Owner's Readiness Index

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Major projects today often succeed or fail based on the readiness of the owner's organization to undertake those projects. In engaging with owners over the course of multiple large projects it becomes clear that there are certain elements of readiness which must be in place in order to promote project success. In this paper I will briefly touch upon some of these elements and suggest that a formal evaluation and scoring by owners may prove to be a useful tool to assess their progress in moving toward project execution.

The considerations described in this paper are to some degree separate and distinct from an assessment of the readiness of the project itself. This project development readiness assessment should be similarly conducted utilizing tools such as the Construction Industry Institute's Project Development Readiness Index or PDRI. The Owner's Readiness Index (ORI) described in this paper is designed to more specifically look at issues within the owner's organization, its processes and level of shared understanding.

The Owner Readiness Index described in this paper is structured to consider major questions in the following areas:

- Owner readiness with respect to an individual program and associated decision frameworks and processes
- Program objectives and criteria
- Program planning and execution approach

We will look at each of these aspects in turn and conclude with a suggested instrument for use in assessing an owner's readiness to undertake a major project.

Owner readiness with respect to program and associated frameworks

The number one source of program underperformance, particularly at the earliest stages is the owner's failure to articulate and clearly communicate the so called strategic business objectives of the program. There are several dimensions to this shortcoming including:

- Poorly defined or articulated vision, mission and top level objectives and, importantly, associated metrics of the owner's organization. As

fundamental as it may seem, the assumption that "everyone knows", is just that, an assumption.

- Strategic Business Objectives of the program must be clearly spelled out and importantly mapped to the owner's top level objectives. This mapping is important since it establishes a program's relevancy and importance in the owner's organization. Sometimes these SBOs may be referred to as program or project business objectives. Experience has shown that even clearly articulating these SBOs is not enough; they must also be continuously communicated.
- SBO Key Performance Indicators (KPIs) must be established and linked clearly and tightly to the owner's top level objectives. This notion of cascading objectives is essential to program success and owner organizations which have not clearly thought this through run the risk of competing, or even worse, contradictory objectives.

If clearly defined strategic business objectives and clear and continuous communication are the first element of owner's readiness, then a well thought out, supported and tracked strategy is second. The owner's strategy for program implementation must demonstrate strong linkage to SBOs and be directly focused on their achievement.

Strategy must be supported by transparent and substantiated top level business assumptions. In organizations which are not sufficiently ready to undertake a major project it is not unusual to see a lack of a shared understanding of the program's context. Specific assumptions and context defining factors that the owner's organization must be cognizant and comfortable with include those with respect to:

- Program demand related forecasts
- Factors related to program revenues
- Owner's financial condition
- Resources available to the program
- Competing programs and associated resource requirements and timing
- Assumed changes to law, regulation or policy impacting owner and program and anticipated timing
- External environment
- Operating strategy and required lifecycle performance
- Owner's risk posture and philosophy

Managers of large programs must do more than just be aware of the assumptions made in strategy development, they must track them throughout the program lifecycle. One of the greatest challenges large long duration programs face is what I refer to as "assumption migration". The owner's awareness of the assumptions he has made and his focus on tracking their migration and importantly understanding the implications of their trajectories is an essential element of owner readiness.

Execution frameworks greatly impact program success and as part of readiness activities the owner's organization must have a secure handle on several execution impacting frameworks and processes that include but are not limited to:

- Business model, scenarios and relationship to program
- Prerequisites for external approvals
- External approval requirements, timing and likelihood
- Prerequisites for owner's executive approvals and linkage to a formal stage gate process including clarity and comprehensiveness of stage gate requirements and processes; stage gate approvals, authorities granted, resource commitments and constraints; approvals matrix
- External prerequisites linked to stage gates including regulatory approvals required, process clarity and timing including safety case requirements; and process for property acquisition

Risk and opportunity identification, assessment and management are key dimensions of an owner's readiness to undertake a major program. Owners must have identified major risks to the owner and his business model as well as to program strategy and any risk mitigation strategies. Importantly the owner must have in place the ability to conduct this risk and opportunity identification, assessment and management program throughout the entire program period. Readiness is not just about an initial upfront assessment but rather must also include a systematic approach to maintain these assessments current and refresh them when circumstances change. While there will be a natural tendency to focus on risks, well prepared owners are similarly focused on opportunity analysis.

Best of class readiness often includes a clearly focused element of risk and organizational preparation that provides for both owner and program resilience.

The owner's organization and its acceptance of its changed roles in large program execution are key elements of program success and an early assessment of the organization's readiness to adopt this changed role is a key element of an owner's readiness review.

This review will focus on the owner's organization capability and readiness to support the program and the various interfaces and delegated authorities with respect to the owner's program implementation organization. The owner's organization must have a clearly defined capability to provide oversight of program implementation by the owner's program organization. This is typically represented by a PMO in large organizations but in any instance the owner must have internally an ability to assess his own program team's performance to ensure they are enabling the various contractors engaged to implement the program and not duplicating efforts (man marking is a classic behavior) or erecting barriers to success (tendency to play "gotchu").

The owner's organization must also demonstrate readiness to:

- Implement the stage gate process, consistent with the owner's own requirements and consistent with a program's demands. Approval time frames, gate expectations and nature of obtained approvals at each gate must tie clearly into program execution strategies.
- Support management of demand for capital
- Drive capital efficiency in projects as they advance trough the stage gate process. Among various elements of owner readiness to be considered would be the early focus on construction realities, constraints and opportunities that may be found in appropriate means and methods selection.
- Enhance project execution by providing a disciplined project development framework
- Enforce standards on management evaluation of alternatives including consideration of life cycle cost and performance evaluations. Significant life cycle performance benefits can accrue from strong incorporation of O&M considerations in the earliest stages of a program but many programs suffer from later stage changes because of lack of an early focus in this regard.
- Influence acceptable risk frameworks commensurate with investments being undertaken and the risks the program will face
- Provide independent validation and verification

Finally, owner readiness with respect to an individual program and associated decision frameworks and processes must ensure that the:

- Capability of owner's technology platforms to support the program are established and functioning at a level consistent with the program's needs
- Physical and cyber security requirements of owner and external organizations with requisite authorities are consistent with the program's risk profile and the sensitivity of data and communications involved
- Required reports by owner on program progress can be efficiently provided to external stakeholders and that there is a plan to do so.
- Internal audit structure and controls are in place and associated budgeting and staffing requirements are recognized
- Inspector general role, authorities and resources are clearly defined with respect to program role and a plan exists to mobilize these resources in support of the program

Program objectives and criteria

The second set of questions which must be addressed as part of assessing the readiness of the owner's organization to undertake a major program focus around program objectives and criteria. The Strategic Business Objectives or SBOs discussed at the beginning of this paper must clearly map to program outcomes and Key Result Areas (KRAs). Project Execution Plans (PEP) must support top level strategy with cascading KPIs linked to outcomes and KRAs and flowing down from SBO KPIs.

The program and its scope must be well defined with final and intermediate deliverables clearly delineated. These include the full range of stage gates (Stage Gate 0; Stage Gate 1 (FEL 1); Stage Gate 2 (FEL 2); Stage gate 3 (FEL 3)) as well as EPC; Startup & Commissioning and Operations & Maintenance.)

Additionally, the scope of supply and services including associated responsibilities and accountabilities (RACI); program assumptions, uncertainties, tracking and modification; applicable codes, standards and regulations; and design and operating margins, must all me spelled out in a good level of detail.

One area of readiness often overlooked has to deal with the various philosophies which will influences how an owner shapes the program, the approach to execution and judges overall program success. Much like strategic business objectives, the assumption that there is shared understanding, a common vocabulary or agreement may be a leap of faith which will result in less than optimal performance as the program advances.

This articulation and integration of owner's philosophies must encompass a wide range of areas including:

- Asset flexibility, availability, reliability and resiliency
- Environmental, health, safety and sustainability
- Life cycle performance characteristics
- Design
- Procurement
- Construction
- Operations
- Maintenance
- Renewal and end of life
- Stakeholder engagement and support of stakeholder objectives
- Risk management, retention and transfer

Time and money encompass the final two areas to be considered when assessing owner readiness as it relates to program objectives and criteria. Program phasing and schedule, even at this early stage, must consider:

- Phasing and scheduling assumptions and precedence
- Constraint coupling
- Minimum operable segments and intermediate milestones
- Beneficial usage and substantial completion
- Final completion
- Schedule related risks and provisions and contingencies

The program's financial model and cost estimate must address model uncertainties and scenarios to be considered; quantitative uncertainties; risk frequency and associated risk model. Risk assessment and management efforts should have considered risk linked consequences; considerations related to "fat tail" risks; risk management strategies to be employed; and importantly, retained risks

Program planning and execution approach

The third set of questions which must be addressed as part of assessing the readiness of the owner's organization to undertake a major program focus around program planning and the execution approach.

The assessment of this third area must begin with the completeness of baselines documents pre-sanction. Specific baseline documents at this stage should include scope, schedule, budget; a risk register prepared from the owner's perspective, an initial HSES plan and associated procedures including the safety case and major hazards review, quality plan, and stakeholder management plan.

Some programs may require additional readiness elements such as a startup and commissioning plan; operating & maintenance plan; and procurement plan. Where procurement is a critical element of program success it may be necessary for this early stage procurement plan to address items such as long lead equipment and materials; fabrication plan; vendor prequalification; procurement process, selection and negotiation; contract standard terms and conditions; quality control and inspection; logistics plan; and requirements related to acceptance and warranty.

All programs must have a well developed financial management plan linked clearly to the program scope and schedule. Any financial constraints, for example cash flow constraints, need to be clearly identified and factored into program execution.

Management plans and procedures should be in place to ensure the program gets off on the right foot. These plans required for adequate owner readiness typically include:

- Program management plan and procedures
- Design and interface management
- Supply chain management
- Construction management

Finally, plans and execution approaches must be enabled by appropriate organizational elements, carefully aligned and staffed with individuals with the right competencies to achieve the strategic business objectives of the program. Considerations would include the actual program organization as well as the owner's program management oversight organization (PMO). Organizational plans should support required owner approvals and associated processes.

Required owner competencies should be defined including the required level and timing (phasing) for requisite skill engagement. Where relevant, owner staff training, recruitment and human resource organizations should be considered.

Owner's Readiness Index Simplified Assessment Instrument		
Readiness Area	***Maximum Score***	***Assessed Score***
Owner readiness with respect to an individual program and associated decision frameworks and processes	**40**	
Program objectives and criteria	**30**	
Program planning and execution approach	**20**	
Commitment to sustained readiness by owner's executive and implementation team	**10**	
Total	**100**	

About the Author

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Bob Prieto is a senior vice president of Fluor, one of the largest, publicly traded engineering and construction companies in the world. He is responsible for strategy for the firm's Industrial & Infrastructure group which focuses on the development and delivery of large, complex projects worldwide. The group encompasses three major business lines including Infrastructure, with an emphasis on Public Private Partnerships; Mining; and Industrial Services. Bob consults with owners of large engineering & construction capital construction programs across all market sectors in the development of programmatic delivery strategies encompassing planning, engineering, procurement, construction and financing. He is author of "Strategic Program Management", "The Giga Factor: Program Management in the Engineering and Construction Industry" and "Application of Life Cycle Analysis in the Capital Assets Industry" published by the Construction Management Association of America (CMAA) and "Topics in Strategic Program Management" as well as over 475 other papers and presentations.

Bob is a member of the ASCE Industry Leaders Council, National Academy of Construction and a Fellow of the Construction Management Association of America. Bob served until 2006 as one of three U.S. presidential appointees to the Asia Pacific Economic Cooperation (APEC) Business Advisory Council (ABAC), working with U.S. and Asia-Pacific business leaders to shape the framework for trade and economic growth and had previously served as both as Chairman of the Engineering and Construction Governors of the World Economic Forum and co-chair of the infrastructure task force formed after September 11th by the New York City Chamber of Commerce. Previously, he served as Chairman at Parsons Brinckerhoff (PB), one of the world's leading engineering companies. Bob Prieto can be contacted at Bob.Prieto@fluor.com.