



Management of Complex Enterprise IT Transformations

An Awareness Discussion ...*Because Awareness Matters*

Awarity Consulting

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Table of Contents

INTRODUCTION.....	1
IT GOVERNANCE	1
CHANGE MANAGEMENT	3
COMMUNICATION AND COLLABORATION	5
The PMO Role.....	5
FEDERAL ENTERPRISE ARCHITECTURE.....	6
CALL TO ACTION.....	7
BIBLIOGRAPHY.....	9

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Introduction

Managing enterprise Information Technology (IT) architecture transformations can certainly be complex and challenging. Combine this with growing demands for CIOs to improve ROI, improve service levels and enhance security without increasing budget or headcount; the challenges could, at times, appear to be overwhelming. Addressing these challenges requires effective processes to drive increased levels of teamwork and cooperation across the different divisions of the organization. Instituting effective governance, change management, and collaborative communication processes are of critical importance to achieving success in dealing with these challenges.

Many factors are accelerating organizational complexity today, and because they all interact, the complexity increases. In particular, federal agencies, like many private organizations, struggle to find efficient ways to ensure that they fully understand how to mitigate organizational risk and solidify Information Systems (IS) performance, while simultaneously executing transformation strategies for tomorrow. To this end, we can more clearly understand that the business risk of complexity is the IS organization's risk, and vice versa.

This Awarity Consulting discussion presents some of the commercial industry, as well as federal government best practice considerations that address these complex challenges and help guide the initialization of a model within the enterprise management spectrum.

IT Governance

The power of strong IT governance (policy + process + people) acts as an essential business alignment and IT performance tool. It helps ensure the right people are in the right place at the right time, doing the right things for the right cost, by framing their expected behavior and creating a high-productivity work climate. Governance includes the planning, prioritization, budgeting, value management, and portfolio management processes, as well as the processes for development and operation of IT products and services. A best-practice IT governance framework supports a full enterprise architecture in a parallel manner. It includes decision-making bodies such as an IT steering committee, IT working committees, and advisory committees such as a line-of-business council and an architecture review board. The framework drives planning, portfolio management, program management, and project management, as well as operations and IT asset management.

While “governance” has a broad perspective as indicated above, for the purposes of this discussion Awarity Consulting focuses IT Governance (governance) on the following elements.

- A process based on a set of well defined policies and procedures to manage what Information Technology does
- A vehicle to resolve ambiguity, manages short-and long-range goals, mitigate conflict within an organization, as well as minimize the incidence of missed project deadlines, cost overruns, un-anticipated downtime, and security lapses
- A supportive framework for the co-existence of business unit autonomy within enterprise strategic direction

The larger the organization, the greater value effective governance can deliver. To achieve a governance model, it is important that policies clearly articulate the guidelines that set the parameters as to which IT employees can act to service customer or constituent needs without jeopardizing consistency of the enterprise goals and objectives.

Additionally, it is important that once the stakeholders have agreed upon policies, the governance process is responsible for providing the means to ensure compliance. This includes defining, communicating, gaining agreement on, and applying consequences of noncompliance.

Equally as important as what governance is, is what it is not. It is not any one product or a set of standards.

The mechanism for communicating within an effective governance model is best articulated through a collaborative process. A means to assuring bi-directional collaborative communication is early definition and adoption of Program Management Office (PMO) principals, which are put into place to address the cultural and socialization aspects of enterprise governance. The PMO, with representation from affected enterprise constituency groups, allows for and manages the voice of not only the “what” and “when” of policy decisions, but also the “why” and “how” aspects of decisions that need to be considered as a part of the process in setting governance policy.

Good governance policy best practice guidelines would include:

- Understand/assess the guiding business orientation and culture
- Maintain perspective of the culture within the organization in developing the model and policies
- Keep the policy concise and make it simple to understand and apply
- Recognize and incorporate good business practices
- Act in the best interest of the enterprise and promote the enterprise architecture strategy
- Encourage individual business units to achieve their objectives and service their customers/constituents
- Incorporate an element of mandatory compliance with an expectation for adjudication in cases where a business unit is unable to or chooses not to adhere
- Allow the enterprise to own policy development, and the lines of business contribute to it

To be effective, the IT governance framework needs top management support and ownership - usually by a governance board (e.g., IT steering committee) made up of senior executives from IT and the individual business units with responsibility for setting investment priorities, approving IT strategy and communicating high-level business requirements. Specific working committees and advisory subcommittees would be responsible for conducting research, analysis and making recommendations to the governance board.

Starting can be the toughest step. There are two industry recognized best practice frameworks to assist organizations with the development of an effective IT governance model - ITIL and CobiT.

ITIL - (Information Technology Infrastructure Library) is the most popular. It provides high level guidance on what should be done in 24 related disciplines, leaving the details of the implementation to the business organization. This framework has widespread support in Europe but is also gaining popularity in North America.

CobiT (Control Objectives for Information and Related Technology) - A prominent IT governance framework developed to align IT resources and processes with business objectives, quality standards, monetary controls, and security needs. The framework organizes its guidance into four domains:

- Planning and organization
- Acquisition and implementation
- Delivery and support

- Monitoring

Developing an IT governance process can be a significant undertaking, and each of these organizations in turn makes three uniform recommendations.

1. Implement an IT governance process in an evolutionary manner. Start off small and focus on addressing the biggest problems first. Add additional capabilities over time. Implementing the entire ITIL or CobiT model in one step would be overwhelming for any IT shop.
2. Get buy-in from executive management and the IT staff. IT governance will involve their participation in formal process changes that may introduce formality and friction in the organization. The clear support of senior executives will be a critical factor in being able to overcome resistance to the new policies and procedures.
3. Leverage external resources. Take advantage of best practices and lessons learned available from outside sources such as the ITIL and CobiT frameworks, industry analysts and consulting organizations.

Change Management

It is a reality of human nature that people are uncomfortable with change. Yet, the world of Information Technology is one of continuous change – hardware and software changes, upgrades, patches, etc. Indeed, IT is confronted with an ever-growing volume of change. An enterprise-wide IT transformation further compounds the problem. One of the primary actions that can effectively address this challenge is forming agreement on a structured process for providing lifecycle management of all IT change requests throughout the enterprise.

In the absence of an effective change management process, change anarchy will likely prevail with the following characteristics:

- Changes will be handled differently by different groups
- They will not be properly coordinated and supported
- The risk of failures will be high
- Delays will impede progress
- The very success of the objective could be jeopardized

What is required for an effective change management process? Three critical components are needed.

1. Strong top level management support
2. Stakeholder consensus
3. Effective and regular communication

Consolidating IT change management into a unified enterprise-wide process is difficult because it will change organizational behavior. A first priority is strong top-level management support to clearly communicate to everyone that a single enterprise IT change management process is a strategic mandate. Without this support, establishment of an effective enterprise IT change management process is unlikely to succeed. Once this is in place, development of the process specifics and related policies requires the participation of affected stakeholders to achieve their acceptance.

Finally, effective and regular communication is needed to ensure that the process implemented functions efficiently and all impacted parties are informed or notified of changes and related

status in a timely manner. Further, communication of progress milestones and accomplishment will help the participants in the process, as well as the organization to connect the activities with the value that is visible to the organization.

What are recommended best practices for Change Management?

In defining specifics of the enterprise change management process and related policies, stakeholders need to consider a number of things. An initial action would be to assign ownership of the process. An industry recommended best practice is to assign this ownership to a 'Change Advisory Board' or CAB. The membership of this board should represent both IT and business stakeholders from individual departments across the enterprise to ensure all affected interests are represented. This board should be managed by a full-time position dedicated to the change management process. Member attendance and participation should be mandatory and any failure to attend addressed by senior management. Meetings should be scheduled on a regular basis (e.g., weekly) with the understanding that situations will arise requiring ad hoc meetings on short-term notice to address urgent or emergency change requests. These meetings should be brief and to the point to encourage participation and avoid being viewed as a waste of time.

Policies and process specifics must be developed to address the different needs of the individual stakeholders. Consensus of all affected parties is critical to successful implementation. As discussed above under governance, implementation of the process should be evolutionary and not try to tackle the entire change management challenge in one step. Begin with the changes that initiate the majority of problems and build up from there. Per recommended best practices, the process should include the following traits:

- IT change requests (e.g. application, system and network changes) are submitted via a single change request form that requires information necessary to assess impact and risk, as well as assign a priority level
- Prioritize change requests based on business impact and associated risk
- Allow for both standard escalated requests and fast track handling of emergency requests (e.g., application of patches)
- Differentiate between high volume, low impact requests and low volume, high impact requests and provide different process paths
- Establish a database for all change requests with the ability to track status and cost data
- Direct notification (e.g., via email or workflow application) of required change request actions to affected parties in a timely manner
- Direct notification (e.g., via email) of change impact to affected parties in a timely manner
- Provide training on the process for all IT employees
- Provide Intranet publication for change requests and related status
- Include recovery escalation procedures in the event a failed change cannot be reversed
- Once approved:
 - Changes are conducted by authorized personnel only
 - Changes are fully tested before deployment in a lab environment isolated from the production network
 - Current state (prior to application of change) is documented and retained as a fall back configuration
 - Schedule application of the change to minimize business impact
- Continue reviews of the process to identify and implement improvements

Communication and Collaboration

As mentioned above within the Governance and Change Management discussions, effective communication and collaboration are critical to the success of transformation management processes. The purpose of communication is to help everyone understand what is happening and how it will affect them before the change occurs. It can also be a helpful tool in marketing the process and letting stakeholders share in the rewards. Key considerations include:

- Who needs to know about the changes?
- What do they need to know about the changes?
- When do they need to know about the changes?
- How should the information be communicated?
- From whom should the information be communicated?

A number of recommended best practices have emerged from the successful experiences of other organizations to offer guidance in developing effective communication processes. They include:

- Involve Change Advisory Board members during the development and review of all external communications
- Develop focused, targeted communications at the right time to the correct audience.
- Send consistent messages using understood terms
- Utilize appropriate and effective communication vehicles (e.g., intranet portal, email, fax, etc.) for each unique audience group
- Communicate concise, relevant, interesting content with a positive tone
- Openly share victories (and sometimes failures), showing appreciation to those who have impact or who are affected
- Provide and encourage the use of feedback channels
- Provide timely responses to all questions and feedback received
- Provide a repository (e.g., intranet portal) of project wide communications and questions and answers that is easily accessible to all team leaders

The development of structured IT governance and change management processes with enterprise wide stakeholder representation provides a synergistic baseline mechanism for collaboration. However, they do not ensure that all collaboration will be effective. To optimize the effectiveness of collaboration activity, the processes need to additionally provide timely task notification to process participants and timely escalation procedures. Incorporating workflow capabilities intrinsic to the governance and change management processes can facilitate implementation of such capabilities.

One of the more effective collaborative workflow methods is the adoption of a Program Management Office, or PMO.

The PMO Role

Establishment of a Program Management Office supporting the initial enterprise transformation activity, as well as survivorship into the longer term can make significant contributions to the effectiveness of related IT governance and change management processes. It can be very effective in managing risk and user expectations related to the enterprise transformation. There is no single definition of what a PMO should be and the actual roles defined for the PMO will vary from organization to organization based on individual organizational requirements and structure. Depending on the identified needs of the organization, the PMO can be tasked with any combination of the following responsibilities:

- Measuring and reporting progress

- Defining program milestones and deliverables
- Monitoring and reporting the status of key program milestones and deliverables
- Preparation of Weekly Status Meetings to address accomplishments and issues
- Monitoring issue resolution
- Promoting understanding of program benefits to all affected parties
- Managing or interacting with the change management processes related to the program
- Promoting and aiding software object reuse
- Fostering clear communications on program status
- Maintenance of a program documentation repository
- Managing sign-off of key deliverables
- Establishing quality standards and conduct quality assurance reviews
- Synchronizing program activities across different geographic locations and business units
- Fostering communications between different geographic locations and business units
- Facilitating workshops and software trials
- Developing a program risk mitigation plan and conduct risk reviews
- Interfacing with executive sponsors

An important first step is to define the charter of the PMO. In its most basic form, it can be the central clearinghouse of program status information for the entire organization, or it can be tasked with any combination of the responsibilities listed above. It is important to be very clear in this charter about the purpose and goals of the PMO and how its performance will be measured. Equally important is sponsorship of the executives and participation of stakeholders affected by the program in the development of this charter. If the charter is unclear about the purpose and goals of the PMO and/or the stakeholders do not support the charter, the PMO runs a serious risk of being ineffective.

Once the charter has been developed and agreed upon, it is critical to determine how the PMO will be structured, who will manage it, what reporting processes will be used for reporting program status, how it will interact with the IT governance and change management processes, and to whom the PMO will report. This should also be determined with the concurrence of the affected stakeholders.

Federal Enterprise Architecture

Federal organizations face additional challenges in transforming organizational structure due to evolving policy mandates associated with Agency organizational IT landscape. To assist with these evolving policies, the federal government has put forward the requirement for individual agencies to subscribe to the Federal Enterprise Architecture (FEA). The FEA establishes the agency-wide roadmap to achieve an agency's mission through optimal performance of its core business processes within an efficient information technology (IT) environment. Simply stated, enterprise architectures are blueprints for systematically and completely defining an organization's current (baseline) or desired (target) environment. Enterprise architectures are essential for evolving information systems and developing new systems that optimize their mission value. This is accomplished in logical or business terms (e.g., mission, business functions, information flows, and systems environments) and technical terms (e.g., software, hardware, communications), and includes a Sequencing Plan for transitioning from the baseline environment to the target environment.

If defined, maintained, and implemented effectively, these institutional blueprints assist in optimizing the interdependencies and interrelationships among an organization's business

operations and the underlying IT that support operations. The experience of the Office of Management and Budget (OMB) and General Accounting Office (GAO) has shown that without a complete and enforced Enterprise Architecture (EA), federal agencies run the risk of buying and building systems that are duplicative, incompatible, and unnecessarily costly to maintain and integrate.

For Enterprise Architectures to be useful and provide business value, their development, maintenance, and implementation needs to be managed effectively. The FEA step-by-step process guide is intended to assist agencies in defining, maintaining, and implementing EAs by providing a disciplined and rigorous approach to EA life cycle management. It describes major EA program management areas, beginning with suggested organizational structure and management controls, a process for development of a baseline and target architecture, and development of a sequencing plan. The guide also describes EA maintenance and implementation, as well as oversight and control. Collectively, these areas provide a recommended model for effective EA management.

Reflecting the general consensus in industry that large, complex systems development and acquisition efforts should be guided by explicit Enterprise Architectures, Congress required Federal Agency Chief Information Officers to develop, maintain, and facilitate integrated systems architectures with the passage of the Clinger-Cohen Act in 1996. Additionally, OMB has issued guidance that requires agency information systems investments to be consistent with Federal, Agency, and bureau architectures. Other OMB guidance provides for the content of Agency enterprise architectures. Similarly, the Chief Information Officer Council, the Department of the Treasury, the National Institute of Standards Technology (NIST), and GAO, have developed architecture frameworks or models that define the content of enterprise architectures. These architecture frameworks are generally available by request by contacting the respective organization.

Call To Action

Gartner Research has predicted that the absence of effective decision-making for multi-sourcing will cause IT cost inefficiency, organizational conflict and desperation modes of operation (0.7 probability). This knowledge should be leveraged today to develop a deep understanding of the risks and take the steps to acquire the competencies inherent in governance, and build sound change control and communication/collaboration practices. Steps that can be taken immediately include:

- Address the growth and learning curve that executives, IT managers and staff will need to embrace in order to navigate and manage the complexities.
- Examine the cultural environment to understand the issues and characteristics that can be leveraged to ensure success.
- Understand the overall business goals and objectives. Ensure that any planned investments, systems and decisions are aligned with the strategic goals of the business.
- Communicate, collaborate and plan. Identify and align stakeholders so that advisories, committees and subcommittees can be built and deployed when appropriate.

In conclusion, a Strategic Integration roadmap is essential in establishing the priority and precedence related to enterprise IT transformation. The roadmap serves to align collaborative processes and lays the foundation for developing the blueprint to managing all IT activity, none

the least of which is behavior management. Strategic Integration becomes the process of executing and maintaining the roadmap. An approach that combines a statistical predictive model with a non-statistical dependency and risk analysis is used to generate a living, strategic plan for integrating not only the identified initiatives, but also additional initiatives that were either overlooked or not yet instantiated. The capability of this approach is multi-faceted and can be leveraged in several areas:

- Maintain a predictable and strategic integration map
- Create an accurate roadmap
- Clearly identify the dependencies between initiatives
- Clearly identify the risk and predictability associated with each initiative
- Existing initiatives can be removed from the roadmap
- New initiatives can be easily inserted into the roadmap

Professional services organizations with a history in providing enterprise level IT services excel in delivering the high value services associated with managing change, the associated IT governance models, and developing the cohabitation required to form a unified IT organization. They also bring an independent 3rd party perspective to the objective. This can serve as a lightning rod in times of adversity.

About Awarity Consulting

In 2007, Awarity Consulting formed to serve in a trusted advisor capacity to commercial and government entities. Our solutions are helping these organizations reduce costs, enhance security and improve service by providing employees with the information they need to perform their jobs with greater efficiency and accuracy, enabling organizations to freely share information across their value chain and simplifying the management of key business processes.

Headquartered in Washington, D.C., the company has delivered solutions at the national leadership level. Our commitment to serving public trust positions is evidenced via our contributions to both American government, and society.

www.awarity.net

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