

NASCIO EA Development Tool-Kit Business Architecture

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BUSINESS ARCHITECTURE

State governments are complex organizations that are difficult to describe. Complex processes and relationships operate in a culture driven by budget. These complexities must be supported by a host of capabilities including information technology. Business architecture provides an operating discipline for describing and managing these complexities. This section of the Tool-Kit will be devoted to exploring and describing that part of Enterprise Architecture that is predominantly business related.

Development of NASCIO's Enterprise Architecture Tool-Kit is an on-going process. Each iteration of the Tool-Kit incorporates new knowledge and best practices as they are developed. NASCIO has generated this section of the Tool-Kit in response to its constituents, who have asked for a treatment of Business Architecture.

NASCIO is treating Enterprise Architecture as a program. As a program, Enterprise Architecture will continue to evolve and become more sophisticated. The reader is encouraged to treat this version of the Tool-Kit as one iteration in an ongoing process. The Tool-Kit will continue to evolve to reflect the changing nature of Enterprise Architecture. NASCIO is presenting Business Architecture as a first iteration in this evolution. The information provided in this version is not an exhaustive treatment of Business Architecture and therefore does not exhaustively detail every aspect of Business Architecture. It also is not NASCIO's intent to repeat within the Tool-Kit information that is readily available from other sources. However, NASCIO will present frameworks, approaches, and concepts that will assist the states in developing their enterprise architecture programs without prescribing a specific methodology. In that light, the Tool-Kit may include more than one view or approach to enterprise architecture allowing the reader to evaluate and use that content that is most relevant and useful in their particular circumstances.

Business Architecture should be viewed as the foundation or driver for the other components of an Enterprise Architecture. There are many definitions for Business Architecture, but for government enterprises, Business Architecture refers to the high-level representation of the vision, mission, goals, objectives, and business strategies that comprise the strategic business intent of government. That intent is then enabled through a variety of capabilities such as functions, processes, information, know-how, and technology critical to providing services to its citizens, agencies, bureaus, departments businesses, vendors, branches and others with whom the government interacts. Strategic business intent is not necessarily described explicitly. Nevertheless, whether the organization in focus is a state, or a branch within state government, strategic business intent will drive the development or further leveraging of technology and non-technology capabilities that are required to enable that intent.

Business architecture must start with an environmental context. That is, a contextual understanding of what is going on economically, politically, and in the way of citizen expectations. This includes identification and understanding of the trends, changes, market forces, fiscal and monetary policies and their immediate and latent effects on the economy, availability of capital, and labor. These environmental factors are spawning the transformation of government. It is important to realize that information technology is not only a tool for government, but also a driver for transforming the operations of government. Some of the trends in government include an increased emphasis on performance, accountability, improved financial management, improved service delivery and collaboration.

This contextual understanding provides the bounding and relevancy required to investigate market opportunities or citizen needs. Those opportunities and needs are then evaluated along with an understanding regarding who is able to fulfill those needs. This evaluation helps determine if a particular

need is best served by government or by the private sector. Once it has been determined that a particular need or desire is best served by government, government must develop its intentions, or its strategic business intent. Strategic business intent is made explicit through carefully articulated mission, vision, goals, objectives, and strategies. Performance measures are established as part of that intent in order to insure performance is perfectly aligned with intent. That intent is then enabled through capabilities that are delivered through management initiatives, programs and projects. Information technology is one of those capabilities. In fact, as with other capabilities, information technology can be stratified or broken down into manageable pieces that can be delivered or further leveraged through well scoped projects. Projects must be managed within portfolios as part of a program management discipline. This will insure that there is proper project to project communication and redundant efforts are avoided. This entire process is demonstrated with what can be termed the *Enterprise Architecture Value Chain* as shown in Figure 1. The four chevrons include examples of the kind of content that typically comprises these major activities

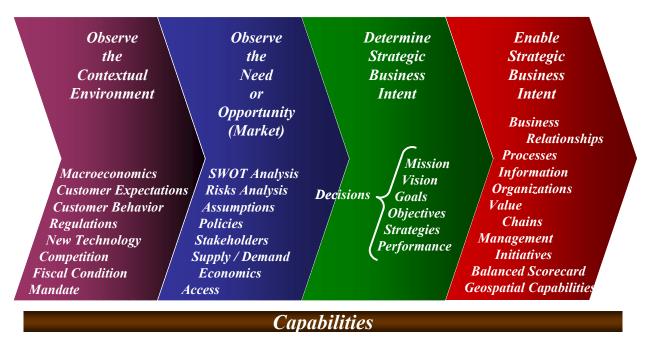


Figure 1. Enterprise Architecture Value Chain

It is termed a value chain as there is value added through the progression from environmental understanding through to enablement. This value adding process insures activities are properly executed within the realities facing government.

It is important to remember that there are many capabilities that enable strategic business intent that may not be predominantly based on information technology. Capability management, a part of enterprise architecture, explores, identifies, stratifies, evaluates and prioritizes capabilities to determine the best investment path for serving citizens.

Business architecture must also consider interaction with other governments, as well as delivery of services to citizens of other governments. Business Architecture includes this aspect as business interactions.

Business Architecture describes government business from an enterprise-wide perspective. Strategies, processes, organizations, locations, and information are all documented to show their existing place in the business model and their future significance. For any Enterprise Architecture effort to be successful, it must be linked to the business direction of the organization. This linkage is established in the Business Architecture

Figure 2 shows how Business
Architecture fits within the overall
Enterprise Architecture Framework.
Business Architecture serves as the
business knowledge base for the
Enterprise Architecture Program. It
documents what, where, by whom,
how, when and why the organization's
business is performed. Essentially,
business architecture describes how
the business of government "fits"
together.

In addition to serving as the focal point for the Enterprise Architecture Program, Business Architecture can serve as a stimulus for developing detailed business plans, technology plans and business contingency plans. Business Architecture can also be used when performing impact analyses to adapt the organization to changing business needs.

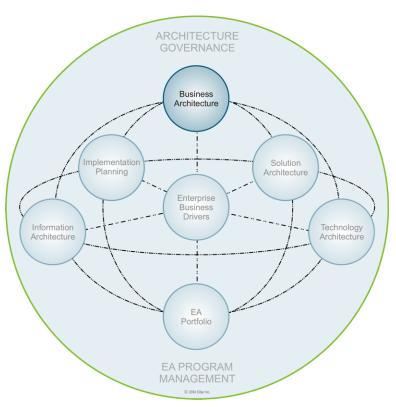


Figure 2. Business Architecture Touch-points

Documenting the Business Architecture provides a clear understanding of the enterprise's current and future direction. The information documented in the Business Architecture supports the decisions of the executives and managers in their efforts to meet the business goals and objectives. Business priorities direct allocation of resources when Business Architecture is included in the Enterprise Architecture.

Business Architecture provides a demonstrable, repeatable approach for assuring the alignment of business processes, systems and resources throughout the enterprise. In addition, documentation of the Business Architecture provides a valuable tool for illustrating and communicating the business of the enterprise to all stakeholders. One of the benefits of Business Architecture is that it can serve as a vehicle for inclusion of the business side of government into the information technology planning process and for building consensus among groups.

Federal, state and local governments continually face mandates for inter-agency sharing of information and for providing bundled services. Business Architecture provides a business-based framework for developing solutions that operate across agencies and within the lines of business of federal, state and local governments. In developing Business Architectures, federal, state and local governments look at the architectures of their communicating partners, thus enhancing opportunities for interoperability between all governmental bodies, both vertically and horizontally. Inter-enterprise architecture refers to

extending the enterprise to include it communicating partners. An example of this is demonstrated with the exchange of criminal justice data within the justice community. Such information is shared between law enforcement, courts, corrections, and probation.

The pursuit of formal Enterprise Architecture Programs within organizations contributes to interoperability across enterprises. This is depicted in Figure 3.

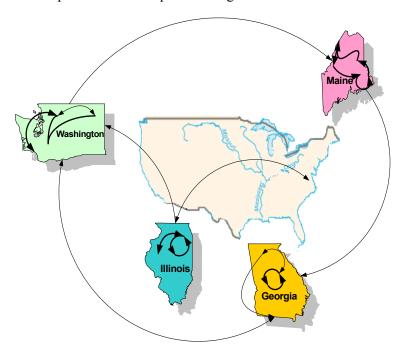


Figure 3. EA Enhances Interoperability Between All Government Bodies.

Definitions

When discussing Business Architecture and related topics, the terminology varies, including a variety of terms with the same or similar meanings, as well as varied meanings for the same term. To minimize any confusion in terminology, a glossary, which provides definitions of terms used throughout the Tool-Kit, is provided in Appendix A of the Tool-Kit document. A brief list of the terms and definitions used within this Business Architecture section are provided here:

- Artifacts: Artifacts constitute any object, or work product that is developed as a component of the
 enterprise architecture. Artifacts include trends, principles, mission, goals, objectives, strategies,
 capabilities, processes, process steps, entities, attributes, relationships, subject areas, application
 components, applications, data bases, etc.
- Approach: Approaches are devised to deliver work products that are consistent. An approach can be project specific or apply to the enterprise as a whole. For example, use of Unified Modeling Language (UML) case models versus entity relationship diagrams. These may be viewed as two different approaches for information modeling. (see http://www.uml.org/)
- Baseline: The current or "as is" state of the business environment, captured in a set of baseline business models.
- *Blueprint:* The dynamic depiction of the business, captured using standardized, structured processes and templates (framework). The Business Architecture Blueprint records the present direction of the enterprise and the direction the enterprise intends to pursue from a business perspective.
- Business Architecture: The high-level representation of the business strategies, intentions, functions, processes, information, and assets (e.g., people, business applications, hardware) critical to operating the business of government successfully.
- Business Architecture Framework: The combination of templates and structured processes that facilitate the documentation of the enterprise's business artifacts (e.g., strategies, processes, events) in a systematic and disciplined manner.
- Business Domain Model: A graphical or pictorial representation for describing business operations of
 the enterprise (Domains), independent of the agencies, bureaus, departments and/or offices that
 perform the operations or provide the services.
- Business Domain: A functional or topical subset of the business operations that is integral to the success of the enterprise. Examples of Domains might include:
 - Functional Domains
 - Education
 - Health and Social Services
 - Justice and Public Protection
 - Resource and Economic Development
 - Transportation and Engineering
 - Topical Domains
 - Customer
 - Location
 - Payments
- Business Drivers: Internal goals and strategies and external trends that influence the business.

- Business Perspective: A breakdown of the Business Domain based on a specific viewpoint, such as Who, What, Where, When, Why, How, or a logical combination of one or more of these viewpoints.
- Business Portfolio: The implemented baseline business environment, business processes, strategies and data of the business organization.
- Business Architecture Perspective: A breakdown of the Domain based on a specific viewpoint, such as Who, What, Where, When, Why, How, or a logical combination of one or more of these.
- Framework: In general, a framework will depict and define the relationship between enterprise architectures. Within an architecture, a framework will depict the relationships among the components. A framework depicts relationships between and among methodological work products. (note: there is a diversity in the use of terms such as blueprint, framework, etc. In order to facilitate effective communication, definition of terms must be established in any enterprise architecture program initiative.)
- *Gap:* The differences between the "baseline" business environment and the "target" business environment in key areas of the business (e.g. business needs, business processes, workload, ability to handle growth, users, interfaces).
- *Inter-enterprise Architectures:* Describes the relationships and interactions between the enterprise in focus and its trading partners/jurisdictions and customers.
- *Meta Models*: Meta models describe the artifacts or elements that comprise architecture domains. These are essentially data models or entity relationship diagrams describing the artifacts, their attributes, and relationships. Meta models are essential to exploring and establishing the components of each architecture domain.
- *Migration*: The evolution from the baseline to the target state of the business environment.
- *Model:* The graphical representation or simulation of a process, relationship or information.
- Operating Discipline: An operating discipline is a "discipline for operations." It describes exactly what is to be done, when, by whom, why, and where. It is comprised of the following elements: a framework for describing the components and their relationships; meta models for describing the content of the framework; a methodology for navigating through the framework; approaches for delivering work products consistently; and service delivery for delivering work products in a particular engagement.
- *Repository:* An information system used to store and access architectural information, relationships among the information elements, and work products¹.
- *Strategic Element:* A strategic direction, driver or goal, used to establish a vision statement, business objectives, business plans and business drivers.
- *Target*: The desired future or "to be" state of the business environment, captured in a set of target business models.
- *Template:* An empty form that serves as a guide for capturing the business details that will ultimately reside in an Enterprise Architecture repository.

Business Architecture is the foundation for other parts of the Enterprise Architecture, providing context and guidance to keep the enterprise architecture focused on the strategies and goals of the government. Figure 4 illustrates the logical links and relationships of the Business Architecture to other parts of the Enterprise Architecture. The Business Drivers and enterprise circumstances influence the development of the Business Architecture Blueprint. The Blueprint, in turn, documents strategic initiatives, identifies potential investment benefits, and influences the development of the Technology, Information and Solution Architectures.

¹ A Practical Guide to Federal Enterprise Architecture v1.0, CIO Council, February 2001

Details pertaining to Motivation (why), Business Information Concepts (what), Business Cycles (when), Location/Logistics (where), Function (how), and People (by whom), are captured within a Business Architecture Blueprint as business models.

By capturing the information for these components in current business models (Baseline) and proposed business models (Target), deficiencies and gaps, including growth opportunities, are identified. Based on the analysis of the business drivers and the gaps, determinations are made regarding mitigation of gaps, migration strategies are developed to bridge the specific gaps and provide a roadmap to move to the target business model.

Pursuing a formal explicit Business Architecture offers many benefits to the Enterprise. These benefits are used to garner support for the Business Architecture effort, as well as the Enterprise Architecture effort as a whole. By presenting a holistic, seamless view of the Enterprise, the Business Architecture will:

- Provide a basis for Capital Planning and Change Management
- Facilitate cross agency and intergovernmental analysis and opportunities for integration
- Increase understanding of how the enterprise carries out its mission through documentation of its business transactions and functions
- Provide explicate documentation of regulatory compliance criteria throughout the Business Architecture Components
- Increase responsiveness to customers
- Increase collaboration and sharing of information across government-wide entities

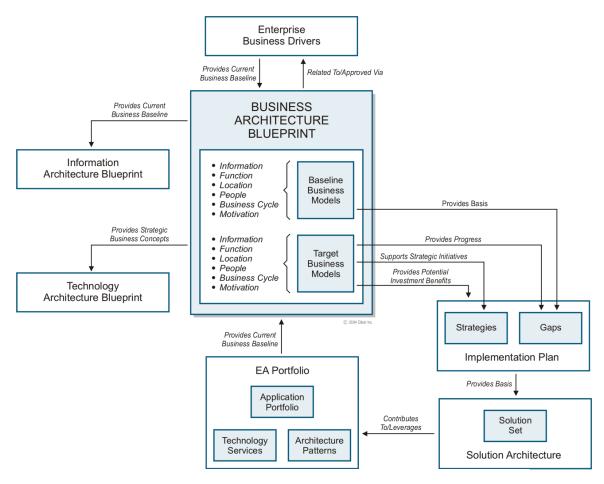


Figure 4. Business Architecture Touch-points

- Assess the impact and mitigate the risk of tactical decisions
- Increase project success rates
- Eliminate costly rework
- Identify opportunities to employ innovative technology²
- Enhance investment decision-making by providing ready access to information about technology and business linkages
- Reduce redundancy throughout the enterprise, which causes excess resource expenditures in human and financial capital
- Produce streamlined auditable processes
- Facilitate Business Process Reengineering (BPR), Business Process Consolidation (BPC), and Continued Process Improvement (CPI) etc.
- Ensure business focus is on the highest priority and mission critical efforts.

² Federal Chief Information Officer (CIO) Council, Federal Architecture Working Group, A Practical Guide to Federal Enterprise Architecture, Version 1.0, February 2001.

This section of the Tool-Kit supports NASCIO's architecture program by providing government organizations a suggested structure (framework) for establishing an effective Business Architecture. As organizations develop the structure for their Business architecture, it is important that the processes and templates be flexible enough to guide the documentation of various business elements such as:

- Business drivers
- Business organizations / roles
- Business events
- Business functions
- Business locations
- Business information concepts

The development and maintenance of a vital Business Architecture requires the involvement of personnel in a variety of roles and responsibilities. Table 1 provides a reminder of the roles that apply across all of the architectures.

Table 1. Architecture Roles

Primary Roles	Supportive Roles
 Overseer Champion Manager Documenter Communicator Advisor Reviewer Audience 	 Subject Matter Experts (SMEs) Services Teams Project Teams Procurement Manager Project/ Services Communicator Special Interest Groups Enterprise Executive

Greater detail for these roles, including a brief description of each role, its responsibilities, its recommended implementation, etc. is provided in the Architecture Governance Section of this Tool-Kit (See *Architecture Governance Roles*). Appendix C also contains a Role & Responsibility Matrix which provides an "at-a-glance" reference of the responsibilities of each Architecture Governance role, the items acted upon, and the roles that interact regarding the responsibility. Each Enterprise should determine the roles that will best help their organization in developing their own Business Architecture. The following identifies the basic roles that are useful in developing Business Architecture:

- Business Architecture Manager- An executive responsible for items including, but not limited to:
 - Providing a "business needs" view of the enterprise with a focus on strategic planning, budgets, organization, policies and procedures (documenters)
 - Understanding the enterprise business architecture and communicating the architecture in such a way that business objects and process models can be developed
 - Understanding the current enterprise strategic direction and the relationships between elements of the organization and current endeavors.
- **Business Architecture Documenter-** A member of a team comprised of business modelers who are familiar with various aspects of enterprise-wide business processes. The team members are responsible for steering, shaping, and developing a Business Architecture Blueprint. These team members should be knowledgeable in both business and technology. The role of Documenter refers to the combination of those best suited to document the architecture, including business Subject Mater Experts.

- Business Architecture Subject Matter Expert (SME) A member of an interdisciplinary team who ensures that the business functions, transactions and information are fully understood and correctly documented in the Business Architecture Blueprint. SMEs may also serve as Business Architecture Documenters.
- **Business Architecture Advisor** An executive who provides clarity and support to the Business Architecture Manager. This Advisor serves as a champion for the Strategic Elements from both the business and technology communities within the enterprise. The Business Architecture Advisor will also provide guidance on enterprise architecture variance requests from a business and economic perspective.
- **Business Enterprise Executive** An executive that provides Strategic Elements that give direction, goals and objectives to the enterprise. A Business Enterprise Executive is typically an executive role that is responsible for ensuring the enterprise goals and objectives are set by the governance organization. This individual must be an active sponsor and evangelist for business architecture.

This section provides concepts to improve understanding of Business Architecture and serves as guidance for enterprise architects and those assisting the architects in developing an enterprise architecture for their organizations.



Business Architecture Framework

The Business Architecture Framework is the combination of templates and structured processes that facilitate the documentation of the enterprise's business artifacts (e.g., strategies, processes, events) in a systematic, disciplined manner. The information captured should foster capital planning and other business decision-making by providing a picture of where the enterprise is today (baseline) and where the enterprise wants to be in the future (target). Having an accurate representation of the two classifications of the business (baseline and target) enables the identification of differences (i.e., gaps) between the two (Figure 5.). During Implementation Planning, analysis of the gaps, development of migration strategies, risk analysis, and development of business cases will draw upon the business architecture information.

For each Business Domain, organizations should decide how much effort is appropriate for documentation of the baseline. The rationale for completing a baseline is to ensure adequate understanding of the current state for the purpose of developing a strategy for moving toward the target, while at the same time minimizing risk.

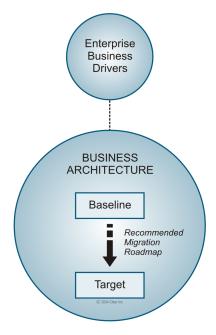


Figure 5. Business Architecture Flow

Documenting the Business Architecture by using structured processes and templates will:

- Provide information on strategic business drivers
- Show how those drivers are reflected today
- Furnish the roadmap to addressing those drivers in the future
- Provide valuable detail for making decisions and planning the investments (human capital or monetary capital) to further those drivers in the future.

The effective use of a Business Architecture Framework provides a standardized approach to capturing the details of the Business Architecture Blueprint by means of:

- Structured processes for documenting the Blueprint
- Templates for capturing the Blueprint detail

Standardization promotes broader understanding and can facilitate the integration and interoperability of solutions.

BUSINESS DRIVERS

The identification and development of Enterprise Business Drivers is an important business activity. Business Drivers include internal goals and strategies and external trends, such as legislation or regulatory items that influence the business. The Enterprise Business Drivers provide strategic business concepts for Business, Information and Technology Architectures. They also influence Implementation Planning and the enterprise solutions built as part of Solution Architecture.

Three common categories of Business Drivers include Principles, Best Practices and Trends:

- *Principles:* Principles are statements of preferred direction or practice. Principles constitute the rules, constraints and behaviors that a bureau, agency or organization will abide by in its daily activities over a long period of time. Principles are also business practices and approaches that the organization chooses to institutionalize to better provide services and information.
- *Best Practices*: Best Practices are practices and approaches that have proven successful over time at providing services and information.
- *Trends:* Trends are emerging influences within the business world that impact how services and information are provided. Trends include governmental trends as well as architecture specific tends, i.e. technology trends, information management trends, etc.

BUSINESS ARCHITECTURE BLUEPRINT STRUCTURE

A Business Architecture Blueprint refers to the dynamic depiction of an organization's business, captured using standardized, structured processes and templates. The Business Architecture Blueprint records the present direction of the enterprise and the direction the enterprise intends to pursue from a business perspective. The Business Architecture Blueprint is comprised of Business Domains, Business Architecture Perspectives, and Business Architecture Components.

Figure 6 provides a pictorial view of the relationship between the business architecture blueprint elements. The graphic displays these pieces working together to ensure the complete documentation of the Business Domains that form the Business Architecture Blueprint.

Business Domains – Business Domains are the natural divisions of the business architecture and are based on either functional or topical scope. Business Domains represent the highest level of the business architecture blueprint. A few examples of functional and topical domains include:

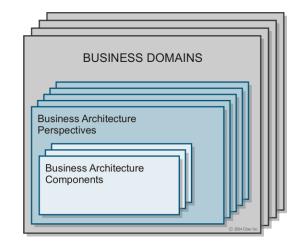


Figure 6. Business Architecture Blueprint Structure

- Functional Domains
 - Education
 - Health and Social Services
 - Justice and Public Protection
 - Resource and Economic Development
 - Transportation and Engineering
- Topical Domains
 - Customer
 - Location
 - Payments.

A Business Domain Model represents how the State's Business service offerings are arranged and used for defining the business needs, business processes, and business information concepts. Each enterprise should design its own model based upon its unique mandates and needs. This high-level representation departs from an organization structure to allow business functionality to cross departments and agencies. This cross-functionality helps in the development of enterprise business solutions that apply across the enterprise and reduces the type of solutions often referred to as stovepipes, silos or islands of information.

Organizations may choose to break out exceptionally large Domains into more manageable pieces. These logical subsets are typically referred to as Disciplines. The Business Domain Template can be customized to document each subset (Discipline) by adding a section for identifying the associated Domain. *Business Architecture Blueprint Samples – Set 2* includes an example of a Domain, Discipline, Business Architecture Component and Gap Component.

Business Architecture Perspectives – A Business Architecture Perspective is simply a breakdown of the Domain based on a specific viewpoint. Documenting each domain entails interviewing numerous stakeholders and collecting a wide range of detail.

The purpose of defining Business Architecture Perspectives is to create focal areas to assist Documenters as they conduct interviews and document the details of the Business Domain.

The Zachman Framework³ is a widely recognized and frequently implemented framework for depicting the enterprise. John Zachman established six questions, or interrogatives: What, How, Where, Who, When and Why, which are addressed from various views. Business Architecture constitutes the top two rows of the Zachman Framework, which he refers to as the Planner's view (Contextual) and Owner's view (Conceptual).

The number of Business Architecture Perspectives and the viewpoint or focus of each Perspective, are determined within each organization based on the environment and circumstances. Once the Business Architecture Perspectives are determined, the same Perspectives or a sub-set of the Perspectives are typically used across all Business Domains.

An organization could decide to define one Business Architecture Perspective for each of the interrogatives addressed in the Zachman Framework: Who (people), What (assets), When (business cycles), Where (locations/logistic), Why (motivations) and How (functions). However, organizations may choose to define a least one of their Business Architecture Perspectives to address a combination of two or more of these interrogatives.

An example of this might be the creation of a Business Architecture Perspective, called Strategic Business, that focuses on the combination of "who" and "why" (Figure 7). This Business Architecture Perspective would cover components such as strategic direction, drivers and goals, organizational roles and responsibilities, business objectives and plans. This combination of viewpoints into a single Business Architecture Perspective is fairly common because the "who" and "why" topics are so often considered together. Creating one or more Business Architecture Perspectives that address a combination of the interrogatives allows the interviewers to address several aspects with fewer individuals.

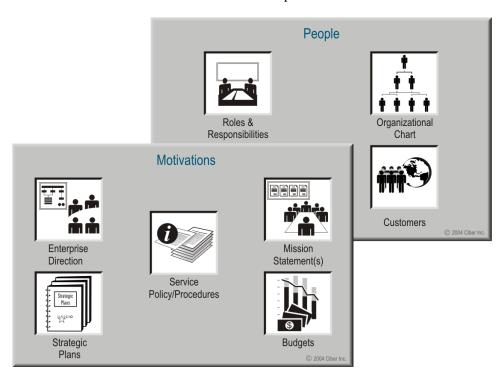


Figure 7. Sample Perspective – Strategic Business

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³ Zachman Framework, http://www.zifa.com

During interviews, each documenter can be assigned to a specific Business Architecture Perspective. By utilizing this method, the documentation team divides the work and ensures that the detail documentation covers all perspectives. By setting scope and boundaries, the Business Architecture Perspectives facilitate full coverage of the Business Domains while breaking the Domains down into manageable pieces. This is important because state government domains are complex. Project management is made easier by using this breakdown because the project deliverables can be managed by Business Architecture Perspective. The following list provides one example of a breakdown of Business Architecture Perspectives. Government organizations are encouraged to develop their own Business Architecture Perspectives that are representative of the culture of their organization.

- Strategic Business a view with the primary focus on motivating factors (why) and organizations (who) involved with the domain or process
- Strategic Services a view with the primary focus on service performed (how) and the business cycles for these services (when)
- Strategic Information a view with the primary focus on the information assets (what) important to the enterprise
- *Strategic Infrastructure* a view with the primary focus on the locations and logistics (where) of the processes in the domain

Business Architecture Components – Business Architecture Components specifically identify what information, service, location/logistics, organizational roles/responsibilities, and strategies will be used for implementation of the Business Domain.

These elements of the Blueprint will be addressed in greater detail in the Business Architecture Documentation process models, however, there is one additional component that is introduced here: the Gap Component.

Gap Components – The Gap Component resides as a component of the Implementation Plan. Contributions to the Gap Component come from Business, Information, and Technology architectures. As part of the Business Architecture Documentation Process, once the baseline and target detail has been confirmed for any given Business Domain, the gaps can be identified and documented as appropriate. The documentation of these gaps, along with the migration strategies for closing the gaps, provides the roadmap for moving toward the target architecture. Information regarding gap closure that is not affordable in absolute or ROI terms and won't be pursued should also be included in the documentation. The graphic in Figure 8 shows the critical link between the Business Architecture Blueprint and the Gap Component, which is part of Implementation Planning.

For example a baseline and target scenario might be:

Baseline: "substantial data about regulated trucking firms resides in separate business units within the department of transportation. Duplication and redundant activities are common. Trucking firms may easily avoid the necessary permitting processes."

Target: "Data will be maintained in a common customer database that will be used to support improved identification, processing, and management of trucking firms under 'regulation XYZ.' As a result, payment of permits will increase, etc."

The Gap Analysis must include the gaps between baseline and target components and the roadmap or delivery process for change management.

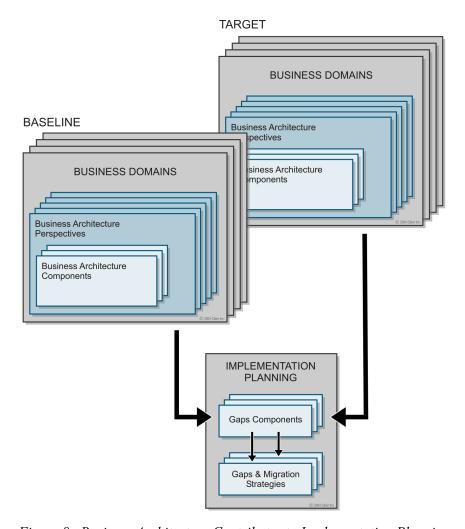


Figure 8. Business Architecture Contributes to Implementation Planning



BUSINESS ARCHITECTURE DEVELOPMENT

The process of developing Business Architecture begins with initiating the Business Architecture Documentation Process. This documentation process allows the architecture teams to capture, analyze, and document details about the business of government, which is included in the Business Architecture Blueprint.

Figure 9 provides a graphical representation of the workflow path for the architecture team as they move through the processes and sub-processes of the Business Architecture Documentation Process.

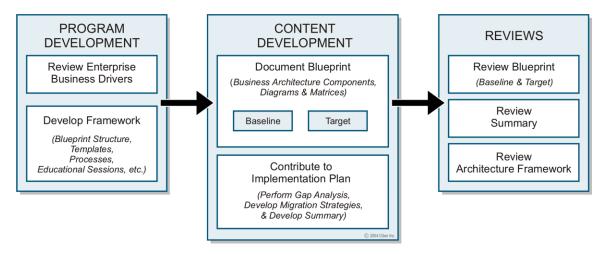


Figure 9. Business Architecture Development Work Flow

During the Business Architecture Documentation Process, details of where government business is today and where it wants to be in the future are captured. After the details of today's and the future's business are captured and documented, a roadmap of how to get to the future state is developed. This occurs as part of Implementation Planning.

It is expected that the majority of effort will be directed toward establishing the target strategic business intent. Strategies describe "how" the intent will be accomplished. Strategies are enabled through capabilities. Capabilities must be defined, stratified, evaluated and prioritized. Once prioritized, capabilities will be delivered or further leveraged through management initiatives, programs and projects. Every government organization will have different capabilities. One strategy might be to learn about common needs and leverage capabilities across the enterprise to meet those needs collectively.

The Documenters develop the Business Architecture Blueprint by interviewing Business Subject Matter Experts regarding various functional and topical areas. The explicit definition of the business model is then captured in what is referred to as the Business Architecture Blueprint. Diagrams and matrix information about the defined pieces of the business are created during this process to show the relationships and associations of all the business definitions.

The Business Architecture Documentation Process describes the systematic process for developing and maintaining the Business Architecture Blueprint. The Business Architecture Documentation Process consists of several sub-processes, including:

- Initiate Business Architecture Documentation Process
- Develop Business Architecture Framework

- Conduct Business Architecture Work Sessions
- Create/Update Business Architecture Blueprint Items.

The structure for each sub-process of this Business Architecture Documentation Process follows the same format:

- Introductory material (where applicable)
- Process model
- Narrative description of the process
- Template for capturing Blueprint detail (where applicable)
- Narrative description of the detail to be captured utilizing the template.



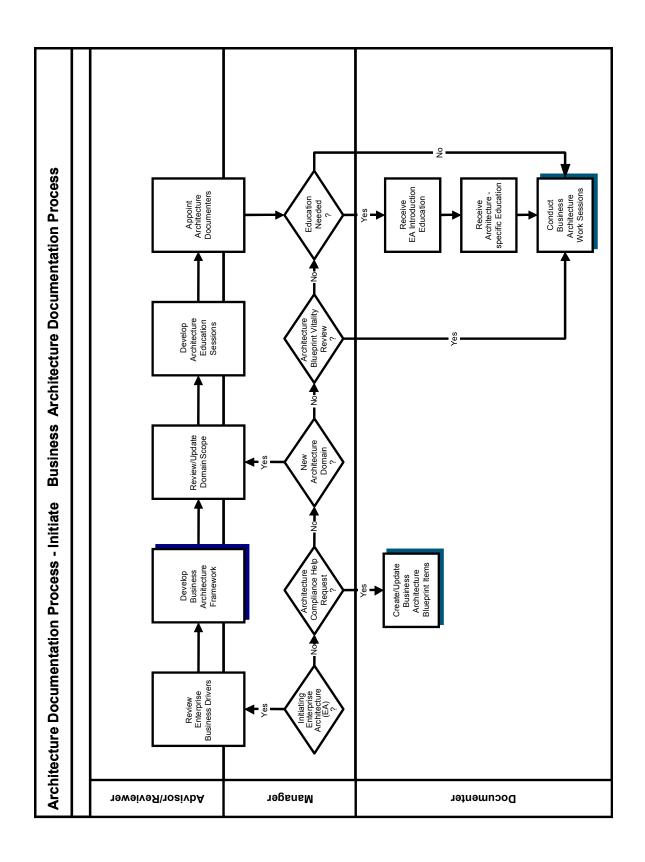
Initiate Business Architecture Documentation Process

PROCESS OVERVIEW

The Initiate Business Documentation Process presented here is similar to the generic process model provided in the Architecture Governance Section of the Tool-Kit. This model and narrative provides the initial process steps that are specific to the Business Architecture.

The Business Architecture Documentation Process can be triggered by the following processes/activities:

- Initiating Enterprise Architecture (EA)
- Architecture Compliance Help Request
- Architecture Blueprint Vitality Review
- New Business Architecture Domain.



PROCESS DETAIL

Review Enterprise Business Drivers – It is important for the Business Architecture team to understand and become familiar with the Enterprise Business Drivers. While the development of the Enterprise Business Drivers is typically an overarching activity of Business, the Business Architecture team may become aware of circumstances or shifts from documented drivers and can contribute to the vitality of the Enterprise Business Drivers.

Develop Business Architecture Framework – The information documented within the Business Architecture Framework will play an important role in the development of the Business Architecture Blueprints. The NASCIO Business Architecture Framework provides structured processes and templates for capturing this information in a consistent and systematic manner. An organization may decide to use the framework elements as described in the NASCIO Tool-Kit, or may choose to develop a modified version, or may choose to use processes, templates and governance structures other than the examples provided in this Tool-Kit.

Review/Update Domain Scope – Review the definition of the domain and add any detail that will be helpful in identifying the documentation team members. Also add any information that will help the team develop the appropriate level of documentation for this domain.

Develop Architecture Education Sessions— The Architecture Education Sessions provide high-level overviews of the Enterprise Architecture Program and prepare Documenters for their role in the Business Architecture effort. Developers of education materials should consider inclusion of the following materials:

- Purpose
- Presenters
- Intended audience
- Session structure
- Prerequisites
- Syllabus
- Objectives
- Class materials for both instructors and attendees.

Appoint Architecture Documenters – At this point, the Documenters are appointed from subject matter experts familiar with the business side of the enterprise. The team is comprised of modelers familiar with various aspects of enterprise-wide business and responsible for steering, shaping, and developing the Business Architecture Blueprint.

The educational sessions described below, are progressive in nature. The sessions will be conducted after the architecture team is identified:

Receive EA Introduction Education – Documenters should receive initial training that covers the overview of enterprise architecture and architecture governance.

Receive Architecture-specific Education – After receiving initial enterprise architecture training, the Documenters will receive specialized instruction addressing the business architecture documentation templates and processes to be used to document the Business Architecture Blueprint. The documentation used during the sessions will contain detail relative to each specific Business Domain.

Conduct Business Architecture Work Sessions – Applying knowledge gained in the two education sessions, Documenters will begin development of the Business Architecture Blueprint documentation. The detail of the Work Sessions is presented in a separate process. (See *Conduct Business Architecture Work Sessions*).

Create/Update Business Blueprint Items - If architecture compliance help is requested, the various Blueprint items should be updated. The process model and details pertaining to updating the Blueprint items is presented in a separate process. (See *Create/Update Business Architecture Blueprint Items*).



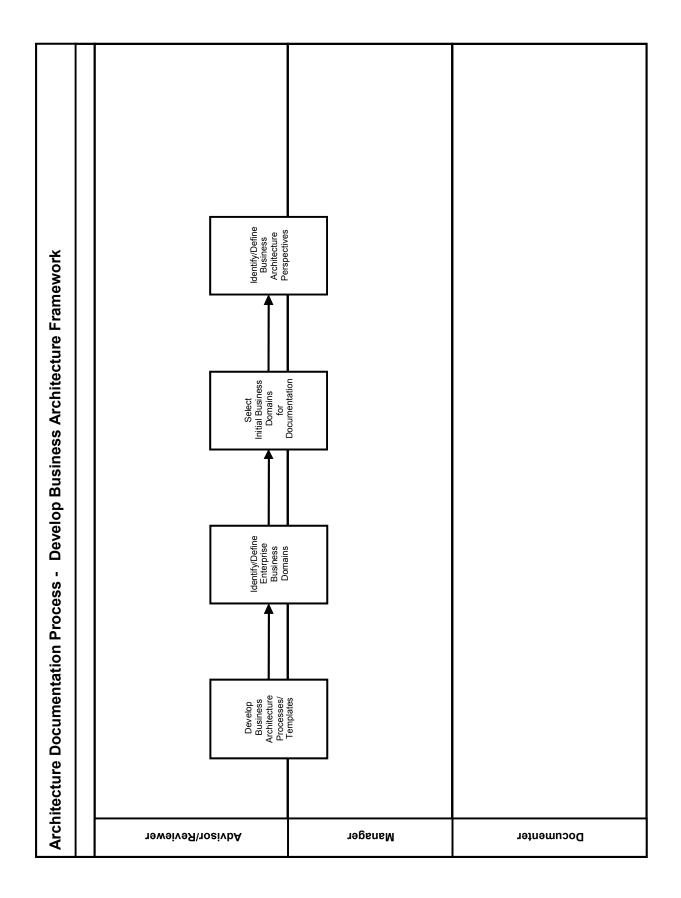
Develop Business Architecture Framework

PROCESS OVERVIEW

In this Tool-Kit, the term Architecture Framework is used to refer to the combination of the structural elements of the architecture, such as the templates and the structured processes for documenting, reviewing communicating, implementing and maintaining the architecture,

Each governmental organization should develop a Business Architecture Framework based on their individual circumstances and build a team with the appropriate blend of business and technical Subject Matter Experts. The NASCIO Tool-Kit is designed to provide a jumpstart for organizations as they develop their architectures, not to provide a methodology. The framework elements provided in this Tool-Kit represent a sampling of the structural elements an organization should consider as they build their Business Architecture and is by no means exhaustive, nor is it intended to be prescriptive

There are many methodologies for developing architectures. Regardless of the methodology selected, the structure for capturing Business Architecture Blueprint detail should be consistent and concise to ensure uniform documentation and communication across the enterprise.



PROCESS DETAIL

Develop Business Architecture Processes/Templates – Developing the processes and templates for capturing pertinent architecture detail, as well as defining and documenting the governance structure to support the architecture activity, is a step that is critical when initiating EA or any of the underlying architectures. Each enterprise must decide upon the methodology that best suits their organization. The best methodology for an organization is one that addresses the resource and time constraints of that enterprise.

The use of a repository or automated tool for the capture and storage of the architecture documentation should be considered. Developing, using and maintaining the Enterprise Architecture is greatly simplified when the information and models are readily available to all stakeholders. There is a large amount of information collected and documented within an EA with many interrelations between the parts of the EA. It is best if all the EA information, models and products are placed in a robust EA repository to maximize the potential for reuse.

Identify/Define Enterprise Business Domains - A Business Domain is a major functional or topical subset of the business operations such as public safety, and health and human services. These domains are integral to the operations of the enterprise. Business Domains provide the natural divisions of the business architecture based on scope and are the main building blocks of the business architecture blueprint. Each organization must identify its own Business Domains. The process of identifying Business Domains across the enterprise is, in itself, a valuable undertaking and most often begins with the Business Domain Model.

Business Domain Model – The Business Domain Model is a graphical representation describing business operations of the enterprise independent of the agencies, bureaus, departments and/or offices that perform the operations or provide the services. Therefore, a Business Domain Model is essentially a graphical representation of all of the Business Domains within an enterprise. The Business Domain Model provides a foundation from which the other levels of the Business Architecture can be developed.

A Business Domain Model will:

- Help in identifying "hot spots" for those domains that the organization feels should be documented further
- Facilitate cross-agency analysis to identify opportunities for collaboration and simplification
- Provide a single point of reference of the enterprise business for agencies, oversight bodies, IT decision makers, business partners, vendors, and citizens
- Facilitate identification of common business processes, information requirements, and opportunities for reengineering across the enterprise
- Aid in identification of redundancies and gaps
- Assist in the definition of user applications in the Solutions Architecture.

The purpose of building the Business Domain Model is to understand the essence of the business of the governmental enterprise so that intersections between functional and topical services are identified. Additionally, considering the overall enterprise will lead the team to discover things that are not being addressed currently. This understanding will help the Documenters in the domain selection process. The number of possible domains within a governmental enterprise can be very large. Resource and time constraints will not allow most enterprises to document every domain. Refining the many business activities and agencies of the government down to the fundamentals of how – in business terms – the enterprise achieves its various missions makes domain selection a manageable process.

Understanding the detail about the business needs that are captured within the Business Domains aids in determining scope, understanding the objectives, and directing the focus. The two most common ways to scope the Business Architecture effort are:

- Functionally: Allows the business, as a whole, to be divided into functional areas that can be explicitly documented to aid in consistency of the Business Architecture Blueprint detail.
- *Topically*: Allows the business to focus on a single subject and explore all impacts and touch points that the subject has across the enterprise.

It is through the topical Business Domains that interoperability and cost reductions can become apparent, for it is within the topical business domains that the redundancies across functional areas are identified. Opportunities for collaboration across functional areas for consolidated solutions are also typically identified during the documentation of topical Business Domains.

A combination of functional and topical divisions will be required to fully illustrate the strategic needs of the enterprise. Regardless of the method chosen for dividing the enterprise into manageable pieces, consistency is important. Without it, duplication and interoperability issues can arise.

There are many approaches to modeling the business of the enterprise. A Business Domain Model might be citizen-centric if that is a mandate for the enterprise, or it might be functionally focused if cross-agency cooperation is a priority. The Federal Business Reference Model (BRM) is a good example of a functionally-focused business model. It organizes the federal government's business into four areas: services for citizens, mode of delivery, support of delivery of services, and management of government resources.

Another option is a model based on what some refer to as Pillars of Government or Communities of Practice. This model could list functional business domains such as Education and Transportation on the vertical axis with topical domains such as Human Resources, Citizens, and Payments as beams along the horizontal axis. This allows the Documenters to visualize all the points of impact, or touch-points, across the enterprise. The use of the pillar and beam concept allows an intersection as the beams pass through the pillars.

Another choice for a business model might be as simple as a spreadsheet listing of all business functional and topical domains within the enterprise. Samples of these Business Domain Models can be found in *Samples – Business Domain Model Samples*.

The creation of a business model is an instinctive and repetitive process. A conceptual understanding of governmental business can help to produce a comprehensive model. However, the creation of a business model begins with the best understanding at hand and changes whenever new information is available.

Though Business Domains selected for inclusion in the Business Domain Model may be domains common across government enterprises or unique to a specific enterprise, the process of identifying these domains typically follows the same basic steps:

- Gather data to develop a listing of lines of business and business functions (use budget documents or send a form for feedback)
- Analyze and compile feedback into a master list (probably an Excel spreadsheet)
- Identify logical groupings (functional and topical)
- Create a cross-functional matrix
- Create a model which best represents the focus of the enterprise as reflected in the Business Drivers (citizen centric, functional, etc.)

• Identify the intersections and areas that are common among the various agencies/departments of the organization.

Select Initial Business Domains for Documentation - As a first step, identify every Domain, providing the Domain Definition and Boundary (the first two sections of the Domain Template). This will establish an overview of the topic to be addressed and will identify possible overlaps between the Domains. Once Business Domains have been identified, the Documenters must prioritize the domains to determine which are the most crucial candidates for complete documentation. Documentation of Domains is typically completed in phases. This prioritization and selection process is necessary because the list of possible Domains within an enterprise is large. Fully documenting every domain within federal, state or local government could overwhelm even the most committed architecture team. Care should be taken to select a reasonable number of domains.

To reach the best balance between an all-inclusive architecture and one that can be realistically achieved, select domains that support the Business Drivers of the enterprise. Also keep in mind the needs of the stakeholders. To the extent possible, consider the future demands on the architecture so the details documented within the architecture can accommodate future changes and growth. Future iterations of the Business Architecture may focus on new areas of the enterprise, based on the business urgencies identified at that time, and can build on what is already documented.

Each organization must identify its own priorities regarding which domains should be the focus for further development. Business strategic elements and cross-functional goals provide vital information for determining the prioritization. Specific circumstances of each enterprise such as legislative mandates, federal regulation, budgetary constraints, competing resources, organizational readiness, pain points, and delivery timeframes will all be additional considerations as Advisors/Reviewers work to define a manageable number of Business Domains for their enterprise.

Business Strategic Elements - All governmental organizations have strategic elements that are documented in some manner. By reviewing and considering the existing documents, the architects, with assistance from Business Subject Matter Experts, can utilize the strategic planning of the enterprise in the Business Architecture Domain Selection Process.

Strategic Elements Documentation can include:

- State/Local Business Strategy Plan documents
- Agency Business Strategy Plan documents
- Mission, Vision and Goals
- Business Initiatives
- IT Strategy documents
- Value Statements
- State of the State Address
- Budget documents
- Interviews of key enterprise executives.

Gathering the recommended documentation may prove difficult in some cases, as only partial documentation may exist within an enterprise or access may not be granted to the existing documentation. In these cases, it is possible to derive business strategy from alternate sources. The objective is to gather strategic information from whatever sources are available. The goal is to develop a good picture of the

enterprise's strategic objectives, the business goals of the enterprise, and the services that they desire to provide or are mandated to provide.

In the absence of specific documentation, options include:

- Survey state agency leaders and other primary stakeholders
- Study trends in state and local government through journals, professional organizations and the Internet for issues that apply to the enterprise
- Review legislative mandates
- Ask IT employees who interact with the business side of government what they are being asked to provide and where their pain points are
- Look at strategic plans from other states for ideas and ask, "Do these apply to my enterprise?".

Cross-functional Selection Matrix - Cross-functional goals are important considerations in the selection process. Documenters can glean valuable insight by creating a matrix with the topical functions along the x-axis and the functional domains along the y-axis; the points of intersection will illustrate the cross-functional activities. For samples of cross-functional matrices, see Samples – Federal Relationship Matrix.

Identify/Define Business Architecture Perspectives – A perspective is simply a breakdown of the Domain into manageable pieces based on a specific viewpoint. Each Business Architecture Perspective provides a specific view of the Business Domain that deals with designated types of architecture information and components.

Each of the components documented will be further broken down into two classifications – baseline and target. It may be difficult to fully capture the baseline. This effort should be "fast" and "thin."

- Baseline, the "as is" or "current" state of the enterprise, indicates where the enterprise is today.
- Target, the "to be" or "proposed" state of the enterprise, depicts where the enterprise wants to be and/or what the enterprise is trying to achieve within a certain scope and timeframe.

The number of Business Architecture Perspectives and the view or focus of each Perspective is determined by each organization based upon its specific environment and circumstances. Table 2 provides a sampling of typical Business Architecture Perspectives.

Table 2. Potential Business Architecture Perspectives

Perspective	Description
Strategic Business Intent Who / Why Organization and Motivation	The components addressed within this Business Architecture Perspective define why and by whom business operations are performed. The manner in which the enterprise carries out its mission and the links from the business motivations and organization of the enterprise to the remaining Enterprise Architecture elements are identified within this Business Architecture Perspective.
Organizational Dynamics Who Organization	The components addressed within this perspective define the organization and organizational dynamic model that is most appropriate for fulfilling the strategic business intent.

Perspective	Description
Strategic Services	This Business Architecture Perspective promotes understanding when and how the various business services are or will be conducted. Proper understanding of the Strategic Services involves two key points:
When / How	 This Business Architecture Perspective simply addresses the descriptions of the business requirements that are or will be fulfilled through modernization.
Scheduling and Process	 The business model represents current thought on how exchanges should be logically grouped in the future. This representation will likely evolve as it modernizes and begins to reengineer key business services and support those functions
Strategic Information	The focus of Strategic Information is on identifying and defining the information captured across the enterprise. Emphasis is placed on understanding what, in the form of informational assets, the enterprise cares about.
What	
Data	
Strategic Infrastructure	The locations where business is performed and the logistics mechanisms used to perform strategic business activities are documented within the Strategic Infrastructure Perspective. Understanding where the state or local government conducts business, or plans to conduct business, aids in determining the types of services that can be supplied/distributed from a
Where	location.
Location	Ultimately the Strategic Infrastructure Perspective relates the logistics mechanisms that are used to perform strategic business activities to the business locations that perform those activities.

Once the Business Architecture Perspectives are determined within the enterprise, the same Perspectives are repeated across all Business Domains.

There is no template for the documentation of Business Architecture Perspectives. The set of Perspectives is defined once by each enterprise and serves as a classification of detail for each Domain.



Conduct Business Architecture Work Sessions

PROCESS OVERVIEW

The Business Architecture work sessions are intended to produce the documentation that initially populates the Architecture Blueprint. The Business Architecture is best documented by members of the business community. Ongoing Documenter meetings with the appropriate mix of business and technical Subject Matter Experts are required to document and maintain the vitality of the Domain's architecture blueprint. The first session will include:

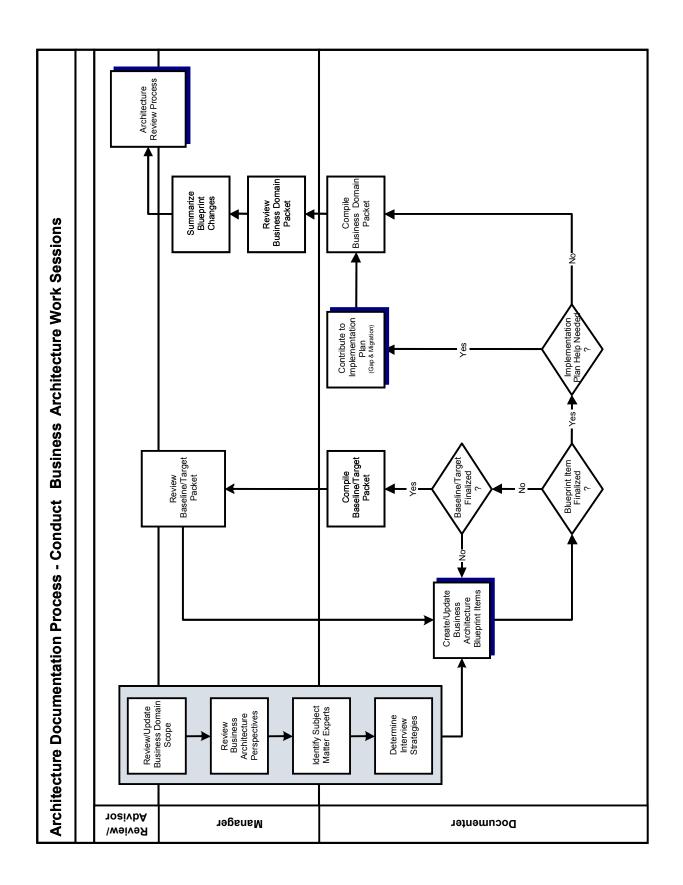
- Defining roles and responsibilities
- Reviewing architecture blueprint documentation requirements
- Determining expectations of on-going meetings.

After the first meeting, on-going working sessions are triggered from Architecture Lifecycle Processes including:

- The need to complete the Domain documentation
- Architecture Review Process

- Architecture Compliance Process
- Architecture Blueprint Vitality Process.

The creation of diagrams for the Business Architecture components provides a pictorial view for identification of the organization's business needs. Analyzing the various pieces within the enterprise facilitates the process of articulating the foundation of the Architecture. Individual components can be more easily defined and enable better communication of the business concepts. The relationships between various pieces can also be built into summary level views.



PROCESS DETAIL

Review/Update Business Domain Scope - The initial definition of the Domain, determined during the Domain selection process, should be provided to the Documenters. The Documenters will update the basic definition as necessary and identify parameters for setting boundaries within the Business Architecture Domain. During this process, the scope of the individual efforts for further developing the business architecture components can be defined in greater detail. The Documenters/Authors are responsible for gathering all necessary information to complete the Domain documentation. Reference the sample Business Domain template for an example of the detail captured for each Domain (See *Business Domain Template*).

An important activity during the documentation/update of the Business Domain scope is the mapping of the Business Drivers that are significant to the Domain, along with indication of conflicts and the description of any conflict that exists.

Review Business Architecture Perspectives – For each Business Domain, the Documenter team is responsible for determining the level of detail that will be captured from each of the Business Architecture Perspectives (Who, What, When Where, Why and How or combinations of these, as determined by the organization). The set of Perspectives that will be utilized by the organization is defined as part of the Develop Business Architecture Framework process. The same set of Business Architecture Perspectives is considered for each Business Domain. The use of Business Architecture Perspectives allows simplification and organization of the Business Architecture documentation.

Identify Subject Matter Experts – Individuals who are experts in a segment of the business are determined. For the functional scope, identify the Subject Matter Experts for each of the Business Architecture Perspectives. Examples of Subject Matter Experts and their areas of expertise from the typical Business Architecture Perspectives could include, but are not limited to, the following:

- Strategic Business experts in:
 - Strategic Elements: Strategic direction, vision statements, goals, objectives, and policies
 - Organizational Structure and Roles/Responsibilities: Resource management reporting as well as cross-functional groups and informal reporting structures
 - Business Function: Main business activities that are conducted regardless of the business process to perform those activities.
- Strategic Services experts in
 - *Business Services*: Services conducted on behalf of external or internal customers, and the transactions that occur to support various business activities within this functional scope.
 - *Master Schedule*: The schedule upon which these services are conducted and any dependencies between these scheduled services.
- Strategic Information experts in:
 - *Strategic Information/Assets*: Assets that are vital to the day in and day out operations of this functional scope, including information that is required to help decision makers.
 - Assets/Information Relationships: The relationships between the various pieces of strategic information/assets. What is beneficial to understand as a group rather than individually? As decisions are made, what additional information would be beneficial to make an informed decision?

- Infrastructure experts in:
 - *Business Location*: The various channels by which the services and information within this business function scope are delivered.
 - Business Logistics: The various types of devices or transportation methods used to support these business locations.

Determine Interview Strategies – Interview meeting topics should be determined in one of the first working sessions. Interview questions should be designed to streamline the interview process and get the most information in minimum time.

Approaches for determining interview strategies can be based on:

- The business component/view to be documented. This format captures components such as strategic elements and organization charts.
- Functional topics. An example of a functional topic is "asset management." This format captures Strategic Transactions, Functional Breakdown, and Strategic Information.
- A specific Information Asset. An example of an information asset is "Customer." This also aids in capturing Strategic Transactions, Function Breakdown, and Strategic Information. Additionally, it can be used to capture the details concerning Application Areas and Infrastructure components.
- Business Cycle activities of a specific Information Asset. An example of this is documenting the various components around Inventory from ordering to consumption. Show the creation, utilization, and obsolescence of a given information asset. This can aid in capturing transaction architecture, application areas, and infrastructure components.
- Documenting the baseline activities followed directly with the target activities for a given topic. Often, the ability to stay on the same topic in a given timeframe assists in capturing the information around that topic, both where the business is today and where the business wants to be tomorrow, and can keep the creativity rolling without starting and stopping based on baseline and target. This can be done for both topical and functional domains.

Create/Update Business Architecture Blueprint Items – The Blueprint items include Business Architecture Component detail and process diagrams. The sample Business Architecture Component template provides an example of the detail that is typically captured. A separate process model and narrative for this sub-process will provide greater detail (See *Create/Update Business Architecture Blueprint Items*). When the Baseline or Target documentation is complete, a summary should be compiled and the Baseline or Target documentation should be submitted for review. The Reviewers can add valuable insight from an over-arching perspective.

Compile Baseline/Target Packet, Review Baseline/Target Packet – At the completion of Baseline, and again at the completion of the Target, a documentation packet should be complied and sent for review. This is beneficial to the documentation process as it allows feedback from the perspective of the Manager, Reviewers and Advisors at strategic points throughout the documentation process.

Contribute to Implementation Plan – After the Blueprint items have been finalized, Documenters will also contribute to the Implementation Plan if needed. Contributions include completing the detail for the Gap Components, performing a Gap Analysis, developing Migrations Strategies, and creating a summary of Gap and Migration results.

A copy of the Gap Component template, narrative for capturing the detail, and a sample template with completed Gap Component Blueprint detail can be found later in this section. (See *Gap Component Template* and *Blueprint Samples – Gap Component*).

Compile Business Domain Packet – A packet containing the completed Blueprint documentation will be compiled in preparation for formal review.

• If the Gap Analysis and Migration Strategies have been completed as a contribution to Implementation Planning, the detail that was compiled into the Gap & Migration Summary document will also be included in the Business Domain Packet. (For a sample of the Gap & Migration Summary, see *Gap & Migration Summary Format Sample*)

Review Business Architecture Domain Packet – The Business Architecture Manager will verify the contents of the Domain Packet and work with the Documenters to make modifications as necessary.

Summarize Blueprint Changes – After contents of the packet are verified, the Manager will summarize any changes that have been made to the Business Architecture Blueprint for tracking purposes and forward the packet to the reviewers for the formal Architecture Review Process.

Architecture Review Process – The governing bodies will review the Business Domain Packet for content and scope and either accept the Domain information into the architecture or reject the Domain information for reasons specified on the Domain template.



TEMPLATE OVERVIEW

The Business Domain Template provides a tool for documenting domain details in an electronic format. After the initial domain definition is completed and domains have been selected, the details of the domain are completed. The visual representation of the Business Domain Template, provided on the following page, is followed by the detailed description of its contents. The development of domains is a process that will evolve and change as information is gathered and documented.

It is anticipated that additional Business Domains may be identified during the lifecycle of the Business Architecture. Stakeholders are also encouraged to provide feedback and suggestions whenever it is apparent that the feedback will enhance the architecture.

Important items to keep in mind when determining the breakout of Domains are:

Business Domains should not be too broad.

In defining the scope of each business domain, it is important to keep in mind the Subject Matter Experts that will need to work together. Do the SMEs have similar:

- responsibilities?
- products and services they provide?
- strategies and goals driving their efforts?

Answers to these questions can help determine the division of Business Domains, as well as the level of documentation required for that domain.

Business Domains should not be too narrow.

Having Business Domains that are narrow in scope will cause the creation of many Domains, which in turn results in numerous documentation efforts that have high overheads in summarizations of baseline and target along with gap and migration strategy development.

- It is best to keep the number of Business Domains reasonable.
 - The first scoping of the Business Domains may not be the permanent arrangement. The best Business Domain scope will surface naturally over time as the Architecture Blueprint is developed and used within your organization.
- Avoid spending excessive time determining terminology issues. Just as in metadata documentation, fine-tuning terminology can occupy a majority of the documentation time. Utilize the keywords and boundary statements to assist in identifying various terms and topics covered within the domain.



Business Domain

			DEFINIT	TION	
Name					
Description					
Rationale					
Benefits					
			Bound	ARY	
Domain Type		☐ Functional	□ То	pical	
Boundary Scope Stater	ment				
	A	SSOCIATED BUS	INESS ARCI	HITECTURE PERSPECTIVES	
Perspectives addressed within this Domain					
		RELATED E	NTERPRISE	Business Drivers	
			Related P	rinciples	
Reference #s, S	Stateme	nts or Links	Conflict	Support / Conflict Detail	
				t Practices	
Reference #s, S	Stateme	nts or Links	Conflict	Support / Conflict Detail	
			Related		
Reference #s, S	Stateme	nts or Links	Conflict	Support / Conflict Detail	
			Ш		
			Keywo	RDS	
Keywords / Aliases					
			CURRENT	Status	
Business Domain Statu	IS	☐ In Developmen	nt 🗌 Ur	nder Review	
Audit Trail					
Creation Date				Date Accepted / Rejected	
Created By			'		
Reason for Reject	ion				
Last Date Reviewed				Last Date Updated	
Reason for Update	9				

TEMPLATE DETAIL

Definition

Domain Name – The Business Domain team and/or the architecture review committee will determine the domain name.

Description – An appropriate description of the domain in a paragraph or two that provides sufficient clarity to the reader about the domain.

Rationale – A paragraph containing the reason or basis for this domain being included in the architecture.

Benefits – A paragraph or bulleted statements that provide the benefits associated with the Domain.

Boundary

Domain Type – Identify the type of domain, functional or topical. Examples of domain types:

- Functional Domains
 - Education
 - Health and Social Services
 - Justice and Public Protection
 - Resource and Economic Development
 - Transportation and Engineering
- Topical Domains
 - Customer
 - Location
 - Payments.

Boundary Scope Statement – The boundary scope statement provides parameters for identifying the boundaries for the domain. This section includes statements about what is included, as well as items that are related to, but excluded from, the domain. If excluded items are identified, it is beneficial to include a reference to the domain where information on those items can be found.

Associated Business Architecture Perspectives

Typically, the same perspectives are covered under each domain; however; your enterprise may choose to address only certain perspectives for a specific domain based on circumstances. In this area of the template, provide a list of the perspectives that are currently addressed within this domain

Related Enterprise Business Drivers

To minimize the amount of documentation required, general support of the business drivers is assumed. Therefore, not every Principle, Best Practice and Trend is specifically documented for each domain.

Principles, Best Practices and Industry Trends should be documented if:

- The driver is directly related to the domain (i.e. the reason for the domain or purpose of the domain is directly tied to the given driver).
- The driver will have a significant impact on the domain.
- There is a conflict between the driver and the domain.

Related Principles

Reference Numbers, Statements or Links: The overarching general rules that hold true across the enterprise architecture. The principles are developed and documented as Business Drivers at the most global level of the enterprise architecture.

Conflict: Verify that the development of the domain does not conflict with the established principles. This is a yes/no answer.

Support/Conflict Detail:

- For supported principle: Include details regarding the relationship between the domain and the principle
- For conflict: Include sufficient detail to describe the conflict.

Related Best Practices

Reference Numbers, Statements or Links: Best practices identify industry processes related to the implementation of the enterprise architecture that will assist in the maintenance and expansion of an adaptive enterprise architecture. They are based on experience and proven results. The best practices are documented as Business and Technology drivers and apply to the enterprise-wide concept of architecture.

Conflict: Verify that the development of the Domain does not conflict with the established best practices. This is a yes/no answer.

Support/Conflict Detail:

- For supported best practice: Include details regarding the relationship between the domain and the best practice
- For conflict: Include sufficient detail to describe the conflict.

Related Trends

Reference Numbers, Statements or Links: Marketplace, industry, technology trends have an effect on the deployment of information technology. Provide description of emerging trends to stimulate discussion regarding what is possible. Identifying these trends and having an awareness of their impact will allow IT decision makers to develop more informed, effective decisions. The trends are documented as Business and Technology drivers and apply to the enterprise-wide concept of architecture.

Conflict: Verify that the development of the Domain does not conflict with the established Industry and Technology Trends. This is a yes/no answer.

Support/Conflict Detail:

- For supported trend: Include details regarding the relationship between the domain and the trend
- For conflict: Include sufficient detail to describe the conflict.

Keywords

Keywords / Aliases - List any keywords and/or aliases that can be used to assist in searching the Architecture Blueprint for these Business Architecture Components. This information will be helpful for anyone that is looking for information regarding similar business elements.

Current Status

Document the status of the Business Domain documentation, indicating whether it is in development, under review, accepted, or rejected.

- *In Development* The architecture team is currently drafting and/or reviewing the Business Domain content.
- *Under Review* The architecture team has completed the Business Domain documentation and has submitted the documentation to the governing body for inclusion in the architecture.
- Accepted The completed Business Domain documentation has been approved by the EA governing body and the content is an official part of the architecture. Once accepted into the architecture, the content is referred to as the Blueprint.
- Rejected The Business Domain has been rejected by the governing body for reasons documented below in the Audit Trail section.

Audit Trail

Creation Date – Provide the date the domain was created.

Created By – List all individuals and their titles that helped in the creation of this Business Domain.

Date Accepted/Rejected – Provide the date the Business Domain was accepted into the architecture or rejected.

Reason for Rejection – If the Business Domain was rejected, document the reason for the rejection.

Last Date Reviewed – Document the most recent date the Business Domain was taken through the Architecture Vitality Process.

Last Date Updated – Document the most recent date at which any item in the Business Domain documentation was changed.

Reason for Update – Document the reason for the update to the Business Domain. This information should be a detailed description of the change, which can be used for future reference.



Create/Update Business Architecture Blueprint Items

PROCESS OVERVIEW

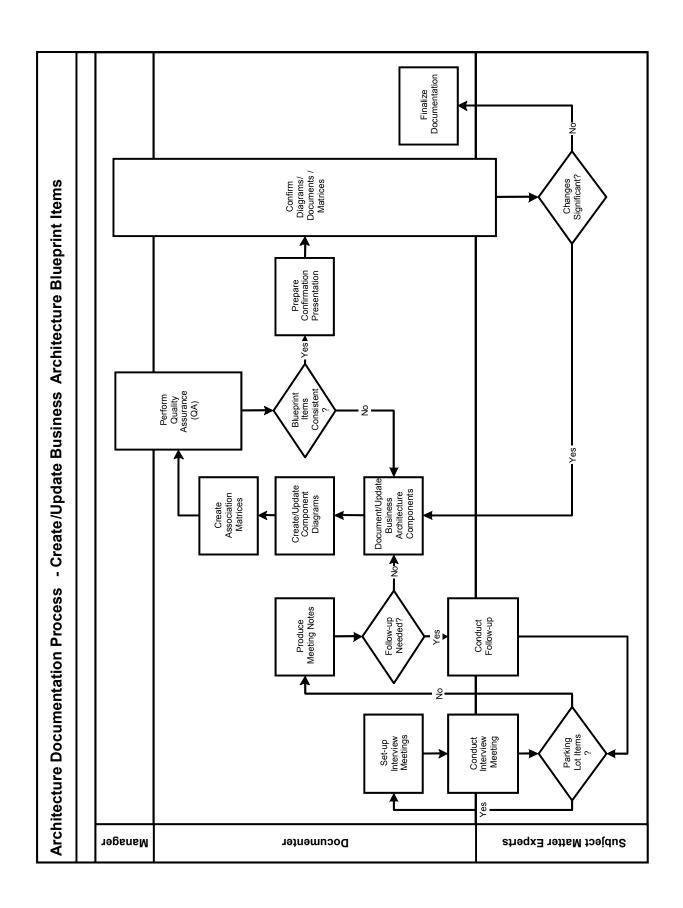
The Business Architecture Blueprint items consist of the Business Architecture Components and the diagrams that illustrate the various components and their relationships. Business Architecture Components refer to the individual elements that are documented as part of the Business Architecture Blueprint. Business Architecture Components specifically identify what information, services, location/logistics, organizational roles/responsibilities, and strategies will be used for implementation of the Business Domain.

Business Architecture Components are identified during the Business Architecture interview process and documented within each of the Business Architecture Perspectives as appropriate. The Business Domain team members, along with the Subject Matter Experts, determine the information to be documented as Business Architecture Components, and which Business Architecture Perspective is most applicable. For example, the business locations, and communication modes available from those locations, would be components documented within the Strategic Infrastructure Perspective. Within the documentation, references that identify relationships to other Business Architecture Components are also documented. Business Architecture components will cover items that answer the following example questions:

- What does the business care about? Components address the various assets of the business.
- How is business conducted? Components address the various functions of the business.

- Where are the locations critical to the business? Components address the mapping of the locations and communication modes available to/from those locations.
- Who affects or is affected by any given piece of the business? Components address the various roles and responsibilities and who fulfills those duties.
- When does something happen? Components address the various scheduled and unscheduled business events that affect the delivery of the services.
- Why is business done this way? Components address the policies, procedures, strategies and motivations that impact the decision making for the business.

This process, which results in defining/updating the Business Architecture Blueprint items, collects, organizes and documents a large volume of detail about the governmental organization's business. The detail is collected via interviews with a mix of Subject Matter Experts, from executives through line managers. Getting good results from interviews of key staff requires a team composed of individuals that are experienced, have knowledge of their business area, and are committed to the enterprise architecture process.



PROCESS DETAIL

Set-up Interview Meetings - Once the subject matter experts have been identified and the interview strategy has been determined, the interview meetings can be scheduled. Allow at least two hours per session. No more than two sessions should be set up in the same day to allow Subject Matter Experts who attend both sessions to have a break from this style of overarching thinking.

Conduct Interview Meetings – Meetings are typically organized around a specific topic within the subject area scope. The topics were determined during the interview strategy session, which usually takes place in one of the first working sessions. At times, new topics will surface during the interviews. These should be aligned to the original strategy to assure that all aspects of this topic are addressed in the interviews. It is best to assign each interviewer a specific Business Perspective for which they are responsible.

Although everyone will be involved in the interviews from a general view, it helps to give each interviewer an area of focus based on the Business Perspectives to be covered for the given Domain. Before the interviews, each interviewer should plan questions based on their assigned perspective. This will help to ensure the coverage of all aspects. It is also helpful to have a different individual assigned as a scribe. This will allow the interviewers to focus their attention primarily on the interviewing process and less on taking notes.

Produce Meeting Notes – Knowledge of who participated in providing the subject matter is very useful. During the interview sessions, Subject Matter Experts or various architecture participants may be asked to follow up with action items or to share documentation and research on specific items. For this reason, notes of these meetings should be taken, reproduced and distributed as with any other formal meeting. Parking lot issues or unresolved items often result during interview meetings. These items need to be compiled, returned to the person interviewed for feedback, and documented in the interview strategies or the summary documentation.

Conduct Follow-up – Following interview meetings with subject matter experts, some items may require resolution or additional action. These activities may include, but are not limited to, the following:

- Changes to Interview Strategy: Based on interview feedback, the style and/or strategy of subject matter expert interviews may be changed.
- Resolution of Items: Dissention or ambiguity may necessitate resolution and/or direction from Architecture Subject Matter Experts, Executives, Manager or Reviewers.
- Clarification: The Documenters may need additional information on a topic.
- Parking Lot Items: Items that are currently out of the defined scope, but have been identified as potentially requiring future action, are documented for further research and resolution.

Document/Update Business Architecture Components – The Documenters capture detail about each of the Business Architecture Components such as keywords, critical references, stakeholders and applicable standards. The Business Architecture Component Template is a form that can be used for documenting this detail. (See *Business Architecture Component Template*). Note that although the components may be used on multiple diagrams and matrices, the detail for each component is documented only once.

Create/Update Component Diagrams - The documenters will place Business Architecture Components on various diagrams to show the flows and relationships. These diagrams may include but are not limited to:

- IDEF activity models
- Workflow models
- Activity tree models
- UML models
- Use case models
- Class models
- State diagrams
- Node connectivity diagrams.

Create Association Matrices – After the modeling/ documentation is drafted, associations between the business architecture components can be created. Coordination with the other modelers/documenters should occur so that all business components for a specific Business Domain are included in the matrices. The various perspectives should be reviewed to make certain that nothing is missing or incorrectly represented.

Examples include:

- Strategic Elements that have no corresponding business plan
- Business functions that do not support a Strategic Element
- Transactions that have no association to Strategic Information
- Strategic Information that has no association with Business Functions.

Perform Quality Assurance (QA) – The various Business Architecture documents, models, and matrices require verification by the architecture team prior to confirming them with the Subject Matter Experts. This quality assurance step allows the team to verify that the various business components are utilizing the same glossary of terms and that the team's understanding of the various components of the business architecture is the same.

Prepare Confirmation Presentation – The Documenters will compile the information from the meeting notes, the documented components and associations, and the quality assurance check. The information will be utilized to confirm the accuracy of the information captured.

Confirm Diagrams/Documents/Matrices – Once the architecture team has verified consistency in how they are defining and representing the various business components, the team will confirm the models/documents/matrices with Business and Technical Subject Matter Experts. This should be an interactive session where modifications and enhancements are noted. Some of the changes can occur in the session while others will take more time and will be conducted in "pick-ups" after the session. If the changes to the models/documentation/ matrices take place outside the session, an electronic copy of the changes should be sent out for approval. If the changes were significant, the potential exists to call another meeting to confirm those changes.

Finalize Documentation – When the component detail has been confirmed, update the status and audit trail detail. The final action is to submit all Business Architecture Component detail for inclusion in the Business Architecture documentation.



Business Architecture Component Template

TEMPLATE OVERVIEW

Business Architecture Components include the definition and gap identification for specific business components. The Documenters, along with Subject Matter Experts, determine the detail applicability to the overall architecture effort that will be included in these components. Each Business Architecture Component reviewed, whether accepted or rejected, will be documented using this Business Architecture Component Template.

The Business Architecture Component Template provides an instrument for documenting the Business Architecture Component details in an electronic format. The visual representation of the Business Architecture Component Template, provided on the following page, is followed by a detailed description of the contents to be captured.

Important items to keep in mind when determining the Business Architecture Component include:

• The sections included in the Business Architecture Component template identify some of the major pieces of information that can be gathered for a Business Architecture Component.

As an organization sets up their business architecture framework, they will want to determine the pieces of information that are of most value to their overall EA effort. The level of detail documented within the Business Architecture Blueprint will also need to be maintained as part of the vitality process..

- Industry trend and best practice scans are helpful in capturing information regarding existing Business Architecture Components within a given Business Domain.
- There is more than one way to determine the level of detail to be documented as Business Architecture Components.

Documenters preferring bottom-up analysis will begin by capturing a list of components from which they determine the level of documentation detail needed to best communicate the needs of the Business Domain.

Those preferring top-down analysis will determine and document the overall Business Domain concepts or topics first, and proceed to identify and document components that address each topic.

• Documentation of Business Architecture Components within a Business Domain can become an area for boundary debate.

When components span functional areas, a question can arise as to which documentation team is responsible for documenting which components. A decision should be made as to whether the component should be documented under multiple business domains, or all Subject Matter Experts should come together to document the component once under a specific Business Domain.



Business Architecture Component

DEFINITION					
Name					
Description					
Rationale					
Benefits					
		COMPONENT CLAS	SIFICATION		
Classification		☐ Baseline ☐ Ta	arget		
	A	SSOCIATED BUSINESS ARCHI	TECTURE PERSPECTIVE		
Business Architecture Perspective					
		Keywore	os		
Keywords / Aliases					
		BUSINESS ARCHITECTURE	COMPONENT TYPE		
Component Type					
		CRITICAL REFE	RENCES		
		Related Business Archite	ecture Components		
Business Architect Component	ure	Relationship	Business Architecture Component	Relationship	
	- 1	Standards Orga	anizations		
Name			Website		
Contact Information					
		Government			
Name			Website		
Contact Information					
STAKEHOLDERS/ROLES					
Stakeholders					
Roles					
Reason for Stake					
		GAP COMPO	NENT		
GAP Component Name	es				

CURRENT STATUS							
Business Architecture Component Status	☐ In Development	□Ur	nder Review	□Accept	ed	□Rejected	
	Į.	AUDIT '	TRAIL				
Creation Date			Date Accepte	ed / Rejected			
Created By							
Reason for Rejection							
Last Date Reviewed			Last Date Up	dated			
Reason for Update							

TEMPLATE DETAIL

Definition

Name – Provide the name for the Business Architecture Component.

Description – Document the description of the Business Architecture Component in a paragraph or two that provides sufficient clarity to the reader about the component.

Rationale – Document a paragraph or two containing the reason or basis for this Business Architecture Component being included within the architecture.

Benefits – Document a paragraph or bulleted statements that provide the benefits associated with the Business Architecture Component.

Component Classification

Classification - Provide the classification for the Business Architecture Component:

- Baseline: The "as is" or "current" state of the component within the enterprise. Baseline indicates the component exists within the enterprise today.
- *Target*: The "to be" or "proposed" state of the component within the enterprise. Target indicates the component should be included or added to the enterprise within a certain scope and timeframe.

Associated Business Architecture Perspective

Business Architecture Perspective Name – Provide the name of the Business Architecture Perspective for which this Business Architecture Component is developed.

The following are sample Business Architecture Perspectives:

- Strategic Business
- Strategic Services
- Strategic Information
- Strategic Infrastructure.

Keywords

Keywords / **Aliases** - List any keywords and/or aliases that can be used to assist in searching the Architecture Blueprint for these Business Architecture Components. This information will be helpful for anyone that is looking for information on similar business elements.

Business Architecture Component Type

Component Type - This allows the type of information, and associated type of deliverables captured in the template, to be explicitly identified. Table 3 provides a list of the available component types, based on the sample Business Architecture Perspectives:

Table 3. Business Architecture Component Types

Primary BA Perspective	Business Architecture Component Types		
Strategic Business	Strategic Direction, Drivers and Goals		
	Organization – Roles and Responsibilities		
	Business Objectives and Plans		
Strategic Services	Significant Business Events		
	Significant Business Cycles		
	Business Function		
Strategic Information	Strategic Information		
Strategic Infrastructure	Strategic Business Locations		
	Business Logistics		

Critical References

Related Business Architecture Components – List all related Business Architecture Components and their relationship to this specific component. The information provided here is valuable for creating matrices that show relationships between the various components of the Business Architecture.

Standards Organizations – List all Standards Organizations that supply standards associated with this Business Architecture Component. Provide contact information for each organization, as well as URLs for websites, if available.

Government Bodies – List all Government Bodies that provide policies and/or mandates associated with this Business Architecture Component. Provide contact information for each Government Body, as well as URLs for websites, if available.

These are research references only, and are used in identifying items that may need to be escalated to review during gap analysis and migration strategies.

Stakeholder Information

To identify stakeholders, use questions such as:

- Who is directly impacted by this component or a change to this component?
- Who may have to change the way they do business?
- Who may benefit financially?

Stakeholders – Provide a list of stakeholders for this Business Architecture Component. Stakeholders are those who are affected by or will have an effect on the Business Architecture Component. If stakeholder title is not known, provide a description of the role the person or group performs in the Roles section. Stakeholders are typically agencies, departments, etc.

Roles – This section provides a place to present the roles and/or responsibilities for this Business Architecture Component. This is especially helpful when a title for the stakeholder is not known. Roles ensure the accountability for all Business Architecture Components and ensure that all stakes in the component are documented when interviewing the Subject Matter Experts. Examples of roles could include Project Manager or Documenter, etc.

Roles can also show IT stakeholders that utilize this information, resulting in better service and closer alignment to the business needs.

Reason for Stake – This optional section provides a place to note the reason that the stakeholder or role has a vested interest in this Business Architecture Component. This is helpful when the reason is not apparent or there are specific circumstances that should be noted. Consideration should be given to the interest of the stakeholder and not only to management, for often the same question posed to these groups results in different responses. The information presented here should take the opportunity to clarify the relationship of the stakeholders.

Gap Component

This section is documented for any Business Architecture Component that will be impacted by the move from baseline to target. If nothing will change, the gap statement can just say "no gap."

Gap Component Names – As gaps are identified, list the names for Gap Components for this Business Architecture Component. The Gap Component Template will be used to document the gaps that exist between this Business Architecture Component and other Business Architecture Components, as well as Impact Statements and Migration Strategies. The gap can be documented from the following perspectives:

- From the perspective of the baseline Business Architecture Component that is being updated, replaced or removed when migrating to the target.
- From the perspective of the target Business Architecture Component that is being added to, replaced or enhanced when migrating from the existing baseline.

Current Status

Document the status of the Business Architecture Component, indicating whether the documentation for the component is in development, under review, accepted, or rejected.

- *In Development* The architecture team is currently drafting and/or reviewing the Business Architecture Component content.
- *Under Review* –The architecture team has completed the Business Architecture Component documentation and has submitted the documentation to the governing body for inclusion in the architecture.
- Accepted The completed Business Architecture Component documentation has been approved by the EA governing body and the content is an official part of the architecture. Once accepted into the architecture, the content is referred to as the Blueprint
- Rejected The Business Architecture Component has been rejected by the governing body for reasons documented in the Audit Trail section.

Audit Trail

Creation Date – Provide the date the Business Architecture Component was created.

Created By – List all individuals and their titles that helped in the creation of this Business Architecture Component.

Date Accepted/Rejected – Provide the date the Business Architecture Component was accepted into the architecture or rejected.

Reason for Rejection – If the Business Architecture Component was rejected, document the reason for the rejection.

Last Date Reviewed – Document the most recent date the Business Architecture Component was taken through the Architecture Vitality Process.

Last Date Updated – Document the most recent date that any item in the Business Architecture Component documentation was changed.

Reason for Update – Document the reason for the update to the Business Architecture Component.



TEMPLATE OVERVIEW

Once the baseline and/or target detail has been documented for any given Business Architecture Component, the gaps that are identified will be documented utilizing the Gap Component Template. The documentation of these gaps, along with the migration strategies for alleviating these gaps, provides the roadmap for achieving the target architecture. The Architecture Team, along with the Subject Matter Experts, determines the information applicable to the overall gap documentation. Each gap that is reviewed, whether it is accepted or rejected, will be documented using this Gap Component Template.

The Gap Component Template provides an instrument for documenting architecture gap details in an electronic format. The visual representation of the Gap Component Template is followed by a detailed description of the contents to be captured.

Important items to keep in mind when determining the various Gap Components are:

• A Gap Component can be documented to cover more than one business component.

For example an organization could have a communication gap (various divisions or teams are having problems understanding the needs of the other groups because of terminology differences). A Gap Component could be created to identify the lack of a common enterprise vocabulary of terms. This Gap Component may be identified as having a relationship to many Business Architecture Components from functions, to organizations, to impeding a strategy/goal.

• Not all identified gaps need to be mitigated and resolved.

Priority of the gaps will be accomplished during implementation planning. It is a good practice to document the gaps as they are identified. This helps everyone to understand that the gap has been identified. The migration strategies may include the decision not to address the gap, along with the reason for the decision.

• Documentation of gaps can identify areas where control points for security, regulatory compliance, and/or privacy need to be increased or fortified.

Once documented, the risk to the enterprise can be assessed and prioritization for mitigating the gaps can be determined.



Gap Component Template

DEFINITION						
Name						
Gap Statement / Description						
Rationale						
	GAP CLA	ASSIFICATION				
Related Architecture Blueprint	☐ Business Architecture	☐ Information Architecture ☐ Technology Architecture				
Architecture Level	☐ Component☐ Domain/Subject Area	☐ Discipline/Perspective☐ Other				
Gap Types		Over-utilized				
	IMPAC	T Position				
Ave a Affactad	Level of Impact	Position Statement				
Area Affected	High Medium Low	None Position Statement				
Business Impact						
Information Impact						
Technology Impact						
	RELATED GAP (COMPONENT DETAIL				
		Component Detail				
Compo	nent Name	Component Type				
	Target Co	omponent Detail				
Сотро	nent Name	Component Type				
	Keywords					
Keywords / Aliases						

STAKEHOLDER INFORMATION							
Stakeholders							
Roles							
Reason for Stake							
	Migr	ATION INFORMATIO	N				
Migration Strategies							
	C	CURRENT STATUS					
Gap Component Status	☐ In Development	☐ Under Review	☐ Accepte	d 🔲 F	Rejected		
		AUDIT TRAIL					
Creation Date		Date Accepted / Rejected	ed				
Created By							
Reason for Rejection							
Last Date Reviewed		Last Date Updated					
Reason for Update							

TEMPLATE DETAIL

Definition

The definition section provides a brief synopsis of the Gap Component:

Name – Provide the name for the identified Architecture Gap.

Gap Statement/Description – Document the description of the Architecture Gap in a paragraph or two that provides sufficient clarity to the reader about the component.

Rationale – Document a paragraph or two containing the reason or basis for this Architecture Gap being included within the architecture. (Optional)

Gap Component Classification

The classification section provides more detail regarding the categorization for the identified Gap:

Related Architecture Blueprint – Select the architecture blueprint where the gap exists.

- Business Architecture
- Information Architecture
- Technology Architecture

Architecture Level – Select the level at which the gap was identified

Component – such as:

- Business Architecture Business Architecture Component
- Information Architecture Process Component or Information Meta Component
- Technology Architecture Product Component or Compliance Component.

Discipline/Perspective - such as:

- Business Architecture Perspective
- Technology Architecture Discipline.

Domain/Subject Area – such as:

- Business Architecture Domain
- Technology Architecture Domain
- Information Architecture Subject Area

Other: if selected, specify.

Gap Types – List all applicable values that describe the nature of the identified gap:

- New: Items that were identified in the target blueprint, but did not exist in the baseline blueprint, reflect new business or technology components. Customer needs, legislative mandates, and technology changes are examples of drivers that cause the creation of these items.
- *Change:* Adapting components to accommodate changing business requirements. Improvement efforts are a consistent source of change and enable the organization to streamline operations, increase efficiency, reduce waste, and save money.
- *Under-utilized:* Identification of components that are not realizing full potential and can provide insight into efficiency improvements.

- Over-utilized: The concept of diminishing returns helps identify those components that are being tasked past the point for which originally slated.
- Obsolete: When a baseline component does not appear in the target architecture blueprint, it is no longer a valid component for the organization. Obsolete items may be replaced with new components or removed altogether unless identified in another Business Architecture Component. If selected, a replacement component must be specified. If the component will be removed, specify "none".

Impact Position

This section describes the impact the Gap has on the business, information and/or technology.

Level of Impact:

- *High:* Gap has a significant impact on the ability of the business to operate effectively. In these cases, significant resources are being allocated to minimize the effects of this gap on operations.
- *Medium:* Gap has an impact on daily operations; however, work-arounds are minimizing the effects of this gap on operations.
- Low: Gap has a minor impact. Daily operations are not affected.
- *None:* Gap has no impact on business operations.

Position Statement - Provide a position statement regarding the impact of the gap on the business, information and/or technology. When developing the impact position statement, consider impacts on the following items:

- Overall Enterprise Architecture
- Physical Environment
- Business Community
- Technical Community.

Related Gap Component Detail

This section lists the specific components involved in the identified Architecture Gap Component. The following information is captured for both the baseline and target components.

Additional lines may be added if needed.

Component Name – Provide the name for the impacted component.

Component Type – Specify the associated component type. The type will differ depending on whether the component is from the Business Architecture, Information Architecture or the Technology Architecture.

The Business Architecture includes items like the examples listed in Table 4. The component types listed in the table are based on the sample Business Architecture Perspectives.

Table 4. Component Type by Business Architecture Perspective

Associated BA Perspective	Business Architecture Component Types	
Strategic Business	Strategic Direction, Drivers and Goals	
	Organization – Roles and Responsibilities	
	Business Objectives and Plans	
Strategic Services	Significant Business Events	
	Significant Business Cycles	
	Business Function	
Strategic Information	Strategic Information	
Strategic Infrastructure	Strategic Business Locations	
	Business Logistics	

The Information Architecture consists of the following component types:

- Process Components
- Information Meta Components.

The Technology Architecture consists of the following component types:

- Product Components
- Compliance Components

Keywords

Keywords / **Aliases** - List any keywords and/or aliases that can be used to assist in searching the Blueprint for these Gap Components. This information will be helpful for anyone that is looking for information on similar elements

Stakeholder Information

To identify stakeholders, use questions such as:

- Who is directly impacted by this component or a change to this component?
- Who may have to change the way they do business?
- Who may benefit financially?

Stakeholders – Provide a list of stakeholders for the Gap Component. Stakeholders are those who are affected by or will have an effect on the gap. If stakeholder title is not known, complete the Roles section. Stakeholders are typically agencies, departments, etc.

Roles – Provides the roles and/or responsibilities for this Gap Component. This is especially helpful when a title for the stakeholder is not known. Roles ensure the accountability for all Business and Technical components and ensure that all stakes in the component are documented when interviewing the Subject Matter Experts. Examples of roles could include Project Manager or Documenter, etc.

Roles can also show IT stakeholders who utilize this information in order to provide better service and establish closer alignment with the business needs.

Reason for Stake – This optional section provides a place to specify the reason that the stakeholder or role has a vested interest in this Gap Component, especially if the reason is not apparent or there are specific circumstances that should be noted. Consideration should be given to the interest of the stakeholder and not only to management, for often the same question posed to these groups results in different responses. The information presented here should clarify the relationship of the stakeholders.

Migration Information

This section is documented for any Business, Information and/or Technology Architecture component that will be impacted by the migration.

Migration Strategies – List the alternatives available for migration or links to reference Migration Strategy documents .

These strategies should identify the following items, as applicable:

For Business: List the alternatives available for migration from the baseline to target.

- Human capital required to migrate
- Human capital being migrated
- Physical capital required to migrate
- Physical capital being migrated
- Training
- Impacts on existing solutions
- Considerations for conversion.

For Technology - Document the migration requirements for:

- Existing Product Components classified as emerging that are moving to the classification of current
- Existing Product Components classified as current that are moving to either twilight or sunset.

These strategies should identify the following items, as applicable:

- Existing user base and technical staff
- Training for existing user base
- Training for existing technical staff
- Impacts on existing technology areas
- Considerations for conversion
- Recommendations for the technology area in:
- New development
- Modifications (corrections & enhancements)
- Possibilities for user-base expansion (reuse).

Current Status

Document the status of the Gap Component, indicating whether the component is in development, under review, accepted, or rejected.

• *In Development* – The architecture team is currently drafting and/or reviewing the Gap Component content.

- *Under Review* The architecture team has completed the Gap Component documentation and has submitted the documentation to the governing body for inclusion in the architecture.
- Accepted The completed Gap Component documentation has been approved by the EA governing body and the content is an official part of the architecture. Once accepted into the architecture, the content is referred to as the Blueprint.
- Rejected The Gap Component has been rejected by the governing body for reasons documented in the Audit Trail section.

Audit Trail

Creation Date – Provide the date the Gap Component was created.

Created By – List all individuals and their titles that helped in the creation of this Gap Component.

Date Accepted/Rejected – Provide the date the Gap Component was accepted into the architecture or rejected.

Reason for Rejection – If the Gap Component was rejected, document the reason for the rejection.

Last Date Reviewed – Document the most recent date the Gap Component was taken through the Architecture Blueprint Vitality Process.

Last Date Updated – Document the most recent date that any item in the Gap Component was changed.

Reason for Update – Document the reason for the update to the Gap Component.





Business Architecture Blueprint Samples – Set 1



Business Domain

	DEFINITION							
Name	Transportation (Business Domain)							
Description		ve the efficiency and effectiveness of projects within the Department of sportation Information Systems division.						
Rationale	Delivering solutions to meet the state's transportation system needs is a complex task, involving many people across numerous business units. The business units have adapted their practices based on the characteristics of their environment and the resources – both tools and people - available to meet needs. This has led to the development of processes and tools that do not necessarily correspond with those used at headquarters and/or other districts.							
Benefits	 Documented current transportation project and program life cycle processes A single point of reference for how the State Transportation Improvement Program (STIP) is created Consistent and accurate reporting of the baseline business practices and processes related to the creation and development of transportation projects, as well as the program and maintenance of the transportation system, available in one official database A list of business units and roles responsible for the activities related to the transportation project life cycle 							
		Boundary						
Domain Type		⊠ Functional ☐ Topical						
Boundary Scope State	ment	This domain is limited to those activities directly related to identifying transportation system needs, developing a transportation project and developing a statewide transportation program (STIP).						
	ASSOCIATED BUSINESS ARCHITECTURE PERSPECTIVE							
Perspectives addresse under this Domain	ed	Strategic Business Strategic Transaction Strategic Information						

RELATED ENTERPRISE BUSINESS DRIVERS							
Related Principles							
Reference #s, Statements or Links	Conflict	Support / Conflict Detail					
Coordinate with other organizations in developing land-use policies.		The coordination regarding land-use policies is essential to the Transportation Project domain.					
 Honor the Highway and Transportation Commission's commitment to deliver the transportation program. Complete projects on time and within budget and work to deliver the transportation program within budget. Develop and implement a project delivery process that is faster and capable of handling a larger program. Structure the contract and timing of the award to facilitate the earliest completion and least disruption to the public. 		Creation of this domain is a direct result of the Highway and Transportation Commission's commitment to deliver the transportation program					
 Manage the state's resources to fund transportation priorities. Increase the ability to fund current transportation priorities while providing adequate flexibility to address emerging needs. Maximize the use of all resources. Identify additional funding sources. Retain existing revenue streams and identify additional funds. 		The creation of this domain supports this principle directly.					
Provide a safe transportation system.		The creation of this domain supports this principle directly.					

	Related Best Practices						
	Reference #s, Statements or Links	Conflict	Support / Conflict Detail				
•	Providing standard methodology for managing projects. Having responsibility for process and project reporting and tracking. Ensuring similar projects are executed in a similar way. Having funding and information needed to speed up or slow down project delivery. Providing a process for resource allocation and capacity management.		This best practice is critical to the successful implementation of the Transportation Program				
•	Strategic leadership, including strategic planning and implementation, public and private partnerships, performance measurement and accountability Program delivery, including funding and finance, workforce retooling, environmental streamlining and stewardship and internal organizational structure Systems operations, including congestion and incident management, as well as operations adjustments for security and safety		Directly affects the Transportation Project domain and its program delivery				
ra	enefits of transportation coordination; nge of programs and potential players, echanisms states are using to create fective coordinating bodies.	Ш	Directly affects the Transportation Project domain				
		Related 7	Trends				
	Reference #s, Statements or Links	Conflict	Support / Conflict Detail				
Co	ome successful partnerships that State buncils have had with the Department Transportation.		Directly supported by this domain				
faction functions for the second faction functions for the second faction function function faction faction faction faction function faction faction faction function function function function faction function	proving and preserving existing cilities; renewal in the midst of traffic; creased federal aid not likely; alternate el vehicles will affect tax collection; sing traffic congestion; labor and skill ortages (DOT vacancies); public global arming concerns; environmental position for even modest projects.		Directly supported by this domain				

Keywords							
Keywords/Aliases	FTIP, Transportati	on Prog	ram				
	CURRENT STATUS						
Business Domain Status		□ U	nder Review	□Ассер	ted		
	1	Audit '	TRAIL				
Creation Date	3/30/04	3/30/04 Date Accepted / Rejected					
Created By							
Reason for Rejection	Reason for Rejection						
Last Date Reviewed	Last Date Updated						
Reason for Update	New Domain						



Business Architecture Component

		DEFINIT	ION			
Name	Build I	Build Public Trust (Business Architecture Component)				
Description	One o	f the 3 strategic element four	nd in the strategic plan			
Rationale	Suppo	orts the organization's mission	on			
Benefits	Con partProv prod	en and analyze what others and analyze what others and ancurate aners, elected officials and the vide a tool that captures all incesses, data definitions, transely manner	nd consistent information to e general public Iformation in a central locat	transportation ion which identifies		
		COMPONENT CL	ASSIFICATION			
Classification		⊠ Baseline ⊠ 1	arget			
	F	ASSOCIATED BUSINESS ARC	HITECTURE PERSPECTIVE			
Business Architecture Perspective		Strategic Business				
		Keywo	RDS			
Keywords / Aliases		First and Best, Build Public	Trust			
		Business Architectur	E COMPONENT TYPE			
Component Type		Strategic Direction, Drivers	and Goals			
		CRITICAL RE	FERENCES			
		Related Busines	s Components			
Business Architec Component	ture	Relationship	Business Architecture Component	Relationship		
Be the first and bes source of information about the organizat	on	Strategy to Strategy				
Business plan FY 2 2008	:003-	Strategy to Strategy				
Demonstrate respouse of taxpayers me		Strategy to Strategy				
Deliver Transportation Project		Strategy to Function				
Identify Transportation Needs		Strategy to Function				
Track Transportation Program	on	Strategy to Function				
		Standards Or	ganizations			
Name			Website			
Contact Information						

Government Bodies							
Name		Website					
Contact Information							
STAKEHOLDERS/ROLES							
Stakeholders	Budget, Department of Tra	nsportation					
Roles	Information Coordinator, P Partners	roject Managers, Elected	d Officials, Transportation				
Reason for Stake							
	GAP COMPONENT						
GAP Component Names	Terminology and Definitions						
	CURRENT	STATUS					
Business Architecture Component Status	☑In Development ☐ Under Review ☐ Accepted ☐ Rejected						
	AUDIT	Trail					
Creation Date		Date Accepted / Rejected					
Created By							
Reason for Rejection							
Last Date Reviewed	2/25/03	Last Date Updated					
Reason for Update	Annual Review of Strategic Plan identified shift in focus						



Gap Component Template

DEFINITION							
Name	Terminology and Definitions (Gap Component)						
Gap Statement / Description	"Terms" are being used inconsistently across the Department of Transportation. Requests for information are not producing correct or usable results because the requester is not using the same language as the functional unit providing the response. Also, reports are being produced containing information that cannot be understood or interpreted by the recipients. Explaining the report's content is ineffective because the report's producer is using terminology differently than the report's recipient.						
Rationale	 A clearly defined set of common business terms will facilitate the complex communication process within the Department of Transportation. Employees at different physical locations and within different functional units will be able to speak the same language, resulting in greater understanding across the organization. Employees will be able to clarify, by asking the right questions, exactly what information they are being asked to provide. Employees will be able to derive the same answer for the same question, or at least determine that they do not have access to the information being sought. The Department of Transportation's stakeholders will benefit by receiving more accurate information about the work that is being done by the Department of Transportation. 						
	GAP CLASSIFICATION						
Related Architecture Blueprint	☐ Business Architecture ☐ Information Architecture ☐ Technology Architecture						
Architecture Level	☐ Component ☐ Discipline/Perspective ☑ Domain/Subject Area ☐ Other						
Gap Types	□ New □ Change □ Under-utilized □ Over-utilized □ Obsolete – replace by:						

IMPACT POSITION					
Area Affected		Level of Ir	npact		Position Statement
AIGU AIIGGIGU	High	Medium	Low	None	
Business Impact					The Transportation Department's Director recently stated that clear communication is the greatest challenge and the greatest failure at the Transportation Department. Communication is impossible unless both parties understand the terminology being used. The interview participants stated that clearly defined terminology is needed to enable them to be more effective in their jobs. Lack of clearly defined terminology is having a significant impact upon the current business processes and therefore should be given High priority.
Information Impact	\boxtimes				Affects the datamarts
Technology Impact					Affects the directory services
		RELATE	D GAP	Сомро	ONENT INFORMATION
		L	Baselir	ne Com	nponent Detail
	omponent	Name			Component Type
Build Public Trust					Strategic Direction, Drivers & Goals
			Targe	t Comp	oonent Detail
	omponent	Name			Component Type
Build Public Trust					Strategic Direction, Drivers & Goals
Improve communication between managers, supervisors & their reports				Significant Business Events	
Hold managers accountable for communication			nunicat	Organization – Roles and Responsibilities	
Keywords					ORDS
Keywords /Aliases	ords /Aliases Dictionary, Glossary, Lexicon				

STAKEHOLDER INFORMATION						
Stakeholders	Department of Transpo	Department of Transportation, DOT Partners				
Roles	Managers, Supervisors	, technical and	executive perso	nnel		
Reason for Stake	Partners and vendors: t about the work that is b					
	Migratio	N INFORMATIO	ON			
Migration Strategies	Five data center personnel 1 week to migrate and/or create datamarts Introduction of directory level server Resources for loading datamarts					
	Curr	ENT STATUS				
Gap Component Status	☐ In Development ☐] Under Review		☐ Rejected		
	Au	DIT TRAIL				
Creation Date	2/25/03	Date Accep	ted / Rejected	3/30/04		
Created By	Created By					
Reason for Rejection						
Last Date Reviewed		Last Date U	Ipdated			
Reason for Update			·			



Business Architecture Blueprint Samples – Set 2



Business Domain

DEFINITION						
Name	Publi	c Safety (Busines	s Domain)			
Description	of Ka	This domain entails all activities associated with protecting the citizens of the state of Kansas. This includes prevention, and response regarding a variety of public safety events. In the criminal justice discipline, this goes on to include prosecution, adjudication, incarceration, probation/parole, and criminal registrations.				
Rationale				ct natural resources and property, to protect effor concerted response.		
Benefits		nced public safet		re protected. Quality of life is improved. Crime is		
			BOUND	ARY		
Domain Type		⊠ Functional	☐ Topic	al		
Boundary Scope State	ment	This does not in local level.	clude the fu	unctions handled at an international, national, or		
	F	ASSOCIATED BUS	INESS ARC	HITECTURE PERSPECTIVE		
Perspectives addresse under this Domain						
	4	ASSOCIATED BUS	SINESS ARC	HITECTURE DISCIPLINES		
Related Disciplines				y statistics, liquor retail licensing, disaster se, preventive police patrol.		
		RELATED E	NTERPRISE	Business Drivers		
		R	RELATED PR	RINCIPLES		
Reference #s			Conflict	Support / Conflict Detail		
The priority and pripublic safety is pre rather than respon	ventio			This principle supports this domain.		
·		REL	ATED BEST	PRACTICES		
Reference #s	, Statem	ents or Links	Conflict	ITECTURE PERSPECTIVE INTECTURE DISCIPLINES statistics, liquor retail licensing, disaster e, preventive police patrol. IUSINESS DRIVERS NCIPLES Support / Conflict Detail This principle supports this domain. PRACTICES Support / Conflict Detail RENDS Support / Conflict Detail This trend is in direct conflict with ensuring publ		
RELATED TRENDS						
Reference #s, Statements or Links Conflict Support / Conflict Detail				Support / Conflict Detail		
Drug abuse is on the rise and has a direct relationship to the incidence and severity of crime. This trend is in direct conflict with ensuring safety.				This trend is in direct conflict with ensuring public safety.		
There is an increased use of fire retardant construction materials and techniques This trend is in direct support of ensuring pub safety.						

Keywords						
Keywords/Aliases	Public safety polic	Public safety police fire disaster risk management attorney jail victim plaintiff				
	CURRENT STATUS					
Business Domain Status		□ U	nder Review	☐ Accepte	ed	☐ Rejected
	Audit Trail					
Creation Date	5/24/04		Date Accepte	d / Rejected		
Created By						
Reason for Rejection	Reason for Rejection					
Last Date Reviewed			Last Date Up	dated		
Reason for Update				·		



Business Discipline

DEFINITION							
Name	State	State Police (Business Discipline)					
Description	enfor	This discipline is in place to enforce state law, mitigate disasters, augment local enforcement operations, and provide security for larger or more critical public events and facilities.					
Rationale	linked	to any particular	r locality. T	apability for law enforcement that is not directly he state police fulfill this capability.			
Benefits	Enha reduc	•	y. Assets a	re protected. Quality of life is improved. Crime is			
			BOUND	ARY			
Boundary Scope State	ment			functions handled at an international, national, or e can act at a local level based on need.			
		ASSOCIATED B	USINESS AF	RCHITECTURE DOMAIN			
Related Domain		Public Safety					
		RELATED E	NTERPRISE	Business Drivers			
		R	RELATED PR	RINCIPLES			
Reference #s,	Stateme	ents or Links	Conflict	Support / Conflict Detail			
The priority and pripublic safety is pre rather than respon	eventio			This principle supports this discipline.			
The public prefers that the response be delivered by the lowest level of government capable of delivering the appropriate response – i.e., the public will prefer the local police department handle an incident. Then escalate to the county sheriff. Then escalation to the state police level. Then escalation to the FBI.				This principle supports this discipline.			
		REL	ATED BEST	PRACTICES			
Reference #s, Statements or Links			Conflict	Support / Conflict Detail			
	RELATED TRENDS						
Reference #s, Statements or Links Conflict Support / Conflict Detail			Support / Conflict Detail				
	Drug abuse is on the rise and has a direct relationship to the incidence and			This trend is in direct conflict with ensuring public safety.			
There is an increasing aggressive driving		idence of		This trend is in direct conflict with ensuring public safety.			

Keywords							
Keywords/Aliases	State police, respo	State police, response, law enforcement, escalation					
	CURRENT STATUS						
Business Discipline Status		□ U	nder Review	☐ Accepte	ed Rejected		
	Audit Trail						
Creation Date	5/24/04		Date Accepte	d / Rejected			
Created By							
Reason for Rejection	Reason for Rejection						
Last Date Reviewed			Last Date Upo	dated			
Reason for Update							



Business Architecture Component

		DEFINITION	ON				
Name	Reduce highway fatalities (Business Architecture Component)						
Description	This goal is to achieve increased safety of the motoring public.						
Rationale	Impro	Improve highway safety.					
Benefits		y of life, safer highways, enha portation system, protection of		ter efficiency in the			
		COMPONENT CLAS	SSIFICATION				
Classification		☐ Baseline ☐ 7	arget				
	A	ASSOCIATED BUSINESS ARCH	IITECTURE DISCIPLINE				
Business Architecture Discipline		Ensure the public's safety					
	A	SSOCIATED BUSINESS ARCHI	TECTURE PERSPECTIVE				
Business Architecture Perspective		Strategic Business					
		Keywori	DS .				
Keyword / Aliases		Safety, accident, fatality, inju	ry, transportation, goal				
BUSINESS ARCHITECTURE COMPONENT TYPE							
Component Type	Goal (i.e., a set of broad, fundamental aims the organization is expected to accomplish to fulfill its mission). Often general in nature (even fuzzy) and deal with "what" the organization wishes to accomplish but not "how" it will be accomplished. Does not include specific measures or dates.						
		CRITICAL REFE	RENCES				
		Related Business Archite	ecture Components				
Business Architect Component	ure	Relationship	Business Architecture Component	Relationship			
Fatalities will be reduced by 35% by EOY 2008 (this is a objective)		Goal to supporting objective					
		Standards Org	anization				
Name			Website				
Contact Information							

Government Bodies										
Name		Website								
Contact Information										
	Star	keholders/Roles								
Stakeholders										
Roles										
Reason for Stake										
	COMPONENT	LIFECYCLE INFORMATION								
	G.	AP Component								
GAP Components	Lack of common wi	ireless communication capability between fire, police, and								
	Cui	RRENT STATUS								
Business Architecture Component Status	☑ In Development	☐ Under Review ☐ Accepted ☐ Rejected								
	A	Audit Trail								
Creation Date	5/24/04	Date Accepted / Rejected								
Created By										
Reason for Rejection										
Last Date Reviewed		Last Date Updated								
Reason for Update										



Gap Component

DEFINITION												
Name	Lack of common wireless communication capabilities (Gap Component)											
Gap Statement / Description	not co	Fire, police and EMS use different wireless capabilities and therefore often do not communicate in a timely manner to coordinate resources in response to an incident.										
Rationale	Common wireless communications canabilities are required to ensure all											
GAP COMPONENT CLASSIFICATION												
Architecture Blueprint	☐ Business Architecture ☐ Information Architecture ☐ Technology Architecture											
Architecture Level		mponent omain			☐ Discipline ☐ Other							
Gap Type(s)	⊠ Ne	ew ver-utilized		Change Obsole	Under-utilized de – replace by:							
			IMPA	CT POS	ITION							
Area Affected		Level	of Impact		Position Statement							
Alea Allecteu	High	Medium	Low	None								
Business Impact					Business architecture of related disciplines become interoperable							
Information Impact	\boxtimes				Information broker is established to share information at the point in time of need, involving all necessary participants based on the incident type.							
Process					Business processes will be affected within allied disciplines							
Technology Impact					Significant change in communication networks, protocols, equipment and operating processes.							
	F	RELATED	GAP C	OMPONI	ENT INFORMATION							
		Ε	Baseline	Compo	onent Detail							
Сотро	nent Nai	me			Component Type							
			Target (Compo	nent Detail							
Compo	nent Nai	те			Component Type							
Fatalities will be reduce				Ob	Objective							
By EOY 2008, 80 % of responders will be able point of need	to con	nmunicat		Ob	Objective							
Through the use of sha frequencies, radio netw interconnected				Str	ategy							

	Keywords										
Keywords/Aliases Radio frequency, first responders, point of need, common, shared											
STAKEHOLDER INFORMATION											
Stakeholders First responders, motoring public											
Roles	Managers, supervisors, first responders and public										
Reason for Stake	Stake Responders need capability, public needs the service										
	MIGRATION INFORMATION										
Migration Strategies	See the state radio p	olan (reference numbe	er).								
	Cu	RRENT STATUS									
Current Status	☐ In Development	☑ Under Review	☐ Accepte	d Rejected							
	4	AUDIT TRAIL									
Creation Date	5/25/04	Date Accepted / Rejecte	ed								
Created By											
Reason for Rejection											
Last Date Reviewed		Last Date Updated									
Reason for Update											

Business Domain Model Samples

PILLARS OF GOVERNMENT

One example of a high-level business model is characterized in Figure 10. A vertical beam is used to represent a functional Business Domain. Functional governmental Business Domains are distinct, yet can be grouped. The groupings of these functional and distinct Business Domains are based on areas that share common functions. The terms Pillars of Government or Centers of Interest refer to functional Business Domains.

A horizontal beam is used to represent Topical Business Domains. Topical Business Domains allow the business to focus on a single topic and visualize all the points of impact or touch-points across the enterprise. Examples of topical Business Domains would be Human Resources, Citizens, and Payments.

The use of the pillar and beam concept allows an intersection as the beams pass through the pillars. This helps to identify where there is common usage of the topical business area within the architecture domain.

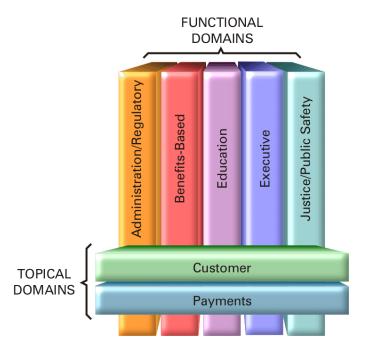


Figure 10. Sample Business Domains

FEDERAL BUSINESS REFERENCE MODEL (BRM)

Another example of a Business Model is the Federal Business Reference Model (BRM) illustrated in Figure 11. The Federal BRM describes the Federal Government's Lines of Business and its services to the citizen – independent of the agencies, bureaus, and offices that perform the business operations and provide the services.

The BRM identifies three *Business Areas* that provide a high-level view of the operations the Federal Government performs – Services to Citizens, Support Delivery of Services, and Internal Operations/ Infrastructure. The three Business Areas comprise a total of 35 external and internal *Lines of Business* – the services and products the Federal Government provides to its citizens; and 137 *Sub-Functions* – the lower level activities that Federal Agencies perform. ⁴

⁴ http://www.feapmo.gov/fea.asp

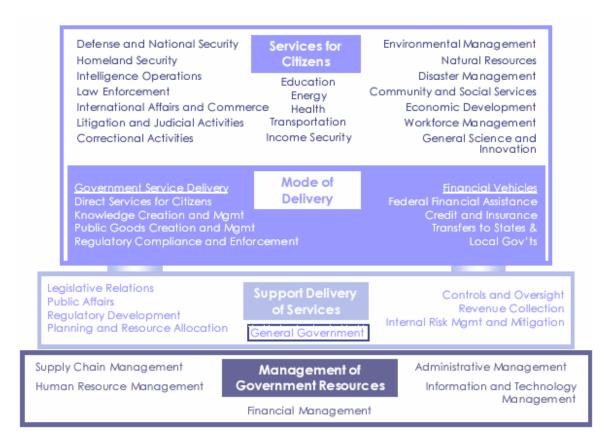


Figure 11. Federal Business Reference Model (BRM)

SPREADSHEET BUSINESS DOMAIN MODEL

A spreadsheet is a good method for capturing intersections between functional and topical areas of the enterprise business. The following samples illustrate only a small part of the actual spreadsheet developed by the Documenters. In the first sample the Agencies are listed on the y-axis and the functions are listed on the x-axis. In this case, the Architecture team included a column to identify services classes, Government to Citizen, Government to Schools, etc., since that information was important to the mission of this state.

This team did not develop the model further, but used the matrix itself as the Business Domain Model⁵.

⁵ State of Indiana, Division of Information Technology *Agency Mapping*, February 2003.

Line of Business	Business Function	Service Class	Accounts, Board Of	Attorney General	Auditor Of State	Budget Agency	Administration	Ethics Commission	Governor	House Of Representatives	Tax Review Board	Election Commission
Service Class:	G2C: Government to Citizen											
	G2B: Government to Business											ı
	G2G: Government to Government											
	G2S: Government to Schools											
	I-Ops Internal Operations											
Public Asset	Cultural Activities and Artifacts											
Management	Public Funds											
	Public Records / Data Management											
	Facilities Mgt.											
	Fleet Mgt.											
Defense and	Anti-Terrorism											
Security Ops	Bio-Terrorism											
Public Health	Illness Prevention											
	Immunization Management											
	Public Health Monitoring											
	Food Assistance											
	Housing Benefits											
	Medical Services											
	Monetary Benefits											

The sample on the following page is from the Federal Government. It is a similar matrix, but in this case the team used the matrix to organize and understand the functions and their intersections and built a simplified model, the BRM, which distilled governmental agencies and functions to an easily understood format.

FEDERAL RELATIONSHIP MATRIX⁶

Agency Mappings
Services to Citizens Business Area*
Analytical Summary
Average Number of Agencies per Sub-Function is 5
Average Number of Agencies per Line of Business is 10
Average Number of Lines of Business per Agency is 10
Average Number of Sub-Functions per Agency is 19

		25		\$\\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Edi.				100		/ &	/ Z		Transport			/ \$/8	MAD	NAC.	/ 8/8					Z	
Public Asset Management	Cultural Archives and Artifacts Public Funds Public Facilities Public Records/Data Management		х			х	х	х	X X			Х		X X	X		X	X		x			х	х		0 4 12 9
Defense and National Security Ops	Anti-Terrorism Border Control Intelligence Gathering Military Operations Weapons Control		х	Х		x			_	X X X		X	Х	X X X		х		_		_	x			X		8 7 3 1 5
Public Health	Illness Prevention Immunization Management Public Health Monitoring	X	х	x			X X						x		х						Х				X	4 3
Energy Management	Energy Distribution Energy Production Energy Resource Management			x		X			X X X				x						Х							2
Domestic Economy	Business/Industry Development Monetary Control		х	х					X		Х	Х	X X	X	Х		Х		Х				Х			11 3
Social Services	Burial Services Community Development Food Assistance Housing Benefits Medical Services Monetary Benefits		X	X		x	X	x	x		x	x	X	х	х	X X X	X						X	x	X	0 9 1 3 3
Marketable Asset Management	Financial Asset Management Personal Property Management Real Property Management			X X X				X		х			X	X			X									3 5 4
Diplomacy & Foreign Relations	Conflict Resolution Foreign Socio-Econ and Political Dev. Treaties and Agreements	X X X	х	X X							х	X X X		X	X				Х					х		7 7
Disaster Management	Disaster Monitoring and Prediction Disaster Preparedness/Planning Disaster Repair and Restore Emergency Response	X X X	х	X X X		x	x	х	X X X			X X X	X		X X X	X X X	X X X						X X			11 11 10
Education	External Training and Education Advising and Consulting Promote Education	X	х	X X	_	X	X	X	X	Х	X	Х	_	X	X	X	X	х	Х			X	X	х	Х	20
Research & Development & Science	Data & Statistics Development Scientific Research and Development Socio-Economic Research & Developmen Technology Research & Development	X	х	X X X	X	X X X	X X X	X	X X	X X	X		X X X	x	X		X	х	X	х	х		Х	X		14 10 9
Transportation	Air Traffic Control Land Transportation Maritime Transportation Space Operations			x					X				X X X		Х		Х									1 5 2
Workforce Management	Job Creation Labor Rights Management Worker Safety			X							X X X	Х	X X X		X		X						X			5 4 4
Recreation and Natural Resources	Conservation Planning Land and Monument Management Tourism Management		X						X X X				X X X	Х	X X X			х								5 5
Insurance	Insurance Issuing Insurance Services		X					X					X			X						X	X	X	X	8
Consumer Safety	Firearms and Explosives Safety Antitrust Control Consumer Products Quality Assurance Monetary Protection		х	X			х		х				X X X	X	х		х									2 8 1
Trade	Export Promotion Merchandise Inspection Tariff/Quotas Monitoring Trade Law Enforcement	Х	X	X X X					х				X X	X X X	X X X								X			6 4 3
Environmental Management	Environmental Monitoring Environmental Remediation Pollution Prevention and Control			X		Х			X X X		X		X X		X X X		х		Х		х					7 3 7
Legal	Judicial Hearings Legal Defense Legal Investigations Legal Prosecution/Litigation Resolution Facilitation							X X	X X	X X X X	X	X	X X X		X X X		X						X	X X		4 1 6 9 4
Regulated Activity Approvals	License Issuing and Control Permit Issuing and Control		X	X			X		х	х	X		X	X	х						X	Е	X			8
Revenue Collection	Debt Collection Tax Collection Other Revenue Collection								х	Х				X X X										х		3
Law Enforcement	Criminal Apprehension Criminal Incarceration Criminal Investigation and Surveillance Citizen Protection Crime Prevention Intellectual Property Protection Leadership Protection Property Protection Substance Control			X	x				X X X	X X X X		x x	X X	X X X X	x		X									6 1 8 1 0 3 3 6 5
Federal Financial Assistance	Grants Assistance Loans Assistance Subsidies	Х	X	Х	X X	х	X	X	X	X			X	Х		X				х			х		Х	11

⁶ Federal Chief Information Officer (CIO) Council, Federal Architecture Working Group, FEA_BRM_Agency Mappings_Rev_1, July 2002.



Gap & Migration Summary Format Sample

The Gap & Migration Summary should summarize the key findings regarding the gaps and migration strategies for the given Domain. The following outline provides an example of the items typically covered, and the general structure of a Gap & Migration Summary Report.

Outline	Description
EXECUTIVE SUMMARY	A summary of the key findings of gaps identified for the Domain
INTRODUCTION	Provides description of background information to support the report
Overview	Provides greater detail regarding the scope of this effort and the methodology used in completing this document.
Goals and Objectives	Present the gap topics and migration strategy options for the Domain
Scope and Approach	Describe the scope of the effort, including any limitations or constraints and outline the approach used in the effort.
BASELINE SUMMARY	Summarize the Domain baseline component results from the various perspectives
TARGET SUMMARY	Summarize the Domain target component results from the various perspectives
GAPS	There can be several Gaps
	(Repeat this section, along with Migration Strategies section for each gap identified.)
Gap Name 1	The name for the identifying the Architecture Gap.
Gap Statement	The Gap Statement is a brief description of the identified gap topic, representing the current or "as-is" status of that topic.
Gap Description	The Gap Description is a detailed description of the gap topic, including background and scope
Goal(s)	This is a statement of the target status of the gap topic. Information found in the Rational Section of the Gape Component Template may assist in determining the future state. If this information is not available, other means will need to be employed to collect this data, i.e. interviews with key subject matter experts and senior management.
Benefit(s)	A statement of the advantages offered by moving to the target status of the gap topic
Priority	A statement of the relative importance of moving to the target status of the gap topic
Migration Strategies	Each Gap can have multiple Migration Strategies (Repeat this section for each migration strategy identified for this Gap)
Migration Strategy 1	Provide strategy statement
Strategy Description	A description of the actions that might be taken to move to the target status of the gap topic
Benefits of Strategy	A list of the advantages posed by employing the migration strategy
Drawbacks of Strategy	A list of the disadvantages presented by the migration strategy.
Degree Strategy Meets Goals	An analysis of the ability of the migration strategy to meet all of the goals of the gap topic
Cost, Time & Resources	A relative ranking of the investment required to implement the migration strategy

Outline	Description
OVERARCHING MIGRATION STRATEGIES	Describe the migration strategies that could be effective for more than one gap topic
CONCLUSION	Summarize the key findings.
APPENDICES	Include items such as Gap & Migration Summary charts and interview statements for each Gap,



Gap & Migration Strategy Chart Sample

The following table provides an example of a Gap/Migration Overview chart that might appear in the executive summary of a Domain Summary Report

Gap	Associated Migration Strategies
Terminology & Definitions	Develop a custom set of common business terms
	Compile a set of common business terms from existing documentation and by researching other Operational Areas
	Compile an initial set of common business terms from existing documentation and by researching other like areas on the Internet. Follow up with interviews across the functional units to validate, modify and append terms and definitions to the initial list
Data Collection & Storage	Develop standard formats or layouts for the same types of data and determine the best storage media for that data.
	Document the layouts or formats of the same types of data and share that documentation.
	Develop a standard format or layout for the same types of data and move the distributed data to a central data repository.
Data Visibility & Accessibility	Identify those times in the Project Life Cycle when the lack of information is creating a problem and address each occurrence individually.
	Create a common data repository and publish information at specified intervals.
	Create a common data repository and allow users to extract whatever information they need, whenever they need it.
Policy & Procedures	Identify and implement fully the existing policy and procedures across the organization.
	Continue the Enterprise Architecture effort to document both the business and technical aspects of the organization in a central, maintainable repository.
	Continue the development of Business Rules for implementation of the processes and procedures that can be automated.
Archival of Project Data	Develop a "datamart" of project data accessible to all functional units.
Change Tracking & Change Reporting	Determine the types of design changes that should generate notification and who should receive that notification.
	Allow the functional units to "pull" their design change data at will.
Agreements	Integrate the Agreements data and processes into the Transportation Project life cycle.

Roles & Responsibilities	Identify the roles associated with data creation and maintenance responsibilities and indicate the CRUD activities performed.
	Identify the roles associated with data creation and maintenance responsibilities and indicate the way in which each role is involved.
	Identify the roles associated with data creation and maintenance responsibilities and indicate the way in which the data is used and the way in which each role is involved.



The Business Architecture provides a business-based framework for developing solutions that operate across agencies and within the lines of business of state and local governments.

It is through the pursuit of formal Business Architecture that provides:

- A demonstrable, repeatable approach to assuring business alignment throughout the enterprise
- A clear understanding of the enterprise's current and future direction
- Identification of opportunities for interoperability between all government bodies both vertically and horizontally
- A clear map between the business of federal, state and local government and IT's enablement of the defined business intentions
- A valuable tool for illustrating and communicating the business of the enterprise to all stakeholders
- Context and guidance to keep the enterprise architecture focused on the strategy and goals of the state or local government
- A method to deliver services and information in a consistent and structured manner.

The Business Architecture describes and interrelates operational elements required to realize the enterprise's business objectives. The Business Architecture is the collection of knowledge and relationships between strategy, people, functions, information, applications and infrastructure.

NASCIO Online

Visit NASCIO on the web for the latest information on the Architecture Program or to download the current version of the Enterprise Architecture Development Tool-Kit.

www.nascio.org