



# Agile Data **ENGINE**

**DataOps platform**  
for cloud data  
warehouses



**designing**  
**deploying**  
**running**

<https://www.solita.fi/agiledataengine/>



# Why the Agile Data Engine was built?

To solve major problems in data platform development:

**1.**

---

Creating cloud based data capability quickly and in a managed way

**2.**

---

Enabling true agility in data platform development

**3.**

---

Addressing the requirements of operational analytics

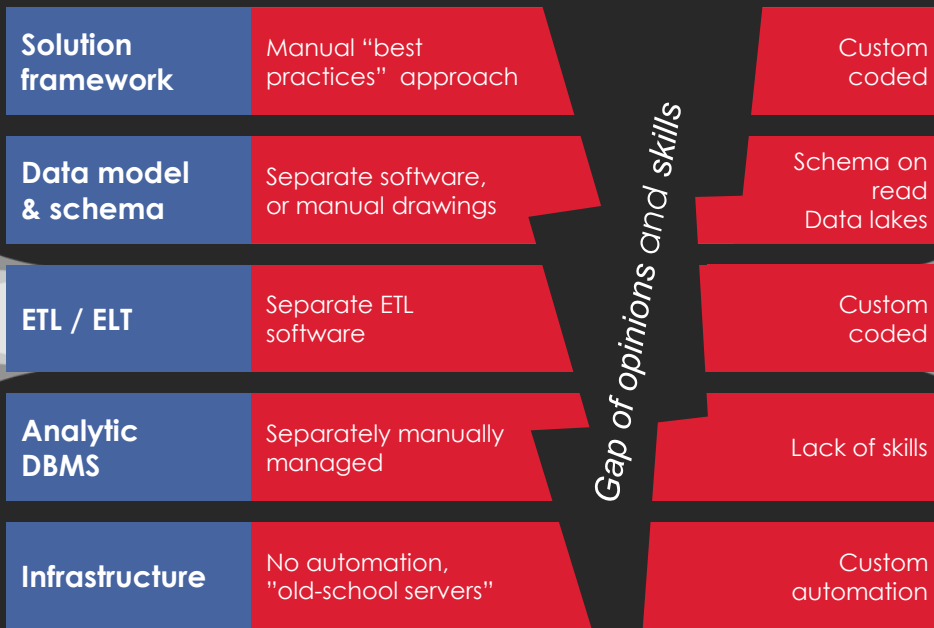
**4.**

---

Unlocking person and vendor lock-ins



# From Data Warehousing to cloud Data Engineering



*Gap of opinions and skills*

Data warehouse professionals

Cloud software developers

Data science & analysis

Data discovery and visualization

Standard and ad-hoc reporting

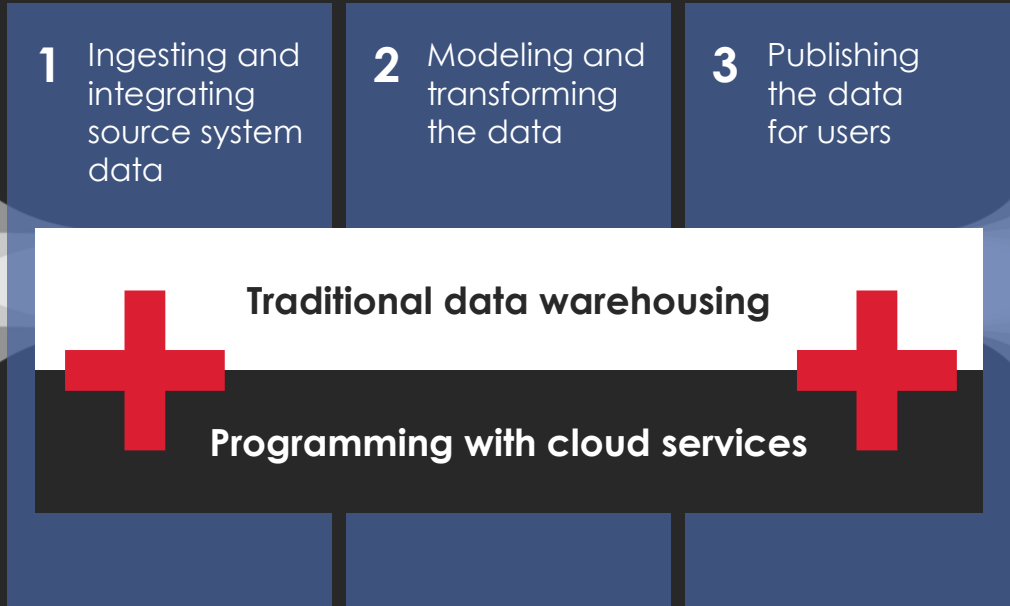
Applications

Alerts and events

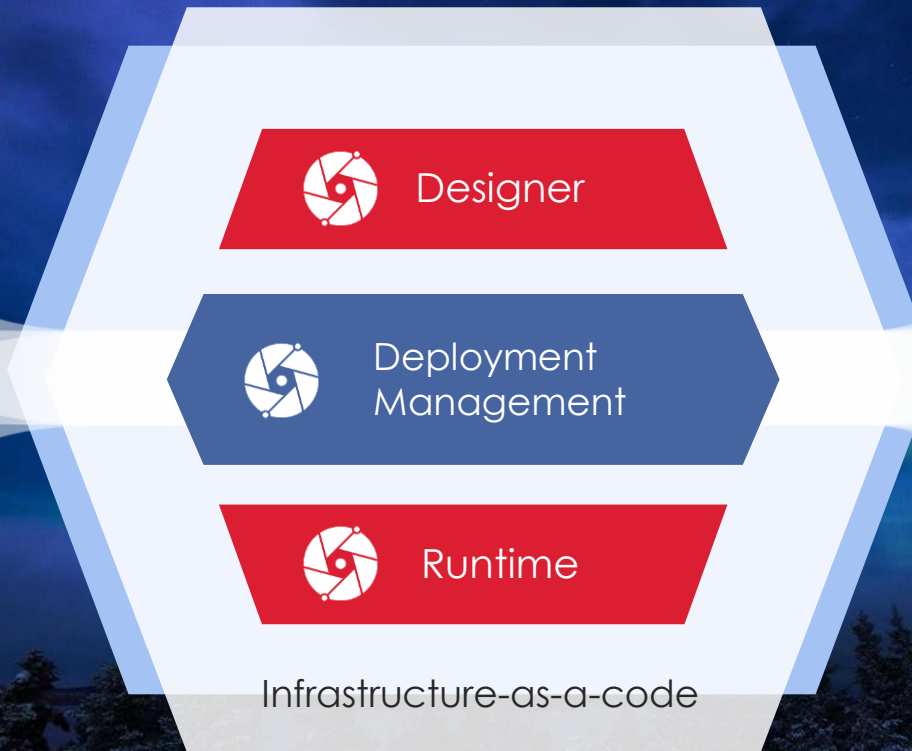
Data governance



# When building a modern cloud based data capability, both DW and SW approaches are needed



# Agile Data Engine platform modules



Designer



Deployment  
Management



Runtime

Infrastructure-as-a-code



Agile Data

**ENGINE**

# Key Features



Designer

**Data model and transformations (loads) design** combined in the same web based user interface.

**Data Vault 2.0 automation** for generating data vault entity loads and accelerating data modeling.

**Graphical data lineage** view with data warehouse entities and loads, with metadata based search.



Deployment Management

**Continuous Deployment pipeline** with automatic schema changes and workflow/load generation, based on load dependencies and scheduling metadata.



Runtime

**Workflow orchestration** with timely and dynamic load processing and concurrency control + API services for process logging and control.

Infrastructure-as-a-code

**Integrated and customizable data quality smoke tests** as part of the data workflows, used to control the execution of workflows or to flag warnings.



Agile Data

**ENGINE**



# Simplified example solution architecture



**1** Ingesting source system data

**2** Modeling and transforming the data

**3** Publishing the data for users

Data science & analysis

Data discovery and visualization

Standard and ad-hoc reporting

Applications

Alerts and events

Data governance

Source data interfaces

Azure Data Factory

Blob storage



Agile Data **ENGINE**



Azure Synapse Analytics

STAGE

DWH

PUBLISH

Business data pipeline  
(data models, loads, workflows)

CI/CD deployment pipeline



Dev



Test

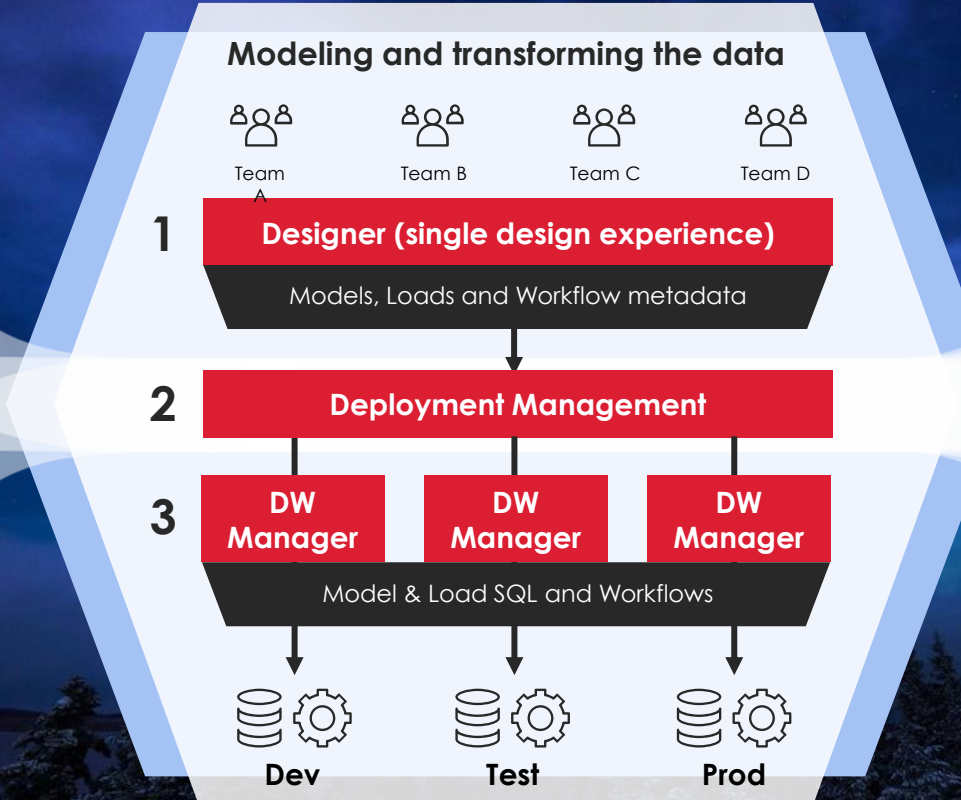


Prod

Any integration tool and storage from cloud



# Shared Design, Multi-Environment Architecture



## Modeling and transforming the data



Team A



Team B



Team C



Team D

1

**Designer (single design experience)**

Models, Loads and Workflow metadata

2

**Deployment Management**

3

**DW Manager**

**DW Manager**

**DW Manager**

Model & Load SQL and Workflows



Dev



Test



Prod

Data science & analysis

Data discovery and visualization

Standard and ad-hoc reporting

Applications

Alerts and events

Data governance





Agile Data  
**ENGINE**



# Agile Data Engine creates tangible business benefits for our customers

**~50%**

SMALLER DEVELOPMENT AND  
OPERATION COSTS

**~90%**

LESS  
ERRORS

**4X**

FASTER  
DELIVERY

**100X**

MORE FREQUENT  
PUBLISHING



# CONTACT

**JYRKI NURMINEN**

Sales Director

Tel: +358 40 848 7055

[jyrki.nurminen@solita.fi](mailto:jyrki.nurminen@solita.fi)

