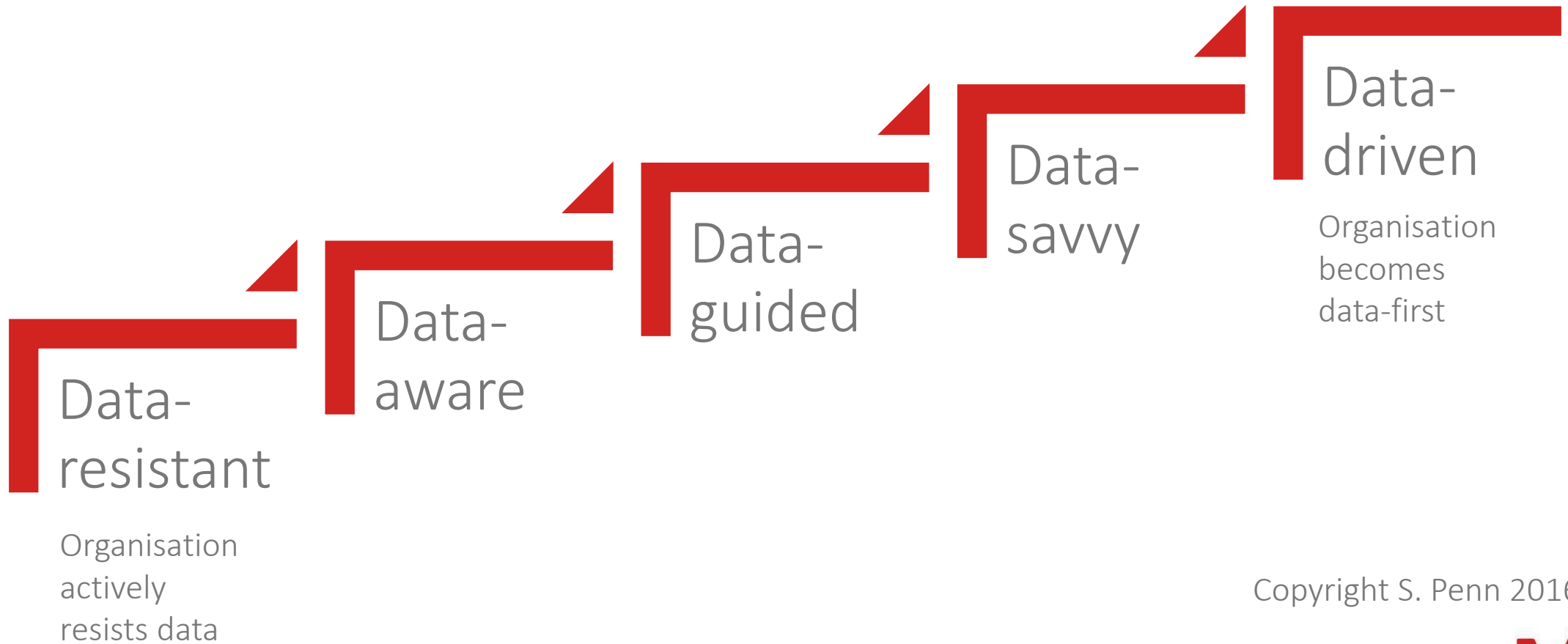




➤ Designing the data-driven company



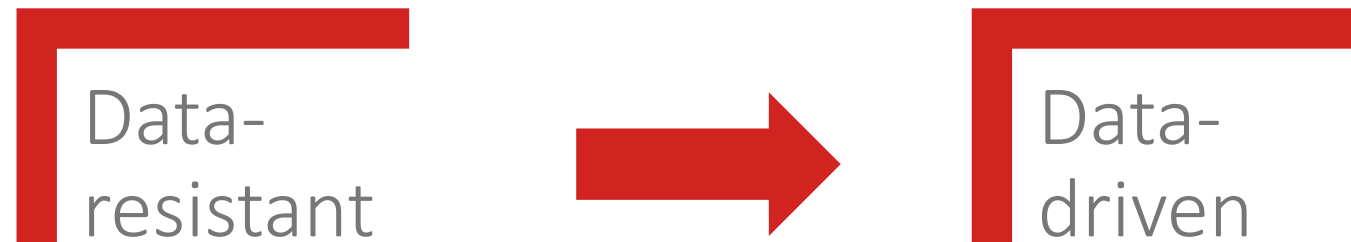
The Data-driven Company



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Customer challenges

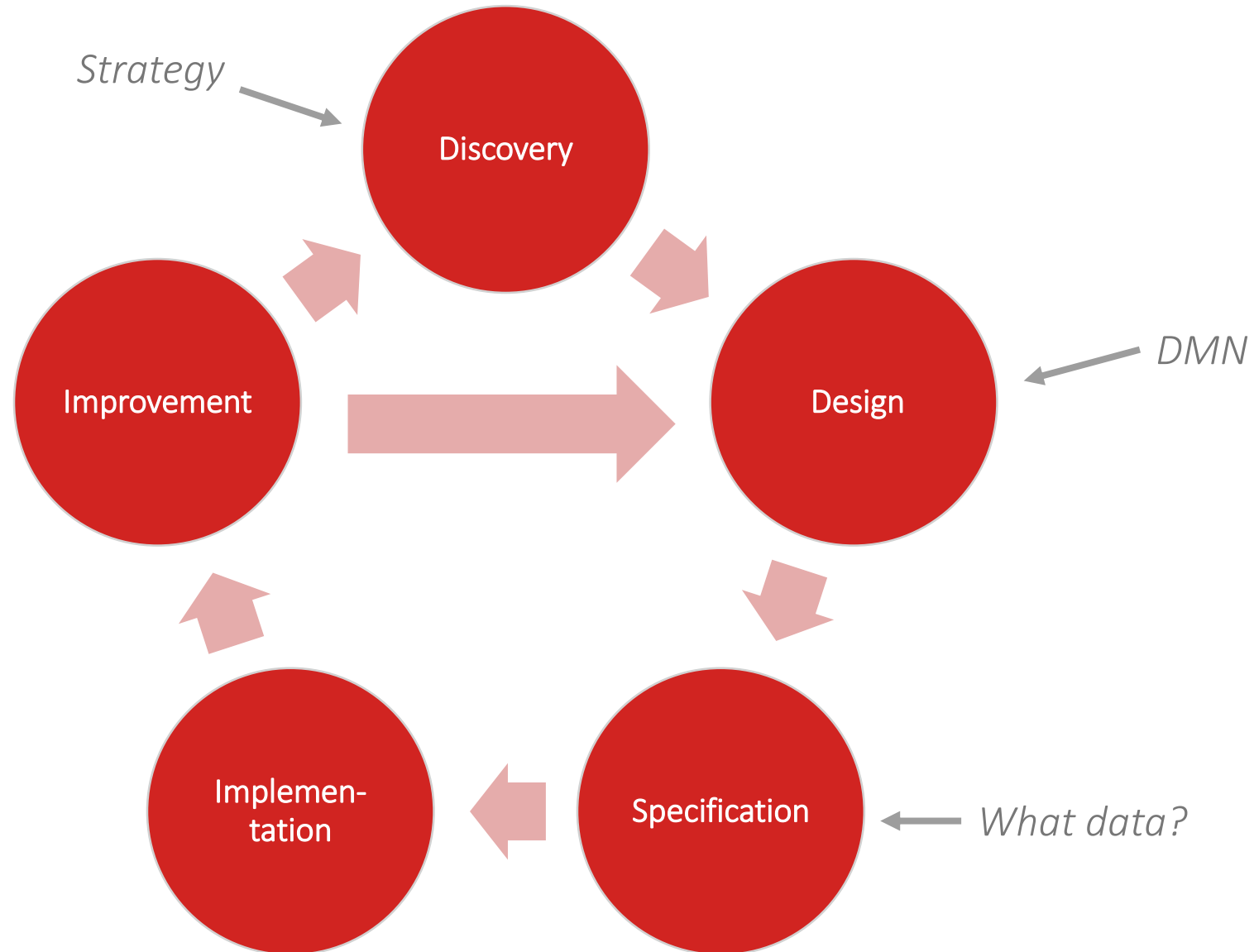
- › Clear understanding of the complex interaction of business processes, decisions and data
- › Priorization and selection of automated business processes and decisions
- › Transition of data-oriented pilots to production-level systems



State of the art

- › Designing the data-driven strategy
- › Great amount of models from BPM, EAM an so on as
- › A lot of pilots exploring the value of Analytics / Big data

Vision: From Strategy to Automated Decisions



Levels of Decisions

Strategic Decisions

- Very few
- Big impact

Tactical Decisions

- Planning
- Controlling

Operational Decisions

- Daily business
- High frequency

Enterprise Decision Map

Fleet Management

Product Management

Car Rental

Customer Management

Strategic Decisions

Tactical decisions

Operational decisions

Business Events

Technical Events

Enterprise Decision Map

Fleet Management

Product Management

Car Rental

Customer Management

Strategic Decisions

Tactical decisions

Operational decisions

Decisions on a single case or item like an insurance claim or an sales opportunity.

Business Events

Technical Events

Enterprise Decision Map

Fleet Management

Product Management

Car Rental

Customer Management

Strategic Decisions

Tactical decisions

Operational decisions

Business Events

Business events influence or trigger operational decisions.

Technical Events

Enterprise Decision Map

Fleet Management

Product Management

Car Rental

Customer Management

Strategic Decisions

Tactical decisions

Tactical decisions set / follow a plan.

Operational decisions

Business Events

Technical Events

Enterprise Decision Map

Fleet Management

Product Management

Car Rental

Customer Management

Strategic Decisions

Tactical decisions

Convertible
campaign

Operational decisions

Buying
new car

Get
available
car

Business Events

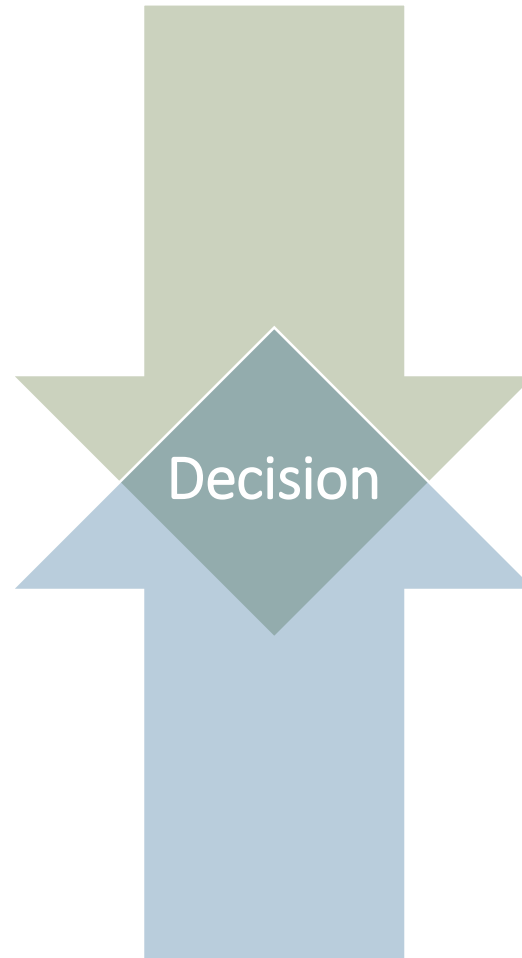
Repairing
car

Technical Events

Decision Discovery

> Top down

- > Corporate Strategy
- > Corporate Policies
- > Business Capabilities
- > Digital Business Models



> Bottom up

- > Business Processes
- > Key Performance Indicators
- > Controlling
- > GRC documentation

Types of Decision Automation

Algorithm

- Classic Decision Service
- Implemented in Code

Business Rule

- Design of Business Rules
- Execution in BR Engine

Predictive ML

- Discovery of Patterns
- Execution in ML Environment

Integrating the work of the data scientist



PMML

Predictive Model Markup Language

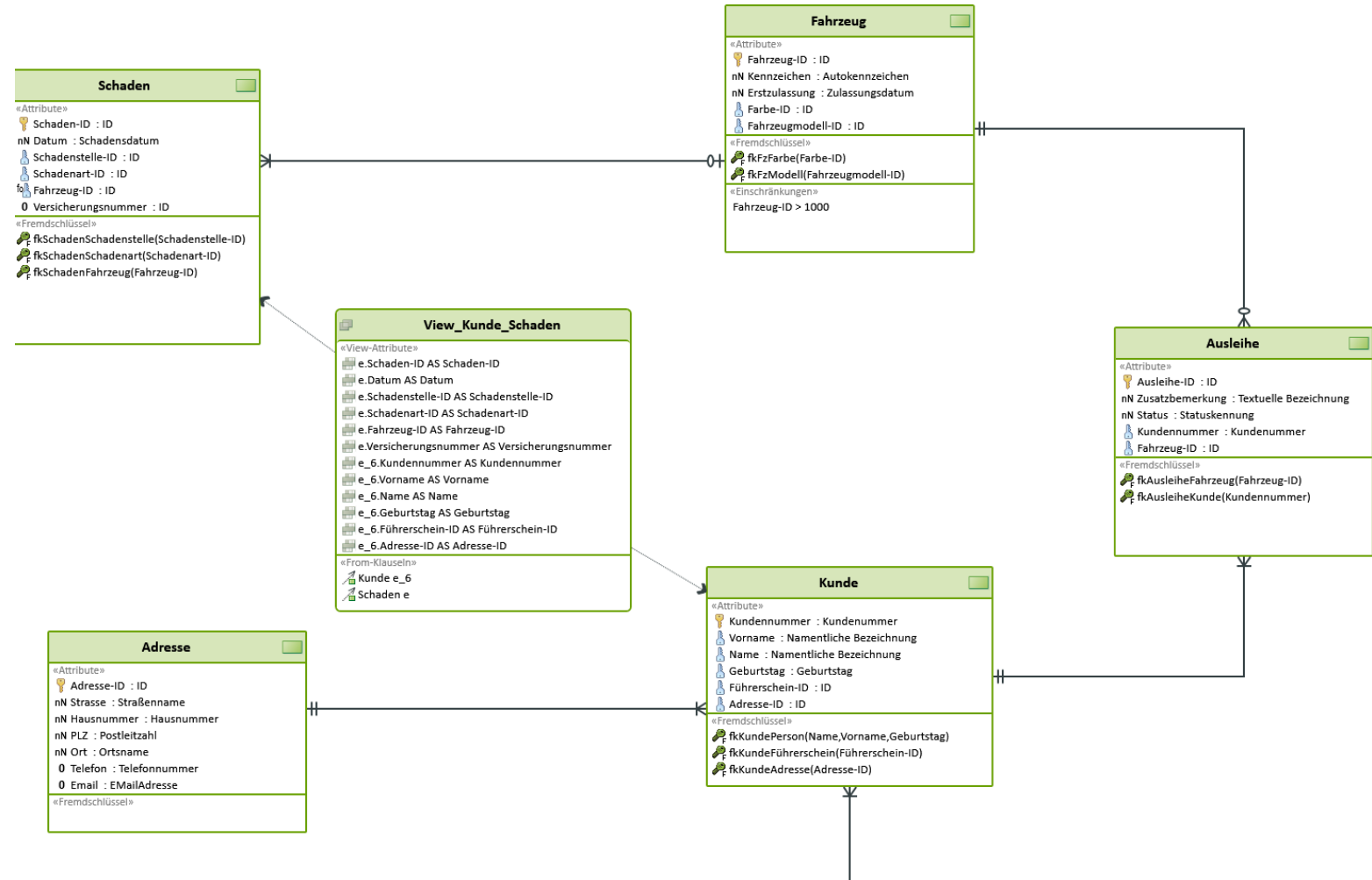
| |
|--|
| Data Dictionary |
| Data Pre-processing |
| Predictive Model: <ul style="list-style-type: none">- Neural Network- Decision Tree- ... |
| Data Post-processing |

Decision based on Prediction

Import PMML into DMN modeling environment

Integrating data modeling

- Connecting data used in decision with existing data models is a key to success



Decision Specification

Traceability between DMN Model and Data Models

Designing the Data-driven Enterprise

- › requires a Modeling Environment for:
 - › Basic DMN and BPMN models
 - › Aggregated views like the Enterprise Decision Map
 - › Traceability to data used in Decisions

Demo with MID Innovator

- › High-End Modeling Environment
- › Multiple User Roles
- › Notations & Standards
- › Shared Repository
- › MS-Office-like GUI

