Enterprise Architecture and Portfolio Management: The Need for IT Governance

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In a federal environment characterized by shrinking budgets and increasing regulation, CIOs are under constant pressure to demonstrate value generated by IT investments. Internally, IT organizations are being asked to justify business value of investments and alignment to strategy, to improve controls to achieve scope, schedule and cost targets and to decommission redundant or low-value assets. Externally, regulations like Sarbanes Oxley require improved financial controls and governance, the Clinger Cohen Act compels federal IT groups to run 'like a business' and OMB mandates Capital Planning and Investment Control (CPIC) processes to manage IT portfolios. This atmosphere has led to an increased need for effective IT Governance to create accountability and achieve an organization's IT vision.

Effective IT Governance can result in:

- clearly defined accountability and authority
- more informed business decisions based on objective metrics
- enterprise prioritization and funding of investments
- transparency in the decision making process

How can an organization shape effective governance? What are the foundational processes upon which strong governance can be built? Why are some organizations able to implement successful governance structures, while others struggle to get their processes off the ground?

Building an Effective IT Governance through CPIC and Enterprise Architecture

Implementing a governance process has its challenges, but carefully orchestrated change management and sound supporting processes can make this endeavor successful. Taking a top-down approach to this problem, we see that Governance structures and processes exist to support the achievement of the organization's IT vision and strategic goals. The Governance layer is in turn supported by processes like CPIC and Enterprise Architecture (EA). These processes are vital to the organization's governance process and to transforming IT from a Business Cost Center into a Value Center. The technology layer provides the tools required to support the processes.

The Office of Management and Budgeting (OMB) and Government Accountability Office (GAO) mandate CPIC as the process for capital resource allocation and portfolio management for federal agencies. CPIC enables CIOs to better manage the IT portfolio by improving the decision-making capabilities of its governance bodies and creating an integrated, process-focused view of key IT management functions. It aims to:

- promote an enterprise view of the portfolio and selection of investments that are aligned with the organization's strategic objectives and Enterprise Architecture
- help CIOs "do more with less" resources and budget by ensuring that the right projects and applications are funded and deployed
- show why specific investments are required in "non-IT speak" and select the ones with the strongest business cases
- maximize the value of IT investments while minimizing the risk

- demonstrate that consistent investment management principles are being applied

CPIC assists the Governance bodies in making better decisions by providing the process framework within which key portfolio selection (Select), monitoring (Control) and evaluation (Evaluate) decisions are made. It creates a transparent collaborative process to evaluate investments and supports decision-making by providing objective metrics and multi-dimensional views of the investment portfolio.

Circular A-130, Management of Federal Information Resources defines EA as "the explicit description and documentation of the current and desired relationships among business and management processes and information technology". It describes the "current architecture" and "target architecture" to include the rules and standards and systems life cycle information to optimize and maintain the environment which the agency wishes to create and maintain by managing its IT portfolio. Enterprise Architecture:

- identifies gaps between the "current" and "target" states and makes recommendations to bridge the gaps
- lays out standards to promote reuse and information-sharing
- minimizes duplication of effort
- assists with performance tracking
- decreases overall costs

EA supports the Governance objectives by identifying redundancies and duplicative efforts in the portfolio, evaluating if the existing investments are still meeting business needs and decreasing overall costs by promoting reuse.

CPIC and EA are mutually supportive processes which, when integrated, create the ideal environment for effective governance. With its comprehensive inventory of business strategy, processes, organizational charts, technical inventories, system and interface diagrams, network topologies, and the explicit relationships between them, EA can assist the CPIC process by providing recommendations to streamline the investments, eliminate duplication of effort and encourage adoption of technologies that are required to achieve the future state. CPIC acts as the vehicle for implementing the recommendations from Enterprise Architecture by helping with prioritization of investment opportunities and enforcement of standards through the capital allocation process. With the support of a sound EA process, CPIC can serve as the change agent to move an organization from the "current" and "target" states.

How can CPIC and EA be integrated to provide a seamless solution to assist IT Governance?
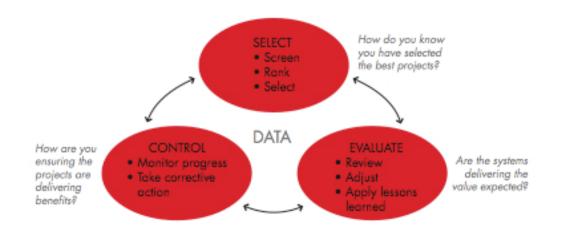
Integrating CPIC and EA

CPIC in the federal space is operationalized through GAO's Select-Control-Evaluate methodology.

- Select: Costs and benefits of all available projects are assessed and the optimal portfolio of projects is selected.

- Control: The portfolio is monitored for performance and corrective action is applied where needed.

- Evaluate: Implemented projects are reviewed to ensure that they are producing the benefits expected and adjustments are made where appropriate.

EA provides vital inputs into each phase, which when used with the other portfolio management metrics like return, risk, strategic alignment etc., facilitates effective decision-making by the Governance bodies.

- In the Select phase, EA can provide inputs on duplicative efforts and make recommendations to consolidate similar investments to reduce costs. Using portfolio management metrics, the organization can prioritize the different EA recommendations and select the ones most important to the organization. New candidate investments can be evaluated for alignment with the recommended standards, redundancy and inclusion into the IT portfolio. EA can use this phase as a means to promote adoption of the recommended standards and technologies and phasing out the non-standard ones.

- In the Control phase, EA can assist with performance tracking using the Performance Reference Model (PRM).

- In the Evaluate phase, EA can assess if existing investments are still meeting business needs and identifying replacement candidates, if required.

Practical Considerations

- Executive Sponsorship: Strong executive support and sponsorship is required to ensure the success of IT Governance. This support needs to be demonstrated by enforcing the processes laid out by CPIC and EA and providing adequate funding for these programs.

- Governance Model: A collaborative governance structure with representation from all the stakeholders has a better chance of success than a dictatorial model. The key is to develop a charter that requires stakeholders to make decisions from the enterprise perspective and not represent divisional interests.

- Phased Implementation: Too much change at one time can cause chaos and confusion in the organization. A phased approach, where the Governance goals are prioritized and implemented over time, will be more effective. It gives the underlying processes an opportunity to gear up to support the organizational goals, time to communicate and train the organization on the new processes and implement the right tool set to support the new process requirements. Organizations should evaluate the maturity of their CPIC and EA programs and look for opportunities to leverage the stronger process.

- Supporting Tool Set: The crucial success factor for any program is having the right solution set—where the process, people and technology aspects are designed to support the target state. With the vast IT inventories and different terminology used in the CPIC and EA worlds, having complementary tool sets that can exchange information and provide synergies is important.