

Engineering Project Standards and Transformation



The Assessment, Definition, Rollout, Training, Systems, Mentoring, and Pass-Off of a new Program Management Ecosystem

The Engineering Team of a public utility needed to establish project management practices that had been lost over years of mergers, staff retirement, and reduction. Their portfolio of projects covered several states with capital and ongoing maintenance for a complex transmission and distribution network. GPD began a transformation faced with the client's inexperienced staff, dysfunctional work culture, an absence of written standards, and untrained, ad hoc practices.

Problem

The client's lack of effectiveness was attributed to "tribal knowledge" lost -- leading to a workforce with significantly less experience. Constant changes in focus and urgent support requests added scope and created churn, diminishing discipline. As such the client was unable to effectively prioritize work across a portfolio. Poor utilization was exacerbated with no clear statement of roles and responsibilities. The practice of "over the wall" construction hand-offs limited the feedback from operations to the engineering team. Impending regulatory requirements and mandated programs were harbingers of a significant increase in project volume and engineering design work. The larger demand for project work was forecast to exacerbate the problems and jeopardize quality.

Solution

GPD began with a Project Management (PM) Maturity Assessment to analyze opportunities for improvement. A roadmap drove executive consensus and change management strategy for rollout. A PM Process consistent with industry standards and terms was designed. The new PM process was integrated with Engineering processes, including charter, scope, risk, change control, resourcing, and portfolio management. GPD then designed and implemented simple, visual, sustainable PM tools, systems, and job aids. A 4 day training course and 200 page manual, matching an online portal, were delivered to three groups across engineering, business, sourcing and operations. The new practices were reinforced with applied demonstration, coaching, and interactive, professional visualization.

Results

Improved alignment of teams and problem-solving work culture through the PM process. Cross-functional coordination at optimal times in the project life cycle. Consistency driven by online Engineering Handbook with processes, procedures, and templates for all phases promotes a meaningful portfolio view. Comparison and tradeoffs across projects now analyzed. Standards for sourcing and construction, including templates for a variety of SOWs, allow earlier bids with less revision. Clearly captured cost, schedule, and risk data for targets, plan, and actuals allows lessons learned practices and ongoing improvement.

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Major Area	Sub-Elements	Priority = Importance * Gap	Priority
Initiating	Project value proposition		7.9
	Project requirements foundation		3.4
	Project readiness preparation		11.0
Planning	Project scope and architecture		15.5
	Feasibility forecasting		7.1
	Team and resource planning		24.0
	Coordination planning		14.9
	Risk and uncertainty planning		20.0
Executing	Progress management and release		1.2
	Scope control		5.0
	Coordination management		13.9
	Issues and uncertainty management		10.0
	Change & escalation		2.2
	Decision making		4.1
	Project redesign		0.7
Closing	Product and process learning		12.4
	Lifecycle information management		2.0

Assessment and Roadmap

Project Management Maturity Assessments include complex work and global readiness reviews, interview and site visit findings, and insights on change management priorities. The assessment leads to a feasible and value- focused roadmap for transformation of performance with an emphasis on behaviors, learning, and culture. The roadmap is matched with a clear communications strategy for effective change management.



Standards and Handbook

Standard work is defined, deployed, and improved as a regular part of an organization's transformation. Project Management assets include courses, handbooks, job aids, templates, gateways, and readiness checklists. These assets are delivered in person, remotely, and as online resources for teams. On the right are shown several parts of an Engineering Project Management transformation including a cross-functional training workshop, handbook, process and roles definitions, and an online program environment.

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