



The Future is Data-Centric, Semantic, & Federated

Is your organization ready?

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Medieval Heaven Sales



- Being sincere doesn't mean being right
- Salvation comes from within

Modern Digital Transformation



- Being sincere doesn't mean being right
- Transformation is an inside job

Externally led transformation

Successful Digital Transformation or Failed Business Transformation

What can go wrong?

Automotive Industry

- PLM modernization project failed after 3+ years, resulting in \$100M+ in losses.

Telecommunications Sector

- 4-year PLM transformation halted after \$65M spent with no operational results.

Retail Industry

- ERP modernization initiative ran for 7 years, costing \$300M before being discontinued.

Toy & Sport Manufacturing Sector

- ERP implementation failure led to financial collapse & significant workforce reductions.

Hundreds of half-failed projects

- Automotive, Machinery, ...

What did they lose?

Time
Competitiveness
Money

What are the root causes?

Application-centric mindset

- The C-Levels believes in a single bullet for the transformation

Data as second-class citizen

- The logic is hidden within the application layer, causes the (data) migrations to fail.

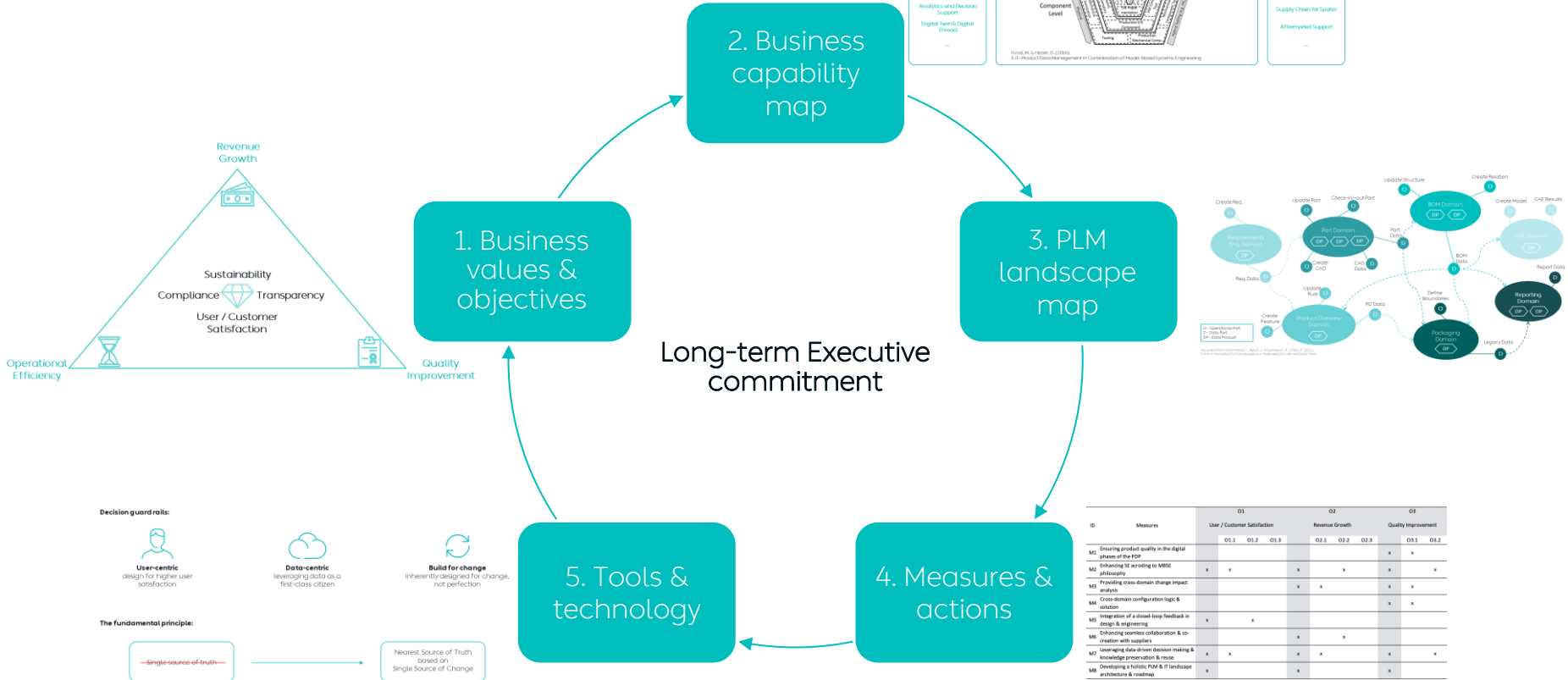
Centralized monolithic landscape

- IT solutions must satisfy conflicting requirements within a single application.

Externally led transformation can, at most, be a successful IT Migration,
but not a Business Transformation!

Business Transformation

5 + 1 steps



Tools & Technology

Decision guard rails:



User-centric

design for higher user satisfaction



Data-centric

leveraging data as a first-class citizen



Build for change

inherently designed for change, not perfection

The fundamental principle:

~~Single source of truth~~



Nearest Source of Truth
based on
Single Source of Change

The Semantic Data Model (The Semantic Layer)

Being Data-Centric & Semantic in a heterogeneous landscape

Enterprise Upper Ontology

- A domain-agnostic ontology model covering the main concepts and business objects of the company.

Integration Model

- Semantically connects the objects across ontology models, forming a coherent Semantic layer.

Terminology Model

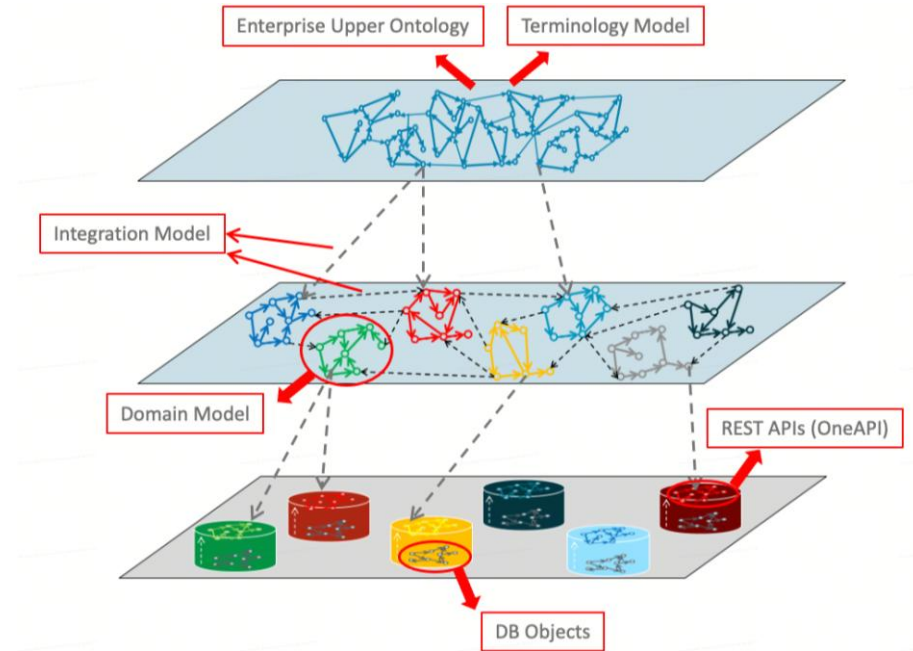
- Combines generic and company-specific terms in a semantically unambiguous model.

Domain Models

- Semantically describe the business domains and capabilities as well as product/system models.

Database Objects

- Semantically represent the physical data structures in underlying data stores that hold the persistent representations of business objects.



A Semantic Data Model is essential for the successful implementation of any high-impact AI use case.

Summary

Semantic Business Transformation is not just a nice-to-have!
It's imperative for survival!

For that, you need:

Leadership Alignment

“Top-Down & Bottom-Up
Engagement”

Holistic Approach

“End-to-End PMT
Transformation”

Iterative Approach

“Transformation is a
journey with continuous
refinement”

Technology-Agnostic

“Fundamental
philosophies drive
measures”

The guard rails

“User-centric / Data-
centric / Build for change”

Next Steps

“Time to Act is Now”



Thank you