How to use SAP PowerDesigner to model your landscape architecture

Dirk Anthony, SAP SE
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Your Presenter for Today

Dirk Anthony
IT Landscape Architect

CoE Enterprise Architecture, SAP Product & Innovations
Agenda

Flashback

Landscape Architecture in SAP PowerDesigner

Example of Model Content & Demo

Summary
Agenda

Flashback

Landscape Architecture in SAP PowerDesigner

Example of Model Content & Demo

Summary
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<tr>
<th>Title</th>
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<tbody>
<tr>
<td>The Evolution from SAP UX Explorer to SAP Enterprise Architecture Explorer</td>
<td>SAP Enterprise Architecture Explorer is a self-service provided by SAP that provides answers to many of your enterprise-related questions. It provides a well-structured and easy way to get to know your options and their relations to the necessary focus areas such as User Experience, Landscape Architecture, offerings such as SAP products and services as well as Enterprise Architecture. In this session you will learn in more detail what this Explorer is, which benefits it provides and how you can use it to quickly increase your know-how about relevant technologies, strategies and methods.</td>
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<td>User Experience and Landscape Architecture in the light of Enterprise Architecture</td>
<td>If you are an enterprise architect you are typically searching for information that covers both, the business and IT perspective. In addition, you might like to see IT not only as a set of boxes and software. Instead you might want to get the topic structured and related to IT capabilities. SAP helps you in this matter with a structured approach to provide architecture viewpoints, transition paths and other elements on various burning topics. In this session, we want to introduce this approach and share the current state of this effort. This session will include real-life examples focused on User Experience (UX) and Landscape Architecture.</td>
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<td>How to start developing an enterprise UX strategy</td>
<td>You might already know the SAP UX Strategy which provides a lot of important information. However, one question might still be in your mind: “How can I start now with my enterprise UX Strategy”. In fact if you seriously want to improve user experience in your enterprise, you will need your own strategy that considers the business and IT goals of your company. Besides the strategy, you will need a roadmap and of course a process that combines all that in a consistent approach. This session provides insight in how to define your strategy, shows a tested process and provides several viewpoints on this matter.</td>
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<td>How to arrange an optimal deployment of SAP products in a system landscape</td>
<td>Before implementing a new SAP product, IT departments need to decide how best to deploy this product within their system landscape. Information about the deployment architecture of the product needs to be analyzed. Useful deployment options have to be evaluated. Finally the planned landscape architecture for the new product needs to be determined and the new product has to be implemented and integrated into the existing system landscape. In this session you will learn more about how SAP can help you to identify the optimal deployment of its products in your system landscape.</td>
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<td>How to use SAP PowerDesigner to model your landscape architecture</td>
<td>SAP PowerDesigner is known as a business process and data modelling software for Enterprise Architecture (EA). It helps you to build a blueprint of your current and planned enterprise architecture in its entirety to understand its many interdependencies. Though, SAP PowerDesigner is often used to do process- and data modeling, you can also make use of it to model your reference landscape architecture. In this session we are going to perform a live demo of how to use SAP PowerDesigner to model such an architecture based on given business and IT priorities.</td>
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Flashback Webinar 1, 2, 4
What we have talked about in the last webinars

Webinar 1, 2 + 4
Landscape Architecture in the context of Enterprise Architecture
Help for Customers: Detailed Practices + Adapt Practices
SAP PowerDesigner

Learn from generic practices
- Learn from typical practices
- Get methods
- Get reference models
- Get reference architectures

Learn from detailed practices
- Review reference architecture models in all detail

Adapt practices to customer needs
- Adapt reference architecture models to your needs
- Create own architecture models

SAP PowerDesigner
Agenda

Flashback

**Landscape Architecture in SAP PowerDesigner**

Example of Model Content & Demo

Summary
Bridging the Gap between Business and Technology
A typical company's situation

**Business Needs**

- Increase access to new market segments
- Reduce cost of account servicing
- Sustainable & measurable growth
- Increase customer loyalty and share of wallet
- Differentiation through products and services

**Technology Runs**

- Disparate technology platforms
- Unclear view of system boundaries
- Growing complexity due to organizational and regulatory change
- New projects in addition to operations and maintenance

**CIO Wants**

- Align IT roadmap to business needs
- Adapt IT landscape to changed business models
- Consider new technology trends like IoT, Cloud, Big Data
- Re-use existing investments
- Reduce cost of project and operations
- Faster and cheaper delivery of projects
Content Management in SAP PowerDesigner
Manage the Enterprise Architecture

**Capture**
- Understand current situation
  - Capture business objectives and impact on business architecture
- Define & describe
  - Model business & technical architecture with consistent linkage to SAP software

**Design**
- Design & plan for future
  - “As-is” and “to-be” modeling
- Streamline
  - Implementation
  - Leverage reference content based on best practice
- Integrate all aspects
  - Tie business & technical viewpoints consistently across the enterprise

**Communicate**
- Understand impact of change
  - Visualization of impact from business architecture to technical implementation
- Collaborate
  - Central repository to discover content, communicate and share
Business Architecture is based on an Enterprise Framework* Connecting Business Architecture & IT Architecture

Backbone of the Customer View: end-to-end linkage across all layers of the enterprise

Customer’s Needs

- Optimal Value Chain Design
- Optimal Business Processes & Practices
- Effective Performance Measurement
- Optimized Application Architecture
- Optimized Integration Architecture
- Optimized Technology Architecture

Customer Metamodel (Content Structure)

- Varied and Changing Business Needs
- Value Layer
- Process Layer
- Information Layer
- Application Layer
- Integration Layer
- Infrastructure Layer
- SAP Solution Patterns

Systematic Traversal up and down

BPTF*

Business Capabilities

IT Capabilities

- Consistent meta model with well-defined artifacts and their relations
- Implemented in SAP PowerDesigner
- Allows to start modeling from different angles
- SAP-internal usage as well

* Based on Open standards (not SAP-proprietary): BPTF: The Value Chain Group’s Business Process Transformation Framework
Customer Landscape Architecture
Different relevant architecture viewpoints on IT landscapes*

**Level 0**
**Strategy View**
*Driver: Operating model, Business Goals, Business & IT strategy, etc.*

**Level 1**
**Capability View**
*Driver: Business context, Pace-layering architecture, etc.*

**Level 2**
**Software Product View**
*Driver: Adoption of Application & Technology Products or Services, Technical Deployment, etc.*

**Level 3**
**Physical Installation View**
*Driver: Physical Distribution of Software & Hardware components, Sizing, Scalability, High Availability, etc.*

*details about Landscape Architecture*
Use Case: IT Landscape Architecture
Connecting customer decisions across different architecture viewpoints

Customer’s Needs

- Optimal Value Chain Design
- Optimal Business Processes & Practices
- Effective Performance Measurement
- Optimized Application Architecture
- Optimized Integration Architecture
- Optimized Technology Architecture

Customer Metamodel (Content Structure)

- Varied and Changing Business Needs
  - Value Layer
  - Process Layer
  - Information Layer
  - Application Layer
  - Integration Layer
  - Infrastructure Layer

Systematic Traversal up and down

SAP Solution Patterns

Landscape Architecture Design

Model Extension for Designing Customer Landscapes

- Strategy View
- Capability View
- Software Product View
- Physical Installation View

* Based on Open standards BPTF: The Value Chain Group’s Business Process Transformation Framework
Agenda

Flashback

Landscape Architecture in SAP PowerDesigner

Example of Model Content & Demo

Summary
Banking Reference Architecture
Covering the full customer engagement lifecycle

Sales
- Vision & Strategy
- Business Case & Validation

Planning
- Design & Blueprint

Execution
- Realization
- Run & Optimization

Strategy and Scoping
- Capability Model
- Heatmap
- Capability Rating
- Solution Discovery

Business Architecture
- Value Chain
- Value Streams
- Value Flows
- Process Flows
- Activity Flows

Application Architecture
- Capability Cluster
- IT Practice
- Logical Systems
- Technical Systems
- Service Provider
- Conversation Diagram
- Choreography Diagram
- Message Flow Model
Strategy View
Define aimed scope of business capabilities within a cluster

Business Strategy:
Heat-Mapping about aimed business capabilities
Strategy View – Landscape Architecture (Level 0)
Model the intended landscape topology for this cluster

Landscape Strategy: e.g. On-Premise vs. Cloud

Option 1
- On Premise Landscape
- Business Capabilities

Option 2
- Cloud Landscape
- Business Capabilities

Drives
Impacts

Level 0
Level 1
Level 2
Level 3
Capability View
Define required IT capabilities to support the specified business scope
Capability View – Landscape Architecture (Level 1)
Model all IT Solutions needed to cover the business scope of the cluster

Landscape of IT Solutions: usage within the whole enterprise
Software Product View
Define the Software Products needed to cover the aimed IT solution

SAP Solution “End-to-End Lending and Deposits” with different SAP products available
Software Product View – Landscape Architecture (Level 2)
Model the logical system deployment needed to implement the defined IT solution

**Option 1**
Decision about the optimal landscape deployment of all contained SAP products*

* Methodology and SAP guidance explained in last webinar

**Option 2**

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Physical Installation View
Define the Technical Deployment to install the Software Products

SAP installation support by Rapid Deployment Solution (RDS) offering
Physical Installation – Landscape Model Level 3
Model the Technical System Deployment for the Logical Systems

SAP installation offerings:
two different RDS packages available for on-premise installation and for cloud installation*

- Option 1
- Option 2

* Amazon Web Services
Demo
Agenda

Flashback

Landscape Architecture in SAP PowerDesigner

Example of Model Content & Demo

Summary
Summary

SAP PowerDesigner allows to manage a complete Enterprise Architecture covering Business, Application, Information and Infrastructure layer.

SAP defined and implemented a meta-model in SAP PowerDesigner allowing

- To define reference architectures for industries (business and IT architecture),
- To model an IT landscape architecture reflecting business priorities,
- To provide different important architectural viewpoints on IT landscapes.

SAP PowerDesigner in SAP EA Explorer
Thank You!

Any questions?

Dirk Anthony  
Mail: dirk.anthony@sap.com

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