Architecture Development Cycle

Phase	Objectives	Inputs	Outputs	Subphases / Questions	Remarks
A. Initiation and Framework	• Consensus within the organization that a change is required • Confirm the organization's business goals and strategic drivers • Define an architectural vision • Build a consensus in favor of the vision within the organization • Define scope of architecture effort and constraints	• Business goals • Strategic plans • Mission statement • Financial constraints • Time limits • Current business system description	• Business requirements and key systems and architecture drivers • Relevant business process • Assumptions • Business return given required changes • First list of candidate re-usable building blocks ("business process driven list") • Model of candidate building blocks showing inter-relationships • Organization sponsors • Project management structure • Plan for remaining phases		
B. Baseline description	• High level description of the characteristics of the current system	• Existing system descriptions • Existing architecture	• A clear description of the current system and its functions • A statement of the constraints imposed by the internal organization • A statement of the constraints imposed by the business or external environments • Relevant assumptions (e.g., financial, organizational,		• Documents the starting point for the architecture • Lists the interoperability issues that the final architecture will take in account

			required technical functionality) • Additional list of candidate building blocks ("baseline driven list") • Current architecture principles embodied in current system		
C. Target architecture	• Identify a target architecture	• Baseline description from B • Business requirements and architecture drivers from A • TOGAF TRM • External constraints • Organizational constraints • Business process driven list of candidate building blocks • Baseline driven list of candidate building blocks	• A baseline systems requirements description in TOGAF terms • A full description of the baseline system and the proposed architecture from all relevant views • A description of the services selected and a detailed architecture definition of the standards used to implement these services • An analysis of how the proposed architecture meets the business goals and objectives • A description and model of the Architecture Building Blocks: a list of the building blocks selected to provide the services, and the interfaces between the building blocks; and a diagrammatic depiction of the building blocks at the	1. Representing the baseline using the Open Group framework to give a common starting point 2. Considering a number of architectural views to ensure that all aspects of the required systems are considered 3. Selecting a high-level model for the architecture 4. Selecting the services required 5. Identifying and validating business goals are met 6. Establishing a set of criteria for service selection 7. Defining the architecture in detail 8. Conducting a gap analysis	

			levels needed to describe strategic and implementation aspects of the architecture • A gap analysis		
D. Opportunities and Solutions	• Identifies the parameters of change • The major steps along the way • Top-level projects required to go from the current environment to the target	• Architectural Building Block architecture from C • Analysis of how proposed architecture meets business goals and objectives • Existing system description from B • Budgetary information • Gap analysis from C	• A list of projects or work packages required to implement the proposed architecture • A description and model of the Solution Building Blocks		It will form the basis for the implementation plan. Identifying implementation opportunities sometimes allows a business to identify new applications; in this case it may be necessary to iterate the Opportunities and Solutions and Target Architecture phases.
E. Migration Planning	• The various implement projects are sorted into priority order	• Current architecture • Building block architecture, both in Architectural (functionally defined) and Solution (product-specific) Building Block forms. • Analysis of how proposed architecture meets business goals and objectives • Organizational information • Product information • Standards information • Other specification information	• A prioritized list of tasks to be implemented including cost/benefit information and outline plans	• Is the migration viable? • What products are needed? • What components must be developed? • Does the organization have the resources needed to develop such components? • What standards are the products or components built on? • When will they be available? • Will the products stand the test of time? • What is the cost of	A prioritized list of tasks will go on to form the basis of the implementation plan

				retraining the users? • What is the likely cultural impact on the user community? • What is the total cost of the migration? • What actual benefits will it deliver?	
F Implementation planning	• Plans are drawn up for each implementation project, and the system is implemented and deployed	• Benefit statements from E • Cost information from E • Outline plan from E	• A full implementation plan • The implemented system	• Project details, including name, description and objectives • Scope, deliverables and constraints • Task lists • Measures of effectiveness • Cost/benefit analysis • Required resources • Acceptance criteria • Risks and issues	
G. Architecture maintenance	• Establishes a procedure for the ongoing maintenance of the architecture and puts it into practice	• Architecture and Solutions Building Blocks • Technology environment updates • Business environment updates	• Ongoing maintenance of the target system		• The maintenance procedure for the new baseline.will typically provide for continual monitoring of new developments in technology and changes in business environment, and for determining whether to formally initiate a new architecture evolution cycle.