Critical Success Factors for EA Effectiveness

There are some common critical success factors that EAdirections has recognized in highly effective EA programs. Not all of these critical success factors are seen in every effective EA program; so each organization must determine which factors are hindering and which are enabling EA effectiveness.

Enterprise architecture effectiveness is highly susceptible to many factors unique to a particular organization. Highly effective EA programs exhibit many of the same critical success factors. Many of these factors were in their favor from the beginning and maintained as such, while others were assessed as obstacles and overcome as the program grew. By identifying an enterprise's strengths and weaknesses, the enterprise architect may develop appropriate remedies to make the environment more favorable for EA growth and effectiveness. This article describes many of the most common critical success factors we have seen in effective EA programs. However, by no means should this list be considered exhaustive, as every organization is likely to have some unique characteristics for consideration in influencing EA program effectiveness.

Critical Success Factors (CSFs)

Based on current best practices in EA development, an analysis of an organization's CSFs for EA effectiveness provides guidance on how to gain control of your architecture program. It helps you characterize the effectiveness of the EA program and guide a program of continuous EA development and improvement, in order to establish a more effective EA Program. It describes an evolutionary improvement path from ad hoc, inconsistently performed practices, to a mature, disciplined development of the knowledge, skills, and motivation of the EA practice.

Culture, Politics, Leadership, and Operating Model

Many unique cultural, political and leadership factors define an enterprise and influence the effectiveness of an EA program, including but not limited to the following:

- Leadership styles
- Openness of communication
- Degree of partnership between business and IT groups within the enterprise
- Degree of autonomy of business groups within the enterprise

Impact on EA effectiveness: The ability of an EA program to make an impact can be lessened in an environment where communication regarding strategy is closed to EA resources, where the culture is such that consensus building is so prevalent that decisions rarely get made in a timely manner, or where leadership is lacking. Also, the operating model of a company determines the levels of standardization, data sharing, and application integration that are appropriate, which must be established by senior leadership.

Business Linkage

Refers to the extent to which any EA effort is linked to business strategy. The discovery and validation of business strategy requires knowing the thinking processes of the business experts from whom future business requirements are elicited. Collaborative work in groups that include business stakeholders is most effective in the early life-cycle phases of planning/requirements analysis as well as for ongoing architecture process improvement. Such collaborative work patterns can be used effectively to model business strategy and derive higher-quality requirements, which include future business requirements. In the collaborative approach to business strategy, enterprise architects and business resources must collaborate to create a business strategy

document that is expressed in natural language, based on common sense, and is directly relevant to the business (see Business Participation for more detail).

Impact on EA effectiveness: EA that has little to no linkage with the business strategies and capabilities to be enabled by EA will find it difficult to induce and sustain significant investment in the recommendations from the EA program.

Senior Management Involvement

A motivated senior management team is a critical effectiveness factor for EA. If the will exists, ways can be found to make the architecture process more scalable; to overcome or adjust to tight budgets; or to market the EA Program more effectively. However, that will not happen with a reluctant or indifferent management team. EA is a life sentence; it takes time and perseverance to pay off. A cohesive enterprise business vision, communicated effectively, is the foundation for a successful EA effort. IT department leadership must participate in developing the strategy. Senior managers must not only believe in the vision and the role of IT (and EA), but they must also consistently send the appropriate "steering signals" (e.g., reward/advancement policies, compensation) to the enterprise to motivate the appropriate behaviors.

Impact on EA effectiveness: The ability to reach an above-average effectiveness level is directly related to senior management involvement; therefore, senior managers must be willing to commit and see it through.

Business Participation

The successful enterprise architect must master the process of navigating cultural, organizational, and political barriers and achieving broad consensus across IT and business organizations alike. Architects and organizations create processes to gain approval, sign-off, and governed deployment on EA deliverables by senior business and IT management. Many EA Programs must develop a certain level of effectiveness, success and credibility within the IT organization before significant and formal business participation can be sought.

Impact on EA effectiveness: EA effectiveness will be limited by the amount of business participation in both the creation of EA deliverables and governance of EA compliance. EA can only impact technology decisions minimally without business participation. Participation in the EA program by business resources will lead to an increase in the understanding of EA contribution and an increase in the acceptance of EA recommendations.

Governance Structure and Compliance Process

Many early EA efforts are detoured awaiting approval of their first deliverable. The creation of a governance structure with appropriate senior-management, business, and IT department representation as well as a compliance process is essential to a successful ongoing EA effort. Often overlooked are formal organizational structures, leadership traits with the right rules and procedures for the operation of these structures, as well as ways to interact with them when requesting approval of architecture deliverables. While these structures define the scope, authority, membership, voting rules, and review processes; their long-term viability is enhanced by creating a set of rules defining how often they assemble, which issues they address directly (EA principles, standards, and strategic products), and which they defer to smaller working groups (lower-level product decisions), while ensuring all constituencies are adequately represented.

Impact on EA effectiveness: EA represents one particular set of criteria for decision makers responsible for investments, resource allocation, operations, and project scoping/review/approval. These criteria must be integrated into the enterprise's overall decision framework.

EA Resources

EA Effectiveness is strongly dependent on the competency and availability of the resources performing the activities of the EA process. This includes not only those directly involved in the process, such as the Chief Architect, EA Council and Domain Team members; but also those involved in governing the EA and applying the EA to their own efforts, such as project mangers, infrastructure engineers, and application developers.

Impact on EA effectiveness: EA is a complex initiative that demands a mix and the required amount of resources with interpersonal skills, business knowledge, multiple technology and business competencies, and managerial skills to get all the work done.

EA Scope and Objectives

The effectiveness of the EA Program can be derailed with unrealistic or overly broad scope and objectives. Likewise, the scope and objectives must be sufficiently significant so that EA delivers value. Scope and objectives must be established so as to ensure a reasonably high probability of success. They must reflect the current set of capabilities, but also recognize that part of the success of the EA program is overcoming some of the critical constraints and increasing the competency and capabilities of the enterprise. The EA Program will likely have long-term scope and objectives that the program will evolve and advance toward over time, while also maintaining a short-term scope and objectives for each iteration of the EA process, increasing toward the evolutionary scope and objectives over time.

Impact on EA effectiveness: The scope and objectives of the EA program must reflect a realistic acknowledgement of an organization's competencies in, appetite for, and expected benefits in order to have a chance to be effective at early stages, paving the road for more optimistic goals in the long term.

EA Process Definition

Process definition is a high-level model definition of the EA process that needs to be understood by all senior, business, and IT managers and includes descriptions of:

- Static structure of its composition, in terms of its artifacts, activities, and their interrelationships
- Artifacts are the external products received from/delivered to outside organizations, or internal products developed and maintained as part of the organization's process
- Activities constituting the work being done to consume/produce the artifacts
- Agents (people or programs) responsible for performing the activities
- Guidance or rules on how new process elements should be added to the EA process, and how the EA should be evolved
- Rationale for how the process addresses the needs of the stakeholders
- High-level dynamic behavior of the process, showing how the components work together and synchronize their work over time — this is especially important for large, complex processes, but it may be deferred to later stages of process design, at the discretion of the architect
- A refinement of the structure and behavior showing allocations and relationships to actual organizational elements —this is especially important if it is desired to define a common organizational structure for all executions of the process (note our use of the term "agent" does not necessarily require specifying the agent's organization).

Impact on EA effectiveness: Defining the work that needs to be done to develop and maintain an EA, as well as how to influence project work, investment decisions and the operations of the company with EA is a critical step in being effective.

EA Process Implementation

The key to EA success is not the final product, but the process an organization follows to create it. The architectural process consists of five major characteristics, which link an enterprise to its competitive, market, and strategic environments, and set it apart from classic systems development methodologies:

- Links business and technology strategies - EA requires senior business strategists to define the key environmental trends driving the enterprise and translate them into business strategies, that are then further analyzed and articulated as statements of impact on the enterprise's business process, information, technology and solution environments.
- Provides the basis for consistency – EA provides a set of principles to guide decision making, across multiple decision making groups.
- Builds a bridge across the enabling technologies - The EA is the "foundation" designers use to craft integrated systems. It guides the selection of standards and reduces the number of possible configurations, thus enabling systems to scale and adapt more quickly to future requirements.
- Anticipates future requirements - The first step in most classic methodologies is systems analysts asking business users, "What systems do you need?" The EA process encourages business analysts to ask, "Who will you become, and what will you do to respond to future challenges?"

- Encourages continual refinement - Successful architecture initiatives keep business strategists engaged as the technical architecture evolves. This ensures tighter alignment between IT and the business as well as an aggressive, proactive approach toward due diligence and IT auditing.

Impact on EA effectiveness: Implementing the defined process to meet stated goals and objectives, while also reflecting the increases in maturity, competency and participation will lead to continued improvements in effectiveness over time.

EA Program Communication

Communicating what an EA is and how it will benefit the organization is paramount to its success. Only through the use of an EA process can its true value be fully realized. From the onset of this process, the EA team also needs to understand that sharing its progress, findings, and future strategies is essential to the continued development and maintenance of the organization's EA. The intent is to reach a wide audience with varying degrees of interest and understanding. In order to be successful, communication planning must be done to ensure that the right communication is happening at the right time targeted at the right audience with the right message for the right purpose. The communication plan must provide for all the communications necessary to:

- Educate your personnel about the EA Program
- Seek the support of those in a position to influence the effectiveness of the EA Program
- Facilitate the work effort of the various groups and individuals involved in the EA process and/or its interfaces with other IT governance and management processes
- Seek approval for EA Program recommendations from those with approval authority
- Present the results of EA work efforts
- Report ongoing and intermediate status
- Provide a mechanism for ongoing feedback to the EA Program and its participants

Impact on EA effectiveness: Communication is a key to an EA Program's impact beyond the group responsible for the development and maintenance programs. EA groups must plan and execute communication in order to avoid becoming the keepers of wonderful documents and deliverables that no one else in the organization accesses.

Technology Investment and Procurement

The objective is to deepen the penetration of architecture content into daily, operational activities. At a minimum, technology investment decisions, even nominal upgrades, must be guided by the EA process and content. Many state-of-the-art EA efforts are derailed by investment decision and/or purchasing processes inconsistent with overall EA direction (e.g., lowest-cost provider, preferential-supplier list, multiyear agreements). Purchasing agents and their associated workflow (e.g., purchase requisition, purchase order, request for comment, request for information, and request for proposal) must be folded into the governance processes. Once information technology has been procured and implemented, EA should play a role in optimizing the usage of these IT resources, as well as sourcing decisions for their management.

Impact on EA effectiveness: EA must be able to impact, at a minimum, the investment decisions and actual procurement of information technology to build a foundation from which business process, information and application transformations can be built. Further effort should then be placed into aligning EA activities with service management, sourcing and asset management activities.

Conclusion

Once an organization has assessed their critical success factors to EA effectiveness, there should be an action plan developed that explicitly addresses how the organization will leverage their strengths and overcome their weaknesses. The CSFs should be assessed annually in most organizations, as the factors will likely change over time.

Directions: Identify the critical success factors within your organization and leverage the factors that enable EA effectiveness and devise methods for overcoming the factors that hinder EA effectiveness.