

## System Integration and Architecture

### ACTIVITY II

#### 1. Identify and discuss the major frameworks in EA

The following framework are:

- The Zachman Framework for Enterprise Architecture Zachman Framework is an enterprise ontology and is a fundamental structure for Enterprise Architecture which provides a formal and structured way of viewing and defining an enterprise. The ontology is a two dimensional classification schema that reflects the intersection between two historical classifications.
- TOGAF was developed by members of The Open Group, working within the Architecture Forum ([www.opengroup.org/architecture](http://www.opengroup.org/architecture)). The original development of TOGAF Version 1 in 1995 was based on the Technical Architecture Framework for Information Management (TAFIM), developed by the US Department of Defense (DoD). The DoD gave The Open Group explicit permission and encouragement to create TOGAF by building on the TAFIM, which itself was the result of many years of development effort and many millions of dollars of US Government investment.
- Open Agile Architecture (O-AA) -- this framework is used by self-directed work teams tasked with rolling out both Agile and digital transformation initiatives. Open Agile Architecture (OAA) is a new standard published by The Open Group in the second half of 2020. It contains many useful techniques for agile and digital transformation of organizational architectures. O-AA combines proven procedures into a coherent and functional unit. In addition to the standard, the course also includes many examples from the practice of our consultants and trainers which we use to explain how we design and control the architecture in an agile organization.

#### 2. Identify the different layers and domains in EA

There are four architecture domains that are commonly accepted as subsets of an overall enterprise architecture:

## Business Architecture

Business architecture is a general description of a system. It identifies its purpose, vital functions, active elements, and critical processes and defines the nature of the interaction among them. Business architecture consists of a set of distinct but interrelated platforms creating a multidimensional modular system.

## Data Architecture

a framework for how IT infrastructure supports your data strategy. The goal of any data architecture is to show the company's infrastructure how data is acquired, transported, stored, queried, and secured. A data architecture is the foundation of any data strategy

## Application Architecture

Application architecture describes the patterns and techniques used to design and build applications. Its architecture gives you a roadmap and best practices to follow when building your app, so you get a well-structured app. Software design templates can help you create apps

## Technology Architecture

Technology architecture provides a **roadmap** within each technology platform to ensure that the right **development** tools and options are **used**. This prevents **you from spending** additional time **disentangling your application work from** the **pitfalls** experienced **previously**. But **architecture is not** enough to ensure that **processes** and **models** are used **correctly**. Describes the logical software and hardware capabilities that are required to support the deployment of business, data, and application services. This includes IT infrastructure, middleware, networks, communications, processing, standards, etc.