

# **Building Target Operating Models** with the TOGAF-Approach

Dr. Helmut Steigele

# **Agenda**



- What are Target (Service) Operation Models (TOM)
- Elements of a TOM
- The TOM Development Cycle
- Repositories as success factor in TOM realization

# **Target Operating Model / Definition**



- A Target Operating Model defines and describes how an organisation needs to operate in the future to meet the needs of all it's stakeholders across and within a business domain
- So it is about
  - Capabilities
  - Resources

# **Relationship Business Model / Operation-Model**



#### **Definition Business Model:**

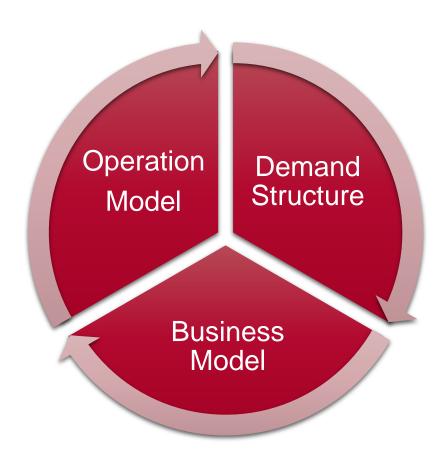
An abstract representation of an organization, be it conceptual, textual, and/or graphical, of all core interrelated architectural, co-operational, and financial arrangements designed and developed by an organization presently and in the future, as well as all core products and/or services the organization offers, or will offer, based on these arrangements that are needed to achieve its strategic goals and objectives.

Al-Debei and Avision – 2010

A Target Operations Model is a consequence of the Business Model



# The Demand Response Cycle and it's consequences



You have to satisfy customers demand by the proper business model and assure your efficiency with your operating model to maintain value in this cycle

# **Agenda**



- What are Target (Service) Operation Models (TOM)
- Elements of a TOM
- The TOM Development Cycle
- The Architecture Approach in realizing TOMs
- Repositories as success factor in architectural work

# **Elements of a Target Operating Model in Detail:**



#### Capabilities

- Vision and Strategy
- Service-Landscape
- Organisational Structure
- Governance and Policies
- Process-Landscape
- Organisation and Management-Structures
- Human and System related Skills

#### - Resources

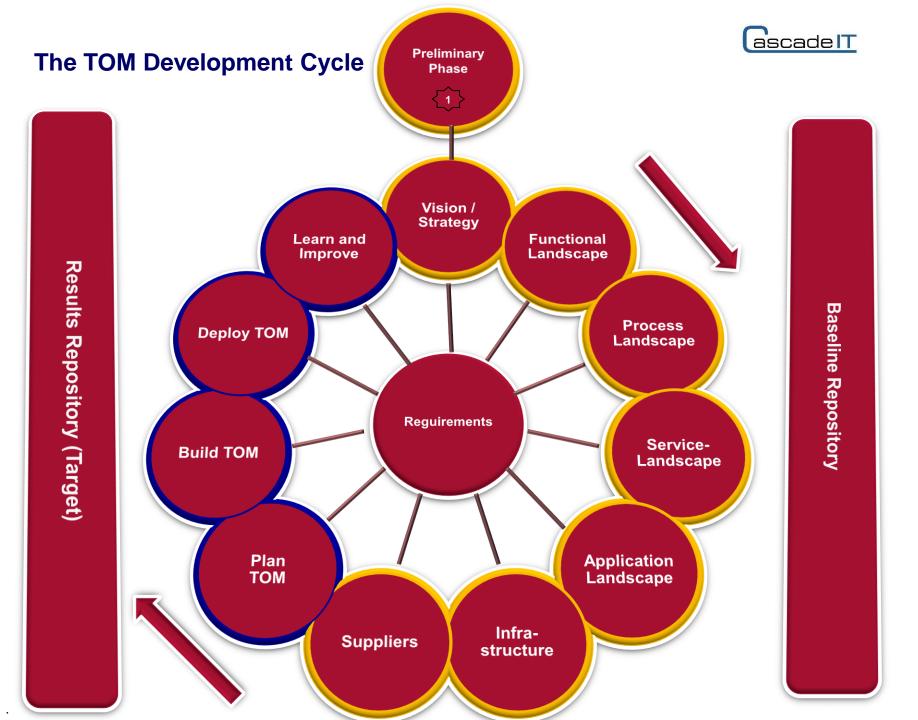
- Information-Logisitics (Data-Architecture)
- Application Landscape
- Infrastructure Landscape
- Provider Landscape
- Financial Streams (Funding Model and Cost Control)

Capabilities will coordinate, deploy and control Resources!

# **Agenda**



- What are Target (Service) Operation Models (TOM)
- Elements of a TOM
- The TOM Development Cycle (based on TOGAF)
- Repositories as success factor in TOM realization



# **Preliminary Phase - Objective**



- Undertake the preparation and initiation activities required to meet the business directive for a new target operationmodel, including the definition of an Organization-Specific Architecture framework and tools, and the definition of principles.
- The Preliminary Phase is about defining "where, what, why, who, and how we do architecture" in the enterprise concerned.
- This means
  - Defining the extent of the "Enterprise" behind the operation model
  - Identifying key drivers and elements in the organizational context.
  - Defining the requirements for architecture work.
  - Defining the architecture principles that will inform any architecture work.
  - Defining the framework to be used
  - Defining the relationships between management frameworks
  - Evaluating the maturity of the referred organisation in architectural work

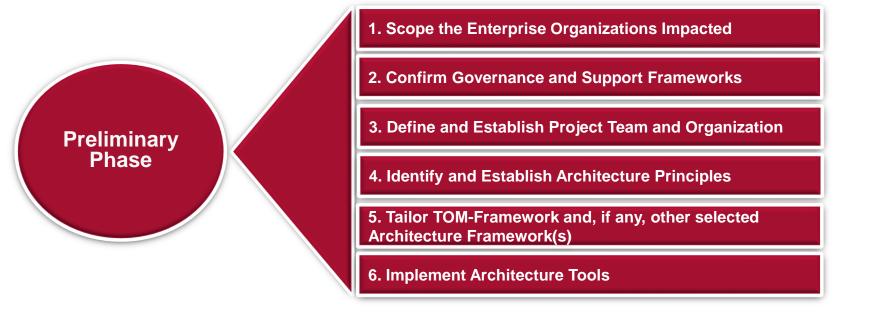
### **Phase 1 - Input Objects**



**Business Model and Business Strategy Business Principles, Governance- and Legal Frameworks Initial Stakeholder-Lists Organisational Model for TOM-Project Preliminary Existing Architecture Framework Phase Architecture Governance Strategy Initial Content of TOM-Architecture Repository Existing Catalogue on Services and Business Processes** 

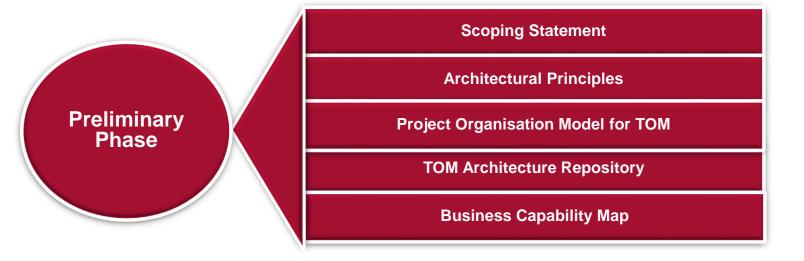
# **Phase 2 - Process Steps**











### **Objectives of Requirements Management**



- Ensure that the Requirements Management process is sustained and operates for all relevant Development phases
- Manage requirements identified during any execution of the Development cycle or a phase
- Ensure that relevant requirements are available for use by each phase as the phase is executed

### **Steps of Requirements Engineering**



In each relevant phase of the Project the Team should identify types of requirement that must be met by the architecture, including applicable:

- Functional requirements
- Non-functional requirements

When defining requirements following points should be taken into account:

- Assumptions for requirements
- Constraints for requirements
- Domain-specific principles that drive requirements
- Policies affecting requirements
- Standards that requirements must meet
- Organization guidelines for requirements
- Specifications for requirements

### **Requirements Impact Assessment**



- Reference to specific requirements
- Stakeholder priority of the requirements to date
- Phases to be revisited
- Phase to lead on requirements prioritization
- Results of phase investigations and revised priorities
- Recommendations on management of requirements
- Repository reference number

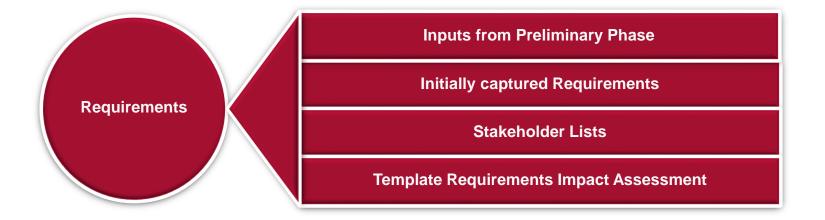
#### **Requirements - Examples**



- Success measures
- Architecture requirements
- Business service contracts
- Application service contracts
- Implementation guidelines
- Implementation specifications
- Implementation standards
- Interoperability requirements
- IT Service Management requirements
- Constraints
- Assumptions

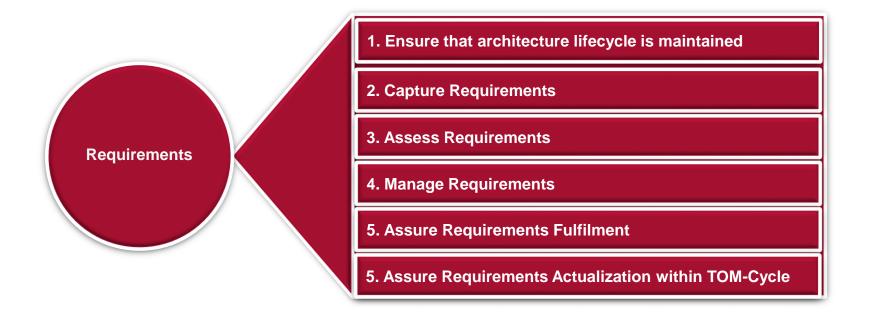
# **Phase 1 - Input Objects**





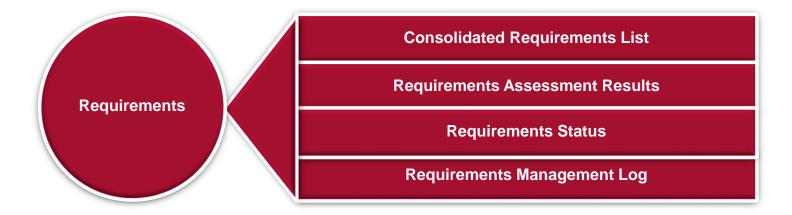
# **Phase 2 - Process Steps**











#### **Vision**



- The TOM-Vision describes how the new capabilities of the referenced Business Model will support the business goals and strategic objectives and address the stakeholder concerns when implemented
- It provides a first-cut, high-level description of the Baseline and Service Architectures, covering the Governance, Service, Process, Organisation, Data, Application and Technology domains.
- Business scenarios (Patterns of Business Activity) are an appropriate and useful technique to discover and document business requirements, and to articulate an Architecture Vision that responds to those requirements.

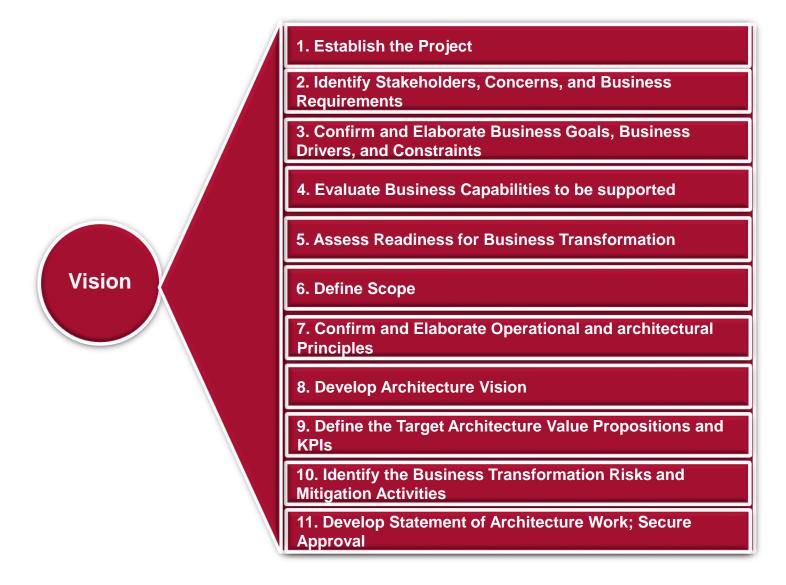
# **Phase 1 - Input Objects**





# **Phase 2 - Process Steps**











#### **Functional Architecture within TOM**



### Objective 1:

 Develop the Target Business Architecture that describes how the enterprise needs to operate to achieve the business goals, and respond to the strategic drivers set out in the Architecture Vision, in a way that addresses the TOM-Project-Objectives and the Stakeholder concerns

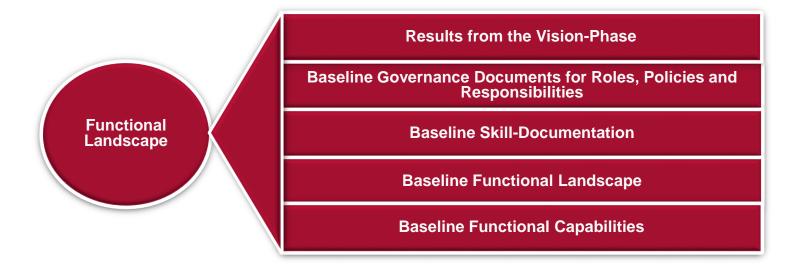
#### Objective 2:

 Identify candidate Architecture Roadmap components based upon gaps between the Baseline and Target Business Architectures

Which organisational units covers which capability?

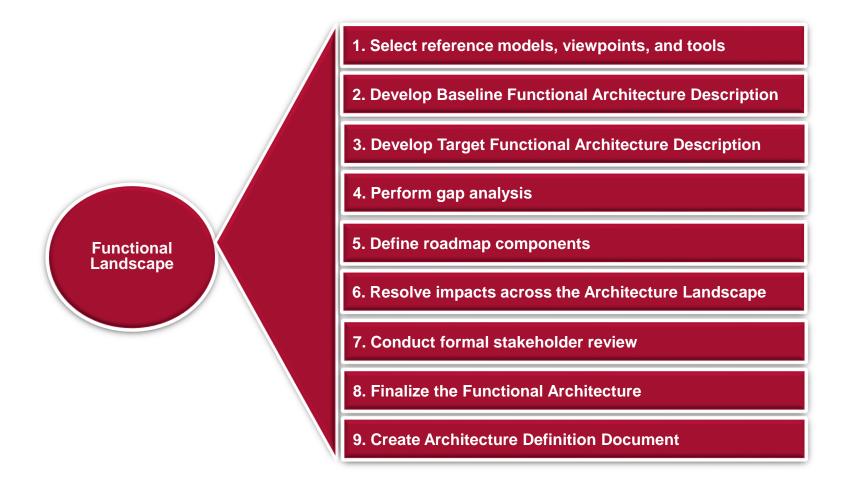
# **Phase 1 - Input Objects**





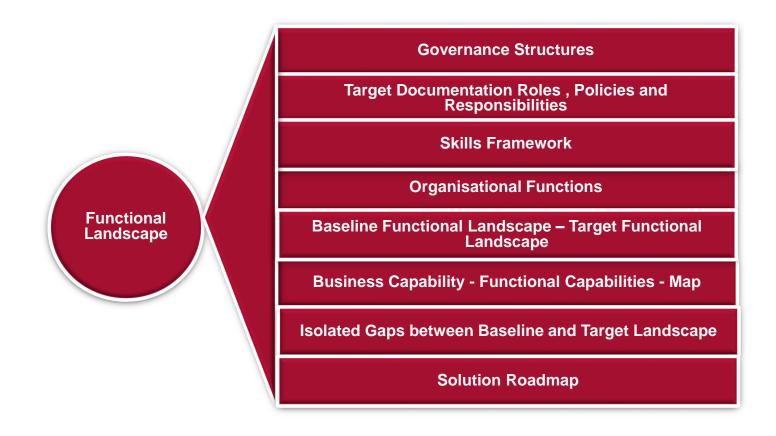
# **Phase 2 - Process Steps**





### Phase 3 – Output





#### **Process Architecture within TOM**

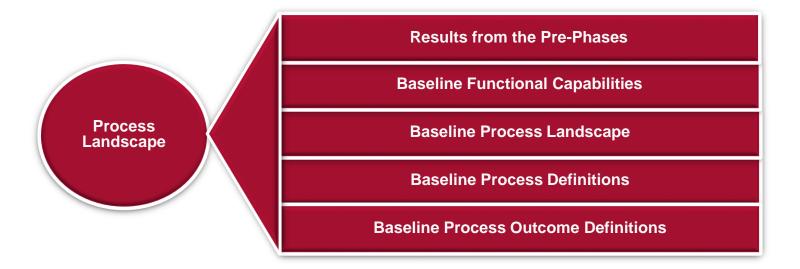


- Objective 1:
  - Develop the Target Process Framework that describes how the enterprise needs to operate to achieve the functional goals
- Objective 2:
  - Identify candidate process components based upon gaps between the Baseline and Target Architectures

Which functional capability is supported by which process?

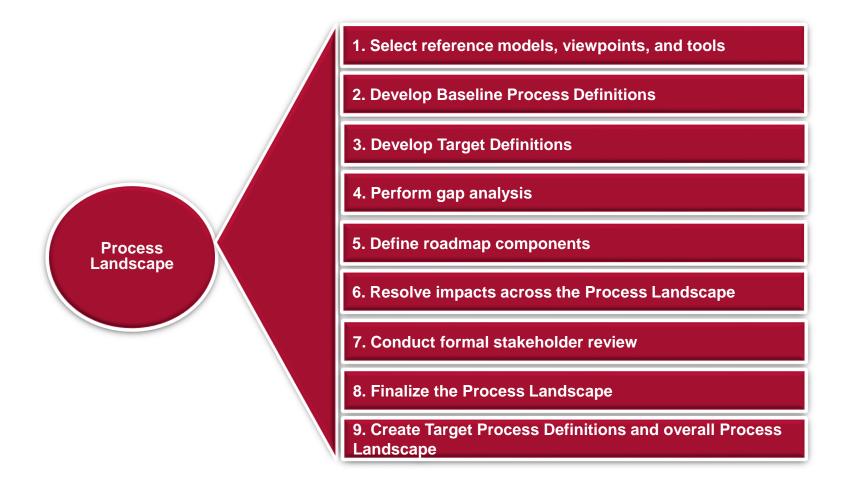
# **Phase 1 - Input Objects**





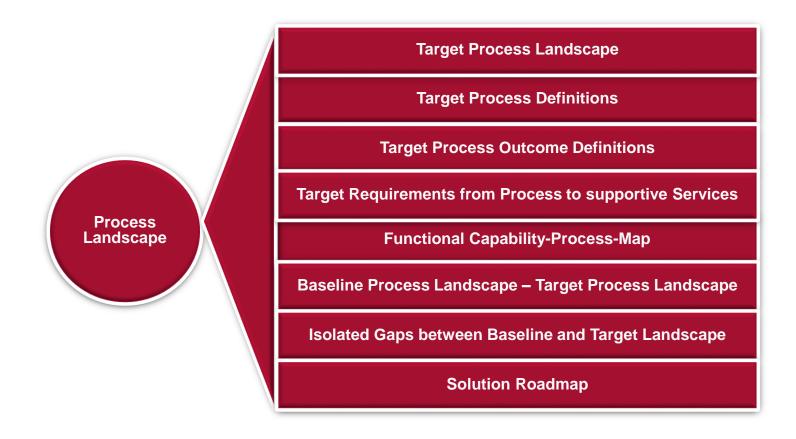
# **Phase 2 - Process Steps**





# Phase 3 – Output





#### **Service Architecture within TOM**



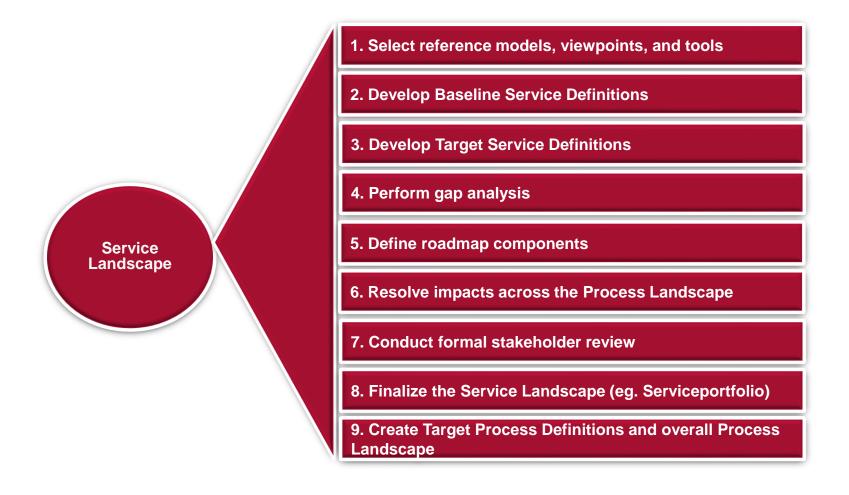
- Objective 1:
  - Develop the Target Process Framework that describes how the enterprise needs to operate to achieve the functional goals
- Objective 2:
  - Identify candidate process components based upon gaps between the Baseline and Target Architectures

Which service supports which process?

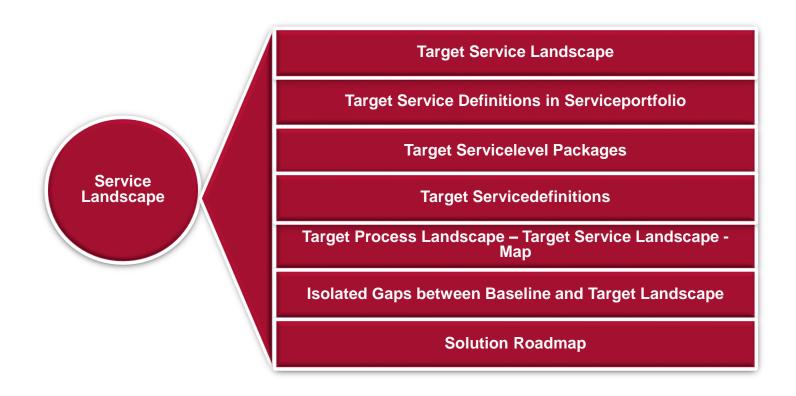












# **Application Architecture within TOM**



#### Objective 1:

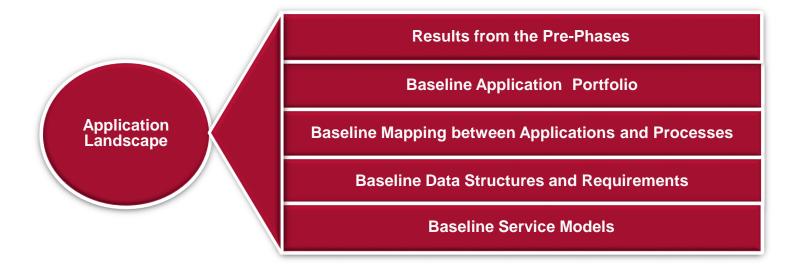
 Develop the Target Information Systems (Data, Usecases, Rules and at the end Application) Landscape, describing how the enterprise's Information Systems Landscape will enable the Business Architecture and the Architecture Vision, in a way that addresses the TOM-Development and stakeholder concerns.

#### Objective 2:

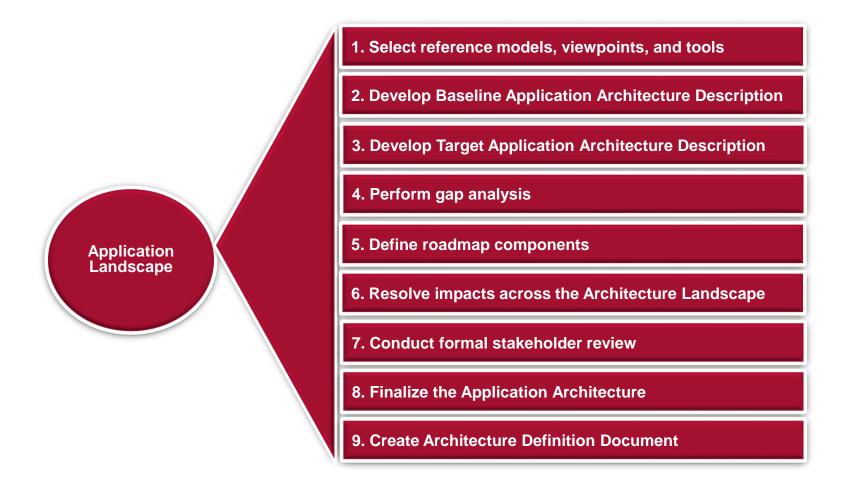
 Identify candidate Architecture Roadmap components based upon gaps between the Baseline and Target Information Systems (Data and Application) Architectures.

Which application and application feature supports which service-to-process-context?

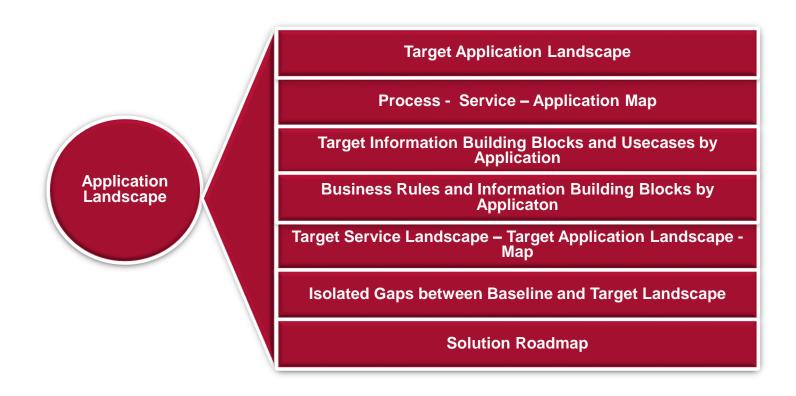












## **Infrastructure Landscape within TOM**



#### Objective 1:

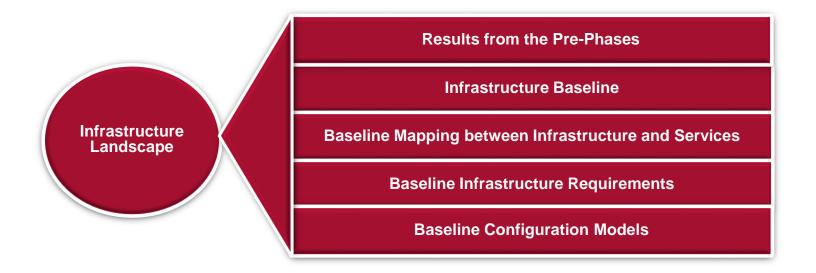
 Develop the Target Infrastructure Landscape that enables the logical and physical application and data components and the Architecture Vision, addressing the TOM-Development and stakeholder concerns.

#### Objective 2:

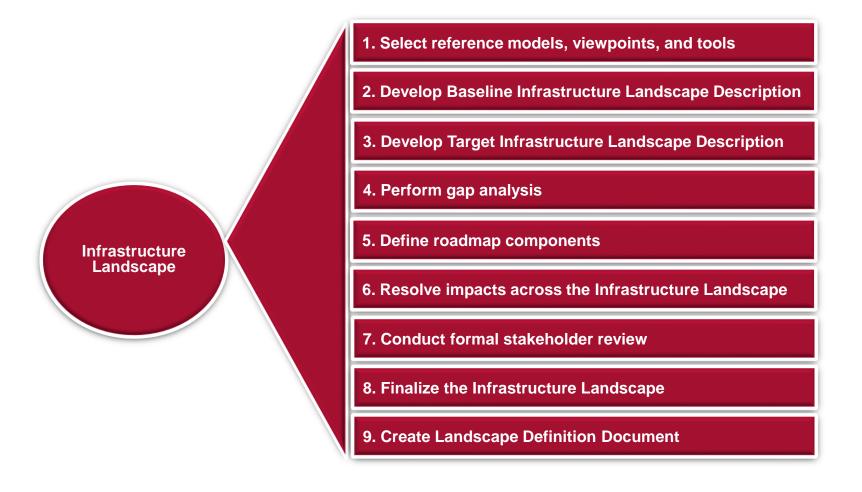
 Identify candidate Architecture Roadmap components based upon gaps between the Baseline and Target Infrastructure Landscape

Which Infrastructure Elements are supporting which service-to-process-context?

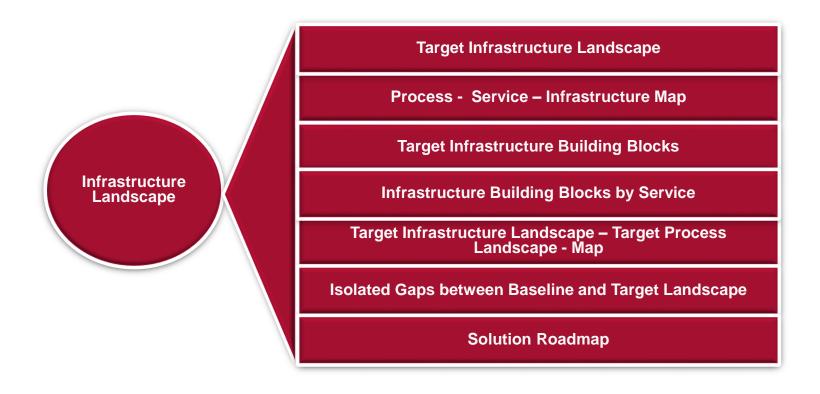












#### **Provider Landscape - Objectives**



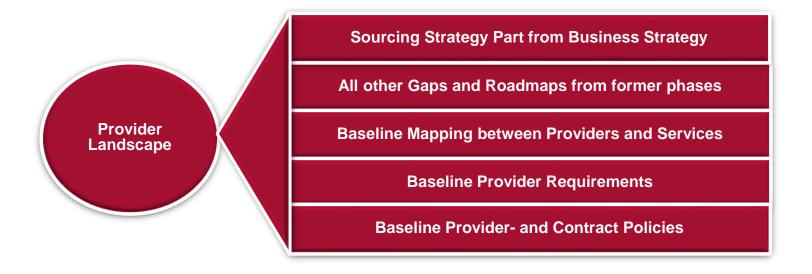
#### Objective 1:

- Develop the Target Provider Landscape that enables the operational support of TOM.
  - Defining Resource-Categories for TOM
  - Defining Provider Classifications for TOM
  - Defining Provider- and Contractmanagement Policies and Processes
  - Defining Target Provider Landscape

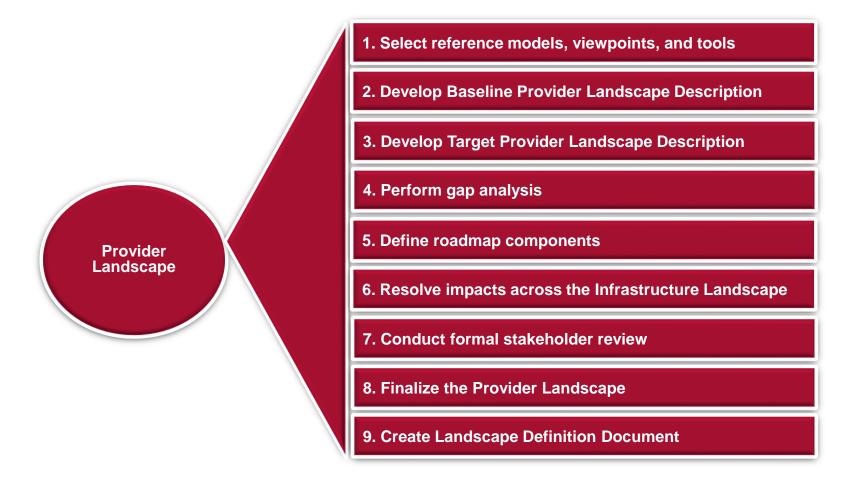
#### Objective 2:

 Identify Roadmap candidates based upon gaps between the Baseline and Target Provider Landscape

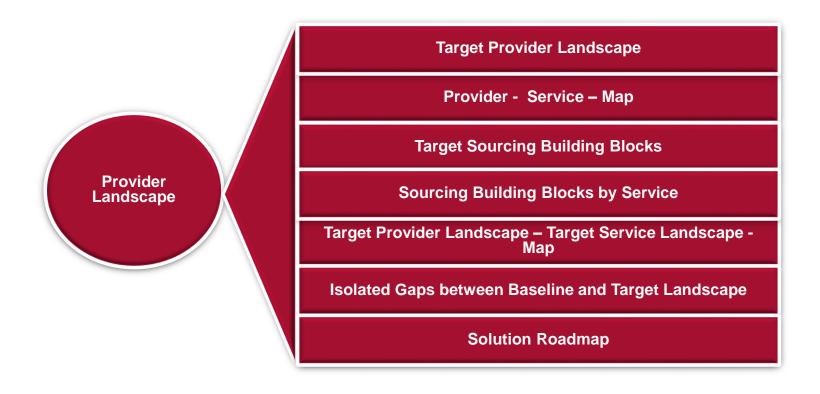










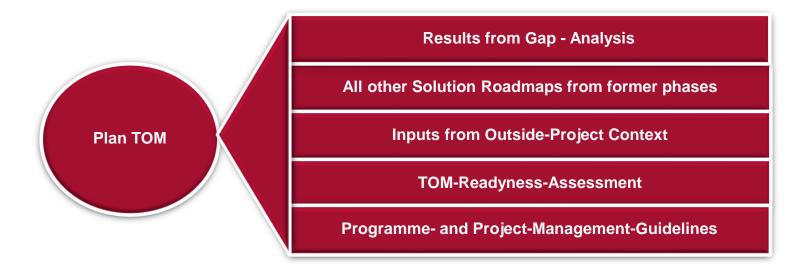


#### **Plan TOM**

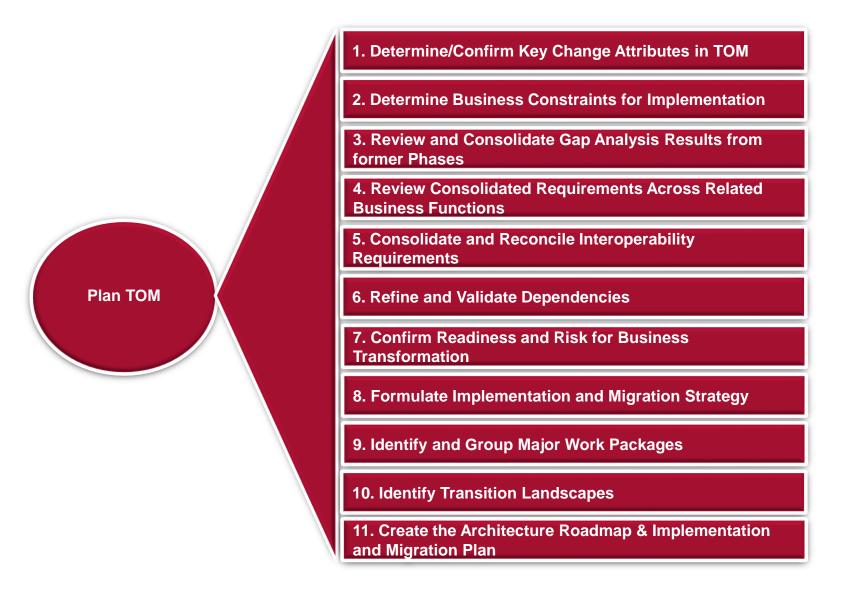


- Generate the initial complete version of the Project Roadmap, based upon the gap analysis and the referred Landscape components
- Determine whether an incremental approach is required, and if so identify Transition candidates that will deliver continuous business value.
- Confirm the enterprise's capability for undergoing change.
- Generate and gain consensus on an outline Implementation and Migration Strategy.

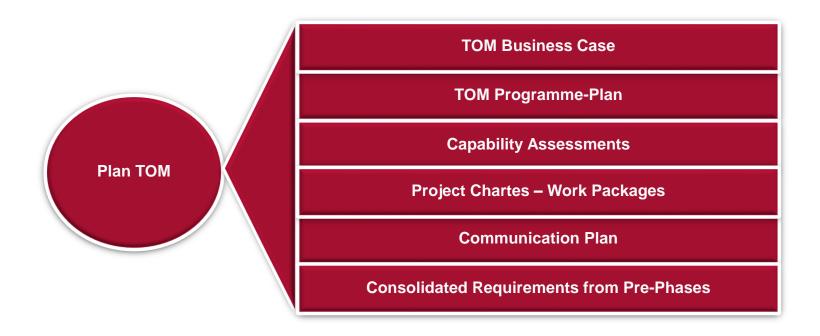












#### **Build TOM**



- Develop TOM-Parts
  - Governance Structures
  - Organisational Structures
  - Policies and Processes
  - Skillbase for operating the TOM
  - Servicecatalogue, Services and related SLAs
  - Headcount
  - Application-Landscape
  - Infrastructure-Landscape
  - Provider-Landscape
- Ensure that the implementation roadmap conforms the target landscape.

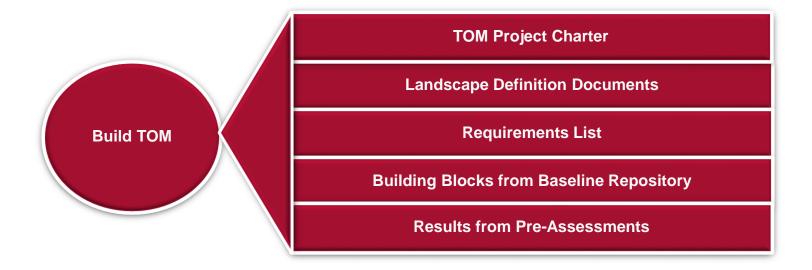
# **Approach**



#### The overall approach is to:

- Establish an implementation program that will enable the delivery of the Landscape Parts agreed for implementation during the Planning Phase
- Adopt a phased deployment schedule that reflects the business priorities embodied in the Project Roadmap.
- Follow the organization's standard for corporate, IT, and architecture governance.
- Use the organization's established portfolio/program management approach, where this exists.
- Define an operations framework to ensure the effective long life of the deployed solution.

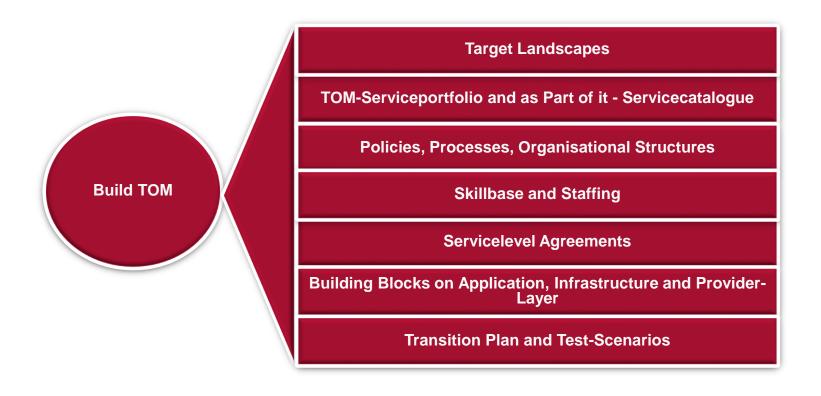












#### **Deploy TOM**



#### Objective 1:

- Develop the Target Provider Landscape that enables the operational support of TOM.
  - Defining Resource-Categories for TOM
  - Defining Provider Classifications for TOM
  - Defining Provider- and Contractmanagement Policies and Processes
  - Defining Target Provider Landscape

#### Objective 2:

 Identify Roadmap candidates based upon gaps between the Baseline and Target Provider Landscape









- 1. Confirm Scope and Priorities for Deployment
- 2. Define Deployment Scenarios and Sequences
- 3. Identify Deployment Resources and Skills
- 4. Coordinate Tests
- **5. Coordinate Readyness Assessments, Validations and Expectation Management**
- 6. Coordinate Deployments
- 7. Establish Early Life Support for TOM
- 8. Manage Transition between Baseline Mode and Target Mode of Operation
- 9. Establish operational Change Management for TOM Invoke new Development Cycles
- 10 . Perform Post-Implementation Review and Close the Implementation



**Established Organisational Structures Active Policies, Processes and Management Controls** Serviceportfolio and Servicecatalogue and Services of TOM Active TOM-Resources (Application, Infrastructure, Provider) **Deploy TOM Implementation Review Results New Requests for Service-Architecture-Work Candidates for new Release of Baseline-Repository Output for Results-Repository** 

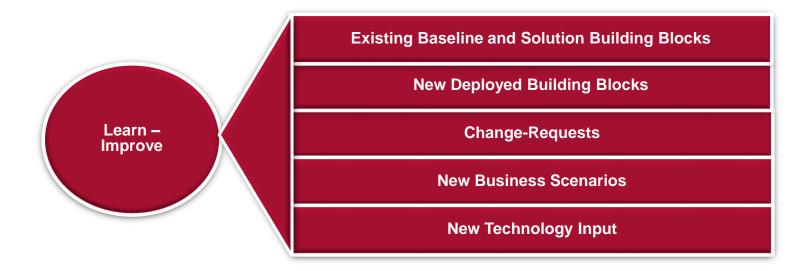
## ascadeIT

### **Learn and Improve - Objectives**

- Providing continual monitoring and a change management process to ensure that the architecture responds to the needs of the enterprise and maximizes the value of the architecture to the business.
- Preventing "creeping elegance" whilst changing the architecture building blocks within established TOM
- Validation of opportunities in adapting
  - Existing Architecture Building Blocks in the Repositories
    - Policies, Processes
    - Serviceportfolio and Servicecatalogue
    - Technologies (Application, Infrastructure)
    - Providers
- Invoking Improvements within TOM-Context or TOM-Development-Cycle itself
- Keeping Repository-Content actual, complete, accurate and accessable

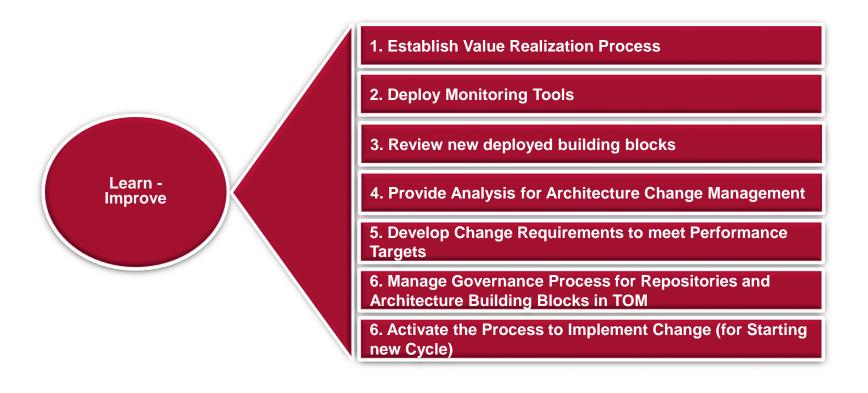
# **Phase 1 - Input Objects**





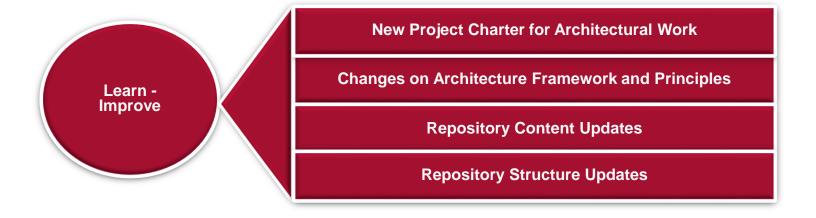
### **Phase 2 - Process Steps**





# Phase 3 – Output





## **Agenda**



- What are Target (Service) Operation Models (TOM)
- Elements of a TOM
- The TOM Development Cycle
- Repositories as success factor in TOM realization

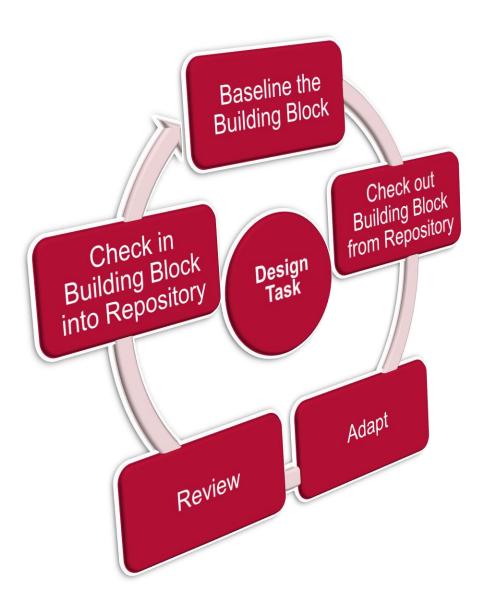
## What means Repository Approach



- Use a Repository for your artefacts
- Work with Solution Building Blocks
- Follow the principle of Re-Useability
- Considering Evolution History of Building Block
  - Requirements capturing from (pre-phase)
  - Baseline Architecture
  - Target Architecture
  - Solution Roadmap
  - Connect Solution with existing Solution Building Blocks
- Solution Building Blocks always have
  - Input- and Output Parameters (often described in Lists)
  - Relationships or Interfaces (often described in a Matrix)
  - Activity or Status Flow (often described in Diagrammes)
  - Are saved and baselined in Repositories

## **Working with Building Blocks and Repositories means**





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#### Consequences



- Higher frequence in solution deploys
- Consistency within developped solutions
- Higher degree of interoperability within Target Organisations
- Lower Cost of Operation
- Higher responsibility to changes at business level

## **Agenda**



- What are Target (Service) Operation Models (TOM)
- Elements of a TOM
- The TOM Development Cycle
- The Architecture Approach in realizing TOMs
- Instruments and Tools

# **Minimum Requirements**



- Representation of all Development Phases in a Document Repository
- http-Links to further Repositories (Process, Contracts, etc.)
- · Policy and Governance View
- Business View
  - Business Scenarios (Patterns of Business Activity)
  - Business Requirements which are critical to Quality
- Functional View
  - TOM-Organisation
  - TOM-Relations to
    - Suppliers
    - Customers
- Landscape-Representation Views (to assure Interoperability)
  - Business Process to Service
  - Serviceprocedures within the Service
  - Application to Service
  - Infrastructure to Service
  - Contracts to Service
  - Service-Features by Service and Process
- Serviceportfolio-View of Target Operation Unit
- Servicecatalogue-View of Target Operation Unit
- Service-Performance-View of Target Operation Unit

# **Training-Session with**





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#### **Kontakt**



#### Dr. Helmut Steigele

Winkel 6

CH 8192 Glattfelden

Tel: 0041 44 300 68 90

Mobile 0041 79 254 57 03

Mail: <a href="mailto:helmut.steigele@cascadeit.ch">helmut.steigele@cascadeit.ch</a>

www.cascadeit.ch

www.4servicemanagers.com

www.ea-serviceplanner.com