

CHARTING NEW BUSINESS OPPORTUNITIES IN THE POSTDIGITAL ERA WITH DIGITAL ENTERPRISE ARCHITECTURE (EA)

The logo for 'atd' is displayed in white lowercase letters on a red square background, which is itself centered within a larger circular graphic with a blue-to-purple gradient.

Presented by:

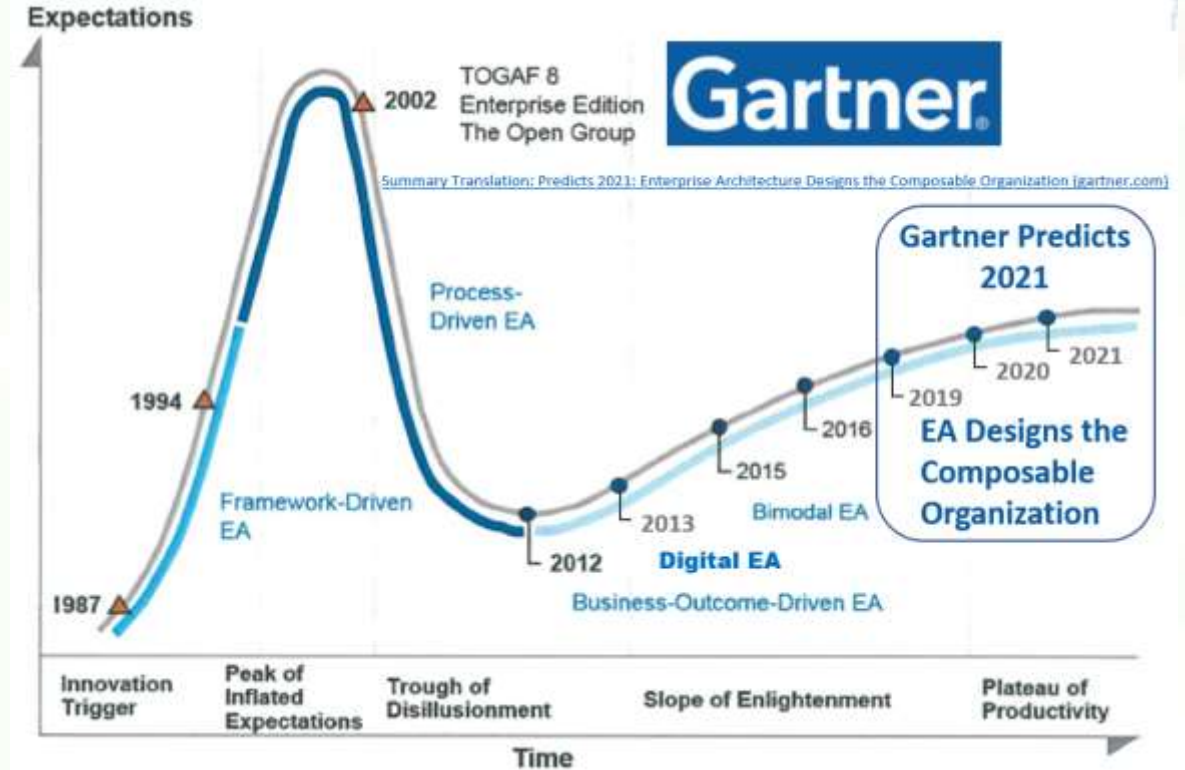
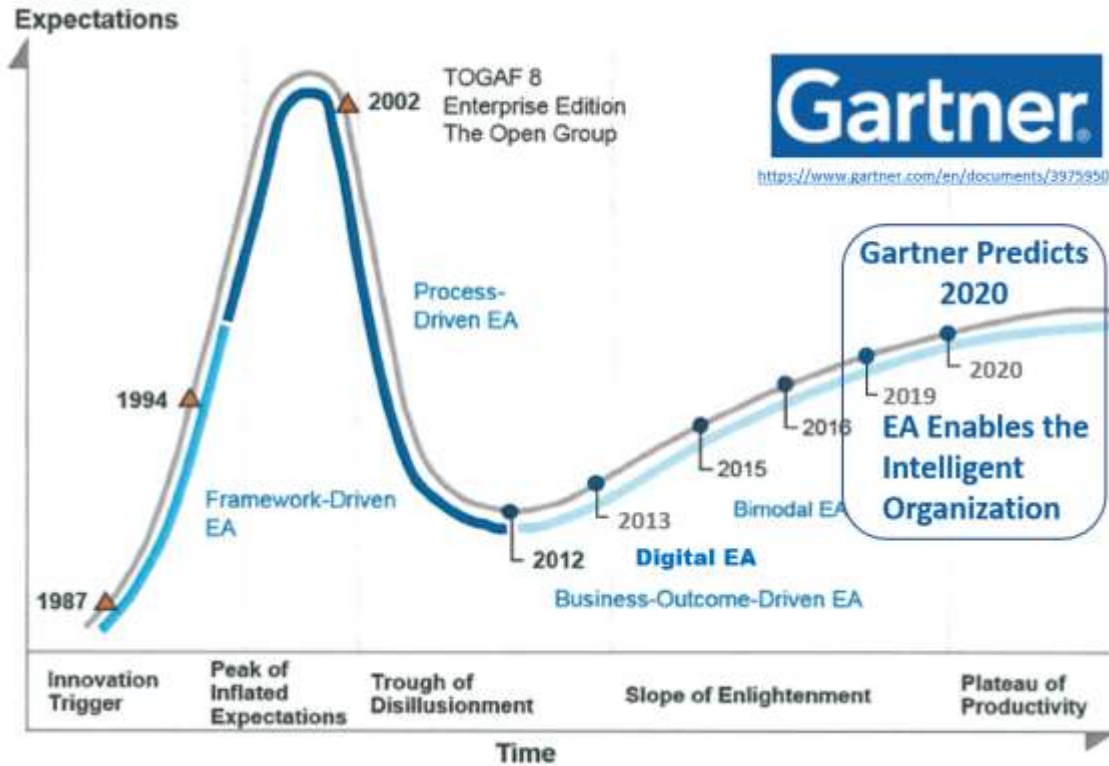
Aaron Tan, Fellow SCS

Chief Architect, ATD Solution aarontan@atdsolution.com

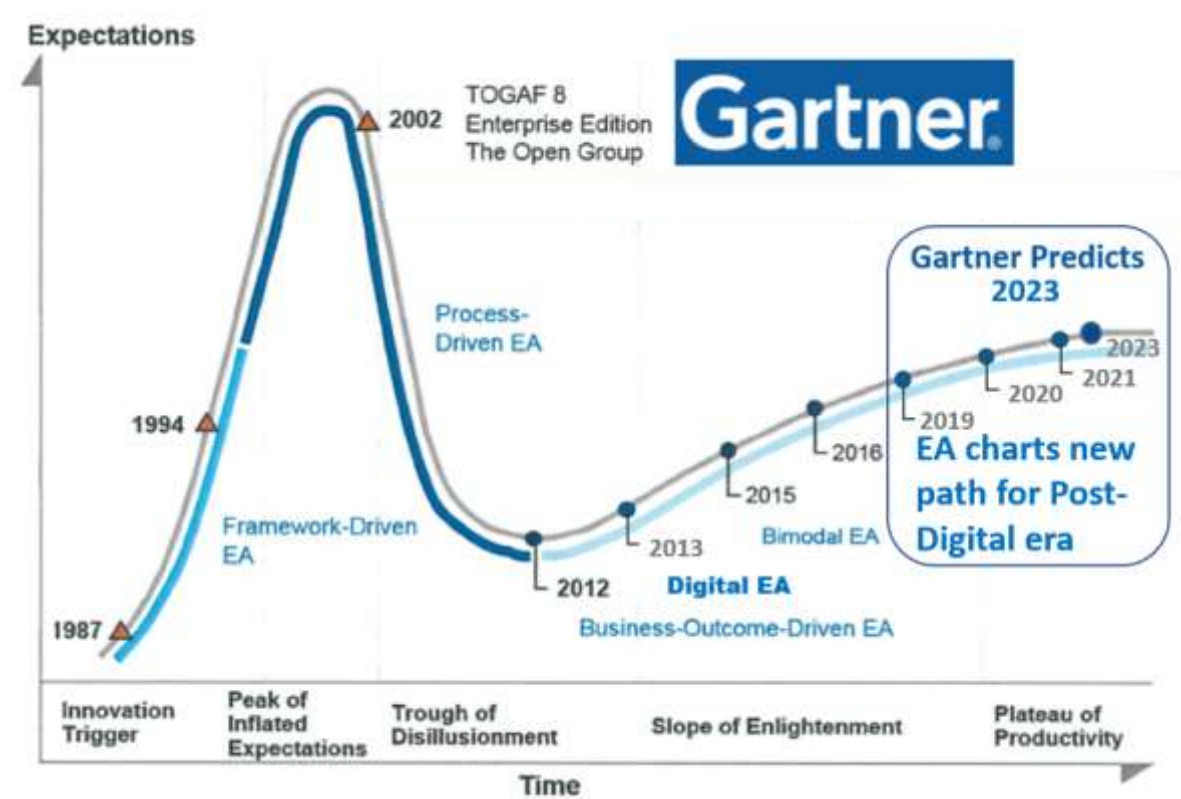
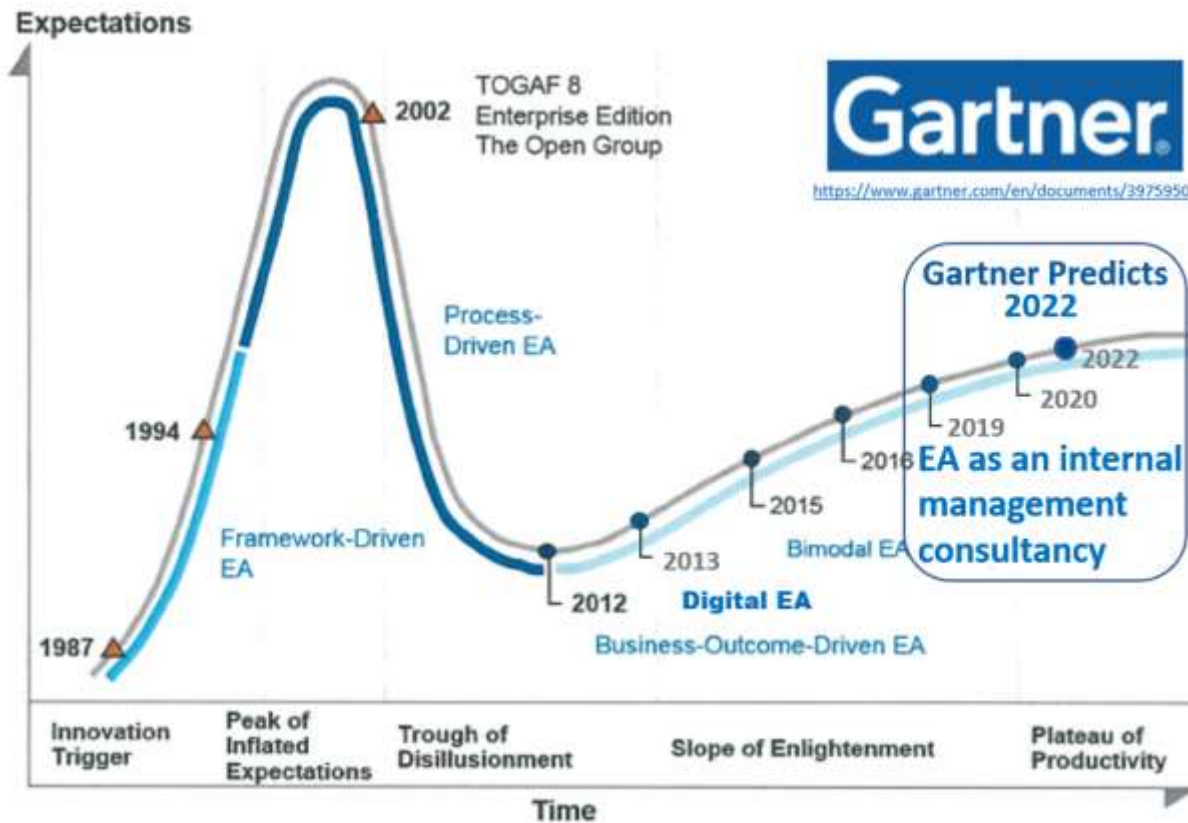
Co-founder & Chairman, IASA Asia Pacific aarontan@iasahome.org

President, Singapore Computer Society EA Chapter aarontan@scs.org.sg

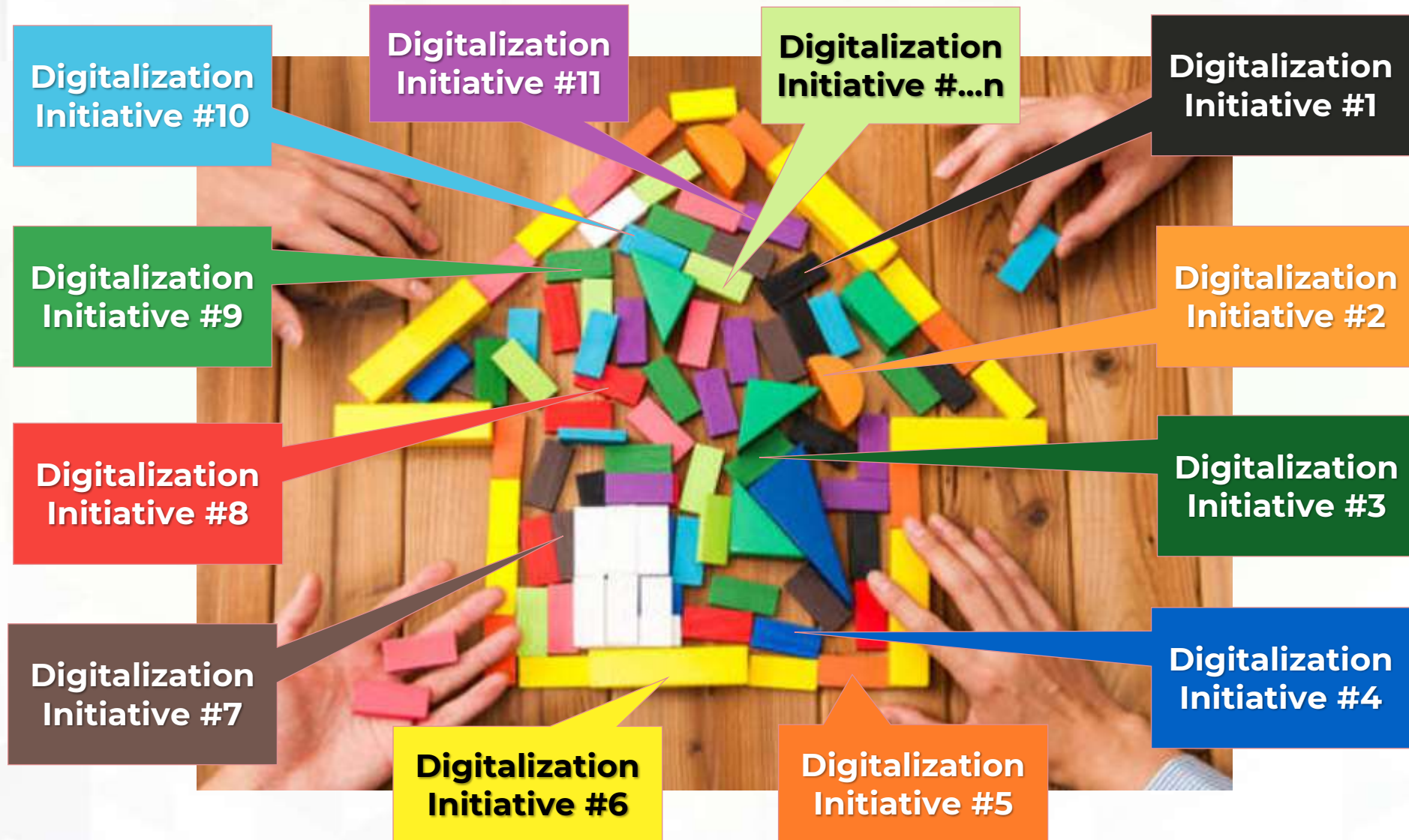
Gartner® Enterprise Architecture (EA) Predicts 2020 & 2021



Gartner® Enterprise Architecture (EA) Predicts 2022 & 2023



The reality on where we are now in the Post-Pandemic Era...



➤ **The Mandate: Enterprise Architecture leaders** are required to support **digital business design and strategy development and realization** that address:

1) Business Architecture to support **VUCA** planning

*“By 2027, 50% of extra-large organizations will use **business architecture** to advance **strategic planning** in the face of **Volatility, Uncertainty, Complexity and Ambiguity (VUCA)**.”*

2) ESG Strategy development and realization

*“By 2026, **business-outcome-focused EA teams** supporting **Environmental, Social & Governance (ESG)** initiatives will outnumber those focused on **IT management alone**.”*

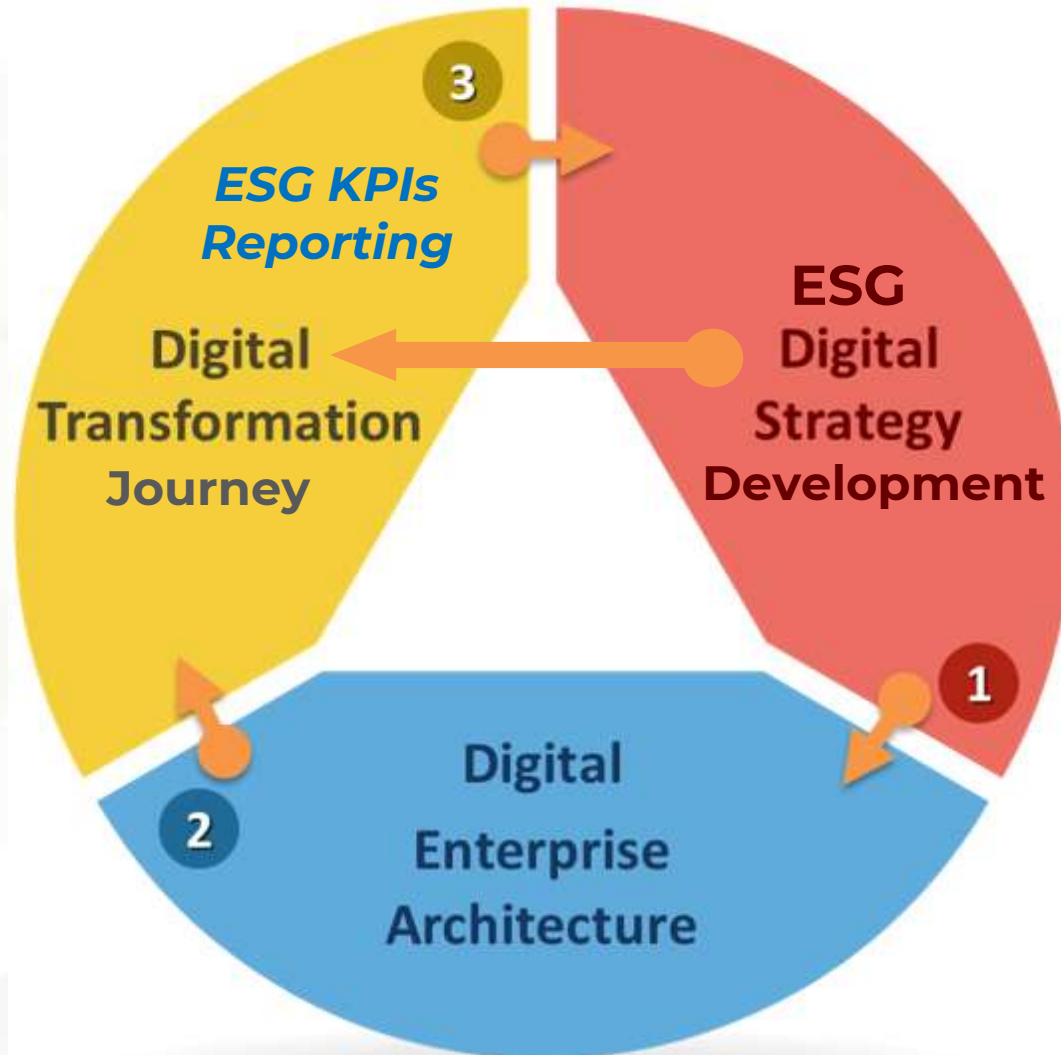
1.) Business Architecture to Cushion the Impact of VUCA

- **Identify the threats and risks impacted through VUCA**
 - Digital EA enables **Impact Analysis** and **Visualization** in the holistic manner

- **Determine business direction, strategy and capabilities in response to VUCA**
 - Digital EA captures **Stakeholder Motivation**, models the **Strategy** and identify the required **Capabilities** for its realization

- **Smarter Investment decisions that exploit VUCA opportunities and risks**
 - Digital EA realizes **Digitally Connected Enterprise** model to ensure **No duplication** and **No silo Systems**

Digital EA in Driving Successful Digital Transformation and Realizing ESG's KPIs

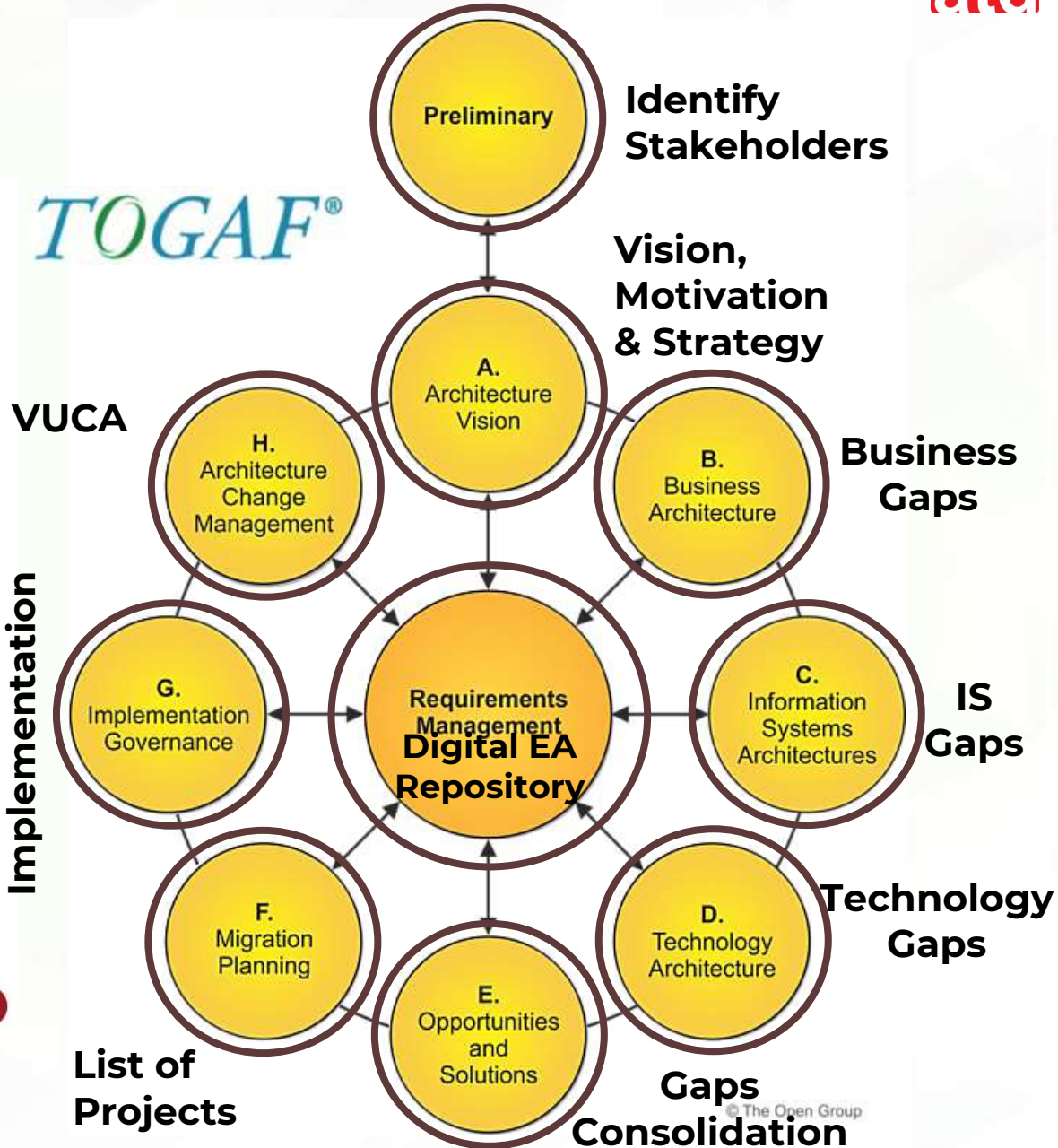
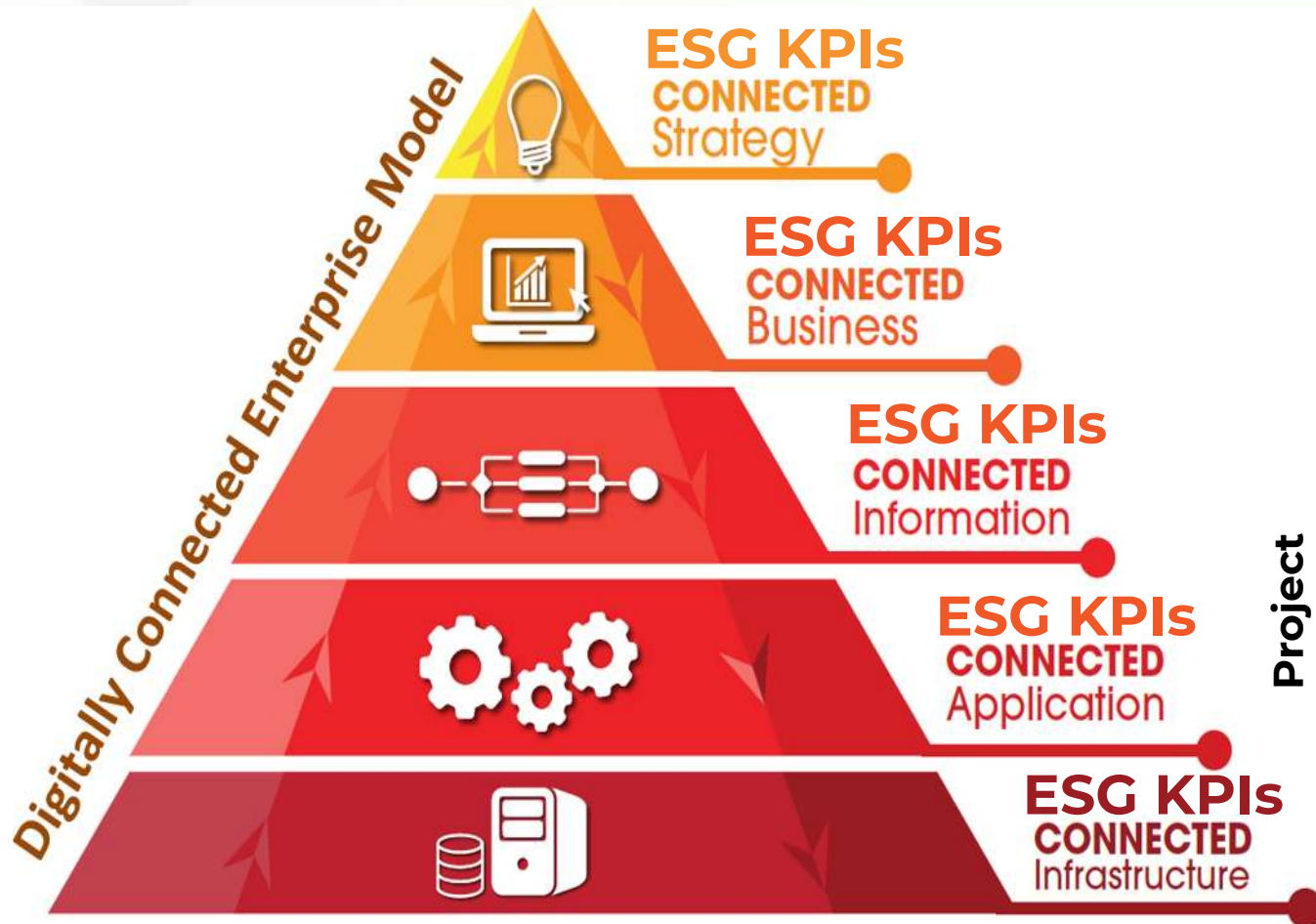


1 The **Outcome Statement** about organization's Digital Positioning in terms of **Goals, Capability** and **Drivers** in the context of the technology adoption

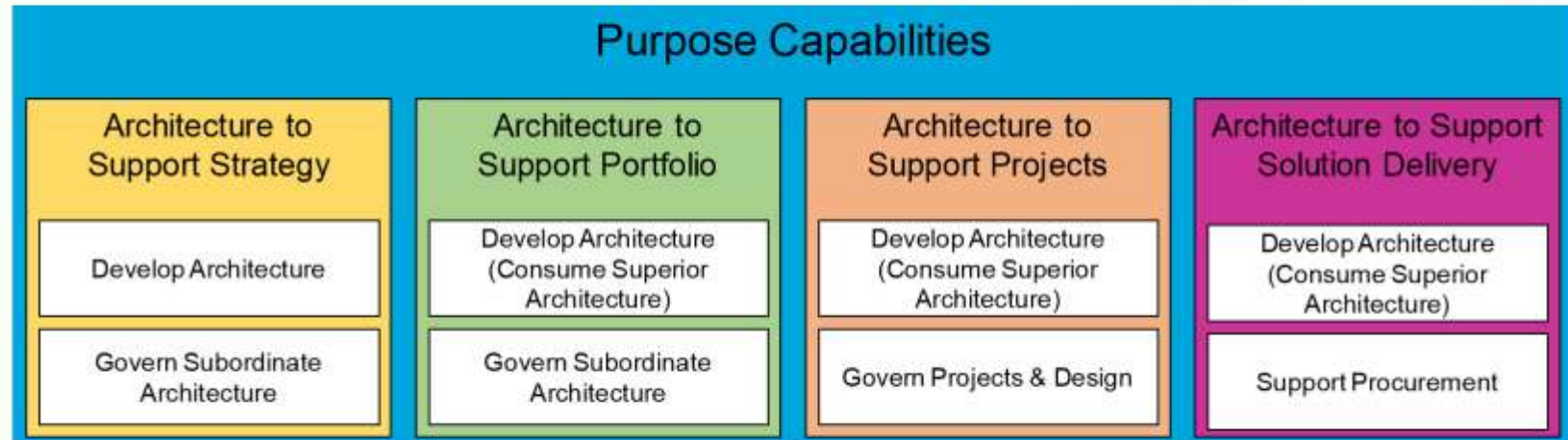
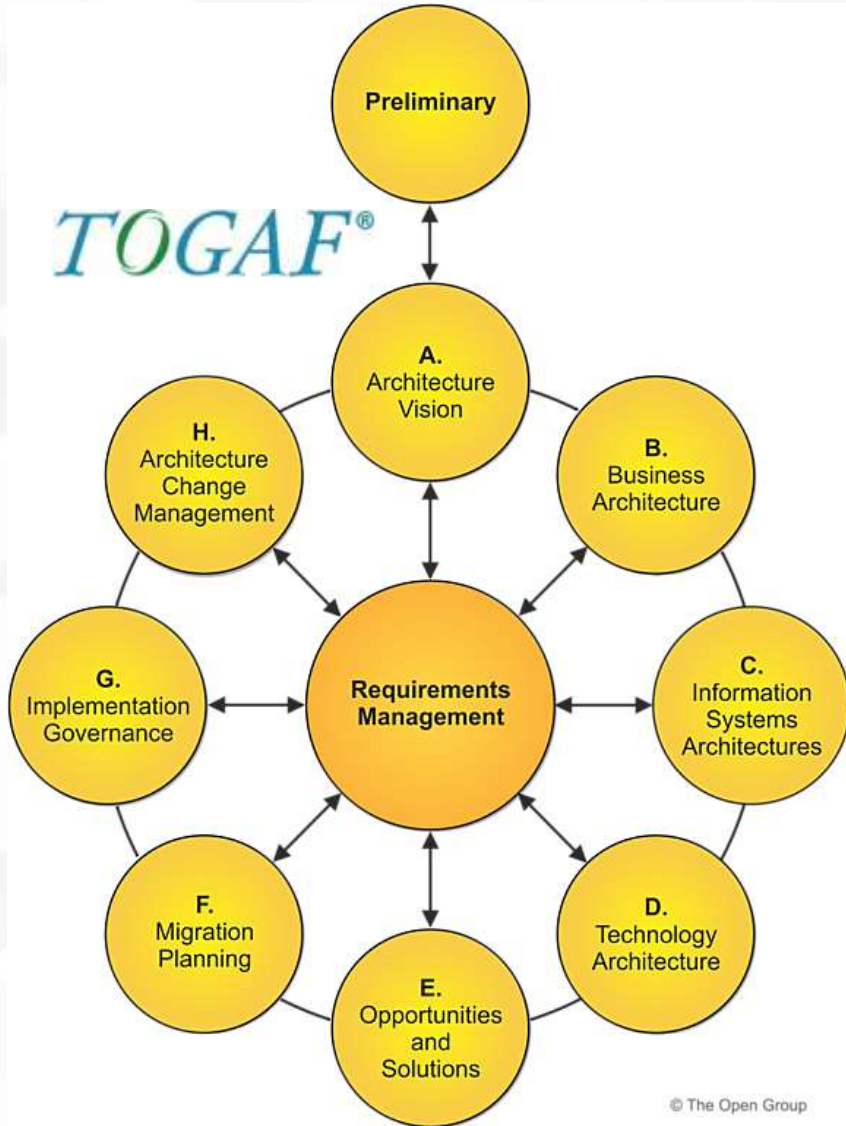
2 The **Digital Enterprise Map** of connected **Business, Data, Application** and **Technology** domain to support **Digital Transformation**

3 The **continuous transformation** of the **existing business** through **technology innovations** and **exploitations**

Digitally Connected Enterprise Model - TOGAF® EA Framework



The TOGAF® EA Standard 10th Edition in a Nutshell

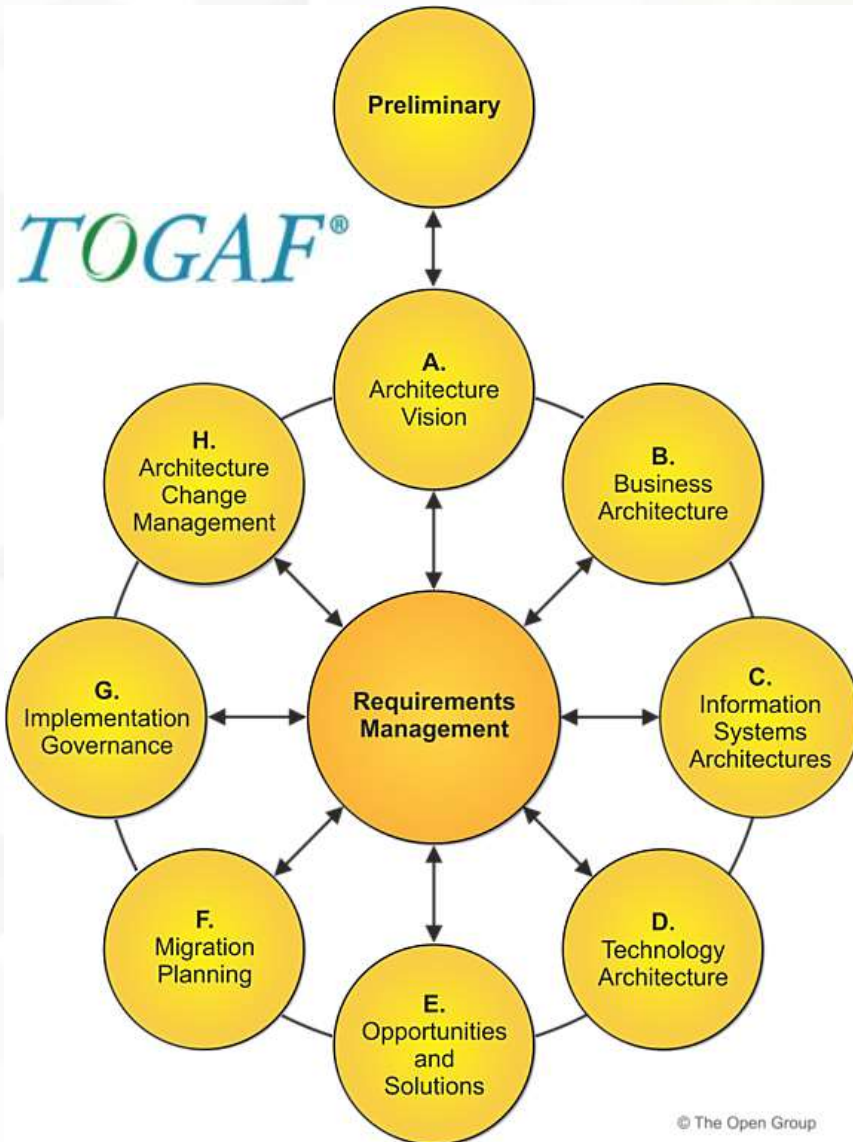


TOGAF® Series Guide Enabling Enterprise Agility

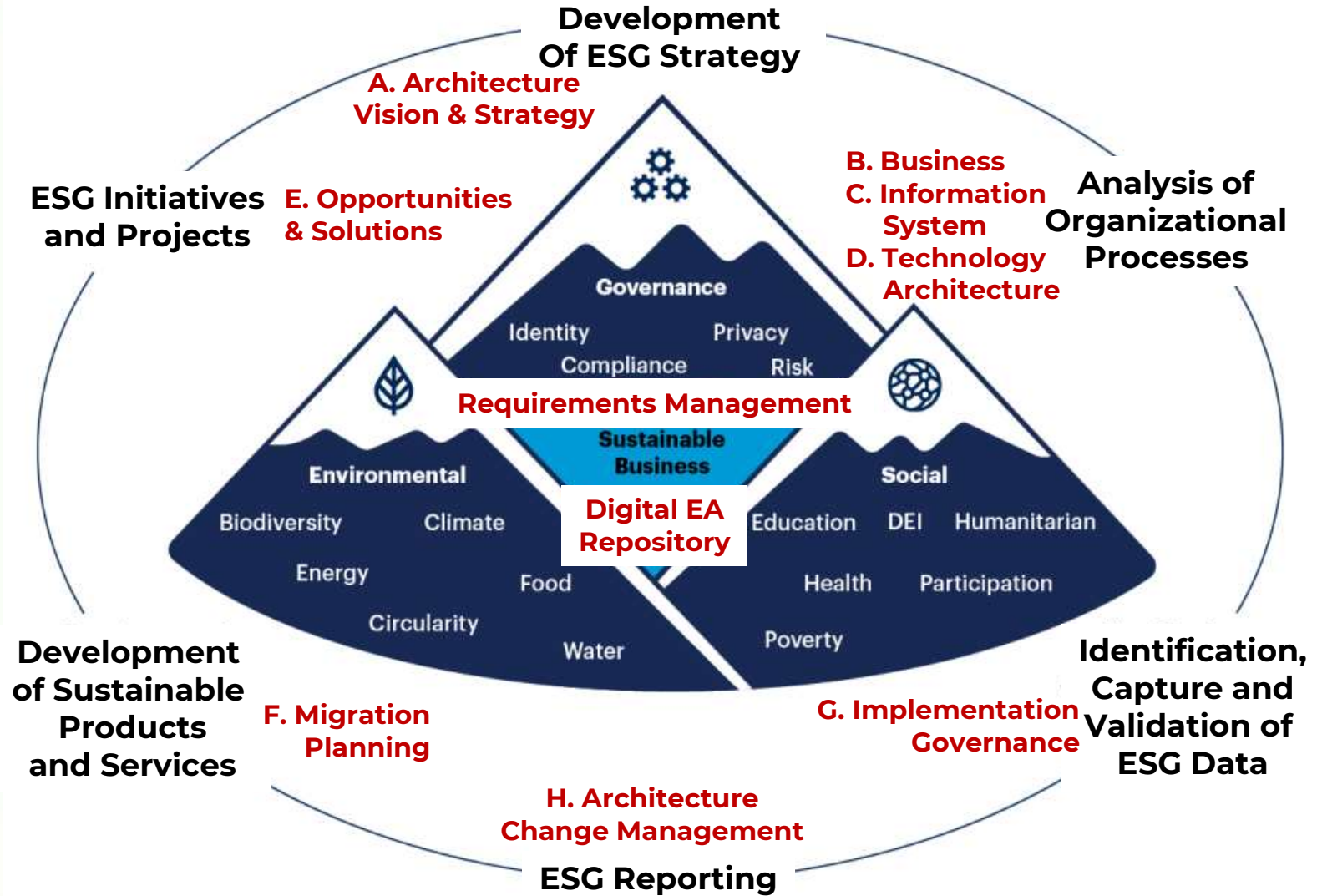
The Open Group TOGAF® Series Guide

Applying the TOGAF® ADM using Agile Sprints

2.) Use Enterprise Architecture to Support ESG Initiatives



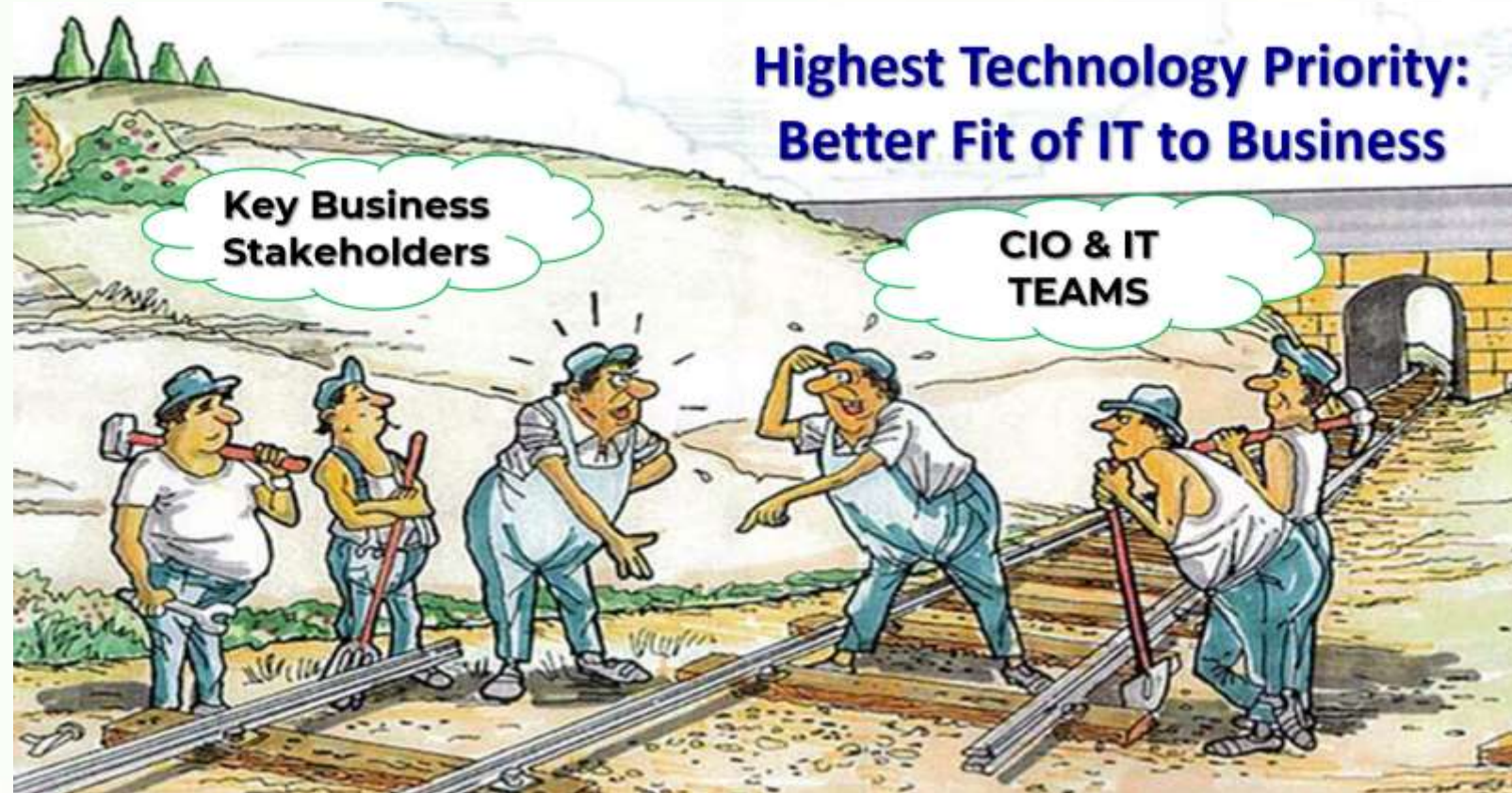
© The Open Group



Source: Gartner
763034_C

Business Technology Strategy Integration is Critically Important

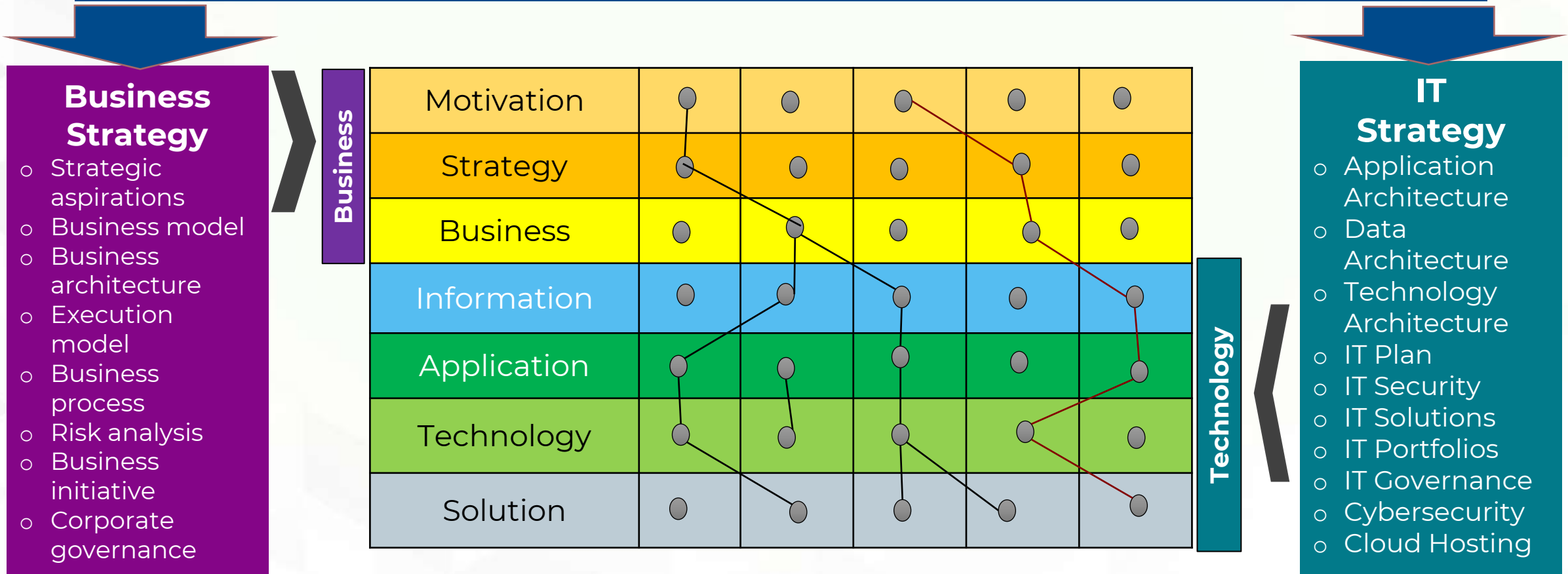
- **EA leaders should:**
 - ✓ Have a good understanding of ESG;
 - ✓ Model organization's strategy and capture Stakeholder motivation;
 - ✓ Deliver tangible EA outcomes for Business IT Integration; and
 - ✓ Drive towards Digital EA maturity practice to support ESG initiatives.



Business & Technology Strategy Integration with Digital EA & 3Cs

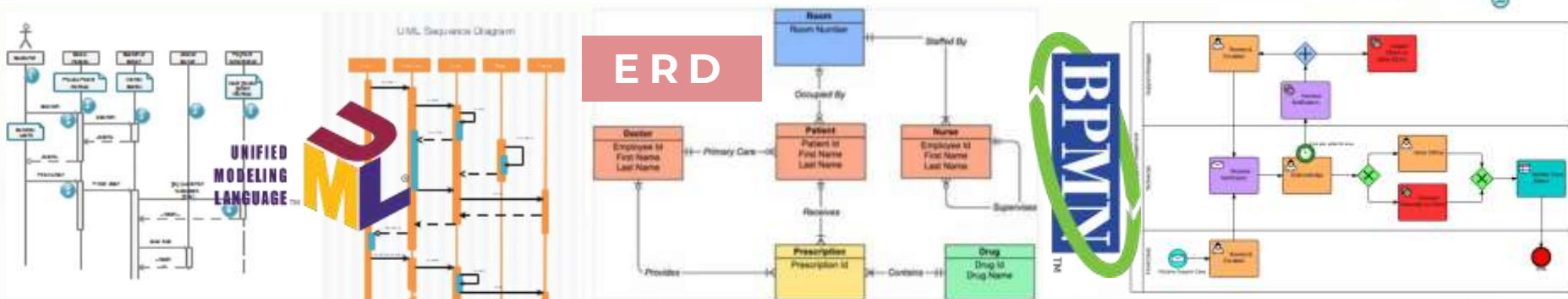
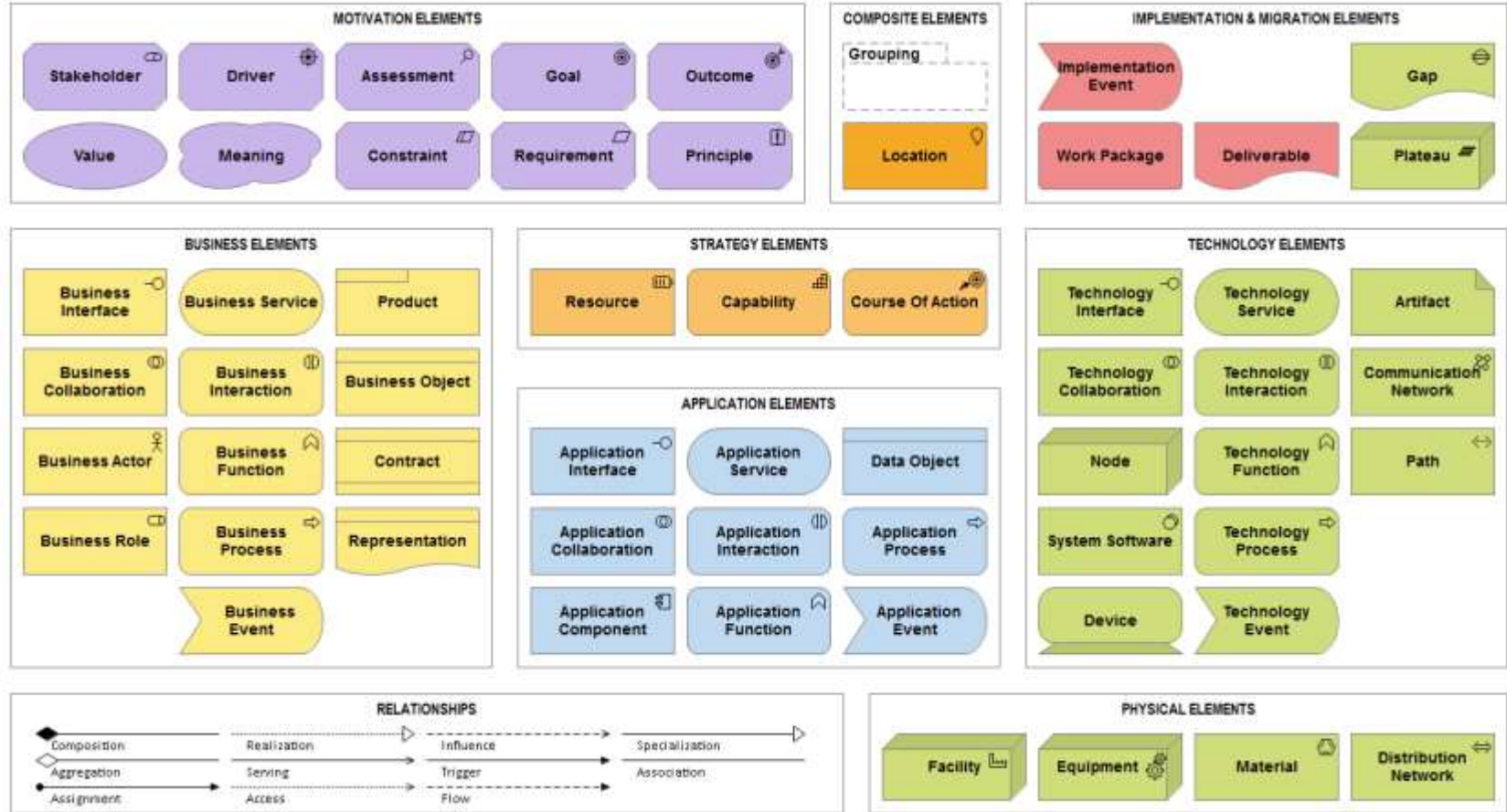
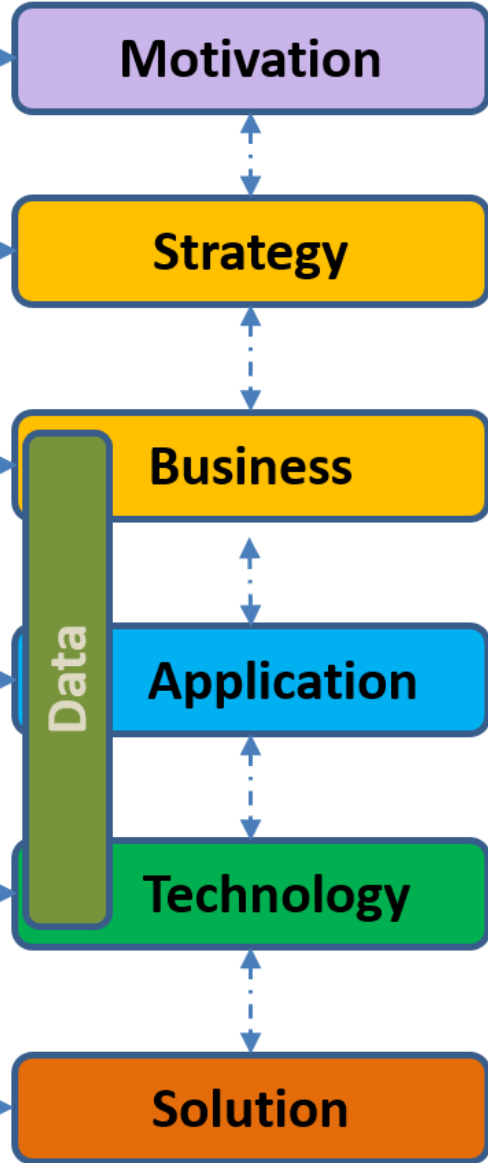
Digital EA Addresses 3Cs of Business & IT Strategy Integration
Collating the Dots | Connecting the Dots | Correcting the Dots

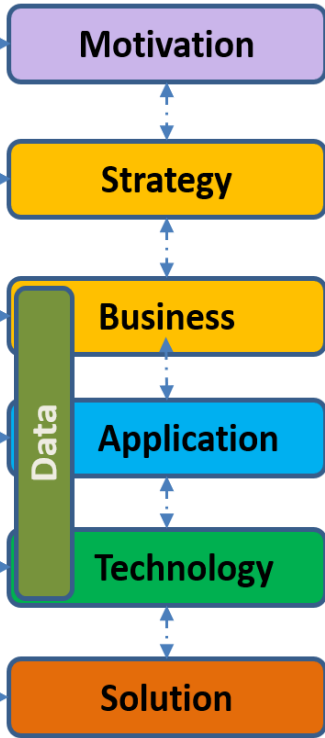
Digitally Connected Enterprise Model with Digital EA



Digital EA Components in Realizing Connected Enterprise Model

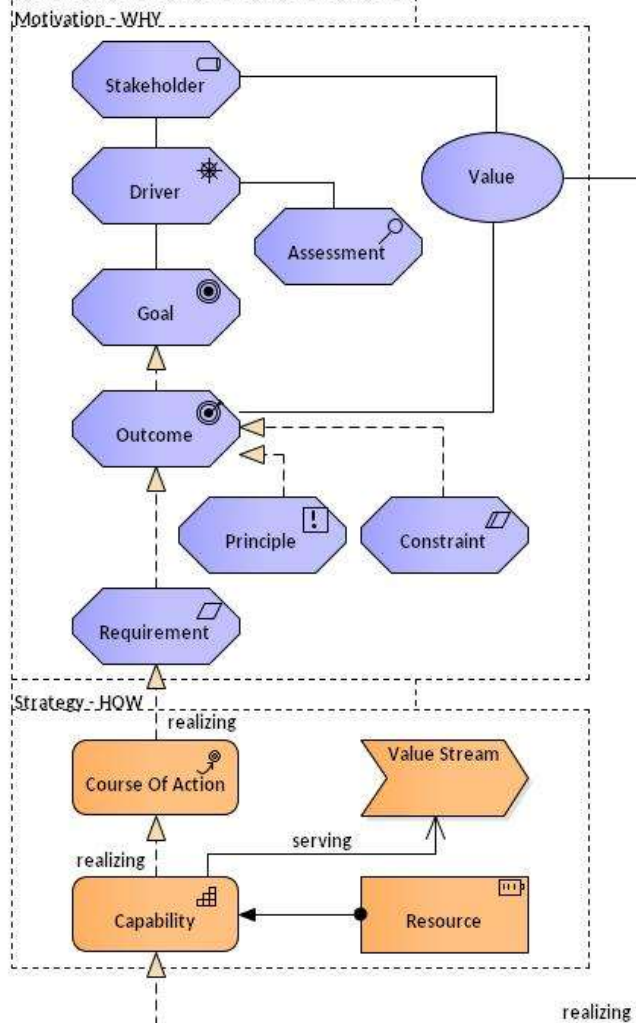
Cross-Layers Metamodel Relationships



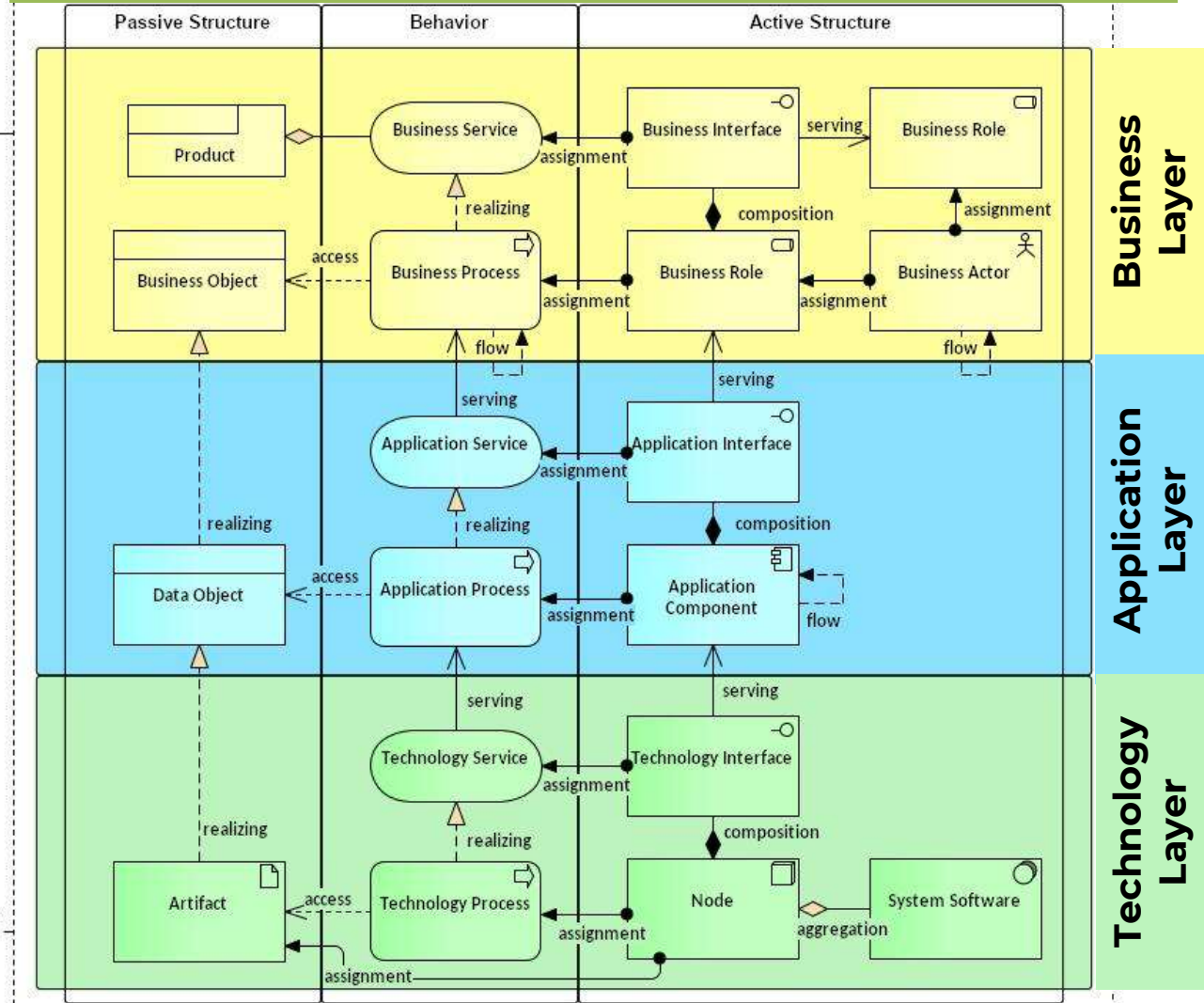


Motivation - Why?

Strategy - How?

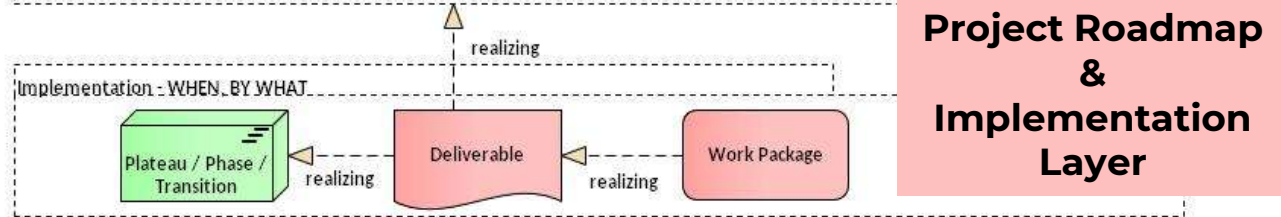


Behavior & Structure - With What?



The Connected Enterprise Model - Why, How, With What & When by What?

Implementation - When by What?

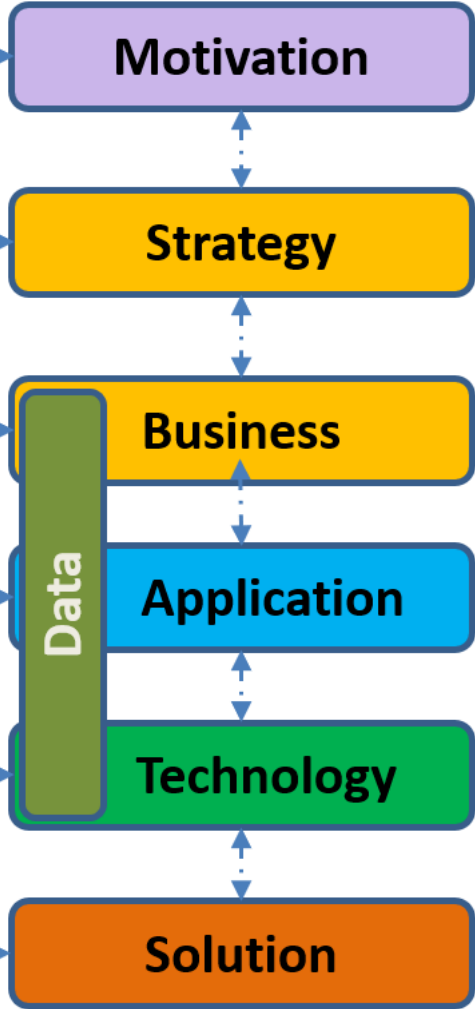


SDG/ESG Realization Supported by IR5.0 with Digital EA

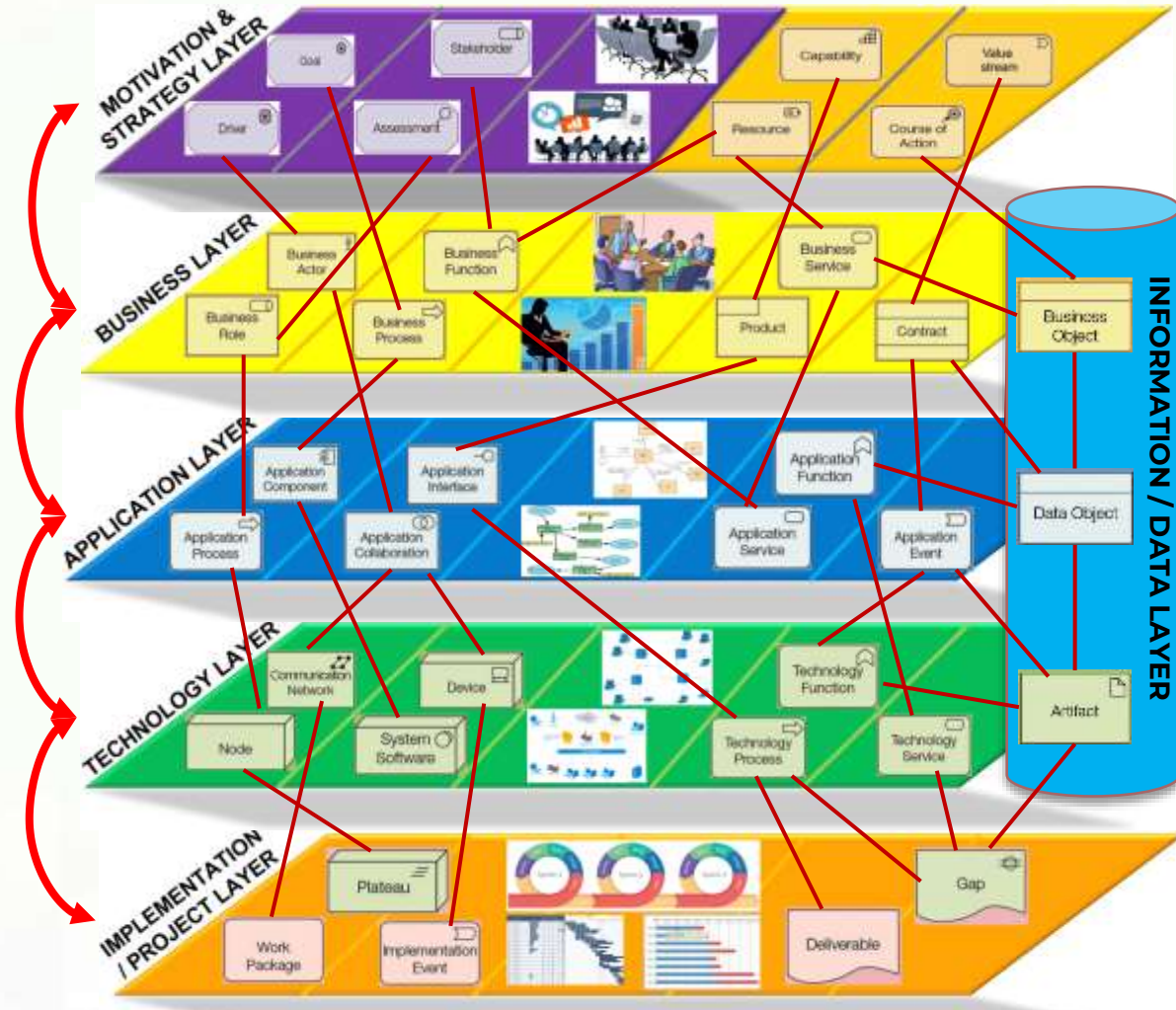


← **Digitally Connected Enterprise Model (Digital Twins) to Realize SDG/ESG KPIs** →

Cross-Layers Metamodel Relationships



DIGITALLY CONNECTED ENTERPRISE MAP



The IASA BTABoK Skillsets Pillar & Architect Specializations



ENTERPRISE ARCHITECTURE SPECIALIZATIONS



Business Architecture

Information Architecture

Software Architecture

Infrastructure Architecture

Solution Architecture

Business Technology Strategy

Human Dynamics

Quality Attributes

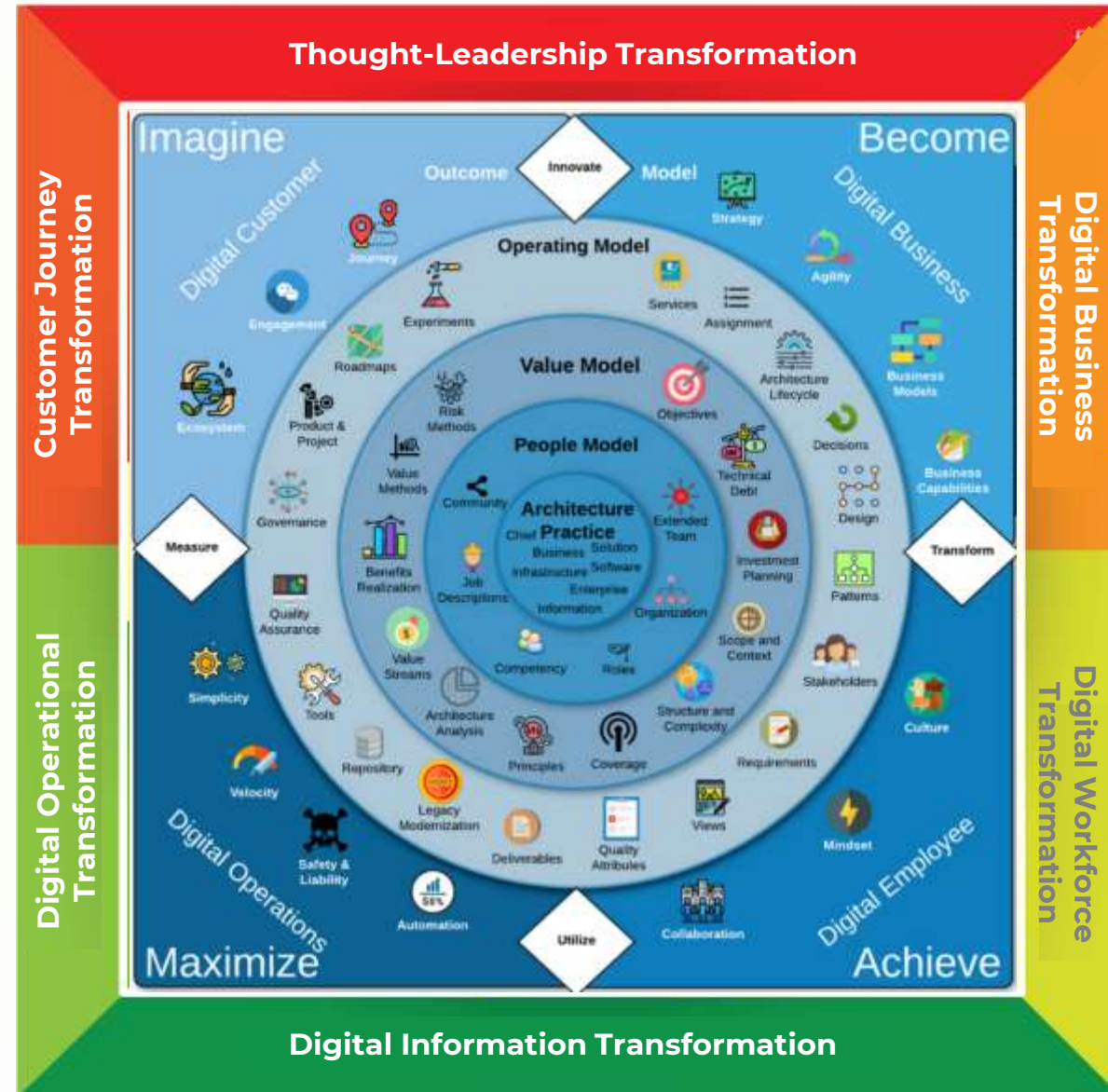
IT Environment

Design Skills

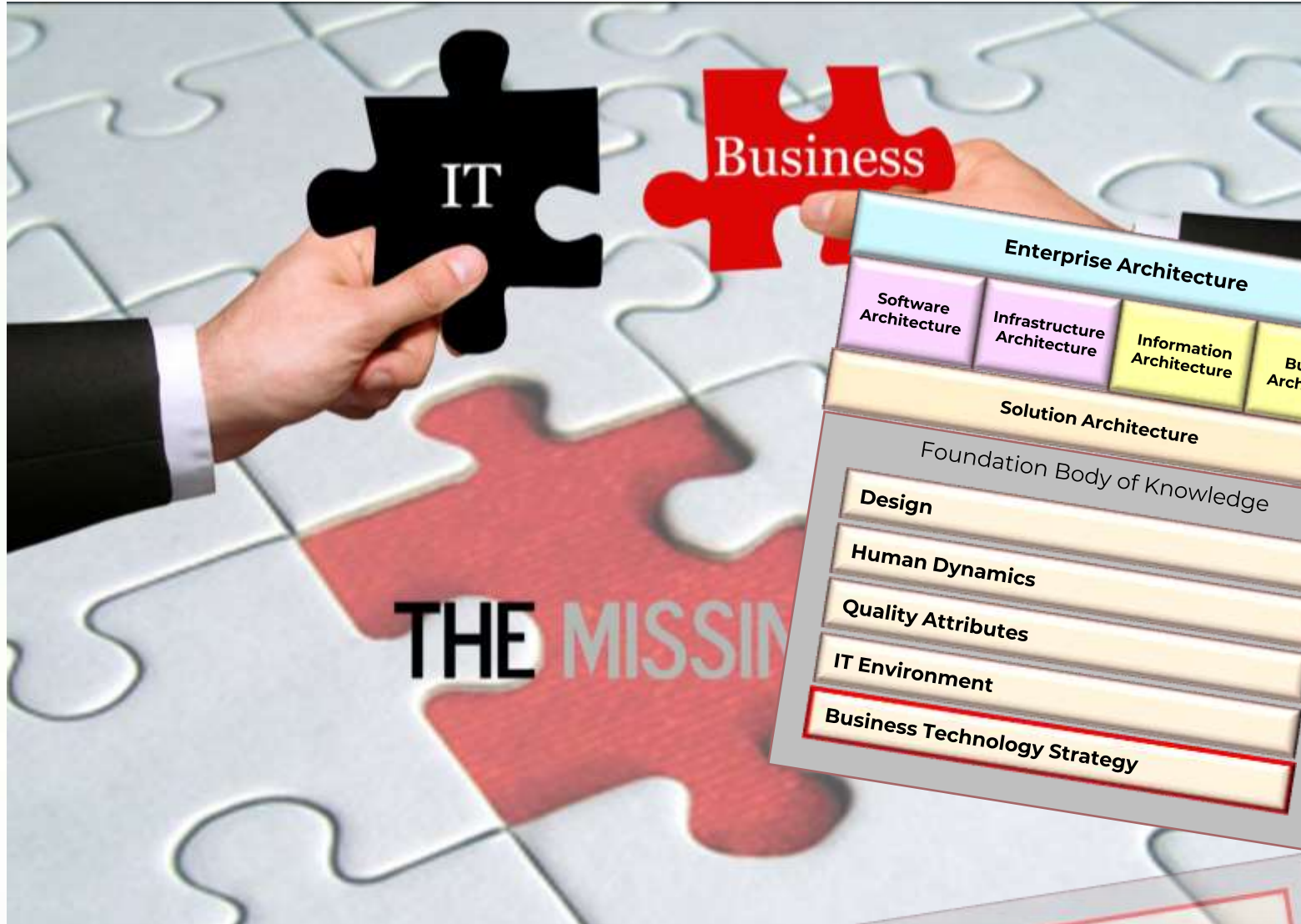
5 PILLARS OF SKILLSETS

The Architects Engagement Model Defined by IASA

- It is the **guidelines** for Enterprise Architects to be successful in delivering **valuable technology strategy** and **innovations** to the business
- It is the **mandate** for Enterprise Architects to drive **continuous Digital Transformation**



IASA BTABoK Business Technology Strategy Foundational Skills



Business Technology Strategy – Competencies Pillars of BTABoK

- Business Fundamentals
- Strategy Development and Rationalisation
- Industry Analysis
- Business Valuation
- Investment Prioritisation and Planning
- Requirements Discovery and Constraints Analysis
- Industry Compliance
- Architecture Methodologies & Frameworks
- Risk Management



An Architect as a Business Technology Strategist



- Business Technology Strategy is the key
- It differentiates Architect from other existing IT professions
- A foundational BOK based for the whole Digital Transformation works
- It connects all Architects with the entire business & IT organizations



(*) Emerging architect role

The Characteristics of Successful Architecture Strategy



1. It **impacts Entire Organization**
 - Cuts across multiple levels of scope
2. It **delivers Business Values** through technology
 - You can trace it to a business value
3. It **validates and supports Business strategy**
 - A business strategy can be aided or hampered by the technology
 - It shows the impact analysis of change
4. It has a timeline (short, medium and long-term strategy)
 - It support the digital transformation journey plan

An Architect Specialization as a Strategist

Software Architect as a Strategist

- Expanding business opportunity through adoption of “right” technology & excellent software design
- **Connecting** Software projects to entire organization

Infrastructure Architect as a Strategist

- Looking at the bottom line in delivering values of infrastructure strategy to stakeholders
- **Connecting** infrastructure decision to the rest of technology strategy

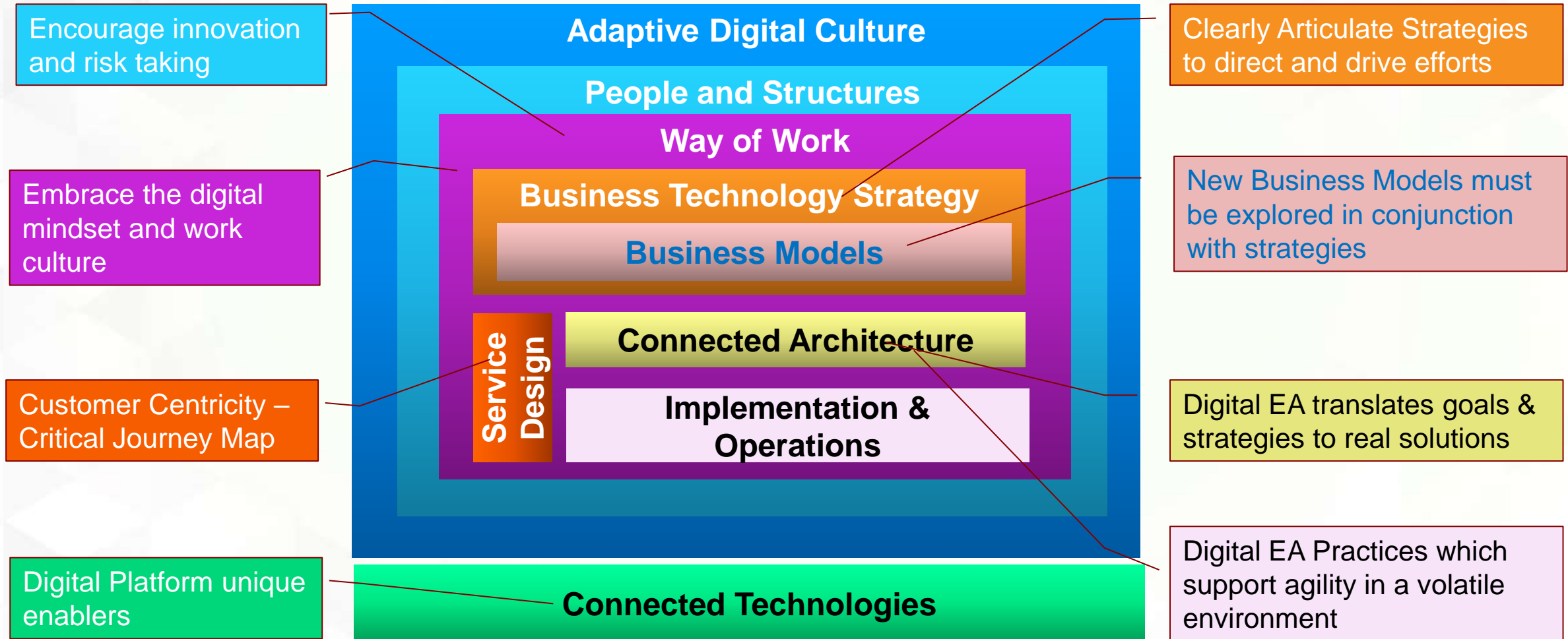
Information Architect as a Strategist

- Controlling and managing information utilization to support technology strategy relevant to business
- Managing and **connecting** the information strategy across projects and enterprises

Business Architect as a Strategist

- Formulating and validating business strategy to act as a bridge between business and technology team
- Providing, **connecting** and validating the technology strategy values as part of the business plan

The Adaptive Digital Culture for Dynamics Environment (VUCA)



atd
CONSULTING

atd
COACHING

**Driving Digital
Transformation through
Enterprise Architecture**

atd
LEARNING

atd
EVENTS



Mr. Tech

Mr. Biz