

EA Assessment Participant Summary Report

State of Nebraska

July 2, 2004

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INTRODUCTION

This summary is based on the EA Assessment survey responses submitted on June 11, 2004. Any development completed after this date is not reflect in this report.

The EA Readiness Assessment is a tool, intended to help your organization determine a baseline for the current state of your Enterprise Architecture Program. There are three components that contribute to the assessment of Enterprise Architecture:

- EA Maturity Model
- EA Readiness Assessment (preview document and online tool)
- EA Assessment Participant Summary Report

The *EA Maturity Model* provides statements describing maturity levels that can be used as benchmarks to measure the performance and path that is a natural progression in the development of enterprise architecture.

The *EA Readiness Assessment* in its preview form is a mechanism for discussion and capture of information about EA and operational activities. The greatest benefit of the EA assessment is realized through these meetings as members from across the enterprise are brought together to discuss the details of the EA activities and identify strengths and weaknesses in their program.

Responses supplied via the online tool provided the basis for this *EA Assessment Participant Summary Report.* This report provides the map from the participant baseline to the EA MM levels for the sole purpose of identifying potential next steps for furthering the development of the EA Program under each category as listed below. This report will also provide references to sections of the NASCIO Enterprise Architecture Tool-Kit, where organizations can find helpful guidance as they continue to develop their EA Program.

The EA Readiness Assessment questions, EA Maturity Model statements and level identifications in this report are divided into categories, which are indicative of the major areas addressed within Enterprise Architecture or contribute to the program:

- Administration (Governance Roles & Responsibilities)
- Planning
- Framework
- Blueprint
- Communication
- Compliance
- Integration
- Involvement



ASSESSMENT APPROACH

The Assessment contained two basic types of questions

- Those that help identify a baseline, which will map to the EA maturity levels
- Those that provide NASCIO greater understanding of the EA programs throughout the various organizations, but do not contribute to identifying the baseline

Questions throughout the assessment were identified as contributing to readiness and/or one of more of the assessment categories. Assessment in the areas of Business and Information Systems Architecture is planned for the future, and will not be addressed specifically in this Participant Summary Report.



Based on your responses to the EA Readiness Assessment, your organization has at least some of its Business and IT goals and objectives defined and IT goals have traceability to the organization's strategic business goals and objectives. Your EA Program is in the planning stages and should be underway within the next six months. The organization has the commitment by executives, the CIO and the State Government Council (SGC) is serving as the impetus for developing an Enterprise Architecture; however, no budget exists for EA Program development.



EA Maturity

The following chart provides an "at-a-glance" view of the EA MM levels that most closely align with the baseline for your organization, as determined through the analysis of the completed EA Readiness Assessment. On the pages following the chart, summary information is provided regarding areas of strengths and weaknesses that are typical within the given level for each of the categories, along with references to Tool-Kit sections that will be useful for continuing development in each of these areas.

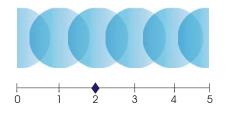
Category	EA Maturity Level	Level Title
Administration	Level 2	Repeatable Program
Planning	Level 2	Repeatable Program
Framework	Level 1	Informal Program
Blueprint	Level O	No Program
Communication	Level O	No Program
Compliance	Level O	No Program
Integration	Level 1	Informal Program
Involvement	Level O	No Program



EA MATURITY SUMMARIES

Administration

This section addresses the administration and staffing of an EA program. A dynamic governance program sets the tone for the acceptance of Enterprise Architecture through an organization.



Current Level Summary – Based on the responses provided in the EA Assessment, the EA maturity level that most closely identifies your organization's current state for EA Administration is Level 2 – Repeatable Program. At Level 2, a need for Architecture "Governance" has been identified. EA Program has begun to developed clear roles and responsibilities. Governance committees are starting to form.

Next Level Summary – The next level is Level 3 – Well-defined Program. At Level 3, Architecture "Governance" committees are established, and have well-defined roles and responsibilities. Authority of the governance committees is also aligned to work together smoothly.

Steps for Progressing to the Next Levels

To Level 3

- Formalize EA Administration roles and responsibilities
- Formally follow EA deliverables through processes to ensure committees are aligned and working smoothly together
- Verify that all responsibilities, aligned to an individual or group, are being done.
- Develop and conduct educational sessions for the EA Blueprint development teams (Domain committees)

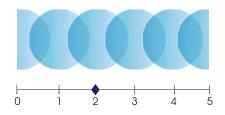
- Review EA Administration roles and responsibilities, based on actual work being performed.
- Make recommendations for updates to roles and responsibilities and EA organizational chart.
- Update EA Administration roles, responsibilities, and organization chart.
- Communicate changes in the roles, responsibilities and organization chart.

- Have Governance committees and individuals provide input on their roles and responsibilities.
- Put EA Administration through Vitality process for updates.
- Meet with other organizations to see how their EA Administration works feed potential improvements back into the Vitality process

Additional Resources – The section entitled <u>Architecture Governance Roles</u> in NASCIO's Enterprise Architecture Development Tool-kit provides greater detail on the roles and responsibilities that are important to a successful Enterprise Architecture, along with samples for various organizations. <u>Appendix C – Roles and Responsibilities Matrix</u> provides a useful chart that includes role, responsibility definition, element acted upon and person or parties with whom the interaction takes place.



Issues discussed in this section are related to the EA program road map and implementation plan. Like all projects, this effort must be appropriately managed to assure the goals for implementation of an EA program are realistic, achievable and kept within scope.



Current Level Summary – Based on the responses provided in the EA Assessment, the EA maturity level that most closely identifies your organization's current state for EA Planning is Level 2 – Repeatable Program. At Level 2, the organization has begun to develop a vision for Enterprise Architecture (EA) and has begun to identify EA tasks and resource requirements. The organization has also decided upon a methodology and begun to develop a plan for their EA Program.

Next Level Summary – The next level is Level 3 - Well-defined Program. At Level 3, EA Program plans are well defined and documented, including governance roles & responsibilities, the architecture lifecycle processes, a structured framework and timeline for developing the EA, and financial & staffing resource requirements. EA activities are also carried out according to the defined plan.

Steps for Progressing to the Next Levels

- Create EA Program Plan based on:
 - EA Administration Model
 - EA Framework (Architecture Lifecycle Processes)
 - Approved Resources (Human Capital and Financial Capital)

- Established Priorities and Scope
- Execute EA activities based on defined EA Program Plan
- Update plans based on changes to any of the plan criteria previously mentioned

- Feed EA Program vitality changes into the EA Program Plan to improve the plan tasks and assignments.
- Capture metrics regarding the time estimated to complete EA Program Plan tasks versus the actual completion time. These should be averaged and fed back into the estimating methods to help in refining the time estimates for future EA Program Plan activities.
- Set Goals for EA Program Plan accomplishments
- Create EA Program Action Plans to manage the day-to-day activities of the program

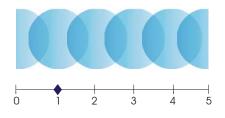
To Level 5

- Measure results against EA Program Plan Goals based on metric information.
- Update EA Program Action Plans based on metric information and team feed back.
- Review the EA Program Plan on periodic basis and make updates to keep the plan vital, rather than updating only when changes happen to the framework/administration.
- Work with other organizations, sharing EA Program Plans and Action Plans to gain incite to potential improvements for your organizations' plans

Additional Resources – The sections <u>Concept – Why Architecture</u> and <u>Overview of Enterprise</u> <u>Architecture Terms and Concepts</u> contained in the introduction to NASCIO's Enterprise Architecture Development Tool-kit provides detail that can serve as a primer for those involved in the planning process. In future versions of the Tool-Kit, additional the area of EA Planning will be expanded.



This section takes a look at the base processes and templates used for Enterprise Architecture within the organization. Defined and documented templates and processes are critical to ensure compliance and consistency within an EA program. The issues addressed in this section concern only the processes and forms intended for use by those documenting the operations of the organization.



Current Level Summary – Based on the responses provided in the EA Assessment, the EA maturity level that most closely identifies your organization's current state for EA Framework is Level 1 – Informal program. At Level 1, the organization is beginning to understand the need to create processes and templates to capture business drivers and technical standards. However, processes are ad hoc and

informal, processes followed may not be consistent. There is no unified architecture process across technologies and lines of business.

Next Level Summary – The next level is Level 2 - Repeatable Program. At Level 2, the basic EA Program is documented. Processes are planned and tracked. The organization is beginning to reuse methods for capturing critical EA information.

Steps for Progressing to the Next Levels

To Level 2

- Document the basic EA Program processes and templates
- Begin to track EA Program plan processes
- Track EA processes, actuals against planned
- Encourage reuse of basic EA Program templates

To Level 3

- Formally document Architecture Lifecycle Processes.
- Formally document EA Program Tools (Architecture Lifecycle Templates, Migration Strategy Templates, Classification Criteria Decision Tools)
- Produce Education Materials for the Architecture Lifecycle Processes and Tools
- Conduct Education Sessions for the Architecture Lifecycle Processes and Tools

To Level 4

- Observe Architecture Lifecycle Processes at work.
- Produce a list of recommended changes to the Architecture Lifecycle Processes
- Observe EA Program Tools in use
- Produce a list of recommend changes to the EA Program Tools
- Review Recommendations for change
- Change Architecture Lifecycle Processes and EA Program Tools
- Capture Architecture Lifecycle metrics on "cycle times" and resources required to go from start to completion on major Architecture Lifecycle tasks

To Level 5

- Architecture committees and individuals provide recommendations for changes to Architecture Lifecycle processes and templates
- These recommendations feed directly into the Architecture Review Process and into the EA Framework
- The recommendations for EA Framework changes are proactively reviewed by all stakeholders prior to incorporation of the changes.
- Based on captured metrics, review for "cycle time" reductions including processing times, processing steps, and the resources required to accomplish a major Architecture Lifecycle task. Feed these identified improvements back into the vitality process for updating the EA Framework.
- EA Framework changes are implemented once approval by stakeholders is received

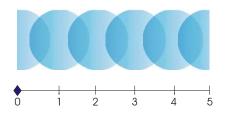
Additional Resources – Several sections within *NASCIO's Enterprise Architecture Development Tool-kit* will provide detail on the various framework elements. The section entitled <u>*Architecture Lifecycle</u></u></u>*

<u>Processes</u> provide detailed information for developing those processes that provide governance for the EA Program, including detailed process models for each of the Architecture Lifecycle processes.

The <u>*Technology Architecture Framework*</u> section provides the process and templates (framework) for documenting the Technology Architecture. Sections for addressing the processes and templates for the Business and Information Architectures are panned for future versions of the Tool-Kit.



The Architecture Blueprint is the collection of the actual standards and specifications that define how the Business and IT Portfolios are and will be built. This section addresses the completeness of the Blueprint and reflects the quality of the EA program within your organization.



Current Level Summary – Based on the responses provided in the EA Assessment, the EA maturity level that most closely identifies your organization's current state for EA Blueprint is Level 0 – No Program. At Level 0, Business functionality is not documented and IT technology standards are not documented.

Next Level Summary – The next level is Level 1 - Informal Program. At Level 1, documentation of business drivers, technical standards, etc. is beginning to happen.

Steps for Progressing to the Next Levels

To Level 1

- Research how other organizations capture business drivers and technology standards.
- Informally begin to document Business Drivers
- Informally begin to document Technology Standards

To Level 2

- Identify documented Business Drivers and strategic information
- Identify documented Technology Standards
- Determine ways to capture the various pieces of EA information in a consistent format and storage medium

To Level 3

 Consistently document Technology Standards and Guidelines using the EA Program Tools provided Consistently document Business Drivers and Strategic Information using the EA Program Tools provided

To Level 4

- On regularly scheduled timeframes, consistently update/document Technology Standards and Guidelines
- On regularly schedule timeframes, consistently update/document Business Drivers
- Capture EA Blueprint aging metrics to help in determining the optimal frequency for regular review and update of the EA Blueprint (Blueprint Vitality process)
- Establish processes to review project against architectural standards

To Level 5

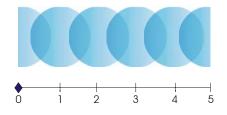
- Identify shifts in business and technology.
- Kick off Architecture Vitality automatically when shifts are identified, rather that reacting to outdated information in the EA Blueprint
- Based on EA Blueprint aging metrics information, perform proactive reviews and updates of the EA Blueprint (Blueprint Vitality process)

Additional Resources – The section entitled <u>*Technology Architecture Blueprint Samples*</u> in *NASCIO's Enterprise Architecture Development Tool-kit* provides examples of completed EA Blueprints for the five levels of the Technology Architecture. Sample EA Blueprints for the Business and Information Architecture is planned for future versions of the Tool-Kit.

<u>Appendix B – Samples Discipline Description</u> provides a sampling of descriptions for EA Disciplines from the Technology Architecture that were compiled using information from several states. These can be helpful as a starting point to generate discussions for developing Disciplines within your organization.

Communication

Communication is a critical component in an organization's ability to operate effectively. As the framework is established in the EA program, it must be readily available to team members for reference and use. The team must also be familiar with the goals and new projects of the enterprise to ensure the EA program remains vital and operates optimally.



Current Level Summary – Based on the responses provided in the EA Assessment, the EA maturity level that most closely identifies your organization's current state for EA Communication is Level 0 - No Program. At Level 0, Senior Management and agencies are not aware of what enterprise architecture is, or the benefits.

Next Level Summary – The next level is Level 1 - Informal Program. At Level 1, the need to create greater awareness about EA has been identified.

Steps for Progressing to the Next Levels

To Level 1

- Begin to talk to Senior Management groups regarding the benefits of Enterprise Architecture
- Create Enterprise Architecture Marketing Materials

To Level 2

- Conduct an Enterprise Architecture Marketing Campaign to Senior Management and Legislators
- Prepare and conduct workshops on sharing ideas, standards, and technology configuration specifications
- Share EA Blueprint information captured in reusable formats

To Level 3

- Develop a formal Communication process to ensure the EA Program is communicated and known throughout the organization
- Conduct EA Senior EA presentation showing actual results from EA Program
- Develop and conduct training sessions to educate committee members on the EA roles and responsibilities, processes and templates
- EA Blueprint is available to all stakeholders for analysis and review
- EA Variances are communicated out to all stakeholders

To Level 4

- Ensure EA communications are automatically pushed to all interested parties
- Develop Introduction to EA orientation presentation and/or materials to be provided to all new employees and contractors
- Ensure EA Blueprint Communication methods are fully enabled to aid in decision making for migration strategies and solutions
- Capture metrics on the types of communications pulled or pushed from the EA Program.
- Solicit feedback on the effectiveness of this communication

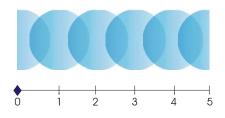
- Provide a mechanism for gathering feedback on the EA communication methods.
- Feed improvement ideas back into the EA Program Vitality processes to continue the enhancement and progression of the EA Tools
- Based on metrics information improve the various communication methods. Provide more and more options to aid in quick and decisive decisions
- Schedule meetings with other states that have EA programs underway, to discuss ideas for improvements in communication processes
- Get involved in NASCIO AWG to share experiences and also hear ideas for improving EA communication from multiple perspectives

Additional Resources – A description of the role of Communicator along with details of the communicator's responsibilities are provided within the section of *NASCIO's Enterprise Architecture Development Tool-kit* entitled <u>Architecture Governance Roles</u>.

Details for the Communication Process, including a process model that portrays the process flow, are provided in the sub-section entitled <u>Architecture Communication Process</u> under the <u>Architecture Lifecycle</u> <u>Processes</u> section.



A key element to a successful EA Program is how effectively the program is working within the organization. The following questions address the mechanism in place to ensure compliance with published standards, processes and other EA elements, and the processes to document and track variances from those standards.



Current Level Summary – Based on the responses provided in the EA Assessment, the EA maturity level that most closely identifies your organization's current state for EA Compliance is Level 0 – No Program. At Level 0, no compliance process exists within the organization.

Next Level Summary – The next level is Level 1 - Informal Program. At Level 1, the need for compliance to standards has been identified.

Steps for Progressing to the Next Levels

To Level 1

- On a "target action" list, identify the need to comply with the developed guidelines, standards and legislation
- Identify the various ways that compliance is currently accomplished within your organization and document them.

- Document a consistent compliance process to ensure that changes in the enterprise are in line with the documented guidelines, standards, and legislation.
- Choose a pilot project to take through the compliance process. Ensure that the compliance
 process takes into account all of the steps required to ensure compliance and brings benefit to the
 team seeking information from the EA Program
- Observe the development of a business case to seek a variance from the guidelines, standards, and legislation.

Document issues that came up regarding the development process and/or difficulties encountered

To Level 3

- Fully integrate the EA compliance process with the other EA Program Architecture Lifecycle Processes to ensure interoperability of the EA Program overall
- To keep the EA Blueprint vital, ensure that the various help requests and variances are tracked and feed into the Architecture Vitality processes
- Use the information documented during the observation of the Business Case development process to further define and improve the process
- Provide a business case template to aid in the development of consistent business cases across the enterprise

To Level 4

- After implementation, follow up on business cases to ensure the accuracy of the cost-benefit comparisons
- Solicit feedback from the various groups/individuals that have utilized the compliance process for areas of improvement

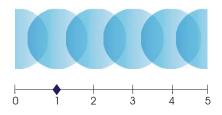
To Level 5

- Track metrics on business cases and feed that information back into the EA Program to aid in migration strategies, impact analysis, and other business case decisions.
- Working with other organizations, compare business case information on EA Program variances, migration strategies, and impact analysis

Additional Resources – Details for the Compliance Process, including a process model that portrays the process flow, are provided in the sub-section entitled <u>Architecture Compliance Process</u> under the <u>Architecture Lifecycle Processes</u> section. This section also includes details for the process of creating an Architecture Variance Business Case.

Integration

An Enterprise Architecture program can touch many different areas, both inside and outside of an organization. A key factor is identifying areas that have similar functions or operations. These questions focus on identifying areas that will benefit from a vital integrated EA program.



Current Level Summary – Based on the responses provided in the EA Assessment, the EA maturity level that most closely identifies your organization's current state for EA Integration is Level 1 – Informal program. At Level 1, the need for integration to the EA Program Framework (Architecture Lifecycle Processes) has been identified. The various touch-points between the Management Processes and the EA Program Framework have been mapped, however, no details exists to how the integration will work. Projects and purchases may be costly because they are done in isolation.

Next Level Summary – The next level is Level 2 - Repeatable Program. At Level 2, the organization has begun to identify common Business and system functions, which allows touch-points to be identified earlier in the project development life cycle.

Steps for Progressing to the Next Levels

To Level 2

- Determine the benefits that the EA Program can bring to the other Management Processes
- Meet with the owners/stakeholders of other Management Processes. Talk to them about the benefits that can be received by integrating various processes
- Brainstorm various options for integrating their Management Processes with the EA Program Framework
- Determine next steps to help the integration to move forward

To Level 3

- Document the EA Program integration points including:
 - Information exchanges
 - Process Steps
 - Stakeholders / Roles / Responsibilities
- The documented integration points should be completed for all of the following Management Processes that exist in your organization:
 - Strategic Planning
 - Capital Planning
 - Project Management
 - Change Management
 - Procurement
 - Legislative Budget Hearings
- Make Architecture Compliance Review part of the project methodology

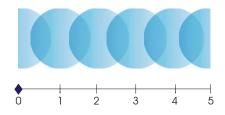
- Determine what areas of Capital Planning can be based on migration strategies
- Base Capital Planning on migration strategies for up-coming Strategic Planning years where applicable.
- Once adherence to the EA Blueprint is determined, ensure that procurements are authorized
- Feed Strategic Planning efforts from the migration strategies and benefits documented in the EA Blueprint.
- Ensure that managers of projects seek advise from the EA Program resources available to them, such as EA committees/groups, the EA Blueprint, etc...
- Regularly verify that projects are going through Architecture compliance

- EA blueprints should be guiding the technology decisions for enterprise integration efforts.
- Business decision makers should look to the EA Blueprints to identify functional areas for improvement.
- Decision-makers from your organization should work with decision makers from other organizations to share experiences and gain incite on how EA has aided others in their decisions over time

Additional Resources – The section entitled <u>Architecture Lifecycle Processes</u> in NASCIO's Enterprise Architecture Development Tool-kit includes detailed discussion and process models of each of the Architecture Lifecycle processes, including the touch-points with the management processes such as procurement, project management and change management.



Human capital is one of the most valuable resources in an Enterprise Architecture program. Any program will struggle without the support of those employees who are expected to utilize and follow the defined processes. Although it may seem that an EA program does not impact some individuals within a department, all should be aware of the process and ready to contribute, as future projects may touch their area of concern.



Current Level Summary – Based on the responses provided in the EA Assessment, the EA maturity level that most closely identifies your organization's current state for EA Involvement is Level 0 - NoProgram. At Level 0, there is no program in place for Enterprise Architecture awareness. Several independent groups or individuals will be typically working to solve a single issue.

Next Level Summary – The next level is Level 1 - Informal Program. At Level 1 the organization has identified a need to make staff throughout the enterprise aware of the benefits and concepts of Enterprise Architecture.

Steps for Progressing to the Next Levels

To Level 1

- Document the advantages of having Enterprise Architecture that are specific to your organization. If you have EA benefit statements or charters already developed, these can help in documenting the advantages.
- In the document, discuss the concept that all organizations have an architecture, however, having a successful, Enterprise Architecture is a matter of having the details of that Architecture explicitly defined and documented, rather than implicitly done based on everyone's personal inclinations or understanding

- Develop EA Program marketing and awareness materials.
- Speak to various management groups throughout the organization about the concepts of EA.
- Set-up web site to increase understanding of EA and solicit involvement
- As EA roles and responsibilities are identified, solicit volunteers and choose individuals to assist in the EA Program.

- Continue to provide the EA Blueprint information to the various organizational groups within your enterprise. Communicate to the members of these groups the benefits of having the EA Blueprint information for the critical decision-making process
- Continue to involve additional organizational individuals/groups in the EA roles and responsibilities. As people get involved they become proponents of the program

To Level 4

- Have various committee members and individuals participate in the communication and education sessions through out the organization.
- Begin to publish success stories through all means of organizational communication (Website, newsletters, etc.)

To Level 5

- Solicit feed back from the users and developers of the EA Blueprint regarding successes and failures they have had using the EA Blueprint. Continually improve communications of the EA effort throughout the organization.
- Bring EA program marketers from within your organization together with marketers from other organizations to discuss success communication medias and topics

Additional Resources – Along with providing detail on the roles and responsibilities that are critical to a successful Enterprise Architecture, the section entitled <u>Architecture Governance Roles</u> in NASCIO's Enterprise Architecture Development Tool-kit highlights the importance of involvement from throughout the enterprise.



CONCLUSION

A list of steps for further development has been provided within each of the categories. The level determinations were based on a comparison between the information that was gathered through the responses to the assessment and the information from NASCIO's EA Maturity Model.

The suggested steps for progressing to the next level are indicative of activities that are typical at the given level, therefore it is possible that activities described in the Next Steps section may be underway within your organization.

These steps are intended as guidance and are not meant to be prescriptive. Developing a successful EA Program is an iterative process. You will need to determine which development steps will provide the greatest value to your organization, how the development steps fit within your organization's vision and goals, and prioritize activities based on your particular environment and situation.