



Strategic Program Management

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Chapter 1

Strategic Program Management

The growing complexity of capital program delivery is increasing the interest in effective, comprehensive program management as a delivery strategy. This delivery strategy has been previously deployed in both the private and public sector in a wide range of industries with varying results. Increasingly, owners and program managers are seeking to capture both the lessons learned as well as best practices associated with successful applications of program management as a key delivery strategy.

This examination points to the need to critically understand core elements of successful program delivery as well as the interrelationships among these elements. A review of troubled program management efforts typically identifies that one or more of these core elements was not adequately considered or implemented in a timely fashion.

One potential set of core elements is reflected in the figure below. Others may characterize these core elements differently, by either combining or dividing specific elements. What is important, however, is not the characterization of these elements but the clear understanding that all must be sufficiently present in order to achieve a successful program outcome.



Overview of Core Elements

The strategic program management process as defined here is very much about ensuring that each of these elements is present and is being adequately managed and that the interaction among the elements is understood and shaped for success. Each of these elements attempts to answer and keep focus on different sets of questions which must be continuously addressed for program success.

In summary, these questions include:

Governance

- Who decides?
- How is this decided?
- What is decided?

Organizational Change Management

- How does the owner's role evolve?
- How does the existing supply chain evolve?
- How does the organization evolve through program phases?
- What is the culture of the program team?

Framework Processes

- What are the processes, systems, and practices required for success?

Strategy

- What are the key ways we are going to achieve the defined strategic business objectives?

Continuous Improvement

- What knowledge and lessons learned should be captured from other programs?
- How are we capturing and sharing lessons learned and best practices within the program team?
- Are we improving how we lead and manage?

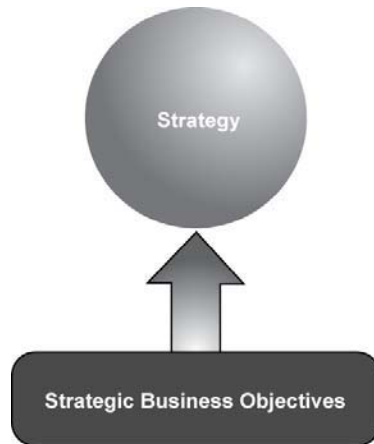
Assessment

- What are the top level metrics which will allow us to measure our ability to achieve the strategic business objectives?
- How does the owner's audit role change under program management?

This list as stated before is not all encompassing but rather defines the universe in which strategic program management must operate. Let's look at a few of these core elements and some of their interactions with other elements of successful program management.

Strategy

The strategy that drives the strategic program management effort derives from the owner organization's strategic business objectives and exists to achieve these objectives. It could be simply viewed as shown in the following figure.



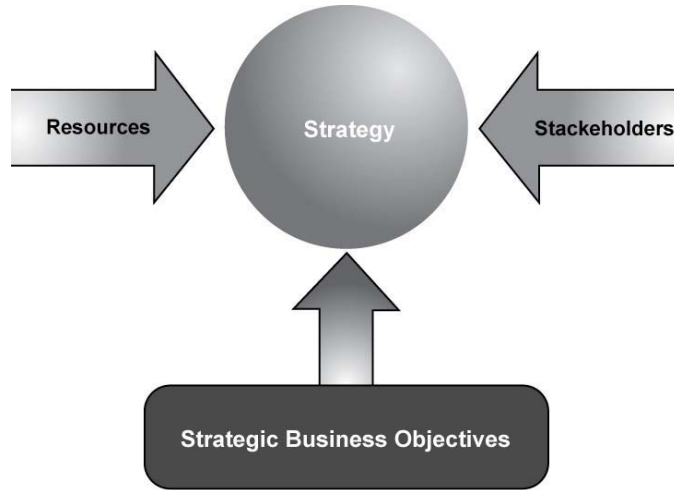
But strategy does not exist in a vacuum, rather it is shaped by the resources available and the external players and factors which have an ability to shape this strategy. For example, if the strategic business objective was to sell 100 million tons of a commodity mineral but only 50 million tons were available from the existing owned mine, no amount of strategy is going to get you there. Not unless the resource constraint acting on the strategy is removed. This change in resource availability might be accomplished by acquiring an additional mine or by buying a competitor and acting to modify what the strategy might otherwise be. It could also be said that the absence of a viable strategy also caused the organization's strategic business objectives to change in such a way that the strategic business objective was now to acquire an additional 50 million tons and sell 100 million tons total.

Resource constraints can take a wide variety of forms, and the example used here is simplistic to make a point.

There is a second set of factors that, in addition to resources, can act to shape strategy, and these can be broadly defined as stakeholders. Stakeholders can run the gamut from shareholders and lenders to workers, communities, and governments affected or potentially affected by your strategic business objectives and strategy.

Broadly speaking, competitors may be viewed as part of this universe of stakeholders with an ability to shape your strategy and potentially even your strategic business objectives. What would Microsoft's business strategy be in the absence of competitor actions via government?

In retrospect, perhaps the drivers of strategy may be better described using the figure below.



A key task of strategic program management is to clearly understand the owner's strategic business objectives without ambiguity, carefully monitor the resource and stakeholders landscape to understand their impacts on the selected strategy, and allow for a strategy modification that may be required.

Control of change to both strategy and the underlying strategic business objectives is essential to successful strategic program management and hence why the governance element and, perhaps even more importantly, the strategy-governance axis are so important.

Governance and the Strategy-Governance Axis

Program management in the engineering and construction industry represents a fundamental reallocation of responsibilities and authorities between the traditional owner organization and an engaged program manager. The readiness of the owner organization to adopt such a delivery strategy will be governed by many factors including overall capital project delivery volumes; prior experience, if any, with program management delivery approaches; inherent organizational capabilities and depth of staff; and, perhaps most importantly, degree of recognition of the level of self-change the adoption of a different delivery and management methodology will require.

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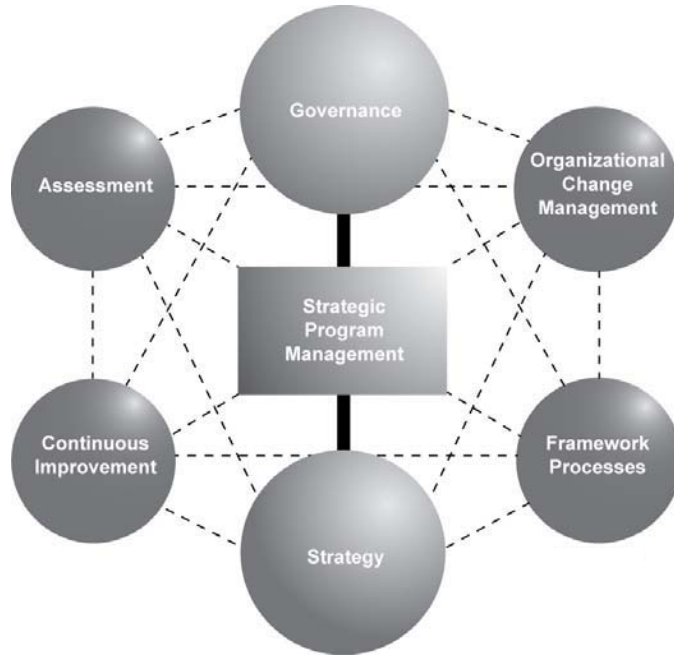
From the program manager's perspective, a key factor for success will be the degree that its responsibilities can be clearly defined, authority allocated is consistent with these responsibilities, and the owner's organization is ready for such an allocation of authority. A well-developed contractual and implementation framework becomes a key ingredient for success, but, in many cases, even the best developed frameworks are undermined by a poorly defined governance regime and inadequate contract administration capabilities within owner organizations. This latter factor sometimes reflects passive resistance to change while in other instances it reflects inadequate organizational maturity to adopt the new delivery regime.

Chapter 4, "Governance: Key to Successful Program Management Delivery," outlines the key success factors (previewed in the following table) and necessary governance structures to ensure strong foundations are built and windows into the program management effort exist to provide assurance, alignment, and improvement.

Table 1 – Key Success Factors for Program Management

- Strong and decisive leadership by senior management
- Early, consistent, and direct involvement of frontline staff
- Engagement and ongoing involvement by each stakeholder population both within the owner's organization as well as externally
- Acceptance and projected confidence in the implementation of new strategies and solutions at an early program stage
- Use of experienced, neutral, and external facilitators to drive organizational change management and alignment processes; identification of latent conflicts for resolution; and facilitation of building the required multidisciplinary team focused on undertaking the program management "journey"
- Clear recognition that many parts of the project delivery system need to be restructured simultaneously for effective program delivery
- Collective determination of key performance indicators and their application
- Comprehensive data analysis by experienced staff with a programmatic and systemic focus and timely reporting of Key Performance Indicators (KPIs)
- Recognition and reward for success emphasized over penalty for failure
- Appropriate resourcing of program management role with sufficient flexibility to migrate the organization structure and skills mix as the program evolves

Let's turn now to the all important strategy – governance axis.



The strategy-governance axis illustrated above plays a central role in strategic program management. While strategy is clearly enhanced or constrained by different resource and stakeholder environments, it would be all too simple to change strategy every time there was the slightest change in these external factors. A hallmark of many failed programs is just such a strategy “du jour” approach. While clearly certain changes in resource or stakeholder factors can influence strategy, it is important to avoid unnecessary strategy rotation at even the slightest changes. The key to this is to develop sufficiently robust strategies in the first place that appropriately consider the variability and uncertainties in the resource and stakeholder environments.

The tool to provide requisite strategy discipline is the governance framework established at the outset of the program. Clearly, a balance must be struck between true strategy change and anticipated evolution of strategy as certain aspects of the external environment and their impact on strategy become known.

Let's return to the resource example described previously, namely an owner with 50 million tons of valuable mineral resource who is looking to sell 100 million tons. Clearly if the strategy to acquire the added 50 million tons had been to acquire a specific property representing another 50 million tons, then unavailability of that property would necessitate a strategy change. If, however, the initial strategy had been to acquire through a combination of competitor and property acquisition an added 50 million tons, then unavailability of one particular property would not necessarily invalidate the strategy.

Conversely, if the strategic business objective changed the target sale from 100 million tons to 200 million tons, the impacts on strategy would need to be assessed and potentially a new strategy put in place. This kind of fundamental change can be extremely disruptive to achieving any given set of strategic business objectives and, therefore, two conditions must apply:

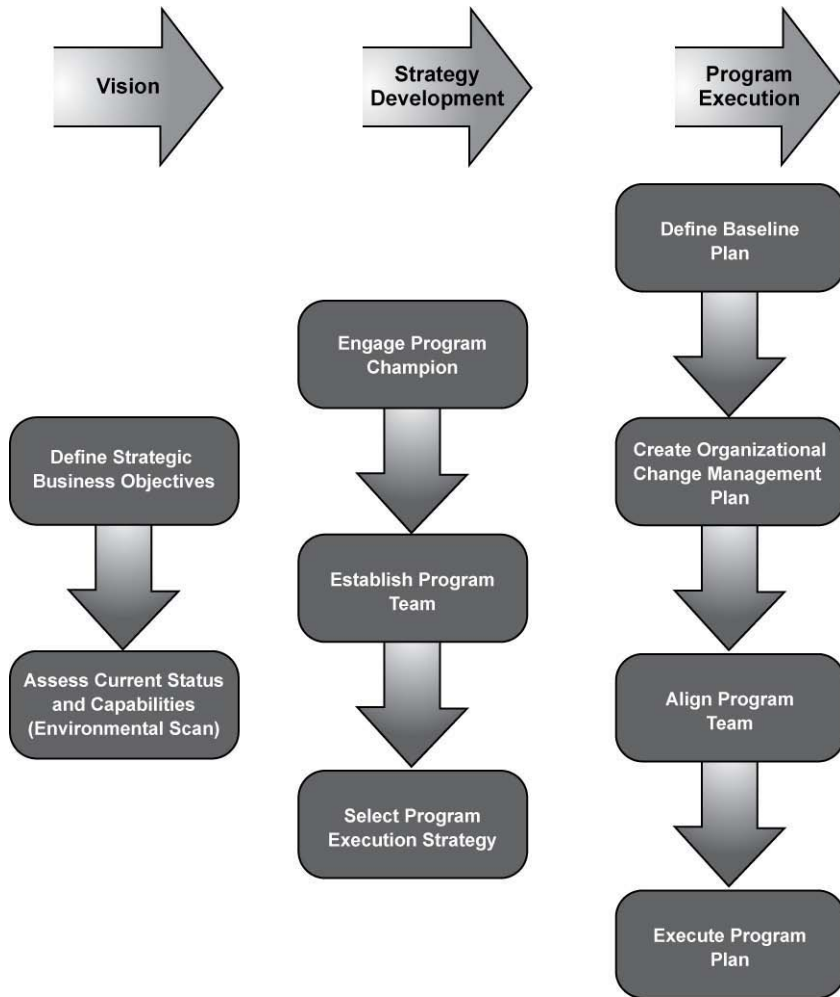
- Strategic business objectives must be truly strategic, easily measured, and void of delivery of processes, preferences, or biases
- Strategic business objectives must only change through a well-defined and controlled process with executive level involvement by both the owner and program management organizations

The importance of this last point cannot be understated since the program manager has a need to clearly communicate to the owner the ramification of such a fundamental change as well as identify the strategic change required and the new strategy that must be put in place to meet these new business objectives. As said well by others, “hope is not a strategy.”

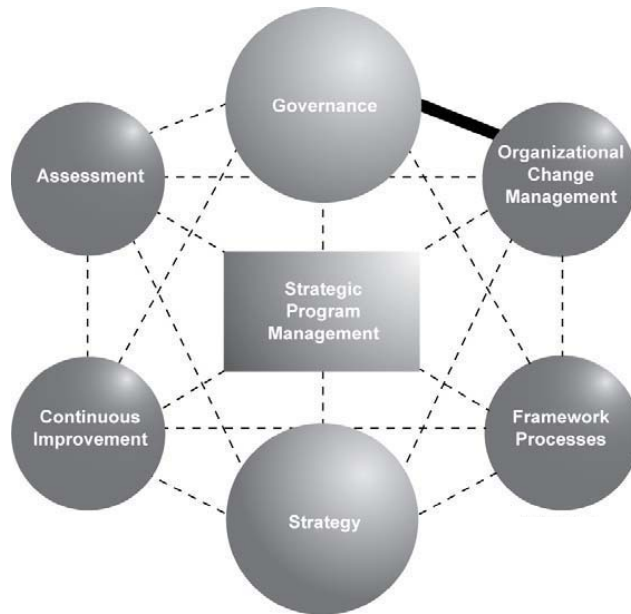
Organizational Change Management

Hopefully, the discussion above provides some insight into the type of organization and relationships which must be in place for successful strategic program management to occur. These ingredients for success rarely exist at the outset of a major program and require a deliberate process to put them in place. This organization transformation process is described in Chapter 6, “Organizational Transformation: A Key Ingredient,” but, in many ways, the process must begin with the inclusion of an adequate governance framework definition in the base program management contract. While a seemingly straightforward approach, it is often inadequately addressed since at the outset of the program optimism abounds and the painful process of personal and organizational change has not begun in earnest.

Key Steps in Organizational Change Management

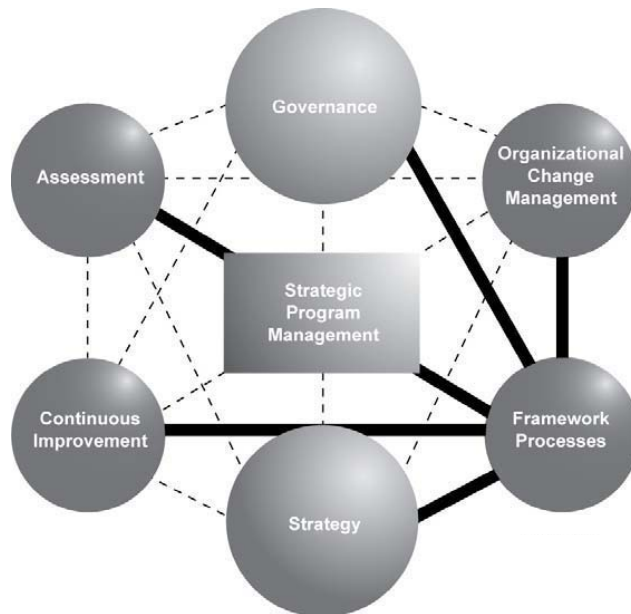


Experience suggests that the governance-organizational change management link needs to be well established at the outset of the program, that organizational change management be recognized as a valuable program management activity (both within the owner and program manager organizations), and that contract and top level program executive directives specifically address this linkage (as well as the individual elements).



Framework Processes

Framework processes are defined in Chapter 2, "Foundations, Frameworks, and Lessons Learned in Program Management," and a list of some of these major framework processes follows. These processes by their very nature are intended to touch upon each of the core elements of successful strategic program management while also providing an execution framework for day-to-day program activities.



Program Management – Integrated Framework Processes	
• Audits	
• Budgeting, Fund Management and Allocation, Expenditure Approval, and Tracking of Funds Committed and Expended	
• Change Impact Assessment (CIA)	
• Configuration Management	
• Constructability Analysis – Systemic	
• Construction Mobilization	
• Construction Technology	
• Contingency Management	
• Cost Estimating	
• Ethics Training and Compliance	
• Insurance	
• Knowledge Management	
• Legal	
• Life-Cycle Cost Analysis	
• Material Management	
• Modularization	
• Operations & Maintenance	
• Procurement	
• Productivity	
• Project Security	
• Risk Management	
• Safety	
• Standardization	
• Technology	
• Training	

Continuous Improvement

Program management affords the program execution process with the opportunity to capture and transfer best practices and lessons learned across multiple projects. The objective of such processes is to improve project execution certainty, avoid known problems, and improve productivity through deployment of best practices and continuous learning.

What knowledge and lessons learned from other programs do we need to capture?

Each program is different, and this is certainly true. No two programs will necessarily have the same set of strategic business objectives to accomplish, and most certainly the resources and stakeholders acting on the strategic business objectives and influencing strategy will be different.

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But at another level many programs, if not all, are the same. They must incorporate all the elements of successful program management, deal with the dynamics of real programs delivered in real time, and deal with a range of uncertainties, most notably the people and organizational dynamics that one would expect to find in such an endeavor.

Each application of program management as a fundamental delivery strategy should begin by understanding the history of program management, how it is intended to be applied, and, most importantly, what may be gleaned from the lessons of prior program management endeavors.

Some of these lessons, drawn from more than \$125 billion in major programs using program management as a delivery strategy, are incorporated in Chapter 2, and more granular lessons learned from large projects are captured in Appendix 1.

Keys to successful program management include identifying how to best capture and share these lessons and other knowledge broadly within the program team and how to translate this knowledge into a strengthened leadership culture and management regime. These lessons learned greatly influence each of the core elements described in this paper including providing feedback and suggested improvements to the strategy-governance axis.

Assessment

Program assessment occurs at many levels and is an ongoing process throughout the life of the program.

The assessment element of successful program management includes both audit (by the owner) of program effectiveness as well as metrics established to measure each of the various cross-cutting dimensions of the program. One can think of these metrics focused on each of the “bubbles” that represent a core element of strategic program management as well as on each of the links or axis that ties these core elements together. The owner’s role in audit changes is discussed in Chapter 5.

To be effective, the developed metrics cannot be static and must capture the lessons learned from prior programs while reflecting the dynamic nature of all large programs. These lessons include the need to:

- Prioritize metrics (they must demonstrate success towards strategy or strategic business objectives as appropriate)
- Socialize metrics (they must be user friendly and repeated consistently)
- Measure the metrics (are they being measured, communicated, and used for effect)
- Review metrics (assure continued relevance)
- Realign metrics (reflect the dynamic needs of the program)

Summary

This chapter highlights the need to critically understand core elements of successful program delivery as well as the interrelationships among these elements. A review of troubled program management efforts typically identifies one or more of these core elements that was not adequately considered or implemented in a timely fashion. In this chapter, one potential set of core elements associated with successful strategic program management delivery is defined, and some key factors to be considered are highlighted. Subsequent chapters treat many of these topics in more depth. The importance of some of the key links and axis in this core element model are also described and cannot be overstated.