

Lean Enterprise Architecture Toolkit

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Introduction





Combining Design Thinking and Architectural Thinking

The Lean Enterprise Architecture Toolkit can be used in combination with the Human Centered Innovation Approach as defined by the SAP AppHaus. While the Lean Enterprise Architecture Toolkit applies an engineering mindset to understand, describe, and solve a business problem, the Human Centered Innovation Approach applies a user-centric view to the business problem with the help of Design Thinking. While Design Thinking focuses on the alignment of users and business, the Architectural Thinking with the toolkit focuses on the alignment of business and IT.

Phases

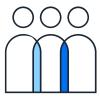
Explore

Discover

Design

Deliver

Design **Thinking**



Explore innovation opportunities:

- Cluster of innovation opportunities
- Prioritize and select innovation opportunity
- Use-case definition
- Stakeholder map

Gain common understanding of current environment and needs via consumer, employee, and market research:

- First insights to overcome the challenges
- Research summary
- As-is user journey

Design and create a prototype of the solution:

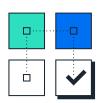
- Storyboard for selected solution idea
- Low-Fidelity sketches
- Clickable prototype
- Visual design
- User stories

Develop and deliver the tailored business and technical solution for productive use:

- Deliver productive solution
- Customer acceptance report

Use-Case Blueprint Diagram

Architectural Thinking Work Products



Understand your company's business goals and strategic drivers:

- Strategy Map
- Stakeholder Matrix
- Statement of Architecture Work

Develop a target business architecture that describes how your company needs to operate to achieve business goals:

- Solution Context
- Architecture Principles
- Risk Analysis

Develop a target technical architecture that addresses the statement of architecture work and stakeholder concerns:

- Baseline Application Architecture
- Solution Concept
- Solution Realization
- Conceptual Data Diagram
- Software Distribution Diagram
- Architectural Decisions

Define an architecture roadmap based upon gaps between baseline and target architecture:

- Architecture Roadmap
- Environments & Location Diagram

Domains

Business Architecture

Technical Architecture

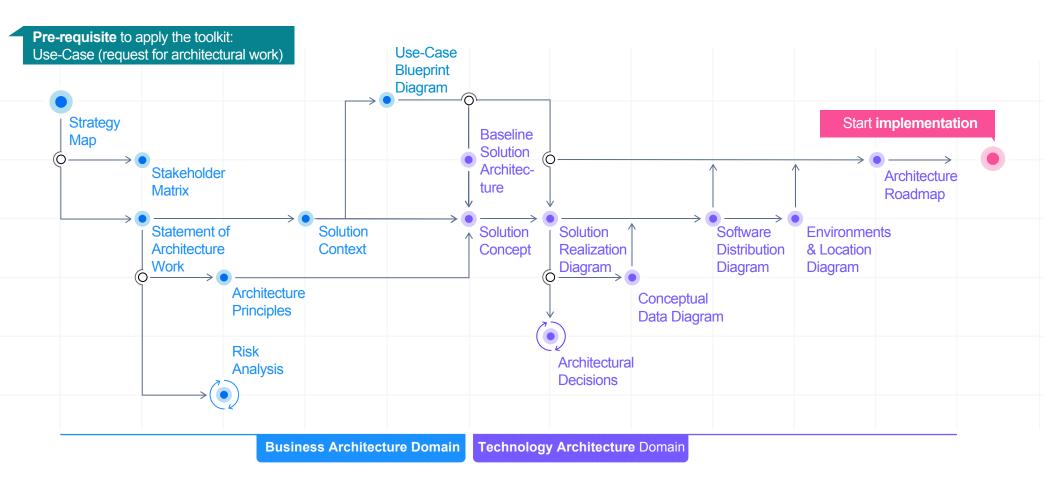
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Overview of the Content of the Lean EA Toolkit

The Lean Enterprise Architecture Toolkit is comprised of 15 work products: 7 work products describe the business domain, and 8 work products describe the technical domain. Work products from the business domain are used to communicate with stakeholders from the business departments as well as business executives and business management. Work products from the technical domain are predominantly used to communicate with stakeholders from IT. Each work product of the toolkit is described by a template, an example showing the adoption of the template, and a brief guide for creating the work product based on its template.

Generally, the work products of the toolkit are applied in a defined sequence. The reason for this is, that results from one work product serve as input for the creation of other work products.

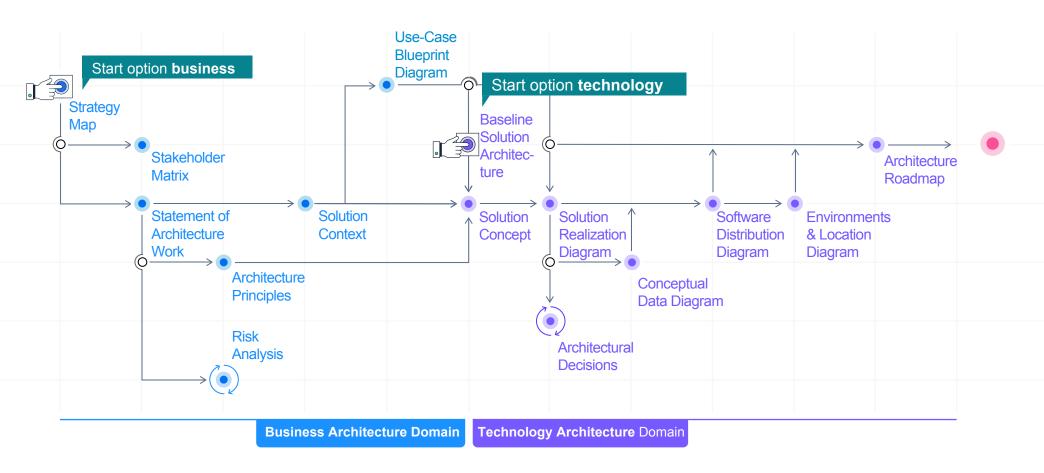


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Start Options for Using the Lean EA Toolkit

Depending on the driver for architectural work, the sequence of using the templates of the toolkit can be adapted, respectively. Considering a business department that issues a request of architectural work, the Strategy Map or Statement of Architecture Work might be one of the first work products being created. In case the IT department would like to discover the business value of using a specific technology, the Solution Concept or Baseline Solution Architecture might be the work products to start with the architecture development.

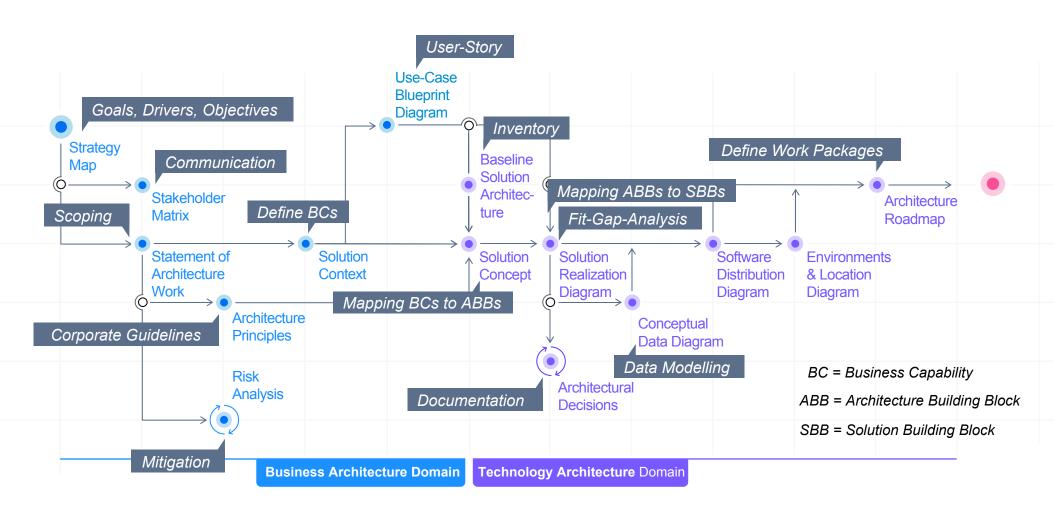


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Activities When Using the Lean EA Toolkit

Using the Lean EA Toolkit involves different activities for the creation of the work products. Each work product offers a different view on the architecture. It is the sum of all work products describing the architecture of the aspired solution.

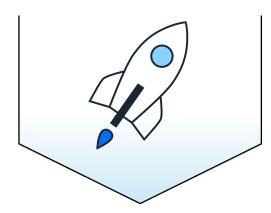


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Scenario Used for Sample Work Products

The samples provided for the Lean EA toolkit work products are based on a fictitious company named Rocket Chips Inc. The sample work products introduced in the following chapters assume a request of architecture work to improve the budget review and approval process for new R&D initiatives and business development projects at Rocket Chips.



Company Name:

Rocket Chips Inc., a global semiconductor company founded in 2013, engaged in the design and fabrication of semiconductors that are specialized to run machine learning algorithms.

Tagline: We bring you beyond!

Drivers:

- Become global market leader in semiconductors optimized for machine learning algorithms
- Grow into new market segments by offering additional services

Goals:

- Grow fast, grow globally
- Fast and effective deployment of capital for business initiatives and research & developmentprojects to support massive growth as well as innovation and adaptability (sources of competitive advantage)

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