A Process For Improving the Definition and Alignment of Intangible Project Outcomes and Project Outputs —Reflections on Recent Project Management Research

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Abstract

It is becoming increasingly apparent that many organisations are at last taking an holistic view of the meaning of project success. Traditional project management theory has stressed the 'iron triangle' of success—achieving time, cost, and quality (fitness for use) outcomes. In more recent times however, notions of value adding, project outcomes and benefits that are more intangible and difficult to formulate have emerged.

Improved definition of intangible outcomes is now the subject of leading edge research in performance measurement and project management. In this paper, we report upon a study that has developed a process for the improved definition and alignment of project outcomes (both tangible and intangible) and tangible project outputs, which can be used as the basis for defining and assessing project success. .

The process was developed iteratively through a series of action research cycles, with each cycle focusing on one of five (5) case study projects. The process was recently tested in a small number of concurrent workshops conducted at a senior management conference of the Victorian state police force, in Australia. Police officers' responses to a brief survey were gathered before and after the workshops. Survey results presented in this paper indicate strong support for the process and its usefulness in managing projects where project success is assessed according to the achievement of a combination of tangible and intangible outcomes.

Keywords: benefits, project outcomes, project outputs performance measurement, project management

Introduction

Project success, its causes and manifestation, have been subject to much debate. Earlier literature on project outputs centred upon the 'iron triangle' of time, cost and quality (PMI 2000). More recently there has been a growing interest in the project management literature on identifying leading, rather than lagging indicators of project success and outcomes rather than a limited focus on project delivered outputs. For example Cooke-Davies (2002, p185) distinguishes between project success (measured against the overall objectives of the project) and project management success (measured against the widespread and traditional measures of performance against cost, time and quality), and between success criteria (the measures by which success or failure of a project or business will be judged) and success factors (those inputs to the management system that lead directly or indirectly to the success of the project or business). This work and others in a similar vein (Belassi and Tukel 1996) express the generally growing unease in the project management literature that the 'iron triangle' measures are lagging indicators because they measure what has happened and therefore limit opportunities to take corrective action. This body of literature is searching for leading indicators that assess the success of a project's execution and delivery - to provide a beacon that project managers and their teams can aim for and in doing so increase the likelihood of them delivering successful project outcomes. Increased focus on project outcomes has also necessitated examination of intangible project outcomes as useful indicators of project planning and control and as a means of recognizing the true value adding activities that a project may deliver. For example Garcia-Ayuso (2003, p599) argues that: "Taken together, the research efforts conducted over the past three decades have provided compelling evidence that:

- Intangibles are fundamental sources of competitive advantages that must be identified, measured and controlled in order to ensure the efficient management of corporations.
- There is a consistent relationship between most intangible investments and subsequent earnings and value creation in business corporations.
- There is a lack of relevant and reliable information on the intangible determinants of the value of companies that actually results in significant damages for business firms and their stakeholders.
- Intangibles are nowadays the main drivers of growth and competitiveness in our societies and their measurement is essential for the design and implementation of public policies".

Clearly, we are witnessing a change in the perception of what constitutes and drives success and indeed how we visualise and explicate the critical objectives that need to be successfully delivered. Once these can be made clear then a vision for their delivery can be formulated and once this vision is clearly and effectively communicated and understood by the project team, then there is an increased likelihood that stakeholder satisfaction can be achieved.

Vision has generally been identified as a crucial tool for teams being able to focus on what needs to be done to be successful (Senge 1990; Bartlett and Goshal 1995; Collins and Porras 1996; Pinto *et al.* 1998). Three elements have been described in building a shared vision (Bartlett and Ghoshal 1990, p141). These are *clarity* (provide the aims to be achieved in simple and relevant terms that are reinforced by actions), *continuity* (despite personnel or other changes, the general direction remains the same), and *consistency* (ensuring that all share the same understanding of the project vision). Thus, for a project vision to be formulated, there must be a comprehensive understanding of what the project is meant to achieve. This requires determining objectives, outcomes and the benefits they are expected to deliver. Emerging project management theory now recognises both tangible and intangible objectives and outcomes. For example, on a recently reported Canadian IT project management research case study, vision was argued to have been a key factor explaining the project's successful delivery of its intended goal despite poor project management practices being used to execute the project (Christensen and Walker 2003).

It is relatively easy to determine the success of tangible project outcomes that can be linked to tangible project outputs, especially when the outputs comprise major physical artefacts such as a building or ship. On the other hand it is more difficult to determine the success of intangible project outcomes, unless they too are linked to tangible project outputs.. Turner and Cochrane developed a useful matrix that defined project types on two dimensions (Turner and Cochrane 1993). On one dimension they place the degree to which methods are well defined and on the other dimension they place the extent to which goals are well defined. This is useful because it helps us to understand why in the past there has been a strong focus upon tangible outputs but their work indicates a focus on specified tangible outputs at the expense of intangible outcomes. Many of the projects that were perceived as successful up to the latter part of the 20^{th} century were projects that tended to be highly visible, with generally well defined rules and objectives such as building a hotel or a ship (Morris 1994). However, as the century drew to a close and the 21^{st} century arrived we have seen the projectisation of business processes due to outsourcing, privatisation and setting up project management groups inside organisations to deliver both products and services. Indeed this has been identified as a key trend in business delivery for the 21^{st} century (Dinsmore 1999; Fenton and Pettigrew 2000). Given the more common incidence of projects undertaken these days being invisible (such as change management or process changes like implementing an outsourcing policy), with poorly defined rules and objectives, it is not surprising that the old iron triangle of cost, time and quality as project outputs are now judged as inadequate. The challenge presented to project managers these days is to adequately define both tangible and intangible project outcomes and to develop processes and tools that help them manage to these forms of assessment, in a similar way that they are accustomed to doing for the iron triangle measures of cost, time and quality.

A further development that is currently taking place in the literature is to link performance measurement, strategy and action to satisfy stakeholders' needs. For example a growing body of literature has been development on a balanced scorecard for measuring a more holistic view of performance (Kaplan and Norton 1992, 1993, 1996, 1998a, 1998b). Additionally the concept of triple bottom line (TBL) has emerged in which the financial bottom line, the environmental impact and its bottom line performance and social responsibility bottom line are measured, reported upon and used as a basis for determining project outcomes (Elkington 1997). This has led to researchers and business practitioners now designing ways in which a range of holistically identified outcomes can be aligned to strategy. Indeed, this has become a major focus of attention over recent years with useful texts that compile contributions of leading academics in the performance measurement field for example (Neeley 2002; Neeley *et al.* 2002). Others in the project management field have also identified the need for logic chains that link the 'what' with both the 'how' (the means by which these can be achieved) along with the 'why' (the strategic reasoning for the need expressed by the outcome) see (Baccarani 1999). A current contribution to the field has been the work of Kaplan and Norton (2004) in which they specifically address both tangible and intangible outcomes. All these support the growing interest and perceived need for developing processes, models and processes that enable projects to be planned to achieve project success, as defined by the combination of tangible and intangible outcomes.

Having established the need for recognising, measuring and managing intangible outcomes, the remainder of this paper will focus upon the process developed for aligning intangible outcomes with tangible outputs. We then provide a sample template that cross-references intangible outcomes to tangible outputs. Following that, we discuss the significance of this process and the workshop assessment results that were used as part of a validation exercise for this process. Finally, we conclude with a brief discussion of the implications for project management practice and limitations of this paper's scope.

Tangible and Intangible Outcomes

The PMBOK Guide defines project objectives, outcomes and outputs as follows:

- Project Objectives are the quantifiable criteria that must be met for the project to be considered successful. Each quantifiable criteria includes an attribute (e.g. cost), metric (unit of measure), and is expressed either as a single value or range of values. (PMI 2000, p56)
- Project Outcomes are either tangible or intangible. The examples cited by the PMBOK Guide are tangible outcomes such as buildings and roads and intangible outcomes such as people who can effectively apply their training (PMI 2000, p47).
- Project Deliverable (outputs) are "any measurable, tangible, verifiable outcome, result or item that must be produced to complete a project or part of a project" (PMI 2000, p200).

According to this hierarchy, objectives should be quantifiable, outcomes may be tangible or intangible and outputs are tangible. It can be expected to be relatively straightforward to align (tangible) outputs to tangible outcomes and quantifiable objectives. However experience, with the case studies and decades of experience of the authors, indicates that it is more challenging to align (tangible) outputs to intangible outcomes and quantifiable objectives. The process described in this paper provides an effective, efficient and repeatable means of defining intangible project outcomes, thus addressing a challenging project management situation.

We have not as yet explicated what we might mean by intangibles and so it is appropriate that we do so before proceeding further. Tangible, according to the dictionary is defined as 'perceptible by touch; clear and definable; real' (Oxford 2001, p1894) In this sense, a tangible outcome means that it has been operationalised to be measured, monitored and controlled. The quality management literature has many examples of untouchable outcomes, such as 'satisfaction' being operationalised on perception scales high to low, for example. The key attribute of an intangible outcome as described in this paper's context is that rather than being assumed and undeclared, it is operationalised (often through a facilitation process) with an agreed measure of success or failure. Generally, these 'intangibles' include but are not limited to: the transfer of tacit knowledge about the project's operational characteristics—how it actually works; knowledge about the project's delivery history including performance data that might be useful in setting budgets in future or deciding upon project delivery methods; explicit knowledge of use for facilities management of the projects' outcome (for more tangible projects); brand image and reputation; social capital such as knowledge of social networks related to the project; and a host of other aspects that stakeholders may have unspoken expectations about.

The key issue that we have discovered through reflection and speaking to both project managers and members of their teams and stakeholders on research case study and other projects, is that despite intangible project outcomes rarely being discussed, stakeholders still tend to assume that their unexpressed needs will somehow become embedded in formal specifications. The result is often that despite explicit and specified outcomes being delivered, clients and stakeholders remain unsatisfied because the project is perceived as unsuccessful, because it did not deliver the often unexpressed and undefined, yet expected intangible outcomes. This gap between expressed and implied outcomes may be considerable. Successive communication failures between stakeholders, drafters of project plans and the project management team set in train a potential cycle of client and stakeholder disappointment. It became clear during the course of the case study research that many intangible outcomes could be aligned and cross-referenced to tangible outputs and that this may be a sound way of defining a more holistic set of desired project outcomes. As highlighted in the literature discussed above, the balanced scorecard approach touches on the problems of intangible identification; however, we found little if any reference to a process for mapping intangible outcomes to tangible outputs.

A Process for Defining and Aligning Intangible Project Outcomes to Tangible Project Outputs

One of the authors undertook five case study research projects to develop and refine the process described in part in this paper. The research was conducted according to an action research methodology (Kemmis and McTaggart 1988; McNiff and Whitehead 2000) after reviewing the literature relating to project management, performance measurement, quality management, knowledge management, stakeholder theory, and general management theory. This led to iterative development of the process for improving the definition and alignment of intangible project outcomes and tangible project outputs.

The process comprises the following steps
1. Identify Stakeholders & Schedule Introductory Meeting
2. Conduct Introductory Meeting & Schedule Workshop
3. Conduct Workshop
    - List Tangible Project Outcomes
    - List Tangible Project Outputs
    - Identify and Prioritise Intangible Outcomes
    - Describe Each High Priority Intangible Outcome
4. Align High Priority Intangible Outcomes to Tangible Outputs
5. Define/Review Tangible Outputs

The process primarily comprises a stakeholder workshop to identify and define intangible project outcomes followed by the analysis of workshop outcomes. In the remainder of this paper we will walk the reader through the process.

Turner (1999, p426) identifies three levels of the project team: the primary group who are intimately involved in the project's design and execution; a secondary group that interact directly with the primary group in support of their work; and the tertiary group who generally comprise various stakeholders whose expectations will shape their perception of project success (ie users of the end product/clients of the service). The stakeholders referred to from now on include those from the primary group—the project sponsor, key stakeholders including project steering committee members and "resource managers" (those people assigning their staff to the project) and operational staff. Operational staff should also be included in this group because they will be responsible for ensuring the ongoing realisation of benefits delivered by intangible project outcomes. The initial step of the process described in this paper was to identify these stakeholders and facilitate them in identifying, prioritising and defining intangible project outcomes.

Based on our research findings from studies where we have tested and developed this technique, we recommend that a meeting be scheduled with this primary stakeholder group to review and discuss:
1. The hierarchical relationship between project objectives, tangible and intangible project outcomes, their benefits and project outputs.
2. Project success being somewhat dependent on the delivery of intangible project outcomes.
3. The proposed process for linking intangible project outcomes to tangible project outputs.

The process is quite complex and requires significant energy and rigour. The process relies upon what Peter Senge refers to as dialogue (1990) and this requires active and reflective listening skills to make sense out of what others are saying. A facilitator involved in these discussions needs to have well developed social and relational skills. Dialogue between a facilitator and stakeholders helps to reveal/identify, define and prioritise assumed After identifying these assumed outcomes they need to be operationalised with measures that describe relative success and failure. The process of linking intangible outcomes to recognised tangible outputs is the key breakthrough contribution of this process. Stakeholders tend to possess tacit knowledge that enables them to readily relate to assumed and often intangible outcomes to tangible outputs. Often, these intangible outcomes are leading rather than lagging indicators, for example trust and commitment generated by the team dynamics. Other intangible outcomes provide the seeds for future success on other projects, for example knowledge about the project history can directly contribute to the capability or capacity building of stakeholders involved in future projects. Further, by explicitly linking intangible outcomes to tangible outputs, all parties involved have a better appreciation and understanding of the cause and effect links between these outcomes and actions taken in managing the project. Thus what is known as causal ambiguity is reduced because the cause and effect loops are less ambiguous and clearer to understand. Szulanski (2003) has identified causal ambiguity as one of the principal reasons why best practice and other forms of knowledge transfer is 'sticky' or difficult to effectively transfer. An effective meeting with genuine dialogue helps to make explicit that which otherwise may remain implicit and therefore poorly communicated and understood.

Our research findings indicate that where possible, the introductory meeting for the primary group of stakeholders should be scheduled as an agenda item at the stakeholder group's regular meeting. Inclusion of the introduction into the stakeholders' regular meeting will increase the likelihood of stakeholder attendance and also send a clear message that the proposal to identify and define high priority intangible project outcomes is part of the group's operating agenda (Thornbury 2003). If the stakeholder group does not meet regularly as a group, then a special purpose meeting will be necessary.

The expected outcomes of the introductory meeting are:
1 An agreement that project success is dependent on the delivery of intangible project outcomes.
2 The relative importance of intangible project outcomes warrants them being identified and defined.
3 Identification and definition of intangible project outcomes will increase the likelihood of project outputs delivering to the outcomes and their associated benefits.
4 An agreed date, time and place to conduct the workshop.

Based on our research findings, serious consideration should be given to scheduling the workshop to coincide with a regular meeting, extending the duration of the regular meeting by the amount of time that the group agrees they are prepared to spend identifying and defining high priority intangible outcomes. The reasons for scheduling the workshop in this way are identical to those described for scheduling the introductory meeting - increased likelihood of stakeholder participation and integration of the workshop into the group's operating agenda. If the stakeholder group meets relatively infrequently, then a special purpose workshop may be necessary.

The workshop agenda comprises the following items:
- List Tangible Outcomes
- List Tangible Outputs
- Identify and Prioritise Intangible Outcomes
- Describe Each High Priority Intangible Outcome

A suitable workshop location should be chosen, with a ready means of recording workshop outcomes e.g. overhead projector and blank transparency slides, a paper flip chart, electronic whiteboard (with paper copying functionality) or a computer linked to display equipment. Our research findings indicate that stakeholder groups prefer the introductory meeting and workshop to be conducted separately, allowing project stakeholders time to think about intangible project outcomes prior to the workshop. We recommend conducting a workshop, rather than interview individual stakeholders. If the stakeholders are interviewed individually, or as sub-groups, their priorities may vary and the facilitator is then posed with the challenge of reconciling the various stakeholder priorities as well as consolidating individual stakeholders' feedback. In our experience, we find it far preferable to meet the stakeholders as a group, in terms of both generating a unified definition of project outcomes and doing so efficiently.

The purpose of the first two (2) steps of the workshop is to identify the tangible outcomes and outputs to be generated by the project. This activity serves as a common starting point that reinforces project stakeholders' current understanding of the project scope and the outputs to be generated.

The next step of identifying and prioritising intangible outcomes has workshop participants list the expected intangible project outcomes and then prioritise them according to an agreed process (e.g. scoring). This process is used because the stakeholder group will have pre-defined the workshop duration, so it is important that the available time be spent discussing the intangible outcomes of greatest importance. The remainder of the workshop is based on the list of prioritised intangible outcomes.

Each high priority, intangible project outcome is then described in terms of one or more "outcome profiles". Outcome profiles are based on a combination of project management and benefits management principles and processes, and can also be directly related to PRINCE2 product descriptions. As this process evolved through five (5) case studies being undertaken in a series of action research cycles, it became clear that a principal reason why this process has not successfully been developed before, is that many stakeholders with many priorities will overload the capacity of any group to identify the critical few that really make the maximum impact upon perceived project success. Therefore, a filtering process is required to prevent the process getting "bogged down".

Outcome profiles comprise information included under each of the following sub-headings
- Definition Statement;
- Owner
- Beneficiary/ies
- Benefit/s
- Benefits Realisation Schedule i.e. during the projector post-project
- Means of assessment/measurement e.g. qualitative. Quantitative, ad hoc
- Roles and Responsibilities
- Outputs
- Dependencies
- Risk Assessment

For example in one of the research case studies conducted with the Victoria state police force, (CYPRASS, the Campaspe Young Persons Referral and Support Scheme) the project management committee identified, prioritised and defined five priority intangible outcomes, one of which was Relationships. Relationships were defined as comprising three tiers of relationships, formal links, partnerships and personal relationships, with some formal links supporting the delivery of partnerships and some partnerships in turn supporting the delivery of personal relationships. Each relationship tier was defined in terms of an outcome profile (refer Attachment 2). Workshops generate descriptions of as many high priority intangible project outcomes as can be discussed during the available workshop time. If it is not possible to collect all of the required information for every profile during the workshop, then follow-up action items need to be documented and agreed, including who is responsible for providing what information to whom and by when.

If this process of aligning high priority intangible outcomes to tangible output/s is used in the planning stages of a project, then it will assist the delivery of intangible project outcomes to be integrated into the development of tangible project outputs. If the process is used to review tangible project outputs, it will assist to evaluate the delivery of intangible project outcomes by tangible project outputs. In the CYPRASS project example, delivery of the partnership outcomes was dependent upon management committee members having sufficient time to foster partnerships and also that existing formal links were capable of generating a sufficient number and diversity of partnerships. The partnership outcome was aligned to the tangible outputs of a proforma partnership agreement or set of guidelines, a contact list that clearly indicated which management committee member was responsible for managing which partnership/s, (including media liaison partnership/s) and the management committee meeting agenda including a standing items for reviewing partnership related activities (including resource estimates for developing/maintaining partnerships).

Having linked intangible project outcomes to one or more tangible project outputs, each of the tangible outputs needs to be defined/reviewed in turn, depending upon whether the process is being used to plan or review project outcomes. This is the point in the process where standard project management practices are engaged to define/review the activities to generate each tangible output, along with the resources required to support the activities such as skill level, time and available budget. Whether used as a planning or review tool the process will provide information capable of influencing the delivery of future intangible outcomes and associated benefits.

The Validation Workshop

Two of the research case studies were community crime prevention projects involving Victoria state police force representatives. These sample projects were expressly chosen by the responsible police Commander to demonstrate the process of defining and aligning intangible project outcomes and tangible outputs. Upon reviewing the case study research reports, the Commander recognised the broader benefits of applying the process to new and existing crime prevention projects. Based on this assessment, one co-author was invited to participate in the Victoria Police senior management conference (November 2003); to both present a description of the CYPRASS research case study and to oversee a number of concurrent hour-long workshops during which participants would put the process into practice, using a crime prevention case study. Senior police members who had attended a "train the trainer" sessions facilitated by the co-author, prior to the conference, facilitated the workshops. The conference workshops provided the opportunity to validate the usefulness of the process. The validation was conducted using a combination of (intentionally) short, voluntary pre- and post-workshop surveys. The surveys were designed to test before and after self-assessed perceptions of confidence in planning and delivering intangible outcomes.

While we did not have a precise roll call of all present (as people did need to periodically leave the room for various reasons) a very high proportion of workshop participants responded to the survey. Indeed, workshops facilitators strongly encouraged workshop participants to complete the survey form, because the results were of great interest to the conference organisers and the responsible Commander. Forty-one people completed the pre-workshop survey before being exposed to the presentation describing the case study project and putting the process into practice during an hour-long workshop. Forty-six people completed the post-workshop survey. The demographics of the senior police officers was such that, 83% of the respondents to the pre-workshop survey (n=41) were male and 89% of the respondents to the post-workshop (n=46) survey were male. Over 87% and 95% of those responding pre and post workshop respectively were at the rank of inspector or above so the seniority level and cumulative experience represented by this group was highly significant and adds to the credibility of the results. Further, over 70% of respondents were graduates or postgraduate trained and so also had high levels of demonstrated cognitive capacity and ability.

The pre-workshop survey included questions 1 to 6 only, of the following list and the post-workshop survey included questions 1 to 7. Survey responses were recorded using a 5 point low to high Likert type score:

1. Rate the importance of intangibles such as networks and partnerships to your day to day responsibilities: 1 unimportant - 5 very important
2. Rate the importance of intangibles such as networks and partnerships to the achievement of your business outcomes: 1 unimportant - 5 very important
3. Rate the importance of members of your networks/partnerships maintaining a shared vision: 1 unimportant - 5 very important
4. If sample intangibles include learning, leadership, networks, partnerships, communication, organisational culture and values, rate your confidence in: defining intangible outcomes: 1 Lacking confidence - 5 very confident
5. If sample intangibles include learning, leadership, networks, partnerships, communication, organisational culture and values, rate your confidence in: planning and delivering intangible outcomes: 1 Lacking confidence - 5 very confident
6. If sample intangibles include learning, leadership, networks, partnerships, communication, organisational culture and values, rate your confidence in: - assessing the delivery of intangible outcomes: 1 Lacking confidence - 5 very confident

7. Rate the likelihood of using today's workshop method again: 1 unlikely - 5 very likely.

Table 1 presents the results as follows:

Table 1 – 't –Test' Results Of The Pre And Post Conference Responses

Question	Pre-Workshop Mean value 1-5	Pre-Workshop Std value	Post-Workshop Mean value 1-5	Post-Workshop Std value	Significance
1	4.46	0.674	4.52	0.547	0.658
2	4.41	0.774	4.46	0.622	0.780
3	4.34	0.762	4.26	0.743	0.619
4	3.32	1.011	3.91	0.626	**0.002** **
5	3.24	0.994	3.80	0.654	**0.003** **
6	3.05	0.999	3.67	0.762	**0.001** **
7	Not applicable		4.09		Not applicable

*Std = standard deviation, Significance testing using t tests of difference of means** = significant at the 99.5% level*

The workshop generated much interest and discussion as well as follow on interaction between some of the many attendees and the co-author who conducted the workshop. The general comments reflected interest in the process and agreement on its applicability to Victoria Police related projects.

The data indicates no significant change in responses to questions 1, 2 and 3, however the pre and post workshop values are rated as very important and that did not significantly change which is to be expected. The changes in perception for questions 4, 5 and 6 were highly significant moving from around average confidence to being confident. Given the short term exposure to the concept, the somewhat limited time for the workshop time to fully test and explore the process, the significant change is highly encouraging. It was also interesting that after the workshop a more positive and consistent response was obtained for questions 4, 5 and 6. The characteristics of the participants and their police culture does not lead to an expectation of any halo effect or undue enthusiasm so the response would indicate a strong and genuine interest and endorsement of the process and its usefulness.

Discussion and Conclusions

We have attempted to explain the process we have developed for making assumed, intangible project outcomes explicit, measurable and clearly linked to tangible outputs. We also presented analysis from data and feedback obtained from workshop participants with the level of seniority associated with project sponsors and champions. This tested the usefulness of the process to those accountable for project success and so we believe that this provides credible and valuable validation of the process

Therefore, we are confident in concluding that this process has merit and represents an advance in project management practice. Attachment 1 indicates a pro-forma that can be used to cross –reference project outcomes and associated benefits to project outputs and also post-project outputs required to deliver the expected benefits (that cannot be realised within the project timeframe). It is worth noting that this simple table generated unexpectedly high levels of attention from stakeholders of all research case studies, those conducted with Victoria Police and also other organisations. Stakeholders' response to this table is due to it providing a highly effective means of documenting project outcomes, associated benefits and how they align with tangible project (and post-project) outputs The process also provides a set of template that assists project management delivery in a similar way to the PRINCE2 methodology. An example of a partnership relationship outcome profile is presented as Attachment 2.

In this paper we have presented a glimpse of how project management practice can be extended by linking intangible outcomes to tangible outputs. We have identified important gaps in the project management body of knowledge (PMI 2000) in the way it fails to provide guidance on how to link critical but unarticulated project outcomes to the standard accepted tangible project outcomes. We have argued that project success extends beyond the limited aims of project managers meeting the iron triangle of project management goals. We argue that a path forward, as indicated above can lead to an improved, shared and holistic vision and definition of project success and that techniques such as the process described here, provides all project stakeholders, including project managers and their teams, with a better chance of achieving common agreement about project success.

We presented evidence from a well qualified group of project champions and sponsors, whose reputations and careers rests in some part on their perceived success in delivering community projects. This evidence strongly supports the validity of the process and provides encouragement for its further development.

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Attachment 1 - Intangible Outcome To Tangible Output Cross-Reference Template

Intangible Outcome	Benefit Description	Tangible Project Outputs (TPO)				Tangible Operational Outputs (TOO)			
		TPO 1	TPO 2	TPO 3	TPO 4	TOO 1	TOO 2	TOO 3	TOO 4

Attachment 2 Sample Partnerships Outcome Profile

Definition Statement
The purpose of this outcome is to establish and maintain formal one-to-one inter-organisational sharing links between the CYPRASS program and other organisations, supported by formal agreements (e.g. Memorandums of Understanding) that define a shared and combined commitment to the provision of youth referral and support services in the Shire of Campaspe.
Partnership organisations will comprise local representation of organisations that have established formal links with CYPRASS. e.g. Echuca Court for Department of Justice.

Owners
- CYPRASS Management Committee
- CYPRASS Project Officer

Beneficiaries
- At risk Shire of Campaspe youth, their families, peers and the broader community

Benefits
1. Capability to provide strategic, holistic services based on shared and combined contributions.
2. Shared and combined resources, skills and experience capable of providing larger range of services.
3. CYPRASS is seen as a “networking agent” introducing partners to each other e.g. could be formalised with “partner events”
4. Intermediate layer of CYPRASS network building upon the foundation layer of Formal Links.
5. Intermediate layer of CYPRASS network capable of delivering personal relationships.
6. The number, frequency and diversity of programs offered by CYPRASS partners both reduce youth risk factors and Increase protective factors.
7. Partnerships are based on an accurate and current understanding of CYPRASS objectives as described in (recent) formal communications.
8. Partnerships provide the opportunity for the CYPRASS Management Committee and Project Officer to develop informal communications (and personal relationships) by building on the foundation layer of standard, consistent, current, complete communication of CYPRASS message.
9. Partnerships support responsibility for review/monitoring of the CYPRASS program. i.e. shared lessons learned
10. Partnerships promote increased learning opportunities - 2-way shared learning.
11. Joint customisation of standard information/documentation presenting a common focus, purpose e.g. multiple organisations sponsoring a brochure, event.
12. Distribution of customised documents to partners' own networks
13. Introduction of partner/s to each others' networks - establish more links
14. Shared Success
15. Address the challenge faced by the Victoria Police Community and Cultural Division to translate "high level partnerships to effect operational strategies at the local level". (Victoria Police - Office of Deputy Commissioner 2003, p14)

Quantitative Measures

1. Number of partnerships
2. Number of partnerships that have delivered personal relationships e.g. mentors
3. Increase/decrease in number of partnerships
4. In-kind resources contributed by partners
5. Funding provided by partners
6. Number and frequency of communications with partners
7. Duration of partnerships.
8. Number of guests from partner organisations who attend CYPRASS meetings/events
9. Number of CYPRASS partner meetings/events attended by CYPRASS Management Committee representatives
10. Number of "CYPRASS Partner" events
11. News reports of CYPRASS partnerships.
12. News reports of CYPRASS partnership events.
13. News reports of partnership generated activities/events, communications e.g. brochures, results

Qualitative Assessments – based on "scoring (e.g. on a scale of 1 to 5), anecdotes and stories

1. Partnership case studies

Roles and Responsibilities

- Management Committee members – Forging and maintaining partnerships from established formal links e.g. each committee member assigned responsibility for fostering particular partnerships.
- Management Committee member organisations - Support services including administration e.g. printing and distributing formal communications
- Victoria Police Youth Officer – Speaker at meetings held by partner organisations.
- CYPRASS Project Officer – Responsible for maintaining the list of partnerships and fostering particular partnerships.

Outputs

1. Proforma partnership agreement, including mention of whom/how makes public statements about the CYPRASS program.
2. Contact List to include which Management Committee member is responsible for managing which partnership/s, including media liaison partnership/s with local media.
3. Management Committee meeting agenda includes standing items for reviewing partnership related activities, including resource estimates for developing/maintaining partnerships.

Dependencies

1. Management Committee members' time
2. Management Committee member organisations' support
3. CYPRASS formal links are capable of delivering a sufficient number and diversity of partner organisations
4. "Sufficient" number and diversity of partnering organisations
5. Partnering organisations able to share resources, including qualified personnel and documentation.
6. Partnering organisations have a demonstrated commitment and strategic alignment to the provision of youth referral and support services.
4. Local media outlets respond positively to CYPRASS approaches to be partners in "spreading the good word" about CYPRASS.

<u>Risk Assessment</u>

In summary, six (6) Partnership related risks were identified. Of these, five (5) re Medium risks and one (1) is a Low risk. The vast majority of risks being assessed as Medium, indicates that Partnership related risks need to be actively managed by the Management Committee to prevent them from becoming High risks and placing realisation of partnership outcomes at risk.

Risk No.	**Risk Description**	**Risk Effect**	**Severit y H/M/L**	**Probab ility H/M/L**	**Risk H/M/L**	**Contingency/Mitigation**	**Residual Risk H/M/L**
1.	Management Committee members' have insufficient time to adequately foster partnerships.	Partnerships not maintained and lapse back to “formal link” status. CYPRASS management committee member organisations need to contribute more resources than expected. Shared resources less available. Poor partnership community perception that is difficult to change/correct.	H	M	H	Management Committee needs to strategically assess which formal links are most likely to develop into partnerships and deliver personal relationships.	M
2.	Management Committee member organisations are unable to provide the support required to foster partnerships.	Resource constrained CYPRASS services do not deliver expected outcomes. CYPRASS needs to seek additional resources from partners. Organisations’ membership of management committee needs to be reviewed.	H	M	H	Management Committee meeting to include standing item to discuss partnership related activities and resource estimates.	M

Risk No.	Risk Description	Risk Effect	Severity H/M/L	Probability H/M/L	Risk H/M/L	Contingency/Mitigation	Residual Risk H/M/L
3.	CYPRASS formal links are not capable of delivering a sufficient number and diversity of partner organisations	CYPRASS services limited due to unavailability of expected shared partnership resources. Additional time required of Management Committee members to create/revive formal links that can develop into partnerships.	H	M	H	Management Committee needs to strategically assess which formal links are most likely to develop into partnerships and deliver personal relationships. Management Committee members to assign responsibility amongst themselves for developing/maintaining formal links and partnerships.	M
4.	The expected number and diversity of partnering organisations is not achieved.	CYPRASS services limited due to unavailability of expected shared partnership resources. Resource constrained CYPRASS services do not deliver expected outcomes. CYPRASS member organisations need to provide more resources than expected.	H	M	H	Management Committee needs to strategically assess which formal links are most likely to develop into partnerships and deliver personal relationships. Management Committee members to assign responsibility amongst themselves for developing/maintaining formal links and partnerships.	M

Risk No.	Risk Description	Risk Effect	Severity H/M/L	Probability H/M/L	Risk H/M/L	Contingency/Mitigation	Residual Risk H/M/L
5.	Partnering organisations unable to commit promised resources	CYPRASS services limited due to unavailability of expected shared partnership resources. Resource constrained CYPRASS services do not deliver expected outcomes. CYPRASS member organisations need to provide more resources than expected.	H	M	H	CYPRASS Management Committee member responsible for developing/maintaining the partnership needs to meet with their partnership counterpart/s to discuss issues and define a means of resolving them.	M
6.	Local media outlets do not respond positively to CYPRASS approaches to be partners in “spreading the good word” about CYPRASS.	CYPRASS services have limited exposure, limiting its ability to promote its image and reputation.	M	M	M	CYPRASS Management Committee needs to clearly assign media liaison responsibilities.	L