Welcome!

ENRIQUE LOBO CRUZ

BOC Group

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ATD Solution / Iasa Asia Pacific

Presented by:

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Driving Innovation with Digital EA

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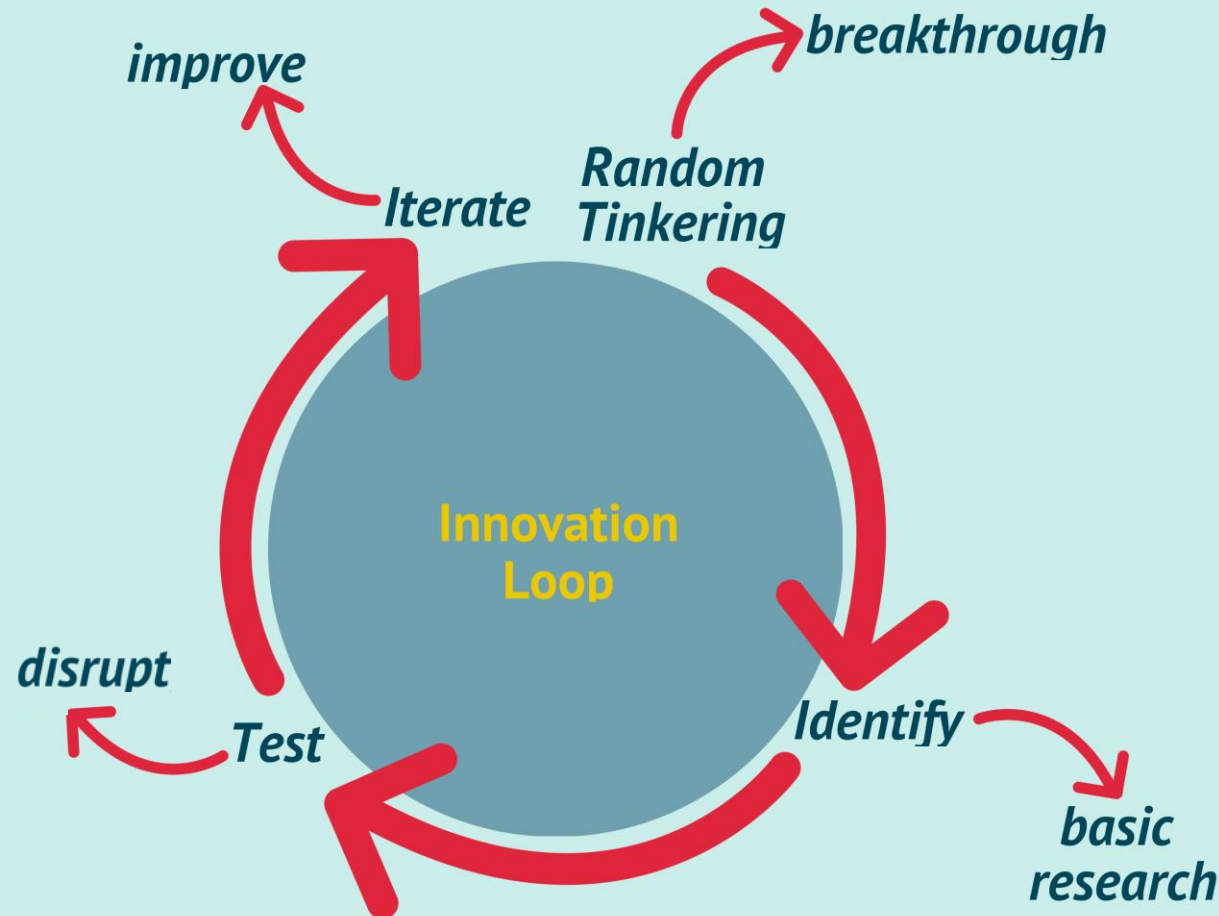## What Is Innovation? Types Of Innovation In A Nutshell

Innovation in the modern sense is about coming up with solutions to defined or not defined problems that can create a new world. Breakthrough innovations might try to solve in a whole new way, well-defined problems. Business innovation might start by finding solutions to well-defined problems by continuously improving on them.

DIGITAL EA JOURNEY
- Transition & Iteration
- Capability Improvements
- Innovation & Productivity
- Metrics & KPIs

STAKEHOLDER'S MOTIVATION
- Vision and Mission
- Stakeholder's Concerns
- Drivers and Goals
- Requirements & Observation
- Strategies & Capabilities

DIGITAL TRANSFORMATION
- EA Realization
- Solution Architecture
- Implementation Governance

BASELINE - TARGET - GAPS
- Business Architecture
- Information Architecture
- Software Architecture
- Infrastructure Architecture

improve

breakthrough

Iterate

Random Tinkering

Innovation Loop

disrupt

Test

Identify

basic research

4

Image source: https://fourweekmba.com/types-of-innovation

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> It provides a guidelines for Enterprise Architects to be successful in delivering valuable **TECHNOLOGY STRATEGY** and **INNOVATIONS** to the business while driving continuous Digital Transformation.
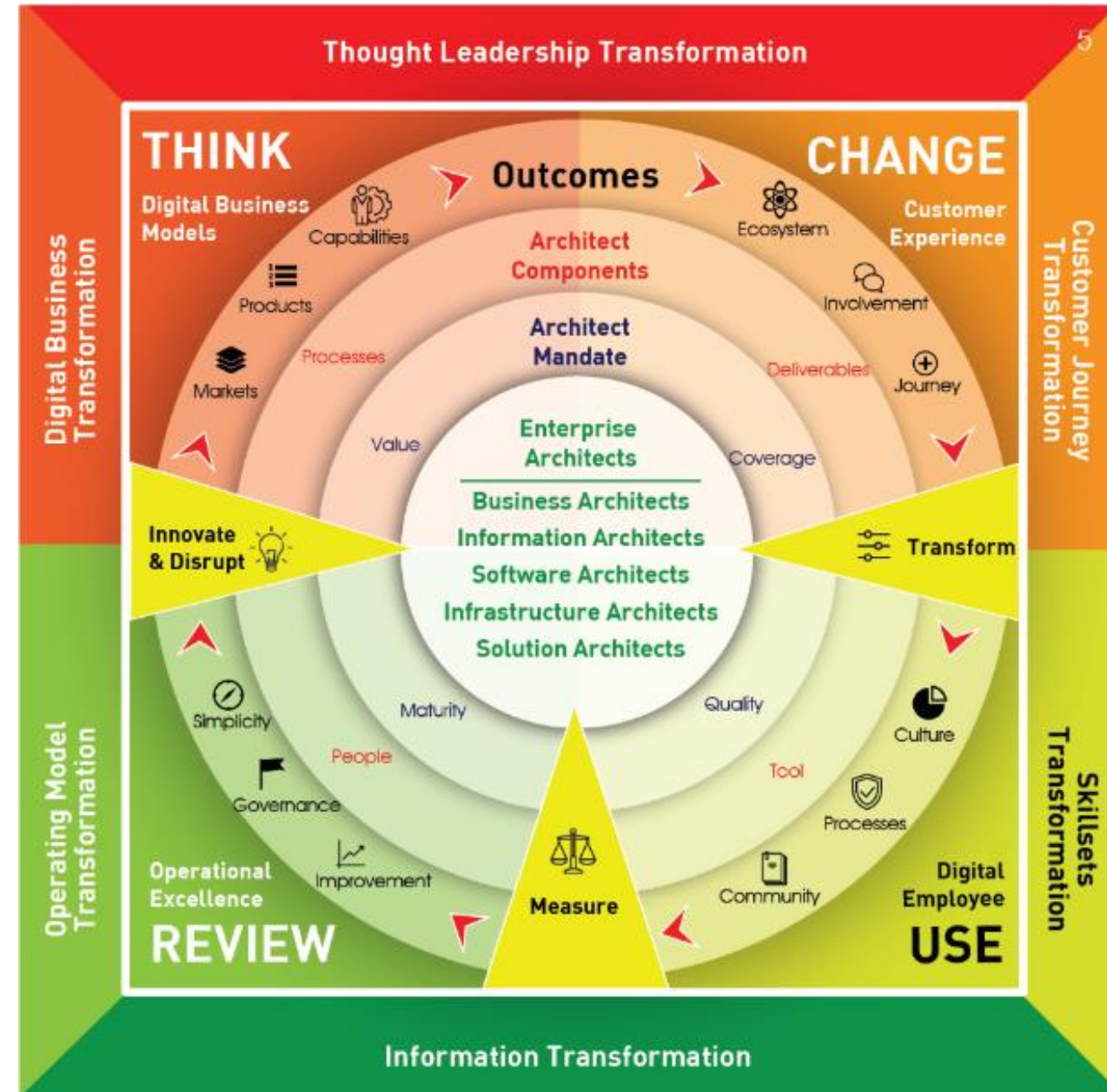
The Evolution of Business-Outcome-Driven EA

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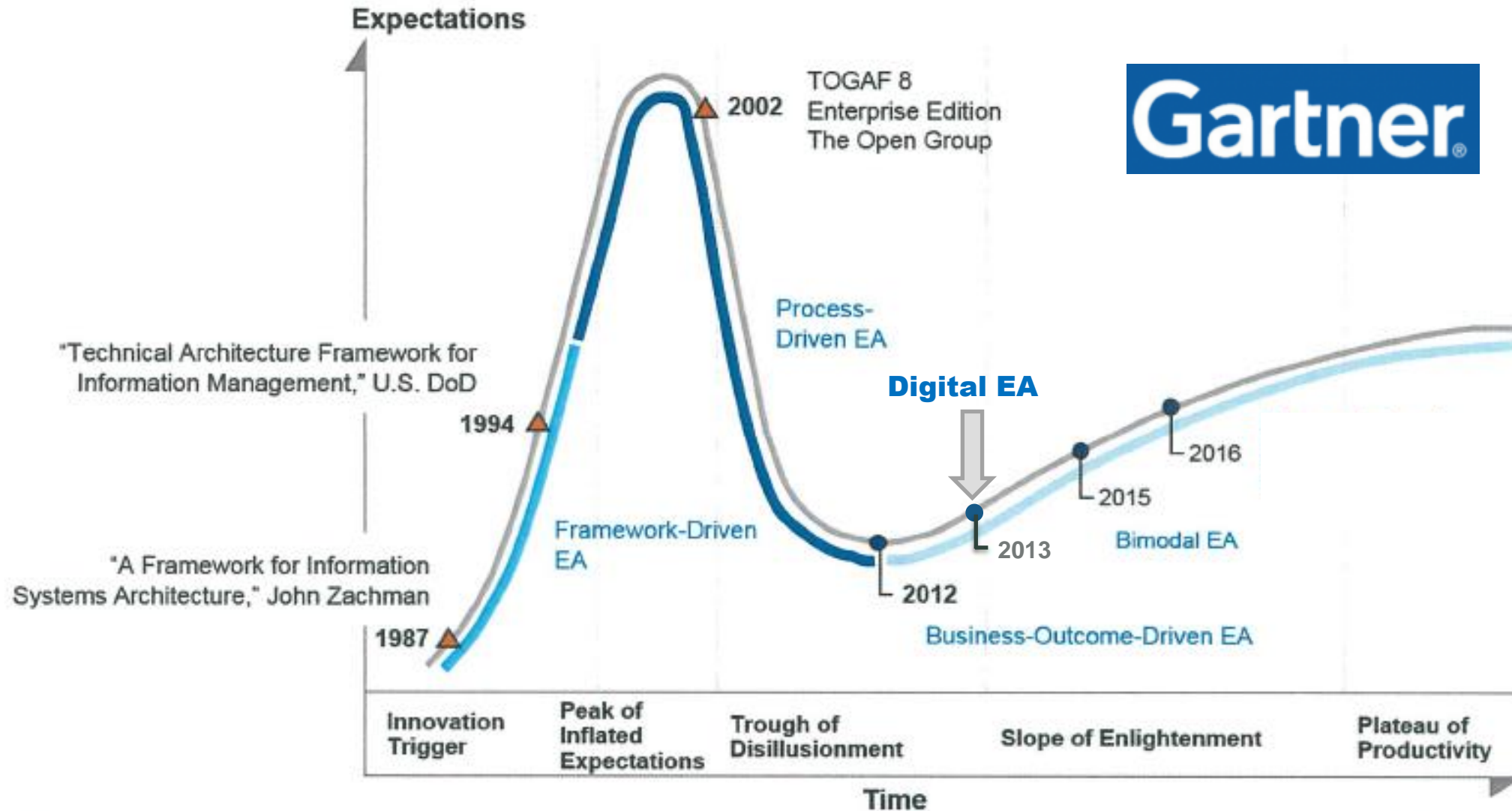
NOW, pushed by COVID19 pandemic

Future of EA 2025: Evolving From Enterprise to Ecosystem

Published: 7 October 2014

Analyst(s): Marcus Blosch, Betsy Burton

Digital business is altering and broadening industries, businesses and people. EA practitioners will expand their perspectives beyond an "enterprise" to deliver business outcomes and leading response to disruptive trends with the context of a broader ecosystem of customer partners and competitors.

By 2025, organizations will predominantly focus EA on delivering business outcomes from the perspectives of their business ecosystem.

Gartner®

Source of articles: Gartner

7

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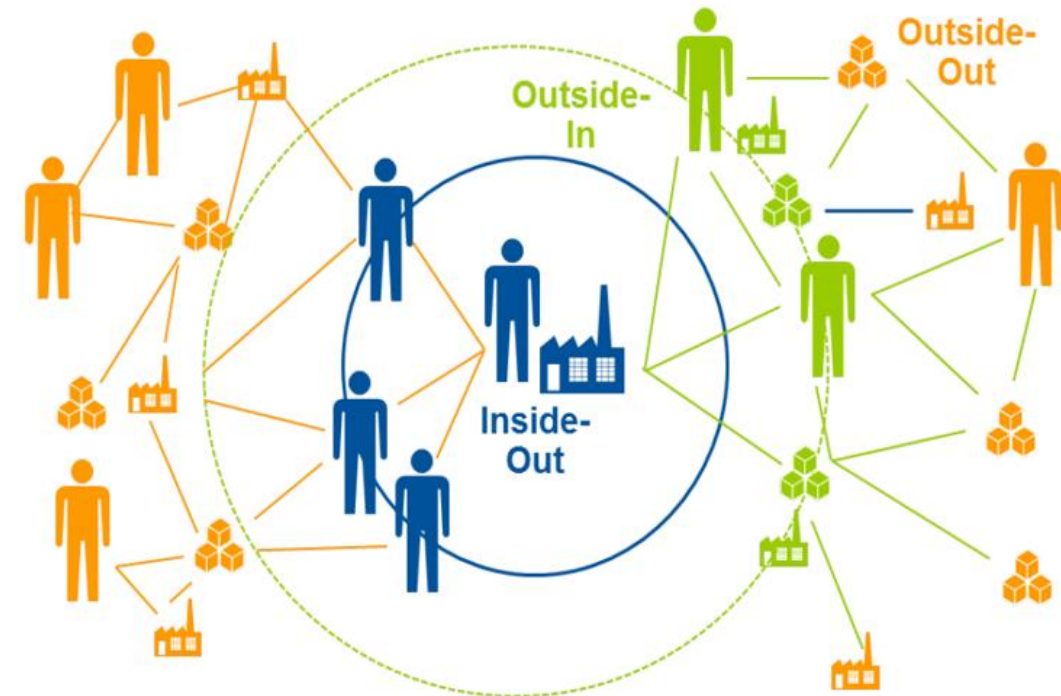
Enterprise Architecture as the Gateway to Digital Transformation - Takeaways from the Gartner EA Summit 2016

Gartner.

Source of articles: Gartner

Author: Jean-Patrick Ascenci
Posted on May 23, 2016 by Jean-Patrick Ascenci

Last week, CAST attended the Gartner EA Summit, held at National Harbor. It was two days of jam-packed sessions and workshops about Enterprise Architecture, but what stuck out the most was the value of this very unique discipline as a catalyst for Digital Transformation.

EA and Digital Transformation were the core focus of many presentations, including Mike J. Walker's session "Leverage EA to Understand the Value and Impacts of Digital Disruption." Mike stressed that this ever-evolving discipline is becoming a vital component to corporate strategy, delivering high-performing and sustainable business outcomes.
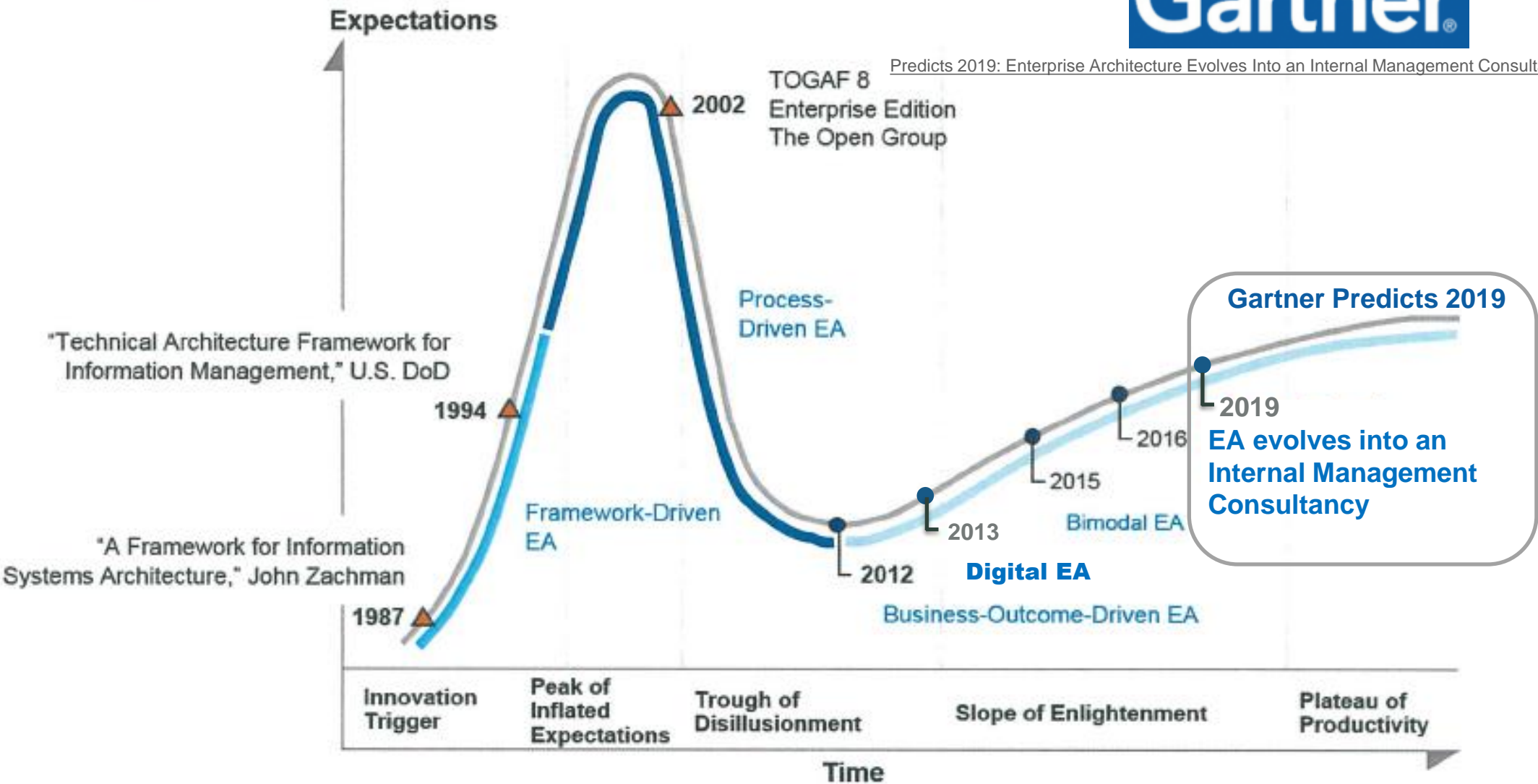
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The Evolution of Business-Outcome-Driven EA

Gartner

Predicts 2019: Enterprise Architecture Evolves Into an Internal Management Consultancy (gartner.com)

Expectations

TOGAF 8
Enterprise Edition
The Open Group

2002

Process-
Driven EA

"Technical Architecture Framework for
Information Management," U.S. DoD

1994

Gartner Predicts 2019

2019

**EA evolves into an
Internal Management
Consultancy**

2016

2015

Framework-Driven
EA

Bimodal EA

"A Framework for Information
Systems Architecture," John Zachman

2013

2012

Digital EA

1987

Business-Outcome-Driven EA

| Innovation Trigger | Peak of Inflated Expectations | Trough of Disillusionment | Slope of Enlightenment | Plateau of Productivity |

Time

The Evolution of Business-Outcome-Driven EA

https://www.gartner.com/en/documents/3975950
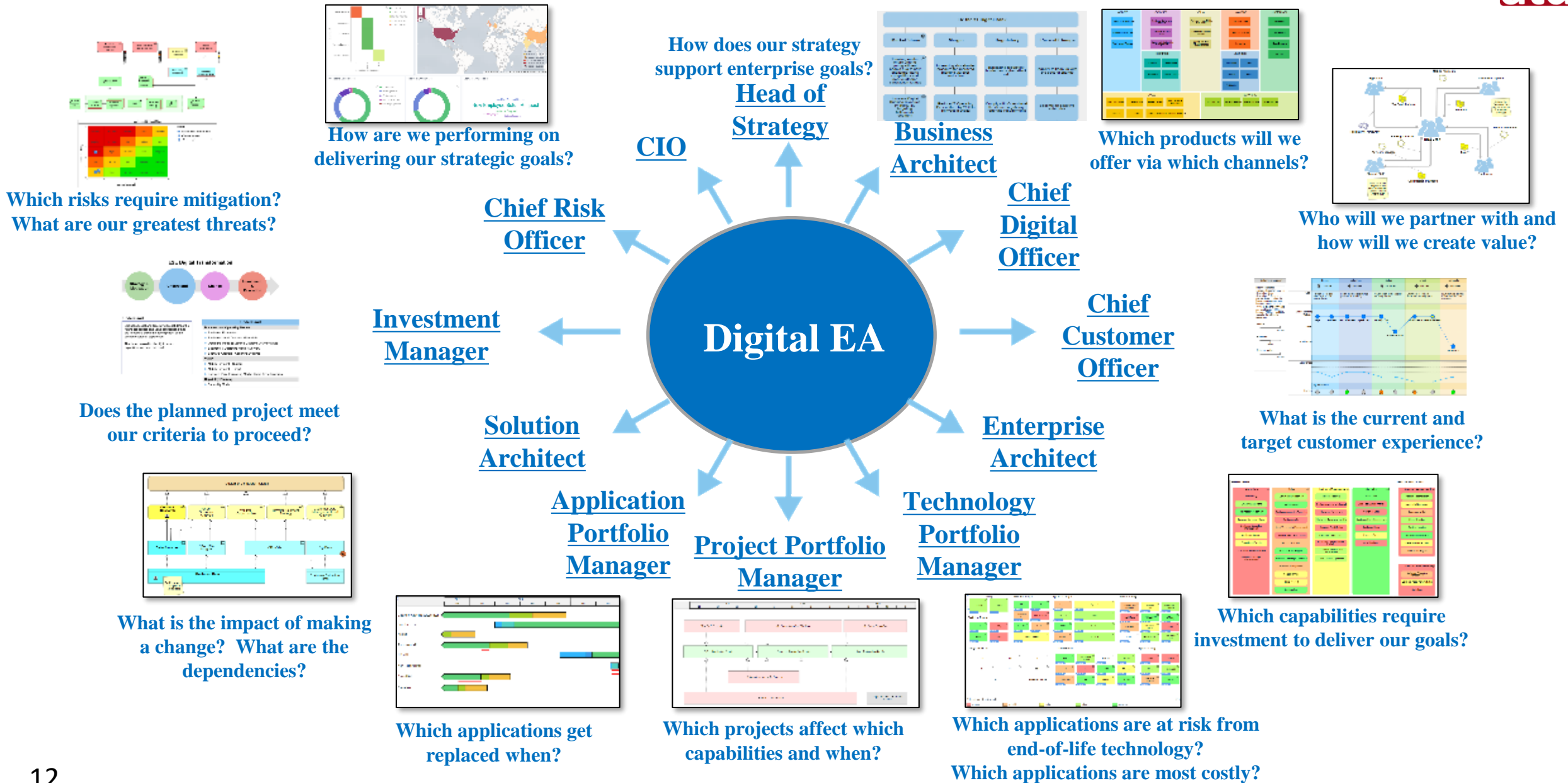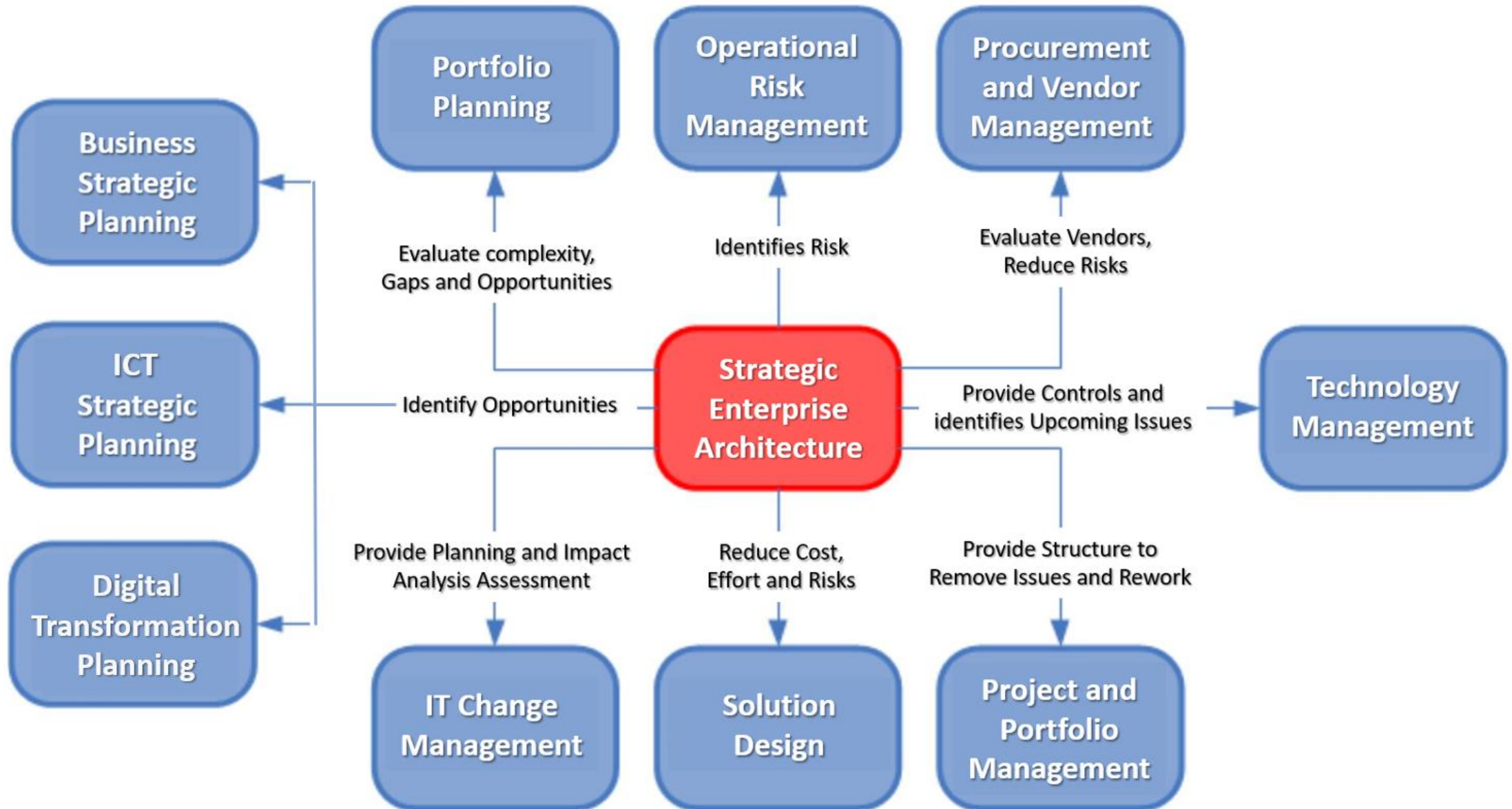
The Evolution of Business-Outcome-Driven EA

Summary Translation: Predicts 2021: Enterprise Architecture Designs the Composable Organization (gartner.com)
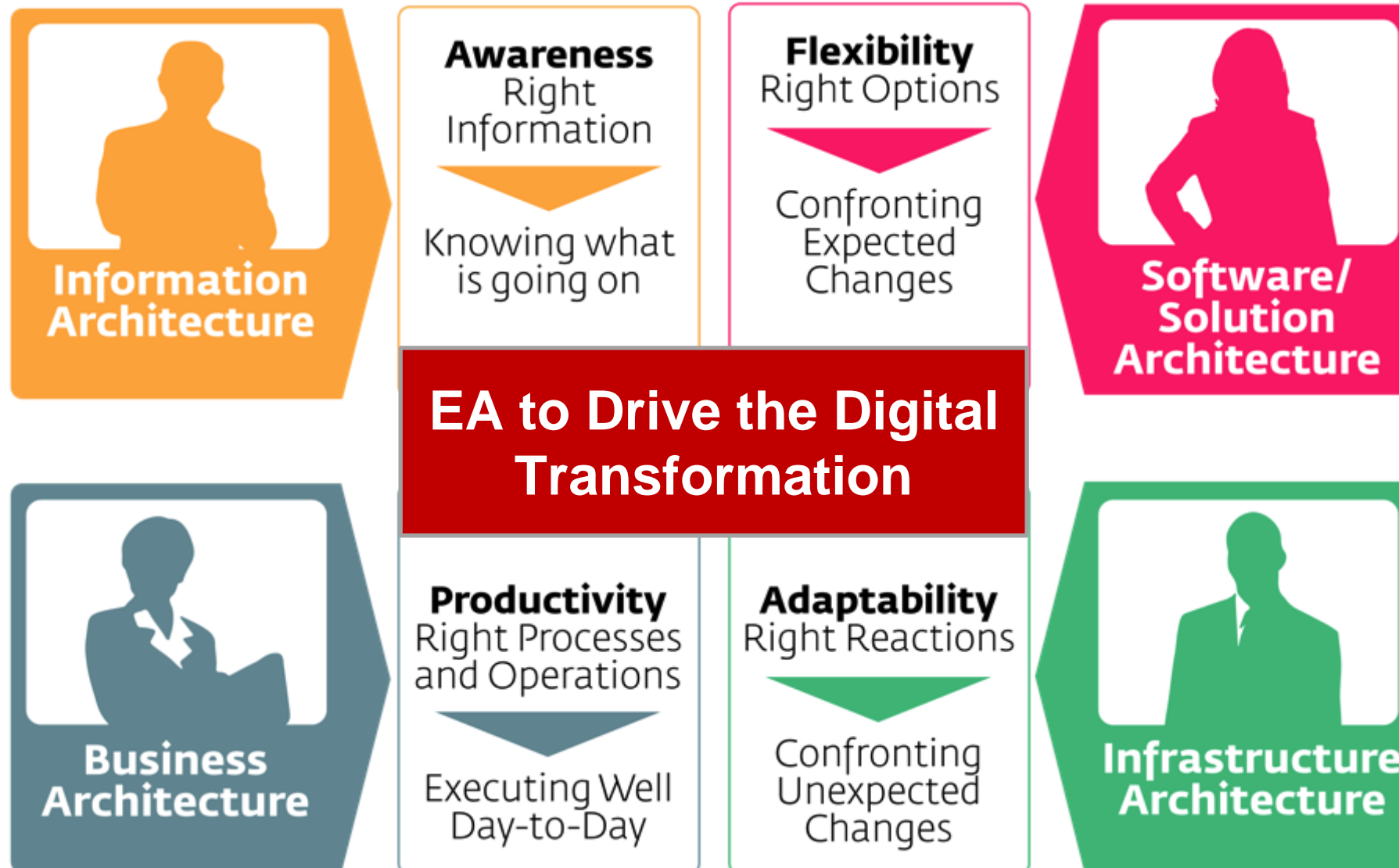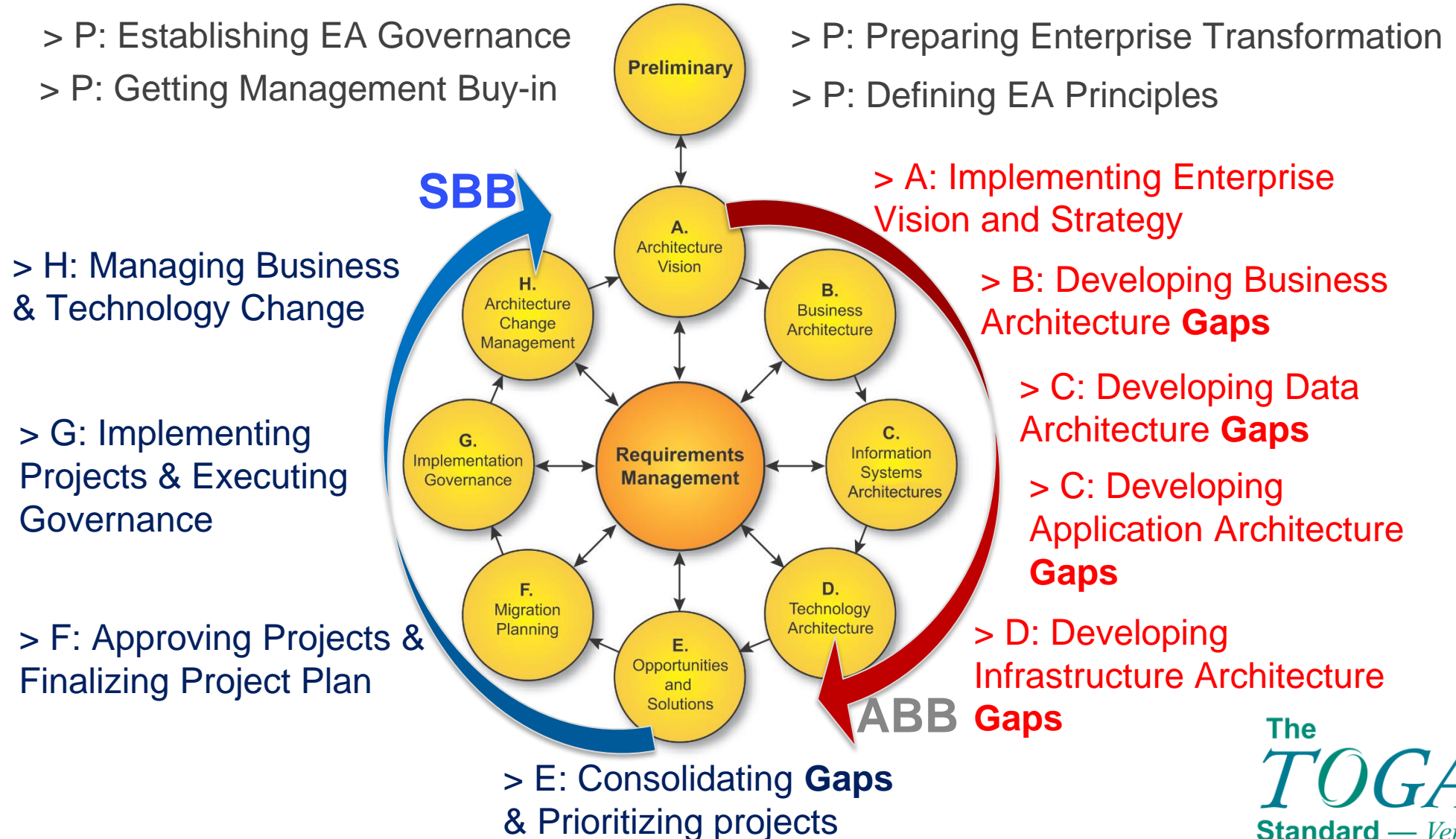
Gartner Predicts 2021
EA Designs the Composable Organization

How does our strategy support enterprise goals?

Head of Strategy

CIO

Business Architect

How are we performing on delivering our strategic goals?

Which products will we offer via which channels?

Which risks require mitigation? What are our greatest threats?

Chief Risk Officer

Chief Digital Officer

Who will we partner with and how will we create value?

Digital EA

Investment Manager

Chief Customer Officer

Does the planned project meet our criteria to proceed?

Solution Architect

Enterprise Architect

What is the current and target customer experience?

Application Portfolio Manager

Project Portfolio Manager

Technology Portfolio Manager

What is the impact of making a change? What are the dependencies?

Which applications get replaced when?

Which projects affect which capabilities and when?

Which applications are at risk from end-of-life technology? Which applications are most costly?

Which capabilities require investment to deliver our goals?

12

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Business Strategic Planning

ICT Strategic Planning

Digital Transformation Planning

Portfolio Planning

Operational Risk Management

Procurement and Vendor Management

Evaluate complexity, Gaps and Opportunities

Identifies Risk

Evaluate Vendors, Reduce Risks

Identify Opportunities

Strategic Enterprise Architecture

Provide Controls and identifies Upcoming Issues

Technology Management

Provide Planning and Impact Analysis Assessment

Reduce Cost, Effort and Risks

Provide Structure to Remove Issues and Rework

IT Change Management

Solution Design

Project and Portfolio Management

13

Information Architecture

Awareness
Right Information

Knowing what is going on

Flexibility
Right Options

Confronting Expected Changes

Software/ Solution Architecture

EA to Drive the Digital Transformation

Business Architecture

Productivity
Right Processes and Operations

Executing Well Day-to-Day

Adaptability
Right Reactions

Confronting Unexpected Changes

Infrastructure Architecture

14

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> P: Establishing EA Governance

> P: Getting Management Buy-in

Preliminary

> P: Preparing Enterprise Transformation

> P: Defining EA Principles

SBB

> A: Implementing Enterprise Vision and Strategy

> H: Managing Business & Technology Change

> B: Developing Business Architecture **Gaps**

> C: Developing Data Architecture **Gaps**

> G: Implementing Projects & Executing Governance

> C: Developing Application Architecture **Gaps**

> F: Approving Projects & Finalizing Project Plan

> D: Developing Infrastructure Architecture **Gaps**

ABB

A. Architecture Vision

B. Business Architecture

H. Architecture Change Management

Requirements Management

C. Information Systems Architectures

G. Implementation Governance

D. Technology Architecture

F. Migration Planning

E. Opportunities and Solutions

> E: Consolidating **Gaps** & Prioritizing projects

The **TOGAF**® **Standard** — *Version 9.2*

15

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**

The TOGAF® Standard — Version 9.2

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Input

Business Vision, Goals, Drivers, Strategies and Stakeholders' Motivation

Output

Enterprise Capabilities & Innovation

Informs the required capability → **Architecture Capability Framework**

Ensures Realization of Business Vision ←

Sets targets, KPIs, budgets for architecture roles →

Drives need for Architecture Capability maturity ←

Architecture Development Method (ADM)

Business needs feed into architecture →

ADM Guidelines & Techniques

Ensure Business Understanding ←

Delivers new business solutions through Project Management Office (PMO) →

TOGAF ADM & Content Framework

Architecture Content Framework

Enterprise Continuum & Tools

TOGAF Reference Models

Informs the Business of the current state ←

Operational changes cause updates ←

TOGAF Enterprise Continuum & Tools

17

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Strategy (Digital Enterprise)

Motivations	Goals	Drivers	Principles	Outcomes

Business (Productivity, Efficiency & Profitability)

Business Architecture (people, process & function)	Information Architecture (data & attributes)

Technology (IR4.0)

Application Architecture (ERP, SCM, mobile & automation)	Infrastructure Architecture (network, cloud, IoT & sensors)

Digitally Connected Enterprise Model

- Strategy
- Business
- Information
- Application
- Infrastructure

Digital Transformation & Realization
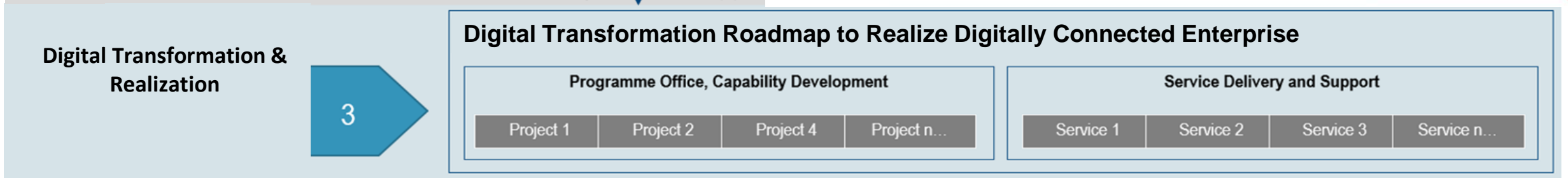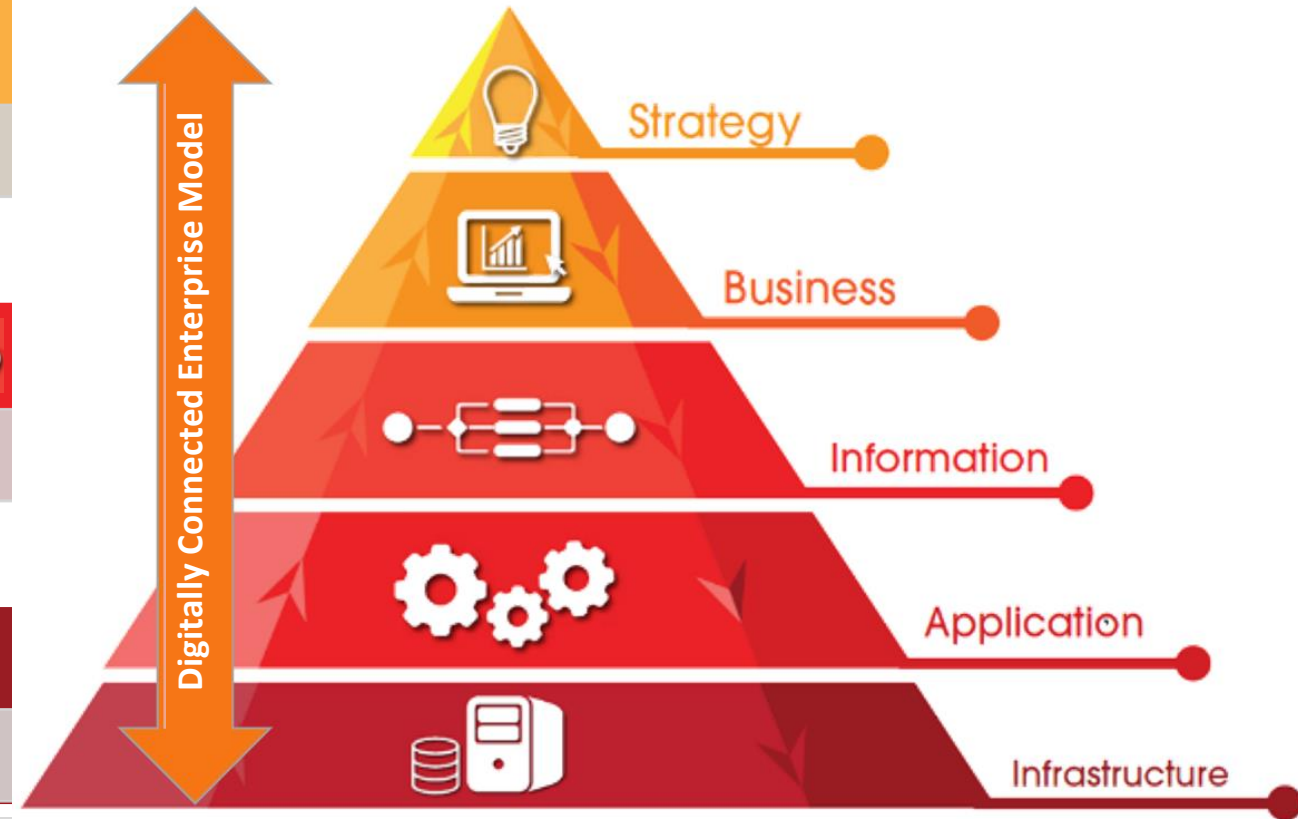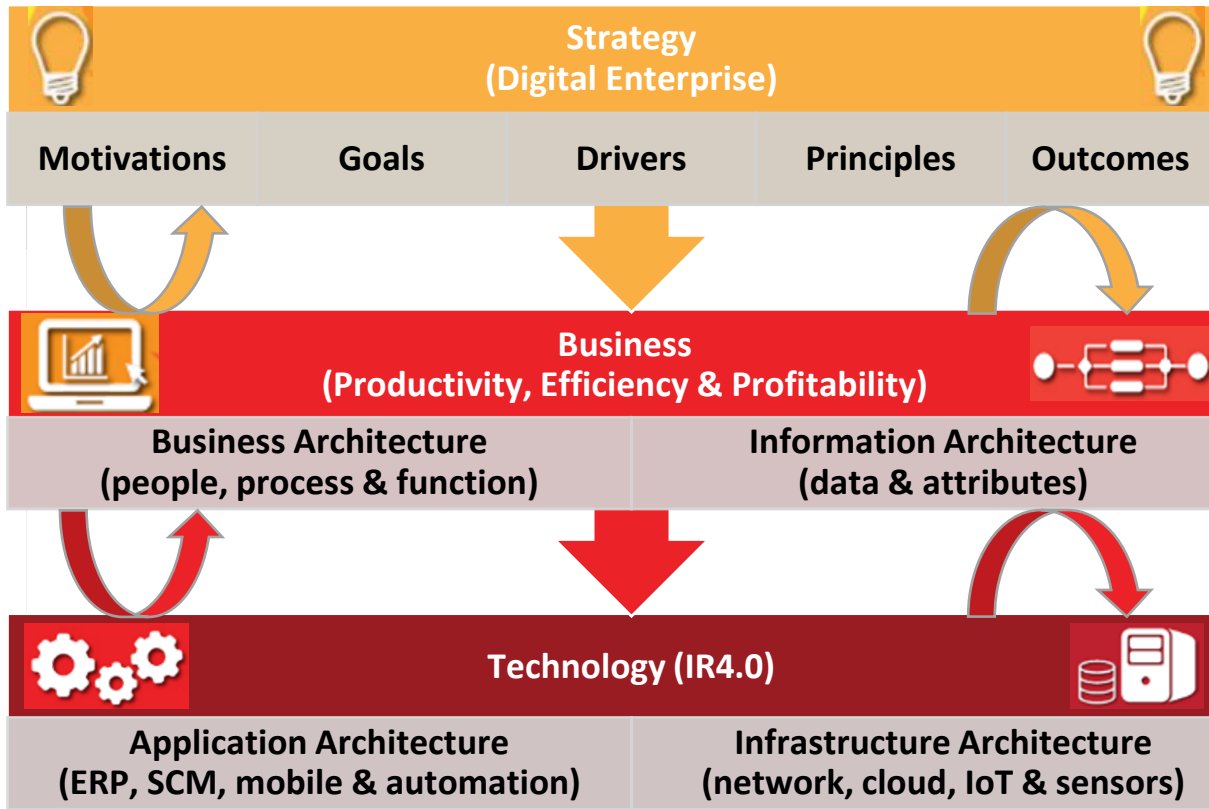
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Digital Transformation Roadmap to Realize Digitally Connected Enterprise

Programme Office, Capability Development				Service Delivery and Support			
Project 1	Project 2	Project 4	Project n...	Service 1	Service 2	Service 3	Service n...

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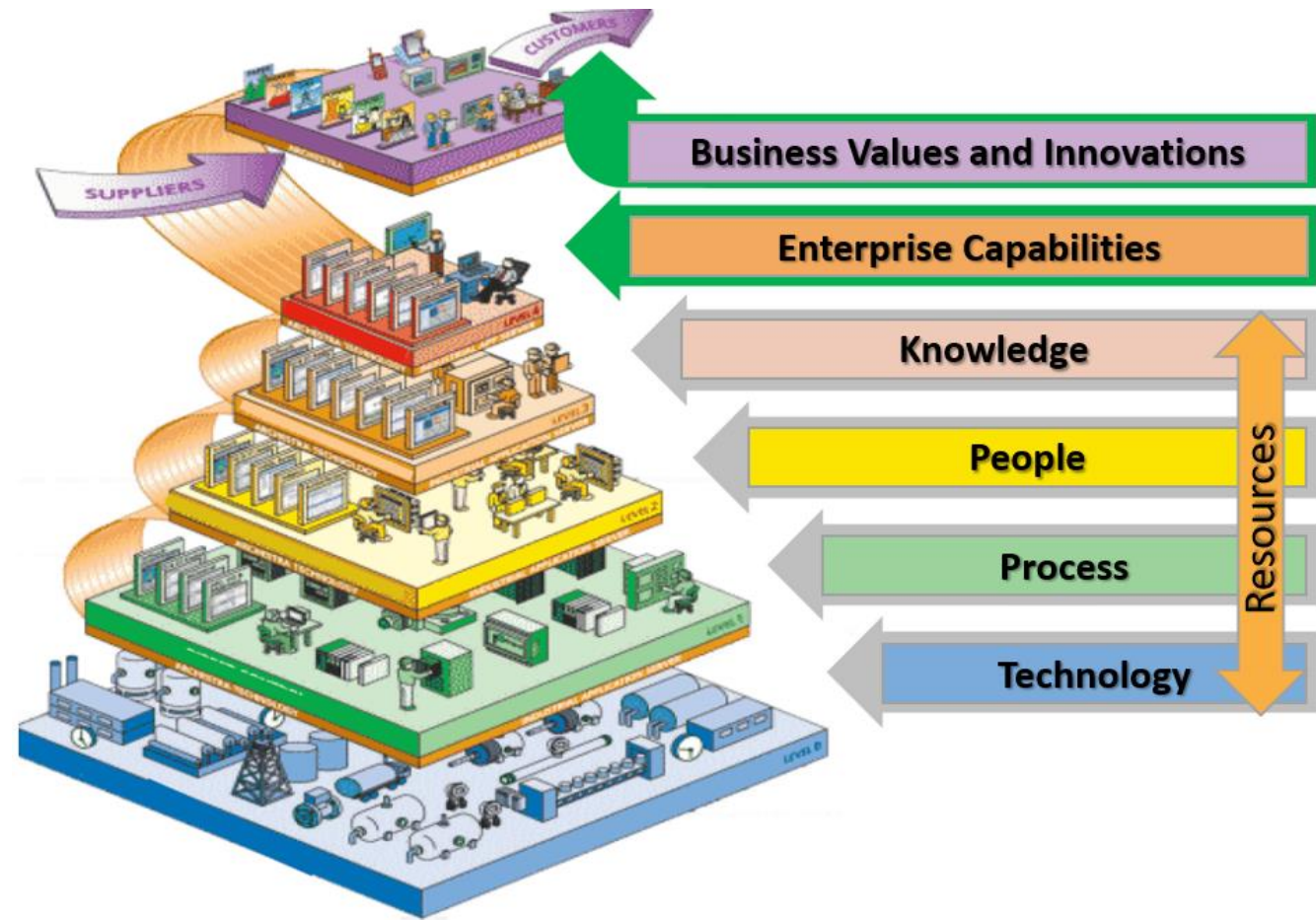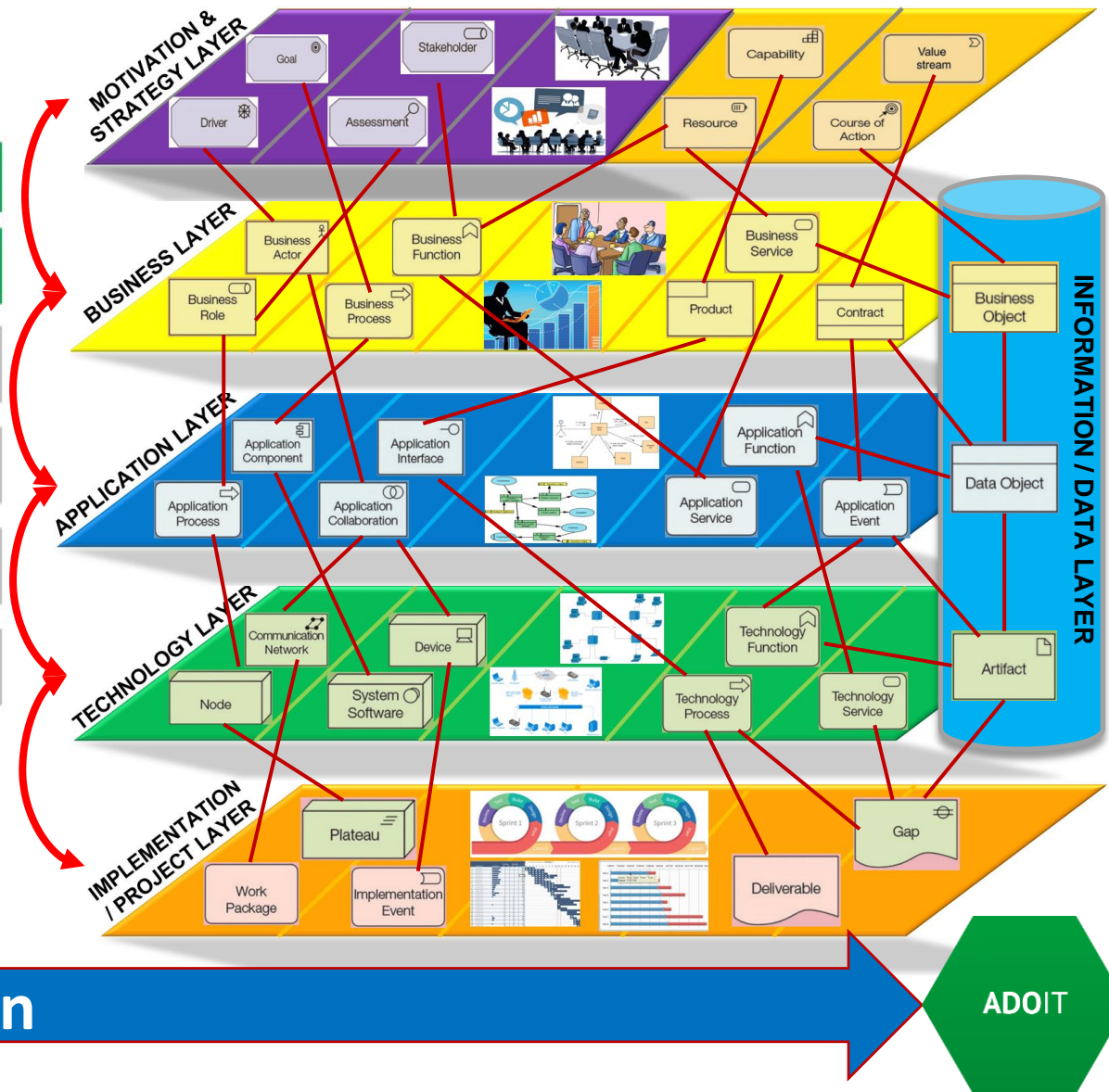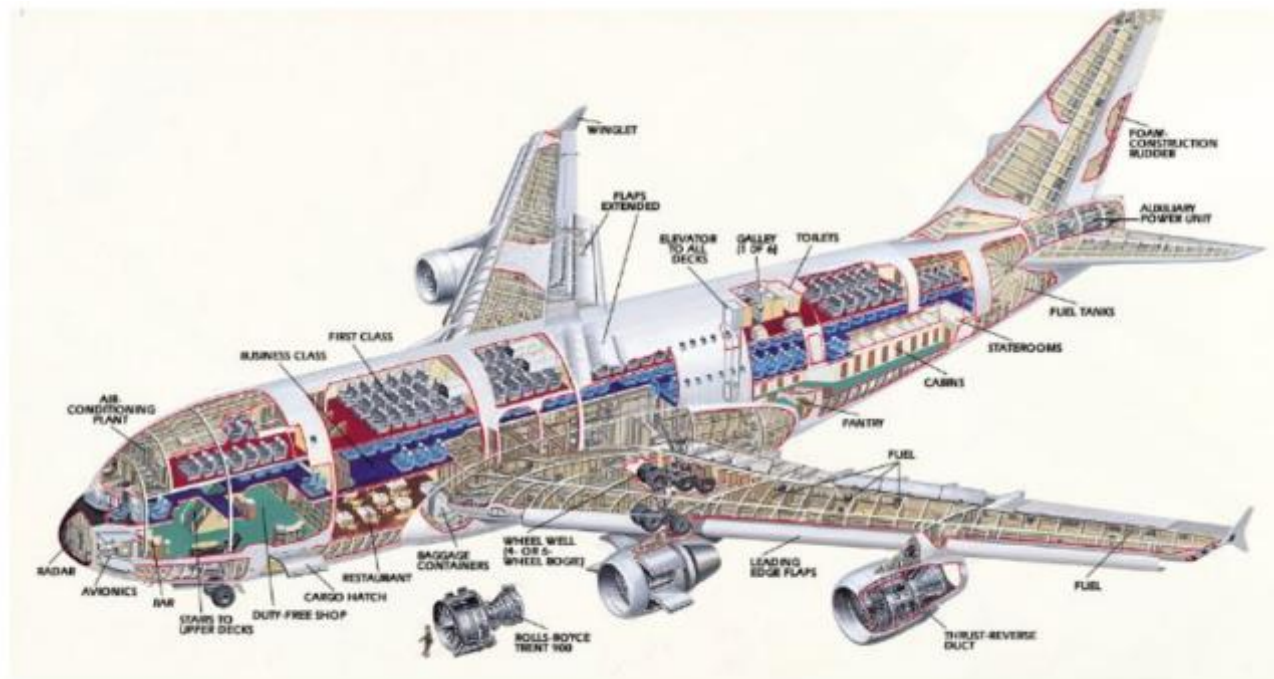
A380 components

When ArchiMate meets PLM for Aircraft OEM like Airbus

Published on January 7, 2017
https://www.linkedin.com/pulse/archimate-meeting-plm-aircraft-oem-like-airbus-dr-nicolas-figay

Dr Nicolas Figay Follow
Expert and researcher within the field of Standards based PLM i...

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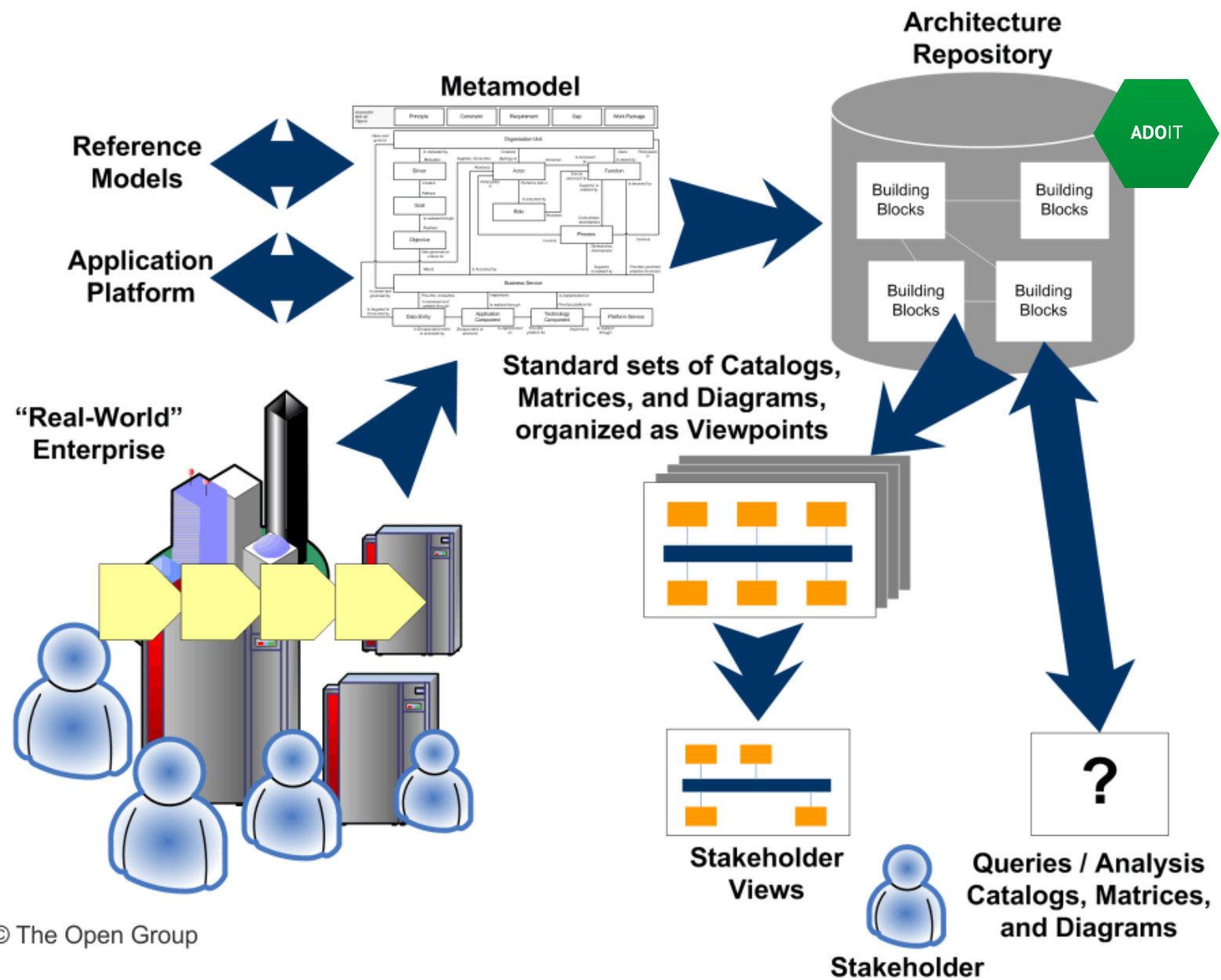
DIGITAL EA METAMODEL EXAMPLE – CONNECTED ENTEPRISE COMPONENTS

22
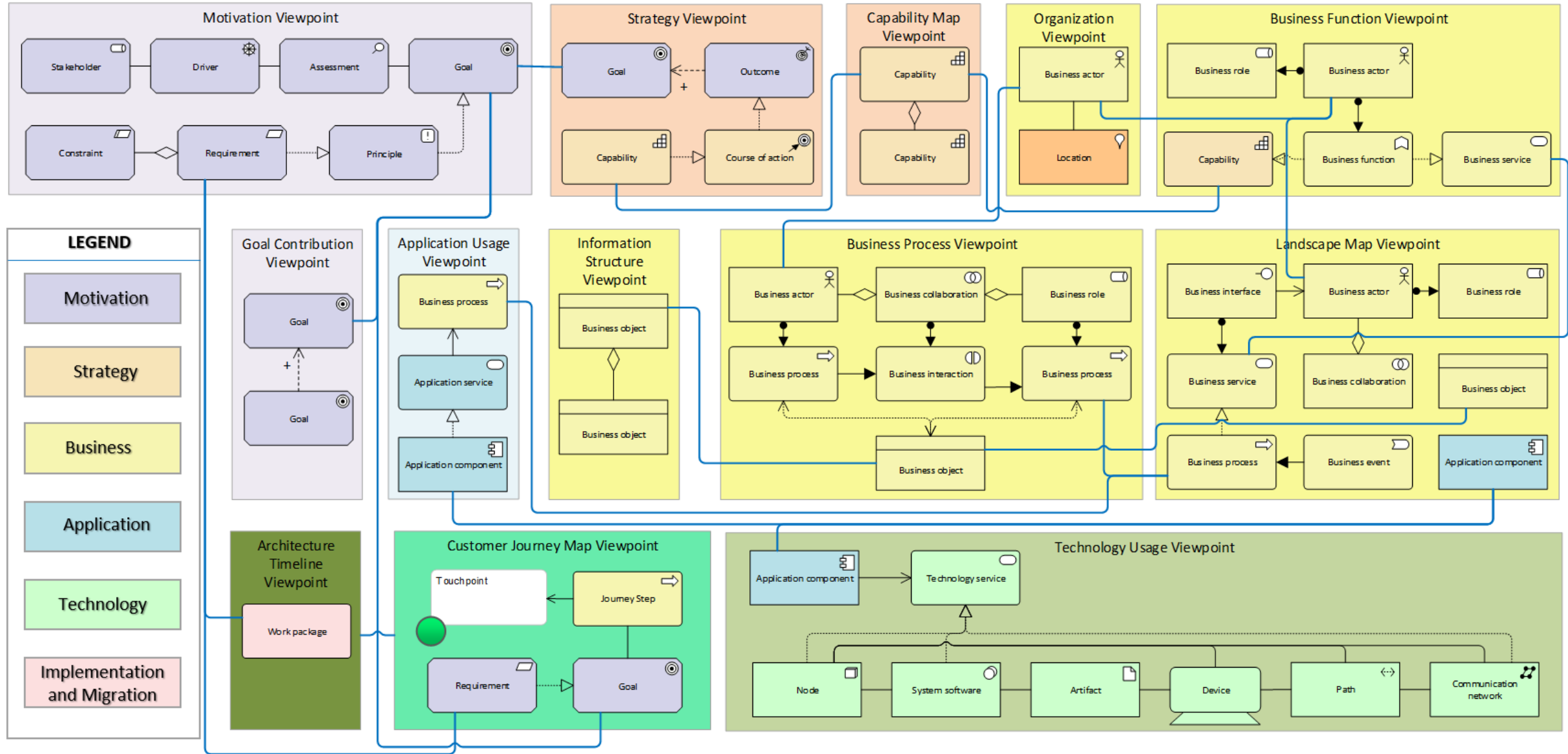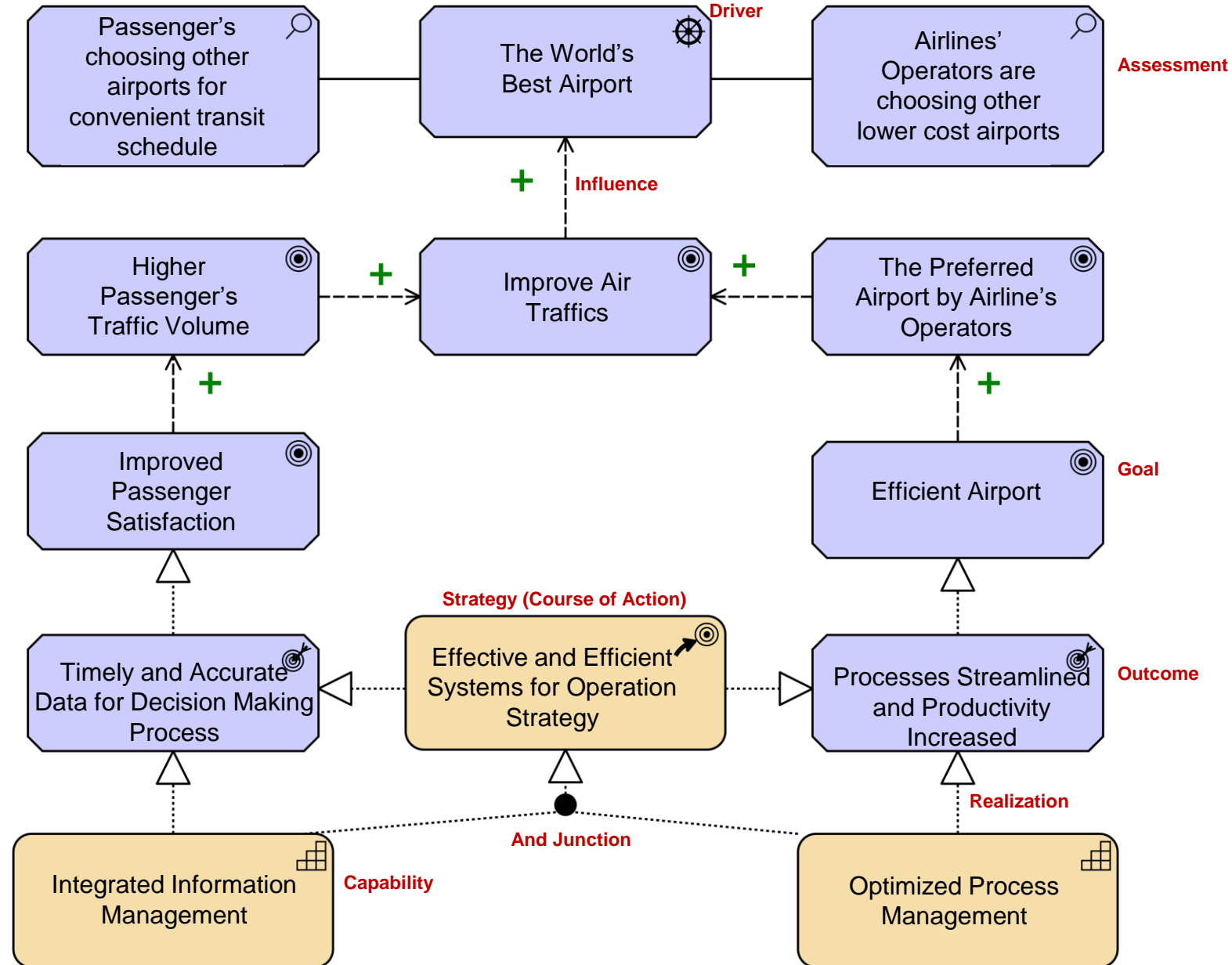
Applications used by respective Business Processes
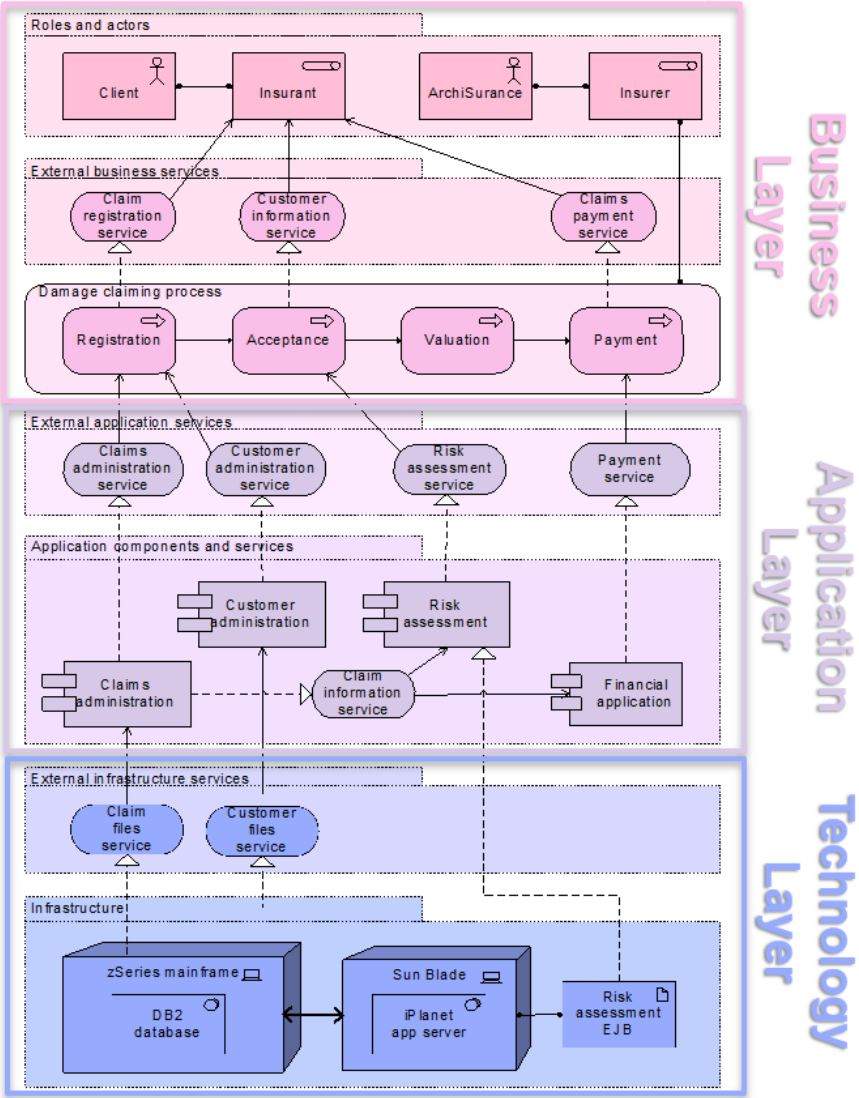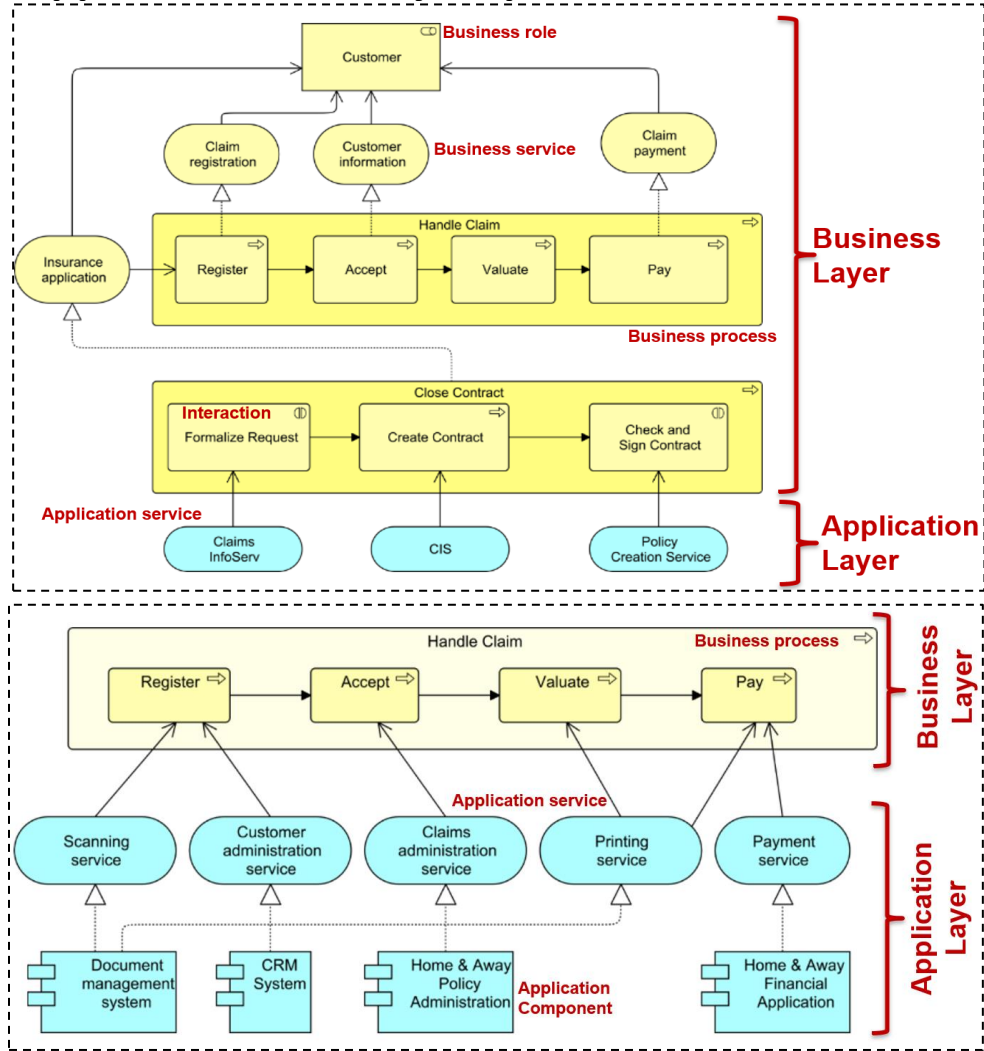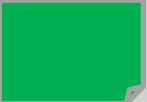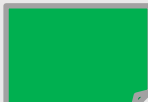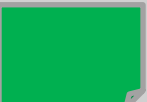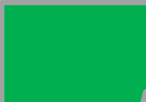
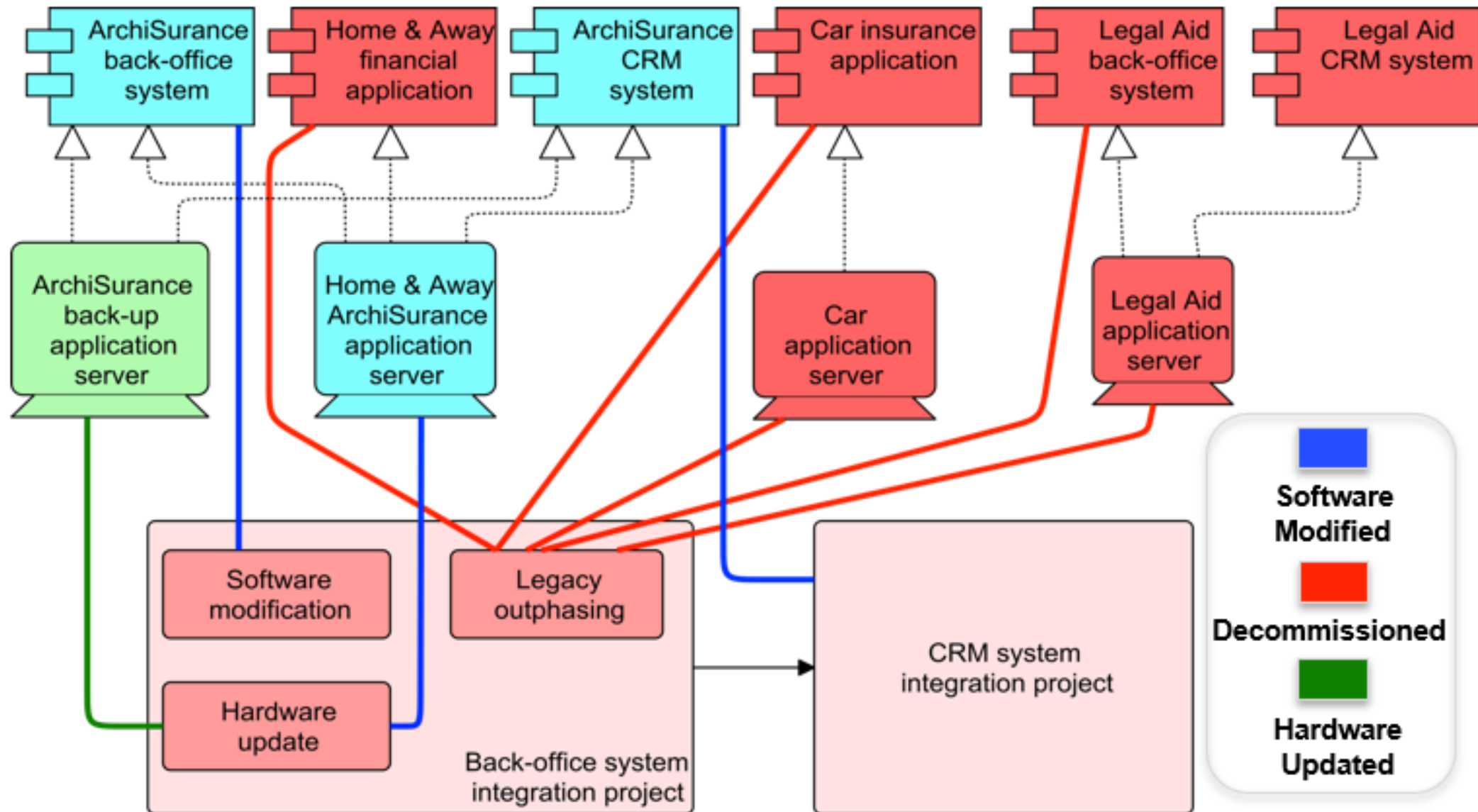# MODELING "MOMENTS OF LIFE"/CUSTOMER JOURNEY MAPPING WITH ENTERPRISE ARCHITECTURE GAPS EXAMPLE

Phases		Awareness	Consideration	Acquisition	Service	Loyalty
Channels						
	Retail Outlet	<<Touchpoint>>				
	Online					
	Kiosk					
Thoughts						
Emotions						
Enterprise Architecture Gaps	Business Architecture	?	?	?	?	?
	Data Architecture	?	?	?	?	?
	Application Architecture	?	?	?	?	?
	Infrastructure Architecture	?	?	?	?	?
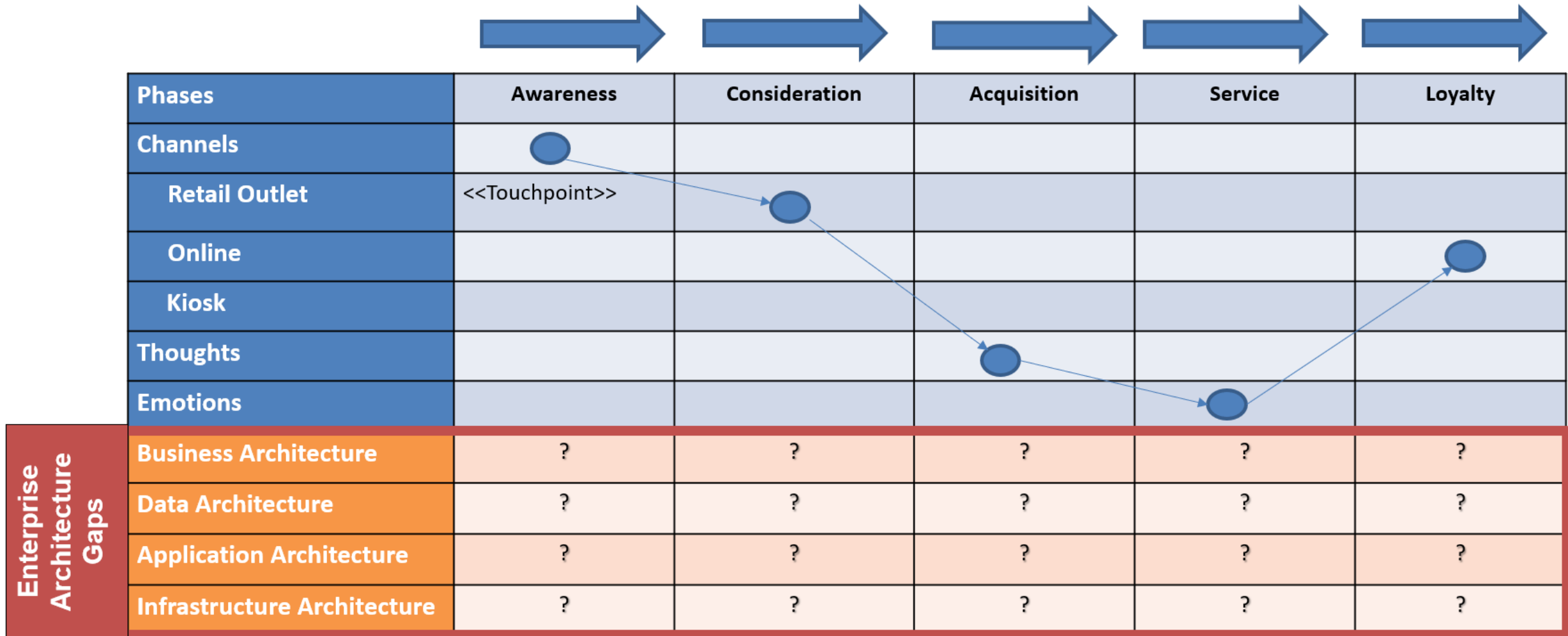
Use different colors to indicate availability (Heatmapping)

Available	Partially Available	Not Available

| Enterprise Architecture (EA) Gaps						
Business Architecture	🟩	🟨	🟥	🟨	🟨
Data Architecture	🟥	🟩	🟨	🟥	🟩
Application Architecture	🟨	🟩	🟨	🟩	🟨
Infrastructure Architecture	🟩	🟨	🟥	🟨	🟨

➢ This example shows how the cross-layer relationships among Business, Data, Application and Infrastructure Architecture layers, to show how the interdependencies and impact analysis in one architecture view.

29

business outcome-driven EA FOCUS WEEK
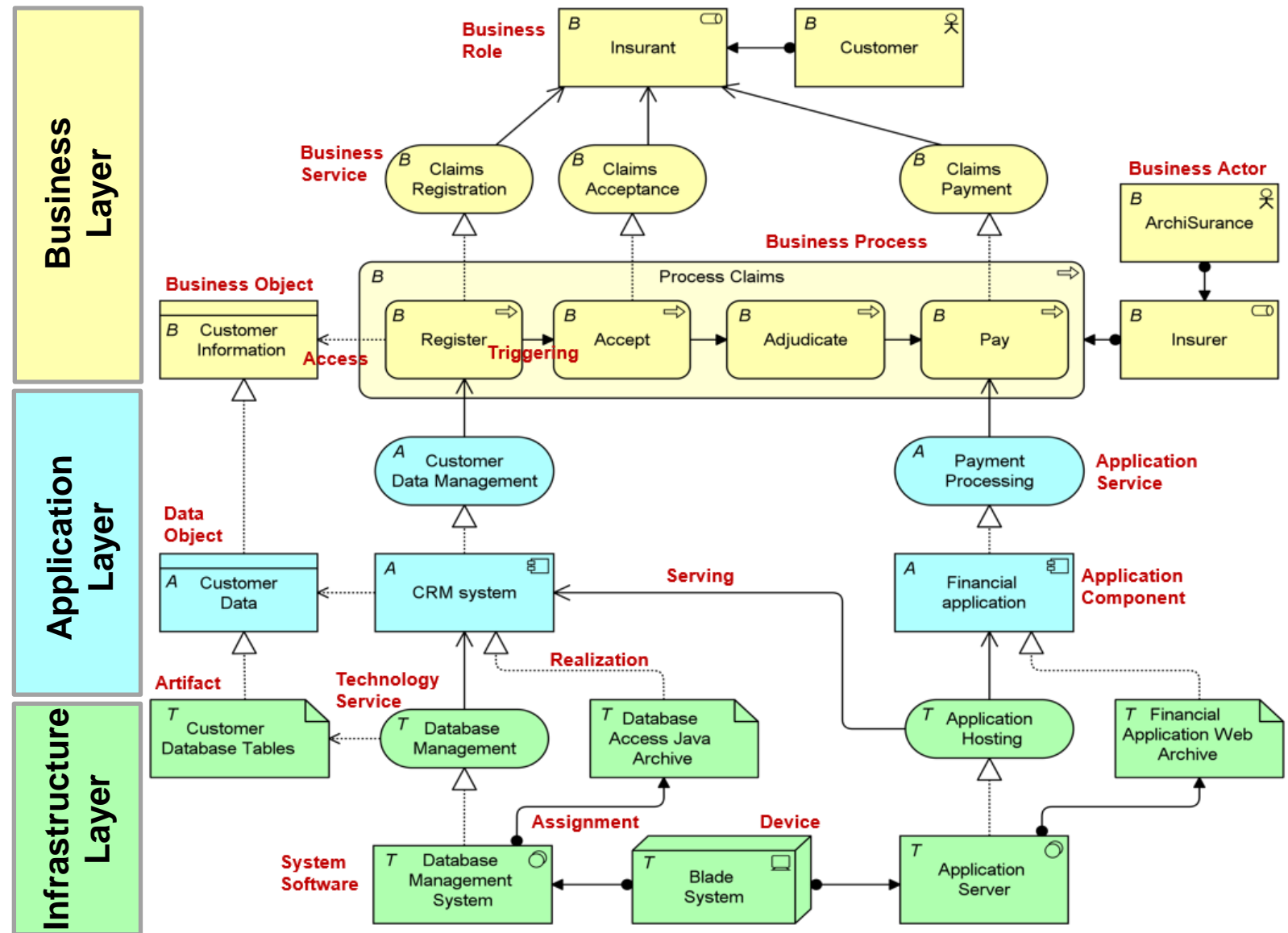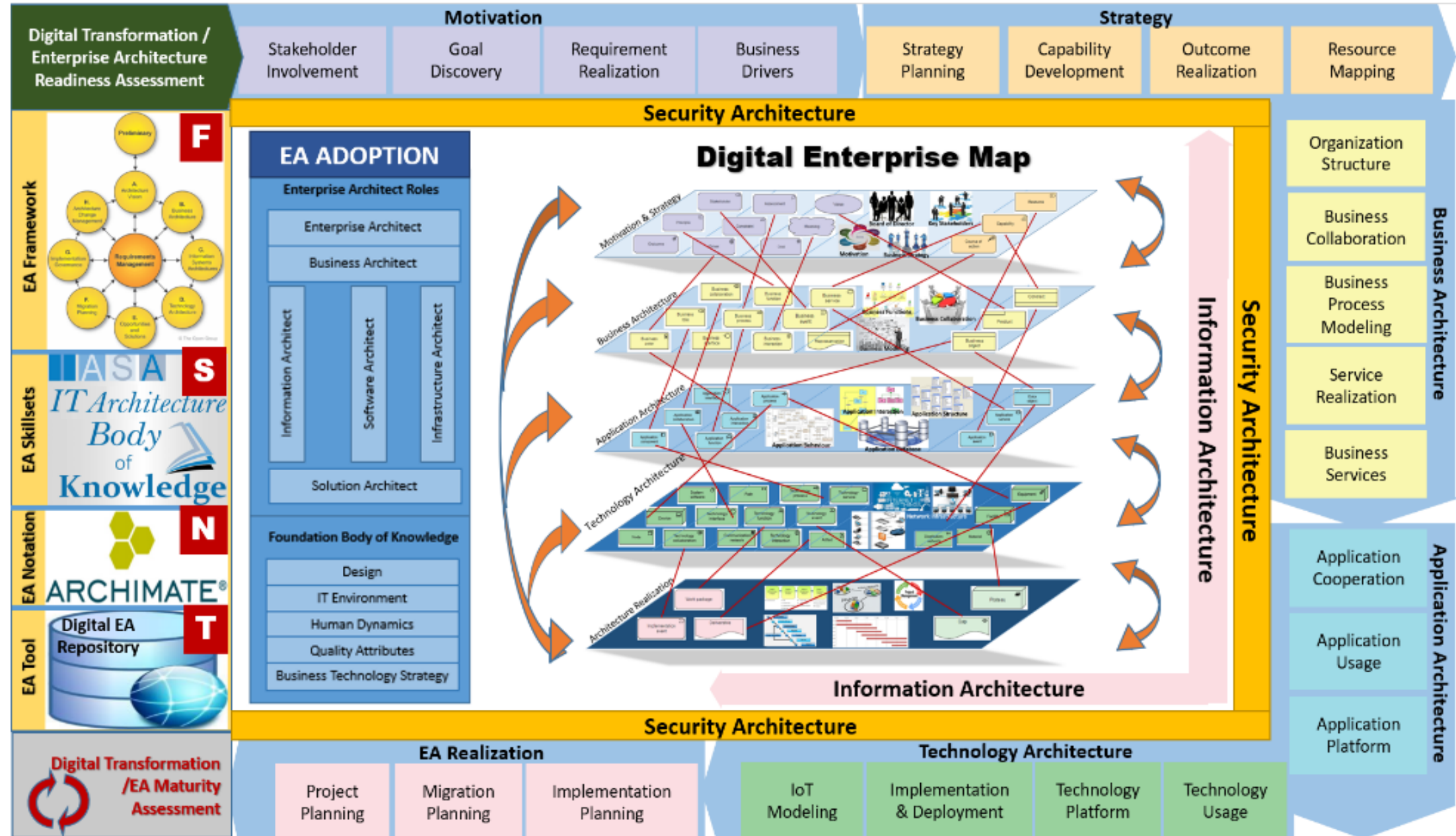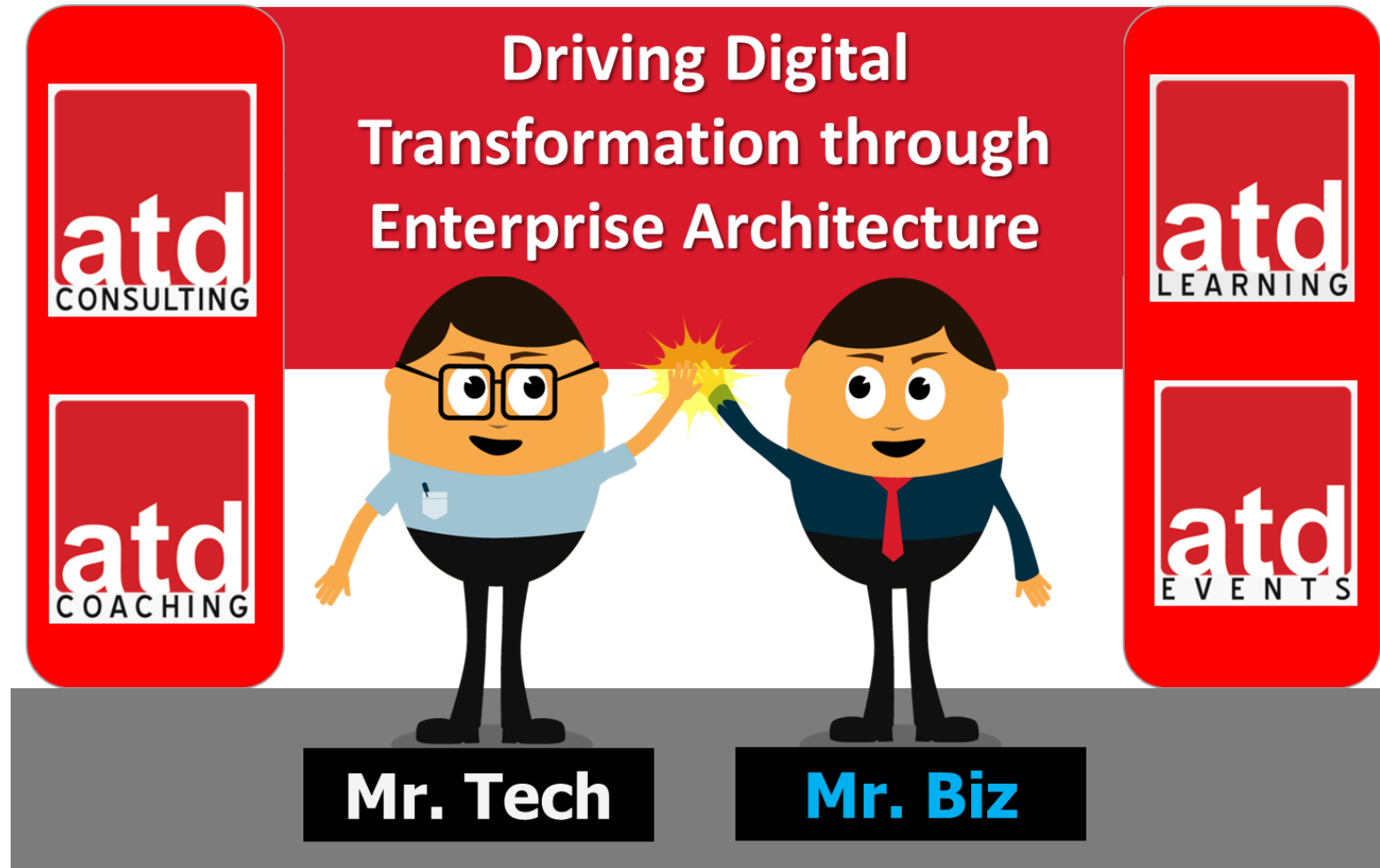
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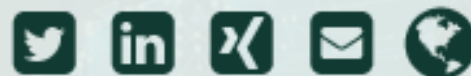
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