TÜBİTAK BİLGEM YTE

YAZILIM TEKNOLOJİLERİ ARAŞTIRMA ENSTİTÜSÜ

DİJİTAL DEVLET VE KURUMSAL MİMARİ

31 Mayıs 2016, Salı

Wyndham Ankara Oteli

Enabling Public Value in the Age of the Customer

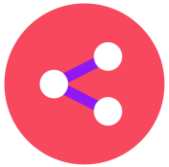
Abdallah El Kadi

Ankara, May 31st, 2016

Innovative technology consulting for business

Agenda

The Customer Age



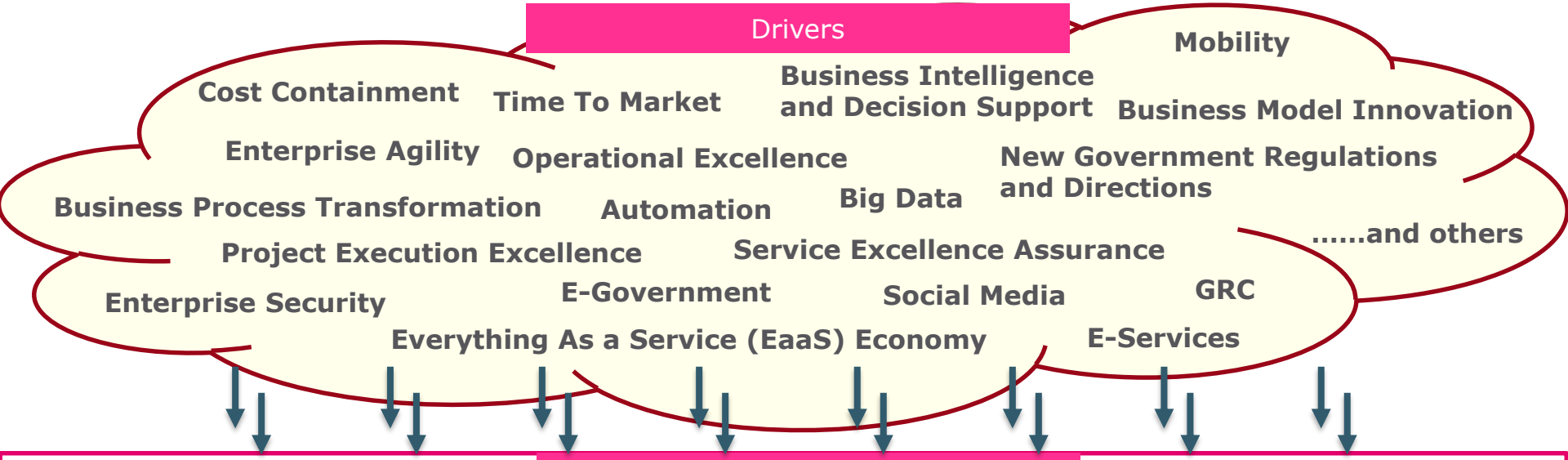
The Digital Context

The Transformation Challenge

Enterprise Architecture Enabled Transformation

Q&A

Business Transformation Context



Business Context

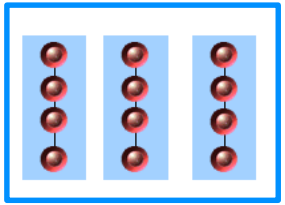
Where you are ...	What to do to get to ...	Where you want to be ...	How do you reach to ...
Assessments, Benchmarks, Reports	Strategy, Key Projects	Vision, Goals, Objectives	Roadmap, Specifications, Capabilities, RFPs…

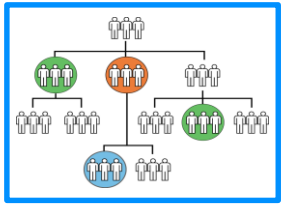
EA practice is a tool to manage this entire journey

Business Transformation Evolution

Industrial Age

Mass manufacturing capacity makes industrial powerhouses successful

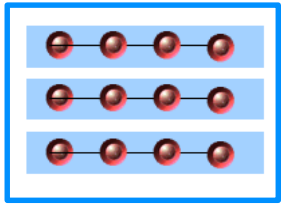


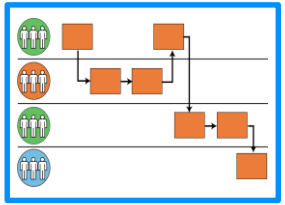


Restructuring
1900 to 1980s

Distribution Age

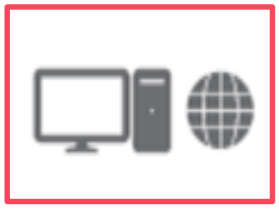
Global connections and transportation systems make distribution key



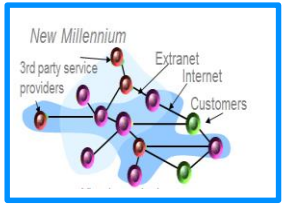


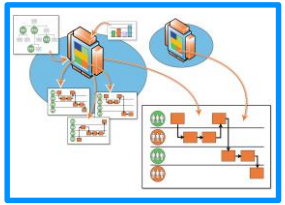
Process Re-Engineering
1980s to 1990s

Information Age



Connected networks and systems mean those that control information flow dominate





Capability Re-Engineering
1990s to 2010

Customer Age

Empowered buyers demand a new level of customer obsession

Value Re-Engineering
2010 to NOW

Key Trends Redefining the Competitive Landscape

Personalized World

Understanding and revamping the total customer experience

As everyday objects and experiences become digitized, new frontiers of personalized services centered on the individual opens up

Outcome Economy

Aggregating evolving interconnected technology capabilities to drive results

The outcome economy re-shapes long held notions of how superior products and services are defined

Ecosystem Re-Definition

Leveraging new disruptive technologies to redefine customer outcome

A new wave of disruptive technologies is changing the business ecosystem By altering the customer's behavior and needs

Data Velocity

Expending enterprise intelligence to predict & influence customer preferences

The new data domains resulting from the digitization of the entire customer journey is redefining the meaning of enterprise intelligence

Virtual Workforce

Redefining the human – machine relationship to extend value proposition

As the digital revolution gain momentum, human and machines need to collaborate more effectively making organizations recognize both as critical team members

Key paradigm shifts redefining our decisions

Efficiency

The focus of organizations is no longer on its own efficiency but rather on outcome of its efficiency (external value)

Value

System of Records

The focus of automation has extended beyond the operational boundaries of the organization to address the interaction with the

System of Engagement

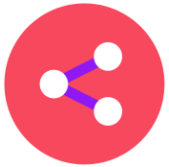
Solutions

Technology adoption shifted from vertical solution thinking to horizontal platform thinking to enable innovation and support evolution

Platforms

Agenda

The Customer Age



The Digital Context

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Q&A

Digital Transformation Profiles

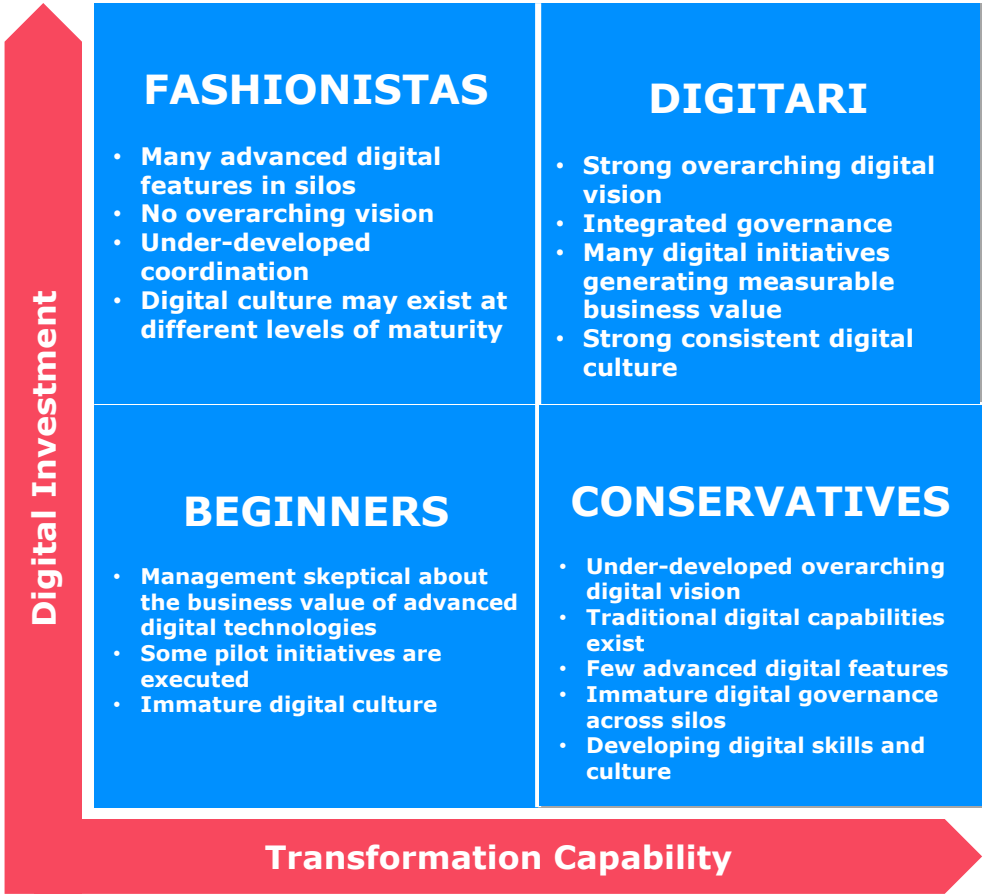
Pace of Digital Undertaking

+

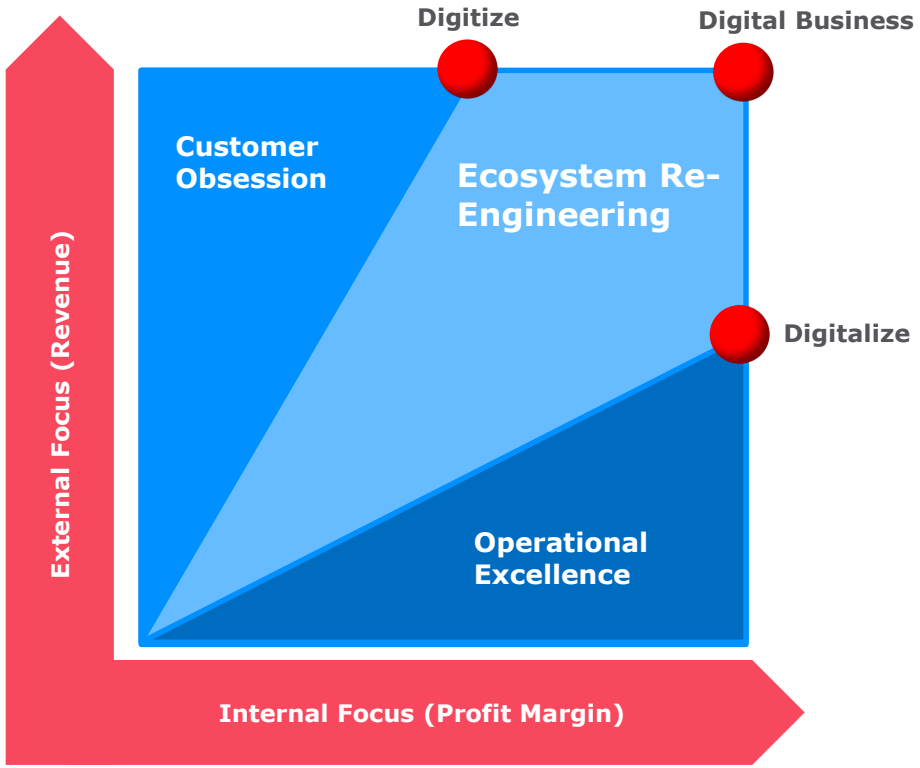
Ability to Execute Transformation

=

Digital Transformation Profile



Digital Transformation Themes



Digital Themes

Digitize
Applying technology to domains that enable enhancing the overall customer reach and experience around existing products and services

Digitalize
Implementing digital technologies that enable process efficiency, drive employee productivity and maximize technology value

Digital Business
Adopting digital technologies to create revenue and results via innovative strategies, products, processes and experiences by redefining the business ecosystem

Digital Transformation Value Model

		Outcome	Initiative Domain
Digital Transformation Value	Digitize	Customer Obsession	Re-imagine the total customer journey to strengthen customer relationship through innovative channels and personalized communication strategies	Personalized Digital Marketing Social Relationship Management Digital Service Excellence Predictive Customer Insight
	Digitalize	Operational Excellence	Enable the organization to optimize its operating model by maximizing the value of its existing resources and their relationships	Organization & Process Efficiency Employee Productivity Technology Value Optimization Operational Insight
	Digital Business	Ecosystem Re-Engineering	Exploit disruptive technologies to define a new business ecosystem that revolves around an innovative customer value lifecycle	Digital Value Chain Digital Products & Services Digital Commercial Model PPP & Corporatization

Innovation Types

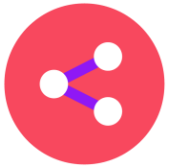
Configuration	**Profit Model**	**Network**	**Structure**	**Process**
	How to make money	How to connect with others to create value	How to align talent and assets	How to use superior methods to do your work
Offering	**Product Performance**	**Product System**		
	How to deploy distinguished features and functionality	How to create complementary products and services		
Experience	**Service**	**Channel**	**Brand**	**Customer Engagement**
	How to support and enhance the value of your offering	How to deliver your offering to your customers and users	How to represent your offering and value to customer	How to achieve faster and continuous interactions

Disruptive Technologies

Social Media	Social media and collaboration technologies enable new ways and drive exceptions of interacting, personalization and building relationships within and beyond the organization
Mobile	The uninterrupted trend towards using mobile devices impacts all areas of business and personal live by transforming how people interact, consume information and services, collaborate and work
Cloud	The possibility to virtualize and consume infrastructure, platforms and applications as a service enables new levels of scalability, flexibility and responsiveness
Big Data Analytics	Analytical methods and access to the right data enable the generation of new insights and decision-rich information in real time. Big Data approaches allow to make use of the rapidly increasing amount of data from multiple sources
Internet of Things	Connected devices of all kinds and cheap sensors integrated nearly everywhere constantly create large amounts of data that provide context specific understanding that can change the way products, services and messages are exchanged

Agenda

The Customer Age



The Digital Context

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Q&A

The story of transformation in the digital age

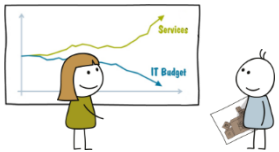
What's the **pain?**

Constant change puts any transformation at risk.

What's the **plan**?

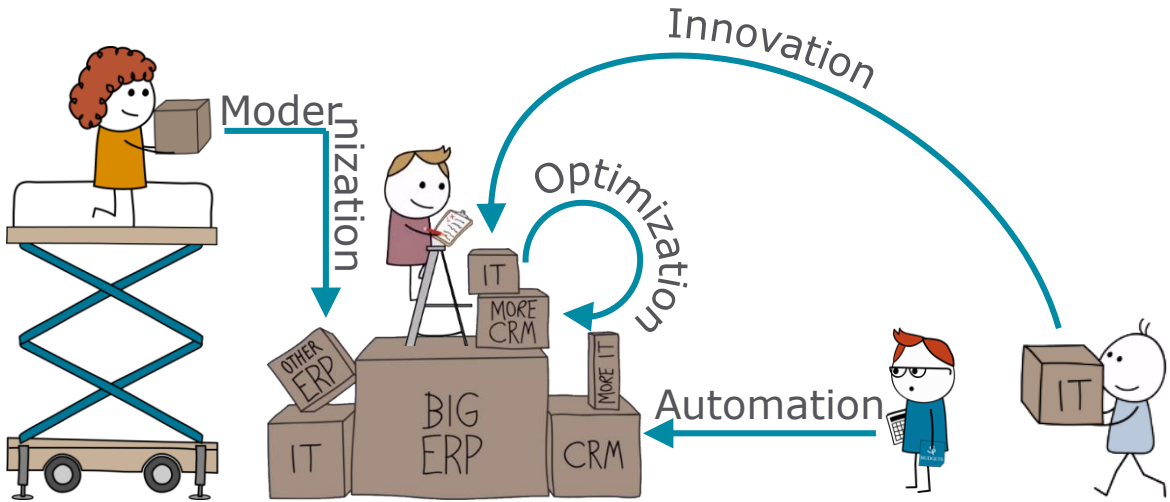
Make portfolio management a **collaborative practice**.

What's the **gain**?

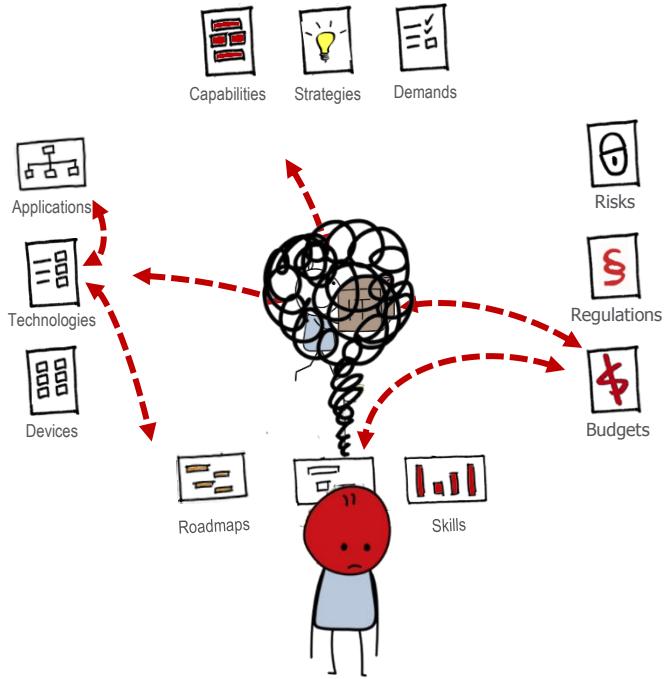


Effective transformation in a dynamic environment.

Many Drivers for Change...



Do you know all dependencies to consider?



Change – if not directed – will slow down your project and your business!

Project collisions not resolved due to isolated views

Project failures caused by technological changes

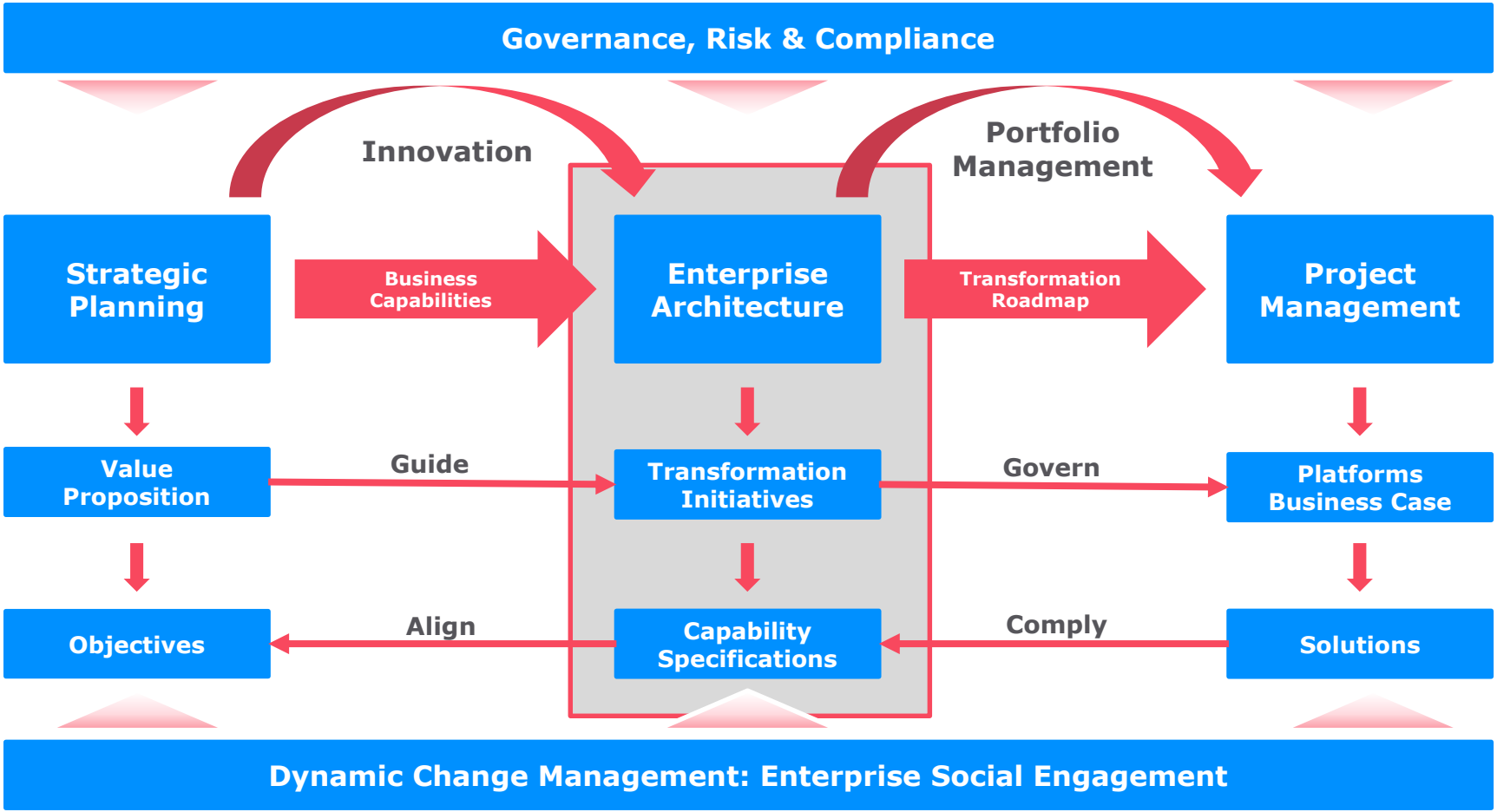
Increased costs and risks driven by complexity

Double effort caused by similar demands

Redundancies created by unaligned projects

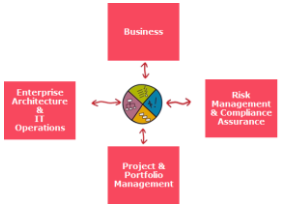
Limited reusability due to lack of insight

The solution : Transformation Management Office



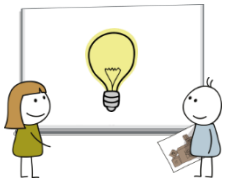
Improved transparency leads to …

… lower
collision potential



… informed
decision making

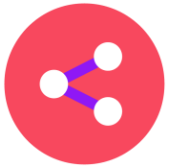
… more
budget for innovation



… better
strategic alignment

Agenda

The Customer Age



The Digital Context

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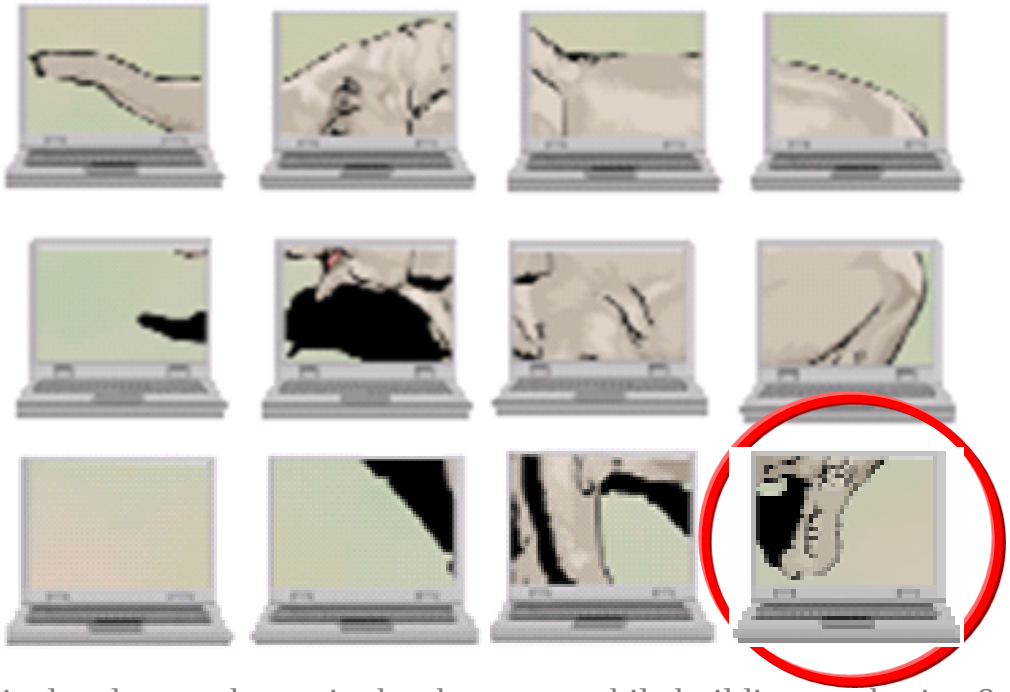
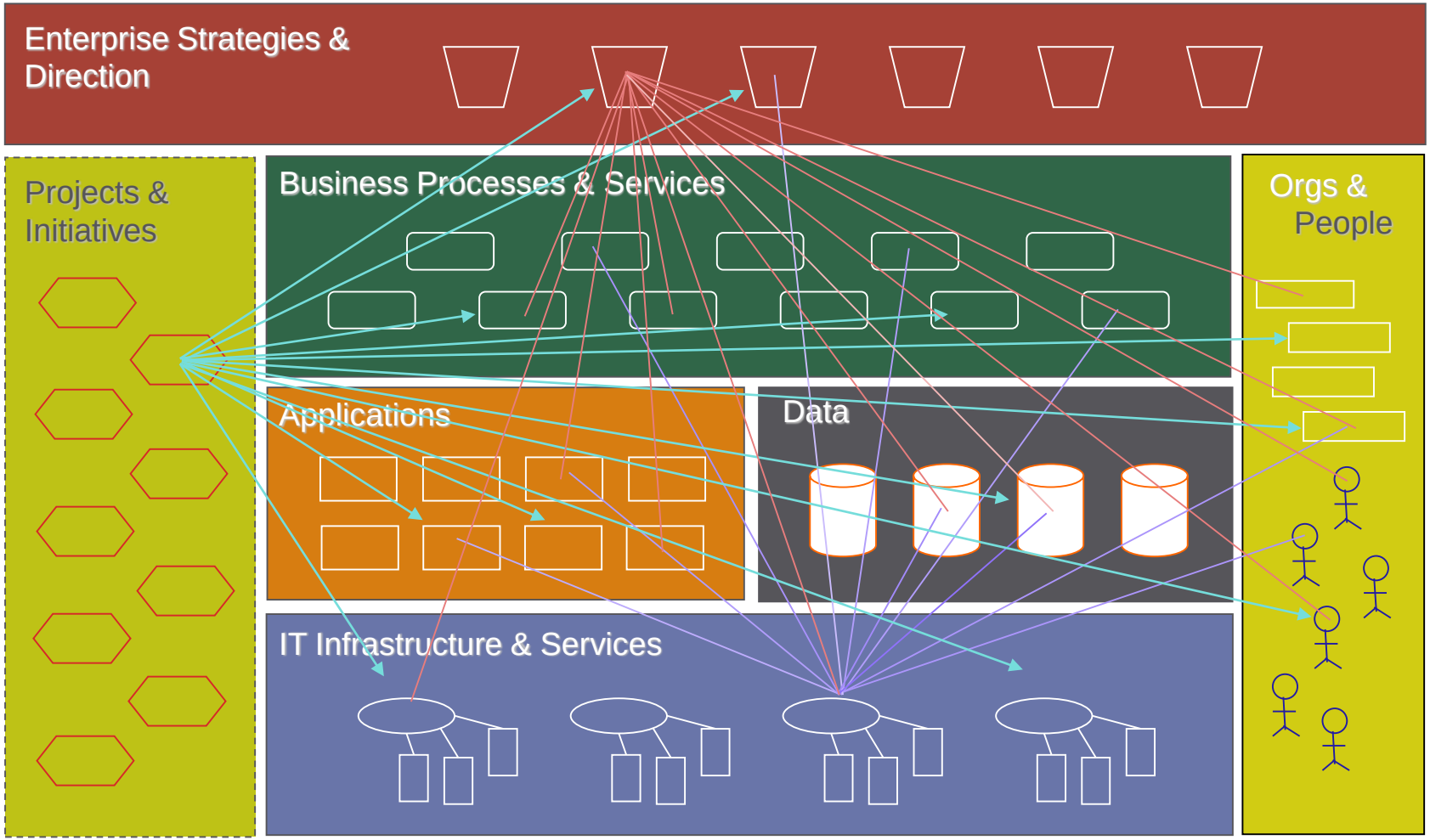
Enterprise Architecture Concept



In order to pro-actively adapt to change in the short term while building a cohesive & integrated Architecture in the long term, you need to see the BIG PICTURE of the WHOLE to improve planning while having the capability to ZOOM into the DETAILS of the PART to accelerate implementation


Enterprise Strategies & Direction
Projects & Initiatives
Business Processes & Services
Orgs & People
Applications
Data
IT Infrastructure & Services

Enterprise Architecture Perspectives

Salesperson

Viewpoint

Viewpoint

Plumber

Electrician

Viewpoint

Viewpoint

Plan

Vision

Drives

Mission

anslates into

Executed by

Strategic Objectives

Executed through

Initiatives

Manage

Policies

Process Groups

Responsible

Departments

To overcome Or take advantage of

Challenges & Opportunities

Execute

Abide by

Use

Applications

Run on

Process Maps

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Belong to

Roles

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Responsibilities

Enable

Use

Data

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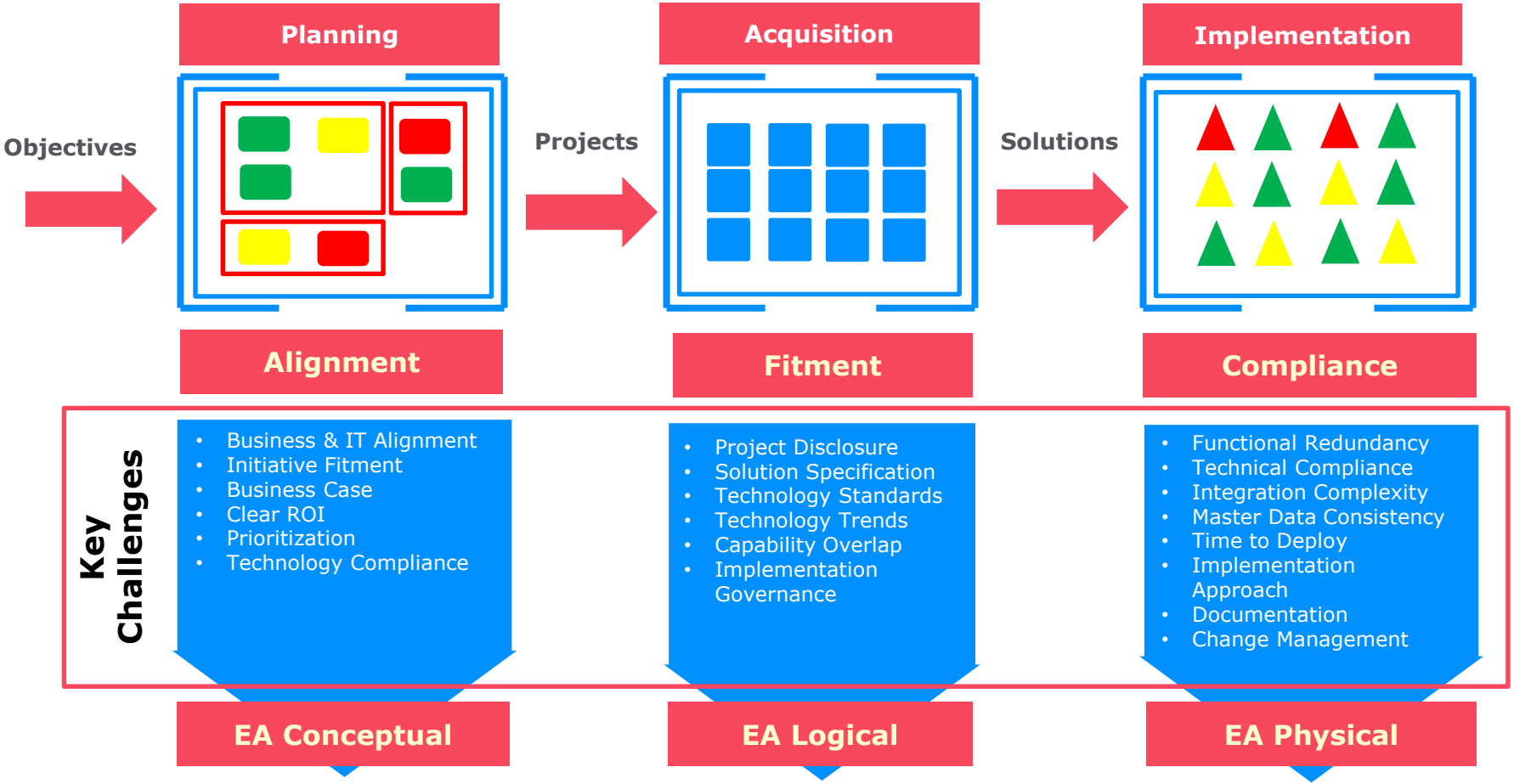
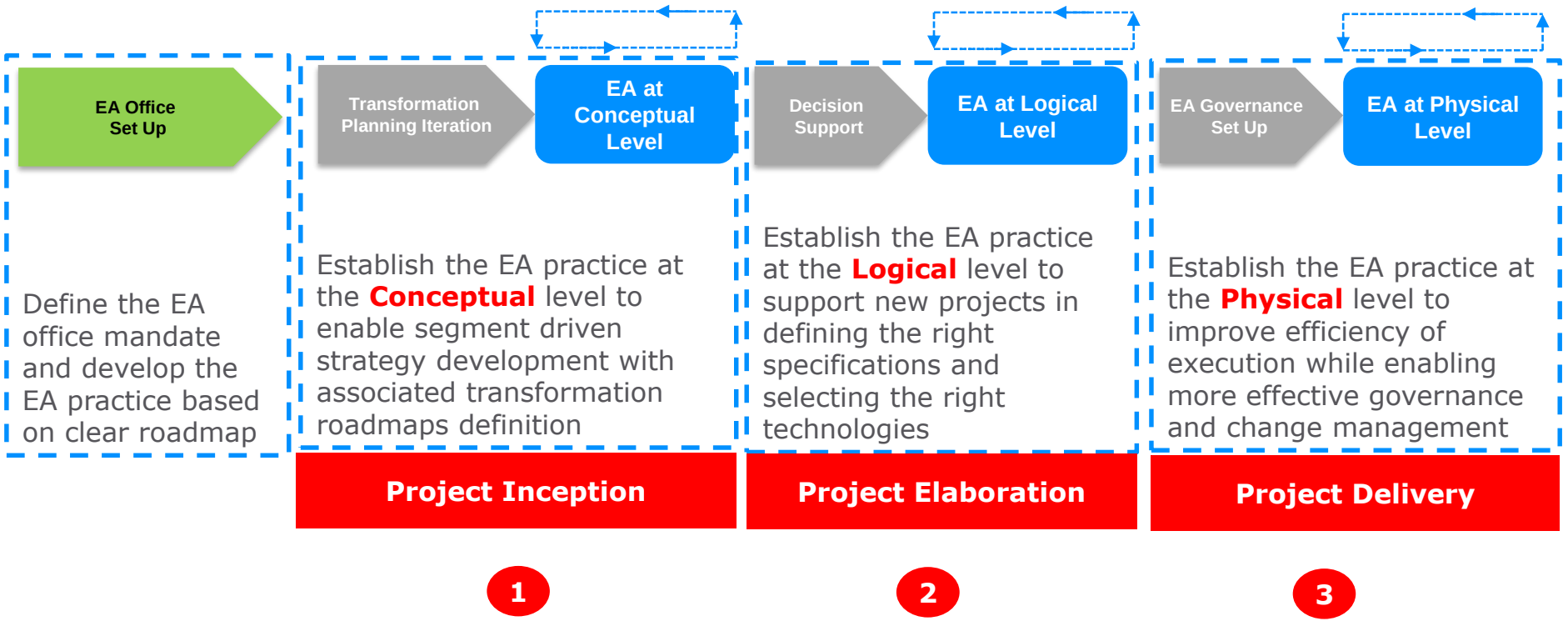
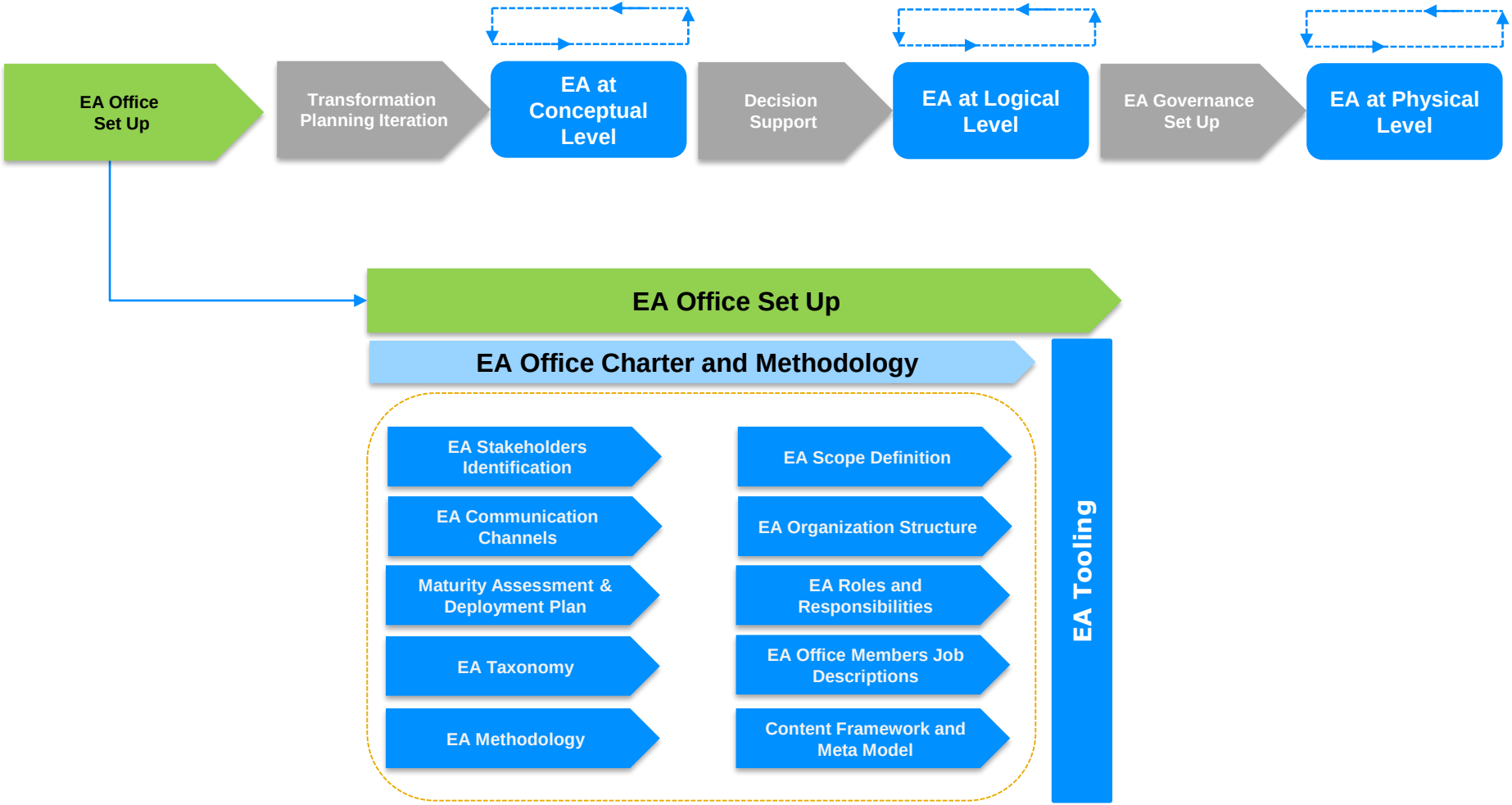
Technology

Business Transformation Lifecycle



Enterprise Architecture Implementation Roadmap




EA Office Set Up
Transformation Planning Iteration
EA at Conceptual Level
Decision Support
EA at Logical Level
EA Governance Set Up
EA at Physical Level
EA Office Set Up
EA Office Charter and Methodology
EA Stakeholders Identification
EA Communication Channels
Maturity Assessment & Deployment Plan
EA Taxonomy
EA Methodology
EA Scope Definition
EA Organization Structure
EA Roles and Responsibilities
EA Office Members Job Descriptions
Content Framework and Meta Model
EA Tooling

Visio

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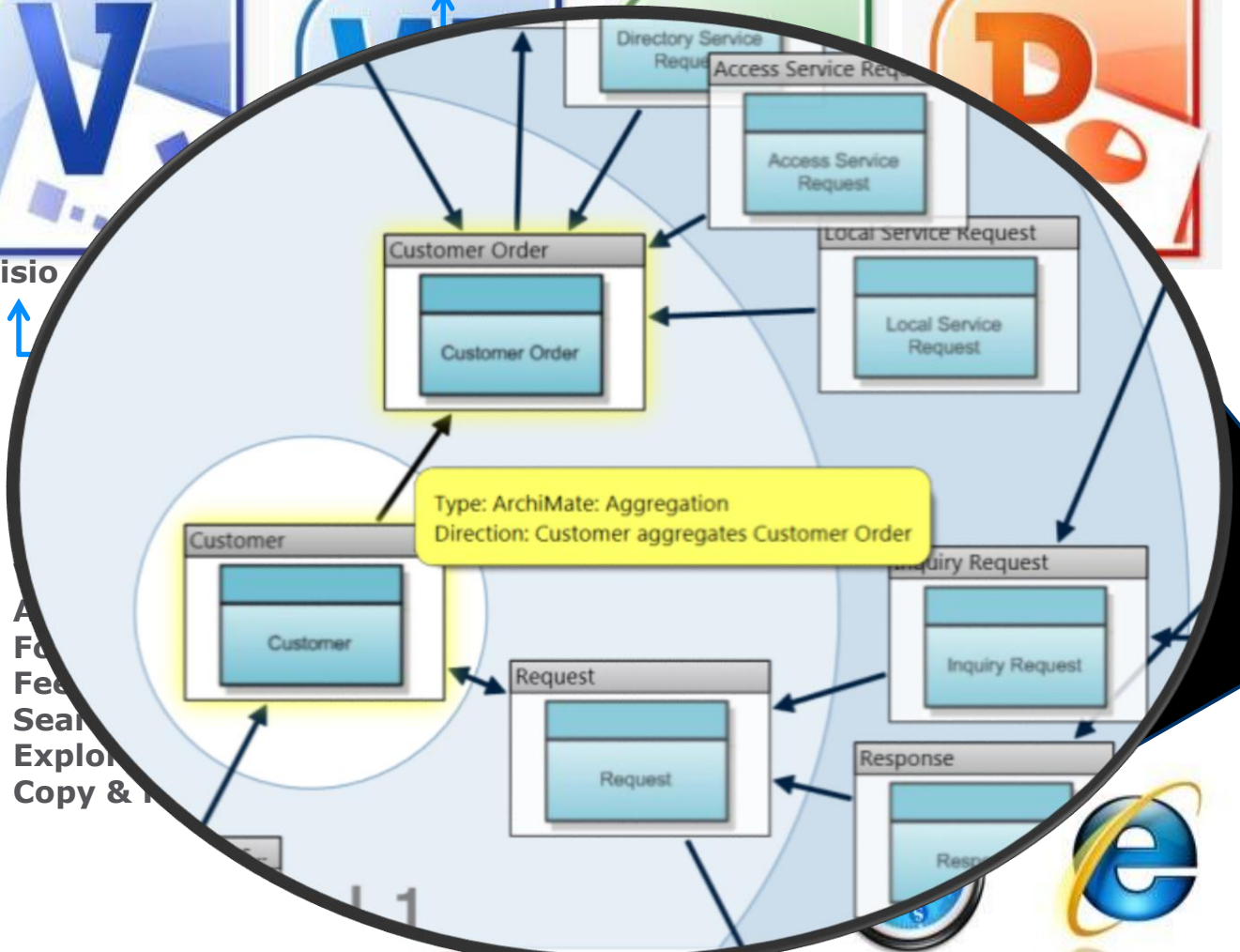
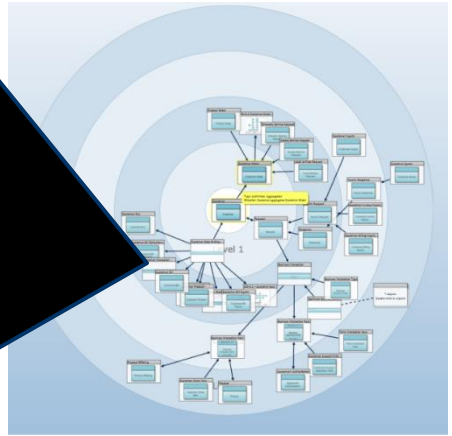
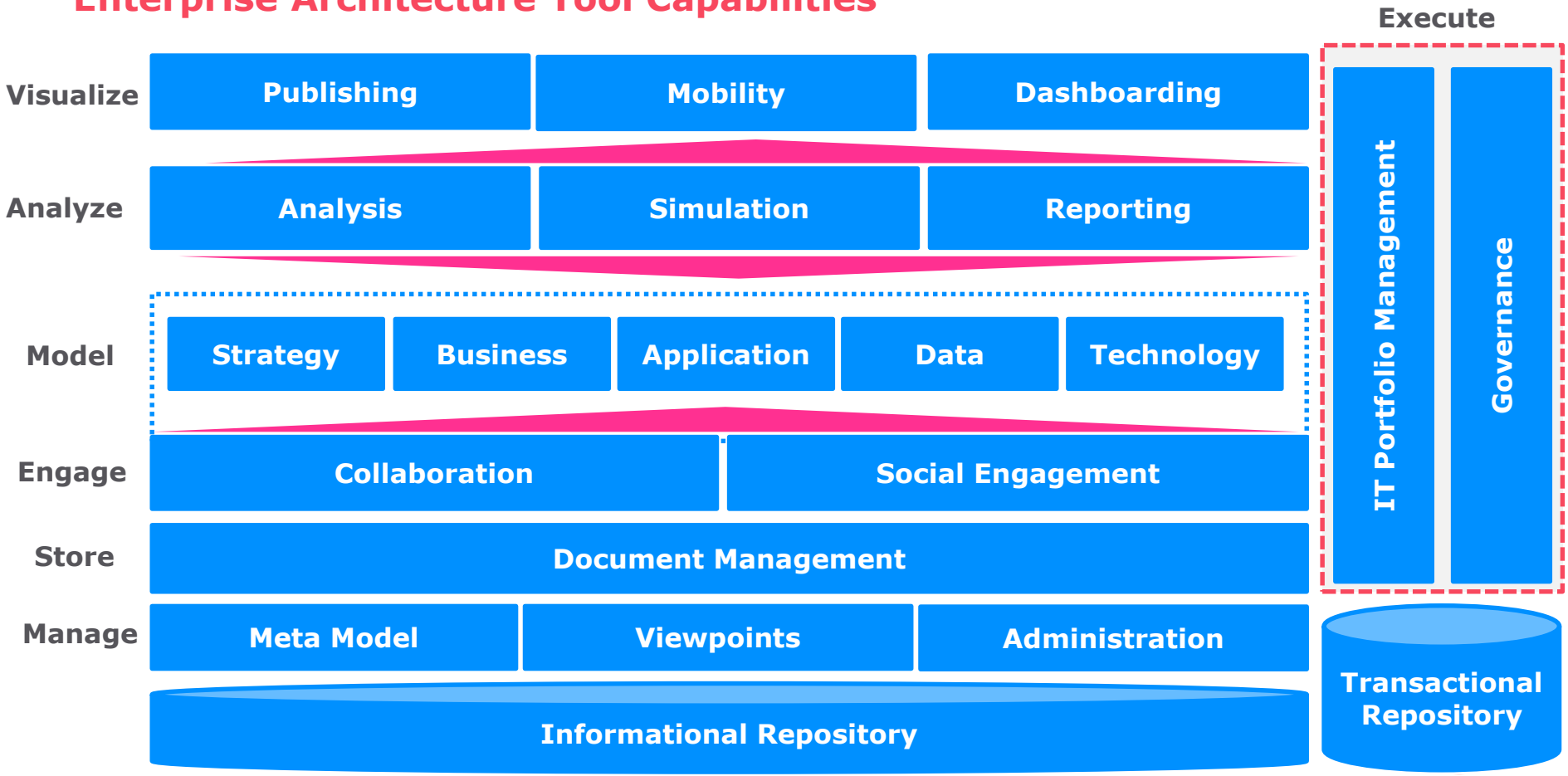
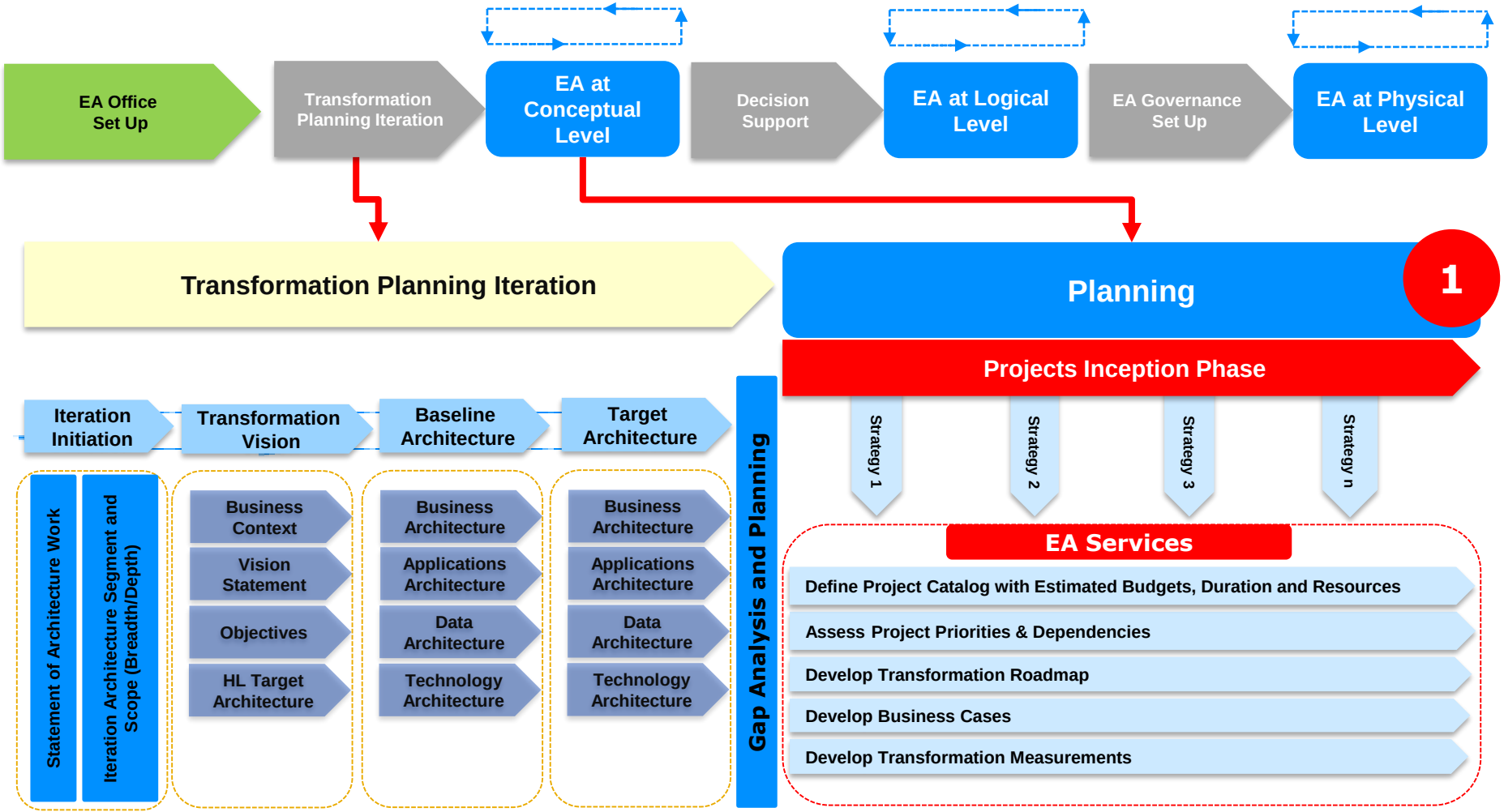




Impact Analysis

Enterprise Architecture Tool Capabilities




EA Office Set Up
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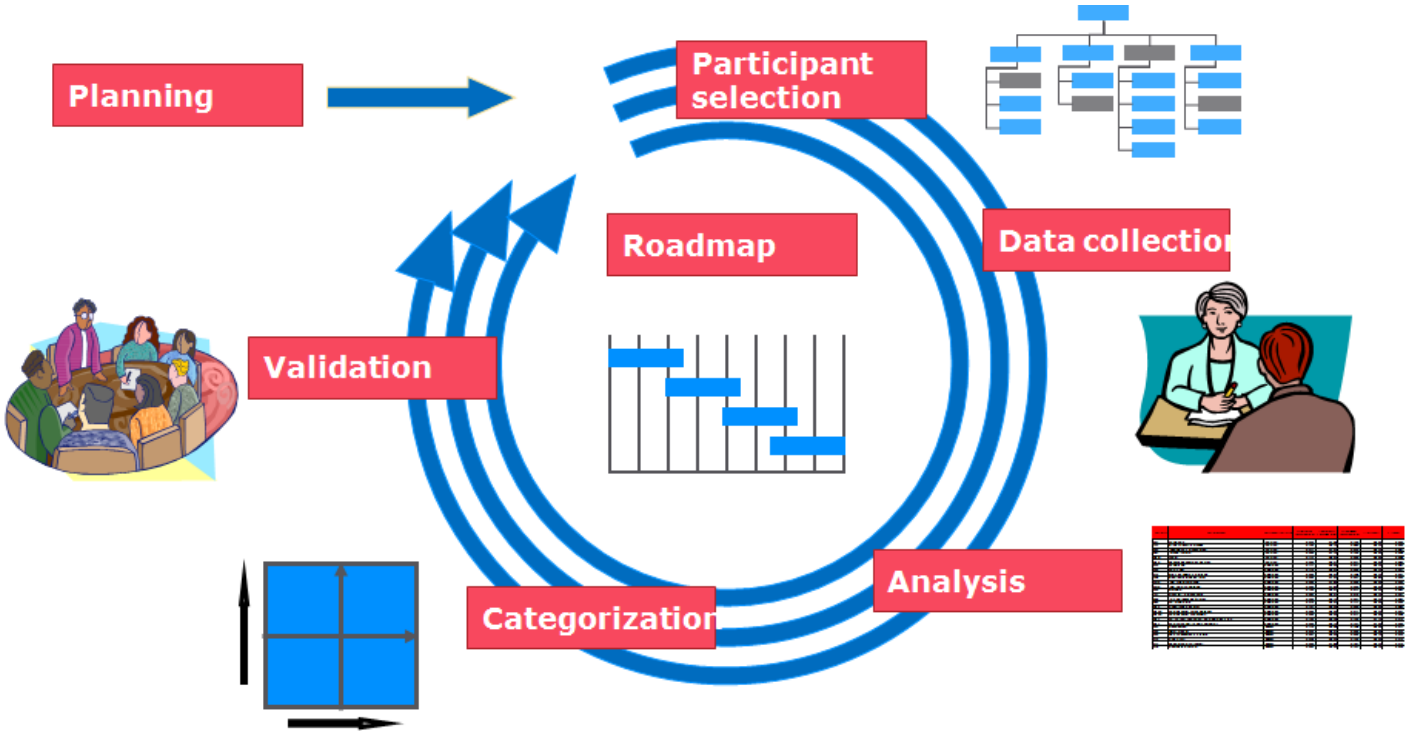
EA at Physical Level
Transformation Planning Iteration
Planning
1
Projects Inception Phase
Iteration Initiation
Transformation Vision
Baseline Architecture
Target Architecture
Strategy 1
Strategy 2
Strategy 3
Strategy n
Statement of Architecture Work
Iteration Architecture Segment and Scope (Breadth/Depth)
Business Context
Vision Statement
Objectives
HL Target Architecture
Business Architecture
Applications Architecture
Data Architecture
Technology Architecture
Business Architecture
Applications Architecture
Data Architecture
Technology Architecture
Gap Analysis and Planning
EA Services
Define Project Catalog with Estimated Budgets, Duration and Resources
Assess Project Priorities & Dependencies
Develop Transformation Roadmap
Develop Business Cases
Develop Transformation Measurements

EA Conceptual Lifecycle

1



- Sustain
- Decommission
- Remediate
- Re-Platform
- Replace
- Consolidate
- Enhance/ Expand
- Review Contract

EA Implementations Case Studies

Planning

Oil & Gas

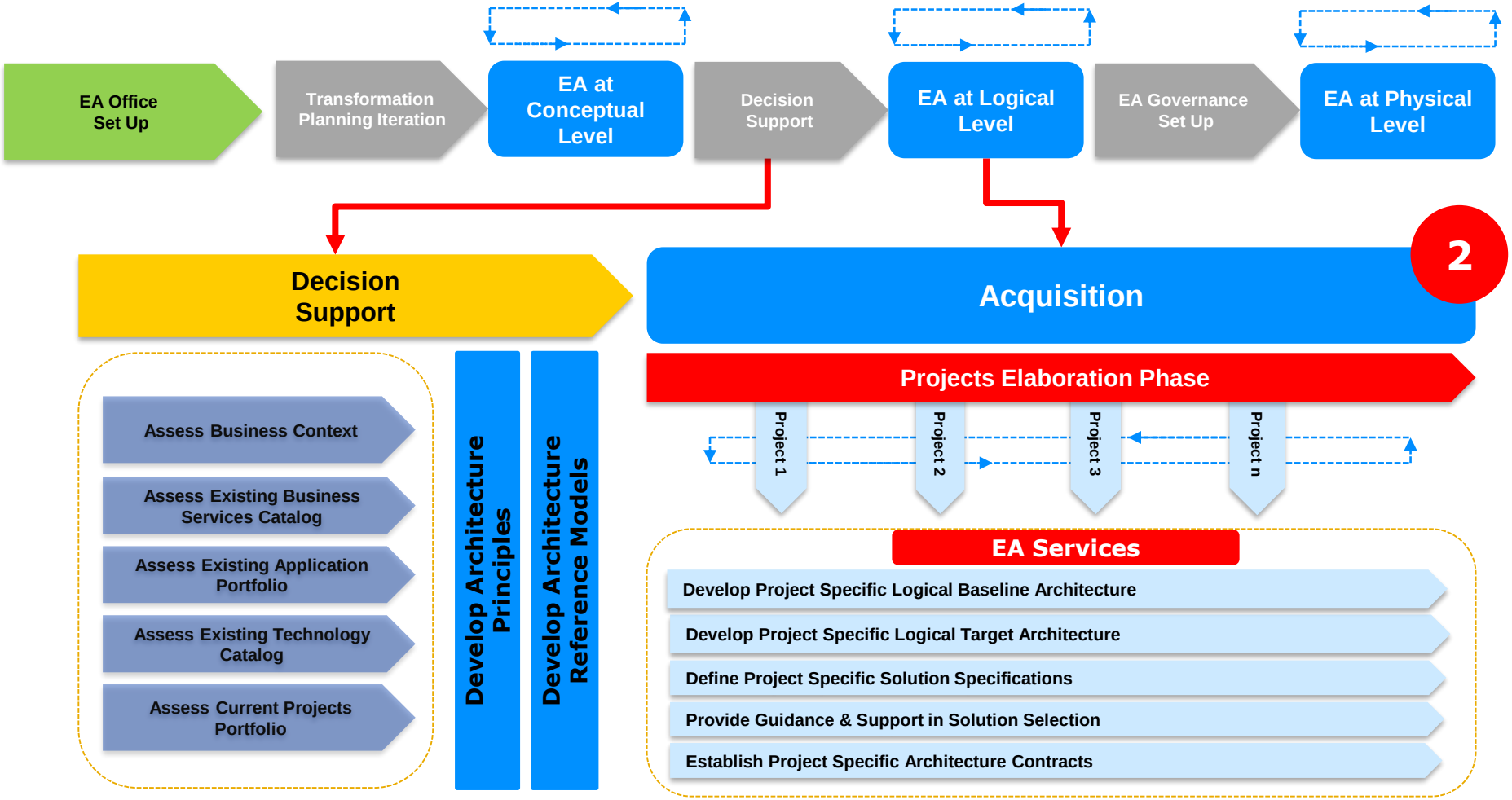
- Redundant solutions
- High operations and maintenance cost
- Complex and non responsive integrations
- Technical obsolescence
- Low application functional fitment

Implemented EA to streamline application portfolio and reduce TCO

- Documented all applications with attributes
- Conducted Full functional / technical survey of applications
- Defined clear application portfolio tactics
- Conduct TCO analysis for all applications
- Implemented Application Portfolio Management tool
- Develop a comprehensive portfolio alignment roadmap to reduce TCO

- Federated application data collection
- Clear data maintenance and update accountability
- Unified functional / technical analysis approach
- TCO based analysis for business case
- Roadmap aligned with strategic direction and leveraging quick wins

- Planned 35% reduction in TCO
- 10% reduction from Quick wins (within 1st year)
- Complete application visibility
- Effective decision support reporting with impact analysis
- Improved technology standards and trends compliance
- Clear target architecture (3 years horizon)
- Clear roadmap to implement target architecture
- Measurable business case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EA at Physical Level
Decision Support
Acquisition
2
Assess Business Context
Assess Existing Business Services Catalog
Assess Existing Application Portfolio
Assess Existing Technology Catalog
Assess Current Projects Portfolio
Develop Architecture Principles
Develop Architecture Reference Models
Projects Elaboration Phase
Project 1
Project 2
Project 3
Project n
EA Services
Develop Project Specific Logical Baseline Architecture
Develop Project Specific Logical Target Architecture
Define Project Specific Solution Specifications
Provide Guidance & Support in Solution Selection
Establish Project Specific Architecture Contracts

EA Logical Lifecycle

Operational Improvements

Capability Gaps

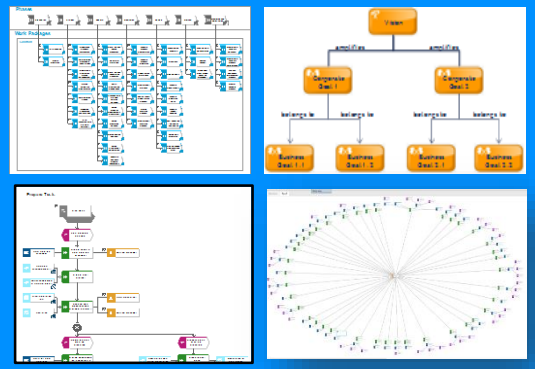
Drivers & Requirements

Principles & Standards

Technology Trends

2

Baseline (As-Is)



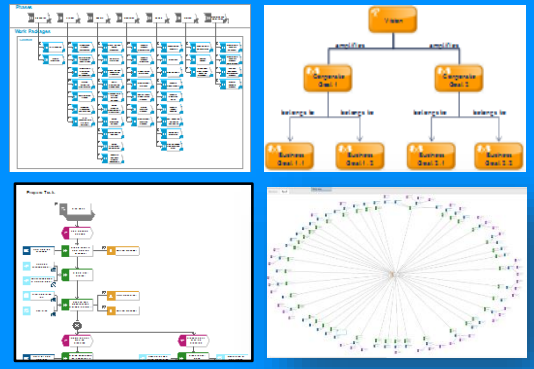
Gap Analysis

Capabilities

Capabilities

Capabilities

Target (To-Be)



Business Transformation Requirements

Solution Specifications (RFP)

Architecture Contract

EA Implementations Case Studies

Acquisition

Telecom Operator

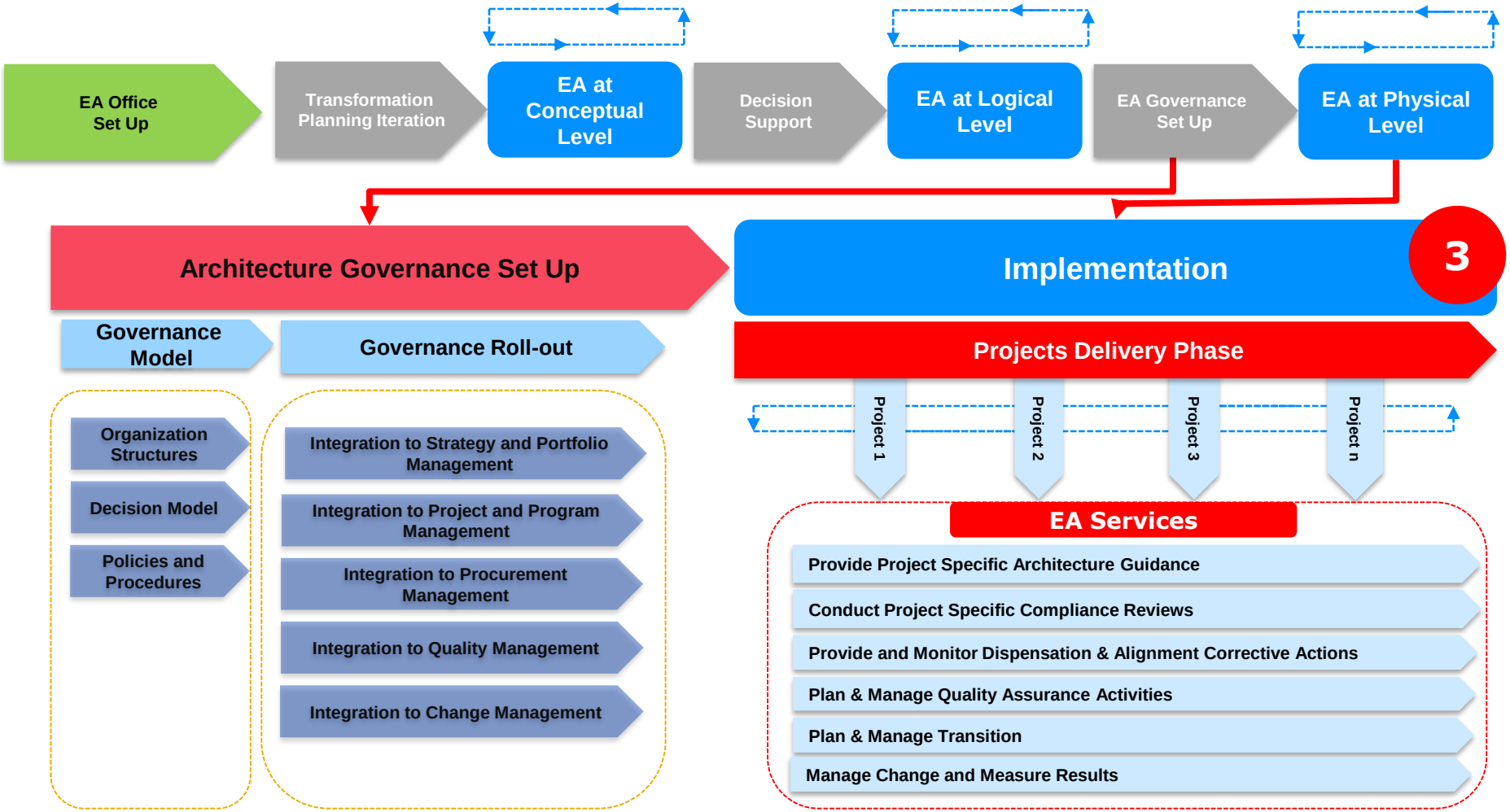
- Projects initiated by business with no visibility to IT
- Redundant technologies to deliver the same capabilities
- Different technical standards
- No understanding of Technology Lifecycle

Implemented EA to bridge the gap between business objectives and technology selection

- Standardized RFP Process using EA driven approach
- Developed and published IT standards
- Developed and published technology reference model

- Simple RFP template
- Minimal number of EA viewpoints selected with the business
- Simple EA tool
- Quick turnaround time (2 weeks)
- Federated EA effort
- Architecture board
- IT standards and reference model alignment and communication

- Increased project disclosure
- Unified RFP process / content
- Improved solution specification
- Reduced time to proposal
- Reduced cost of proposal
- Improved business and IT collaboration
- Reduced redundancy of IT capabilities
- Improved technical compliance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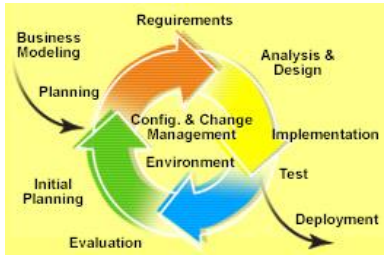
Architecture Governance Set Up
Implementation
3
Governance Model
Governance Roll-out
Organization Structures
Decision Model
Policies and Procedures
Integration to Strategy and Portfolio Management
Integration to Project and Program Management
Integration to Procurement Management
Integration to Quality Management
Integration to Change Management
Projects Delivery Phase
Project 1
Project 2
Project 3
Project n
EA Services
Provide Project Specific Architecture Guidance
Conduct Project Specific Compliance Reviews
Provide and Monitor Dispensation & Alignment Corrective Actions
Plan & Manage Quality Assurance Activities
Plan & Manage Transition
Manage Change and Measure Results

EA Physical Lifecycle

3

RUP Methodology



Organized by

Discipline

Divided into

Phases

Based on

Best Practice

Supported by

Tool

Expressed as

Workflow

Described by

Workflow Details

Executed by

Role

Performs

Activity

Create

Artifacts

Follows

Artifact Principles

Has

Checklist

Uses

Template

Stored in

Framework

Generate

Deliverables

Intranet

Publish

	Motivation (Why)	People (Who)	Function (How)	Data (What)	Time (When)	Network (Where)
Scope View	Vision/Needs	Vision: Stakeholders	Vision: Features	Business entities	Business workflows	
Owner's View	Business rules	Actors	Use cases	Business object model	Use case flow of events	Network configurations
Designer's View	Constraints, multiplicities, workflow activities	Boundary classes	Use case realizations	Persistent classes	Interaction diagrams	Deployment model
Builder's View		End user support tool	Components	Data model	Process model	Process-to-node mapping
Detailed View		UI design classes	Design classes	Columns, types, keys, indexes	State machines	

EA Implementations Case Studies

Implementation

Government Department

- Contractual problems
- Inconsistent technical design
- Poor technical documentation
- Very poor testing results
- High iteration in designs and tests
- Ineffective training and change management

Implemented EA to ensure technical consistency and effective documentation

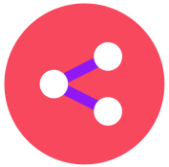
- Unified SDLC methodology
- Standardized EA meta model and viewpoints
- Implemented EA tool
- Implemented EA Compliance Assurance
- Strengthened Training and Change Management

- Common SDLC methodology based on best practices
- Unified documentation taxonomy using standards like UML, TOGAF and Archimate
- Enforced EA tool collaboration
- Adopted EA driven testing
- Adopted EA driven training and change management

- Replaced development company in 6 months with internal team
- Developed and published all design documentations
- Reduced design documents iterations
- Reduced testing defects
- Created project portal to communicate solution to stakeholders
- Generated training manuals

Agenda

The Customer Age



The Digital Context

The Transformation Challenge

Enterprise Architecture Enabled Transformation

Q&A