Requirements Life Cycle



Discovery

Key Players:

Proposal Sponsor Analyst

Objectives: Investigate Proposal Consider Alternatives Determine if Concept is Viable

Deliverables:

Change Required

Proposal Description Analysis of Alternatives (if required) Business Justification

<u>Decision Gateway:</u> Evaluate Proposal for Investment



Investment Authorized

0 Scope Determination

Who is I nvolved:

Proposal Sponsor Analyst

Key Processes:

Determine Scope of Proposal Determine Stakeholders Define Project Outcomes

Deliverables: Scope Document RACI Project Charter

Governance:
Project Charter Review



Project(s) Commissioned

Document Stakeholder

Needs

Determine What is Required Who is I nvolved:

Requirement Stakeholders Project Manager

Analyst

Key Processes: Develop Requirements Plan Evaluate Current State Define Post-Change Target State

Elicit Requirements for Change Deliverables:

Stakeholder Requirements Solution Development Plan Procurement Document (if needed)

Governance: Notice to Proceed



Ready to Build Solution

8 Solution

Development

Who is Involved:

Solution Development Team Project Manager Analyst

<u>Key Processes:</u>
Document Technical Specifications Support Develop / Testing Effort Monitor Vendor Performance

Deliverables:

Solution Vendor Assessment (if needed) "As Built" Requirements / Architecture

Governance:
Solution Satisfies Project Outcomes



Project Outcomes Satisfied



Requirements Stored for Next Change

Sustaining

the Solution

Project Stakeholders (previous phases)

Archive Project Requirements

<u>Deliverables:</u> Notification of Project Completion

Governance:
Organization Ready for Next Change

Update Enterprise Artifacts

Conduct Lessons Learned

Who is I nvolved:

Project Manager

Key Processes:

Analyst

Software / System Development Lifecycle [SDLC]

Project Management Life Cycle [PMLC]

Business Transformation Life Cycle

Key Architecture Perspectives and Models Used for Each RLC Phase

Scope Context Model	Use document analysis to fill in key pieces of the diagram and capture questions which may be relevant to scope.	Elicit, verify and approve the diagram with the sponsor and key stakeholders. You may use the diagram for project artifacts such as a charter.	Use the diagram a tool to align requirements, ensuring they support one or more of the objectives. As new stakeholders or systems are discovered, use the diagram to conduct scope impact analysis with the Project Manager.		If performance metrics are tracked, the outcomes should be audited using elicitation techniques, such as a survey, to learn if the outcomes contributed to business goals as documented in the discovery phase.
Capability / Business Process Models	Document analysis might uncover business processes and/or business capabilities. Capture these processes in a diagram along with a note indicating the source for future reference.	Use the capability decomposition model to understand all business capabilities, business functions, or processes which might be impacted by the proposed change. Also helps to identify organizational stakeholders.	If the business change in any way affects the way people do their work, process models should be constructed to learn how the change will affect the way they do their job.	Process models help identify good User Acceptance Test candidates by identifying the roles who will actually interact with the solution once it is in place.	Created and updated business process information becomes a valuable enterprise asset, helping with resource onboarding efforts and future business change efforts.
Business Context models	Constructed to show a high level view of a capability, for "what if" analysis. Also helps with Analysis of Alternatives [AoA].	Used to explore organizational and legal impacts for a business change at a high level.	Acts as a reference for requirements elicitation.	Acts as a reference to provide an overview for developers who may not be familiar with organizational functions (i.e. vendors).	Might be updated as a result of the solution. Also used to assess solution effectiveness on Key Performance Indicators [KPIs].
Business Technology Landscapes	For infrastructure optimization proposals, business technology helps to understand dependencies between systems, assess infrastructure complexity, and application lifecycle risks.	Used to determine systems affected by a business change, along with constraints, assumptions, and solution risks.	Provides a way to ensure system function, interface, data, and nonfunctional conditions are captured and logically grouped for solution development.	Used to show progress and set expectations for cutovers when new systems or services need to be deployed.	Provides an overall blueprint of transactions between systems, data sources, and services.
Organization Models	Organization models help to assess impacts for proposed business changes, providing full consideration of business justification or Analysis of Alternatives (AOA).	Use organization diagrams to determine which organizations will participate in the requirements effort, how they will participate, and what they need to review. Business roles affected by the solution are also analyzed.	During the requirements gathering sessions, it is often the case that unforeseen requirements are discovered (a good thing). Organizational diagrams might help assess who needs to be consulted on the requirement.	The organization model supports communication planning to determine roll out strategies, user testing support, progress communications, and other Organizational Change Management [OCM] activities.	Supports a post implementation review of effectiveness by ensuring all parties have a voice in the solution performance assessment.
Data Model	Though not typically used in Discovery, Conceptual Data Models (CDMs) might provide a common understanding of entity or business relationships. Often it provides an opportunity to standardize the name of an entity which might go by two different names.	Logical Data Models [LDMs] may be used to discover affected systems. These models might also be useful to determine dependencies or applicable mandates (i.e. security or privacy).	Logical Data Models {LDMs} are commonly used to determine what information is needed to support a desired system functional requirement. LDMs can also help uncover data sources for the information and rules associated with information elements.	The Logical Data Model [LDM] helps with the determination of authoritative data sources, along with data formatting rules and Extract, Transform, Load [ETL] rules. LDMs also help with Physical Data Model [PDM] data structures.	Updated data models support impact assessments for future projects. When an enterprise repository is used, impact assessments can apply to concurrent projects which might be using the same information elements.
Rules Modeling	Rules which need to be considered during Discovery include laws, organizational values, and business guidelines - high level information which will be needed to support an understanding of change complexity or might alter the selection of an alternative course of action.	Rules models may be needed to understand the complexity of the business change and constraints which must be considered in the intended solution.	Rule models are created or updated to capture operational decisions made during the execution of business processes. Rules are documented to describe system-to-system transactions at a high level.	Rule models are used to inform development of functional requirements as well as a means to test developed functionality. System rules are also documented to involve the Extraction, Transformation, and Loading of information to support a system function.	Rules models represent the intellectual capital of the organization. Once stored in an enterprise repository, they ensure valuable knowledge is not compromised or lost when resources leave the organization.
System Function Models	Not typically used in this phase.	Used on smaller projects where change is centered around a few functional requirements.	Used to identify system functional and non functional requirements.	Used to describe how a function will execute. Expressed as use cases or user stories depending on the solution development methodology.	Used for training and reference materials. System Function Models should be stored in the enterprise repository (if used) to increase standardization across the enterprise.
Interface Models	Not typically used in this phase.	Used on smaller projects where change is centered around a few functional requirements.	Might be used as a visual tool to elicit what a stakeholder wishes to change.	Used to illustrate how the user will interact with the system or how systems/services will exchange information.	"As built" interface models work well for user training, reference, and procedure documentation.