational structures of their respective business areas. The responsibility for delivery of projects was assigned to Project Leaders appointed internally within such business areas. Expertise in standard Project Management methodology or the adherence to a process was not mandatory, although professional Project Managers were often employed by the Project Leaders to manage some aspects of projects.

In 2009, a review of ANSTO's project governance and management processes revealed the need to concentrate on two key aspects in internal project delivery: 'doing the right projects' and 'doing the projects right' [1, 2]. To drive the delivery of projects on time, on budget and to expectations, a number of changes to the governance of internal projects were made. The most significant change in ANSTO's project management methodology was the adoption of a stage gated project planning, review and approval process, where project risks are reviewed jointly by the Project Manager and the Project Client as the project progresses through various stages of its lifecycle. To support the stage gated project review process, a two-point accountability framework where the Project Client, together with the Project Manager is held accountable for the project delivery was set up and the Strategic Assets Programs Office (SAPO) was launched within the ECP Section as ANSTO's center for project management excellence. In parallel with these explicit changes, subtle, implicit cultural changes occurred, driven by experienced professionals with a depth of understanding in successful project delivery. These have drastically changed the way projects are perceived at ANSTO.

Over the past five years, a number of minor improvements have been made to the project governance framework. However the key components of the governance framework, including the two-point accountability framework, have remained largely unchanged.

Governance and Management Methodology

A project at ANSTO is now defined via a Capital Investment Case (CIC) and governed by a structure comprising key stakeholders and independent advisors. Every project at ANSTO is managed under a PMBoK-based project management methodology and managed via a Project Management Plan [2]. A project may span several years, but is subject to ongoing financial approval at a number of pre-established 'Stage Gates'. Importantly, although a project's output should be well defined, the approved plan of work is measured and reviewed at the completion of each project stage (stage gate). As work progresses and greater certainty is achieved about how the project's outputs will be delivered, the project's scope, motivation, plan and estimates (capital budget, contingency, and schedule) are refined and re-approved as required.

Client Engagement

The Project Client is defined at ANSTO as the primary beneficiary of a project. The key accountabilities of the Client include the development of the initial scope for the project, obtaining funding and verifying that the deliverables handed over by the Project Management team are consistent with the agreed scope. To achieve these successfully, the Project Client is required to coordinate the concerns of Project Sponsor, End User(s) and Subject Matter Experts. Some of the key

roles, responsibilities and deliverables of Project Client and Project Manager functions are shown in Figure 1.
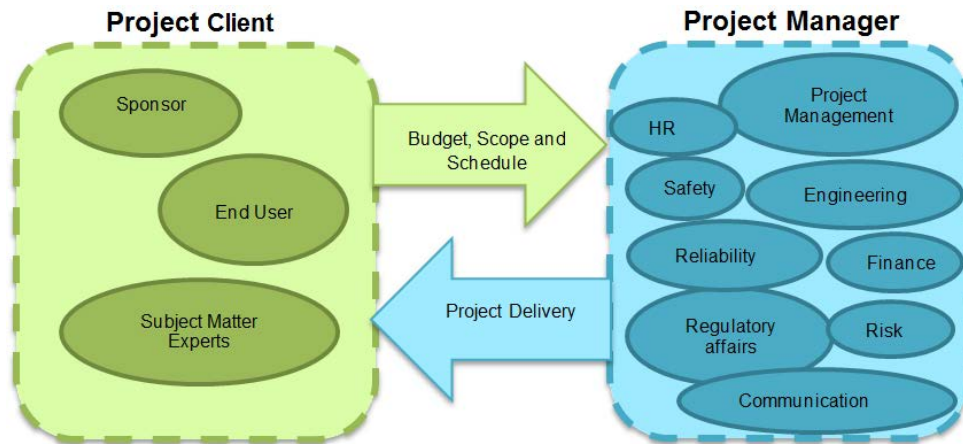

Fig. 1. Roles, responsibilities and deliverables of Project Client and Project Manager Functions.

A central concept in ANSTO's revised project delivery framework is the understanding that the lifespan of deliverables of most projects in the nuclear sector significantly exceed the lifecycle of the traditional project delivery phase. This is illustrated in Figure 2.
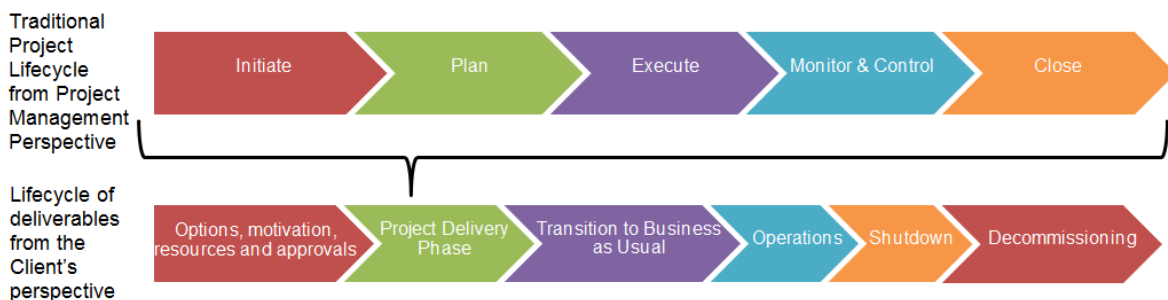

Fig. 2. Project Manager's and Client's perspective on Project Deliverables.

For example, prior to a project receiving formal approval, the scope of the project needs to be mapped out by those responsible for capital expenditure (Project Sponsor). A schedule has to be developed which balances the needs of the end user with the physical realities and availability of resources. A balanced initial budget for the project is required to have a realistic chance of getting the funding for the project and to complete the project within the budget. At the end of the lifecycle of the project, a suitably capable/qualified end user may be needed to take over the custody of the project deliverables. In some cases, the end user may require a significant period for ramp-up of operational and staffing capabilities to fully utilize what was delivered by the project. Once a steady-state operation is established, the end user needs to operate, maintain and manage the deliverables with the support of the subject matter experts, and for nuclear waste management facilities, the end user may also need to develop and implement plans to manage shutdown and decommissioning. In most cases, the Client has a much more long-term perspective of the project than the Project Manager, who would tend to see his/her primary responsibility end after Final Completion (normally 12 months after Practical Completion). The long term perspective that the Client brings to the table can be very useful to effectively resolve project issues in a way that delivers the better value for the investment.

Similarly, the involvement of a technically competent project manager in the early establishment phase of a project is invaluable. This enables the Project Manager to inject his/her experience to assist the Client develop risk based boundaries for scoping, budgets and schedules, and obtain relevant

initial approvals. These typically take place well before a project is 'Initiated'. As the project progresses through its lifecycle, the ability to identify and correct fundamental project issues decreases almost exponentially. Therefore, the early participation of the Project Manager to 'establish' the project correctly is a key success factor in project delivery.

In other words, the active engagement of a Project Manager is needed before the 'Initiate' stage of the project, while the Client's input is needed during the project 'Delivery' stages to deliver best value for the organization. This was one of the key reasons for including the Project Client, side by side with the Project Manager in the project accountability framework at ANSTO.
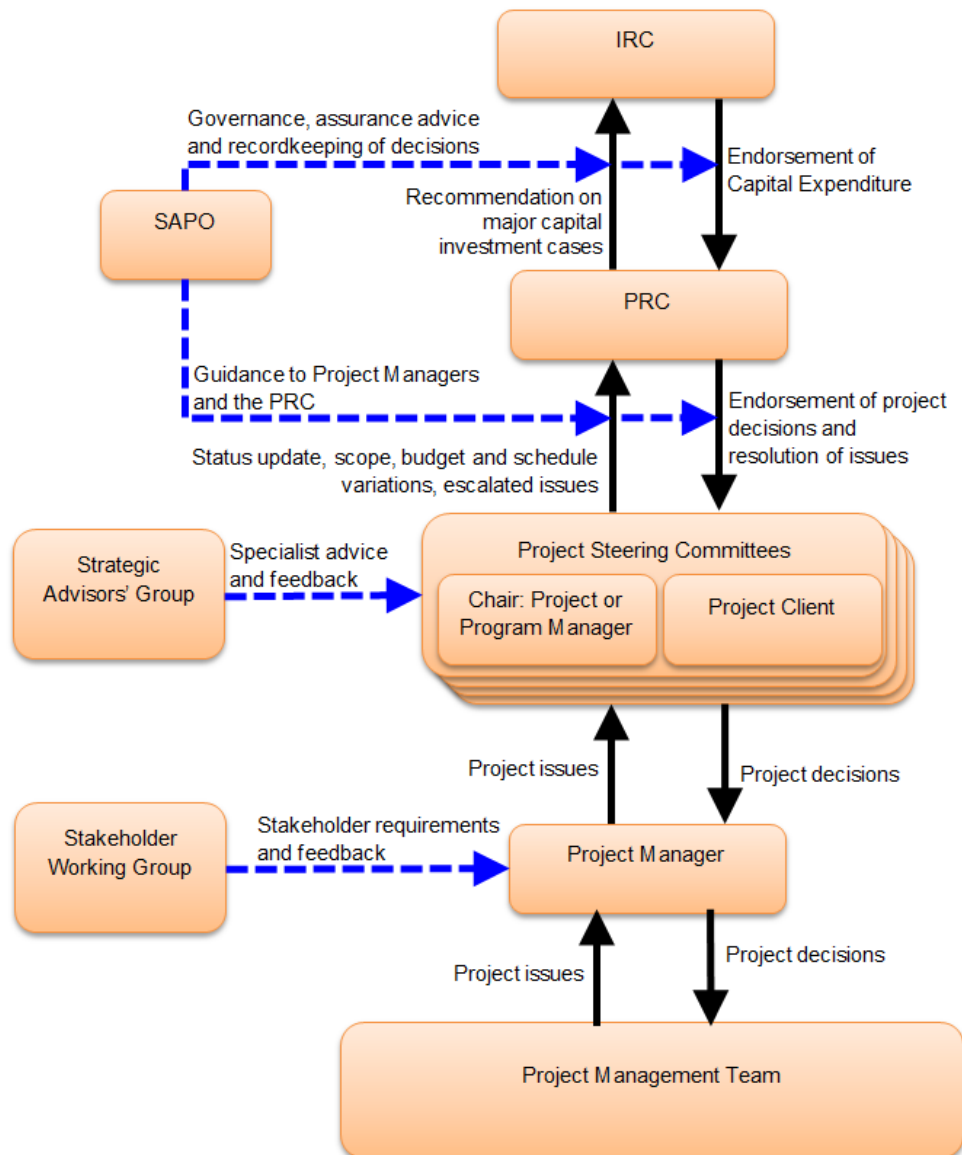

Fig. 3. The Standard Project Governance Structure at ANSTO

While it is not unusual to have an senior end user representing the business or the service benefitting from the deliverables of the project involved in high level governance of projects, the engagement of the Client in day-to-day decision making for the project may be seen as a contradiction of one of the most central requirements for successful project delivery: a single point of accountability [3]. However, the experience in the last five years at ANSTO suggests that the early intervention of Project Managers to address budget and schedule challenges before the 'Initiate' stage and the active participation of the Client during the 'Delivery' stages produces better project delivery outcomes, in

spite of the shared project accountability under the two-point accountability framework; as opposed to the more common and historical adversarial approach.

The main elements of the project governance structure are shown in Figure 3. The Project Manager and the Project Client are supported by a Steering Committee comprising key stakeholders to make day-to-day project decisions. They are jointly accountable to the Portfolio Review Committee (PRC), which is headed by the Project Sponsor, usually the senior executive responsible for the business area that will benefit from the project. The PRC reviews the performance of the project and is responsible for recommending critical decisions about the project to the Investment Review Committee (IRC), which is made of senior executives and is accountable for the governance of capital projects across the organization. The Project Manager and the Project Client, therefore, are ultimately accountable to the Investment IRC for the successful delivery of projects.

DYNAMICS IN PROJECT DELIVERY

During the lifecycle of a project, various developments may take place in organizational strategies & priorities, resource allocations, and financial capabilities that may impose changes in the project. It is not uncommon for the Project Manager to realize that the project needs more funding and time than originally approved and that some things included in the original scope are no longer feasible. On the other hand, the Project Client, sometime after the commencement of the project, may come to the conclusion that the agreed scope is no longer adequate, and/or the agreed schedule is too long.

In projects where science and engineering merge to deliver a solution, the difference in perspectives from the key stakeholders can become a challenge. Scientists instinctively gravitate to the Scientific Method for resolving issues – observation, analysis, development, testing and modification of hypothesis. The Project Managers on the other hand, are driven by established risk based methodologies and procedures. In most circumstances, both of these approaches may lead to an acceptable solution for all parties. However, Scientists tend to be driven by the desire to achieve an elegant, multipurpose solution, and this requires flexibility in project delivery. Project managers are more likely to be driven by the desire to meet the project schedule and budget targets, causing a natural tension between the parties. Success is largely dependent on the ability of both parties to arrive at an optimum outcome and this is largely dependent on their ability to maintain a good working relationship, good communications, trust and respect. Therefore the compatibility of the personalities of the protagonists is a key to project success.

In a more standard project governance framework, where the relationship between the Project Manager and the Client is defined by a contractual agreement, these issues are usually resolved with respect to the terms of the contract. A "win-lose" attitude often guides the approach taken by the parties involved. Experience over the past five years at ANSTO has shown that when both parties are collectively accountable for the success of the project through their work in the project steering committee, the dynamics between the client and the project management teams are very different: both parties are required to work collaboratively to achieve the best result from an organizational perspective. In most cases the outcome is that the two parties reach for a better outcome than what could have been possible otherwise.

To assess the effectiveness of the two-point accountability framework, a number of interviews with ANSTO Project managers and Project Clients were conducted. This provided valuable feedback on effectiveness of the two-point accountability framework and its impact on the stakeholders of projects at ANSTO.

Key Advantages of the Two-Point Project Accountability Framework

The past five years have proven that the structure with two-points of accountability is a robust, consistent and practical approach for projects, and allows for flexibility and scalability across a

diverse organization comprising research, commercial and enabling business units. The following key benefits were identified by the Project Managers, End Users, Sponsors and Subject Matter Experts.

1. Scope of Work is defined clearly: The ownership of the scope of work remains with the Project Client during the lifecycle of the project. The Client will consult with the end users and subject matter experts extensively to develop the scope of work and with the Project Manager to modify with scope after the commencement of the project. The scope statement, along with the agreed budget and schedule, are the key components of the agreement between the Client and the Project Managers, to which they both are jointly accountable for delivery. It has been observed that this shared accountability has led to the development of more comprehensive scope documents at the early stages of projects.
2. Initial Project Budget and schedules are more accurate: The project Sponsor, through the Client, is accountable for the overall project success and as such, it is in their interest to work with the subject matter experts and end users to develop realistic budgets for the project from the very beginning.
3. A tiered approach to resolving project issues is available to the Project Manager: Where issues cannot be resolved at the project level, they can be raised to the Steering Committee level where the Project Client can have an input into generating and evaluating solutions. Issues that cannot be resolved at the Steering Committee level can be further escalated to the PRC or the IRC, to the attention of the senior executive representing the Project Manager and the Project Client.
4. Better knowledge transfer occurs between the Subject Matter Experts and the Project Team: Shared accountability has in most cases, led to better communication between the Project Management team and the End Users / Subject Matter Experts. This has resulted in the Project Management team having better access to specialized technical information from the Subject Matter Experts.
5. Improved Operational Readiness: Due to increased ownership, the End User is more likely to be involved with the project team during all stages of the project, so that by the time the project reaches the closure phase the end user has had significant experience with managing the deliverables of the project. The shared accountability also ensures that financial and staffing resources needed to operationalize the project deliverables are better understood and better planned. Consequently, a better transition from the Project Phase to the Business as Usual Phase can be achieved.
6. Emphasis on obtaining better value for the organization: Prior to the introduction of the two-point accountability framework, a Project Manager in most cases was a direct report of the Client – typically a Functional Manager. Most Clients had limited visibility of other functional areas and were primarily focused on matters in his/her own portfolio. In such cases, options and possibilities that may offer better value for the organization may get overlooked in the resolution of project issues due to the silo mindset of the key decision makers. The two point accountability framework creates an egalitarian culture where the Project Manager has direct access to the executive through the head of SAPO and the General Manager or ECP to resolve issues in a manner those deliveries the best value for the organization.
7. Better guidance to Project Managers - Functional managers rarely have the project management expertise to guide Project Managers to resolve challenging project issues. Unlike the previous system where Project Managers were guided by the functional managers (Clients, with line management responsibility for Project Managers), the two points of accountability framework allows flexibility for Project Managers to seek advice and guidance from senior project management professionals.

Some Challenges of the Two-Point Project Accountability Framework

Notwithstanding its advantages, the two-point accountability framework can create some challenges. In the absence of a formal contractual agreement, as in the case of a more traditional governance framework, the effectiveness of resolving conflicting priorities between the Project Manager and Client becomes subject to the understanding of roles, objectives, and willingness to collaborate to

resolve difficult issues. Some of the challenges identified by the Project Manages and Clients included the following:

1. Engaging the Project Client: In comparison with the role of the Project Manager, which is a well-established profession with clear expectations of performance, the Client has limited access to guidance and expectations. In the absence of clear expectations, the Client may not have a clear understanding of the expectations of their role have led to some Clients disengaging from the governance process, leaving the Project Manager to coordinate the input from the Sponsor, End Users and Subject Matter Experts. The Project Manager in such cases may fail to receive accurate, consistent, and timely input needed to deliver the project on time and to budget.

2. Strengthening the Project Client role: The Project Client role, unlike the Project Manager role, is not a formally established position within the organization. The role of a Project Manager is defined in the HR management system and position descriptions are available at several levels. On the other hand, the role of Project Client is not captured in the HR management system, so the appointment of Project Clients may happen without adequate consultation and formal endorsement. This may lead to a number of unhelpful situations:
   a. While the accountability of the Client role may be accepted as a procedural matter, it may not be incorporated into routine responsibilities. In most projects, the Project Client role is an add-on task assigned to mid-to senior-level mangers or executives in operational areas with an already heavy workload. In such cases, the urgency of day-to-day operational challenges may distract the Client from giving the required attention to a project which does not have similar levels of urgency.
   b. In large organizations, there may be any number of senior managers and executives who consider themselves capable of representing the business and serving as the Client. In such situations, the Project Manager may receive incomplete or inconsistent input. In such situations the two-point accountability framework is not very effective.

3. Mismatched influence of Client and Project Manager - In some occasions, the lack of clarity of the Client role is compounded when the Project Client is significantly more influential in the organization than the Project Manager. In such situations, the Project Client may take a dominant role in driving the project and, regardless of how good their intentions are, often lack sufficient expertise and awareness of the details of the project to make optimal day-to-day management decisions.

Opportunities for Improvement.

It can be seen that most of the challenges listed above are resulting from conflicting or ambiguous expectations around roles and goals. In a typical project environment where activity-based management tools (process mapping, workflow diagrams etc.) are used, misunderstanding of roles could have a significant impact on the deliverables as well as the engagement level of individuals. Therefore future improvements in ANSTO's project governance framework may need to include clarifying roles and goals of the Project Client and maintaining the accountability of the Client role through effective oversight and audits conducted by the Strategic Assets Programs Office.

It could also be argued that the SAPO unit (which provides project governance oversight function) being attached to the ECP Section (which is ANSTO's main project delivery group) creates a conflict of interests. Project governance function could be further strengthened by relocating the SAPO unit outside of ECP Section to improve its independence.

Another area for attention is the reliance on an activity-based approach in the relationship between the project team and the Client. A shift toward better use of agreements on work products or deliverables [4] would centrally assist in clarifying the goals of the key parties working on the project.

Challenges related to the input from the Client are not a unique concern in ANSTO's project management system. A recent review of Project Management Lessons Learned in DOE Projects identified a number of common, reoccurring problems. Some of these are unique to the DOE, but

most of them apply to other organizations managing nuclear related projects [5]. Among the reoccurring problems identified are that the project management documents have not been updated or approved, that the project is not adequately defined, and that the project design has not reached a sufficient level of maturity to develop a baseline. These and many other problems are directly or indirectly related to the input the project requires from the End Users, Sponsor or Subject Matter Experts. As the authors have of the above work have remarked, "with regard to project management deficiencies, there is nothing new under the sun".

CONCLUSIONS

While the two-point project accountability framework is not a conventional approach at project management level, the response from the Project Managers and Project Clients at ANSTO indicated that the two-point accountability model in project management decision making provides a robust, consistent and practical approach for projects, and facilitates flexibility and scalability across a diverse organization comprising research, commercial and enabling business units. For an organization such as ANSTO, the two-point accountability system in project decision making provides opportunities for better engaging the key stakeholders during the lifecycle of the project and puts the end user in a better position to transition the deliverables to business as usual.

This framework requires active collaboration from the Project Manager and the Client. However, conflicting or ambiguous expectations around roles and goals has the potential to distort the collaboration, introducing an additional risk to projects. The key to ensuring correct Client engagement and successful project delivery is to ensure that the project governance structure is correctly established and continually supported as a true two-point accountability framework, with clear definitions of the role and expectations of the Project Client.

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