Linking Data Strategy to Business Strategy

How Data Projects can be Prioritized
Based on Potential Impact on Key Business Objectives

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Fremtind

insurance in bank

#1

Bank distribution

#3

Market position

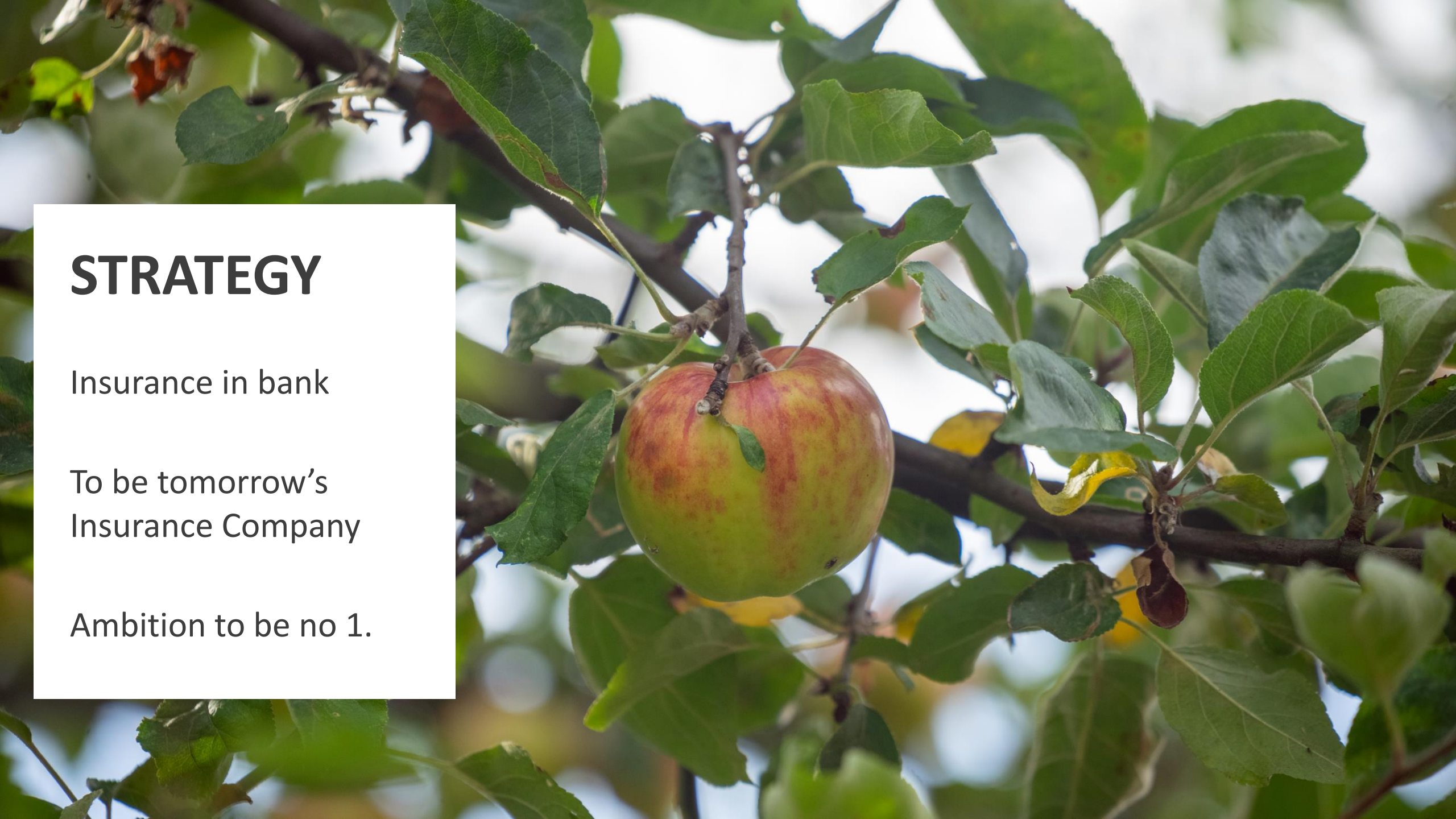
A data-driven approach

The story about …

- Linking the business strategy and data- and analytics strategy
- A modern data platform
- Data culture

….and how we stumbled and what we learned

Fremtind



STRATEGY

Insurance in bank

To be tomorrow’s Insurance Company

Ambition to be no 1.

Plenty of business initiatives

- Several business units
- Several customer focus areas
- Several products

- …. supported by data and insight

Data Strategy

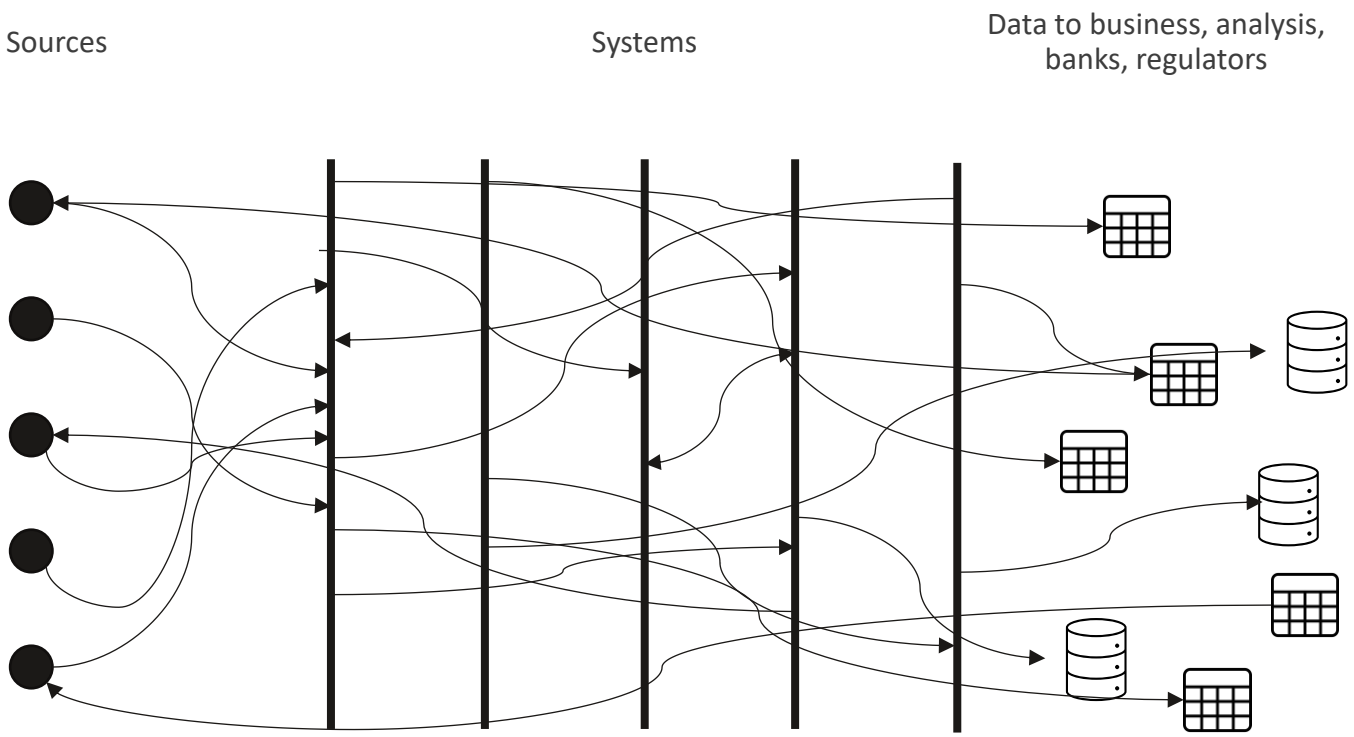
Transform Fremtind to be data driven

- Utilize data and analytics
- Advanced machine learning and AI
- Decentralized data culture
- Distributed data organization – moving towards mesh
- From on-prem to cloud

The Economist
Crunch time in France
Ten years on: banking after the crisis
South Korea's unfinished revolution
Biology, but without the cells
MAY 6TH–12TH 2017
The world's most valuable resource
Data and the new rules of competition
Google
amazon
UBER
Microsoft
Google
TESLA
TESLA

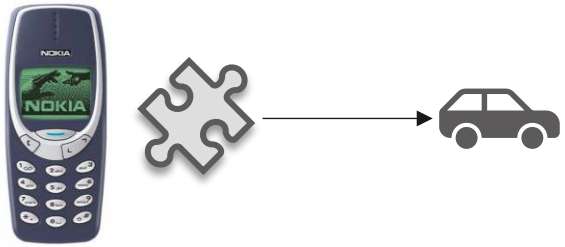
The problem

The on-prem data warehouse has become big and inflexible



The goal – a flexible and fast data platform

The old on-prem platform...

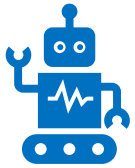


…is slow and inflexible

Tomorrow's platform in the cloud….

…has self service, data ownership, data products, domain orientation, autonomous teams

The key elements in a modern data- and analytics platform



Technology

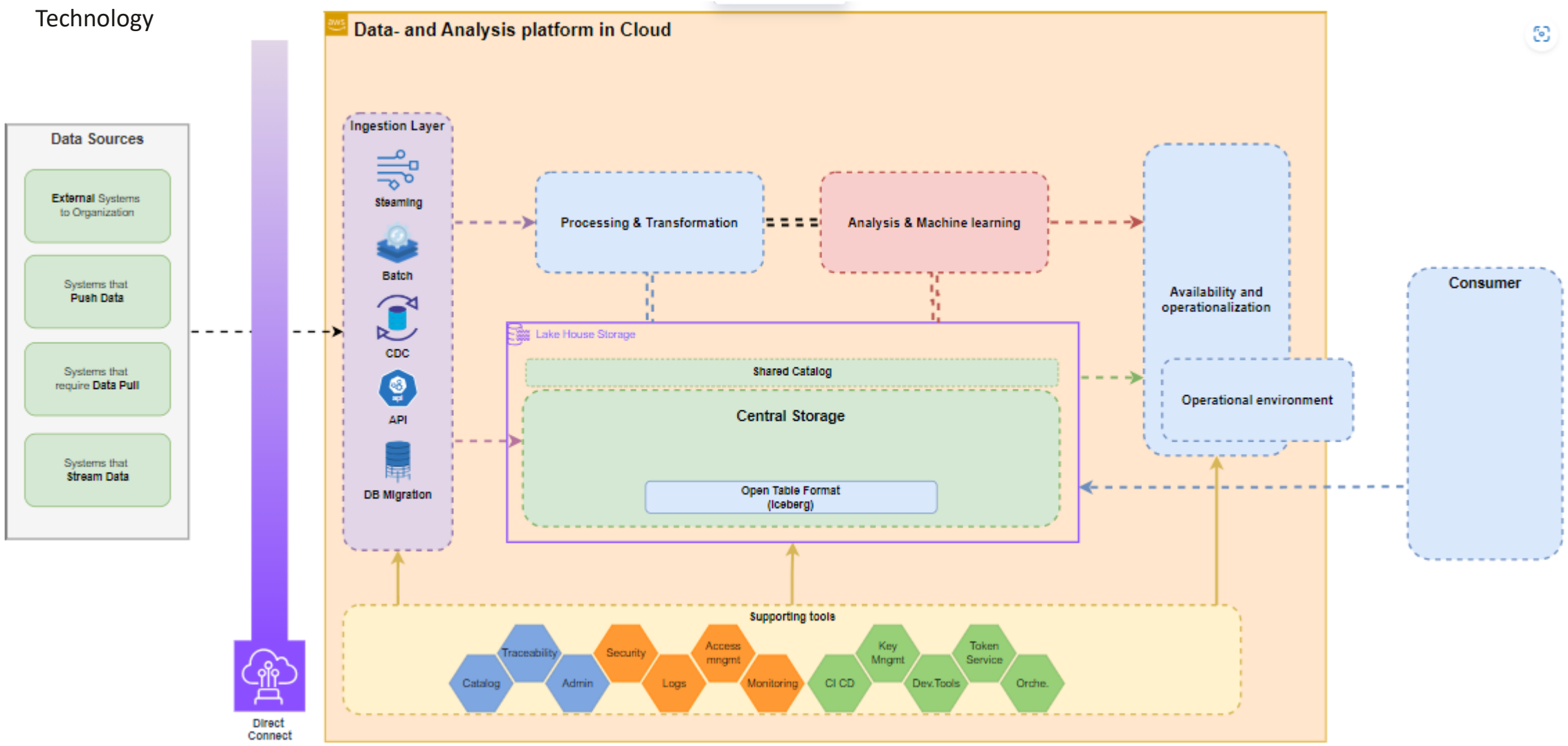
Data

Processes

Organization

Technology

Technical arcitecture



Technologies

Technology

Data sources

- Internal on-prem sources
- Internal cloud sources
- External sources

Data ingestion

- Fivetran
- Amazon Kinesis Firehose
- kafka
- amazon SQS
- Snowpipe
- Amazon S3

Data warehouse

- snowflake

Data Lake

- snowflake
- Amazon S3

Data transformation

- dbt

Orchestration

- Apache Airflow

Runtime

- AWS Lambda
- AWS Fargate ECS
- Python
- docker

Solutions

- databricks
- tableau
- Power BI
- Streamlit
- mlflow
- Excel
- FastAPI

Support tools

- Data Catalog
- Data Product Tools Governance Management

CI/CD

- GitHub
- Terraform
- Github Actions

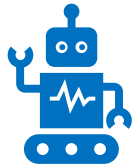
Monitoring and alerting

- DATADOG
- Streamlit

Documentation

- Confluence
- GitHub

The key elements in a modern data- and analytics platform



Technology

Data

Processes

Organization

AS IS	✓	✓	?	?
TO BE	✓	✓	✓	✓
Plan	✓	✓		
Implement	✓			

But….

Where are we heading?

Culture Eats Strategy for Breakfast and Transformation for Lunch.

Change network

Business domain leader network
with weekly meetings.

- Create a common understanding.
- Onboarding of domains.
- Ensure ownership to the transformation.

Creating a common understanding of the changes

Technology

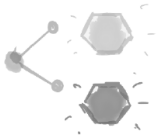
Data

Processes

Organization

Principles

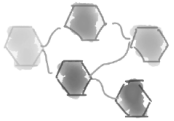
Data as a resource



Data as a product

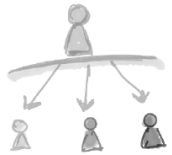
Architecture

Monolithic

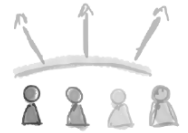


Distributed

Operations



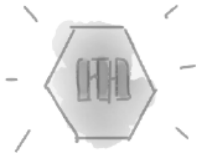
Top-down governance



Shared governance with automation

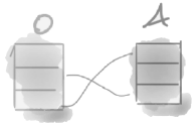
Data

Data from code



Data and code in a data product

Infrastructure



Fragmented platform

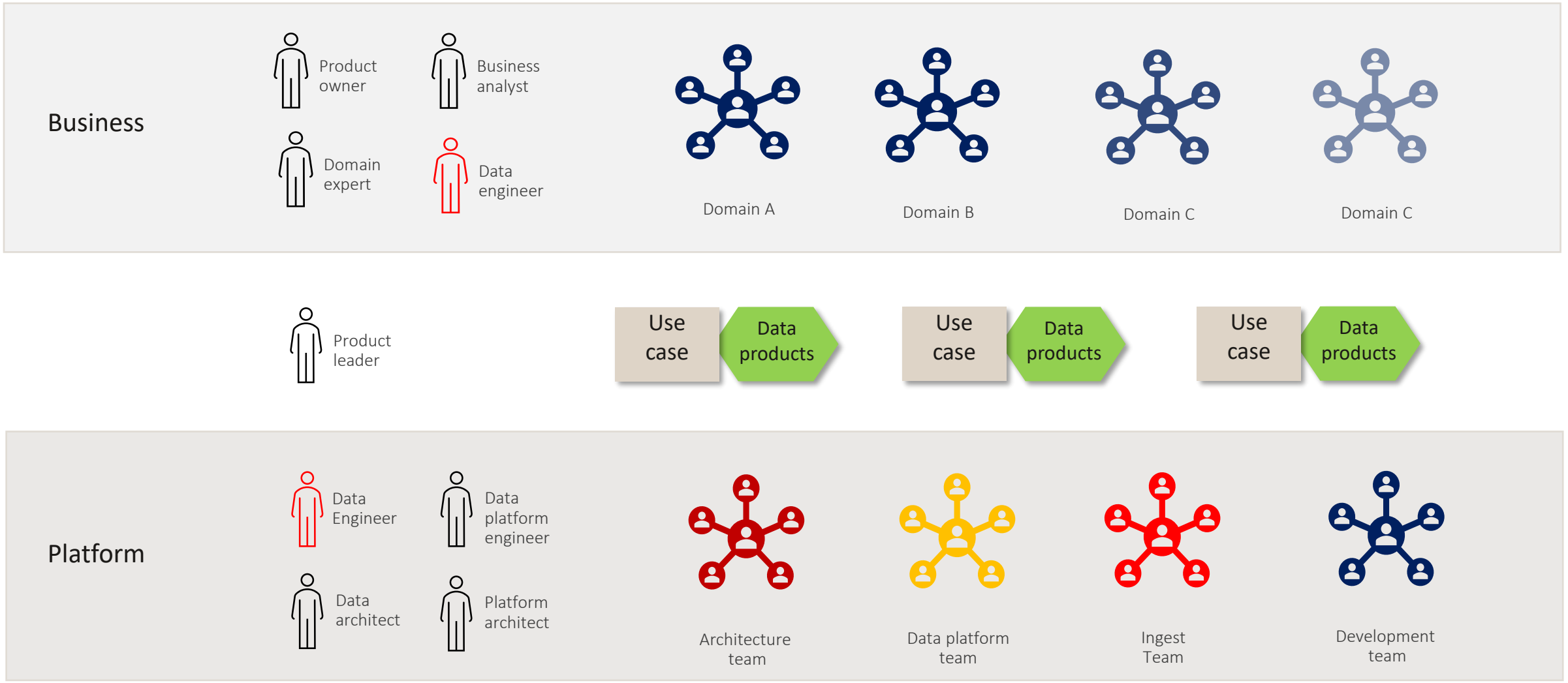
Integrated platform

Organization

Centralized ownership

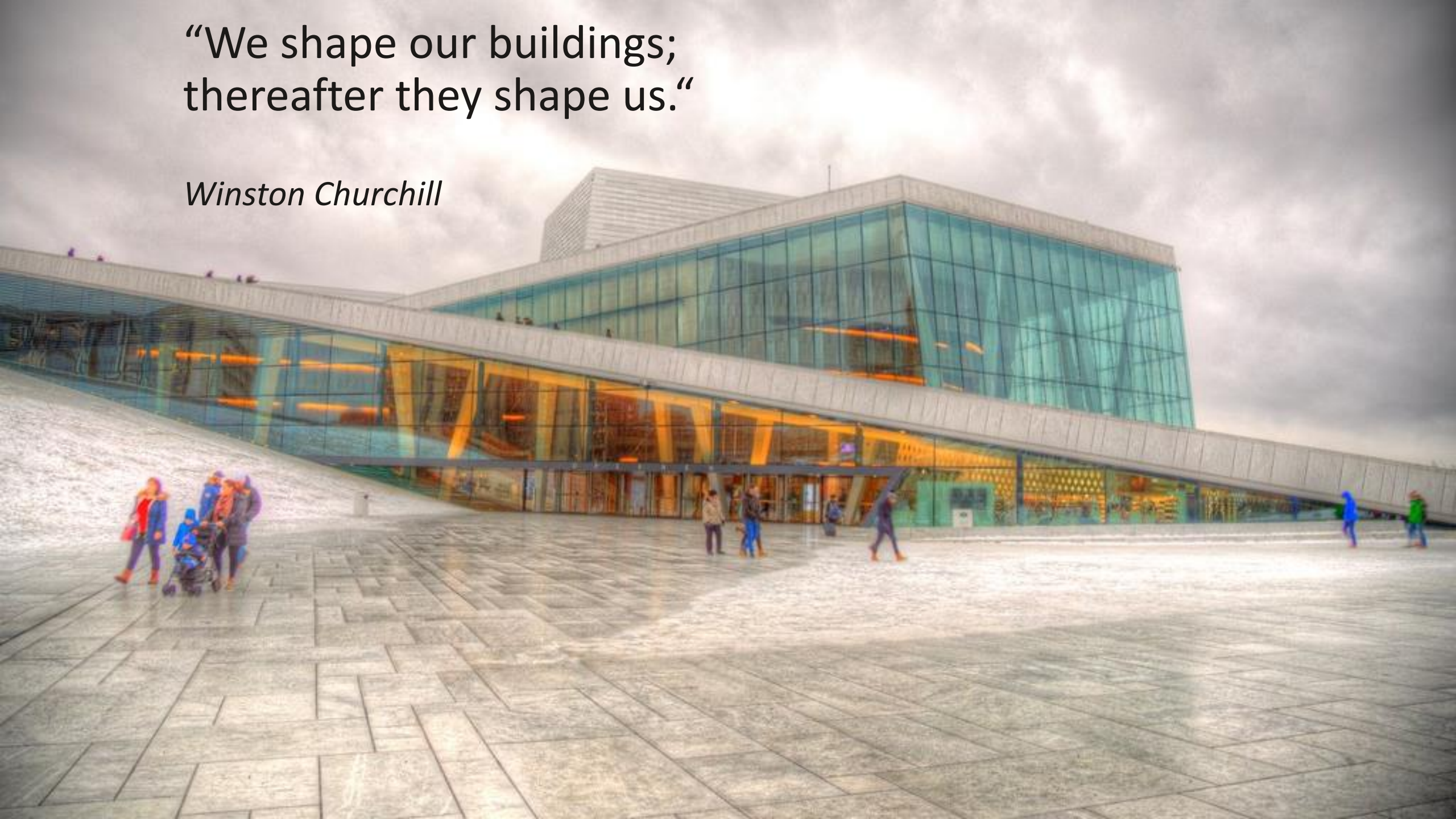
Decentralized domain ownership

Organizing the work



Key learnings

- Get the business on board
- Enable business to realize their own strategy
- Spend time on architecture
- Make sure the use cases build the platform
- Get rid of technical debt


“We shape our buildings;
thereafter they shape us.“
Winston Churchill