Program Performance Management Continuum

Increasingly, programs are used as the means of ensuring that business strategy and transformation initiatives are efficiently and coherently implemented across organizational boundaries, and to ensure the realization of benefits. Programs provide the structure and discipline to review alternatives and implement changes in the business environment, the optimal allocation of resources, and the means to managing the value realization of business transformation initiatives.

The Program Performance Management Continuum discussed herein was formulated from having participated and observed the delivery and results of several large-scale corporate-wide programs. It draws on these experiences to produce a framework that will provide programs and its constituent projects with the ability to remain aligned to the strategic drivers, business goals, and stakeholders expectations.

Introduction

Organizations use business strategy to identify and trigger the response to changes in their environment. Change also occurs from the need to restructure operations arising from performance improvements, turnaround/refocusing strategies, mergers, or acquisitions. At its core, strategy development leads to the assessment and identification of changes to business processes and supporting management systems.

Figure 1 – Program Context & Accountability Model

Business Transformation Initiatives (BTIs) are high-level management tactical responses to support the ongoing evolution and existence of the organization. Increasingly BTIs are supra-programs created to coordinate strategy implementation across functional units, and to provide management coordination and resources to multiple programs. Transformation initiatives usually involve milestones setting, organizational design, process transformation, and often culture transformation in response to merging organizations. The two disciplines more often applied to execute business transformation are business processes redesign and change management of organizational systems.

Programs are the means of implementing strategy and business transformation initiatives with impacts across organizational boundaries. Programs usually require the identification and governance of multiple projects, each charged with facilitating systems implementation and organizational and process changes.

For programs to be successful, the management of stakeholders expectations and the formulation of a portfolio of programs and constituent projects need to be prioritized and aligned with the ever-changing needs of the organization. The programs and projects milestones must also be aligned with the business strategic drivers at all times.

The Enterprise I/S Strategy must adapt to support programs implementation and be aligned to support the needs of the organization as it transforms itself, particularly in times of change. When organizational changes occur, initiatives to implement information and infrastructure systems changes to supporting new or revised operational systems are identified in a form of Programs (for large & complex initiatives that have impact across organizational boundaries), or projects (when contained within a single organizational unit).

The Program Performance Management Continuum manages projects via the use of Stages, each comprised of activities necessary to produce outcomes, which, in turn, align with each program milestone. Gates are performance thresholds (moments of truth) used to verify that the work is being executed in accordance with key performance indicators (KPIs), and in turn can be used to determine the true status of a program and constituent projects based on value earned.

KPIs are indicators defined at the start of the program which apply to its constituent projects to assess their progress and performance. PSRs (Performance Status Reports) provide information about how the project is proceeding at each stage with respect to the KPI hierarchy.

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Defining Program Management

To distinguish between programs and projects, one could consider the following explanations, proposed by Wijnen and Kor[i]. Projects concentrate on realizing a single predetermined result, whereas programs strive for the achievement of a number of goals across organizational boundaries, and are sometimes conflicting.

The project approach directs energy, while the program approach combines energy. Therefore, management emphasis on projects is defining the final outcome, while in program management the emphasis is on establishing which activities are essential for the achievement of the organizational goals and objectives [as they evolve].

Key success factors exist for both project and program management. Before commencing, it is essential that outcomes and objectives are properly defined. These outcomes and objectives must be communicated to all stakeholders. Moreover, all projects, initiatives and tasks must be properly prioritized by top management. Management must also assign appropriate authority, responsibility and accountability to various stakeholders.

In this regard, the program and project managers must be given full authority over project work. The program approach differs from large projects because of its ***total goal-oriented focus*** rather than prescriptive outcomes. Activities in a program often originate from the bottom up, arising from work in which the various project teams are engaged. These activities are often created through innovative ideas that emerge from the learning organization ranks. However, activities in programs also originate at the top managerial level to create fundamental organizational change and transformation as a result of prescriptive and emergent strategy development.

Murray-Webster and Thiry[ii] have defined a program as *"A collection of change actions (projects and operational activities) purposefully grouped together to realize strategic and/or tactical benefits".* They argue that *"Increasingly there is a recognition that programs should be the means of ensuring that an organization's strategy and initiatives are efficiently and coherently implemented; a way of dealing with emergent change in the business environment, and a way of gaining optimal use of resources."*

The nature of emergent change is such that rapid responses are often required to maintain the organization's competitive position or compliance with market and/or regulatory expectations. Such responses may mean responding to external or internal pressures with a new project, modifying or replacing existing project objectives with more appropriate solutions, altering the relative priority between projects, or utilizing key staff in different areas of the business.

Whereas, in the past, such decisions were relatively straightforward, because of the slow rate of change and the small number of stakeholders (usually one or two), the current accelerating rate of change and multiplicity of stakeholders make it impossible for performance-based project management to respond effectively in those situations. Effective response can only be achieved through a learning and expectations management process aimed at increasing the decision-makers' knowledge of the situation, as well as clearly identifying and balancing the needs and expectations of diverse stakeholders.

Managing Programs

The Program Performance Management Continuum outlined in Figure 2 defines the two accountabilities of program management:

- ***Expectations Management*** - capturing and managing the stakeholders needs and expectations; and
- ***Value Management*** - to deliver value from the resources allocated to implement the strategy.

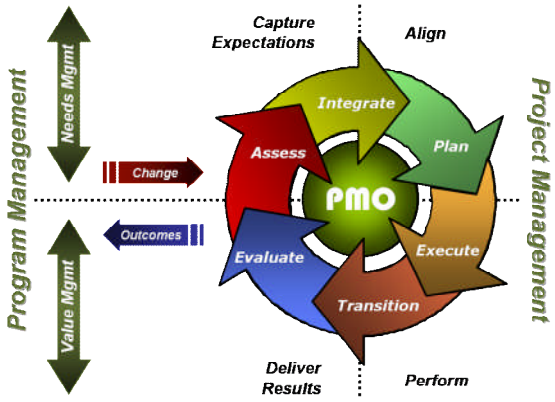

Figure 2 – Program Performance Management Continuum

Program management ***is an alignment process*** and goes beyond PMI's five fundamental process groups of PMI's project management Book of Knowledge[iii] - Initiate, Plan, Execute, Control, and Close. It is both about making sure projects deliver their expected objectives and benefits, but it is also about evaluating options and making the 'right' decisions that will enable project managers to deliver these. The task of defining priorities among stakeholder objectives and identify alternatives, which will enable project managers to make trade-offs, is part of a program management process.

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Within a context of a program, Project management ***is a performing process***. It is about delivering a specific set of outcomes with a limited set of resources, within a defined timeframe and budget. Project Initiation is used to align the project objectives and plans with all projects within the program; Closing, on the other hand is used to verify that the expected value of the project within the program is delivered. The accountability for the project resources allocation and project control processes is shared, supported by an escalation process covering status reporting and issues-risks outside the projects control.

Managing Needs & Expectations

Effective Program Management is all about capturing, learning, understanding, prioritizing, managing and delivering stakeholder expectations.

Business strategies are outcomes of shared inputs from cultural and political framework, customer or market pressures, and organizational/business needs. These create a pressure to change requiring a response, which is usually expressed through the definition of expected business benefits. Benefits are translated into objectives and Critical Success Factors[iv] (CSFs), forming the basis for the selection of programs and constituent projects.

Expectations Management is defined as a process of managing stakeholders interactions, who are building a collective understanding of a situation and its response is usually based on cues.

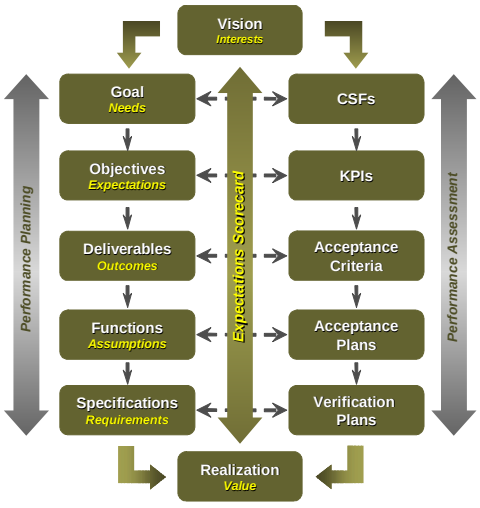

Figure 3 – Expectations Management Model

The Expectations Management Model (Figure 3) outlines the learning and understanding process that must be followed to enable the alignment of stakeholders' interests and value perceptions as a program and constituent projects evolve. The goal is to ensure that expectations are always aligned with all stakeholders set of interests and value elements that would inevitably dominate their actions during the program execution.

The reality in most program initiatives is that, no matter how well documented a program and projects' scope is, each stakeholder always maintains a different set of interests and values they expect to receive from its outcomes. The longer and larger the program is, the wider the disparities between the stakeholders expectations will be. As such, many projects as they evolve tend to suffer from what I call "User Expectations Disenchantment" caused by the gradual and steady disconnect between the project scope and what the stakeholders wanted in the first place.

Expectations are "inductive" elements (shown in italics) that always remain in the "back-of-the-mind" of stakeholders and usually are fluid and in constant evolution or adjustment relative to their particular interests as the project progresses

A program manager must be accountable for converting the inductive elements (italics) to deductive elements via an "**Expectations Convergence Process**" that involves dialogue, understanding, documentation, and commitment (sign-off), and to ensure that a governance process is implemented to ensure that the business objectives are met.

Expectations are managed via planning and assessment. The performance planning processes permit achieving convergence of stakeholders' interests, whereas the assessment processes provides the governance continuum necessary to ensure that alignment is maintained with the business and end-user expectations

Managing Results & Value Outcomes

The discipline of program management has emerged as a fundamental method of ensuring that an organization gains maximum benefit from the integration of project management activities. As with any emergent discipline, there are variations in the interpretation and implementation of program principles, methods, and techniques used by different organizations and practitioners.

The recently published European Standard on Value Management[v] defines value in the following terms: *"Value lies in achieving a balance between the satisfaction of many differing needs and the resources used in doing so. The fewer resources used or the greater the satisfaction of the need, the greater is the value."* Further, the standard states: *"The Value Management contributions to a formal project will coincide with specific project*

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milestones in order to assist the project management team progress from one phase of the project to the next."

Program management is the means by which organizations ensure delivery of benefits across organizational boundaries; it needs to focus both on the delivery of specific project objectives, and on the development of effective responses to emergent change.

Program Management Office (PMO)

The establishment of a Program Management Office (PMO) is essential to maintain communications and coordinated allocation of resources to deliver results via a common control mechanism. The PMO is the arm of senior management to execute transformation initiatives.

Program management is accountable for the constituent projects initiation, control, and closing processes, as defined within the PMI model. Without centralized control no coordination of priorities and resources is possible, and anarchy and chaos would be an inevitable outcome. The main functions and accountabilities of the program management office are:

Alignment Management

- Portfolio Management
- Stakeholders Expectations Management
- Communications Management
- Resource Allocation & Accountability Mgmt.
- Business Process Design
- Organizational Change Management
- Issue Resolution Management
- Scope & Change Management

Projects Management & Control

- Program Status Reporting
- Team Directory Administration
- Facilities Assignment & Security Administration
- Knowledge & Competencies Coordination
- Resources Training, Scheduling & Assignment
- Procurement Coordination
- Projects Definition, Initiation & Closing
- Interdependencies Management
- Risk Management
- Change Control
- Projects Coordination and Review
- Configuration Management
- Knowledge Repository Management

Value Realization Management

- Business Requirements Acquisition
- Cost-Benefit Analysis
- Quality Management
- Value & Benefits Realization Management
- Resource Assessment & Rewards Mgmt.

PMO Assess Stage

Stakeholders are individuals or parties who have different and sometimes conflicting interests, all of whom are 'groups at risk' from the outcome.

Expectations management is defined as a process of managing stakeholders interactions, who are building a collective understanding of a situation and its response is usually based on cues. The process involves the formulation of a shared understanding of the situation and definition of a shared and desired outcome. This interaction process usually results from the challenge of established order and the need to anchor one's thoughts to known concepts.

Change assessment is a vital first step on any program. It is triggered by the need for individuals to make sense of the world around them, set in motion by ambiguity and uncertainty. For groups, it involves a constructivist interaction, which is characterized by effective communication based on co-operation and the development of a shared frame of reference.

The change assessment process can lead to either positive or negative results, influenced by the way information is captured, distilled, and communicated. The confidence of achieving desired goals also affects the assessment process. All these factors create cognitive behaviours which need to be managed in order to achieve the desired consensus on objectives.

The main objective of the change assessment process is to identify and generate alternative solutions to be evaluated. Creativity and innovation need to be fostered in order to reach the most 'valuable' options, both at the strategic level, for the selection of projects, and for change management. Most studies on creativity agree that the objective of a creative process is to use the right side (imagination, lateral thinking) and the left side (analytical, vertical thinking) of the brain in sequence in order to offer the analytical mind a greater number of ideas to select from. If the two are used concurrently, the ideas will be skimmed too early, not allowing for cross-fertilization and leveraging thought processes.

Edward De Bono[vi] talks about lateral and vertical thinking, stating: *"Lateral thinking is useful for generating ideas and approaches and vertical thinking is useful for developing them. Lateral thinking enhances the effectiveness of vertical thinking by offering it more ideas to develop. Vertical thinking multiplies the effectiveness of lateral thinking by making good use of the ideas generated."*

Creative thinking is not a standard project management tool, project managers are more used to focus and deliver; change is seen as disturbing, whereas the creative or innovative

process thrives on change and sees it as potential opportunities. *"With vertical thinking, one concentrates and excludes what is irrelevant; with lateral thinking one welcomes chance intrusions"* (De Bono, 1990[vii]).

The creative process must not be passive; it must be actively managed in order to deliver the expected results. The management of creativity also involves focusing the creativity process on the situation to be addressed, using the 20/80 Pareto rule[1]. It is recommended that the creativity process be externally facilitated to provide the best results and to prevent the facilitator from being 'challenged'.

Inputs Strategy and Organizational Change Priorities, CSFs, Process Maps, System Overviews.

Techniques Delphi and Nominal Group Facilitation[viii], SWOT & functional analysis, Change analysis checklists, stakeholder analysis, functional analysis, process modeling[ix], balanced scorecard[x].

Outputs Situational Model, Problem Statement, Process Change Assessment, Alternative Tactical Scenarios, KPIs.

PMO Integration Stage

This stage defines the programs and constituent projects that have compatible and complementary outcomes. Program design is performed by integrating acceptable initiatives that have compatible benefits to be managed[xi].

Before undertaking the project integration stage, it is paramount to understand both the intent (which has been identified in the assess stage), and the organization's capabilities. All alternative scenarios need to be evaluated using the following aspects:

Suitability Alignment with strategy (CSFs, timelines, etc.);

Feasibility Capability assessment (required financial & human resources vs capability and probability of success).

Acceptability Long term assessment (likely benefits vs. risks);

The objective of the prioritization stage is to identify the options with the best balance of all these factors. Whereas suitability and acceptability mostly concentrate on qualitative aspects of evaluation, emanating from the stakeholders' analysis and functional analysis; feasibility focuses on the following quantitative factors:

Financial Capital cost, cash flow, life-cycle costs;

Resources Resource availability, competence, stakeholders and end-user perceptions;

Risk The probability of success.

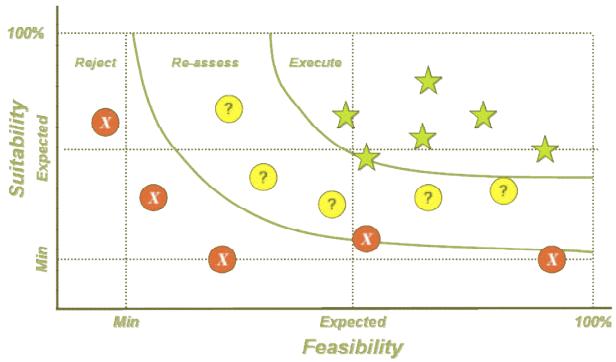

Figure 4 – Alternatives Assessment

Each alternative is assessed against the organization's capacity to carry it out. Non-viable alternatives are eliminated. After having fixed minimum and expectation points for each aspect of the evaluation; alternatives will be assessed. Those who do not achieve minimum requirements are eliminated, whereas those that are above the minimum, but below expectation need to be improved and re-assessed. The program team will end up with a series of alternatives (Portfolio) that are suitable, acceptable, and feasible.

Inputs: A list of alternatives to be evaluated and/or developed into workable options, KPIs.

Techniques: Cost benefit analysis, selection criteria, portfolio analysis, selection matrices ranking and rating, interdependencies analysis, etc.

Outputs: Portfolio of most beneficial option(s), Program Charters, Outcomes & Milestones Plan, Communications Plan, Value Realization Plan.

[1] *The Pareto's rule states that a small number of causes are responsible for a large percentage of the effect, in a ratio of about 20:80. Expressed in a management context, 20% of a person's effort generates 80% of the person's results. The corollary to this is that 20% of one's results absorb 80% of one's resources or efforts. For the effective use of resources, the manager's challenge is to distinguish the right 20% from the trivial many.*

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PMO Planning Stage

Once a decision is made to structure and initiate a program, its objectives are translated into finite time, cost and functionality/quality objectives for its constituent projects. Specific outcomes associated with the program's CSFs are defined.

Since programs are aimed at making best use of resources to achieve the most benefits, the aim of projects is to achieve these set deliverables (scope, functionality and quality) with the least possible resources (time, cost, and human resources). Projects require a more 'efficient' approach, where programs will strive for a more 'effective' perspective, based on the principles of value management.

Project management is specifically aimed at improving the performance of limited resources to deliver set objectives. The whole concept of project management is based on tools and techniques that will achieve clear and specific deliverables with the least possible resources; definitely a performance process. The PJM process groups, as defined by PMI, are specifically designed to enhance performance of the project team and the overall project process and achieve the least deviation from plan. Following a decision, it goes through initiating, planning, execution, control, and closing, leading to delivery.

Within a program context, the initiation, planning, control and closing processes of its constituent projects are shared and coordinated through the program management office. A project manager with accountability for a given project is responsible for the project planning and execution processes.

Inputs	Program Charter & Objectives, Business Requirements, Stakeholders Analysis.
Techniques	Planning & Facilitation
Outputs	Finalized Value Proposition Business Case, One-page Projects Charters, Outcomes Acceptance Criteria, Program Milestone Alignment Plan, Projects Inter-dependencies Analysis, Risk Analysis.

PMO Execution Stage

The role of the program management office is limited to monitoring the constituent projects execution through:

Projects Integration Support

- Assist the sponsors in managing the projects as a portfolio
- Milestones plan & interdependencies monitoring
- Monitor & report project progress
- Manage issues & actions
- Manage change request processes
- Coach & mentor project teams
- Meetings facilitation
- Integrated Contract Management

Resource Management Support

- The right resources, to the right place, at the right time
- Check resource availability, location and competencies within the program's resource database
- Reassign a program resource or allocate constrained resources.

Knowledge Coordination

- Assess project team information needs
- Acquire information from multiple sources, including project teams
- Share & re-use knowledge to promote efficiency and consistency
- Proactively seek out opportunities for project teams to re-use information
- Manage the program knowledge repository database

Risk & Quality Management

- Acceptance Criteria Development
- Monitor resource loaded work plans
- Facilitate design-requirements integration walkthroughs
- Review completed key deliverables and facilitate sign-offs from stakeholders
- Monitor risks identified in the project charters and through risk analysis sessions
- Activate contingency plans when required
- Review & confirm project-based cost/benefit analysis
- Monitor project resources for appropriate skill sets, time dedication

Team Orientation & Training

- Provide orientation on overall program to new team members
- Deliver best practices training offerings such as Effective Communications, Project Management, Business Change Implementation, and other program-specific offerings needed to carry out the projects effectively.

PMO Transition Stage

The transition stage planning should start concurrently with the Execution Stage - beginning with the end in mind. This will facilitate the refinement of execution plans from all projects, as well as the alignment of milestones and outcomes from individual projects.

The transition stage involves the coordinated execution of:

- Data and systems migration

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- Integration testing & certification
- End-user training
- User acceptance testing
- Transition to production

The final process of the program is its conclusion after the successful completion of all projects. The process of concluding a project within the program is done only after project termination has been established, reported, and agreed on by the project's infrastructure, including the Program Manager and Sponsors. This process formally brings a project to a conclusion, at which time the project and its resources are formally evaluated. This conclusion occurs only once for any one project and consists of the following:

- Determination of completion
- Reporting of completion
- Assessment of performance
- Recording of history
- Appraisal of team members

PMO Evaluation Stage

Program management and portfolio management, supported by relevant and actionable measurements represents a significant amount of change for most organizations. The process of change must be proactively managed. It is this proactive management of change that will ultimately determine the success of benefits realization for the organization.

"If you can't measure it, you can't manage it."

Make sure measurement systems must guide decisions and action. Without an appropriate measurement system, full cycle governance, portfolio management, program management and, as a result, benefits realization, will be no more than wishful thinking.

Traditional measurement systems were never designed to measure key linkages in a benefits realization process leading from concept to cash. They do not capture organizational capabilities, intermediate outcomes, some of the softer end benefits and benefits streams. They do not link naturally to value cases, programs and all the stage gates of full cycle governance. Models constructed using the Results Chain[xii] provide a key for building – and adapting – the measurement systems that do support the decision and management processes of benefits realization.

The information requirements of benefits realization form an ascending hierarchy, starting with basic measurement of outcomes, to interpretation of linkages in the Results Chain models, to high-level decision support on program selection. These requirements must be met in order to measure the effectiveness of programs.

A solid measurement and management information base for each individual blended investment program is one of the foundations on which full cycle governance is built. To build powerful measurement systems, you must:

- Decide what needs to be measured.
- Establish processes to measure the right things.
- Make sure measures exist.
- Measure things the right way.

Program Accountabilities[xiii]

Managing programs involve five major governance groups:

Decision Board	Accountable through portfolio management for the value of IT investments and the achievement of the associated business benefits.
VAO	The Value Administration Office is Accountable for the progress of the initiatives through properly funded programs.
Sponsor	Accountable for the achievement of the agreed business benefits of the program.
Program Mgr	Accountable for expectations alignment, overall program management, and the combined results of the projects within the program.
Project Mgrs	Accountable for the timely delivery and implementation of the agreed deliverables.

The responsibilities of these groups with respect to the programs execution are:

Decision Board	Commits business sponsors, monitors portfolio status, and resolves major cross-organizational issues/conflicts.
VAO	Facilitates the definition of value business cases, defines benefits realization processes, and monitors value acquisition progress and program expenditures.
Sponsor	Is the business Owner of the program, is responsible to the Decision Board for the achievement of business benefits, recruits the program manager, negotiates the allocation of SME resources, and

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oversees program implementation process.

Program Mgr — Is responsible to the business sponsor for the success of the program, recruits project managers, and directs and coordinates the program activities.

Project Mgrs — Are responsible to the business sponsor for project deliverables, and are responsible to the program manager for the project execution within the agreed to plans, time, resources and cost constraints.

Program Status Management

The program status is a composite of its constituent projects and should be based on key performance indicators captured at least on a monthly basis. The best reports are those that provide a graphical representation of the status of the projects (as shown in Figure 5 below) and supported with appropriate status information to that back up each assessment.

Project	PJM Status Assessment	Scope Changes	Financial Status	Schedule & Deliverables	Team Resources	Sponsor Expectations	Management & Bus Unit Support	Risks / Inter-dependencies	Other Issues
Project 1	Y	Y	Y	G	G	G	G	G	G
Project 2	Y	G	Y	Y	Y	G	G	G	G
Project 3	G	G	G	G	G	G	G	Y	G
Project 4	R	Y	R	Y	Y	Y	G	G	Y
Overall Status	R	Y	R	Y	Y	Y	G	Y	Y

Figure 5 – Program Execution Status

The program completion status should be reported on the basis of the completion of status gates and not based on the traditional measurements of effort against plan or dollars spent against budget.

The chart below provides a simplified example of the status of a program by assigning 50% of the weighted value of a gate when the work for the gate is in progress and 100% when it has been deemed closed and accepted by the stakeholders. In reality, not all projects are equal and they may have a different weighting regarding their relative complexity, thus providing a better and more accurate status for the overall program.

Project	Initiate	Plan	Resource	Requirements	Design	Build	Transition	Close	Evaluate	% Complete
Gate Weight:	1%	4%	2%	10%	20%	35%	20%	5%	3%	100%
Project 1	C	C	C	C	C	C	C	C	C	100.0%
Project 2	C	C	C	C	C	C	S			82.0%
Project 3	C	C	C	S						12.0%
Project 4	C	S								3.0%
Overall Status	1.0%	3.5%	1.5%	6.3%	10.0%	17.5%	7.5%	1.3%	0.8%	49.3%

Figure 6 – Program Performance Status

PRSI's Perform™ Program & Project Management Methods and Practices provide a comprehensive set of management tools (from basic to advanced) that allow a project/program manager to track a project or program status with minimal effort.

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