Enterprise Architecture (EA) in Action: The Methodology for Business Transformation (MBT) v1.5

Participant Guide
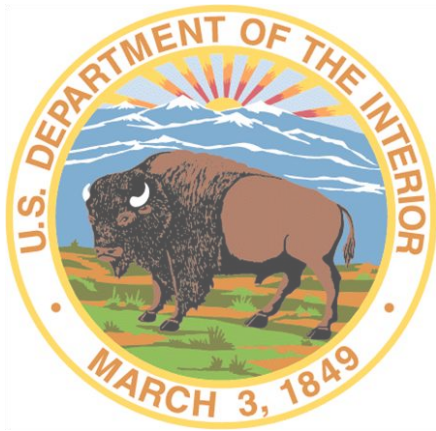
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Department of the Interior
Enterprise Architecture Program
Washington, DC
www.doi.gov/ocio/architecture

As the Chief Information Officer for the Department of the Interior (DOI), I am proud to introduce the latest version, of our Methodology for Business Transformation (MBT). MBT Ver. 1.5 is the next generation release of DOI's business-driven approach to enterprise and segment architecture (aka modernization blueprint) development and implementation. DOI's MBT has been highlighted as a best practice at the National Defense University, Information Resources Management College and the Federal Enterprise Architecture Certification (FEAC) Institute. In addition, the Office of Management and Budget (OMB) Federal Enterprise Architecture Project Management Office has cited DOI's MBT as an example of how to effectively develop business-driven segment architectures.

The MBT is a critical component of DOI's IT processes as it enables us to consistently analyze and propose recommendations to make our mission delivery more efficient and effective and ensure our IT investments are guided by approved modernization blueprints. By leveraging this standardized methodology, we can speak in a common language, plan in a common way, and interoperate across DOI Bureaus and Offices in our architecture implementation efforts.

MBT has already been successfully used to start business transformation initiatives in several of our critical business areas (e.g., Law Enforcement, Financial Management) It provides DOI business leaders and IT service providers with the critical information they need to choose the best business processes and technology to better serve our customers. I fully endorse its continued use in support of business transformation across the Department.

Michael Howell

Michael Howell
Chief Information Officer (CIO)
Department of Interior

The Interior Enterprise Architecture (IEA) team is committed to helping DOI business leaders achieve business transformation in order to improve our overall mission performance. This commitment to performance is supported by DOI's Methodology for Business Transformation (MBT), a step-by-step approach to prioritizing, creating and implementing segment architectures (aka modernization blueprints). The MBT is a key component of the IEA program and has been used successfully to create modernization blueprints for multiple business areas (e.g., Law Enforcement, Financial Management) The MBT includes architecture best practice approaches and techniques derived from DOI's internal EA expertise in addition to private and public sector sources. It is continuously refined to meet the needs of DOI's mission environment and ensure continued alignment with the Federal Enterprise Architecture. As the Chief Architect for the DOI, it is my great pleasure to introduce to you our new and improved MBT version 1.5.

The MBT 1.5 contains over 100 enhancements from version 1.0 including the addition of detailed templates that strengthen our blueprinting process. MBT 1.5 includes new EA governance check points, better alignment of data architecture analysis with business architecture analysis, and new pre-blueprint steps that better gauge a business area's readiness for the blueprinting process.

The IEA team is committed to bringing you the best business transformation products. If you have suggestions for further improving MBT, we welcome your thoughts.

We are proud of our new MBT 1.5 and glad you have chosen to use it.

Colleen Coggins
Chief Architect
Department of the Interior

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✳ INTRODUCTION

Welcome to *EA in Action: The Methodology for Business Transformation (MBT) v1.5*. This course seeks to provide enterprise architecture practitioners with the skills, knowledge, and tools they need to engage their customers in planning and implementing business transformation. Through discussion and practice, this course will equip participants with a practical understanding of how to leverage the MBT as the step by step process for facilitating business transformation. More specifically, you will learn how to select the business areas to transform, how to achieve business participation, how to establish a modernization blueprint, and how to proceed to implementation.

This course is structured to be practical and highly applicable to the Federal sector. The intention of this class is for you to walk away with the skills and tools you need to engage your EA customers and team members. The course consists of lecture, group discussion, and activities that are designed to build upon one another. Questions and comments are highly encouraged throughout the course duration.

✳ COURSE OBJECTIVES

At the end of this course, you will be able to do the following:

- Evaluate business areas and prepare decision makers with standard information so that they can select the high priority business areas for transformation

- Participate in soliciting and securing executive sponsorship and business participation for transformation

- Guide a team of business area representatives through a well rounded analysis process that yields a modernization blueprint with actionable and defensible findings and recommendations with corresponding transition plan

- Guide business representatives and leadership from their approved modernization blueprint to the inception of its implementation

✳ AGENDA

DAY 1

MORNING

- Welcome
- Introduction and Overview
- Lesson 1 – Overview of Enterprise Architecture

AFTERNOON

- Lesson 2 – MBT Phase 1: Select the Business Areas to Blueprint
- Lesson 3 – MBT Phase 2: Prepare for the Blueprint

DAY 2

MORNING

- Lesson 4 – MBT Phase 3: Develop the Blueprint

AFTERNOON

- Lesson 4 (cont.) – MBT Phase 3: Develop the Blueprint
- Lesson 5 – MBT Phase 4: Implement the Blueprint Recommendations
- Lesson 6 – MBT Phase 5: Maintain the Blueprint
- Questions, Course Evaluations

✳ CLASS PARTICIPATION GUIDELINES

- Participate freely in discussions.
- Listen to other viewpoints.
- Avoid sidebar conversations.
- Try to relate your own experiences.
- Ask questions when you need clarification.
- Turn off your cell phone.

✳ COURSE GOALS

The content and agenda for this course assumes that you, as a participant, already possess some knowledge of enterprise architecture as a discipline. In addition, this course provides modeling and content examples that conform to the Department of the Interior's standards. These modeling and content examples are typical of government and private sector analytical techniques and, when coupled with the course's practical exercises, will give you the skills and confidence to easily adapt the skills you learn in class to your architecture work within your own organization.

This course also provides the opportunity to develop a community with your classmates who are also interested in architecture and transformation. You are encouraged to build relationships with your classmates and to foster those relationships over time. Within the community of those interested in architecture and transformation, there will be new innovations and techniques that will be developed over time and could be shared and re-used across organizations.

Finally, understand from the onset that accepting a standard approach for planning and implementing transformation is a key to realizing the potential of your enterprise architecture and inter-organizational collaboration efforts. There is a natural expectation that organizational missions and dynamics might demand different approaches to transformation. However, note that leveraging a standard such as the MBT provides for consistency in training, procurement, communications, planning, outputs, and innovation throughout your transformation efforts. Your internal benefits to adopting MBT as a standard include consistency amongst your internal planning efforts and quality control for outputs destined for decisions makers. External benefits to adopting MBT as a standard include efficiencies in collaborative planning with other organizations and the establishment of federal planning skills and deliverables which helps shape training and recruiting of personnel and contractor resources.

✳ EA IN ACTION: THE METHODOLOGY FOR BUSINESS TRANSFORMATION (MBT) V1.5 INTRODUCTION

WHY DO WE NEED ENTERPRISE ARCHITECTURE?

As most would agree, enterprise architecture is about transforming some aspect of an organization to make it more efficient and more effective in performing its mission. There are wide ranges of thought on how to setup an EA organization and how to actually conduct the practice of EA, but in the end, all agree that EA is about changing something for the better.

Overall, change is important as we collectively work towards a government that is more effective in meeting the needs of its citizens. This change manifests itself in presidential initiatives, federal budgets, congressional hearings, and citizen feedback efforts. The grand ideas of government are passed to the Agencies through a variety of influence channels and the Agencies move forward with the resources that are made available. The role of the EA is to not only document how things are being done but to work collaboratively with the organization's resource base to find ways to implement the grand ideas of government in order to better achieve its mission. EA is a facilitator, an enabler, a motivator, and an information source. In participating in these roles, the EA practitioners are constantly involved in communications and outreach at many levels, to many types of audiences, and under many different circumstances. It is through the delivery of consistently high quality analysis and highly crafted communications that the EA function can be one of significant intra- and inter-organizational impact.

WHY DO WE NEED THE MBT?

Planning projects generally start with weeks or months of discussion and deliberation over the approach that will be taken, the terminology that will be used, the work products that will be created, and the governance bodies that will be engaged. In many instances, these items are not resolved up front but are handled as needed throughout the duration of the planning and implementation work. These discussions are often complicated further by the participation of multiple organizations, the need to meet the output expectations of a variety of decision makers, and the presence of multiple professional services companies with their own proprietary methods and techniques.

Enterprise architecture is a very robust planning function that, in fact, is more susceptible to the above scenarios than most planning projects. As a result, there is a critical need for the establishment of a standard methodology for conducting architecture planning and implementation. The MBT is a standard methodology as it provides a standard process, terminology, work product expectations, governance check points, and communications suggestions. The benefits include:

- Architects can more effectively engage one another for ideas, inspiration, and lessons learned when they are using the same methodology.

- Government architects can more effectively communicate expectations for skills, deliverables, and outcomes when a robust, standard methodology is government property rather than proprietary contractor property.

- Contracted architects can be expected to work more closely together, despite employer, when they use the same non-proprietary methodology.

- Solution architects, developers, and procurement specialists can tailor their process not to each individual project but to the standard planning methodology used by all projects.

- Training of architecture practitioners can be standardized around the <u>standard methodology</u> to save money, reduce conflicting course materials, and reduce confusion.

- The EA community of practice can innovate more quickly and significantly when working from the <u>same standard methodology</u>.

EXERCISE: INTRODUCTION AND EXPECTATIONS

Directions: In your table group, complete the following:

- Introduce yourself to your table group.
- Discuss your expectations for this class with your group and come up with 2-3 expectations for your table.
- Select a group spokesperson for your table for this exercise. Make sure to rotate the role of spokesperson throughout the team for subsequent exercises.
- The instructor will lead a round robin of the table groups, recording expectations on chart paper.

Lesson 1

Overview of Enterprise Architecture

✷ LESSON OBJECTIVES

At the end of this lesson, you will be able to do the following:

- Explain what is enterprise architecture

- Discuss the roles of the enterprise architect

- Describe the breadth of information that is associated with enterprise architecture

- Discuss the major categories of outside parties that the enterprise architect must engage to affect transformation, the general focus of the outside parties, and their recurring needs that can be met by the enterprise architect

- Define the key points throughout the enterprise architecture lifecycle where these outside parties will be engaged

✷ WHAT IS ENTERPRISE ARCHITECTURE

Enterprise architecture is a structured planning discipline where architecture practitioners facilitate the planning and implementation of change within their customers' organizations.

There are four principles that capture the essence of this definition:

EA is about Business Transformation to Improve Performance: One of the greatest threats to enterprise architecture in the public sector appears to be the confusion concerning exactly what EA is and is not. To some practitioners, EA is seen as a type of system engineering. Other practitioners view EA as the development of specific process and data models. Other groups attempt to build enterprise architectures by developing centralized IT structures without directly engaging the business units and their stakeholders.

A more practical interpretation of what EA is can be captured in one phrase: *business transformation*. Business transformation is about working with business organizations to help guide them towards developing and implementing their own unique plans for change. True business transformation can only be achieved by working with business organizations and enterprise governance groups as a trusted change agent. This includes understanding the business units' short and long term goals and objectives, including their existing pain points and weaknesses. It also includes understanding the acceptable rate of change for a given business area.
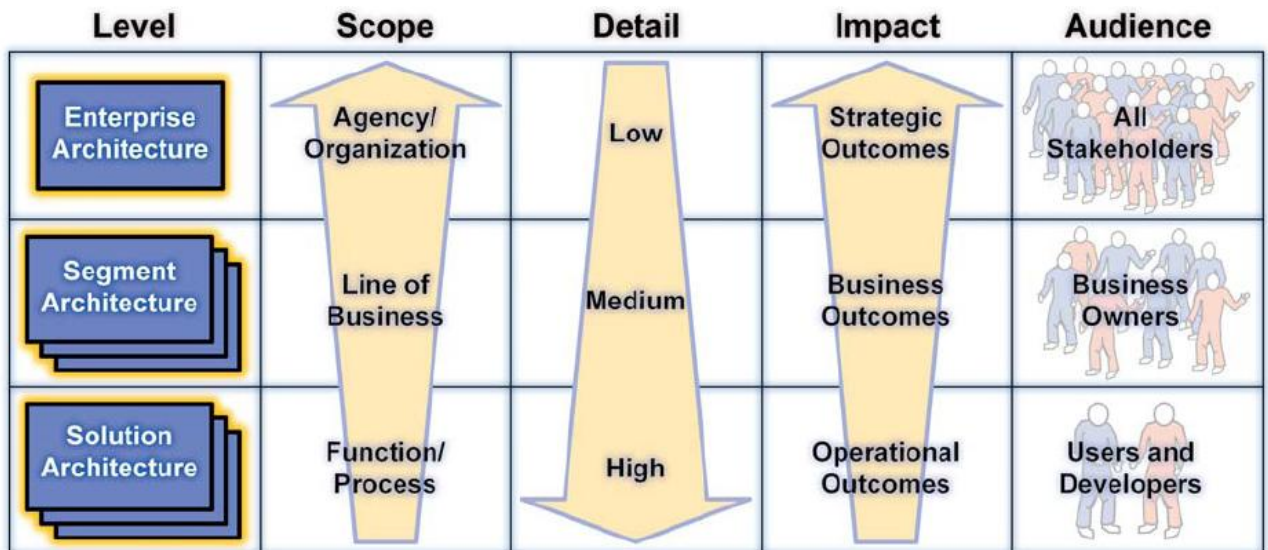
EA is a Service Delivered to the Business: Enterprise architecture, as a structured discipline, must be balanced against the reality that EA is delivered as a service to

a customer base. Architecture practitioners are service providers that have to deliver high quality resources and techniques for helping solve business problems. Embracing this philosophy enables EA practitioners to build trusted relationships with their customers and develop a reputation of assistance rather than inconvenience.

Architecture Practitioners are Change Agents: Effective architecture practitioners are powerful change agents within the enterprise. In fact, enterprise architecture should be seen as a powerful tool that enables a business organization to improve its performance and more effectively carry out its mission.

EA is about Communication – Communication – Communication…: Effective communication is an absolute necessity for an effective, results-oriented EA program. Simply put, the architects must be in a position to communicate complex ideas to a wide variety of people at all levels within an organization. Without good communication capabilities, good ideas can be lost and business transformation can be stalled. Here are some warning signs that communication is a problem for the architecture program: 1) No one knows the architecture team; 2) The architecture team is left out of many important planning meetings; 3) The architecture team spends the vast majority of its time talking internally rather than with its customers.

DOI has utilized what is called a "segment architecture approach" to business transformation since 2004. DOI's segment architecture approach is in full alignment with OMB's newly published FEA Practice Guidance (figure below from OMB's *FEA Practice Guidance*) which summarizes the three levels of architecture and the distinctions between these levels. DOI's MBT version 1.5 is designed to work across all three levels by defining business-driven segment architectures, and ensuring that each segment architecture seamlessly aggregates up to the EA, and finally extending the segment architectures with corresponding solution architec-

Level	Scope	Detail	Impact	Audience
Enterprise Architecture	Agency/ Organization	Low	Strategic Outcomes	All Stakeholders
Segment Architecture	Line of Business	Medium	Business Outcomes	Business Owners
Solution Architecture	Function/ Process	High	Operational Outcomes	Users and Developers

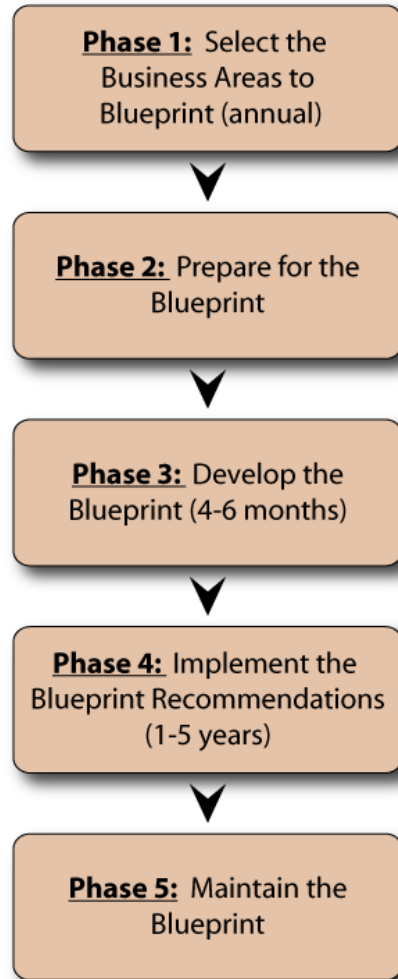tures in order to achieve measurable results.

⊠ ROLES OF THE ENTERPRISE ARCHITECT

One of the most common misperceptions of enterprise architects is that they should sit in their offices and play with their architecture models. Quite the opposite is true! First and foremost, enterprise architects are facilitators of transformation. As an enterprise architect you play many roles depending on the people you are engaging, what you are trying to accomplish, and where your project currently sits in its *Transformation Lifecycle*.

The *Transformation Lifecycle* is the key to understanding which role to play at which time. The illustration that follows summarizes the *Transformation Lifecycle* at a high level. The enterprise architect plays many roles when traveling through the stages in this lifecycle and plays many roles within each stage of the lifecycle.

Transformation Life Cycle

Phase 1: Select the Business Areas to Blueprint (annual)

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Phase 2: Prepare for the Blueprint

↓

Phase 3: Develop the Blueprint (4-6 months)

↓

Phase 4: Implement the Blueprint Recommendations (1-5 years)

↓

Phase 5: Maintain the Blueprint

The role that you play is critical to understanding the tact that should be taken and the people that you should be engaging. An enterprise architect that wears the same hat day in and day out will run into challenges in affecting change. There are many nuances in the life of an enterprise architect. Overall there are six key roles that are played throughout the *Transformation Lifecycle*.

INFORMATION GATHERER

Throughout the *Transformation Lifecycle* the enterprise architect is gathering information. Information Gatherer is the most traditional of the roles for the enterprise architect. In many instances, the Information Gatherer role represents the comfort zone of the enterprise architect. This role is generally thought of as impacting Phase 3 of the *Transformation Lifecycle*. The common thoughts on the Information Gatherer are of interviewing and researching information and documenting the information in standard modeling formats. In most instances, the information is documented in an enterprise architecture repository.

Although this is the classic view of this role, the Information Gatherer also participates in Phase 1 and 4 within the *Transformation Lifecycle*. In Phase 1 the Information Gatherer supports the collection of financial and performance data to aid decision makers in determining which aspects of the business should be studied. In Phase 4 the Information Gatherer supports its customers by supplementing enterprise architecture data with the information that is needed for capital planning and budget formulation. Also in Phase 4, the Information Gatherer collects metrics about the performance of what was architected and piloted and information on measurable results so that progress can be tracked and reported.

FACILITATOR

Facilitation is an art that can make or break any type of project. This certainly remains true of the transformation projects in which enterprise architects participate. An effective transformation project will involve representatives from all affected organizations. The enterprise architect plays the role of Facilitator in an effort to support and guide these representatives throughout the *Transformation Lifecycle*.

The Facilitator is a key player from Phase 1 in the *Transformation Lifecycle* where debates and decisions yield program areas to study, through the study itself in Phase 3, the investment and budgeting decisions of Phase 4, the solution definition, pilot, and scale up decisions in Phase 4, and the updating in Phase 5, The Facilitator needs to be generally impartial to the outcomes with the exception of keeping an eye on ensuring that the target recommendations abide with the organization's guiding architectural principles.

IDEA GENERATOR/ANALYST

In a purely academic setting one would argue that the enterprise architect is simply guiding the program executives and documenting their decisions. The operational reality is that the program executives need your support. The enterprise architect is regularly playing the role of Idea Generator/Analyst.

The Idea Generator/Analyst is intimately familiar with the details of the program area. Through the Information Gatherer and Facilitator roles, much knowledge has been gained and can be leveraged by the Idea Generator/Analyst role. The Idea Generator/Analyst is actively involved in Phase 3 of the *Transformation Lifecycle*. The key to Phase 3 is the synthesis of information and the formation of findings and recommendations that will help transform the organization. The Idea Generator/Analyst is positioned to help form these findings and recommendations and then to appropriately document and communicate those findings and recommendations so that decisions can be made.

POLITICIAN

The world of the enterprise architect is a risky world with political pitfalls around each corner. The effective enterprise architect needs to be smart, have great communications skills, and great political skills to match. It is critical that the enterprise architect play the role of the skilled Politician.

The role of Politician for the enterprise architect is one that involves skillfully navigating the personalities, egos, desires, and needs of the key players throughout the *Transformation Lifecycle*. This must all be done without the impression that the Politician has a personal agenda. To affect transformation within the program area, the Politician must discover the levers and influences that cause decisions to go one way versus the other. This information needs to be understood for each of the key participants within the *Transformation Lifecycle* so that the Politician can appropriately aid in communications, negotiations, and brokering compromises. In a purely academic sense, this role is not necessary, but the operational reality of decision making in any organization causes this role to be a key component.

COORDINATOR

The enterprise architect actively plays the role of Coordinator throughout all stages of the *Transformation Lifecycle*. Whom you are coordinating and for what purpose are key elements to determining the most appropriate way to perform this role. In

many instances the Coordinator will be corralling the key program stakeholders to analyze information and make decisions. In several instances the Coordinator will be scheduling review sessions with governance teams and pre-briefing program leadership before the reviews take place. In all instances the Coordinator will be guiding the business representatives through the process of transformation planning and ensuring that participation and quality both remain high.

MARKETER/SALESPERSON

When it comes to communications and outreach, one often thinks of presentations on specifics. The enterprise architect is tasked with these presentations as well as more general and broad based presentations. In playing the role of Marketer/Salesperson, the enterprise architect is outreaching many concepts at once.

In some cases the Marketer/Salesperson is performing outreach to communicate the general value of the enterprise architecture program, what types of services that it offers, and why program executives should want to be involved. This type of presentation is outreach and marketing at its heart but it is also brand establishment in its effect. These types of presentations not only create awareness for the EA program but also help establish a trusted brand and image that will be leveraged and recalled by future modernization studies. When the Marketer/Salesperson makes claims about the quality of the EA program, the breadth of its skills, and the measurable benefits of transformation, that same audience will hold future findings and recommendations from the EA program to the standards originally set. This is a good thing as it establishes expectations and helps market your capabilities as a program.

There are also cases where the Marketer/Salesperson is presenting specific details of a transformation study. In such cases, the Marketer/Salesperson is outreaching the specifics of the findings and recommendations for that business area. However, the Marketer/Salesperson is also marketing the quality of work and the potential results that have been produced and articulated with the help of the EA program. These sessions are opportunities to demonstrate to executives, governance teams, and program specialists the potential benefits of engaging the organization's EA program.

✦ TYPES OF EA INFORMATION

The illustration below summarizes the content areas that are usually captured within the enterprise architecture discipline. By helping organizations with analysis in these areas, synthesizing that analysis, and communicating the results effectively, the EA practitioners are able to affect change in their organizations.
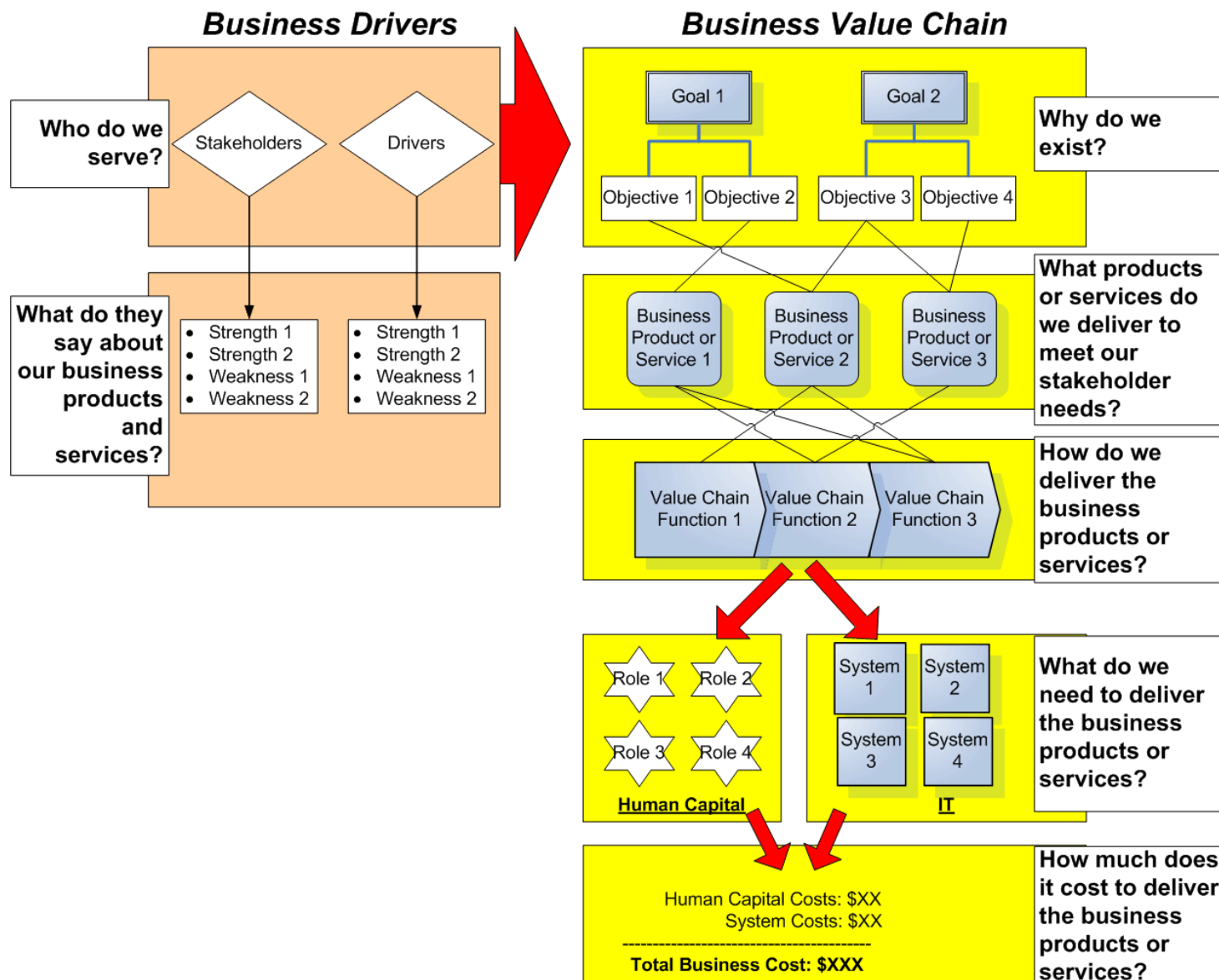
The information concepts within the illustration can be summarized as:

- Who are the stakeholders?

- What are the wants and needs of the stakeholders?

- Where are the areas for improvement based on the stakeholder analysis?

- What are the goals and objectives for the organization?

- What products and services will be offered by the organization?

- What will the processes look like within the organization?

- What are the human capital and information technology resources that will be used?

- How much will the resources cost for the organization?

The importance of understanding the breadth of information within the purview of the enterprise architect is so that we can associate the types of people and organizations that would supply such information. By reviewing the illustration above, we can begin to extrapolate the people within our own organizations that we would need to engage in order to gather and synthesize this information.

✴ ENTERPRISE ARCHITECT ORGANIZATIONAL AWARENESS

Who does the enterprise architect engage, what is being communicated, and what triggers the communications?

So far we have explored the roles of the enterprise architect and have made the connection that, while in these roles, the enterprise architect is working to collect certain information and make use of the information to help aid in affecting transformation. Throughout this process there are many people and groups that the enterprise architect will engage. The following chart outlines how all of these connections can be documented within your own organization. By documenting this information, the resulting matrix serves as a reminder of the people that you want to engage, the types of conversations that you want to be having, and the many roles that you want to be playing.

Role	What Is Communicated?	Who Is Engaged?	What Triggers the Communication?
Information Gatherer	• Gathering Stakeholder Wants and Needs	Stakeholders, Lobbyists, Legislation, Previous Research	The transformation study is started and it is time to decide who to interview.

Role	What Is Communicated?	Who Is Engaged?	What Triggers the Communication?
Information Gatherer (cont.)	• Gathering the products and services currently offered by the organization	Program Area Executives and Subject Matter Experts	The stakeholder interviews have pointed the team to a set of problems that need to be resolved.
	• Gathering the current processes for the organization?	Program Operations Specialists	The current state products and services are understood and you must now determine how they are delivered.
	• Gathering which human capital resources are currently used	Program Operations Specialists, Human Capital Officer	The current state processes are understood and you must now determine the human capital that is currently used within those processes.
	• Gathering which information technology resources are currently used	Program Operations Specialists, System Owners, CTO, Governance Teams	The current state processes are understood and you must now determine the information technology that is currently used within those processes.
	• Gathering the cost of resources for the organization in the current state	Program Operations Specialists, Budget Managers, Financial Analysts	The current state resource allocation is understood and you must now determine how much is currently being spent.
Facilitator	• Facilitating the listing of stakeholders	Program Area Executives	The transformation study is started and it is time to decide who to interview.
	• Facilitating the creation of ideas for transformation	Program Area Executives	The stakeholder interviews are complete.

Role	What Is Communicated?	Who Is Engaged?	What Triggers the Communication?
	(based on stakeholder wants and needs)		
Facilitator (cont.)	• Facilitating the development of the goals and objectives for the organization	Program Area Executives, Governance Teams, Strategic Planners	The ideas for transformation have been determined.
	• Facilitating the listing of products and services to be delivered by the organization in the future	Program Area Executives and Subject Matter Experts	The organization's strategy has been set based on the needs of its stakeholders.
	• Facilitating the development of target processes for the organization?	Program Operations Specialists	The organization has determined which products and services will be delivered in the future.
	• Facilitating the determination of which human capital resources will be used in the target state	Program Operations Specialists, Human Capital Officer	The organization has determined how its processes will look in the future.
	• Facilitating which information technology resources will be used in the target state	Program Operations Specialists, System Owners, CTO, Governance Teams	The organization has determined how its processes will look in the future.
Idea Generator / Analyst	• Synthesizing information from stakeholder interviews and how it impacts the organization's strategy	Program Executives	Stakeholder interviews are complete.
	• Synthesizing information from the organization's goals	Subject Matter Experts	The ideas for transformation have been determined.

LESSON 1 • *Overview of Enterprise Architecture*

Role	What Is Communicated?	Who Is Engaged?	What Triggers the Communication?
	and objectives to determine ideas for new or improved products and services		
Idea Generator / Analyst (cont.)	• Synthesizing information on processes to create ideas for new processes in the target state	Program Operations Specialists	The organization's strategy has been set based on the needs of its stakeholders.
	• Synthesizing information on new process to determine human capital needs for the future	Program Operations Specialists	The organization has determined how its processes will look in the future.
	• Synthesizing information on new processes to determine information technology needs for the future	System Owners, CTO	The organization has determined how its processes will look in the future.
	• Synthesizing information on all transformation recommendations to determine future costs	Financial Analyst	The organization has determined which re-sources it will use in the future.
Politician	• Engaging leaders to understand their individual needs and desires	Program Executives	During Phase 1 of the Transformation Life-cycle in order to help determine what should be studied. During Phase 3 of the Transformation Life-cycle to aid in forming decisions and negotia-tions.

Role	What Is Communicated?	Who Is Engaged?	What Triggers the Communication?
			During Phase 4 of the Transformation Life-cycle to assist in form-ing the basis for budget requests. During Phase 4 of the Transformation Life-cycle to assist in which pilots should be sche-duled and to assist with scale-up decisions.
Politician (cont.)	• Engaging people to determine the organization's overall direction and movement	Governance Team Members	During Phase 1 of the Transformation Life-cycle in order to help determine what should be studied. During Phase 3 of the Transformation Life-cycle to aid in reviewing the recommendations from the transformation study. During Phase 4 of the Transformation Life-cycle to best formulate investment and budget requests.
	• Building trust in EA and the process	Program Area Execu-tives and Subject Matter Experts, Program Op-erations Specialists, Governance Teams	There is no trigger for this event. This is a continuous process of outreach both in pres-entation and through actions. Enterprise arc-hitects should be meet-ing regularly with EA stakeholders in order to spread the word on the value of the program. Additionally, the actions and results associated

Role	What Is Communicated?	Who Is Engaged?	What Triggers the Communication?
			with the EA program will do the same.
Politician (cont.)	• Mediating disputes and perceived differences between the key participants	Program Area Executives, Governance Teams	During Phase 1 of the Transformation Lifecycle when there are differences in opinion on what should be studied.
			During Phase 3 of the Transformation Lifecycle when there are difference in opinion between subject matter experts, stakeholders, executives, and operations staff.
			During Phase 4 of the Transformation Lifecycle to assist in differences of opinion during the investment and budget processes.
Coordinator	• Drive the scheduling of meetings, interviews, and review sessions	Program Area Executives and Subject Matter Experts, Program Operations Specialists, Governance Teams	There is no trigger for this event. The enterprise architect is largely the facilitator of transformation activities. As such, there are many coordination roles that the enterprise architect can play throughout the Transformation Lifecycle. This is particularly true in Phases 1, 2, and 3 of the Transformation Lifecycle.
	• Drive the integration of EA and CPIC	Program Area Executives, Capital Planners	Throughout Phase 2 of the Transformation Life-

Role	What Is Communicated?	Who Is Engaged?	What Triggers the Communication?
	information, people, and processes		cycle the eventual linkage to CPIC should be considered.
			At the point where Phase 2 is complete and Phase 3 is set to take place, the integration work should be in focus for the enterprise architect.
Coordinator (cont.)	• Drive the integration of EA and Budget Formulation	Program Area Executives, Budget Specialists	Throughout Phase 2 of the Transformation Lifecycle the eventual linkage to Budget should be considered.
			At the point where Phase 2 is complete and Phase 3 is set to take place, the integration work should be in focus for the enterprise architect.
Marketer/ Salesperson	• Communicating the value of engaging EA in the organization's transformation initiatives	Program Area Executives, Program Operations Specialists, CIO	There is no trigger for this event. The enterprise architect should be actively performing outreach to spread the word about the value of the enterprise architecture program. At least 25% of the enterprise architect's time should be focused on outreach and marketing.
	• Communicating the quality and value of the recommendations within the architecture	Program Area Executives, Capital Planners, Governance Teams, Budget Specialists, Stakeholders	Although this should occur actively, it is particularly critical throughout Phase 2 of the Transformation Lifecycle. In Phase 2, the

Role	What Is Communicated?	Who Is Engaged?	What Triggers the Communication?
	deliverables		enterprise architect is advocating the ideas and recommendations that emerge throughout the development of the blueprint.

EXERCISE 1-1: IDENTIFYING EA ROLES IN YOUR ORGANIZATION

Directions: Working individually, take 10-15 minutes to consider how you would perform these roles within your own organization. In the matrix below, list who you might engage while performing each role, what you would communicate, how frequently you might engage that person, and the challenges you might face in these communications.

Be prepared to participate in a class discussion about the types of people to engage with each role, the frequency of communications, and the challenges that need to be met.

Role	Who Would You Engage?	How Frequent Are the Communications?	What Will Be the Challenges?
Information Gatherer			
Facilitator			
Idea Generator / Analyst			
Politician			
Coordinator			
Marketer/Salesperson			

⭐ LESSON SUMMARY: KNOW THE PURPOSE OF EA AND YOUR ROLES

Enterprise architecture is a structured planning discipline where architecture practitioners facilitate the planning and implementation of change within their customers' organizations.

There are four principles that we discussed in this lesson:

1. EA is about Business Transformation to Improve Performance

2. EA is a Service Delivered to the Business

3. Architecture Practitioners are Change Agents

4. EA is about Communication – Communication – Communication…

The enterprise architect plays many roles as he or she engages many different audiences. In this lesson we discussed the six key roles for the enterprise architect:

1. Information Gatherer

2. Facilitator

3. Idea Generator

4. Politician

5. Coordinator

6. Marketer/Salesperson

Beyond those six key roles, we explored the people that might be engaged while playing those roles and the type of information that could be communicated during these interactions. Specifically, we listed the fact that enterprise architects should have a wide array of organizational awareness and should interact with:

- Program Area Executives
- Program Operations Specialists
- System Owners
- CTO
- Governance Teams
- Stakeholders
- Human Capital Specialists
- Budget Specialists

- Strategic Planners
- Financial Analysts

These interactions are intended to communicate information such as:

- Who are the stakeholders?
- What are the wants and needs of the stakeholders?
- Where are the areas for improvement based on the stakeholder analysis?
- What are the goals and objectives for the organization?
- What products and services will be offered by the organization?
- What will the processes look like within the organization?
- What are the human capital and information technology resources that will be used?
- How much will the resources cost for the organization?

Lesson 2

Introduction to MBT &

MBT Phase 1: Select the Business Areas to Blueprint

✳ LESSON OBJECTIVES

At the end of this lesson, you will be able to do the following:

- Provide an overview of the MBT

- Explain the process for prioritizing business areas for modernization blueprinting

- Explain the relationships between the business areas and key financial and performance indicators

✳ INTRODUCTION TO THE MBT

The MBT is designed to help answer some of today's more challenging business problems:

Mission Performance

- What are the business changes I really need to have?

- Where should we focus on improving performance?

- Where are the opportunities for and risks for program collaboration, data sharing, and standardized business processes?

Investment Performance

- Where do we spend program funds?

- Do our investments support the business needs?

HR Performance

- What is level of resources I need to have in place, and where?

- How can I move back office resources into mission functions?

IT Performance

- Where do I have redundant buying?

- Where am I over/under invested? How do I know?

- What metrics do I need?

The MBT is different from other approaches because:

- The planning is guided by the architects but the knowledge and skills come from business community

- The analysis of your business includes more than just IT: *stakeholder analysis, strategy analysis, process analysis*

- The MBT delivers a Modernization Blueprint as well as short and long-term transition plans for implementation

- Information is structured to support investment planning and the CPIC process

- The MBT is designed for maximum buy-in and high probability of implementation – no shelf ware

The MBT consists of five phases that are described in the following five visuals:

Select the Business Areas to Blueprint (annual)

Prepare for the Blueprint

Develop the Blueprint (4-6 months)

Implement the Blueprint Recommendations (1-5 years)

Maintain the Blueprint

The 5th Phase of the MBT is focused on continuous maintenance of the business area architecture.

Perform Blueprint Project Management

Author the Modernization Blueprint and obtain governance approvals

Incorporate approved Modernization Blueprint into enterprise architecture

Perform business transformation initiation tasks

Implement solution and conduct change management tasks

Maintain the Blueprint and the architecture

The full MBT set of phases and steps is illustrated in the following visual:
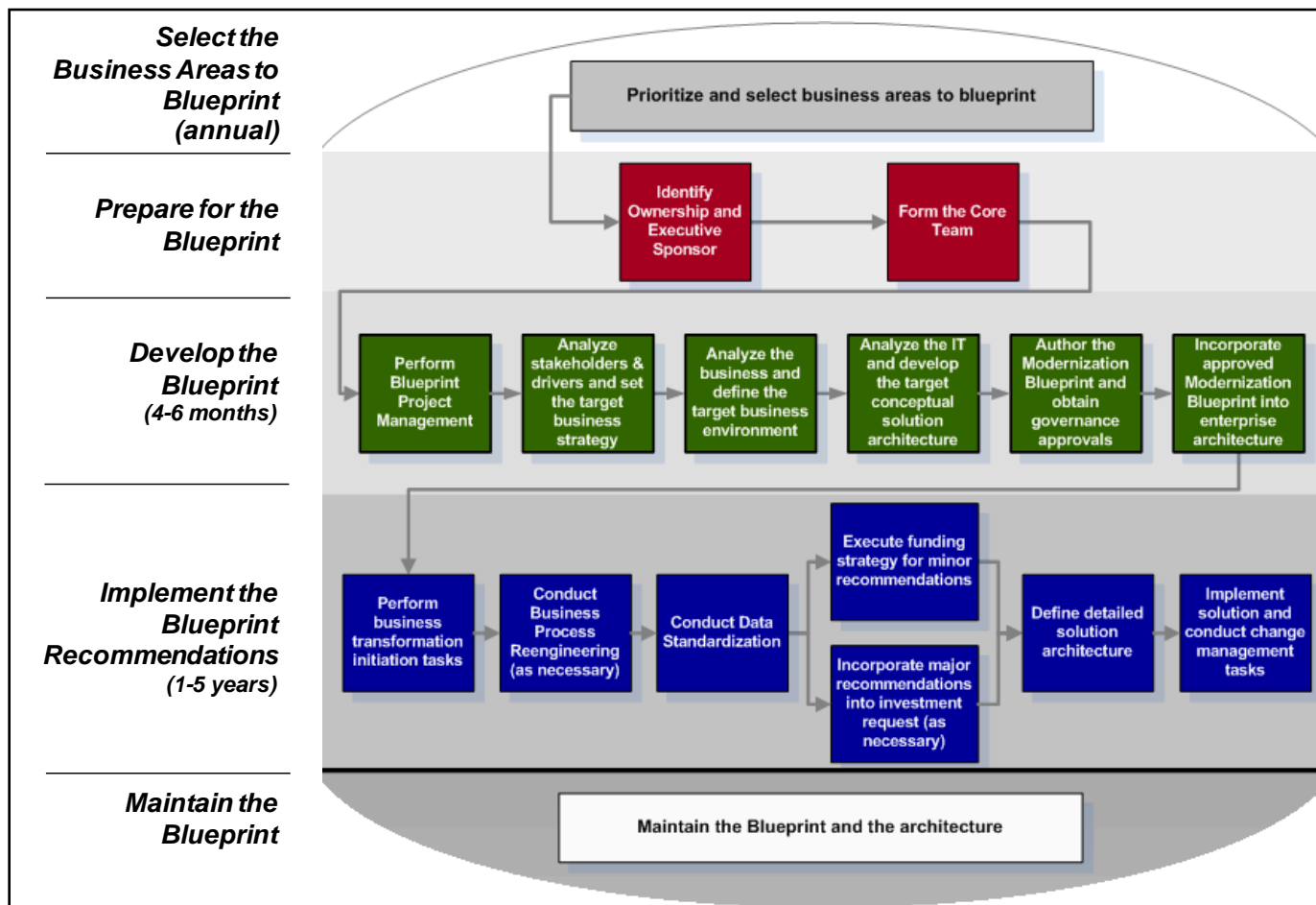
Each step within the MBT is further broken into tasks that are described in the guidance white papers, work product templates, and MBT project plan.
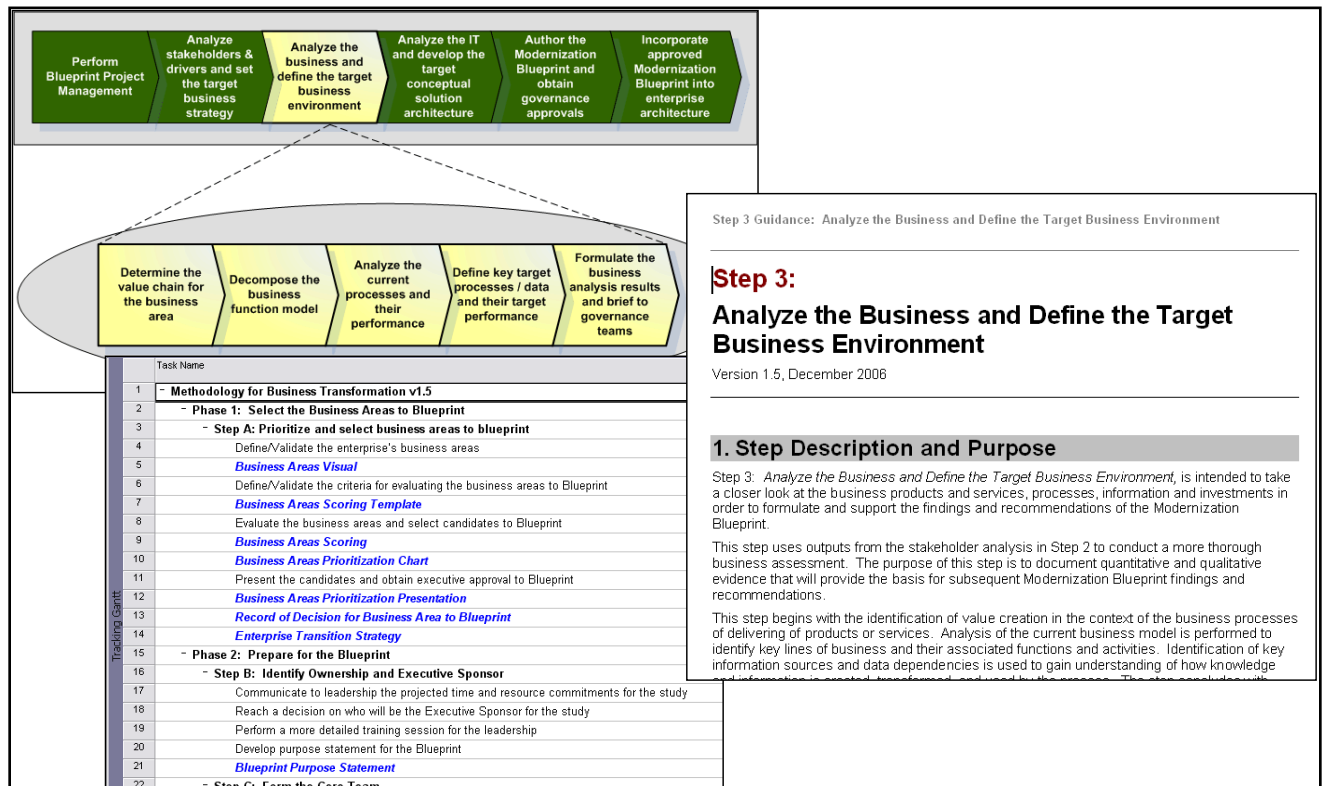
✴ OVERVIEW OF PHASE 1: SELECT THE BUSINESS AREAS TO BLUEPRINT

Phase 1 includes only one step which is *Step A: Prioritize and Select Business Areas to Blueprint.* This step is intended to clearly articulate the business areas that should create a modernization blueprint within the enterprise. The detailed activities for Step A are designed to define or refine the list of business areas within the enterprise, and then to apply quantitative, measurable criteria against those business areas in order to determine the business areas with the greatest need for transformation. This step should be conducted annually in order to prioritize business transformation activities.
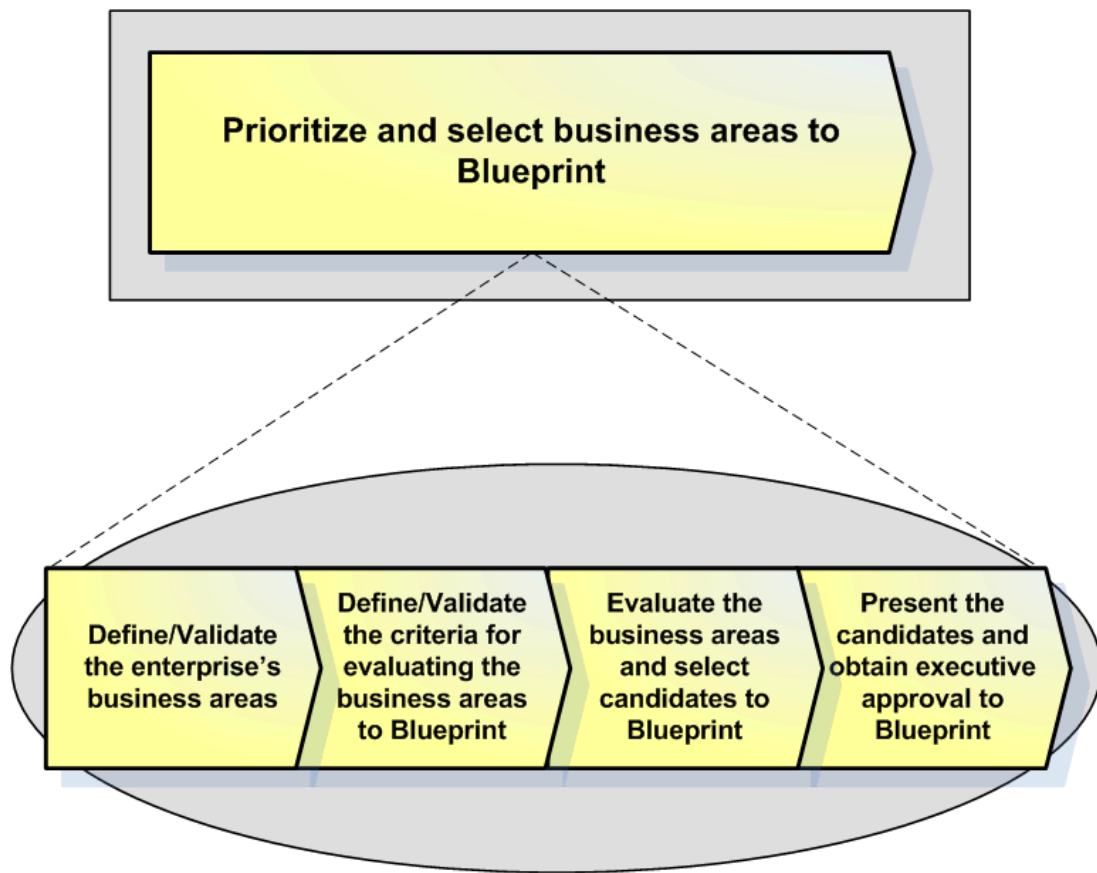
KEYS TO SUCCESS:

THIS STEP SHOULD BE COMPLETED ANNUALLY. BY COMPLETING THIS STEP DURING YOUR BUDGET PLANNING CYCLE, YOU CAN SCHEDULE YOUR YEAR'S MODERNIZATION ACTIVITIES AND INTEGRATE THOSE ACTIVITIES WITH WORK/PERFORMANCE PLANS.

- *Business Areas Visual:* This visual is generated to illustrate each of the organization's business areas. Additionally this visual is color coded to show business areas that are at various stages of transformation activities. These business areas should be assessed each year to determine transformation priorities.
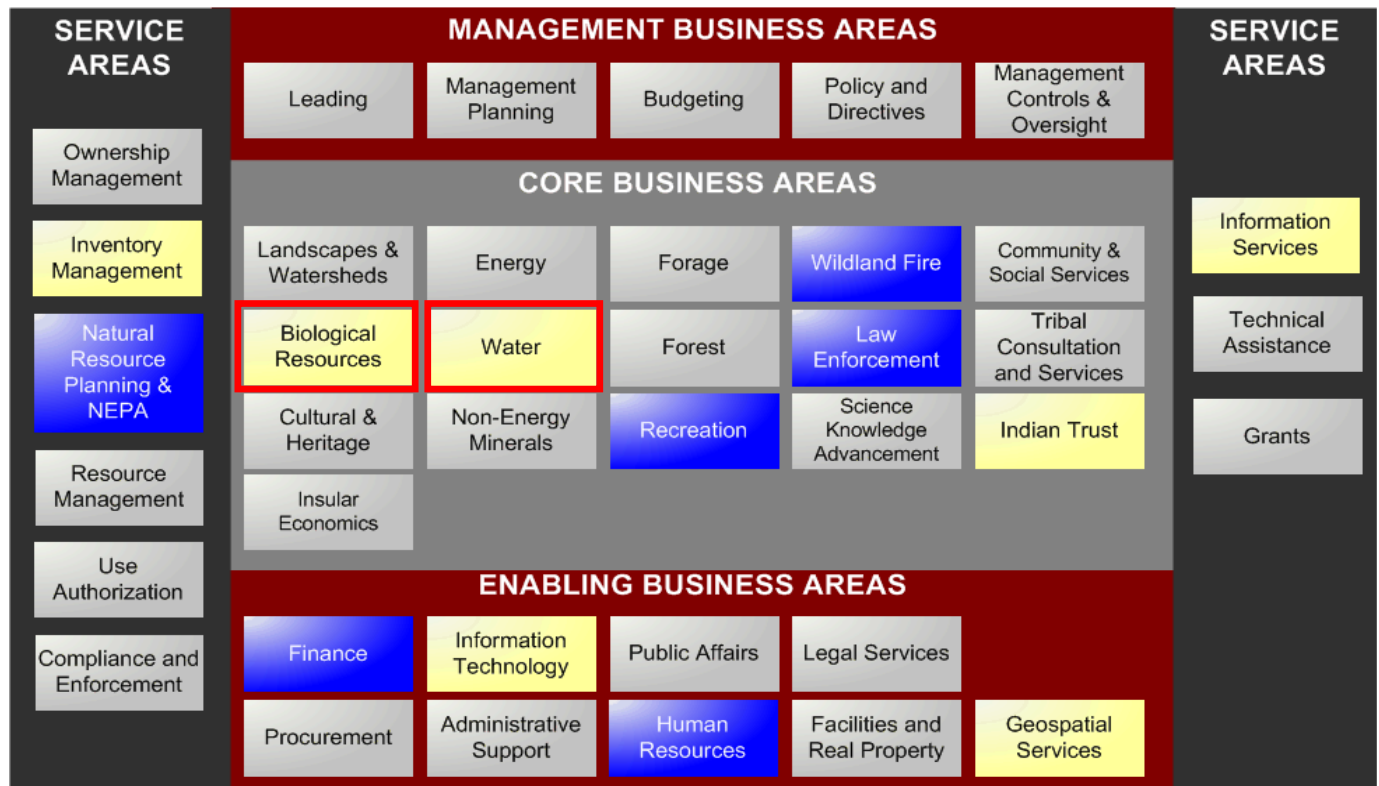
- *Business Areas Scoring Template:* This is a MS Excel workbook that contains the criteria by which the business areas are scored. The template is setup to assess financial spending and performance results using two criteria from each category. The template also includes weights for each criterion.

	Business Area Prioritization Scoring				
	Financial Spending		**Performance Results**		
	% of Overall Labor Costs Score 1-4 Weight: 70%	% of IT Portfolio Score 1-4 Weight: 30%	PART Outcome Score 1-4 Weight: 50%	PAR Results Score 1-4 Weight: 50%	Executive Sponso for Study Yes = 4 || No = 1
CORE BUSINESS AREAS					
Business Area 1	4	1	2.1	2	4
Business Area 2	4	1	1.56	1	1
Business Area 3	1	1	2	2	1
Business Area 4	2	2	2	2	1
Business Area 5	1	1		1	1
Business Area 6	1	1	2	4	1
Business Area 7	3	2	3	2	4
Business Area 8	1			1	1
Business Area 9	2	1	1	3	1
Business Area 10	2	1	1	1	4
Business Area 11	3	1		4	1
Business Area 12	3	1	2.2	4	4

- *Business Areas Prioritization Chart:* This visual shows the results of the business area scoring. The scoring is conducted and the visual illustrates the business areas that are candidates for modernization. Business areas that have relatively high spending and relatively low performance should be candidates for modernization.

Core Business Area Prioritization
(Larger Bubbles Have Executive Sponsors)
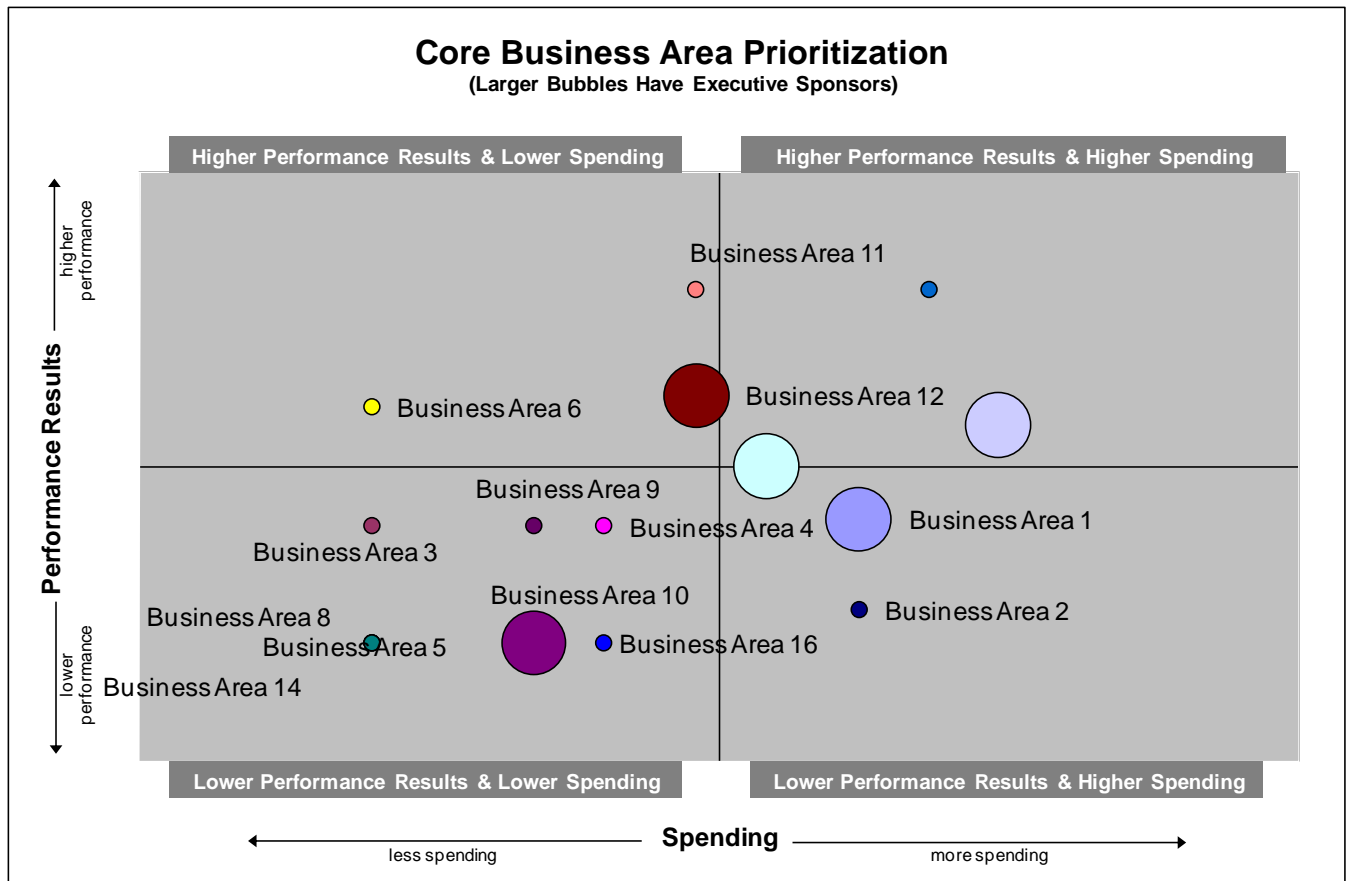
- ***Business Areas Prioritization Presentation:*** This presentation is intended to explain the methods and results of the scoring of business areas and to present candidate business areas to executives for consideration.
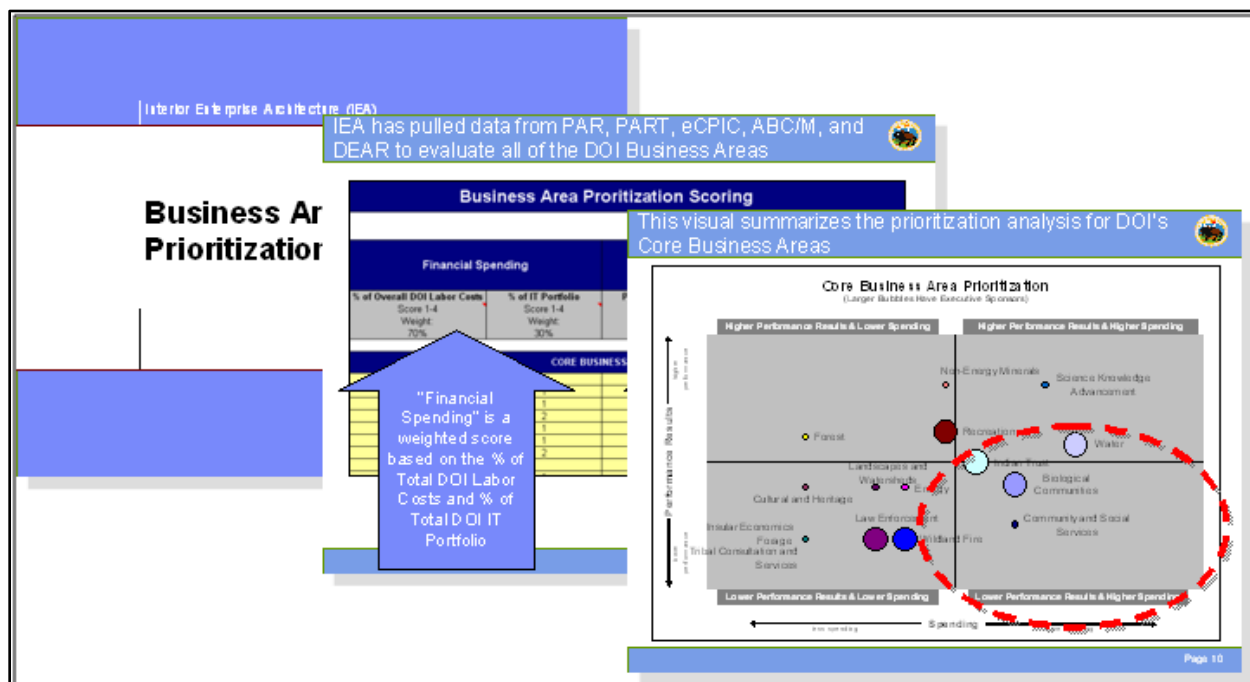
EXERCISE 2-1: ANALYZE BUSINESS AREAS FOR MODERNIZATION

Directions: Working individually, take 10 minutes to read the sample performance and spending data and to score business areas 1 and 2.

Next, take 10 additional minutes to create a prioritization chart with your team and to discuss the ramifications of briefing this chart to executives.

Following the intra-group discussion time, be prepared to participate in a class discussion about your chart and your group's observations about briefing these materials to executives.

✴ LESSON SUMMARY: ENGAGE LEADERSHIP TO STEER EA RESOURCES

An effective EA program takes its direction from executive leadership and their strategic needs. This lesson outlined an approach for how EA practitioners can support executive leadership by preparing an analysis of the enterprise's business areas using existing spending and performance data. Sources of such data include:

- Performance Accountability Report (PAR):
  http://www.doi.gov/ppp/

- Program Assessment Rating Tool (PART):
  http://www.whitehouse.gov/omb/part/index.html

- Budget:
  http://www.whitehouse.gov/omb/budget/

- IT Spending:
  http://www.whitehouse.gov/omb/budget/fy2008/sheets/itspending.xls

This data can be gathered, mapped to business areas, and plotted to show the business areas that spend relatively higher amounts and have relatively lower performance based on these pre-existing, quantitative data sets.

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Lesson 3

MBT Phase 2: Prepare for the Blueprint

✳ LESSON OBJECTIVES

At the end of this lesson, you will be able to do the following:

- Explain the process for obtaining an executive sponsor
- Explain the techniques for developing the core team

✳ OVERVIEW OF PHASE 2: PREPARE FOR THE BLUEPRINT

Phase 2 is comprised of steps that are designed to setup an environment conducive to creating a successful modernization blueprint. In order to create a modernization blueprint that is effective in achieving transformation within a business area, the enterprise architecture practitioners need solid support from the business area's leadership. Phase 2 is designed to produce a designated executive sponsor and core team that will provide the leadership and subject expertise needed to promote transformation.

Phase 2 is more than forming teams and naming leaders however. The steps within Phase 2 are also designed to:

- promote a common declaration of why the blueprint is necessary,
- level set expectations of the required resources and time that the blueprint creation will require, and
- achieve a declaration of commitment by individuals on the core team to seek and achieve transformation.

Phase 2 features a series of team oriented work products that are designed to establish cohesiveness within the team and consistency of expectations for the modernization blueprint.

✴ PHASE 2, STEP B: IDENTIFY OWNERSHIP AND EXECUTIVE SPONSOR

The *Identify Ownership and Executive Sponsor* step is intended to obtain a wide understanding from the business area leadership as to the process and time commitment for performing the transformation planning and then to select the official executive sponsor for the study and formulate a specific purpose for the study being completed. It is important that the leadership understand the breadth of the study and to jointly formulate a purpose for the study so that when the study is conducted, the core team and the chosen executive sponsor have a clear indication of what is expected and the mindset of the business area's leadership at the time of project inception. It is important to note that this entire step can be accomplished in a single-day facilitated workshop with the business area leadership.
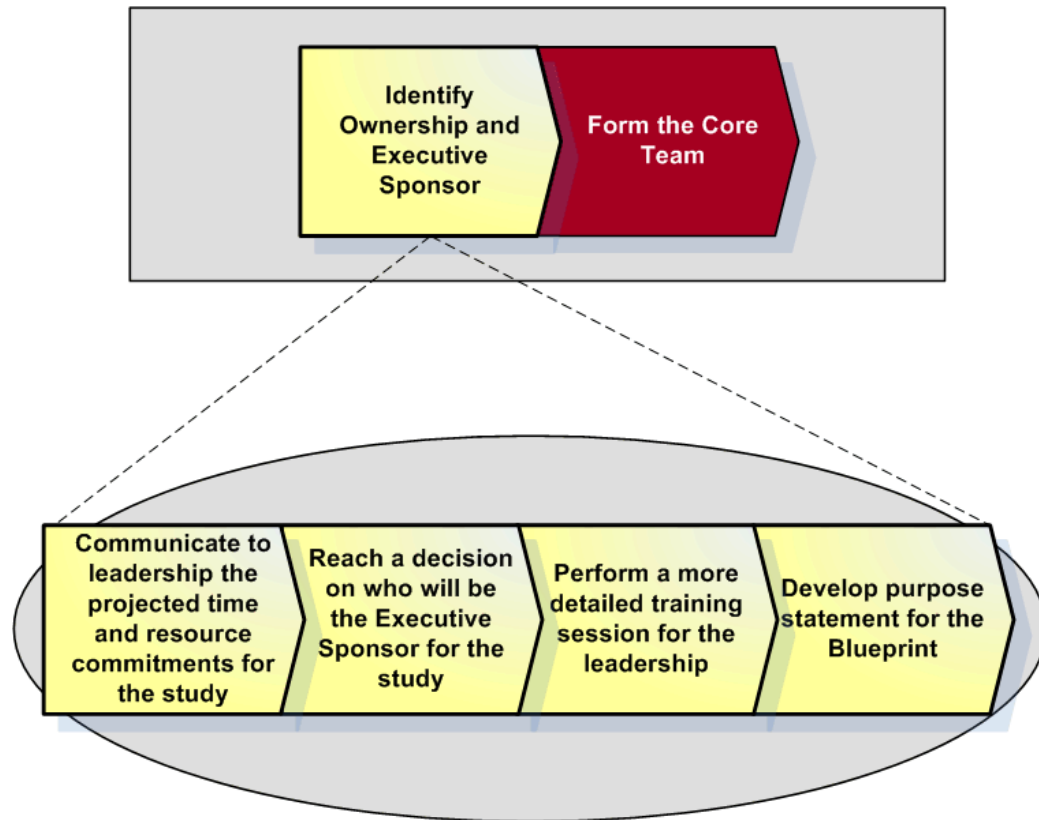
KEYS TO SUCCESS:

MAKE THE MOST OF YOUR TIME WITH THE BUSINESS LEADERSHIP BY COMPLETING THIS ENTIRE STEP IN ONE WORKSHOP. THIS ENSURES THAT YOU CAN MOVE TO THE NEXT STEP IN A TIMELY MANNER WITHOUT ADDITIONAL WORKSHOPS.

- *Blueprint Purpose Statement:* This is the template that captures the leadership's un-animous thoughts on what purpose the blueprint should serve for the business area. This template has signature lines for each of the business area leaders whose organizations are participating in the study. A sample purpose statement is shown below.

Blueprint Purpose Statement

Date: xx/xx/xxxx

Business Area: [*enter business area here*]

Purpose Statement	The [enter business area] Business Area includes functions and resources within [enter affected Bureaus]. The leadership from these Bureaus has determined that a Modernization Blueprint is appropriate for this business area. The intent of this Modernization Blueprint is to bring similarly focused organizations together to formulate a vision and roadmap for the future business environment and resource needs for this business area. This Modernization Blueprint is being conducted in order to improve our services for citizens and increase efficiencies within our organizations.

Signature: Executive Sponsor   Date:

Signature: Organization Leader   Date:

✳ PHASE 2, STEP C: FORM THE CORE TEAM

The *Form the Core Team* step is intended to get the right people to participate in the MBT process and to ultimately help guide and shape the findings and recommendations captured in the modernization blueprint. The executive sponsor solicits key resources from each of the affected organizations and forms the core team that will remain as a standing body throughout the MBT process. This step concludes with a commitment agreement that bonds the core team into active and constructive participation throughout the MBT process.
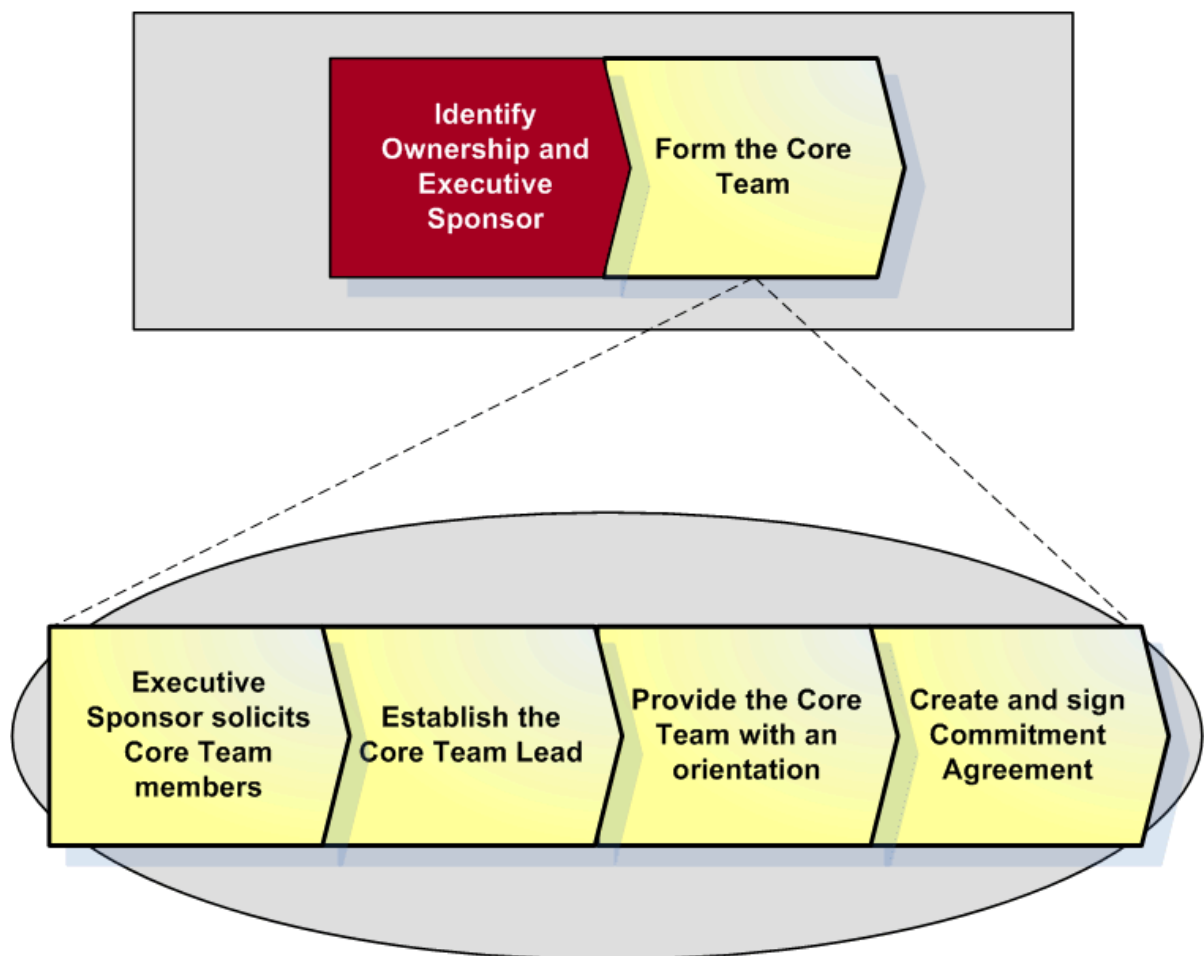
KEYS TO SUCCESS:
ENSURE THAT YOU HAVE CORE TEAM MEMBERS THAT ARE EAGER TO PARTICIPATE IN MODERNIZATION PLANNING. A GOOD CORE TEAM IS MORE IMPORTANT THAN QUICKLY COMPLETING THIS STEP.

- *Core Team Solicitation Memorandum:* This memorandum serves to solicit business area leadership to gather potential members for the core team. This memorandum restates the purpose statement for the blueprint (created in the previous step), the expected time commitments, and asks for nominations of core team members to represent affected organizations.

To: Heads of Bureaus
From: Office of Environmental Policy and Compliance

Subject: Request for designation of NRMT members as Planning/NEPA Blueprint core team members and request for subject matter experts

The DOI Investment Review Board has directed the BLM to lead a Modernization Blueprint effort for Land Use Planning and NEPA across the Department. Attached is the IRB decision directing this study. My office is sponsoring this effort. The DOI Natural Resources Management Team/ NEPA Contacts (NRMT) members were briefed on this activity during a September 15th meeting.

To develop the blueprint, a small Land Use Planning and NEPA mission-focused core team is required for optimal results. The qualifications of your representative to the NRMT fit the requirements to handle the critical core team member role. Therefore, I would like to request the participation of your NRMT representative on the core blueprint development team. To meet IRB timeframes, please respond to this request by COB, Friday, September 23rd confirming that your NRMT member will be your representative on this effort or provide the name of a different representative.

In addition, the core team member will need access to bureau or office subject matter experts in three areas: NEPA, Land Use Planning, and the IT systems supporting these areas. This access will be needed at critical times during the blueprint development for interviews and validation activities.

The modernization blueprint approach will facilitate a high level, structured approach to identifying common and unique land use plan development and associated NEPA processes. It will also be indentifying supporting Information Technology systems. The end result will be process improvement and supporting IT system recommendations to improve this DOI Mission critical function. Your representative will be your organization's voice in the recommendations that will be made to the DOI Investment Review

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- ***Core Team Formation Memorandum:*** This memorandum serves to communicate and make official the existence and purpose of the core team as well as the membership that has been drawn from each of the affected organizations. This is an official communications mechanism and serves to notify personnel of their representatives.

United States Department of the Interior

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IN AMERICA

IN REPLY REFER TO:

Month XX, 20XX

MEMORANDUM

To: [*Bureau Leadership*]

From: [*Core Team Executive Sponsor*]

Subject: Formation of the [*enter business area*] Modernization Blueprint Core Team

The DOI Investment Review Board has commissioned the study of the [*enter business area*] Business Area with the intent that a Modernization Blueprint will be developed and implemented. The process of developing and implementing the Modernization Blueprint will be guided by a Core Team of business area individuals that have the responsibility and authority to represent their organizations in this process. As the Executive Sponsor for this initiative, I am authoring this memorandum to communicate the intent of this initiative and to identify the membership of this important Core Team.

- *Core Team Commitment Agreement:* This is a short document that builds from the blueprint statement of purpose (Step B) and the record of decision (Step A) and commits the members of the core team to participate in the development and implementation of the modernization blueprint.

Core Team Commitment Agreement

Date: xx/xx/xxxx

Business Area: [*enter business area here*]

___

This Core Team has been formed in order to guide the development and implementation of the [*enter business area*] Business Area Modernization Blueprint. This Modernization Blueprint is intended to address the following purpose statement:

   [*ENTER STATEMENT OF PURPOSE FROM STEP B*]

The undersigned individuals, as members of the Core Team, are committed to the success of this transformation initiative. This commitment extends to the active and constructive participation in the development and implementation of the Modernization Blueprint. The undersigned Core Team members are committed to participating in the following roles:

- Attend and Participate Actively and Constructively in Core Team Meetings
- Provide Business Area Strategic and Tactical Expertise
- Contribute to Core Team Discussions
- Provide Access and Introduction to Subject Matter Experts and Stakeholders During Blueprint Creation
- Participate in Subject Matter Expert and Stakeholder Interviews
- Review and Approval of Project Documentation
- Act as Communications Plan Focal Point for their Organization
- Brief Blueprint Progress as Required
- Develop a funding strategy for blueprint implementation that is in the best interest of organizations participating in this study

In order to performing these minimum roles, the Core Team members commit to allocating the time and effort necessary to effectively represent their organizations and stakeholders.

✳ LESSON SUMMARY: ENGAGE LEADERSHIP TO STEER EA RESOURCES

In this lesson, we learned how to engage leadership and to formulate a committed core team of business representatives.

- We first learned to work with business leaders to publish a statement of purpose and to appoint and executive sponsor.

- We continued by learning that the executive sponsor can solicit core team nominations through an official nomination process that involves the other business leaders.

- Finally, we learned that the core team should have a commitment agreement that makes expectations clear at the start of this process.

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Lesson 4

MBT Phase 3: Develop the Blueprint

✳ LESSON OBJECTIVES

At the end of this lesson, you will be able to do the following:

- Explain the process for developing a modernization blueprint
- Explain how data and business analysis fit together within the business architecture
- Explain how the solution architecture enables the business architecture

✳ OVERVIEW OF PHASE 3: DEVELOP THE BLUEPRINT

Phase 3 is designed with steps that result in practical and actionable findings and recommendations for transformation within the business area in focus. The steps within Phase 3 include analytical techniques for the entire "line of sight" including performance, business, data, services, technology, and solutions analysis. The intent behind the design of Phase 3 is to provide architecture practitioners with a wide ranging set of analysis activities and techniques so that the final recommendations can include not just technology recommendations but also process, performance, human capital, and services recommendations.

The steps within Phase 3 are based on best of breed techniques from a variety of public domain analysis and planning efforts. Some of these techniques originated within the private sector while others have originated within the public sector. The melding of these techniques and best practices into Phase 3 provides the architecture practitioner with the tools necessary to facilitate the analysis and author the business area's modernization blueprint.

✳ PHASE 3, STEP 1: PERFORM BLUEPRINT PROJECT MANAGEMENT

The Perform Blueprint Project Management step is intended to establish the key supporting project management tasks necessary to successfully manage and execute the blueprint effort. The detailed activities for Step 1 will ensure the project team follows solid project management practices, establishes its charter in line with the blueprint's stated purpose, and executes its critical communications strategy.
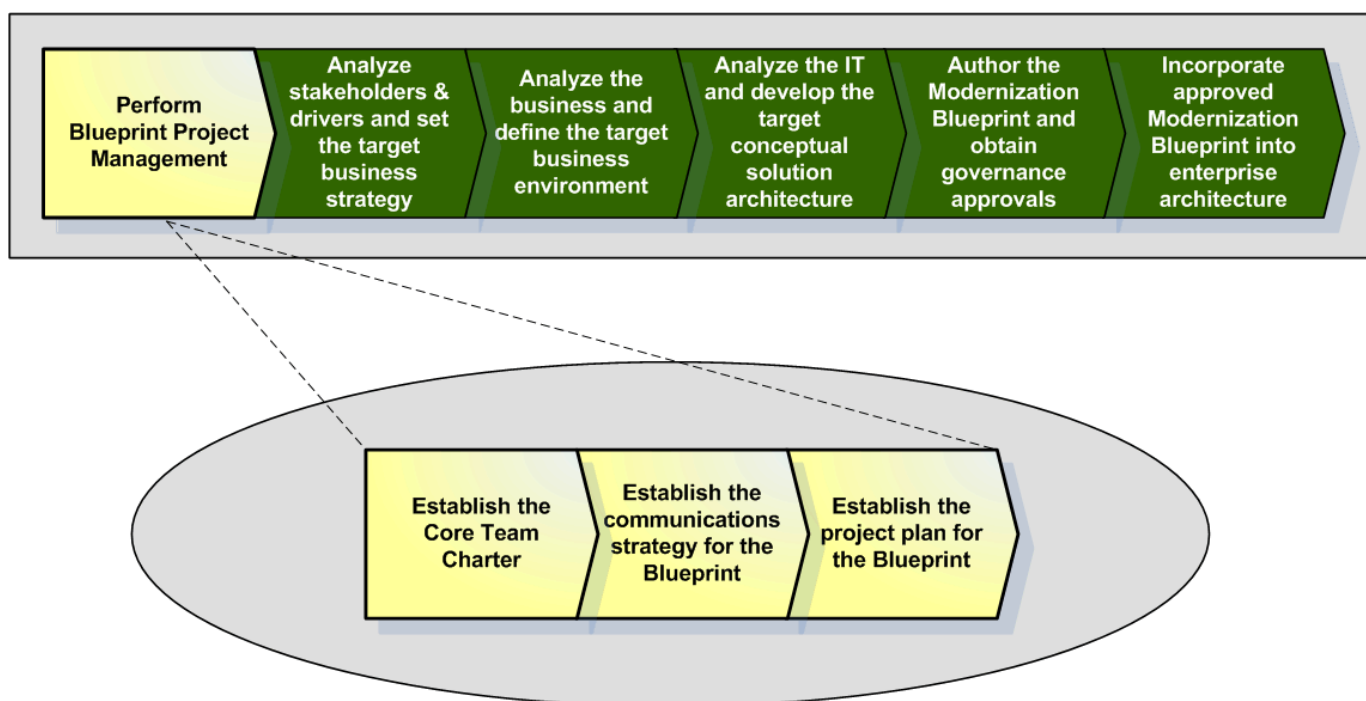
KEYS TO SUCCESS:

THE ROLE OF THE ENTERPRISE ARCHITECT IS TO PROVIDE FACILITATION AND SUPPORT TO THESE ACTIVITIES WHILE ALLOWING THE CORE TEAM TO BEGIN MAKING GROUP DECISIONS AND SOLIDIFYING THEIR GROUP DYNAMIC.

- ***Blueprint Core Team Charter Template:*** The core team should be chartered into existence so that expectations, participants, scope, and deliverable definitions are established.

DRAFT

Department of the Interior's (DOI) Geospatial Modernization Blueprint
|
Draft Project Charter
1-30-2006

Introduction:

Why modernize the Department of the Interior's (DOI) investment in geospatial data* and services*? To the DOI, location is ubiquitous in all our endeavors. The Geospatial Modernization Blueprint is a planning practice that documents the business activities performed by the DOI in fulfilling its mission and goals, and identifies the information technology and other resources needed to support those activities. The identification and deployment of common architectural elements across the DOI will facilitate the sharing of information and services and enhance overall mission effectiveness. DOI has literally hundreds of mission functions that rely on location and addresses for business processes such as land use authorizations, management of surface and subsurface minerals, fire and emergency response, campground and reservation systems, engineering facilities or conducting a wide variety of important scientific studies. Many of these mission objectives require the use of the same types of geospatial information or the same type of capabilities. The enterprise GIS software license has already begun to save DOI millions of dollars over the first five years. The Blueprint is designed to identify additional opportunities for the common use of proven solutions to improve the quality, defensibility, and reduce risk of providing or integrating geospatial products into DOI business. Additional benefits of the Blueprint include:

- Creation of long term savings and business efficiencies
- Improve the ease, usability and reuse of location based information and services
- Improve the effectiveness of DOI investments

- *Communications Plan:* All projects should include a communication plan to ensure that all necessary parties are engaged and communications events are planned and re-sources. These activities should be integrated into the overall project plan.

Stakeholder Classes	Target Audience	What do they need to know?	What would they want to know?	How much detail do they need?	What is the communication vehicle? -email, newsletter, presentation…
Executive Management	DOI Secretary				
Executive Management	DOI Assistant Secretaries				
Executive Management	DOI CIO				
Senior Business Management	Program Directors				
Senior Business Management	Program Managers				
IT Management	System Owners				
IT Operations	IT Folks (different levels)				
Architecture	Bureau Architects				
IT Management	Bureau CIOs				
Executive Management	Executive Sponsor				

- ***MBT Blueprint Project Plan:*** The blueprint project plan should contain all the necessary activities, dependencies, resources and deliverables to support the successful development of the blueprint.

		Task Name	redecessor:
13		⊟ Step B: Identify Ownership and Executive Sponsor	
14		Communicate to leadership the projected time and resource commitments for the st	11
15		Reach a decision on who will be the Executive Sponsor for the study	14
16		Perform a more detailed training session for the leadership	15
17		Develop purpose statement for the Blueprint	16
18		*Blueprint Purpose Statement*	17
19		⊟ Step C: Form the Core Team	
20		Executive Sponsor solicits Core Team members	18
21		*Formed Core Team*	20
22		Establish the Core Team Lead	21
23		Provide the Core Team with an orientation	22
24		Create and sign Commitment Agreement	23
25		*Core Team Commitment Agreement*	24
26		⊟ Phase 3: Complete the Blueprint	
27		⊟ Step 1: Perform Blueprint Project Management	
28		Provide the Core Team with an overview of the MBT and the transformation cycle	25
29		Establish the Core Team Charter	28
30		*Core Team Charter*	29
31		Establish the communications strategy for the Blueprint	30
32		*Communications Strategy*	31
33		Establish the communications plan for the Blueprint	32
34		*Communications Plan*	33
35		Execute the Communication Plan	34
36		Establish the project plan for the Blueprint	28
37		*Project Plan for Blueprint*	36,33

✴ PHASE 3, STEP 2: ANALYZE STAKEHOLDERS & DRIVERS AND SET THE TARGET BUSINESS STRATEGY

The step *Analyze Stakeholders/Drivers and Define the Target Business Strategy* provides the opportunity to evaluate the strategic objectives, business man-dates/drivers, organizational readiness, products and services, and the principal stakeholders of the business area. With the intended purpose of the blueprint iden-tified and established in MBT Step B, Step 2 creates the strategic business context and the key components from which the remainder of the MBT analysis will be built. Step 2 instantiates the relationship from stakeholder needs and business mandates/drivers to mission performance and scorecard to the supporting products and services. The gathering and analysis of stakeholder needs and business drivers will provide the required information to create the target business vision and strat-egy (performance architecture) for the business area. The subsequent MBT steps and blueprint development effort must align with the target goals (scorecard) and vision of the business area established in this step.
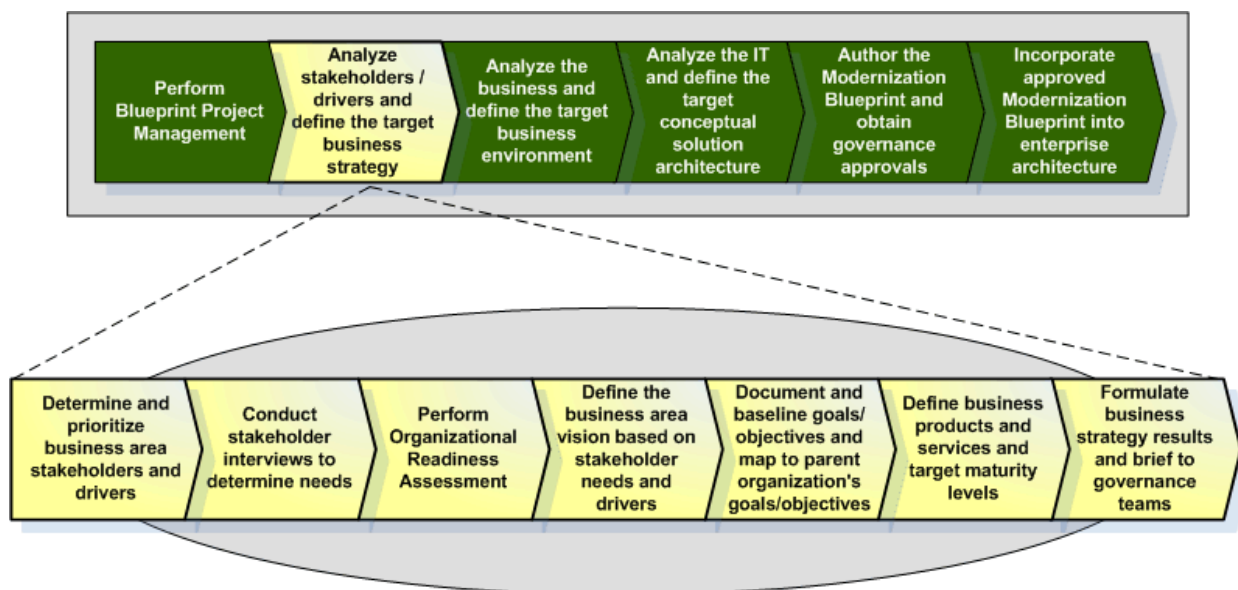
- *Stakeholder Hierarchy Diagram and Prioritized List:* The core team along with the architecture support staff will develop a list of stakeholders. These stakeholders will be classified and prioritized. The list is used to create the stakeholder hierarchy diagram which articulates stakeholder groups, stakeholder instances, and the priority of each. From this analysis, the core team will select stakeholders to interview.
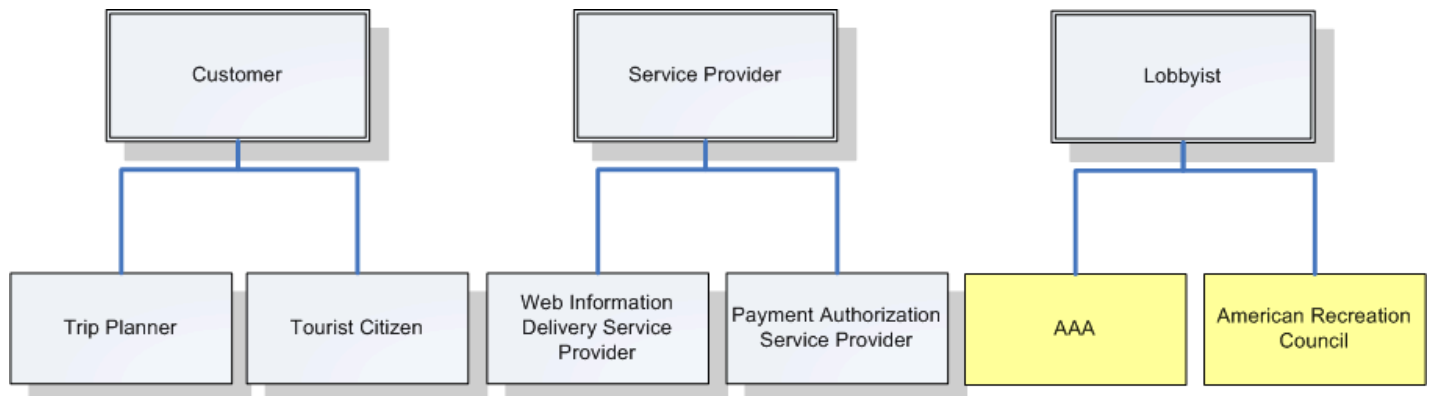
- *Business Drivers/Mandates Hierarchy Diagram and Prioritized List:* The core team along with the architecture support staff will develop a list of business drivers/mandates. These drivers/mandates will be classified and prioritized. The list is used to create the business drivers and mandates hierarchy diagram which is then used by the core team to prioritize and assess the impact of these drivers/mandates.
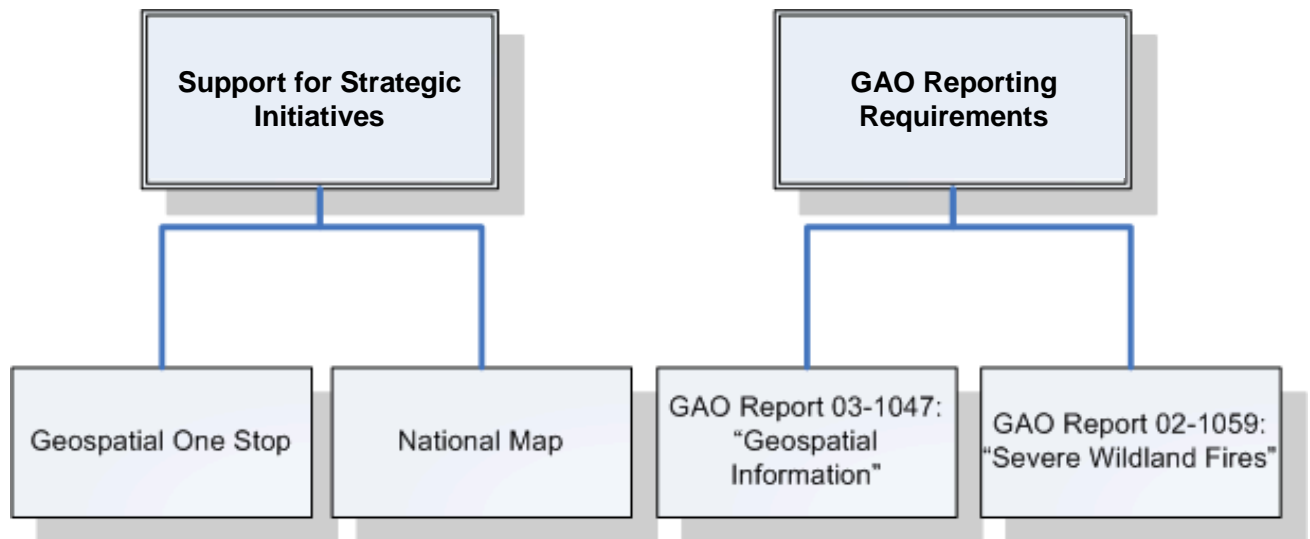
- *Stakeholder Exchange Diagram:* The architect will create an exchange diagram that identifies the products and services that the business area is delivering to its stakeholders, defined within the stakeholder hierarchy. The diagram is useful to capture the as-is products and services as well as the target products and services, i.e. those the stakeholder community is requesting. This artifact is useful for assessing needs without the confines of process and systems. This artifact is a starting point for process and data analysis as process analysts can determine how the information is exchanged and data analysts can classify the relationships between the information being exchanged.

Tourist Citizen		Recreation BFA
	Recreation Reservation	
	Recreation Opportunity Information	
	Recreation Permit Information	
	Information Request	
	Reservation Request	
	Money	
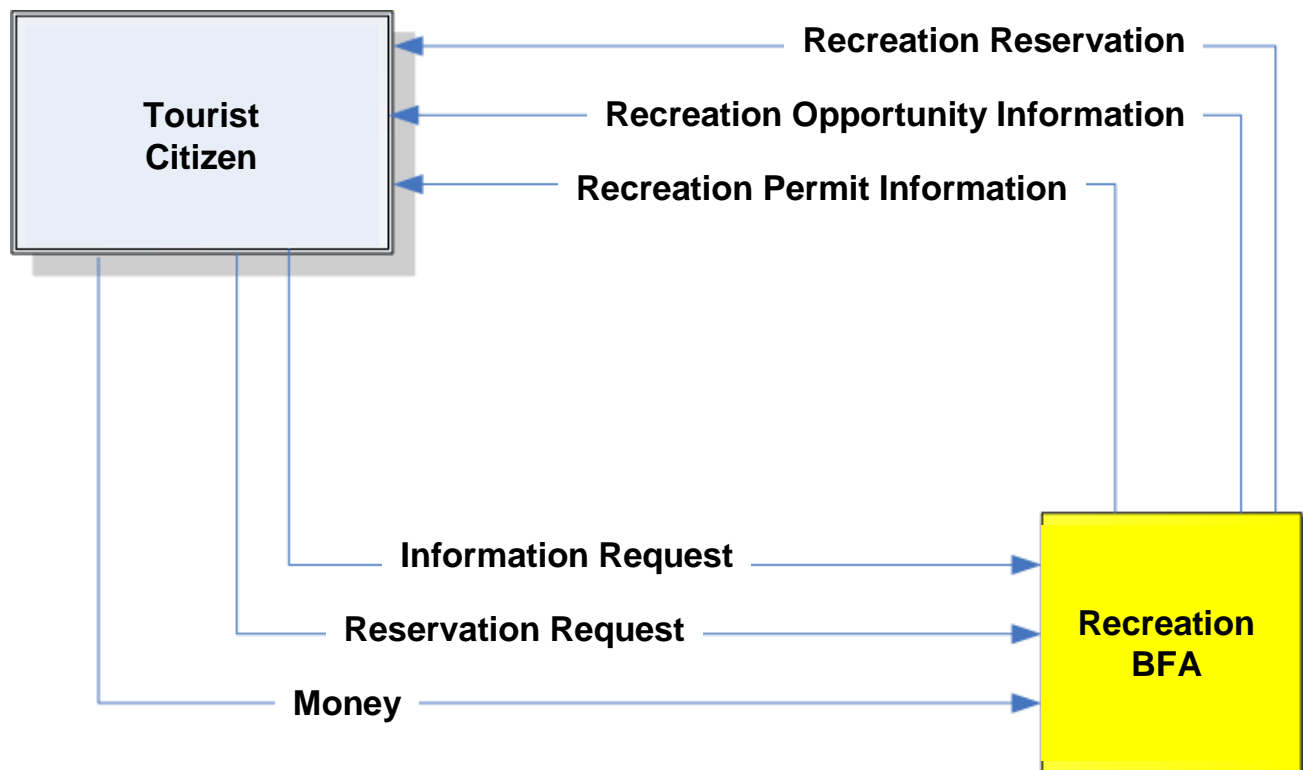
- *SWOT Diagram:* The core team will develop a Strengths, Weaknesses, Opportunities and Threats (SWOT) diagram based upon the stakeholder interviews. This analysis and diagram provides an effective communication tool for characterizing the business landscape from both an internal perspective (Strengths and Weaknesses) and an external perspective (Opportunities and Threats). The diagram is intended to provide a simple means of focusing on issues affecting the business area.

Strengths

> 50% of reservations are web based

Excellent knowledge of customer base

Weaknesses

Incomplete Recreation Data available to Citizen for trip planning

No official organization to manage change for Federal Recreation

Opportunities

Market Federal Services through 3rd Party Travel Services/ Brokers

Leverage Point of Sale Credit Card Services from Banks

Threats

Lack of Support for Federal Marketing from AAA/Etc

Legislative constraints on pricing

- *Organizational Readiness Assessment:* The organizational readiness assessment is a Microsoft Excel workbook containing several worksheets designed to assess the readiness for change within the organization. The template includes a scoring assessment and visualization worksheet to orient, capture, and visualize the results of the self-assessment. The resulting visuals can be used to communicate the results of the assessment. The scoring results when compiled will help develop organizational findings.

ORGANIZATIONAL CAPITAL			
Leadership			
	1	The organization has a clear mission that is understood by employees.	1
	2	Leadership shares information about organizational performance and decisions with employees.	1
	3	There is a regular process for receiving, logging, and responding to feedback provided by employees.	1
Strategic Planning			
Citizen and Market Focus			
Measurement, Analysis, and Knowledge Management			
Business Results			
	13	Customer satisfaction is an organizational objective and is meeting performance targets.	1
	14	Organizational products and services meet the needs of the customer base.	1
	15	The organization is focused on proving value to the customer base, and does not allow bureaucracy to stand in the way.	1
HUMAN CAPITAL			
Human Resource Focus			
	16	The organization employs the appropriate skill sets to most effectively and efficiently fulfill the mission.	1
	17	Employees cooperate and work as a team, both internally and with external partners.	1
	18	Employees are encouraged to develop their job skills so they can more effectively fulfill the organization's mission.	1
Process Management			
	19	The organization's dependencies and relationships with	1

- *Vision Document:* The core team will leverage the stakeholder analysis to create a vision document for the business area. This document should consider the work products from throughout MBT Step 2 and focus on the target state of business services and products based on stakeholder assessments. A sample vision is provided below.

DOI Geospatial Business Focus Area Vision

DOI mission areas and goals of Resource Protection, Resource Use, Recreation, and Serving Communities are effectively and efficiently enabled with geospatial data, information, and services. The vision for the geospatial business focus area is to:

➢ Improve the ease, usability, and reuse of location based information and services

➢ Create long-term savings and business efficiencies

➢ Improve the effectiveness of DOI investments.

Strategies and objectives for the achieving the geospatial vision for DOI include:

➢ Identification and development of critical reusable enterprise geospatial services and supporting business processes to improve business effectiveness

➢ Identification of areas to improve existing business process, data, or IT to support program decision making

➢ Improvement in the usefulness of existing geospatial investments and assets by:

  o Identifying opportunities to collaborate

  o Improving geospatial interoperability through appropriate standards adoption

  o Reducing duplicative data stores and business processes

  o Aligning best-of-breed existing capabilities with existing and future requirements

  o Investing in missing needed capabilities to achieve program objectives

  o Improving the quality and reliability of DOI trusted data assets.

- *Goals and Objectives Hierarchy Diagram with Baseline Data:* The core team will create a hierarchical goals and objectives diagram derived from the organization's strategic plan(s) as well as the stakeholder interviews from earlier in this step. This diagram covers the performance responsibility of the business area and the additional goals and objectives discovered during the Step 2 analysis. When available, the baseline measurement data for these goals and objectives should be documented.
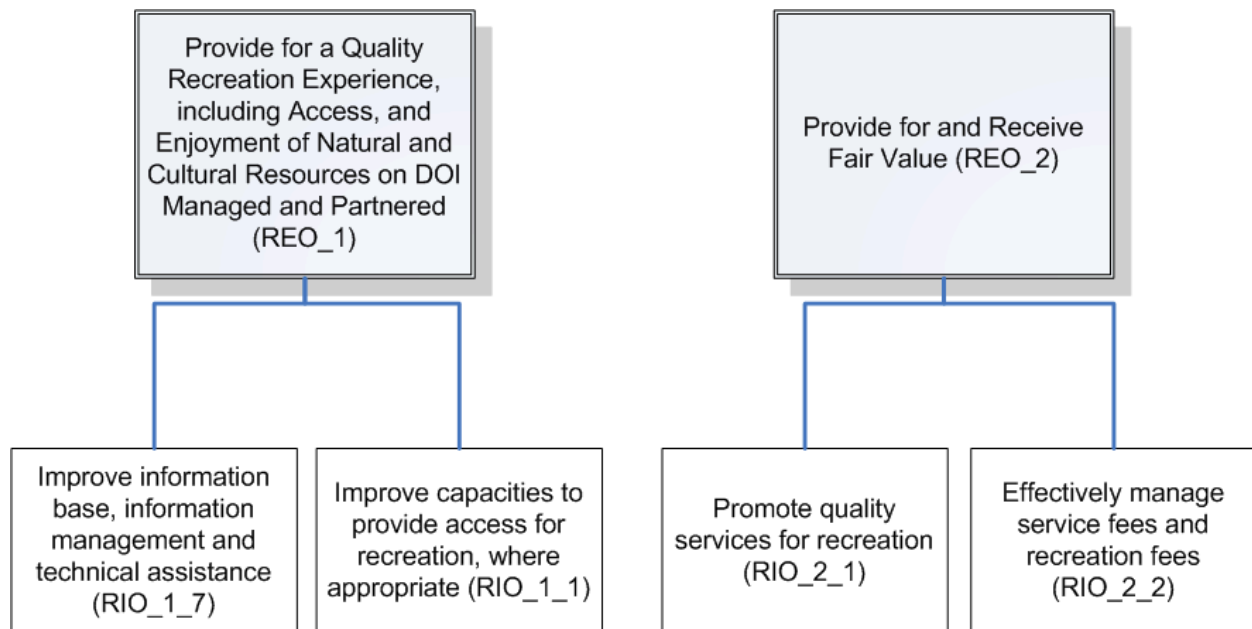
- *Business Area Goals and Objectives to Parent Organization's Goals and Objectives Matrix:* This matrix is designed to ensure that the goals and objectives are correctly mapped into the overall performance model of the organization. The establishment of the relationship to the overall performance model ensures the newly designed performance architecture is in alignment with the parent organization's strategic intent.

	Parent Org's Goal 1	Parent Org's Goal 2	Parent Org's Goal 3	Parent Org's Objective 1	Parent Org's Objective 2	Parent Org's Objective 3
Vision		X		X		X
Goal 1	X		X		X	
Objective 1	X			X	X	

- • ***Business Area Balanced Scorecard:*** The core team will build from the business area goals and objectives to develop measures in the context of the balanced scorecard. This product provides an organized technique to weight and manage categorized performance improvements for the effort based on the discovery and analysis of existing capabilities and performance needs. These detailed objectives will later be used to prioritize blueprint recommendations.

Balanced Scorecard Categories	Business Area Goals and Objectives	Performance Measures	Metrics		
			Baseline	Target	Timeframe (FY)
Business Results					
Customer Results					
Processes and Activities					
People					
Technology					
Other Fixed Assets					

- *Business Strategy to Mandates Matrix:* This product is designed to ensure the goals, objectives, and measures established for the business area relate, via a matrix, to the business drivers and mandates previously documented. This provides a means for ensuring that all relevant mandates are being addressed and conversely, that all business strategies have a legitimate driving force.

	DOI Strategic Plan	DOI e-Gov Plan	eGov Act 2002	GPRA	President's Management Agenda	Clinger Cohen
Vision		X		X		X
Goal 1	X		X		X	
Objective 1	X			X	X	

- *Business Products and Services Maturity Model:* The core team will identify and discuss the key products and services that are now required to address the business drivers/mandates, vision, stakeholder needs and the balanced scorecard resulting from the MBT Step 2 discovery and analysis. The discussion should address a reasonable maturity strategy for each of the critical products and services that are deemed to be needed. The objective is to develop a practical framework for the subsequent analysis of the business (Step 3) and technology (Step 4) to provide scoping guidance and ensure analysis maps back to the strategic intent.

Capability Area	Level 0 (current state)	Level 1	
Recreation Information Availbility	Level 1 Centralizaed Recreation Area Info: Centralized and standardized collection, consolidation, and distribution of all recreation areas associated with federal, state, local, and industry partners plus detail reservation information about all federal recreation facilities associated	**Level 1 Centralizaed Recreation Area Info:** **Centralized and standardized** collection, consolidation, and distribution of **all recreation areas** associated with federal, state, local, and industry partners plus detail reservation information about **all federal recreation facilities** associated with Gold level partners **(integrated with recreation.gov)**	**Level 2 Centr** Centralized an **recreation inf** federal, state, l about **all feder** (integrated with
End User Help	Level 1 Online Search, Decentralized Phone: Online FAQ, email contacts, dencentralized phone support, and online knowledge base	**Level 1 Online Search, Decentralized Phone:** Online FAQ, email contacts, dencentralized phone support, and **online knowledge base search** provided on behalf of Silver level partners	**Level 2 Online** online knowled provided on be

EXERCISE 4-1: DEVELOP A SWOT AND PERFORMANCE ARCHITECTURE

Directions: Working individually, take 10 minutes to read the sample interview notes and to draft a SWOT diagram. Look for the identifiable strengths, weaknesses, opportunities, and threats. As you develop the SWOT, write down a draft performance architecture consisting of goals and objectives for this business area.

Next, take 10 additional minutes to discuss your observations with your group and formulate a final SWOT and performance architecture.

Following the intra-group discussion time, be prepared to participate in a class discussion about your group's SWOT and performance architecture.

✴ PHASE 3, STEP 3: ANALYZE THE BUSINESS AND DEFINE THE TARGET BUSINESS ENVIRONMENT

Step 3: *Analyze the Business and Define the Target Business Environment,* is intended to take a closer look at the business products and services, processes, information and investments in order to formulate and support the findings and recommendations of the modernization blueprint.

This step uses outputs from the stakeholder analysis in Step 2 to conduct a more thorough business assessment. The purpose of this step is to document quantitative and qualitative evidence that will provide the basis for subsequent modernization blueprint findings and recommendations.

This step begins with the identification of value creation in the context of the business processes of delivering products or services. Analysis of the current business model is performed to identify key lines of business and their associated processes, activities, and tasks. Identification of key information sources and data dependencies is used to gain understanding of how knowledge and information is created, transformed, and used by the processes, activities, and tasks. The step concludes with analysis and development of the target processes for the delivery of products and services, along with the information, and data exchanges associated with the processes. At the conclusion of this step, the results of the business analysis are reviewed with the appropriate governance teams. An overview of the connection between Steps 2 and 3 is illustrated in the following visual.

Step 2 helps define __What is Value.__

Step 2 Artifacts

Stakeholder Analysis

Business Area Product and Services Maturity Model

SWOT

Business Area Strategy Mapping Matrices

Strategy, Mandates, Goals and Objectives

Step 3 Artifacts

Value Chain Analysis (Determine key processes)

Organization Business Area Functional Analysis

IDEF0/Swim Lane Models

Data Models (Mapped to Processes)
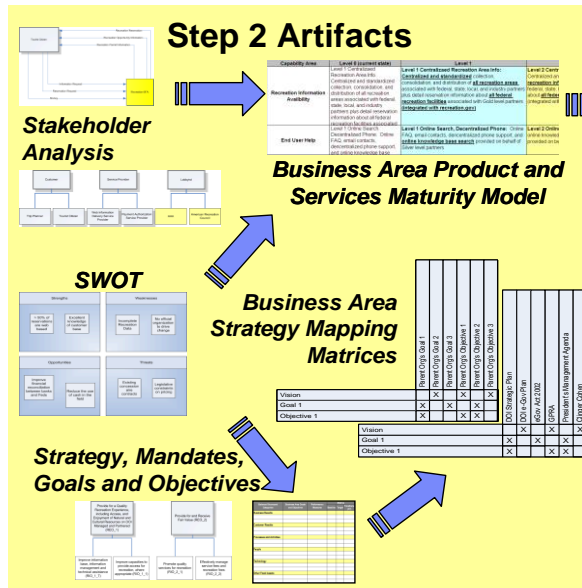
Step 3 expands the analysis of Step 2 to define __How Value is Created.__
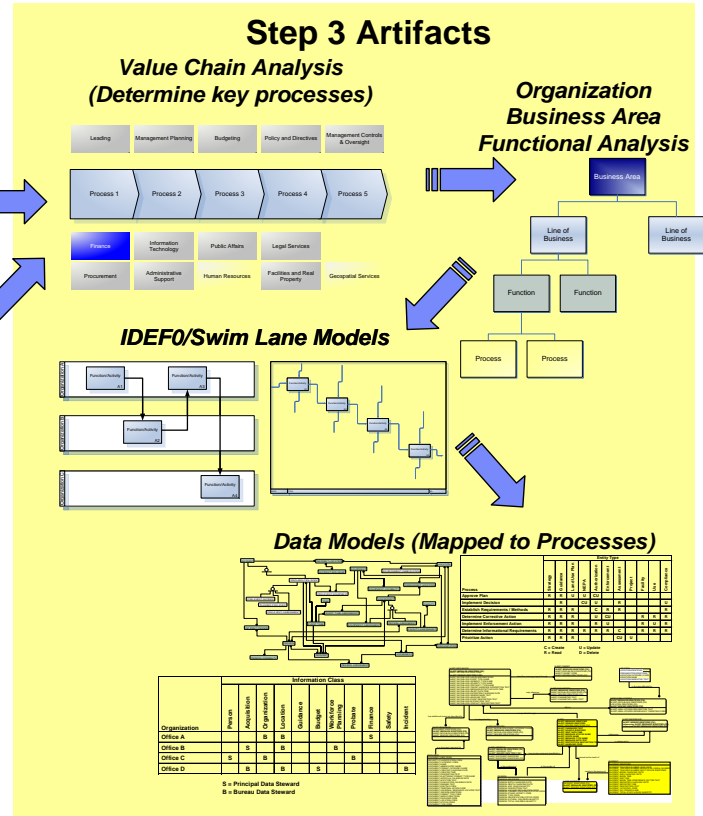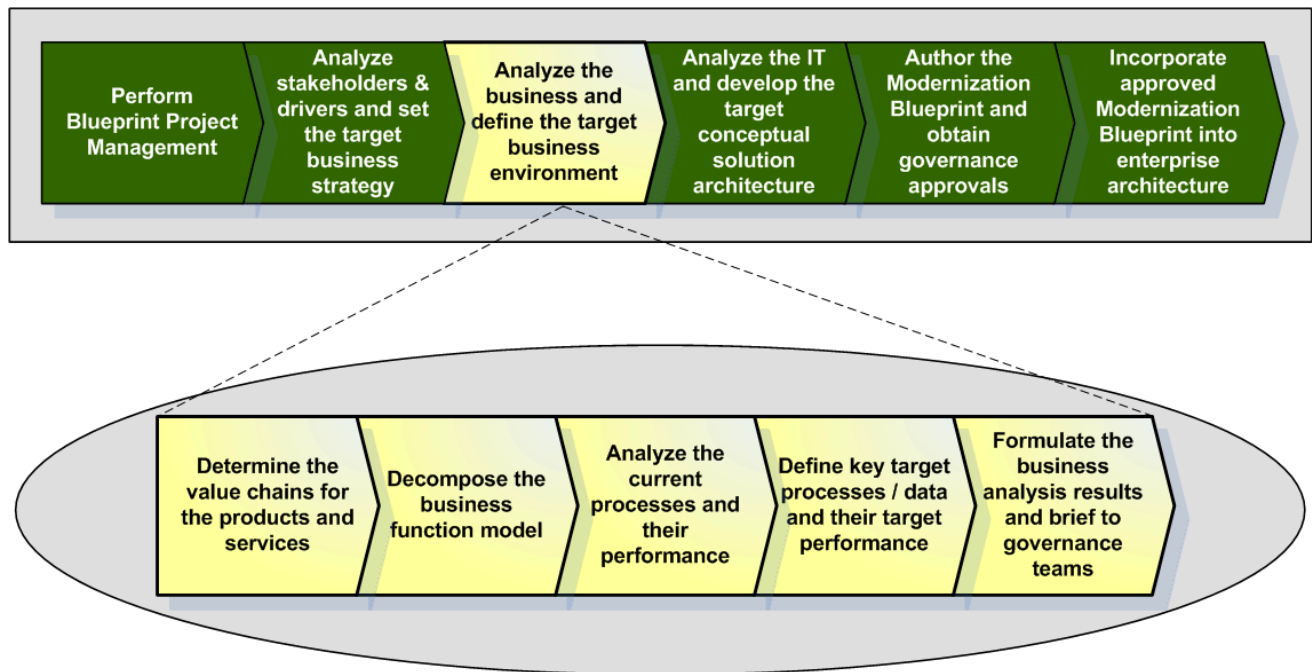
KEYS TO SUCCESS:
THE KEY TO THE BUSINESS ANALYSIS IS TO ANALYZE TO THE LOWEST LEVEL OF DETAIL THAT IS *NECESSARY* TO FORM ACTIONABLE RECOMMENDATIONS. ADDITIONALLY, IT IS IMPORTANT THAT DATA AND BUSINESS ANALYSIS RESULTS BE IN SYNC.

There is a difference between the Business Reference Model and a Business Function Model:

Business Reference Model	**Business Function Model**
❑ A taxonomy of business functions with definitions.	❑ A representation or depiction of the business.
❑ Does not decompose beyond the sub-function.	❑ Decomposes to the lowest level of the business operation.
❑ Does not provide a complete understanding of any organization	❑ Can provide a complete understanding of an organization's operations when fully attributed

FEA BRM Hierarchy

A framework to synchronize business elements that are critical to mission performance and managing change.
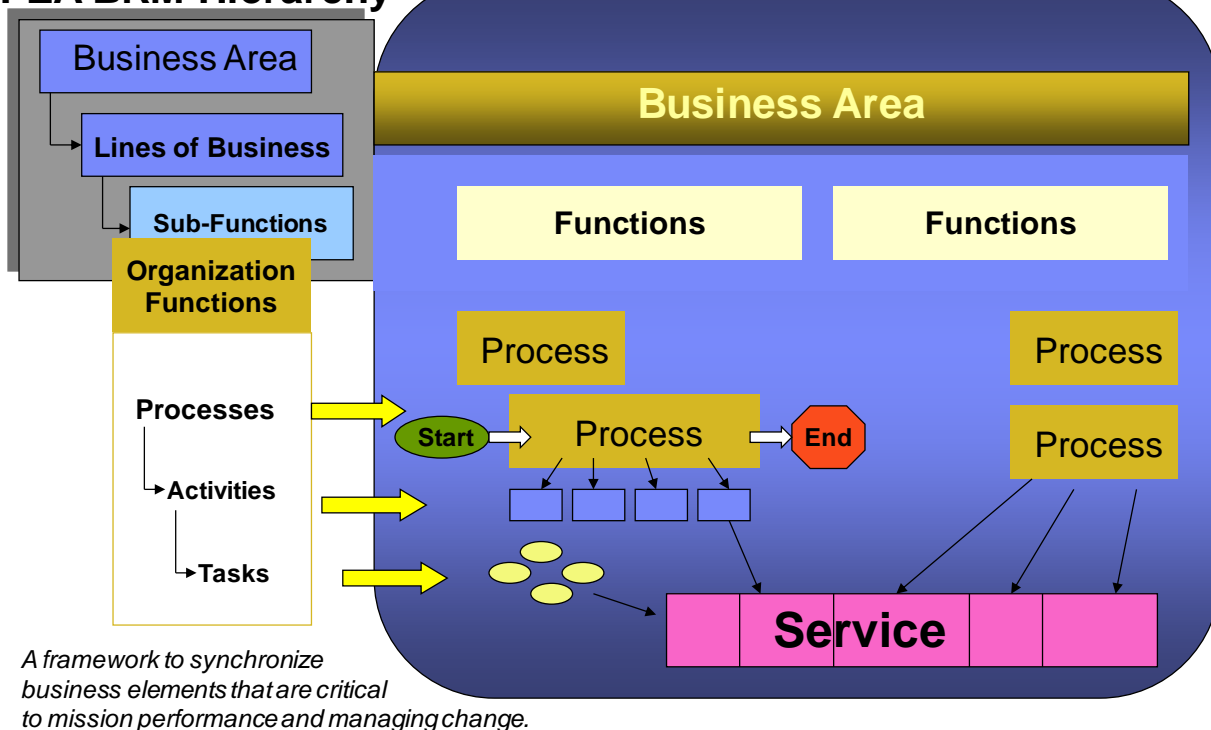
- *As-Is Value Chain Diagram:* The As-Is Value Chain Diagram describes the current sequence of processes that deliver the current state products and services detailed in MBT Step 2. This work product is useful in evaluating the value each process adds to the business area's products or services. Note that the blocks above and below the processes are the management and support business areas from the Business Areas Visual produced in Step A.

- *Target Value Chain Diagram:* The Target Value Chain Diagram describes the desired sequence of processes that will deliver the future products and services detailed in MBT Step 2. Note that the blocks above and below the processes are the management and support business areas from the Business Areas Visual produced in Step A.

| Leading | Management Planning | Budgeting | Policy and Directives | Management Controls & Oversight |

| Process 1 | Process 2 | Process 3 | Process 4 | Process 5 | Product / Service from Step 2 |

| Finance | Information Technology | Public Affairs | Legal Services |
| Procurement | Administrative Support | Human Resources | Facilities and Real Property | Geospatial Services |
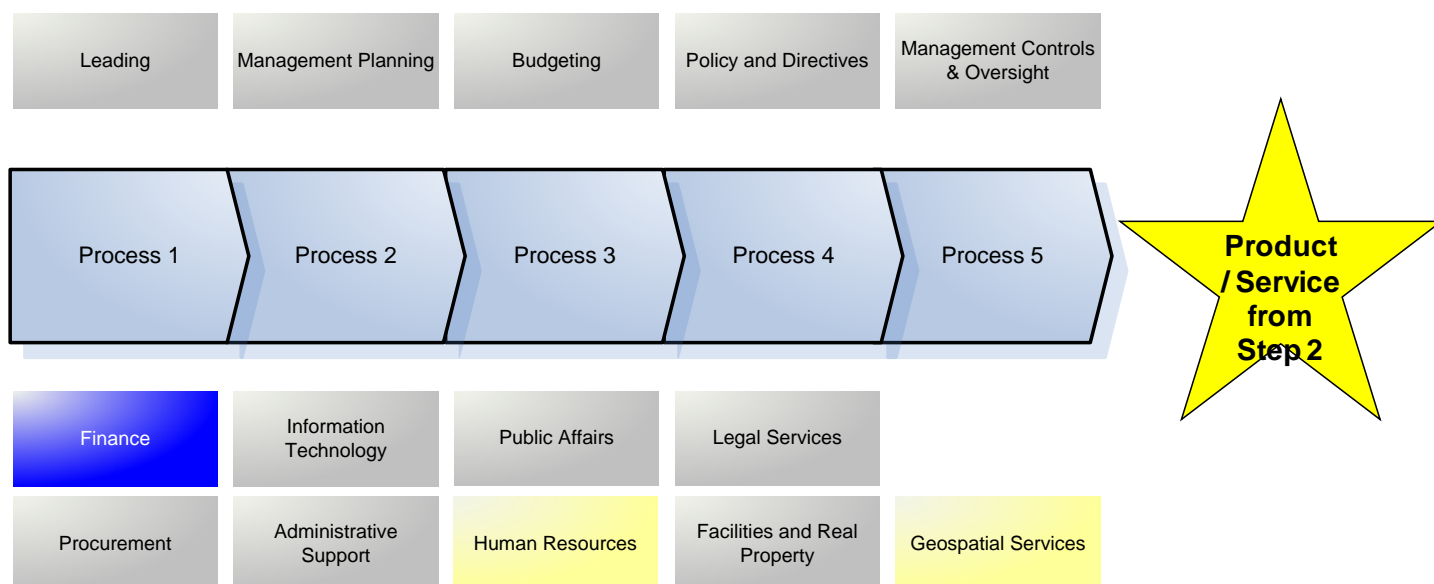
- ***Business Function Model:*** Once the processes are identified in the value chain, the business function model can be developed to show the hierarchy above and below the processes and to map to the FEA BRM.
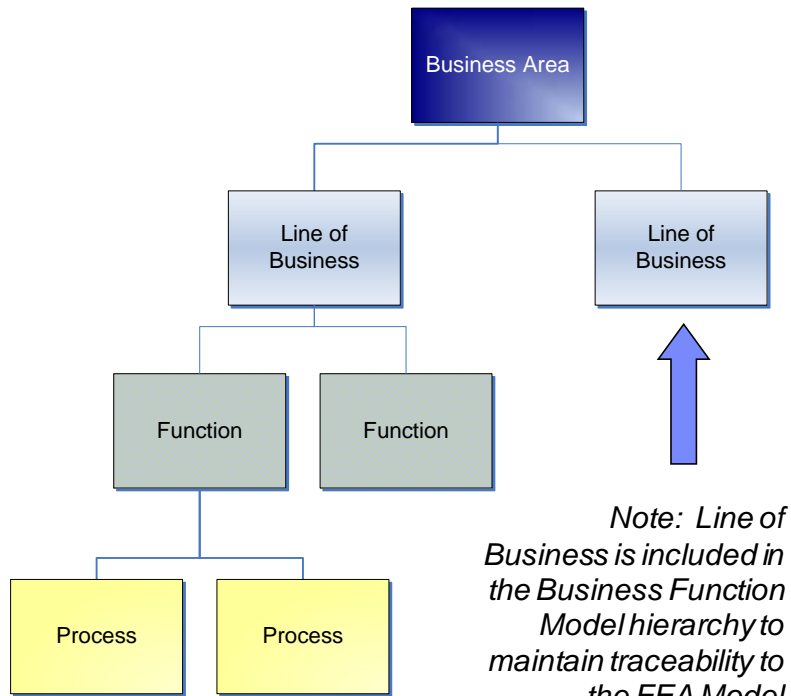
FEA BRM Hierarchy

Note: Line of Business is included in the Business Function Model hierarchy to maintain traceability to the FEA Model

Source: FEA Consolidated Reference Model Document Version 2.2, Office of Management and Budget (OMB), July 2007
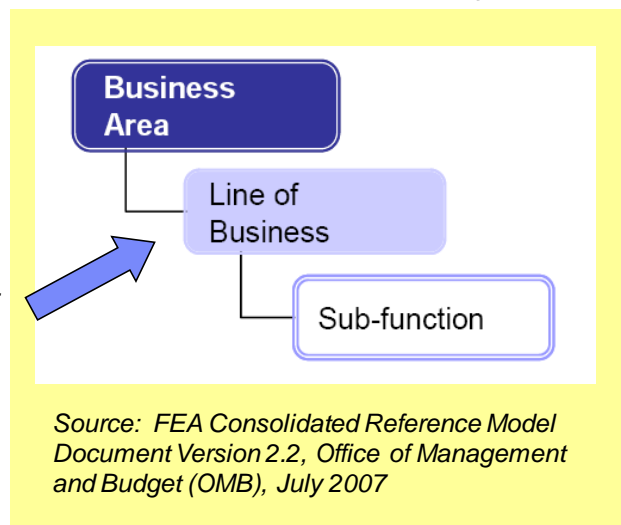
- *Existing Investments to Processes Matrix:* This matrix describes which of the existing investments (as identified in the Exhibit 300's) support the business processes in the business function model and the value chain.

	Investment 1	Investment 2	Investment 3	Investment 4	Investment 5	Investment 6
Process 1	X					
Process 2			X			
Process 3		X		X		
Process 4					X	
Process 5						

- *IDEF0 Diagrams for Critical Value Chain Processes:* The IDEF0 diagrams provide more detail on the processes from the value chain. Additionally, the IDEF0 diagrams can be used to decompose processes and provide more detail on the activities within the processes.
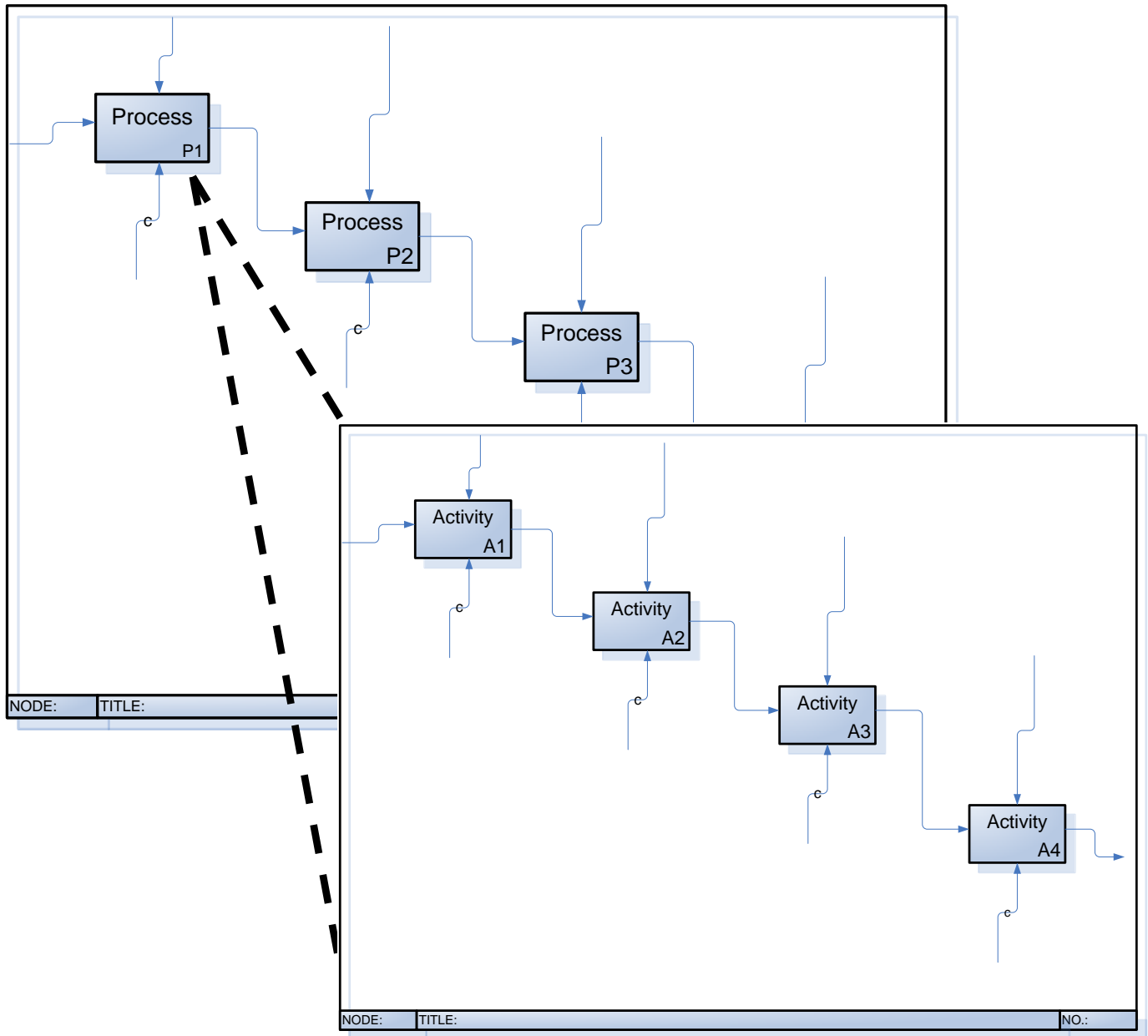
- *As-Is Swim Lane Diagram (actual organization):* The processes and activities from the IDEF0 diagrams can be used to develop swim lane diagrams. These swim lane diagrams are used to describe the current dependencies, roles, and interactions in the overall context of the current state business organizations.

- *Target Swim Lane Diagram (proposed organizations):* The processes and activities from the IDEF0 diagrams can be used to develop swim lane diagrams. These swim lane diagrams are used to describe the target dependencies, roles, and interactions in the overall context of the proposed state business organizations.
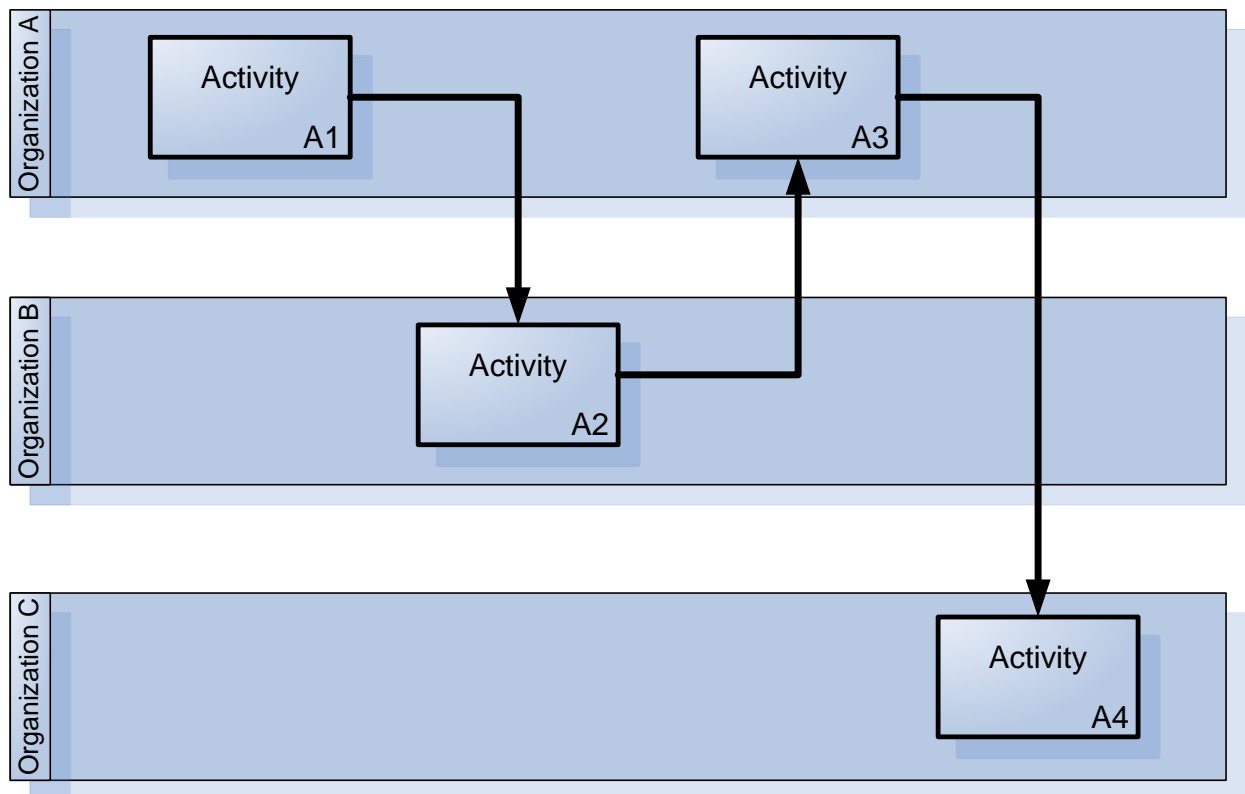
- *Target Data Stewardship Matrix:* The target data stewardship matrix maps the information classes to the organizations containing the data stewards. Data stewards are responsible for the creation, maintenance, and quality of data to support target business activities in the target environment. There is only one Principal Data Steward for an information class. Additional data stewards are identified at the bureau/office level and they assist the Principal Data Steward.

Organization	Information Class										
	Person	Acquisition	Organization	Location	Guidance	Budget	Workforce Planning	Probate	Finance	Safety	Incident
Office A			B	B					S		
Office B		S		B			B				
Office C	S		B					B			
Office D		B		B		S					B

S = Principal Data Steward
B = Bureau Data Steward

- *Target Information Services Matrix:* This matrix describes the producers and consumers for each information class along with the associated information services. This is the beginning of planning for information services and provides the basis for understanding the organizational information stakeholders. The Information Service Type is defined in the FEA Data Reference Model (DRM) Chapter 5.

Information Class	Information Producer	Information Consumer(s)	Information Service Type (FEA DRM Chapter 5)
Bio Resources	FWS	USGS, BLM, States	Transactional
Person	HR	All Bureaus	Data Query
Location	USGS	All Bureaus	Content Search and Discovery
Location	USGS	NOAA	Retrieval, Subscription and Notification

From FEA DRM Chapter 5

Types of Data Exchange Services:
- Extract/Transform/Load
- Publication
- Entity/Relationship Extraction
- Document Translation

Types of Data Access Services
- Context Awareness
- Structural Awareness
- Transactional Services
- Data Query
- Content Search and Discovery
- Retrieval, Subscription and Notification

- *Entity Relationship Diagram:* An ERD is a type of conceptual data model that is a graphical representation of the business data requirements as entities and relationships. Entities are recognizable concepts such as a Person, Place, Thing, or Event which have relevance to the business and which are eventually transformed as tables in a database and/or as an XML Schema
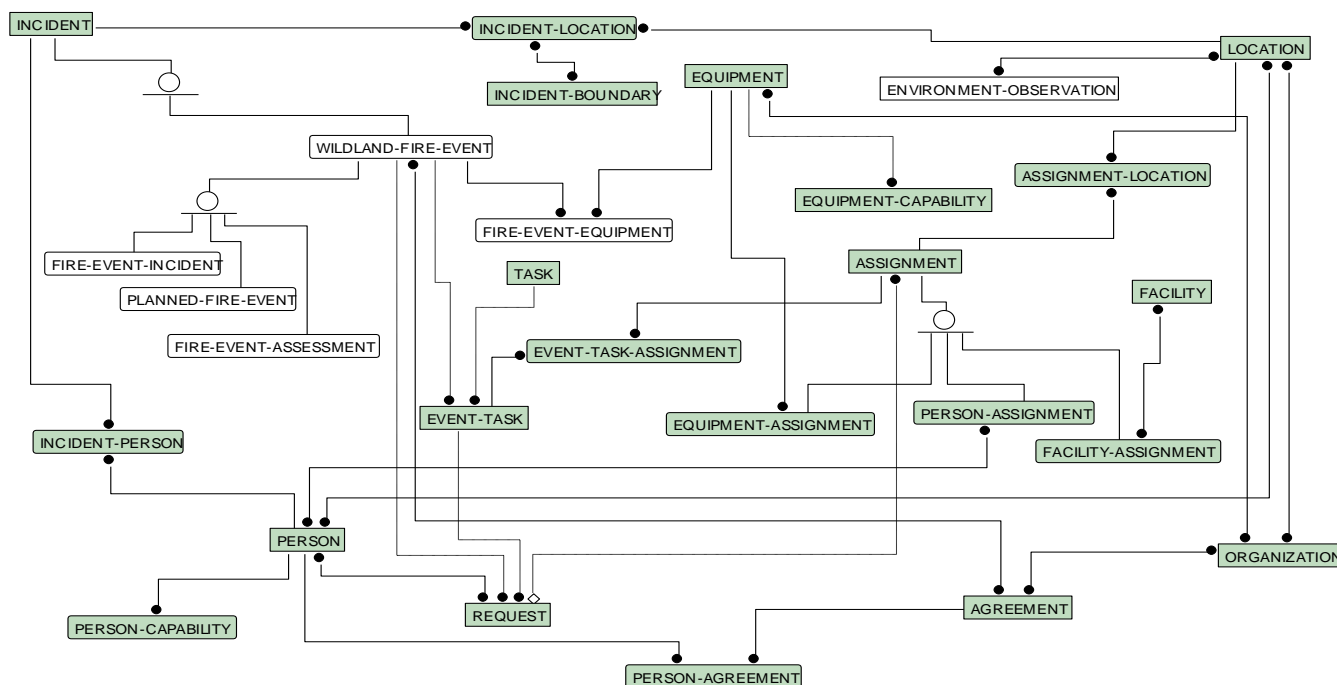
- *Target Logical Data Model:* This model is based on the structures identified in the conceptual data model. It is not a database. Data is described in as much detail as possible without regard as to how they will be physically implemented in a database. Business experts drive the development and maintenance of this model. This model contains the data requirements and informs the process for identifying candidate authoritative data sources (ADSs).
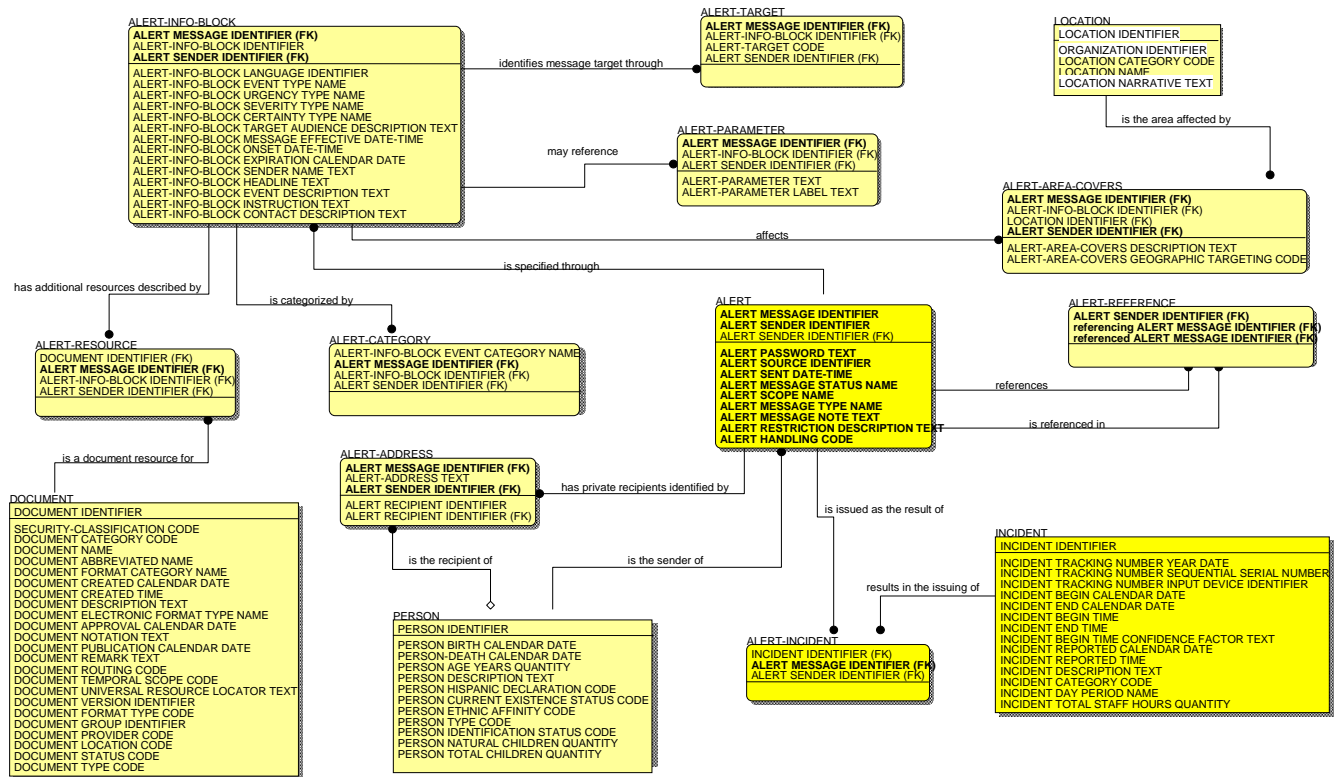
IDEF0 Diagram
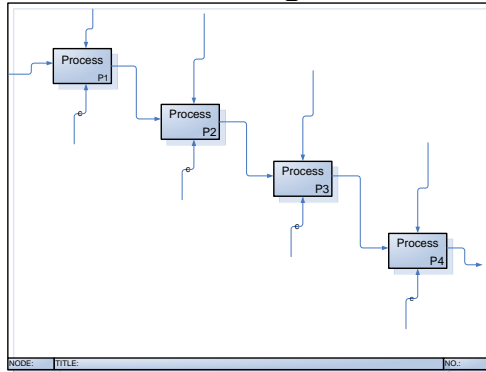
Logical Data Model

Data
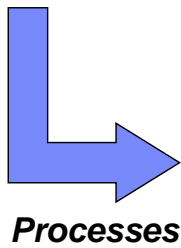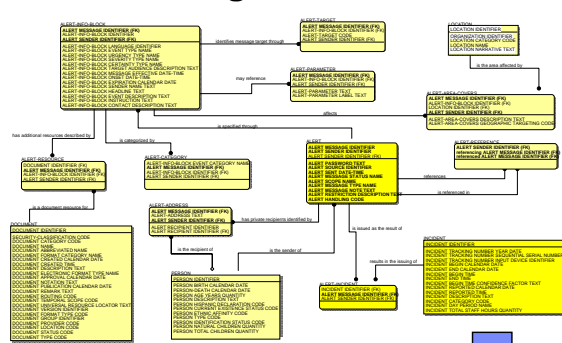
Processes

Process	Entity Type										
	Strategy	**Guidance**	**Land Use Plan**	**NEPA**	**Authorization**	**Enforcement**	**Assessment**	**Project**	**Facility**	**Use**	**Compliance**
Approve Plan	R	R	U	U	CU						
Implement Decision		R		CU	U		R				U
Establish Requirements / Methods	R	R	R		C	R	R				R
Determine Corrective Action	R	R	R		U	CU			R	R	R
Implement Enforcement Action	R	R	R		R	U			R	U	R
Determine Informational Requirements	R	R	R	R	R	R	C		R	R	R
Prioiritze Action	R	R	R				CU	U			

C = Create   U = Update
R = Read   D = Delete

*Shows how processes
interact with data*

CRUD Matrix

- *Target Business Process to Data Entity CRUD Matrix:* The CRUD (Create / Read / Update / Delete) matrix maps the data entities to the business processes. The CRUD matrix helps identify: (1) what data actions take place with each process, (2) what data is used by the business, and (3) what data to process cluster might provide a service component opportunity

Process	Entity Type										
	Strategy	Guidance	Land Use Plan	NEPA	Authorization	Enforcement	Assessment	Project	Facility	Use	Compliance
Approve Plan	R	R	U	U	CU						
Implement Decision		R		CU	U		R				U
Establish Requirements / Methods	R	R	R		C	R	R				R
Determine Corrective Action	R	R	R		U	CU			R	R	R
Implement Enforcement Action	R	R	R		R	U			R	U	R
Determine Informational Requirements	R	R	R	R	R	R	C		R	R	R
Prioiritze Action	R	R	R				CU	U			

C = Create   U = Update
R = Read   D = Delete

Process	Entity Type															
	Program Office	Program	Funding Opportunity	Applicant	Project Participant	Applicant Certification	Application	Project	Problem Need	Goal	Measurement Tool	Project Activity	Project Activity Budget	Housing Site		
Establish Program	R	C	C													
Process Applicant				C	C	C										
Process Application	R	R	R	U			C									
Establish Project			R	R				C	C	C	C					
Establish Project Activities			R	R				U				C	C	C		

EXERCISE 4-2: DRAW BUSINESS FINDINGS FROM THE SAMPLE ARTIFACTS

Directions: Working individually, take 10 minutes to review the sample value chain, swim lane, vision statement, and activity artifacts. Keeping in mind the SWOT and performance architecture from the previous exercise, note some potential business findings and recommendations based on the sample artifacts.

Next, take 20 additional minutes to discuss your observations with your group and formulate a final set of business findings and recommendations.

Following the intra-group discussion time, be prepared to participate in a class discussion about your group's business findings and recommendations.

✴ PHASE 3, STEP 4: ANALYZE THE IT AND DEVELOP THE TARGET CONCEPTUAL SOLUTION ARCHITECTURE

Step 4: *Analyze the IT and Develop the Target Conceptual Solution Architecture*, builds on the analysis from Step 3 by focusing on the maturation of the IT portfolio. With detailed analysis and scoring of the current IT portfolio, the analyst will be able to develop the target conceptual solution architecture as well as perform alternatives analysis where gaps are discovered.

The target state will include business, enabling, and support services that are either re-used from the current portfolio, leveraged from existing enterprise services, or established as new services via projects to develop them. Each service will have a view into what new or existing systems will support the service, identify the authoritative data sources (ADS) for the service, and have a clear view into what functions and/or stakeholders the service will be supporting.

At the conclusion of this step, the analysis and service rationale are presented to, and approved by, the appropriate architecture governance teams.
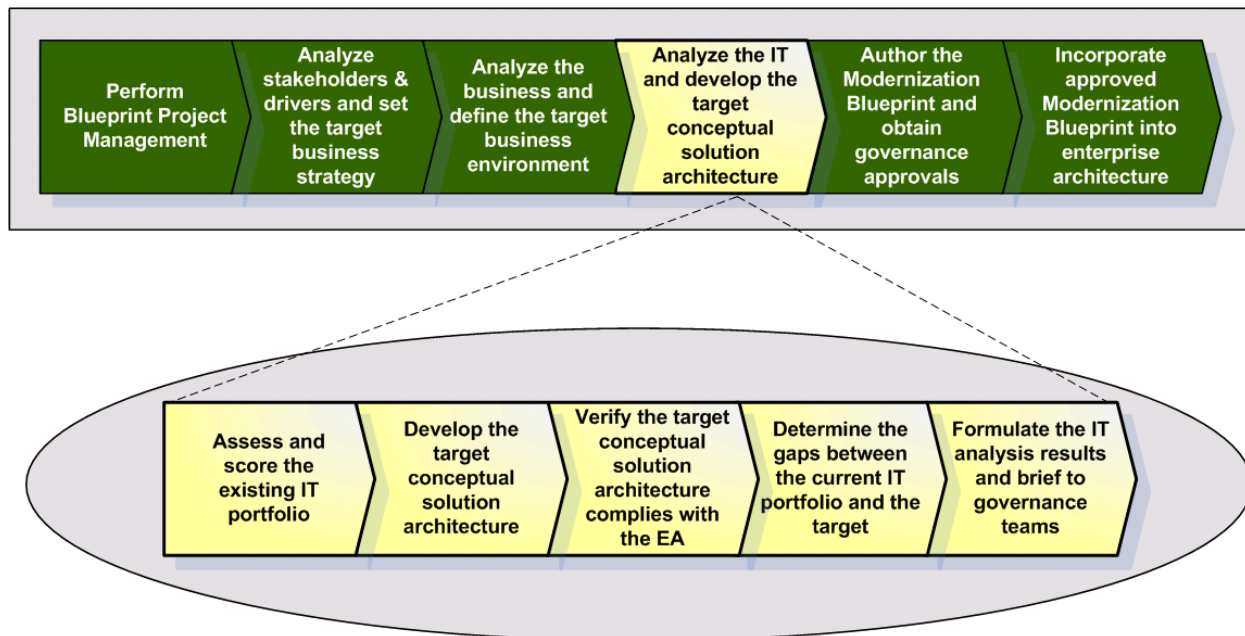
- *Initial Business Area Metadata:* This spreadsheet captures the metadata about the business area. Only populate the following sections: Descriptive, Blueprint Status, MBT Products for Review, Business Mission and Vision, Team Information, Portfolio, Line of Sight (Reference Models). The intention of this spreadsheet is to gather the information to begin populating the business area information into the repository.

	Group	Column	Field Definition	Values	MBT Step	Your BFA Information	EXAMPLE
1	Group	Column	Field Definition	Values	MBT Step	Your BFA Information	EXAMPLE
2	Descriptive				1		
3		Name	Name of BFA (if for just an	(80 Character Max)			Recreation
4		Description	From Team Web Page	Short Description; Text			This effort goes beyond
5		Business Focus Area Type	Type of Business Area	Core Functional Area			Core Functional Area
6		Managing Partner	Organization Acronym of Lead	Acronym of Organization			OCIO
7		Blueprint Scope	From Team Web Page	Text			Department
8		Main Point of Contact	Person Name of Team Lead	Name			"Colleen Coggins"
9	Blueprint Status				All		
10		Blueprint Status	Select from MBT Step	Not Started			5 – Final/Maintenance
11		Overview	From Team Web Page	Text			
12		Accomplishments	From Team Web Page	Text			
13		Milestones / Budgeted or Required Funds	From Blueprint	Text			
14		Issues/Challenges	From Blueprint	Text			
15		IRB Priority	From Blueprint	High Medium Low Unknown			High
16		MBT Status	Steps completed or currently at	Pick List of MBT Steps			"Step 1: Perform
17	MBT Products for Review				5 ->		
21	Business Mission and Vision				2		
30	Team Information				1		
43	Portfolio				4		
51	Line of Sight				2,3,4		
60	Analysis - Summaries				5		
65	Analysis - Scoring				5		
75	Analysis - Findings				5		
77	Analysis - Plans				5		
81	Business Process Re-Engineering - Summaries				8		
86	Business Process Re-Engineering - Documents				8		
91	Data Quality - Overall Summary			Values are: (Click on Cell	2,3,4,8,9		
97	Data Quality - Inventory Summary				4		
102	Data Quality - Integration Summary				4		

- *Enterprise Architecture Repository BFA Portfolio Reports:* A reporting section will be created for you after working with the enterprise architecture repository team to load your IT Portfolio and MBT information. Your section will be linked on the EA reporting site, and can be pointed to from your core team web site.
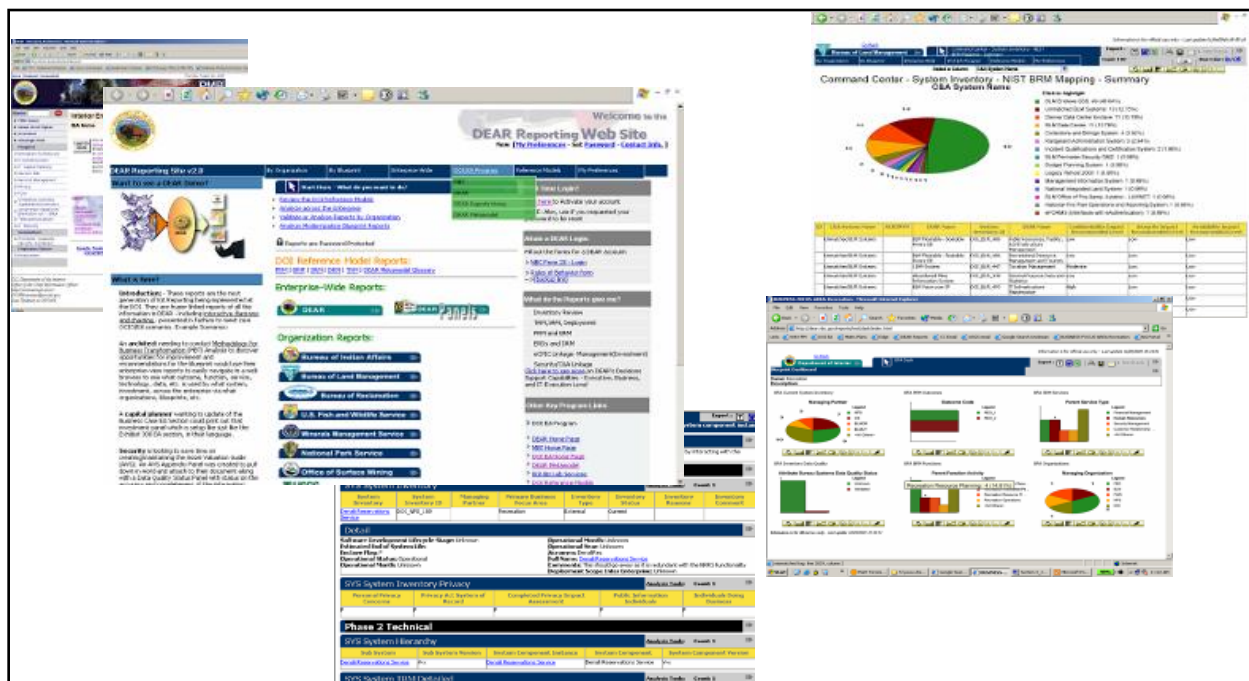
- *Systems and Services Description and Scoring (As-Is):* This work product is a quantitative assessment of the business area's systems and services across several dimensions including data, business fit, technology fit, applications design, service management, and security maturity. This scoring can be used to begin formulating systems recommendations for retirement or consolidation.

Arch. State	System	Service	Service Description (20-70 words)	Overall As-Is Score	Overall Target Score	P1	P2	P	B1	B2	B
				2.0	2.1	2.7	2.9	2.8	2.4	1.67	2.0
As-Is	System2			1.8		3	3	3.0	1	1	1.0
As-Is	System3			1.5		1	3	2.0	1		
As-Is	System4			1.8		3	3	3.0	1		
As-Is	System5			1.0		1	1	1.0	1		
As-Is	System6			1.3		1	3	2.0	1		
As-Is	System7			4.4		5	5	5.0	5		
As-Is	System8			1.9		3	3	3.0	3		
As-Is	System9			2.1		2	3	2.5	5		
As-Is	System10			1.0		1	1	1.0	1		
Both	System11	Service11		2.2	2.2	3	2	2.5	1		
Both	System12	Service12		3.0	3.0	3	3	3.0	5		
Both	System13	Service13		1.9	1.9	3	3	3.0	3		
Both	System14	Service14		3.9	3.9	5	5	5.0	5		
Both	System15	Service15		1.0	1.0	1	1	1.0	1		
Both	System16	Service16		1.0	1.0	1	1	1.0	1		
Both	System17	Service17		1.8	1.8	3	3	3.0	1		
Both	System18	Service18		3.7	3.7	4	5	4.5	5		
Both	System19	Service19		1.8	1.8	3	3	3.0	1		
Target		Service20			1.0	1	1	1.0	1		
Target		Service21			4.2	5	5	5.0	5		
Target		Service22			2.6	3	3	3.0	5		
Target		Service23			2.1	5	3	4.0	1		
Target		Service24			2.0	3	3	3.0	1		
Target		Service25			2.0	2	3	2.5	5		
Target		Service26			1.6	2	3	2.5	1		
Target		Service27			1.8	3	3	3.0	1		
Target		Service28			2.0	2	3	2.5	5		
Target		Service29			2.1	3	3	3.0	3		
Target		Service30			1.8	3	3	3.0	1		
Target		Service31			1.5	3	3	3.0	1		

Column legend (header descriptions):
- **Overall As-Is Score** (2.0) / **Overall Target Score** (2.1)
- P1: System's capability for supporting associated Strategic goals and objectives as defined in DOI (2.7)
- P2: Extent of stakeholders feedback for performance measurement and system refinement (2.9)
- P: Performance Assessment Score (Scale of 1 to 5) (2.8)
- B1: Lack of functional overlap with other systems. (2.4)
- B2: System incorporates re-engineered/streamlined business processes (workflow) in an automated (1.67)
- B: Business Assessment Score (Scale of 1 to 5) (2.0)
- D1: Existence and documentation of data standards and protocols. (1.4)
- D2: Relative maturity and accessibility of system's data storage and access methods. (1.87)
- D3: Relative data entity access or modification overlap with other systems. (1.77)
- D: Data Assessment Score (Scale of 1 to 5) (1.7)
- A1: Degree of architectural compliance with the conceptual Target Blueprint Analysis (1.73)
- A2: Extent to which system design requirements are defined and documented (1.97)
- A3: Extent to which systems interfaces are defined and documented (1.83)
- A4: Extent to which high-level design or operational concepts are defined. (1.97)
- A: Application Assessment Score (Scale of 1 to 5) (1.9)
- T1: Extent of compliance with Technology Reference Model standards, protocols and best practices. (1.57)
- T2: Extent of maximum use of shared, existing infrastructure, components and services. (1.57)
- T: Technology Assessment Score (Scale of 1 to 5) (1.6)
- S1: Extent to which the system complies with current security requirements and extent of progress through (2)
- S: Security Assessment Score (Scale of 1 to 5) (1.6)
- Business Fit (2.4)
- Technology Fit (1.7)

Summary of Systems Scoring

(Scatter plot of Technology Fit (y-axis, 0.0–5.0) vs Business Fit (x-axis, 0.0–5.0), divided into four quadrants:)
- Upper-left: **Consolidate / Retire**
- Upper-right: **Target**
- Lower-left: **Retire**
- Lower-right: **Consolidate / Re-engineer**

- *As-Is System Interface Diagram*: This work product depicts the existing systems within the business area (and sometimes external to the business area) and the data that is exchanged between those systems in the current state. This work product can be used to analyze the relationships between systems.

- ***Authoritative Data Source (ADS) Analysis:*** This work product contains the templates for the following: As-Is Data Store to Target Logical Data Model Entity Matrix; As-Is Data Store ADS Assessment Matrix; and the ADS Scoring Summary. The ADS analysis is focused on formulating ADS related blueprint findings and recommendations.

Authoritative Data Source Analysis

The purpose of this template is to determine total cost of ownership and the cost of decommissioning systems that are affected by FBMS. This template contains three tabs/worksheets.

The three tabs are:

1. Introduction: This tab

2. As-Is Data Store to Target Logical Data Model Entity Matrix

3. As-Is Data Store ADS Assessment Matrix

4. ADS Scoring Summary

- *Total Cost Ownership (TCO) and Decommission Template:* Total Cost of Owner-ship template captures activities and estimated for total cost to provide, deliver, sup-port, and manage a system. The TCO is necessary to determine the economic viability of maintaining systems in the target state.

Total Cost of Ownership

Instructions:

Please complete the fields below that are highlighted in yellow. By completing these fields, a total cost of ownership will be calculated below. This template allows for one-time costs as well as recurring annual costs. This template also allows for the entry of IT related costs like software licenses and hardware as well as for the entry of personnel and training costs. Also note that there are opportunities for you to list costs that are not already part of this template. Note that in the personnel costs boxes that you select a number of hours and select a GS level from the drop down menu within that box. This will calculate a total cost for you.

System Name:	
System Start Date	
System Projected Retirement Date	
Number of Users:	
System Owner	
Organization	
Name of Person Providing Information	

IT System Cost	Type of Cost	$ One-time	Annual Costs
Software Costs:	Acquisition Costs		
	License Costs		
	Renewal Costs		
	Software Maintenance Costs		
	Software Update Costs		
	Other License Costs		
	Subtotal	$ -	$ -
Hardware Costs:	Server/Appliance Cost		
	Storage Upgrades		
	Memory Upgrades		
	Processing Speed Upgrades		
	Installation		
	Network Hardware (router, switch)		
	Other Hardware		
	Hardware Maintenance		
	Other Costs - Enter Description		
	Other Costs - Enter Description	s	
	Other Costs - Enter Description		
	Other Costs - Enter Description		

- ***Integrated Target Services and Systems Model:*** A diagram showing the target services and systems as well as the overview. This diagram serves as conceptual level solution architecture for the target state. The difference between this target diagram and the current state version is generally found in the blueprint's systems recommendations.
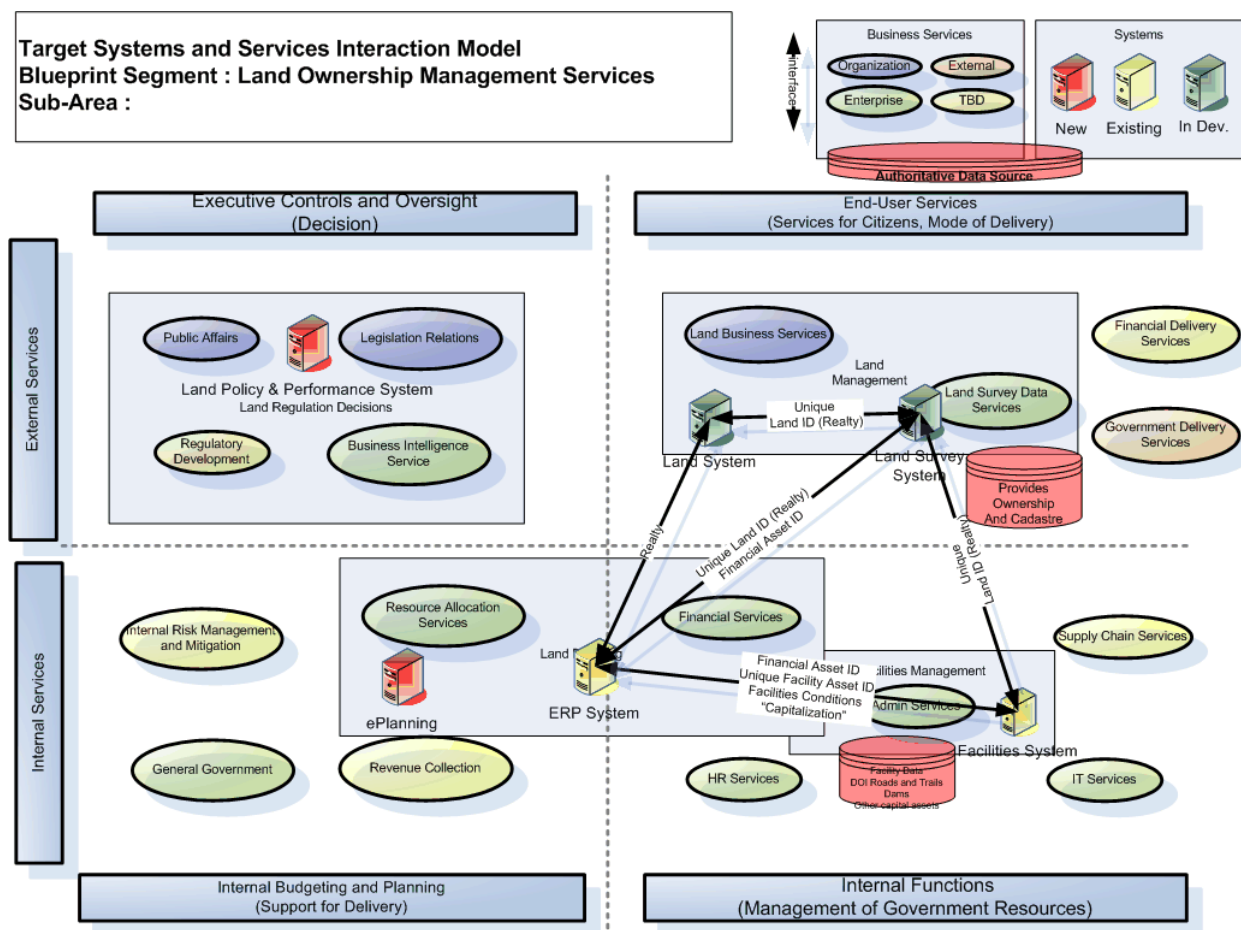
- ***Solution Architecture Document:*** The solution architects at DOI have a solution architecture document whose contents and requirements are outlined in their guidance. The beginnings of this document can be formulated and documented in Step 4.

**Department of Interior
Enterprise Architecture (IEA)**

Interior Enterprise Architecture

Solution Architecture

- *Architecture Decision*: This is the official work product containing the gap analysis, draft architecture decisions, and alternative analysis for systems decisions. This is a work product that is required by the DOI solution architecture community.

Gap Analysis and Architecture Decisions

The purpose of this template is to determine total cost of ownership and the cost of dec...
This template contains three tabs/worksheets.

The three tabs are:

1. *Introduction:* This tab
2. *Gap Analysis Guidance*
3. *Architecture Decision Guidance*
4. *Architecture Decisions*

Subject Area	Topic	Status
(choose one)	(short name for this decision)	Draft/Approved/ Revised 2002-mm-dd (author initials)
AD - AD Tiers		
AM - Application Models		
DD - Data Distribution		
DV - Distribution Variations		
IF – Interfaces		
TC - Technology Components		
Other		

		AD ID xxNNN
Architectural Decision	A concise statement of the decision.	
	(note: the id to the left is a combination of two letter abbreviation for the	
Problem Statement	A description of the problem this decision is related to.	
Assumptions	Any pre-existing assumptions or constraints	
Motivation	What is behind the decision thought process, the key principals that apply and what	
Alternative 1		
Alternative n		
Decision	Short description of decision (i.e. which alternative was selected – the alternatives should	
Justification	Primary reason(s) why the alternative was decided upon	
Implications	What this means for the system, directly or indirectly	
Derived requirements	If this decision adds some implicit new requirements, what are the y?	
Related Decisions	A list of any decisions that are closely related to this decisions	

U.S. DEPARTMENT OF THE INTERIOR · MARCH 3, 1849 ·

- *Updated Total Cost Ownership (TCO) and Decommission Template:* System Decommission, which is closely tied to the Total Cost of Ownership template, captures activities and estimates for the total cost to migrate, consolidate, retire, and finally decommission a system.

Decommission Costs

Instructions:

This sheet is intended to capture your estimates for costs associated with decommissioning your system. There are places on this sheet where you can enter your estimated costs associated with common decommissioning activities. There are also places where you can enter additional decommissioning activities that are relevant to your system. Enter information into the fields highlighted in yellow.

System Name:	0
System Start Date	0
System Projected Retirement Date	0
Number of Users:	0
System Owner	0
Organization	0
Name of Person Providing Information	0

Decommissioning Activities	Estimated Cost ($)
Analyze legacy system functionality and data to determine fit with target system	
Analyze any interfaces with legacy system	
Map legacy system data to target system	
Move data from legacy system to target system or other legacy system	
Archive legacy data (not being moved to target) based on NARA regulations	
Decommission hardware from legacy system	
Train users on target system	
Other Decommission Activity - Enter Description	
Other Decommission Activity - Enter Description	
Other Decommission Activity - Enter Description	
Other Decommission Activity - Enter Description	
Other Decommission Activity - Enter Description	

EXERCISE 4-3: DRAW SYSTEMS FINDINGS FROM THE SAMPLE ARTIFACTS

Directions: Working individually, take 10 minutes to review the sample systems interface and systems scoring artifacts for the business area. Keeping in mind the SWOT, performance architecture, and business artifacts from the previous exercises, note some potential systems findings and recommendations based on the sample artifacts.

Next, take 20 additional minutes to discuss your observations with your group and formulate a final set of systems findings and recommendations.

Following the intra-group discussion time, be prepared to participate in a class discussion about your group's systems findings and recommendations.

✸ PHASE 3, STEP 5: AUTHOR THE MODERNIZATION BLUEPRINT AND OBTAIN GOVERNANCE APPROVALS

Step 5: *Author the Modernization Blueprint and Obtain Governance Approvals,* is the culmination of the process for creating a modernization blueprint. The step begins with the development of prioritized findings and recommendations. A risk-adjusted cost benefit analysis is performed for the prioritized recommendations using the Value Measuring Methodology. The prioritized recommendations then provide the basis for developing the detailed blueprint and transition plan.

The draft blueprint is developed and undergoes a structured review process with key stakeholders and members of governance teams. The review process also helps obtain buy-in to the recommendations and sequencing alternatives for implementation. As reviewer feedback on the findings and recommendations is received, comments and change requests provide the basis for finalizing the modernization blueprint and transition sequencing plan. Finally, the modernization blueprint is presented for approval by the appropriate governance teams. Once approved, the core team is ready to move ahead to subsequent steps to begin implementation of the recommendations described in the blueprint in accordance with the transition sequencing plan.
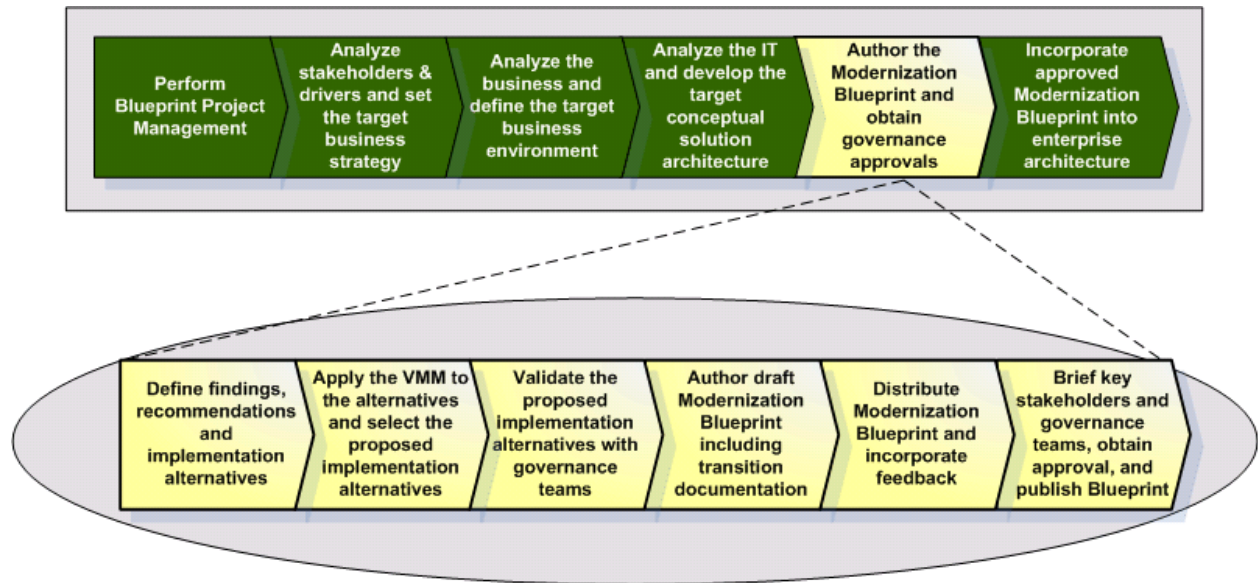
KEYS TO SUCCESS:
THE FINDINGS AND RECOMMENDATIONS AND THE MODERNIZATION BLUEPRINT ITSELF NEED TO BE WRITTEN TO BE UNDERSTOOD BY THE BUSINESS COMMUNITIES THAT ARE IMPACTED. THE BLUEPRINT SHOULD BE ACTIONABLE, READABLE, PRACTICAL, AND CAPABLE OF BEING IMPLEMENTED.

- *Modernization Recommendations to Horizontal Dependencies Matrix:* This work product describes how the recommendations in the blueprint overlap with key organizational initiatives and modernization blueprint recommendations from other business areas.

	Existing Initiative A	Existing Initiative B	Recommendation #1 from Other BFA	Recommendation #4 from this BFA	Budget Approval – FY0X	Existing Initiative C
Recommendation #1	X		X			X
Recommendation #2		X	X		X	
Recommendation #3	X		X	X		
Recommendation #4	X	X			X	

- *Modernization Recommendations to Mandates Matrix:* This matrix facilitates the prioritization of the Blueprint recommendations by demonstrating how each recommendation is aligned with key strategic mandates. This is an extension of the Business Strategy to Mandates Matrix developed in MBT Step 2

	DOI Strategic Plan	DOI e-Gov Plan	eGov Act 2002	GPRA	President's Management Agenda	Clinger Cohen
Vision						
End Outcomes						
Intermediate Outcomes	X	X	X	X	X	X
Recommendation 1		X		X		X
Recommendation 2	X		X		X	
Recommendation 3	X			X	X	

- *Value Measuring Methodology (VMM) Cost to Value Matrix:* The VMM cost-to-value matrix provides the results of a structured cost / benefits analysis of the recommendations and can be depicted graphically. VMM analyzes the value per dollar and associated risk to determine which recommendations provide the most "bang for the buck".
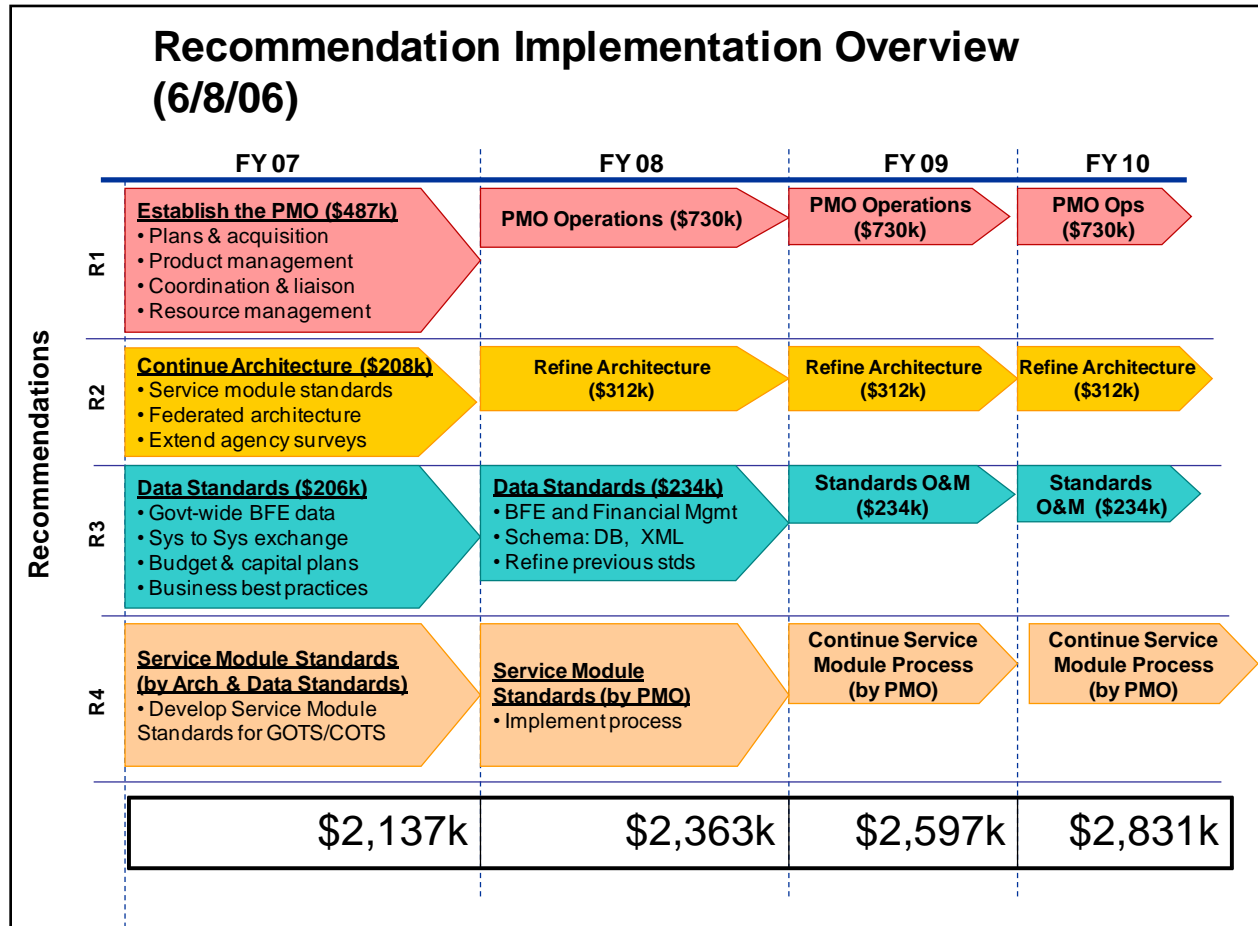
| Blueprint Recommendations	Value Assessment						Base Scores		Aggregated Risk Analysis (from RMM Analysis)			Risk Adjusted Score	
Recommendation & Description	Business Results	Customer Results	Processes and Activities	People	Technology	Other Fixed Assets			High 0.75	Med 0.50	Low 0.25		
									Risk Probability	Risk Impact Value	Risk Impact Cost	Cost	Value
	Weights for Each Measure (from Business Value Determination)						Est. Cost	Value					
	0.13	0.17	0.14	0.15	0.25	0.16							
Recommendation 1													
Alternative 1.1	8	2	7	5	8	3	1	5.6	Med	Med	High	1.4	4.2
Alternative 1.2	9	6	5	4	4	8	7	5.8	Med	Med	Med	8.8	4.3
Alternative 1.3	4	2	6	2	9	4	7	4.9	High	Med	Low	8.3	3.0
Recommendation 2													
Alternative 2.1	7	5	5	10	3	9	6	6.2	High	Med	Med	8.3	3.9
Alternative 2.2	6	8	5	2	5	7	9	5.5	Low	High	High	10.0	4.5
Alternative 2.3	10	9	9	1	1	9	2	5.9	Low	Med	Low	2.1	5.2

VMM Analysis - Risk Adjusted
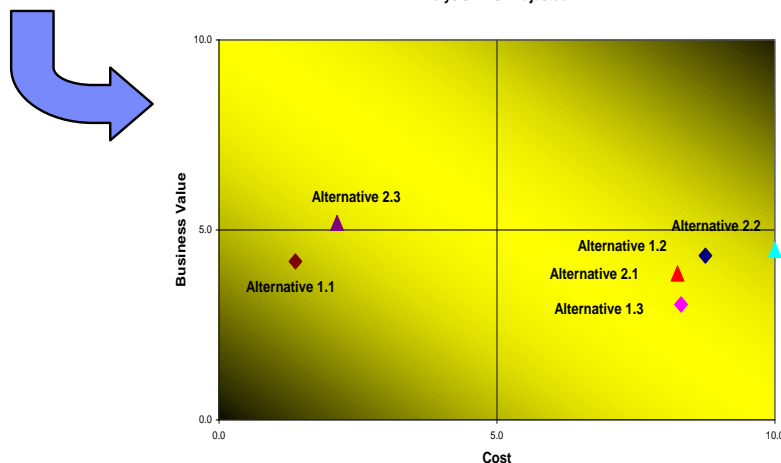
- *Draft/Final Recommendation Implementation Overview Visual:* The draft recommendation implementation overview depicts the proposed time line for the modernization blueprint implementation effort by focusing on the recommendations and the associated investments.

Recommendation Implementation Overview (6/8/06)

	FY 07	**FY 08**	**FY 09**	**FY 10**
R1	**Establish the PMO ($487k)** • Plans & acquisition • Product management • Coordination & liaison • Resource management	PMO Operations ($730k)	PMO Operations ($730k)	PMO Ops ($730k)
R2	**Continue Architecture ($208k)** • Service module standards • Federated architecture • Extend agency surveys	Refine Architecture ($312k)	Refine Architecture ($312k)	Refine Architecture ($312k)
R3	**Data Standards ($206k)** • Govt-wide BFE data • Sys to Sys exchange • Budget & capital plans • Business best practices	**Data Standards ($234k)** • BFE and Financial Mgmt • Schema: DB, XML • Refine previous stds	Standards O&M ($234k)	Standards O&M ($234k)
R4	**Service Module Standards (by Arch & Data Standards)** • Develop Service Module Standards for GOTS/COTS	**Service Module Standards (by PMO)** • Implement process	Continue Service Module Process (by PMO)	Continue Service Module Process (by PMO)
	$2,137k	$2,363k	$2,597k	$2,831k

Recommendations

- *Draft/Final Strategic Systems Migration Diagram:* The draft strategic system migration diagram provides a visualization of the sequencing of system-specific recommendations required to achieve the target state.
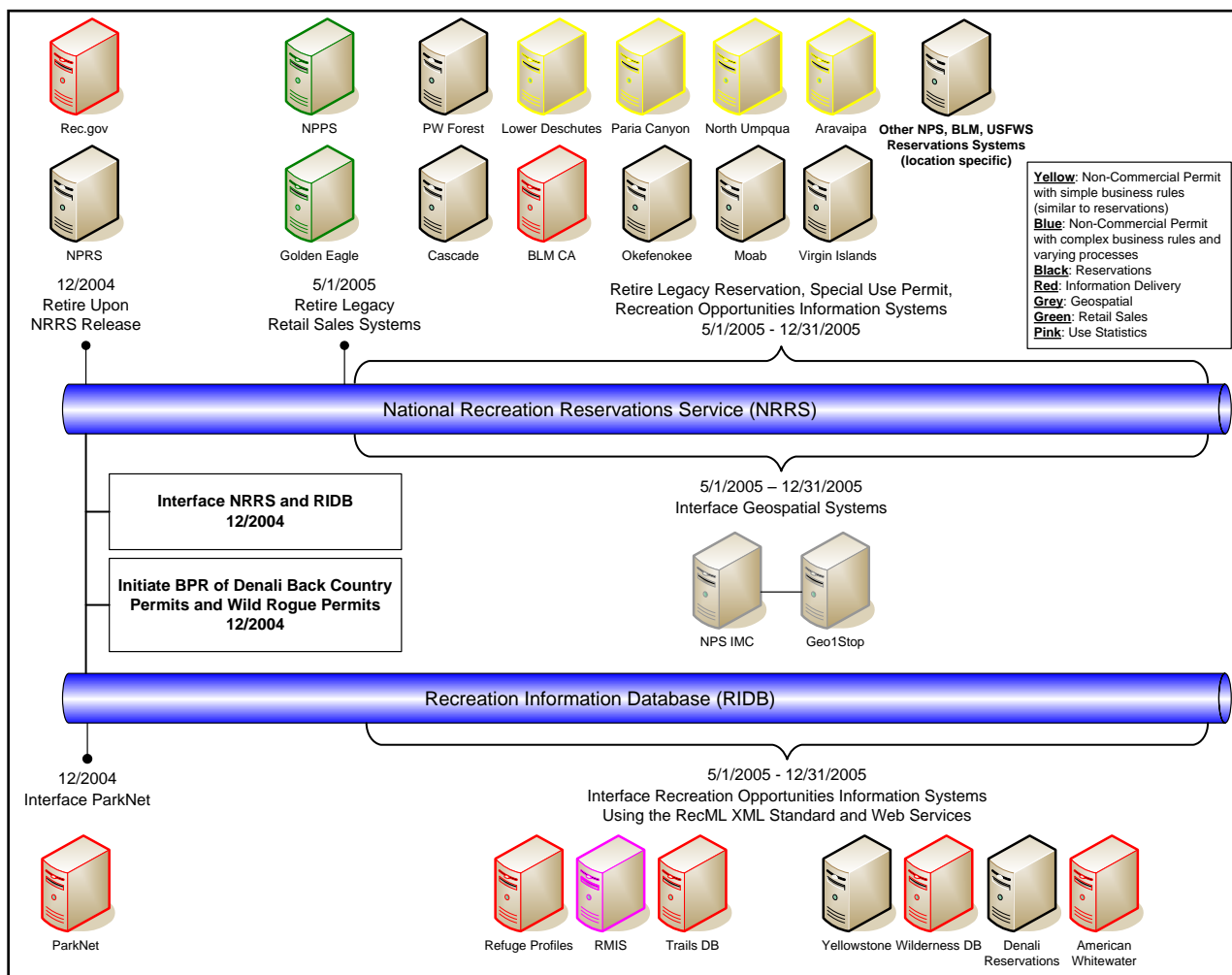
- *Draft/Final Strategic Sequencing Overview Visual:* The strategic sequencing over-
  view visual provides a visualization of the transition from the as-is to the target state
 solution architectures.
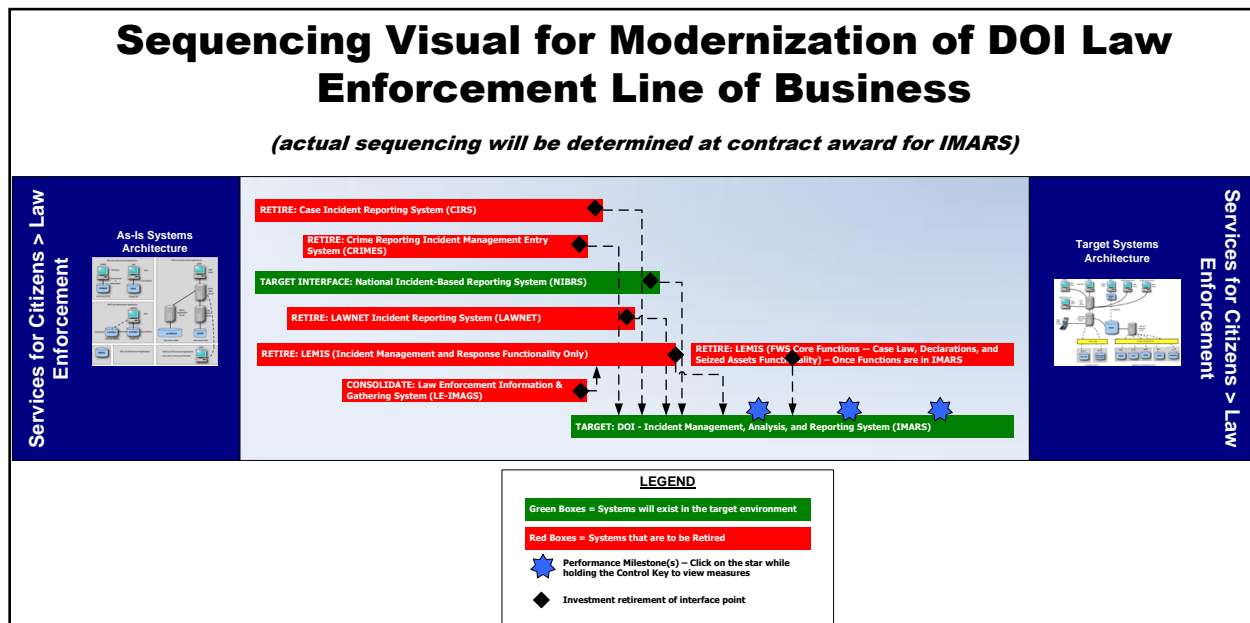
- *Draft/Final Implementation Sequencing Plan:* The draft implementation sequencing plan provides a detailed step-by-step, time-sequenced approach to implementing the modernization blueprint recommendations.

Task Name	Duration
Award NRRS Service Contract	0 mons
Implement New NRRS	5 mons
Prove New NRRS	7 mons
Special Use Permits	**23.6 mons**
Integrate non-comm special use permits (simple reservations style processing) into NRRS	6 mons
Conduct BPR Study for non-comm special use permits too complex for immediate NRRS integration	**16 mons**
BPR for Wild Rogue Permits Service	4 mons
BRP for Back Country Permit (Denali)	4 mons
BPR for Permitting System for the Deschutes River Management Area	4 mons
Conduct study on DOI wide permits management	12 mons
Integrate NRRS with DOI permits management process	6 mons
Entrance Fees	**12 mons**
Include entrance fee information in NRRS	2 mons
Sync websites with entrance fee info with NRRS	2 mons
Conduct entrance fee transactions using NRRS	6 mons
Pilot field kiosks for entrance pass distribution	6 mons
Extended Market Channels	**8 mons**
Establish partnership governance for channel partners	2 mons
Form network of market channel partners	6 mons
Common Branding and Business Rules	**4 mons**
Review activity models and identify rules in use	1 mon

- ***Draft/Final Modernization Blueprint:*** The Modernization Blueprint is the document that describes the findings and recommendations as well as the corresponding sequencing plan and supporting documentation.

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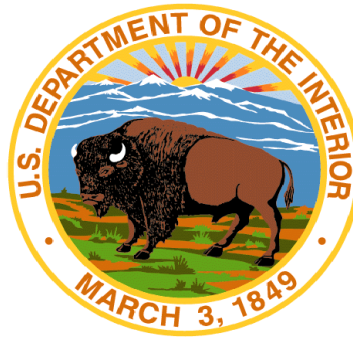
DOI Interior Enterprise Architecture
Recreation Modernization Blueprint

Recreation Line of Business

Version 1.10

July 7, 2004

- *Feedback Tracking Document and Feedback Action Report:* The Feedback Tracking Document is used to log and track all feedback received from reviewers of the draft blueprint document. Follow-up actions are documented to generate the Feedback Action Report.

Feedback Tracking

Feedback ID	Date Created	Priority	Status	Feedback Originator
1		High	New	Joe Smith
2		Medium	New	Sally Williams
3		Low	Action Taken	Joe Smith
4		High	Action Taken	Sara Jones

Feedback Action Report

BFA 1: Modernization Blueprint

Related Blueprint Finding	Feedback Content	Feedback Owner	Action	Date Completed	Document and Version
1	Need to change X	Analyst 1	Make the Change	2/1/2005	Blueprint V1.01
1	Issue with the following wording	Analyst 1	Make the Change		Presentation v1.1
3	I don't agree with X because of Y	Analyst 1	No action taken because of X		
2	Nice work	Analyst 1	No action needed		

- ***Document Review Form:*** The Document Review Form is distributed with a document to be reviewed, and is used to collect reviewer comments and change requests.

Modernization Blueprint Request for Comment

Please use this form to provide your review comments for the [Insert Document Title]. For each comment, please provide the following information:

- Specific comment or change(s) suggested,
- Section and page number where the comment of change(s) applies,
- Additional reference to a specific paragraph, figure, table or other item, and
- Rationale or details to support the comment.

In addition, the template includes a contact name, phone number, and email in the event that there is a question or a request for additional information concerning that comment. Also, please provide the agency name, contact person, and date the response was submitted in the table below.

Comments are requested to be submitted no later than [Insert Due Date]. Please submit comments to [Insert Contact Information, Email, Phone, etc.] Thank you.

Reviewer Name	
Title / Organization:	
Email and/or Phone No:	

Reviewer Comment or Change Request	Section and Page No.	Paragraph, Figure, Table or Other Reference	Rationale

- ***Record of Decision:*** The Record of Decision is used to document approval by the governance teams. A separate template is not provided, as this work product is of a customary format for the particular governance team.

Investment Review Board (IRB) Recommendation for Approval and Implementation of the DOI Financial Management Modernization Blueprint – January 12, 2007

Record of Decision (ROD):

The IRB approves the recommendations encompassed in the Financial Management Modernization Blueprint dated January 8, 2007 including identified system retirements and interfaces (see attached Affected Systems List). This Modernization Blueprint is approved with the stipulation that no systems will be retired from service until the appropriate level of functionality is implemented within the target FBMS solution.

All systems scheduled for retirement or interface will be centrally tracked within the Office of the CIO with Bureau input as to progress with defined milestones.

The approved Blueprint will be used by the Bureaus for their Capital Planning and Investment Control (CPIC) planning so that associated investments and project schedules are consistent with the FBMS schedule and the FBMS Affected Systems List included in this Record of Decision and imbedded in the Financial Management Modernization Blueprint.

The Financial Management Modernization Blueprint will be updated regularly to reflect any changes associated with the Financial Management Line of Business and/or the FBMS deployment. Updates to the Financial Management Modernization Blueprint will be created in partnership between the DOI IEA program, FBMS PMO, DOI PFM, and DOI PAM offices. All changes to the Blueprint must be approved by the Financial Management business owners and the DOI Investment Review Board.

The IRB is requesting, to the maximum extent possible, that the FBMS project team supply regular updates to FBMS planning and architecture artifacts. The FBMS planning and architecture artifacts should be consistent with artifacts that are regularly documented as part of DOI EA.

This Record of Decision (ROD) serves to approve the target architecture as outlined in the Financial Management Modernization Blueprint and serves as a commitment by the organizations represented on the Investment Review Board to participate actively in the FBMS implementation.

Approved: _____   Approved with Stipulations: ____X____

Stipulations: *BOR FERM system will be noted as potentially having Trust Data. Subject to refinements on Affected systems list. Blueprint is revised to encompass BRM subfunctions of budget execution and budget performance integration.*

Michael J. Howell
DOI Acting CIO
Chair, ITMC
Co-Chair, IRB

Paul Hoffman
Deputy Assistant Secretary for Performance, Accountability, and Human Resources
Chair, DOI E-Gov Team
Co-Chair, IRB

United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, DC 20240

FEB 1 6 2007

...randum

Michael Howell, Acting CIO, Department of the Interior

Business Owners for Financial, Acquisition and Property Management

...t: Approval of DOI Financial Management Modernization Blueprint

...e business owners for the functions contained in the DOI Financial Management Blueprint ...January 8, 2007, the undersigned are pleased to approve this document. This blueprint ...so approved by the DOI Investment Review Board.

Sonderman, Director
...e of Acquisition and Property Management
Date 2/9/07

...Fletcher, Director
...e of Financial Management
Date 2/14/07

...Hatfield, Deputy Assistant Secretary
Business Management and Wildland Fire
Date 2-16-07

EXERCISE 4-4: CONDUCT A VALUE MEASURING METHODOLOGY (VMM) ASSESSMENT OF YOUR RECOMMENDATIONS

Directions: Working individually, take 10 minutes to review your group's business and systems recommendations. Divide the list of recommendations into two categories: potentially implementable and non-probable for implementation. Perform a quick VMM analysis on the potentially implementable recommendations.

Next, take 20 additional minutes to discuss your observations with your group and formulate a final VMM visual.

Following the intra-group discussion time, be prepared to participate in a class discussion about your group's VMM analysis.

✴ PHASE 3, STEP 6: INCORPORATE APPROVED MODERNIZATION BLUEPRINT INTO ENTERPRISE ARCHITECTURE

Step 6, *Incorporate Approved Modernization Blueprint into Enterprise Architecture,* is intended to bring the analysis and architecture associated with the business area into the more global architecture picture of the enterprise. Although the analyst is continuously referencing the enterprise architecture when making observations of the business area, the resulting analysis and architecture products are not fully integrated with the enterprise until they are approved and this step is completed.

The result of this step is an evolving view of the target state for the enterprise. As any given business area completes its architecture analysis, the enterprise architecture absorbs this analysis and continues to evolve. Step 6 allows for:

- There to be an enterprise level architecture – other MBT Steps are business area or segment-focused.

- Executive management planning at the enterprise level as well as within each business area in order to form conclusions about the enterprise and business area (segmented) efforts.
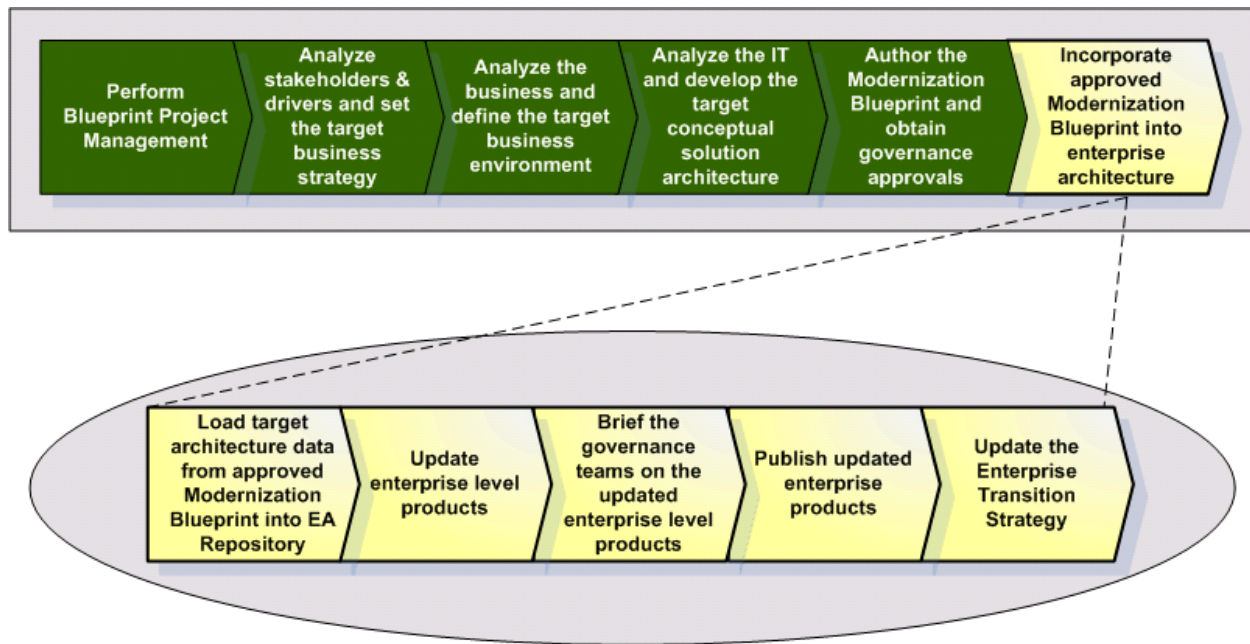
KEYS TO SUCCESS:
THIS STEP PRODUCES THE ENTERPRISE VIEW THAT SHOWS THE BUSINESS SEGMENTS AND HOW THEY FIT TOGETHER. BE SURE TO WORK WITH THE EA REPOSITORY MANAGER WHO IS THE KEEPER OF THE ENTERPRISE LEVEL PRODUCTS.

- *MBT Products Checklist:* The spreadsheet lists all MBT products that may be produced in creating a blueprint and is used as a communication and status management tool for tracking blueprint product submission, loading of those products, and validating of these products.

	A	B	C	D
1	Step/Artifact	What is needed for Step 6	URL or File Name	Product Status
2	Step A			
3	Business Area Visual			
4	Business Area Prioritization Chart			
5	Business Area Prioritization Presentation			
6	ROD from MIT on Blueprints to be Studied			
7	Step B			
8	Blueprint Purpose Statement	Provide URL to link to		
9	Step C			
10	Formed Core Team	Provide URL to link to		
11	Core Team Commitment Agreement	Provide URL to link to		
12	Step 1			
13	Core Team Charter	Provide URL to link to		
14	Communications Strategy	Provide URL to link to		
15	Project Plan for Blueprint	Provide URL to link to		
16	Step 2			
17	Stakeholder Hierarchy Diagram	Diagram in MBT Template File		
18	Mandates and Drivers Hierarchy Diagram	Diagram in MBT Template File		
19	Stakeholder Exchange Diagrams	Diagram in MBT Template File		
20	Organizational Readiness Assessment	Provide URL to link to		
21	SWOT Analysis Diagram	Diagram in MBT Template File		
22	Updated Stakeholder Exchange Diagrams	Diagram in MBT Template File		
23	Vision Statement	Provide URL to link to		
24	Goals and Objectives Hierarchy Diagram with Baseline Data	Diagram in MBT Template File Supporting Data in Spreadsheet		
25	Business Area Goals and Objectives to Agency's Goals and Objectives Matrix	Supporting Data in Spreadsheet		
26	Business Strategy to Mandates Matrix	Supporting Data in Spreadsheet		
27	Business Products and Services Matrix	Supporting Data in Spreadsheet		
28	Presentation on Business Strategy and Product and Service Decisions	Provide URL to link to		
29	Step 3			
30	As-Is Value Chain Diagram	Diagram in MBT Template File		
31	Target Value Chain Diagram	Diagram in MBT Template File		

Overview \ **Artifact List** /

- *Business Area Metadata Template:* The spreadsheet captures the metadata about the business focus area including Descriptive, Blueprint Status, MBT Products for Review, Business Mission and Vision, Team Information, Portfolio, Line of Sight (Reference Models), Analysis (Summaries, Scoring, Findings, and Plans).

	Group / Column	Field Definition	Values	MBT Step	Your BFA
1	Group · Column	Field Definition	Values	MBT Step	Your BFA
2	**Descriptive**			1	
3	Name	Name of BFA (if for just an	(80 Character Max)		
4	Description	From Team Web Page	Short Description; Text		
5	Business Focus Area Type	Type of Business Area	Core Functional Area		
6	Managing Partner	Organization Acronym of Lead	Acronym of Organization		
7	Blueprint Scope	From Team Web Page	Text		
8	Main Point of Contact	Person Name of Team Lead	Name		
9	**Blueprint Status**			All	
10	Blueprint Status	Select from MBT Step	Not Started		
11	Overview	From Team Web Page	Text		
12	Accomplishments	From Team Web Page	Text		
13	Milestones / Budgeted or Required Funds	From Blueprint	Text		
14	Issues/Challenges	From Blueprint	Text		
15	IRB Priority	From Blueprint	High Medium Low Unknown		
16	MBT Status	Steps completed or currently at	Pick List of MBT Steps		
17	**MBT Products for Review**			5 ->	
21	**Business Mission and Vision**			2	
30	**Team Information**			1	
43	**Portfolio**			4	
51	**Line of Sight**			2,3,4	
60	**Analysis - Summaries**			5	
65	**Analysis - Scoring**			5	
75	**Analysis - Findings**			5	
77	**Analysis - Plans**			5	
81	**Business Process Re-Engineering - Summaries**			8	
86	**Business Process Re-Engineering - Documents**			8	
91	**Data Quality - Overall Summary**		Values are: (Click on Cell	2,3,4,8,9	
97	**Data Quality - Inventory Summary**			4	
102	**Data Quality - Integration Summary**			4	

- *Enterprise Data Exchange Node Drawing:* This work product is a visual depiction of the data that is exchanged between the business areas within the enterprise. Each business area is a node in the diagram, and the lines between the nodes depict data that flows between the business areas.
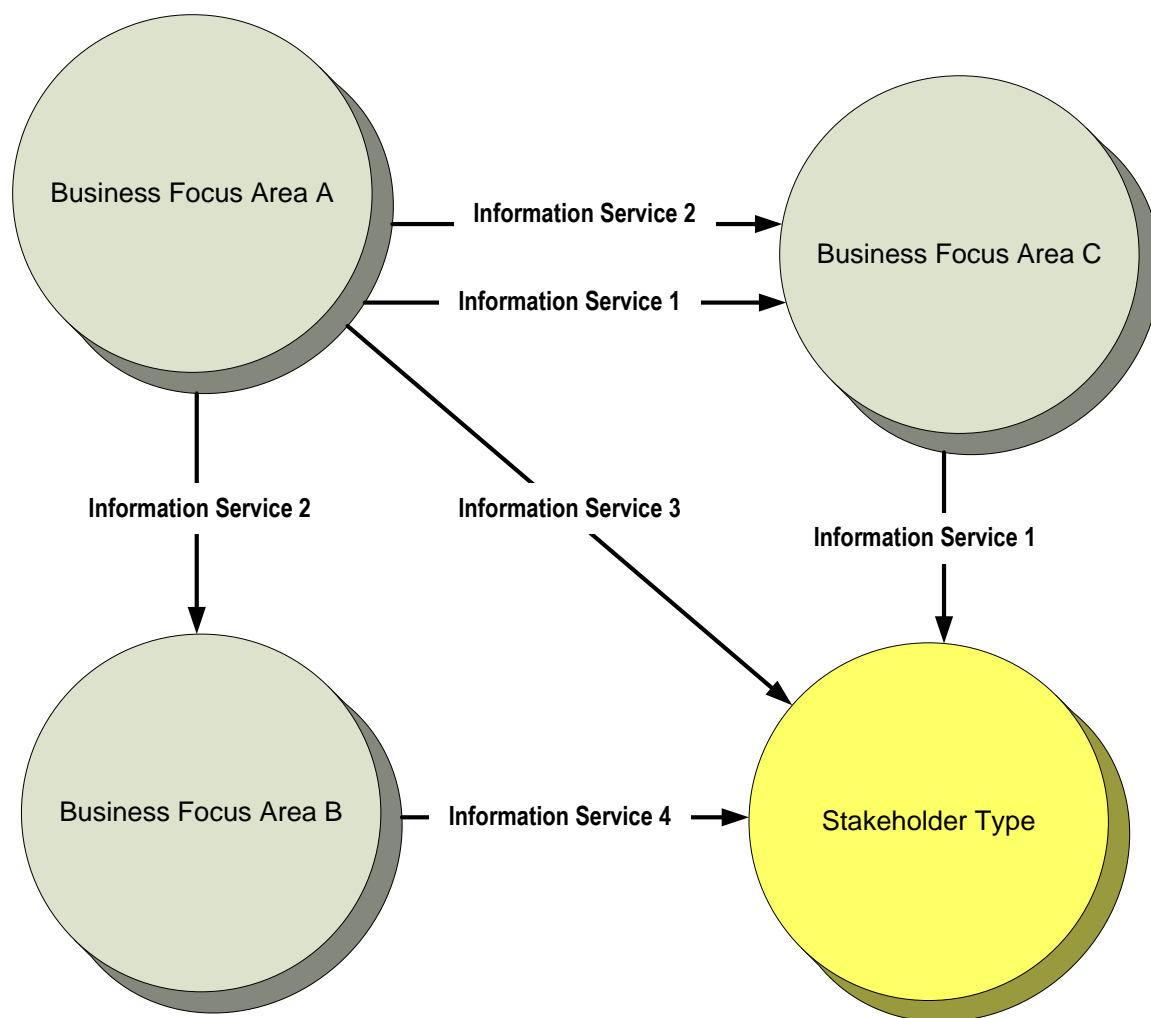
- *Enterprise Data Stewardship Matrix*: This work product is a matrix that documents the subject areas within the enterprise, and the business areas within the enterprise that are the stewards for the data.

	Business Area 1	Business Area 2	Business Area 3	Business Area 4	Business Area 5	Business Area 6
Subject Area #1	X					
Subject Area #2			X			
Subject Area #4		X		X		
Subject Area #5					X	

- ***Enterprise Modernization Sequencing Plan***: This work product is an enterprise level snapshot of all modernization initiatives. Each Blueprint publishes a business area modernization sequencing plan. The enterprise modernization sequencing plan is a compilation of all of the business area plans plus the enterprise level initiatives.

		Task Name	Duration	Start	Finish	Pre
1		Business Focus Area A	1600 days	Mon 8/2/04	Fri 9/17/10	
2		Blueprint Recommendation 1	320 days	Mon 8/2/04	Fri 10/21/05	
3		Subtask 1	40 days	Mon 8/2/04	Fri 9/24/04	
4		Subtask 2	40 days	Mon 9/27/04	Fri 11/19/04	
5		Subtask 3	60 days	Mon 11/22/04	Fri 2/11/05	
6		Subtask 4	80 days	Mon 2/14/05	Fri 6/3/05	
7		Subtask 5	100 days	Mon 6/6/05	Fri 10/21/05	
8		Blueprint Recommendation 2	320 days	Mon 10/24/05	Fri 1/12/07	
9		Subtask 1	40 days	Mon 10/24/05	Fri 12/16/05	
10		Subtask 2	40 days	Mon 12/19/05	Fri 2/10/06	
11		Subtask 3	60 days	Mon 2/13/06	Fri 5/5/06	
12		Subtask 4	80 days	Mon 5/8/06	Fri 8/25/06	
13		Subtask 5	100 days	Mon 8/28/06	Fri 1/12/07	
14		Blueprint Recommendation 3	320 days	Mon 1/15/07	Fri 4/4/08	
15		Subtask 1	40 days	Mon 1/15/07	Fri 3/9/07	
16		Subtask 2	40 days	Mon 3/12/07	Fri 5/4/07	
17		Subtask 3	60 days	Mon 5/7/07	Fri 7/27/07	
18		Subtask 4	80 days	Mon 7/30/07	Fri 11/16/07	
19		Subtask 5	100 days	Mon 11/19/07	Fri 4/4/08	
20		Blueprint Recommendation 4	320 days	Mon 4/7/08	Fri 6/26/09	
21		Subtask 1	40 days	Mon 4/7/08	Fri 5/30/08	
22		Subtask 2	40 days	Mon 6/2/08	Fri 7/25/08	
23		Subtask 3	60 days	Mon 7/28/08	Fri 10/17/08	
24		Subtask 4	80 days	Mon 10/20/08	Fri 2/6/09	
25		Subtask 5	100 days	Mon 2/9/09	Fri 6/26/09	
26		Blueprint Recommendation 5	320 days	Mon 6/29/09	Fri 9/17/10	

- *Enterprise Modernization Dependencies Matrix*: This work product is a matrix that lists all of the modernization initiatives within the enterprise, and depicts the other initiatives to which those modernization initiatives are dependent.

	Existing Initiative A	Existing Initiative B	Recommendation #1 from Other BFA	Recommendation #4 from this BFA	Budget Approval – FY0X	Existing Initiative C
BFA A Recommendation #1						
BFA A Recommendation #2						
BFA B Recommendation #1						
BFA B Recommendation #2						

- *Enterprise Horizontal Services Model*: This work product is a drawing that depicts all of the recommended horizontal services within the enterprise, and how they would provide information to the business areas.
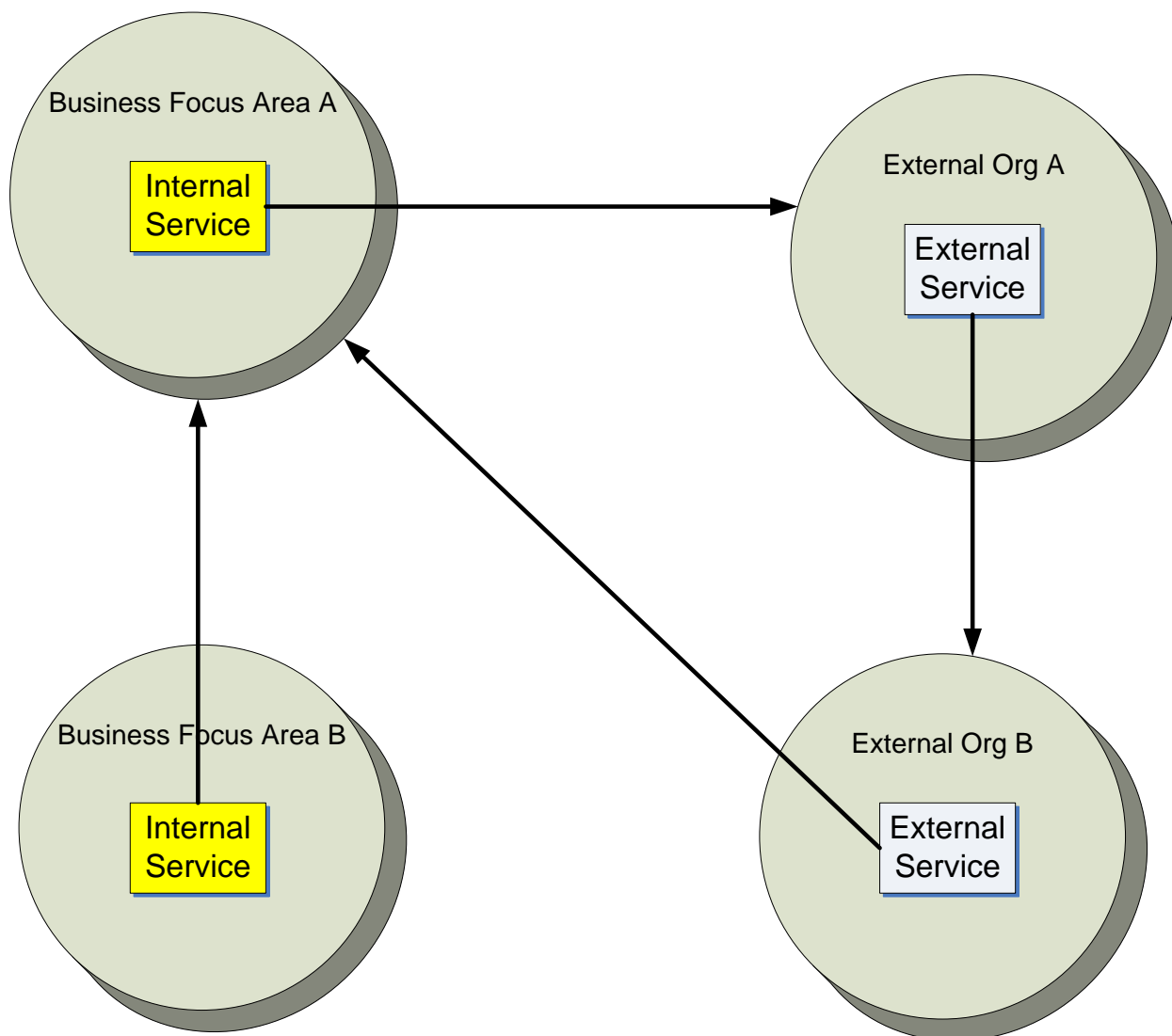
- *Enterprise Modernization Recommendations to Mandates Matrix*: This work product is a matrix that illustrates all of the modernization recommendations within the enterprise, and how those recommendations meet the many mandates to which the enterprise is responsible for action.

	DOI Strategic Plan	DOI e-Gov Plan	eGov Act 2002	GPRA	President's Management Agenda	Clinger Cohen
BFA A Recommendation #1						
BFA A Recommendation #2						
BFA B Recommendation #1						
BFA B Recommendation #2						

- ***Enterprise Modernization Recommendations to Outcomes Matrix***: This work product is a matrix that illustrates all of the modernization recommendations within the enterprise, and how those recommendations meet the strategic outcomes to which the enterprise is responsible for action.

	DOI Strategic Plan – Resource Protection	DOI Strategic Plan – Resource Use	DOI Strategic Plan – Serving Communities	DOI Strategic Plan – Recreation	President's Management Agenda	DOI Strategic Plan – Management Excellence
BFA A Recommendation #1						
BFA A Recommendation #2						
BFA B Recommendation #1						
BFA B Recommendation #2						

- *Enterprise Transition Strategy Checklist:* Provides all section updates required for all four sections of the Enterprise Transition Strategy. This also is a status document and change tracking mechanism to communicate the progression of the enterprise transition strategy document each quarter as it is reported to the Office of Management and Budget.

	Each Tab contains the required section updates and recommended level of changes notes to capture.
	Click on a link below to go to the required section updates
1.	As-Is Architecture
	> Enterprise "As-Is" Architecture including Reference Models, IT Portfolio, and blueprint dashboards and enterprise canned reporting
2.	Conceptual Target Architecture
	> Conceptual Target Architecture including enterprise products updates including data exchange, target services, and mapping to business focus areas
3.	Enterprise Transition Plan
	> Enterprise Transition Plan including sequence plan and recommendation review of blueprints in development, being implemented, enterprise dependencies and generic lifecycle milestones
	> Include coordinating and uploading plans to PMIS (Enteprise Project Plan Server)
4.	Annually Update - Standing Transition Strategy
	Standing Transition Strategy including Principles, Governance, LifeCycle Management, Closing "Gap" Strategy, Methodology, and planning approach

✴ LESSON SUMMARY: ANALYZING A BUSINESS AREA INVOLVES BUSINESS PARTICIPATION AND WELL ROUNDED ANALYSIS

Enterprise architecture is a discipline that involves many groups, individuals, roles, and levels within one or many organizations. In this lesson we learned that a proper EA analysis involves a full spectrum of domains including:

1. Performance
2. Business
3. Data
4. Systems
5. Technology
6. Services

In this lesson, we dove deeper into the six domains to discuss analysis techniques that result in EA artifacts. Not only are the EA artifacts useful for documenting your analysis, but we learned that the MBT artifacts are designed to build upon one another to deliver a full "line of sight" analysis.

Furthermore, this lesson also included discussion on who should be involved throughout the modernization blueprint development steps in the MBT. There are many roles to play for the architecture practitioners as well as critical roles for business leadership, business managers, and solution specialists.

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Lesson 5

MBT Phase 4: Implement the Blueprint Recommendations

✳ LESSON OBJECTIVES

At the end of this lesson, you will be able to do the following:

- Explain the process for taking an approved blueprint and moving it towards implementation

- Explain how the Capital Planning and Investment Control and Solution Architecture processes receive information from EA and use it to advance the modernization efforts

✳ OVERVIEW OF PHASE 4: IMPLEMENT THE BLUEPRINT RECOMMENDATIONS

Phase 4 includes steps that are designed to guide an approved modernization blueprint from the establishment of an implementation project team through implementation of the approved recommendations. Phase 4 includes guidance for establishing the appropriate project management controls and structure for implementation as well as guidance on performing more detailed pre-implementation analysis such as business process reengineering and data standardization. Additionally, Phase 4 includes Capital Planning and Investment Control activities, the formulation of a more detailed solution architecture, and the participation in procurement activities.

Throughout Phase 4, the enterprise architecture practitioners are interacting with a variety of additional planning functions including Budget, Capital Planning and Investment Control, Solution Architecture, and Procurement. Through these relationships, the enterprise architecture practitioner is able to guide the modernization blueprint to the starting line for implementation. The core team also plays an active role as it is refreshed with implementation expertise in Phase 4, and then is active throughout the lead up to implementation.

✳ PHASE 4, STEP 7: PERFORM BUSINESS TRANSFORMATION INITIATION TASKS

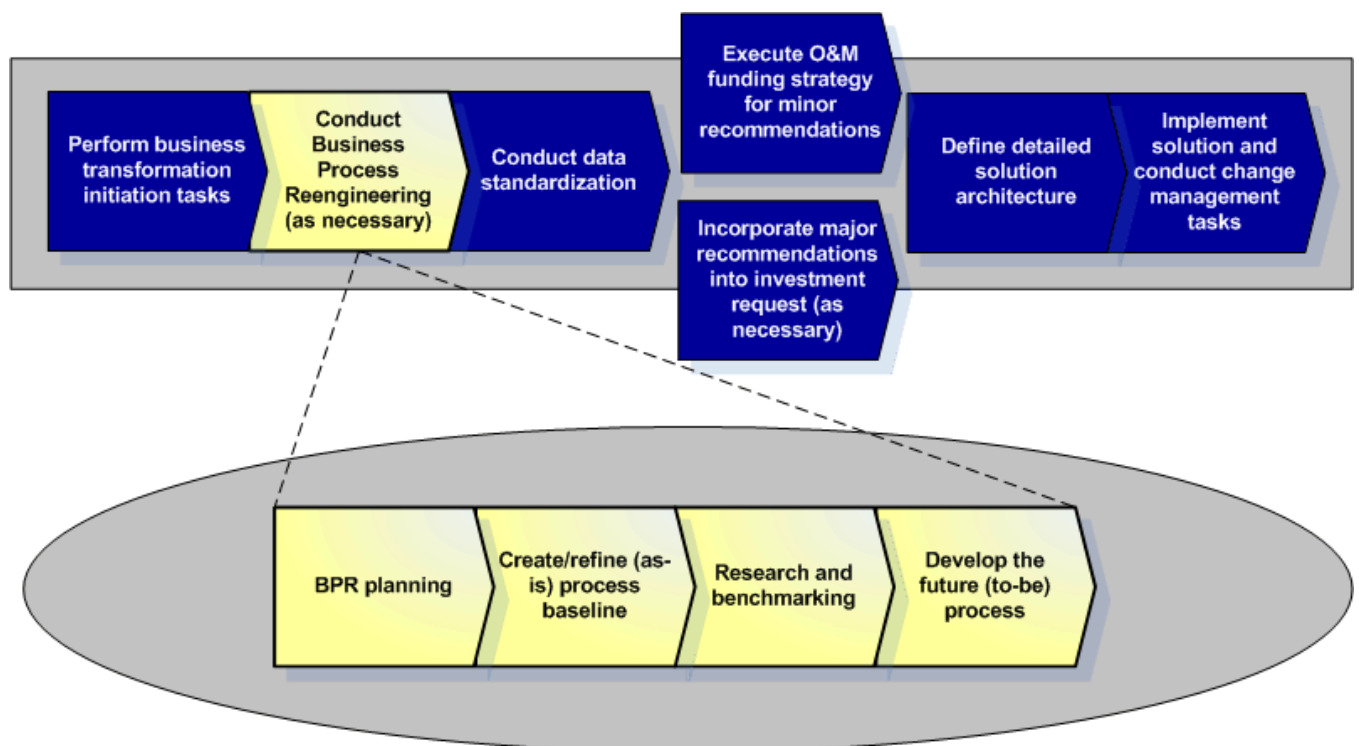STEP 7 IS PERFORMED FOR THE FOLLOWING PURPOSES:

- Develop a core team to provide subject matter expertise and knowledge to ensure a successful and valuable implementation
- Develop the detailed implementation plan
- Develop the Communication Risk Management and Change Management Plans to faciliate a successul implementation
- Develop the requisite funding strategy to support the implementation objectives
- Provide outreach to governance bodies and user communities to ensure adequate support for the initiative
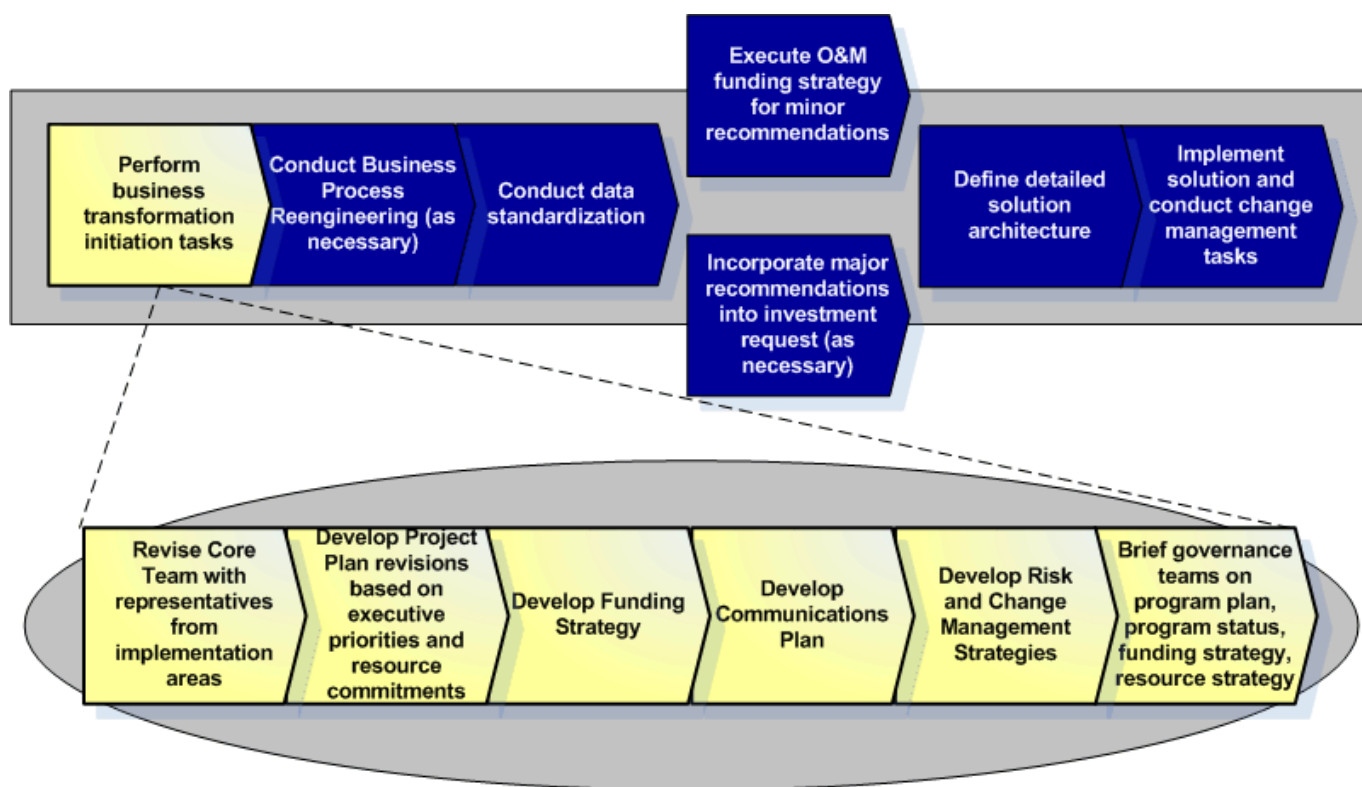
✱ PHASE 4, STEP 8: CONDUCT BUSINESS PROCESS REENGINEERING

STEP 8 IS PERFORMED FOR ONE OR MORE OF THE FOLLOWING PURPOSES:

- To further refine and validate information and business requirements in support of business area modernization objectives
- To select which functions and/or processes within the scope of the business area effort need further analysis
- To identify and document the shortcomings and inefficiencies of current business processes
- To identify potential opportunities for functions and/or processes harmonization across departments, geographic locations, Bureaus, etc.
- To provide the basis for sizing the effort required to understand and assess the current environment and/or redesign the future environment

✳ PHASE 4, STEP 9: CONDUCT DATA STANDARDIZATION

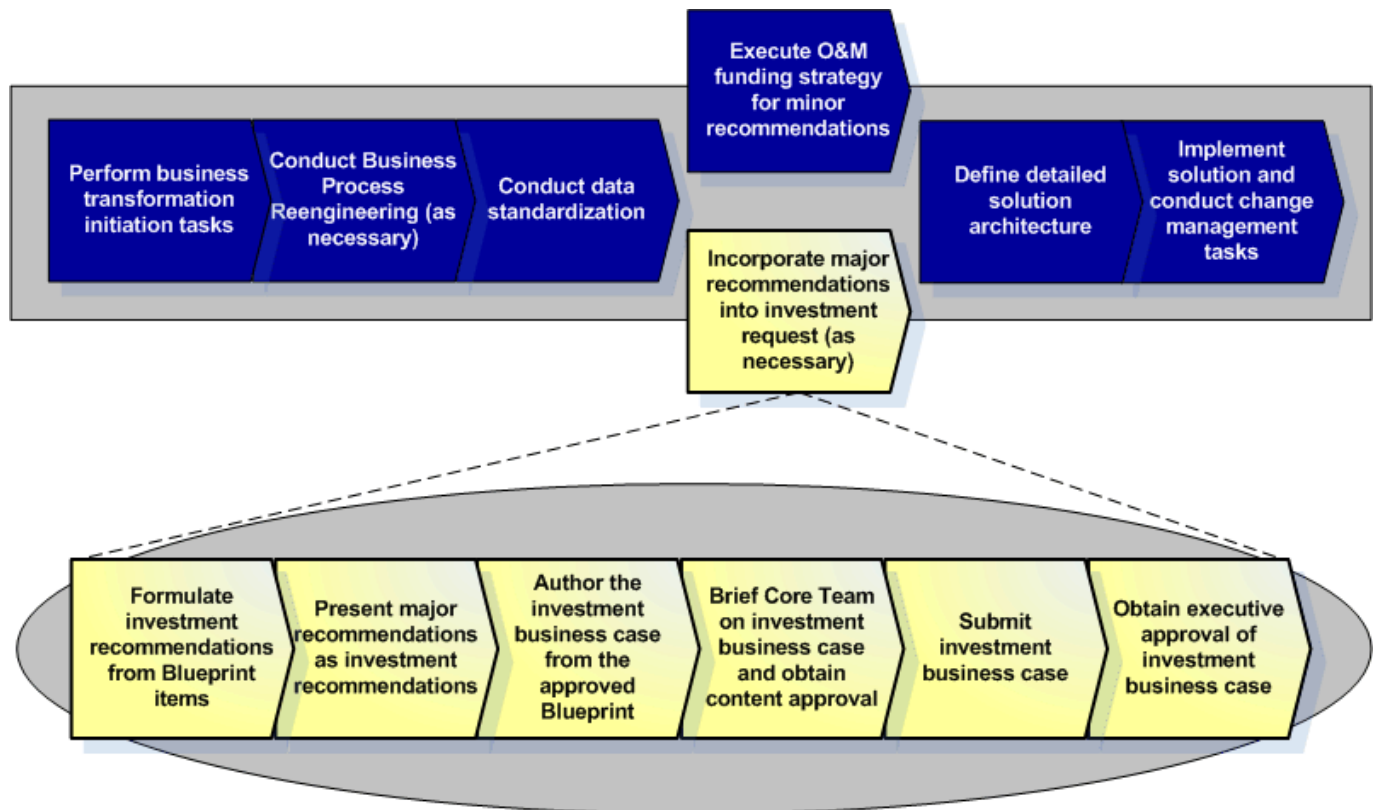STEP 9 IS PERFORMED FOR THE FOLLOWING PURPOSES:

- To identify priority data that are important to the enterprise especially data that are shared across systems and organizations.

- To enhance interoperability among information systems by promoting data structures and data exchanges that are based on a common understanding of data.

- To identify and reuse quality data.

- To expose data standards to a broader community and seek collaborative input from that community on how shared data is best defined and structured.

- To provide database schemas and data exchange standards that are based on standardized data.
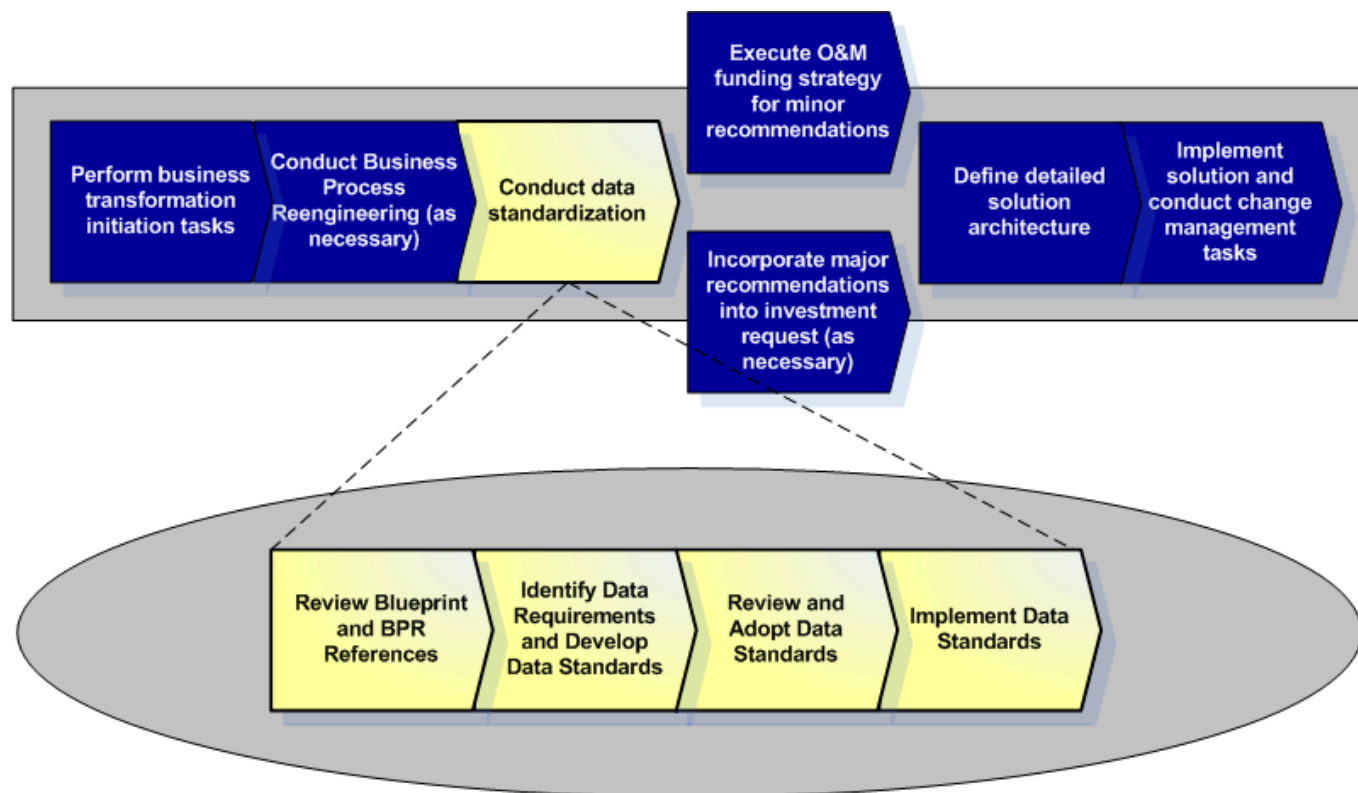
✳ PHASE 4, STEP 10B: INCORPORATE MAJOR RECOMMENDATIONS INTO INVESTMENT REQUEST

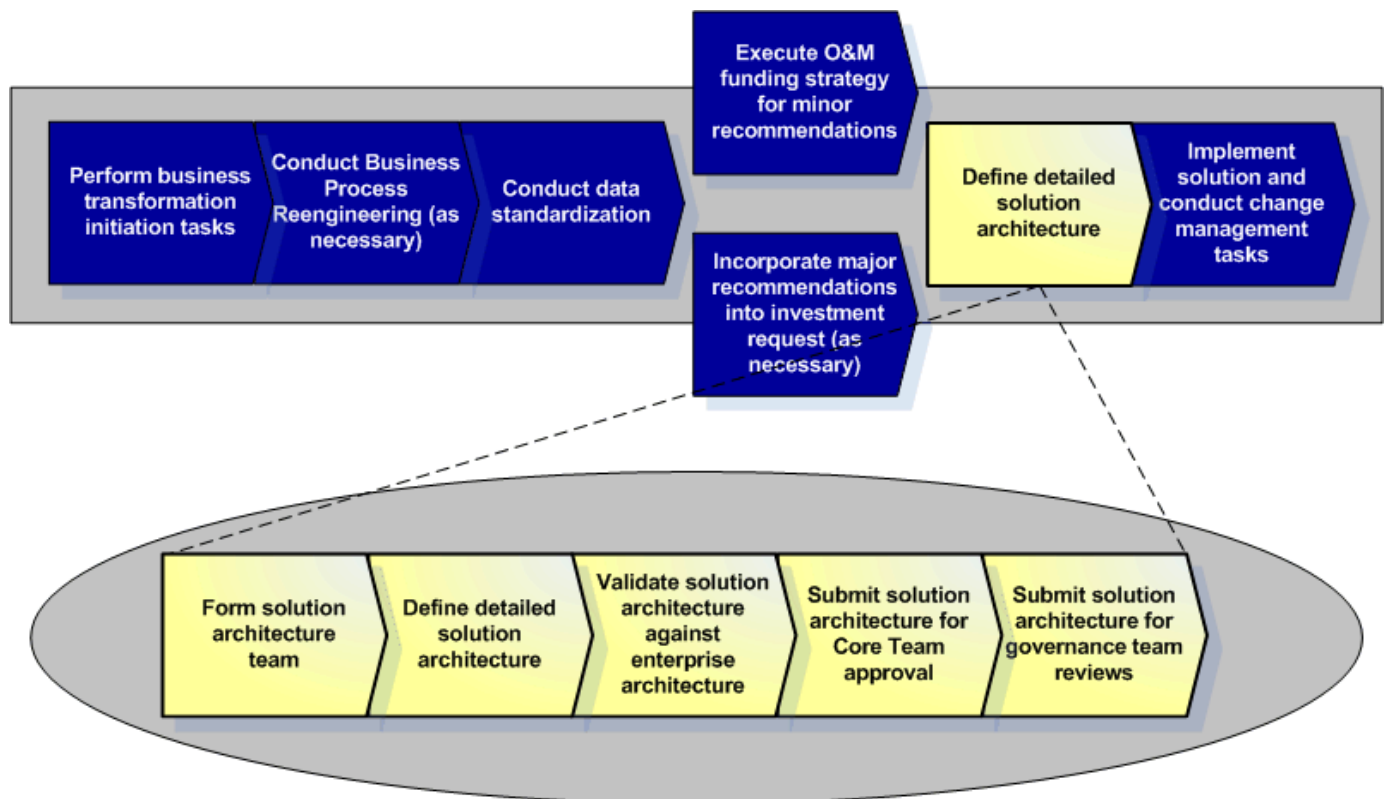STEP 10B IS PERFORMED FOR THE FOLLOWING PURPOSE:

- Secure needed funding for the recommended changes in the modernization blueprint

✴ PHASE 4, STEP 11: DEFINE DETAILED SOLUTION ARCHITECTURE

STEP 11 IS PERFORMED FOR THE FOLLOWING PURPOSES:

- To define the detailed solution architecture
- To ensure that the solution architecture is in compliance with enterprise architecture principles, best practices, and conceptual target application architectures

✳ PHASE 4, STEP 12: IMPLEMENT SOLUTION AND CONDUCT CHANGE MANAGEMENT TASKS

STEP 12 IS PERFORMED FOR THE FOLLOWING PURPOSES:

- To acquire the physical materials necessary to configure and implement the solution as designed and approved
- To communicate the intent and impact of the solution to a wide community of business owners, business staff, and administrators
- To construct and implement new policies to smoothe the transition to the new solution
- To train business owners and business staff on the new solution and on any new skills that they must possess
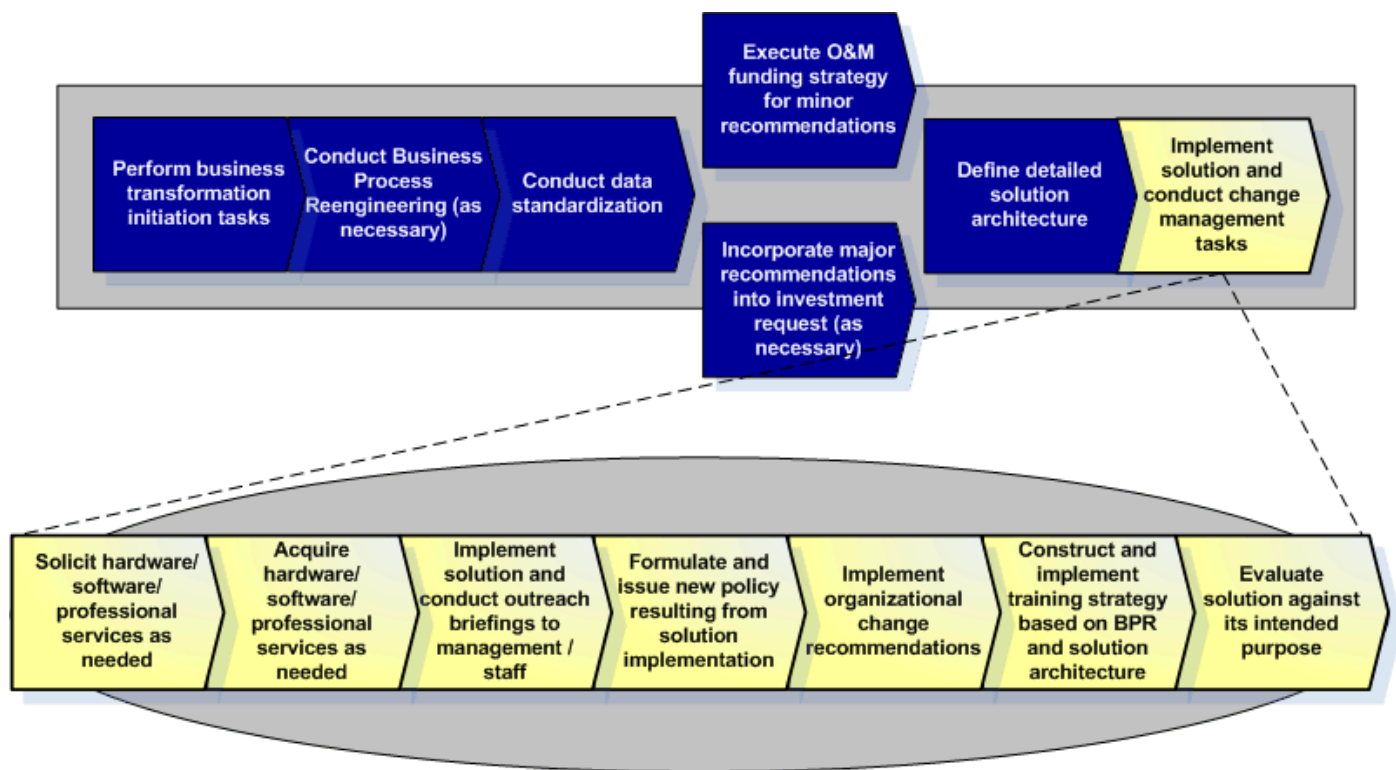
✴ LESSON SUMMARY: IMPLEMENTATION SUCCESS DEPENDS ON TEAMWORK AND HANDOFFS

The role of enterprise architecture practitioners is not complete when the modernization blueprint is completed. EA practitioners have a continuing obligation to the progress of modernization efforts including the obligation to participate actively with other planning and implementation functions. Some of the planning and implementation functions we discussed in this lesson are:

1. Budget
2. Capital Planning and Investment Control
3. Solution Architecture
4. Acquisitions/Procurement
5. IT Security

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Lesson 6

MBT Phase 5: Maintain the Blueprint

✳ LESSON OBJECTIVES

At the end of this lesson, you will be able to do the following:

- Explain the process for maintaining the modernization blueprint and the enterprise architecture
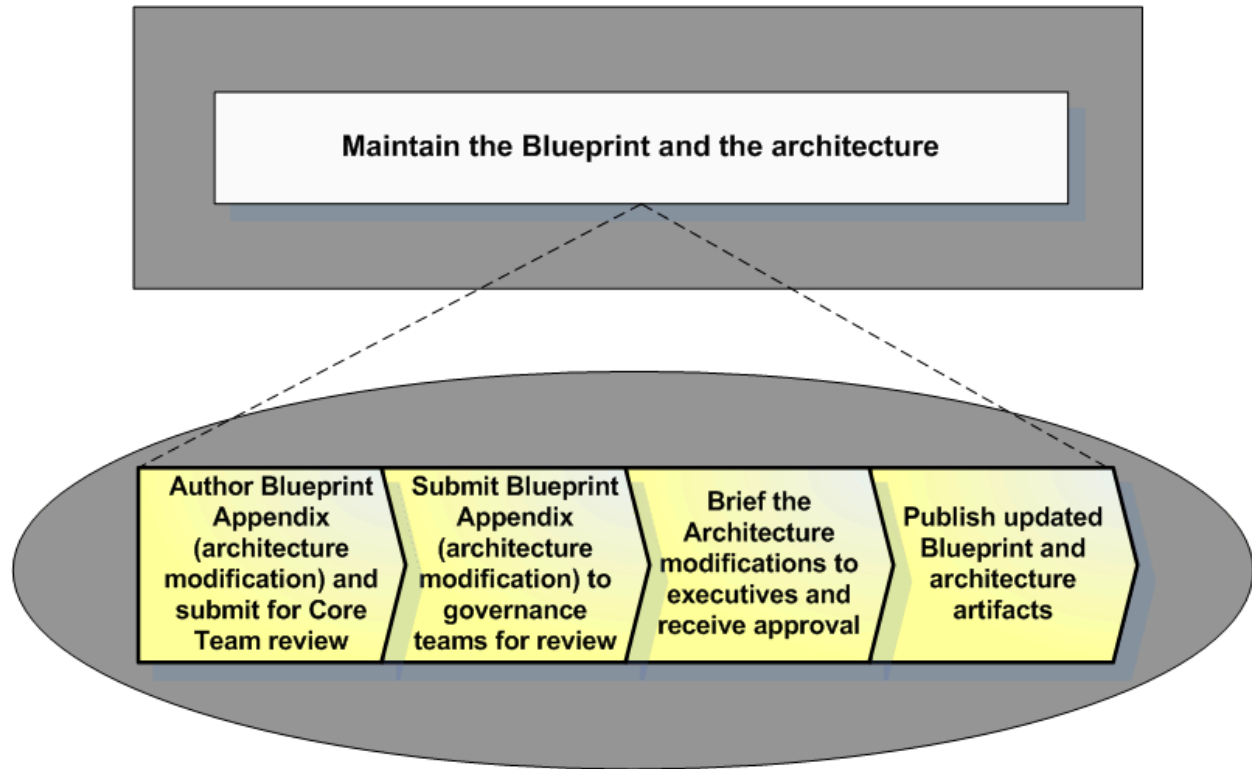
✴ PHASE 5, STEP 13: MAINTAIN THE BLUEPRINT AND THE ARCHITECTURE

Step 13 provides the business area with a recurring process for keeping their architecture and blueprint current. During the business transformation implementation steps, and in years following the implementation, there will be forces that will necessitate changes to the architecture and the Blueprint. In some cases, those forces will require a new modernization blueprint or a new analysis task to create another analysis work product. However, in many cases, there will be smaller architecture modifications that impact the existing blueprint and the existing architecture artifacts. This step is intended to handle such cases through an appendix to the existing blueprint and the publication of updated architecture artifacts.

STEP 13 IS PERFORMED FOR THE FOLLOWING PURPOSES:

- To provide architecture analysts and the business leadership a process to keep the business area's architecture documentation current
- To provide an outlet, other than lengthy new analysis efforts, to maintain documentation and make smaller revisions to items that have already been reviewed, approved, and published
- To provide a mechanism to keep the governance team involved with continuing to review and approve a business area's architecture decisions

Maintain the Blueprint and the architecture

Author Blueprint Appendix (architecture modification) and submit for Core Team review

Submit Blueprint Appendix (architecture modification) to governance teams for review

Brief the Architecture modifications to executives and receive approval

Publish updated Blueprint and architecture artifacts

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Enterprise Architecture Program
Washington, DC
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