An architecture is a structure of components, their inter-relationships, and the principles and guidelines governing their design and evolution over time. The purpose of enterprise architecture is to optimize across the enterprise the often-fragmented legacy of processes (both manual and automated) into an integrated environment that is responsive to change and supportive of the delivery of the business strategy. EA reduces costs, increases quality, speeds time to market and mitigates risks by enabling enterprise-wide standards and solutions. Effective Enterprise Architecture frequently provides pragmatic artifacts such as requirements, specifications, guiding principles, and conceptual models that describe the next major stage of evolution of an organization, often called the "future state.". With Enterprise Architecture, organization leaders can more readily improve the effectiveness, efficiency, and responsiveness of their enterprise. Because enterprise architects consider common strategic goals and strong integration between business strategy, enterprise program management, portfolio management and governance functions, they are able to bridge the gap from strategy to implementation in an organization.

EA is often broken down into four domains: business, application, data and technology architecture.

- 1. Business Architecture models the services, processes, people, and tools the business need to achieve strategic goals.
- 2. Data architecture is the design of data to support strategic business capabilities.
- 3. **Technology Architecture** plans technology capabilities such as networking, computing, security and data storage.
- 4. **Application Architecture** is the process of translating business goals into effective strategies for applications. Solution Architecture leverages proven approaches to solve complex system design problems.

Enterprise Architecture Value Proposition - Breaks down IT silos, Pushes IT silos to think globally and act locally, reduces technology costs, accelerates time to market, common approaches, bridge between business strategy and IT execution, develops competitive advantage, strategic core competencies, enable move from temporary stop-gap projects to strategic initiatives, supports revenue generation and cost reduction by enabling faster, smarter projects, provides IT transparency, facilitates pragmatic, cost effective approaches, flags redundant, non-strategic and high risk projects, ensures IT spending is aligned with business strategy and goals, enterprise-wide IT transparency, solutions that make sense for the organization as a whole, Develops opportunities

TOGAF Part Summary (The Open Group Architecture Framework)

- 1. **Introduction** This part provides a high-level introduction to the key concepts of enterprise architecture and, in particular, to the TOGAF approach. It contains the definitions of terms used throughout TOGAF.
- 2. **Architecture Development Method (ADM)** a step-by-step approach to developing an enterprise architecture. The ADM includes establishing an architecture framework, developing architecture content, transitioning, and governing the realization of architectures.
- 3. ADM Guidelines and Techniques collection of guidelines and techniques available
- 4. **Architecture Content Framework** a structured metamodel for architectural artifacts, the use of re-usable Architecture Building Blocks (ABBs)
- 5. **Enterprise Continuum and Tools** discusses appropriate taxonomies and tools to categorize and store the outputs of architecture activity
- 6. **TOGAF Reference Models** TOGAF Technical Reference Model (TRM), and the Integrated Information Infrastructure Reference Model (III-RM).
- 7. **Architecture Capability Framework** discusses the organization, processes, skills, roles, and responsibilities required to establish and operate an architecture practice

Architecture Development Method Phases

The **Preliminary Phase** - preparation and initiation activities, business directive for a new enterprise architecture, including the definition of an Organization-Specific Architecture framework and the definition of principles.

Requirements Management - process of managing architecture requirements throughout the ADM.

- A. **Architecture Vision** includes information about defining the scope, identifying the stakeholders, creating the Architecture Vision, and obtaining approvals.
- B. Business Architecture development of a Business Architecture to support an agreed Architecture Vision.
- C. **Information Systems Architectures** development of Information Systems Architectures for an architecture project, including the development of Data and Application Architectures.
- D. Technology Architecture development of the Technology Architecture for an architecture project.
- E. Opportunities and Solutions initial implementation planning and the identification of delivery vehicles for the architecture
- F. **Migration Planning** the formulation of a set of detailed sequences of Transition Architectures with a supporting Implementation and Migration Plan.
- G. Implementation Governance architectural oversight of the implementation.
- H. **Architecture Change Management** procedures for managing change to the new architecture.

Zachman Framework				Why (Motivation)	How (Process	What (Inventory	Who (Responsibility	Where (Distribution	When (Timing Cycles)
Executive Perspective Business Mgmt.	⇒ -{ ⇒-{ ¬-{ }-{ }}}}}}}}}}}}}}}}}}}}}	Executive view, capturing the vision, strategy, drivers etc. Business management concepts and information required to model the enterprise Architectural perspectives of systems - models, catalogs, matrices, patterns etc. Engineering/ Design perspectives Technology implementer's perspectives End-user/ operational perspectives	Executive Perspective	Motivation Identification	Process Identification	Inventory Identification	Assignments) Responsibility Identification	Networks) Distribution Identification	Timing Identification
Perspective Architect			Business Mgmt. Perspective	Motivation Definition	Process Definition	Inventory Definition	Responsibility Definition	Distribution Definition	Timing Definition
Perspective Engineer			Architect Perspective	Motivation Representation	Process Representation	Inventory Representation	Responsibility Representation	Distribution Representation	Timing Representation
Perspective Technician			Engineer Perspective	Motivation Specification	Process Specification	Inventory Specification	Responsibility Specification	Distribution Specification	Timing Specification
Perspective Enterprise			Technician Perspective	Motivation Configuration	Process Configuration	Inventory Configuration	Responsibility Configuration	Distribution Configuration	Timing Configuration
Perspective			Enterprise Perspective	Motivation Instantiations	Process Instantiations	Inventory Instantiations	Responsibility Instantiations	Distribution Instantiations	Timing Instantiations

A Strategy Map Represents How the Organization Creates Value

