Inland Revenue
Te Tari Taake

Decision Management in Tax Administration

Inland Revenue New Zealand lessons learnt and future developments

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Presentation Outline

- The Goal
- The Stages
- The starting Point: GST

  Results; impact of the results to the next (planned) stages
- Current stage
- Approaches
- The role of decision modelling, simulation and DMN
- Conclusions

The Goal

Paradigm Shift

from

product centric traditional risk management strategies

to

business strategy and (modern) analytical driven

decision management approach

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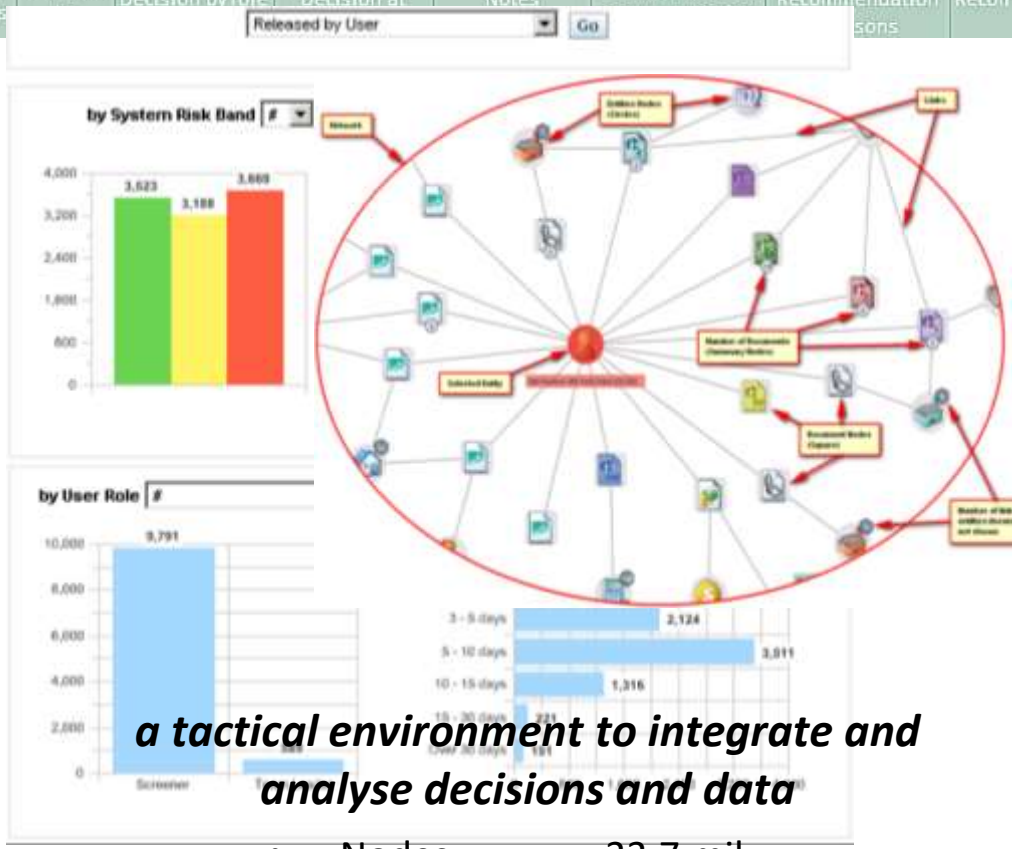
The Change

Focus: Capability
Success: Change Management

GST

Success!

- ✓ Straight through processing
  and front end risk analysis
- ✓ Operational efficiency and improved costumer satisfaction
- ✓ IR integrity Protected
- ✓ IR Policies Supported
- ✓ Visibility, trail and evidence at any point of the decision process
- ✓ 360º view of the customer
- ✓ Continuous Improvement



a tactical environment to integrate and analyse decisions and data

- Nodes 33.7 mil
- Relationships 272.9 mil
- Properties 2.06 bil
- Entity types 28
- Db Storage 444 GB
- Index on disk 246 GB

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The Move

Focus: Business Strategy
Success: Decision Management

The goal

» Enterprise Decision Management

based on the

» Delivery of hybrid and integrated enterprise solutions, conducted by the business

supported by

» Modern analytical culture

driven by

» Business strategic goals and principles

Building blocks

» Decision management Strategy

» Experimental Enterprise

» Combination of lean and traditional analytics principles

» Data Science Framework and Carrier

focus: continuous business value
sustainable agility
success: methodology

» Definition of a robust and sustainable methodological approach

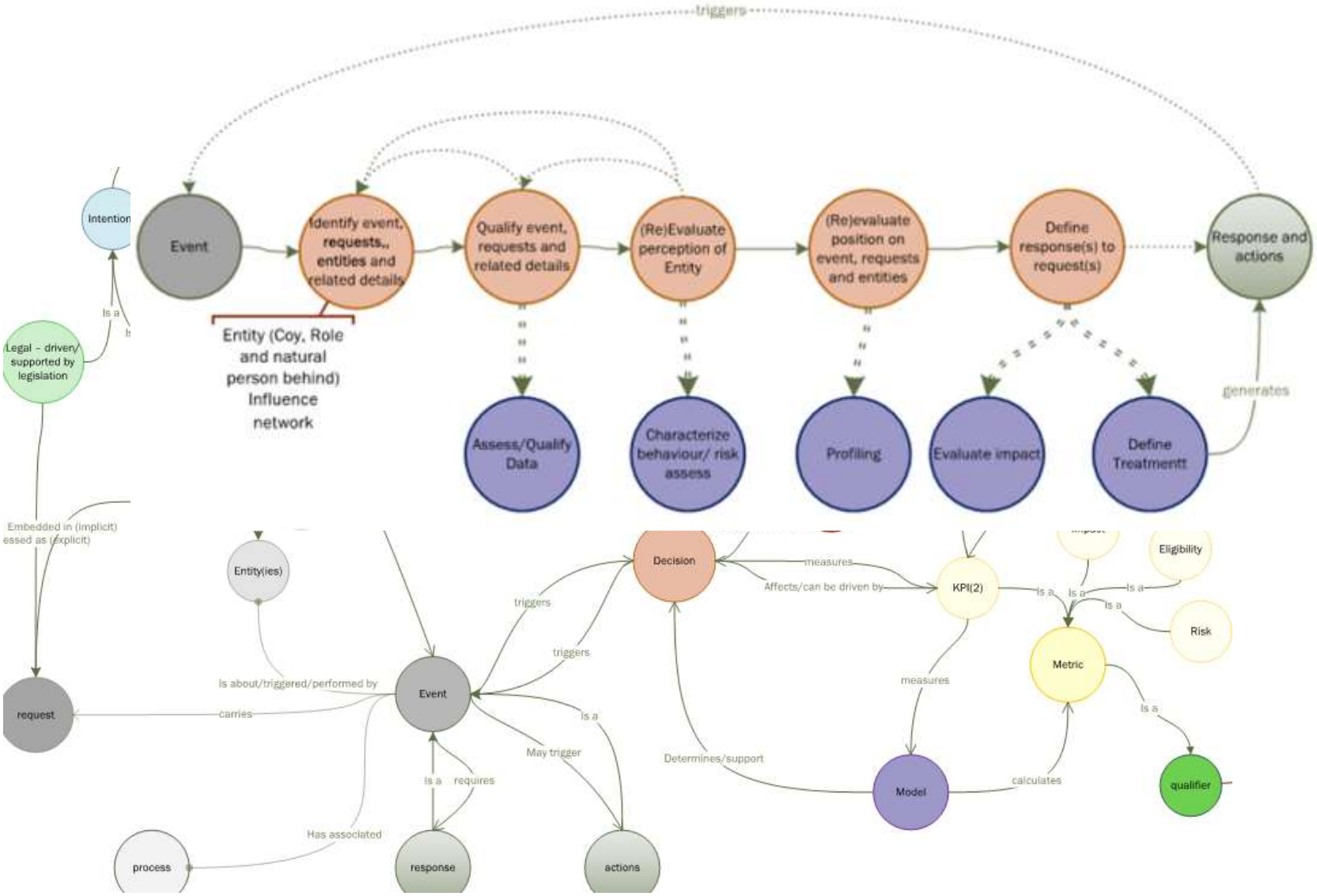
decision modelling; dmn

crisp/kads/scrum

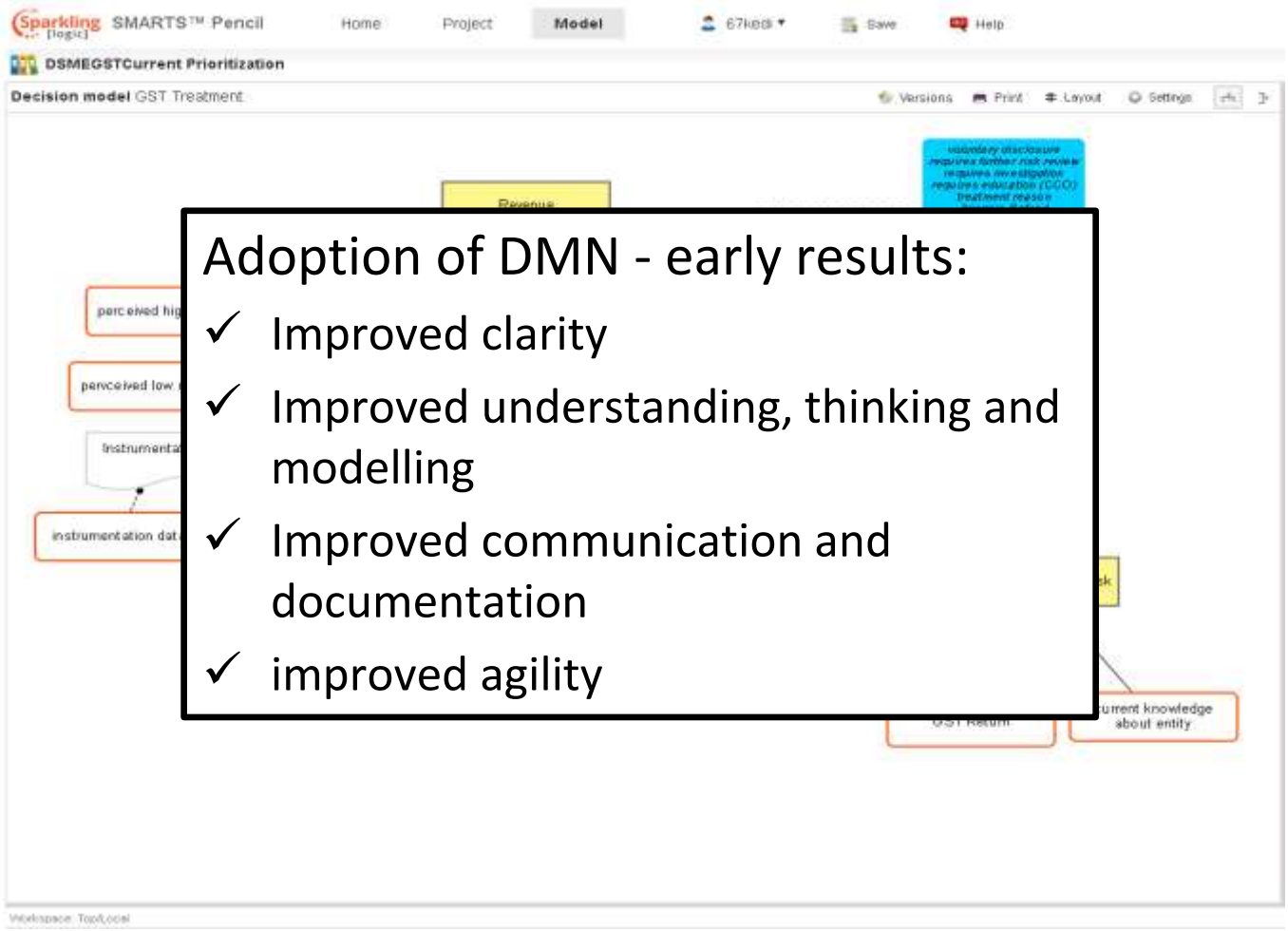
Rolling up the sleeves

- ✓ GST from risk identification and risk measurement to Risk and Costumer Profiling
- ✓ Other Tax and Social Products
- ✓ Business Strategy Principles
- ✓ Cross Government Collaboration
- ✓ Decision Management Framework
- ✓ Decision Modelling

Decision Management Framework



Decision Model for the GST Solution



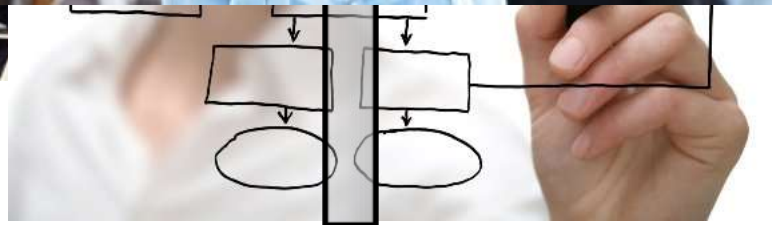
Adoption of DMN - early results:

- ✓ Improved clarity
- ✓ Improved understanding, thinking and modelling
- ✓ Improved communication and documentation
- ✓ improved agility

Rolling up the sleeves

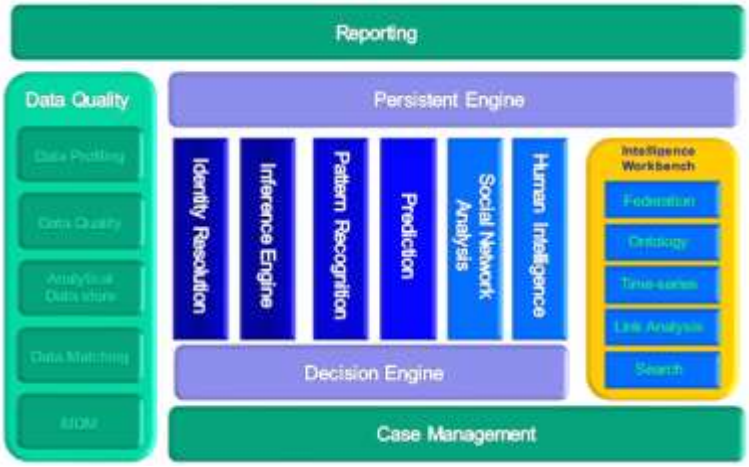
- ✓ GST from risk identification and risk measurement to Risk Costumer Profiling
- ✓ Other Tax and Social
- ✓ Business Strategy Pri
- ✓ Cross Government Co

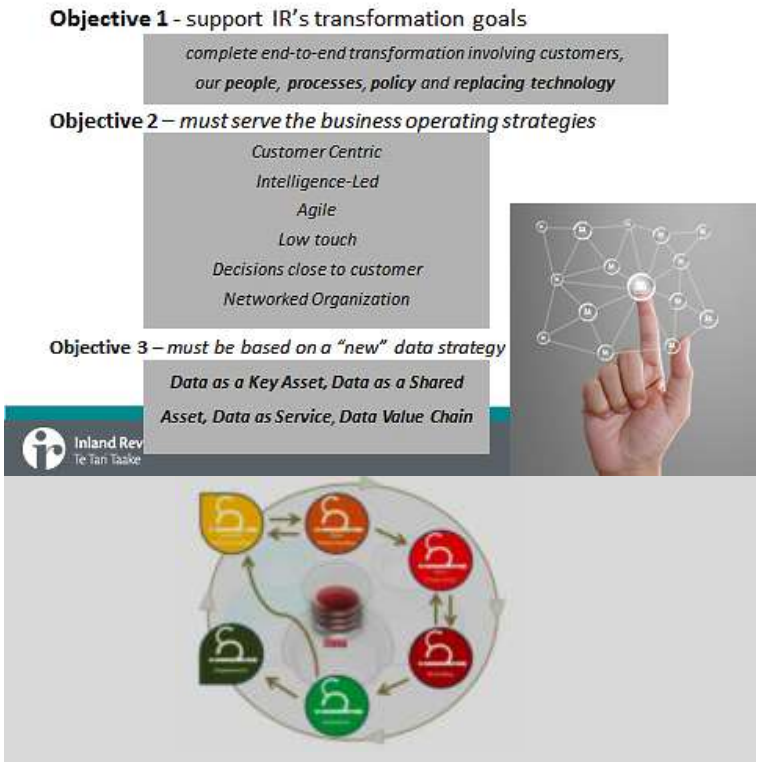
- ✓ Decision Management Framework
- ✓ Decision Modelling
- ✓ Metrics and KPIs
- ✓ Environment for Simulation
- ✓ Broadening the engagement with partners
- ✓ More and different types of data



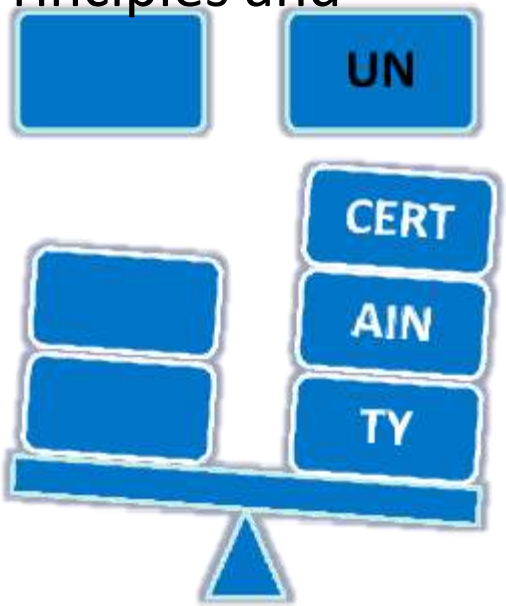
Business Transformation

Opportunities





- Focus on Analytics and Experimental
  - Advanced Analytic Platform (AAP)
- Data Science carrier and framework
- Decision Management Strategy and Framework
- Decision Modelling Principles and Approach
- Next Stage



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The Shift

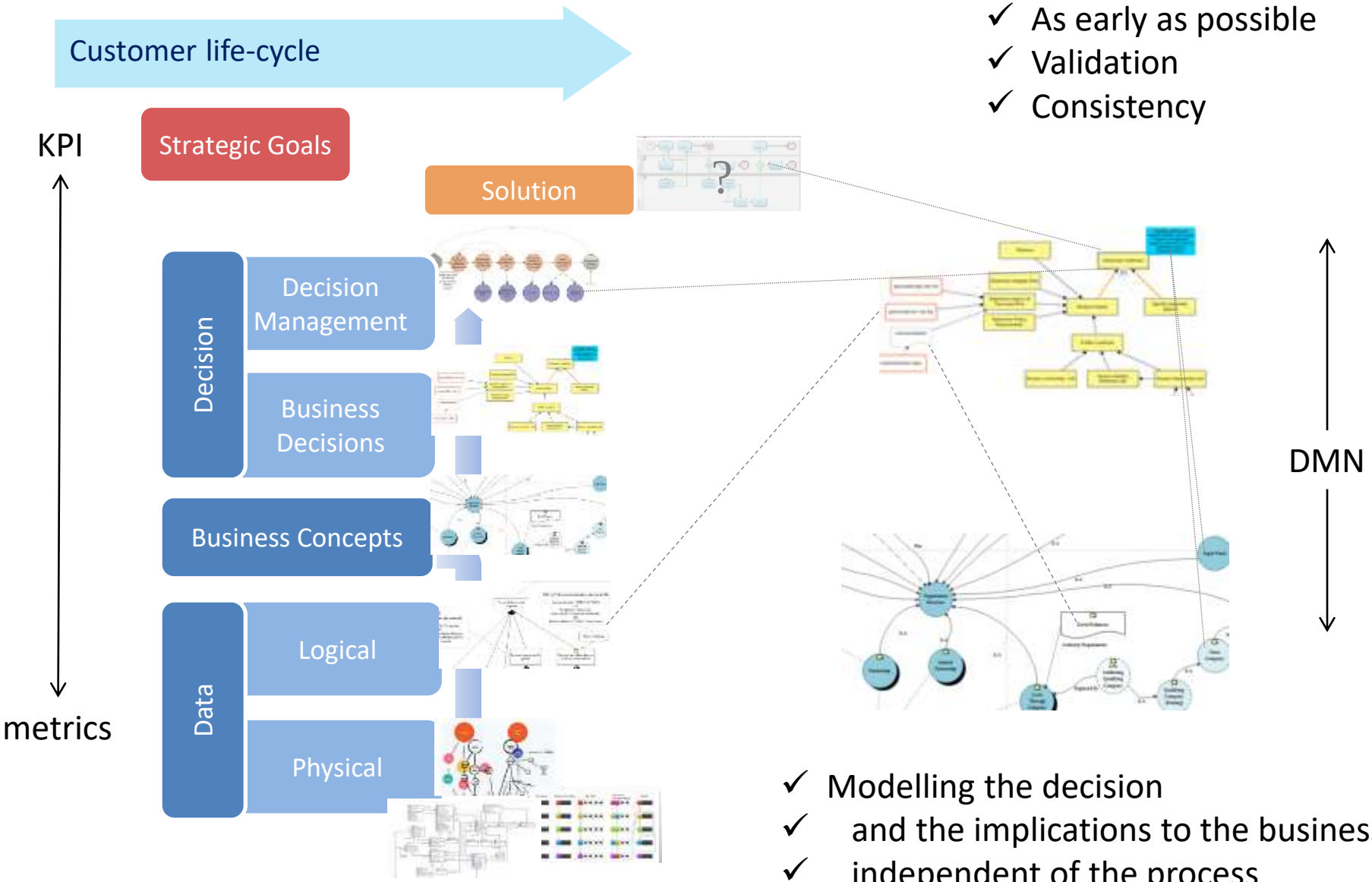
Focus: Customer

Success: Decision Optimization

Invisibility

Model Design Principles

- ✓ Acquisition at any point
- ✓ As early as possible
- ✓ Validation
- ✓ Consistency



- ✓ Modelling the decision
- ✓ and the implications to the business
- ✓ independent of the process

Conclusions

- The paradigm shift on the way to approach the problem and the solutions
  - enables the ability to deal with complexity
  - was a definite step towards bringing the Organization to understand
    - the need for the management of decisions beyond its internal boundaries;
    - the need for an architecture and infrastructure that supports capturing, integration and analyses of decisions and data;
    - experimental, lean and analytical approaches applied across the Organization

Conclusions

- The early adoption of a robust methodology, framework and infrastructure are a paradigm shift enablers and fundamental for a sustainable consolidation and growth
  - Data Science Framework
  - Decision Management Framework
  - Modelling principles

    DMN applied across different dimensions of the solution (knowledge engineering principles) following an agile and robust methodology (Crisp) supports:

    - representing and dealing with complexity
    - agility, consistency, communication, collaboration;
    - is a powerful documentation and requirements specification instrument

Conclusions

- Don’t underestimate the change that is required and the impact of the change;
- Cater for more change – including in Exec and sponsorship;
- There are always opportunities if you know what you want to achieve;
- Uncertainty, dynamicity and noise are facts; it pays off not to ignore them;
- Forge solid partnerships;
- Keep true to your team, goals, role and knowledge; the Organization and its customers need your skills and sanity