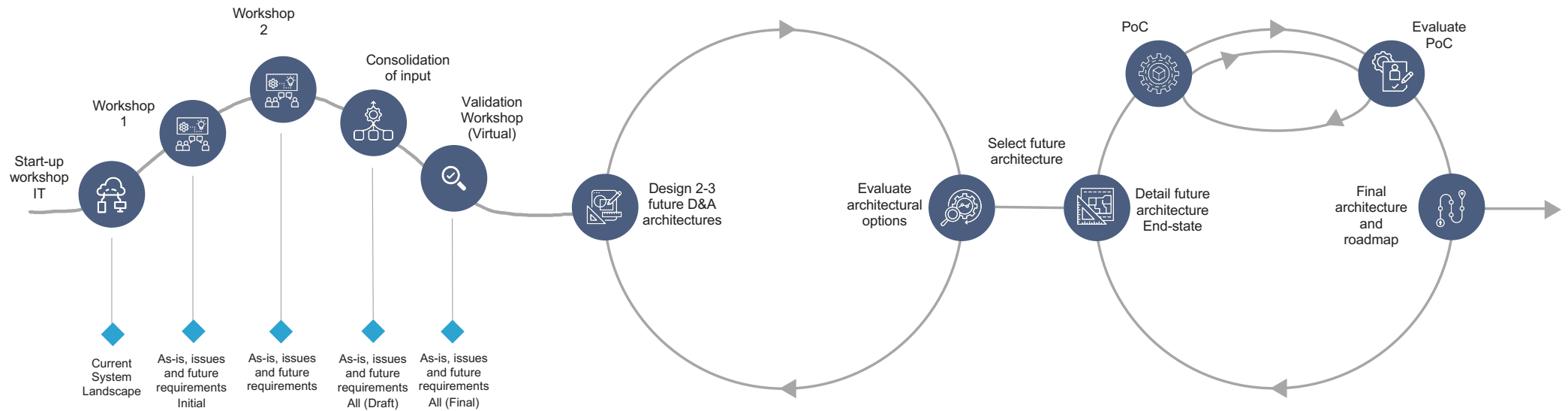


Data & Analytics Architecture Assessment

Jacob Orup Lund - 27.10.2022

Assessment – Overview

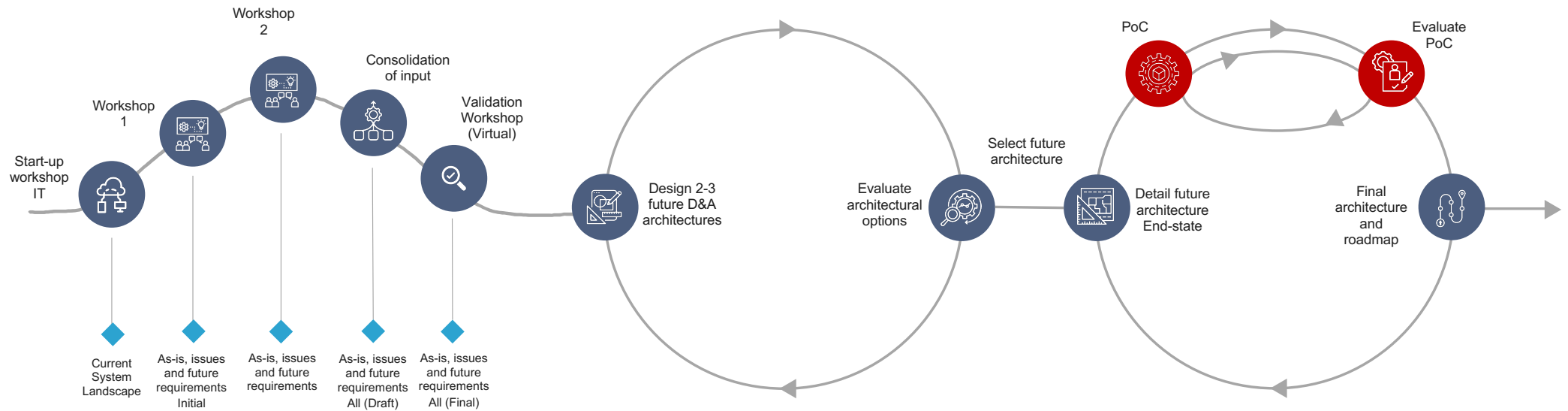


Establish as-is

Design to-be options and evaluate

Detail and test

Assessment – Effort



Establish as-is

Business: 4 hours / 0,5 day per participant

IT: 52 hours / 6,5 days per participant

Design to-be options and evaluate

Business: No participation

IT: 8 hours per participant

Detail and test

Business: 1 hour per participant (PoC not included)

IT: 4 hours (PoC not included)

Assessment – Workshops (example)

Area	Business Unit 1	Business Unit 2
Finance	½ day	½ day
Controlling	½ day	
CSR	½ day	
Procurement	½ day	2 hours
Sales & Marketing	½ day	½ day
E-Commerce	½ day	
Supply Chain	½ day	½ day
Manufacturing	½ day	
Total	4 days	2 days

Agenda – High-level (Example)

- **Introduction**
 - Why are we doing it?
 - What is covered?
 - How will we do it?
 - When will we do it (process)?
- **Introduction to Data & Analytics (D&A)**
 - Current state at Royal Unibrew (Corporate level)
 - Trends within Data & Analytics
 - Data & Analytics capabilities overview
 - Data & Analytics Framework
- **Discussion of as-is, including any relevant issues**
 - What data is being used?
 - How is data processed and transformed?
 - Who is working with the data?
 - How is the data presented/consumed?
 - What tools are being used in the process?
 - ...
- **Discussion of to-be/Future requirements**
 - What D&A capabilities would your area like to have in the future?
 - Functionality, Refresh rates, Format, ...
 - What requirements do you have for the process?
 - Speed, Agility, ...
- **Wrap-up and next steps**

Assessment – Deliverables

Deliverables

- Workshop agenda and template for questionnaire
- Documentation of current state, issues and future requirements
- Future D&A architecture(s) based on input collected via workshops
- Pros and cons for architectures (if multiple is suggested/created)
- License estimate for proposed architecture(s)
- High-level roadmap for implementing the future architecture
- Future D&A roles and responsibilities

Duration: 6 - 8 Weeks (calendar) - Fixed price: 250.000 DKK
 (PoC and travel cost not included in estimate)

Personas	Description							
Consumer	Consumers are frontline workers, executives or external customers who view analytic content periodically. The content is typically in the form of reports or dashboards Located: Business							
Business Analyst	Business Analysts are business users who are looking to do more diagnostic-type analytics, or junior analysts who are looking to expand their understanding of specific domains.							
Personas	Data			Analytics				
	BW Objects*	MS Objects**	Ad-hoc Data Sources	BW Queries	Ad-hoc Data Sources	SAP Analytics Tools	Power BI	
Expert Analyst	■	■	■	■	■	■	■	
Data Scientist	■	■	■	■	■	■	■	
Developer							■	

Analytics Architecture of the Future – Value Analysis

Reference Architectures – Detailed Components

The diagram illustrates a multi-layered architecture. At the top, seven circular icons represent the data pipeline stages: Data Sources, Ingest, Store, Transform, Model & Serve, Prepare & Visualize, and Consume. Below this, a horizontal bar shows SAP and Non-SAP data sources feeding into the pipeline. The SAP layer includes BW/4HANA and SAP Analytics Cloud. The Non-SAP layer includes SAP ERP, Non-SAP, Azure Data Factory, Azure Data Lake Gen 2, Azure Data Factory, Azure SQL Storage, and Azure Data Share. A 'Hybrid #1' label is positioned at the end of the pipeline. The bottom section contains a table with 'PROS' and 'CONS'.

PROS	CONS
<ul style="list-style-type: none"> • An SAP and MS Azure only architecture reducing the number of vendors • Easy to find resources for the Azure stack • Seamless integration with Power BI • All regions available on Azure • Many tools available • Easy DevOps with Visual Studio and Azure DevOps • Fixed price for the SQL DB 	<ul style="list-style-type: none"> • Not possible to scale for individual workloads (all or nothing) • Could potentially require multiple Azure Components if data sharing is needed or fees should be available for downloads • Serverless option is available, but when paused, the first connection will fail • Azure SQL DB is built for OLTP; some performance issues due to logging bottleneck. • Requires more administration for optimizing loads • Requires additional license for SAP Landscape Transformation (on premise solution requiring infrastructure and maintenance) • Risk of data integration processes being disrupted by compatibility issues arising from upgrades to SH and BW