Data Monetization

Just collecting and storing data is not enough. Data potential should be recognized. Let’s explore the value of data and uncover ways to make use of it.

Joris Renkens, Lucia Falcioni, Loukas Pouis, Ondřej Kulhánek

KPMG Workshop

2021

Today's agenda

INTRODUCTION TO DATA MONETIZATION

KPMG APPROACH

REAL CASE STUDIES

Moderator Introduction & housekeeping rules

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Speakers Introduction

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Introduction to Data Monetization

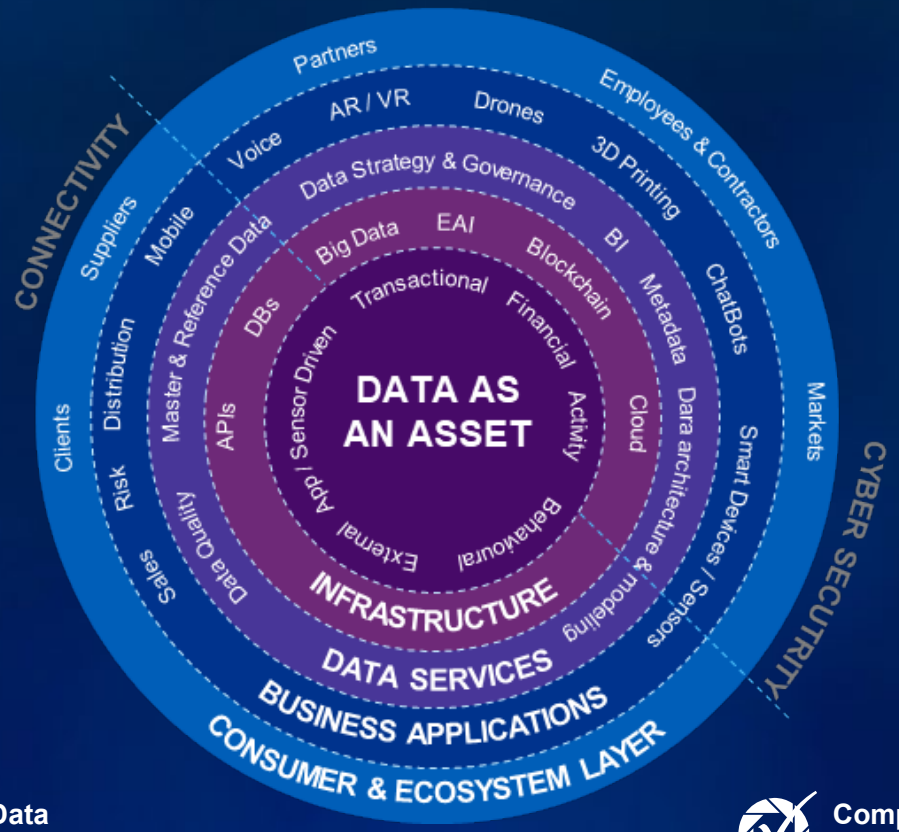
Data is a valuable asset that needs to be managed

There is a significant shift in the position of data in the Enterprise architecture. Data nowadays is recognized as the „Core“ of any successful 21st century enterprise.

To generate its value, data must be accessible and available for business applications and processes.

Customer satisfaction & intimacy

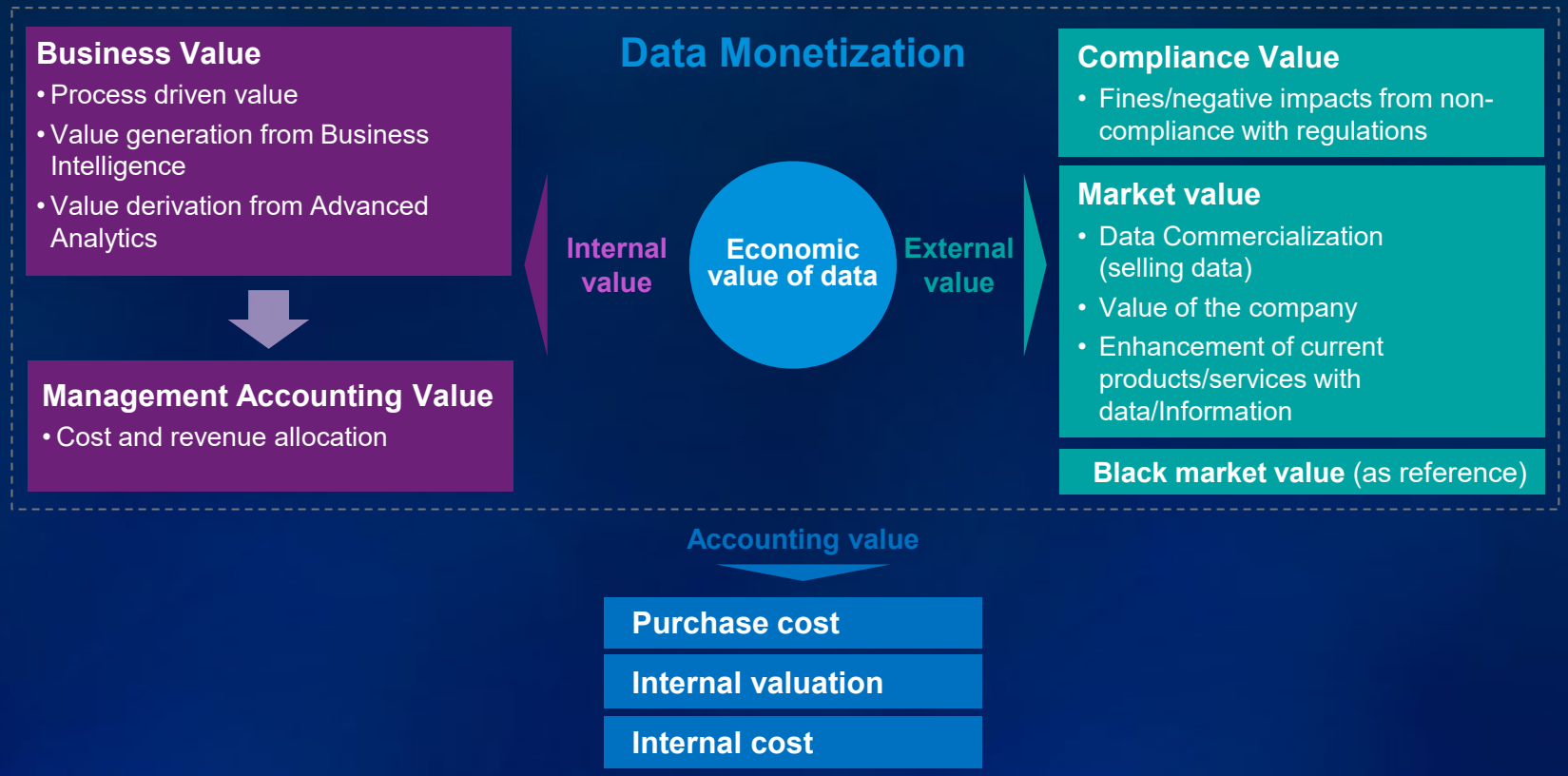
Workforce efficiency



Data as a service

Compliance and risk reduction

Data is valuable, but what exactly is this value?



How can companies monetize data?

Data monetization

Extracting value from data through its internal or external application as a raw material, product or service.

Google

40 % decrease in energy consumption used for cooling data centers thanks to AI

BURBERRY
LONDON ENGLAND

50 % increase in repeated purchases thanks to customers' data from loyalty programs

Infonomics*

Management discipline of measuring and accounting for the economic benefit of data within an organization.

Coca-Cola

4x higher chance for an advertisement on social media to be opened thanks to advanced analytics

PAYBACK orange Telefónica patientslikeme

direct sale of data as revenue stream
(customer behavior, anonymized customer data on diseases, location data, loyalty card data etc.)

* Terminology used by Gartner

Source for success stories: SLÁNSKÝ, David. Data a analytika pro 21. století. [Praha]: Professional Publishing, 2018. ISBN 978-80-88260-25-7.

KPMG Approach

KPMG Infonomics Engine

… because recognizing data value leads to discovering new business potential

‘We produce vast amount of data, but we are helpless to find its most beneficial use.’

‘We are wondering how data can accelerate our business strategy and what revenue or cost savings it might bring.’

Can you quantify the value of data?

Quantified Opportunities

- AI algorithm that will recommend the most beneficial business opportunities for particular company
- A continuously growing library of potential data-driven use-cases for business growth based on industry

Data Valuation

- A comprehensive methodology that will calculate the economic value of data
- AI algorithm that will combine three data value dimensions: internal, external and accounting

Intelligent Data Discovery

- A sophisticated component that will look for and analyze structured and unstructured data, metadata and logs from various data sources
- AI algorithm that will analyze the quality of data and discover business meaning based on industry

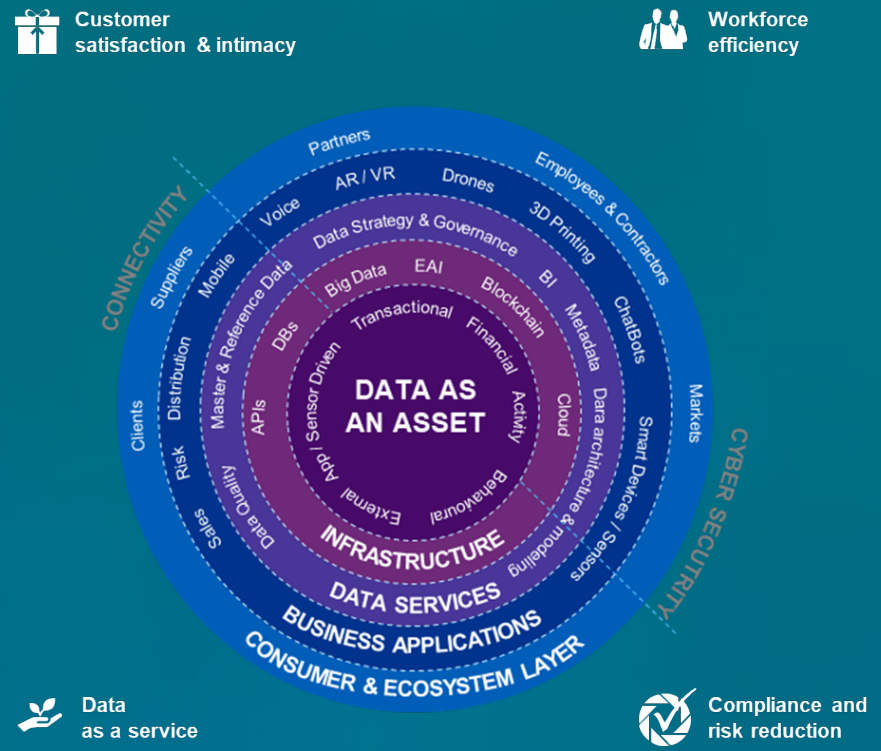
KPMG INFONOMICS ENGINE

A user-centric approach to data monetization

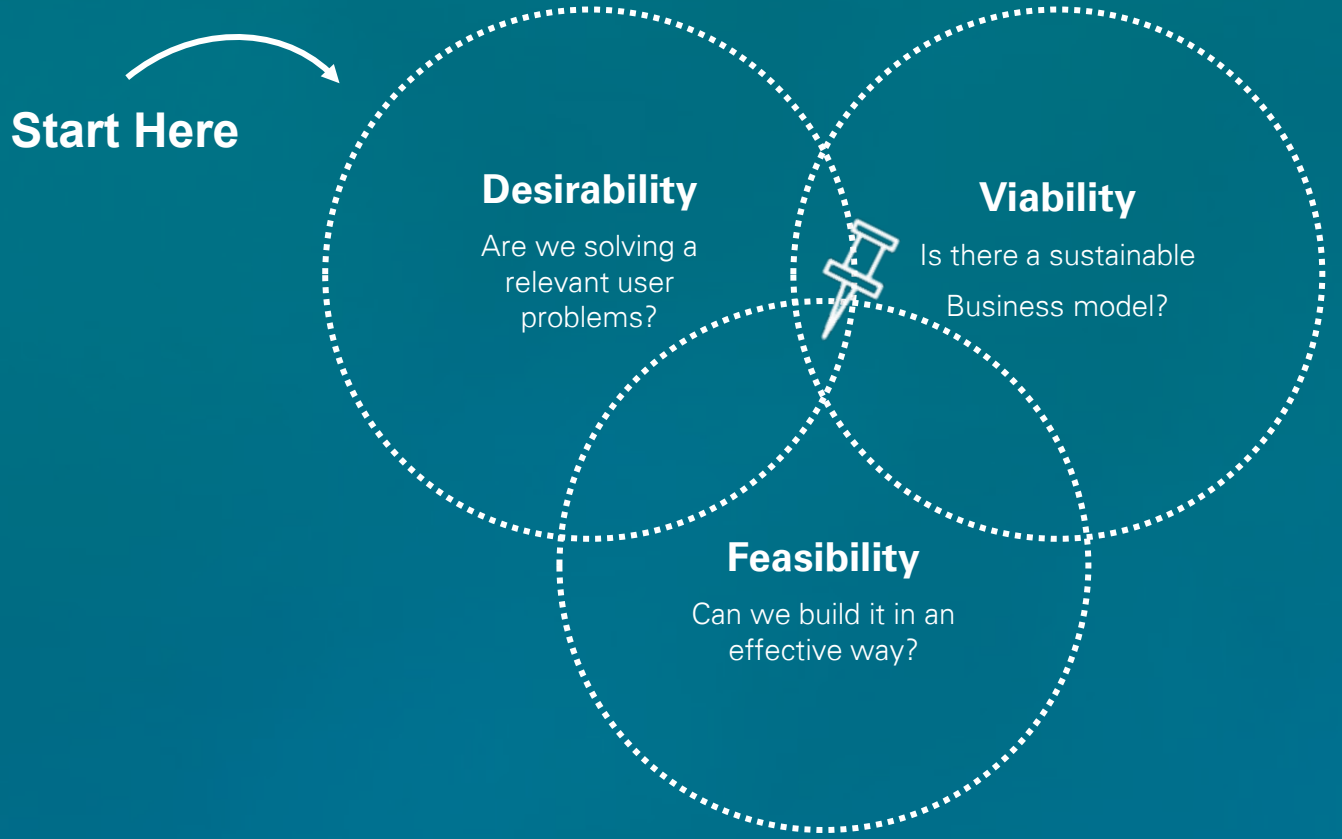
Joris Renkens, BE

An insight is not a product, a data product is:

"Anything that can be offered to a market that might satisfy a want or need"

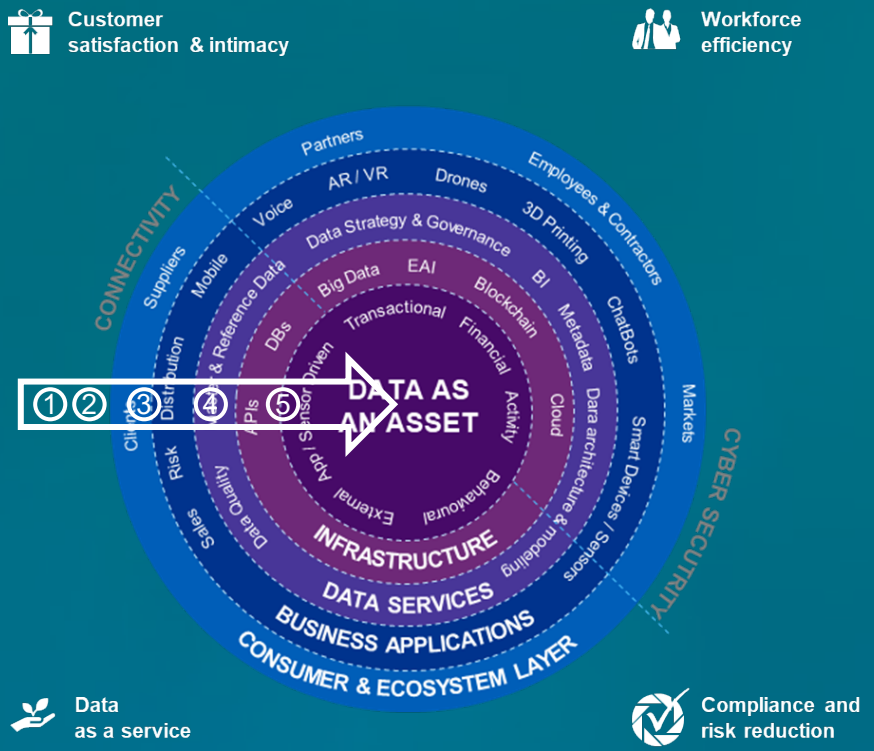


A good product needs to be desirable, viable and feasible

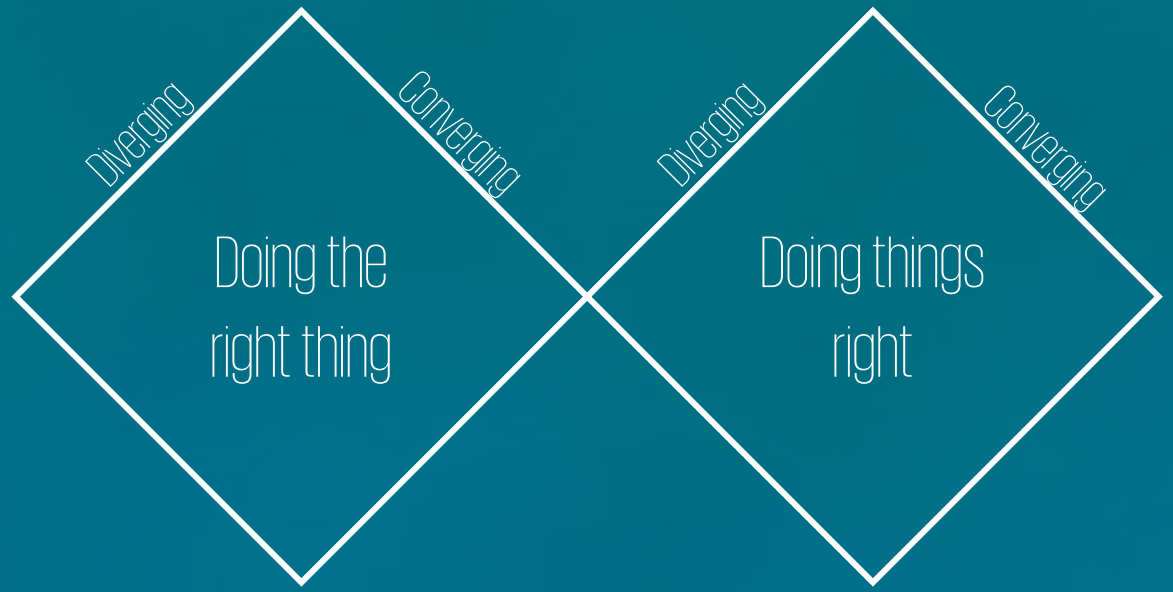


We take an outside-in approach to identifying opportunities

1. Who are the (potential) users of our data products?
2. What problems do our customers experience?
3. How can we solve those problems (solutioning)?
4. Which business and operating model do we need?
5. What technologies and data sources do we need to create those solutions?



Design thinking helps us to build desirable products



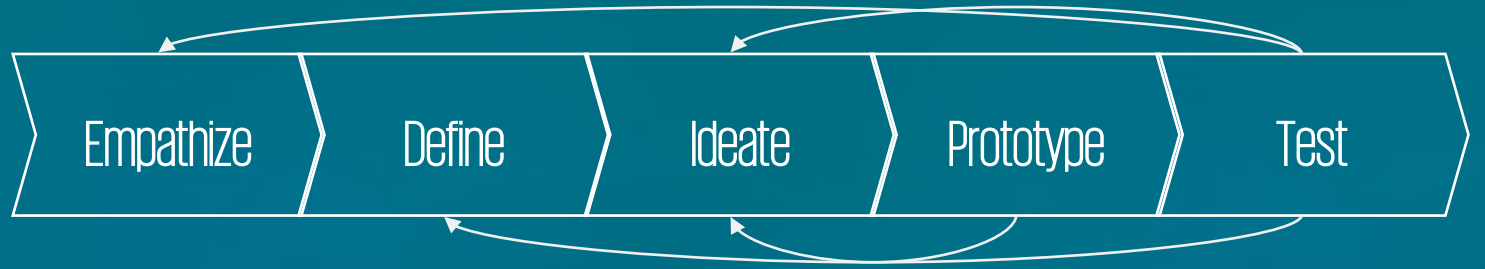
5 stages of design thinking

Design thinking is not a linear process

Learn about users
through testing

Tests create new
ideas for the project

5 stages of
design thinking



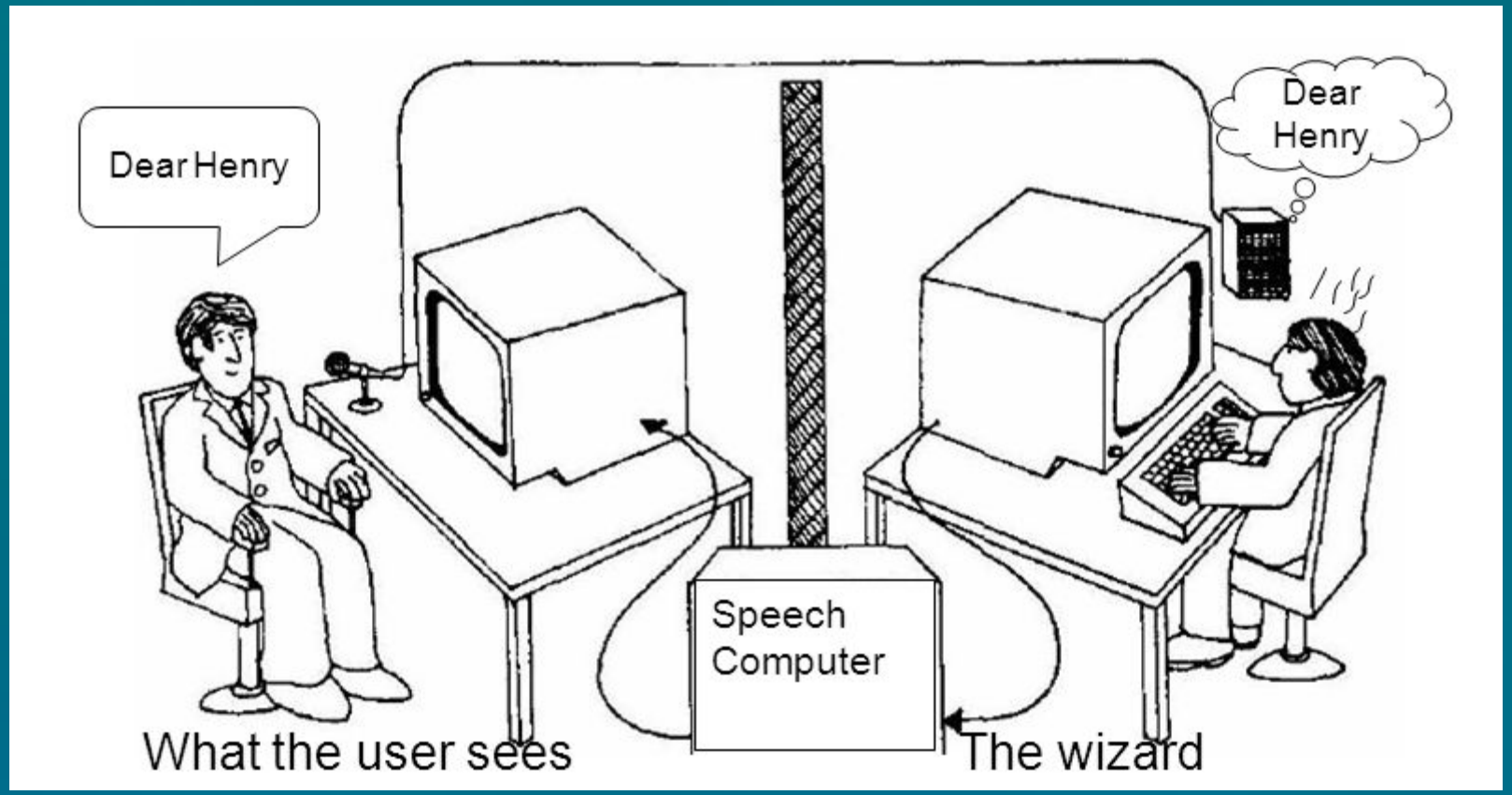
Learn from prototypes
to spark new ideas

Tests reveal new
insights that redefine
the problem

Pivot as many times as possible before you run out of runway

"A pivot is a change in strategy without a change in vision"

MVPs allow us to test assumptions in a cheap & fast way



MVPs allow us to test assumptions in a cheap & fast way

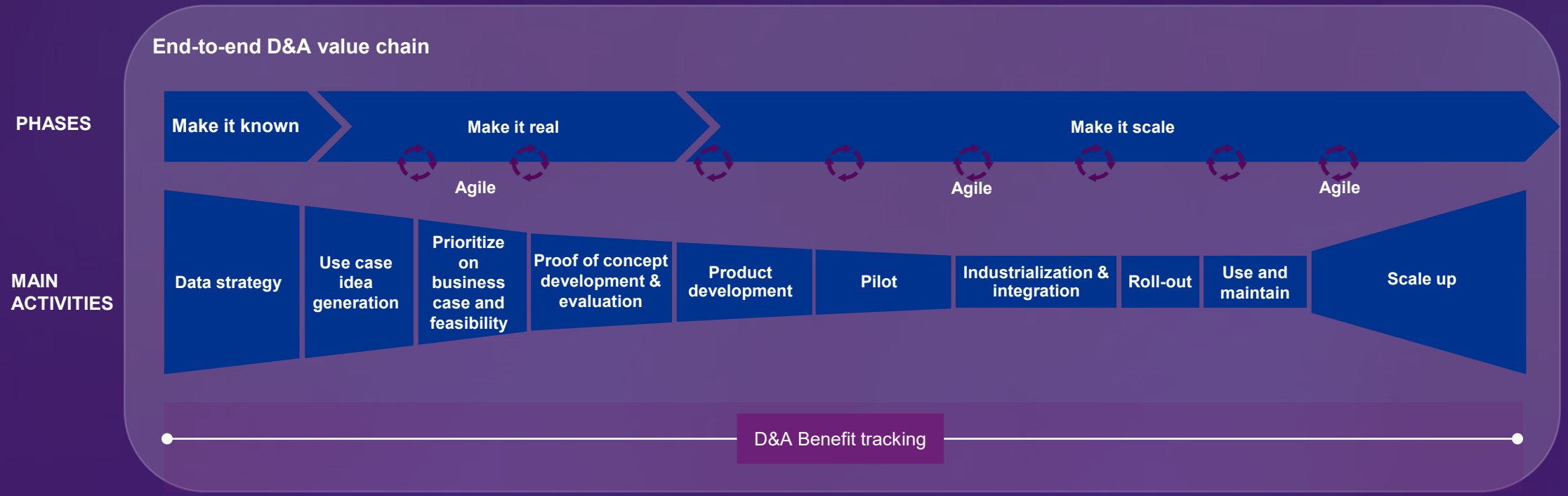
Questions

Benefit Tracking

Lucia Falcioni, NL

Value creation doesn't stop once the Data & Analytics Solution is implemented

D&A benefit tracking is integrated within the funnel process end-to-end



Three key challenges surround D&A benefit tracking

Challenge	Challenge definition
1  **Defining value**	How to connect benefits and cost drivers truly relevant to the business to, often abstract, technical model KPIs?
2  **Measuring value**	How to accurately measure model performance and evaluate true benefits, often in a dynamic environment?
3  **Responding to changes**	How to set up a process or governance that ensures responsiveness to changes, while being transparent and efficient?

A leading Dutch bank created value with the right central steering and business ownership

1 Defining value

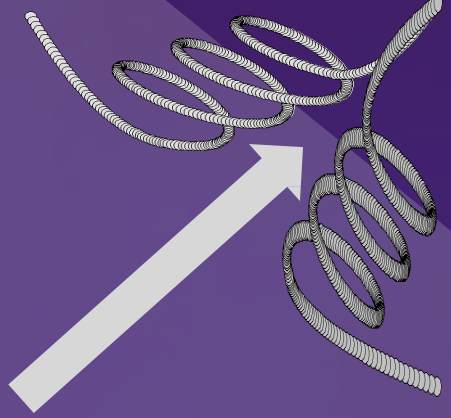
SPEED

- Push towards usable D&A solutions that bring instant value to business
- Responsible for budget allocation and solution success

VALUE

Competitive use of analytics and the new stack, allowing the client to win in the market of today and tomorrow

BUSINESS OWNERSHIP



- Inspire business to see the potential of D&A
- Ensure high quality analytics

QUALITY

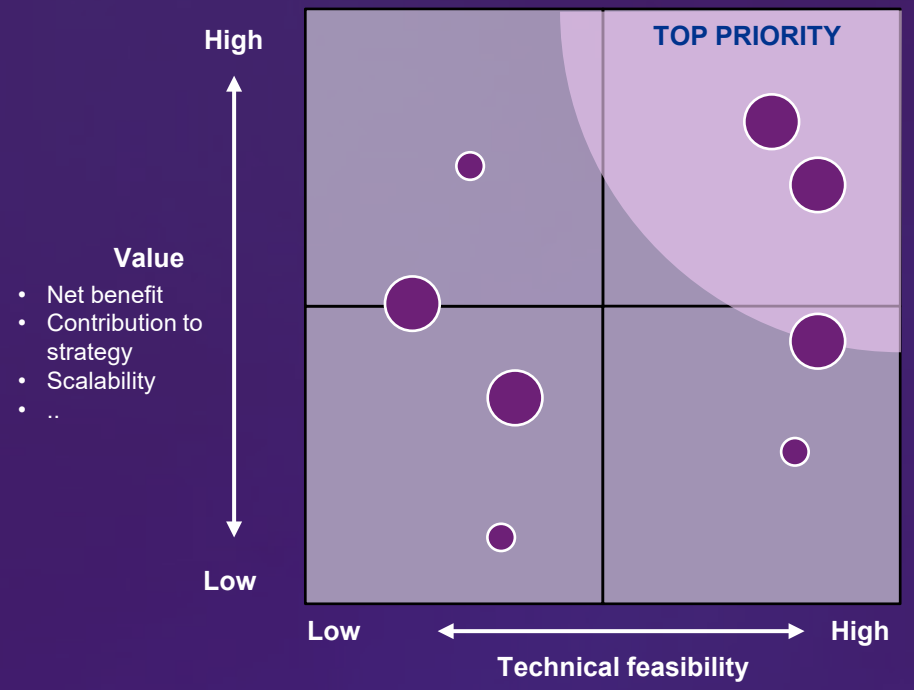
CENTRAL D&A STEERING

Besides classical issues like ideation, metrics, scoring and prioritization two matrices play a role during benefits tracking

2 **Measuring value**

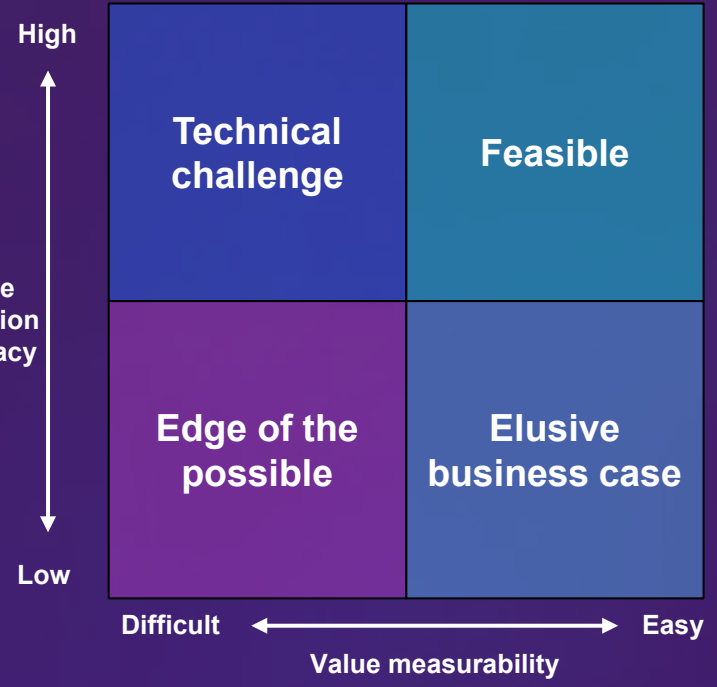
Use Case Prioritization

Use case prioritization matrix



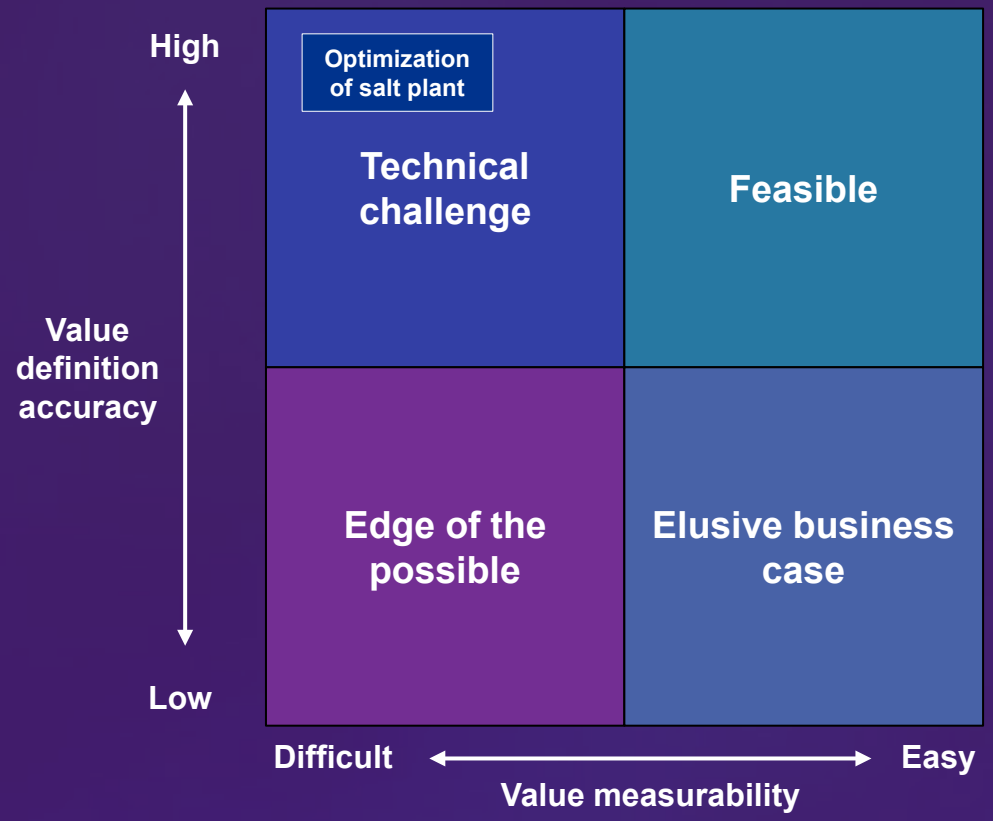
Use Case implementation

Benefit tracking use case difficulty matrix



Using an advanced measuring approach we proved the impact of an optimization algorithm

Benefit tracking use case difficulty matrix



Case study

Optimization of salt plant

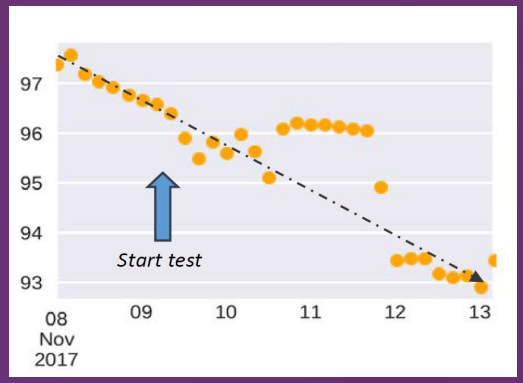
Objective: Maximize salt production rate by adjusting process settings

1) Algorithm input: production parameters (process parameters, brine rate and properties, environment)
2) Algorithm output: optimal process settings
3) Results: Salt production rate
4) Benefits: Contribution of settings improvement to production rate

Evaluation: Sequential A/B test

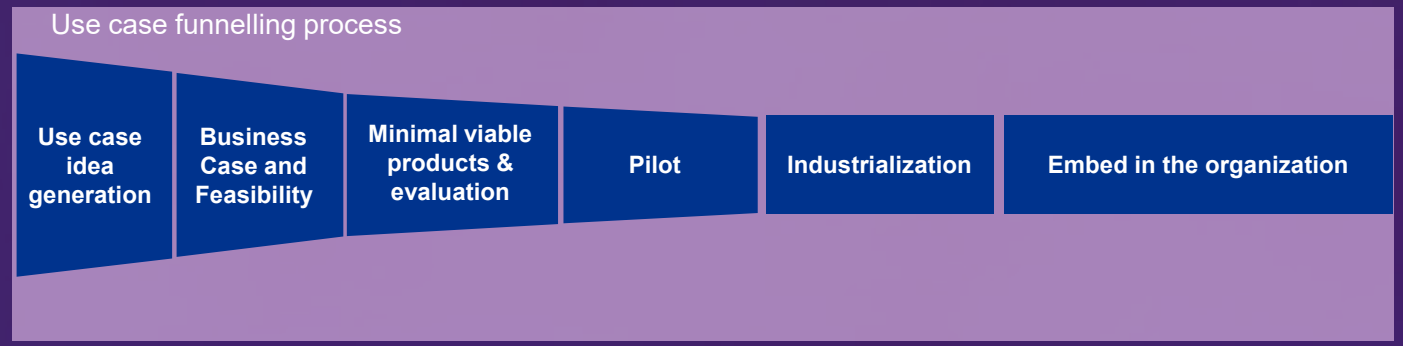
Outcome: Measurement proved that there was no significant change derived by the algorithm: decreasing trend in salt production rate overall.

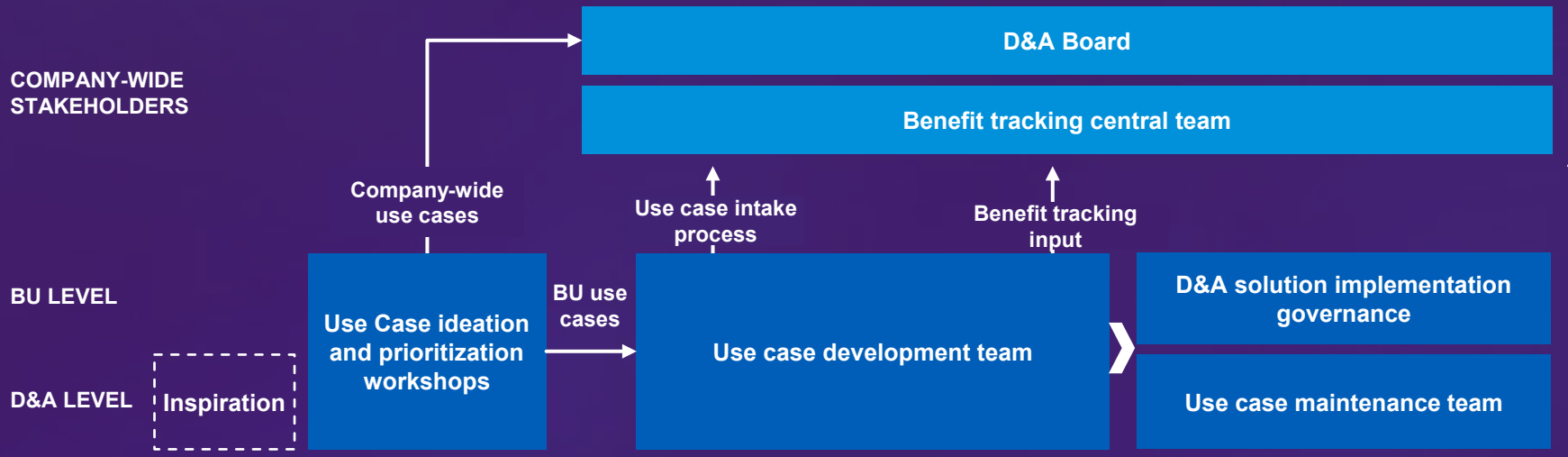
Due to the effect of external factors (i.e. salt quality used) it was hard to determine the effect of improved settings during the test.



A supportive governance is key for scalability and implementation

3 Responding to changes





Across clients we see common challenges of funnel management which need proper governance and process to be addressed:

- **Cross-BU involvement**
- **Business ownership vs D&A central steering**
- **Ownership of post-release activities**

To summarize, three key pillars that help ensure D&A initiatives deliver and track true business value

Key pillars for a value-driven approach to D&A benefit tracking

1 Defining value	2 Measuring value	3 Responding to changes
‘Business value first’ – throughout the lifecycle	**Case-by-case methods for D&A value tracking**	**Streamlined governance and process**

Measuring the benefits of use cases takes time, effort and a structured approach.
Start with the right use case(s) to make it agile and create support from the organization from the start.

Questions

Leveraging data for optimizing a bank's branch network

Loukas Pouis, CY

Unlocking the value of data in cost optimization

Indicative areas where most of the benefits exist

How data can be leveraged?

Minimize cost of operation in the core organizational functions

- What is the current status of my operating costs across my core functions (e.g. finance, IT, etc.) ?
- How to find the best use cases for introducing automation?
- What is the optimal level of cost considering other factors like performance and profit?

Set-up an optimal network of stores

- What is the current health status of my branch network?
- Where should I open a new store to maximize profitability?
- How to strategically position a new store based on the competition presence (i.e. increase market share)?

Utilizing workforce efficiently

- How to find the sweet spot between workforce power and high quality of process execution incl. customer service?
- How to set an optimal, automated employee scheduling?
- What factors are associated with higher employee engagement?

The Branch Network Optimization case

Key challenges in the banking sector

The current banking environment, as well as the changing customer behaviour towards banking, have posed several challenges on the banks.

Competition

- Maintaining a competitive edge.
- Increase profit without affecting customer experience.
- Changing customer behaviour: the rise of the digital customer.

Cost

- Imbalanced branch performance
- High operational cost
- Limited budgets as maintaining all branches open, esp. now with many transactions being completed digitally, is very costly.

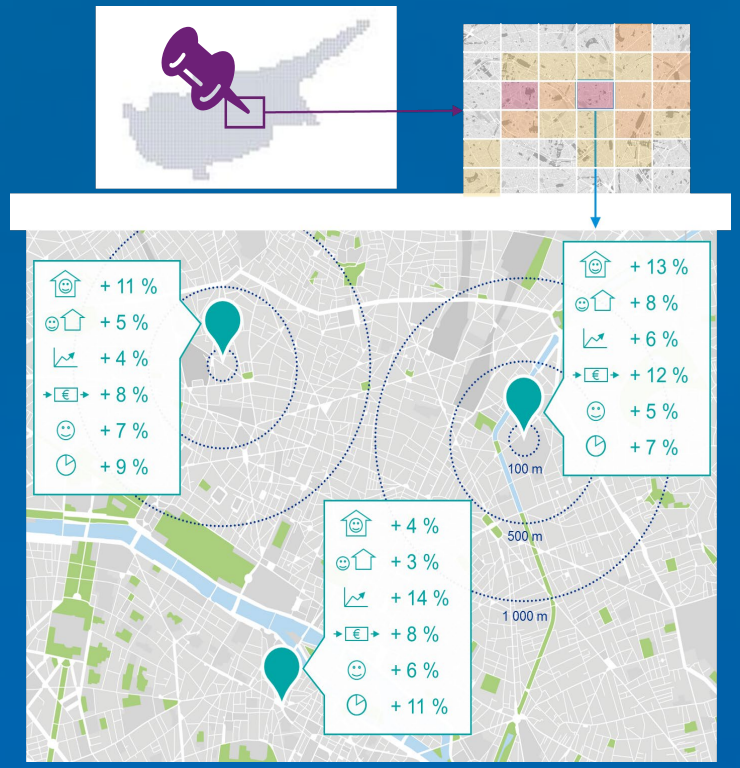
Knowledge

- Monitor current locations to assess markets suitable for expansion or relocation.
- Limited knowledge of new locations related to ambitious expansion programs.
- Absence of intelligent site selection model.

Goal of our solution : Optimizing the Branch Network

Build a solution that sources internal data, which are subsequently enriched with external data sources and executes different analyses on top of those. The outcome of those steps is the generation of the necessary results to help the organizations take the right decisions related to:

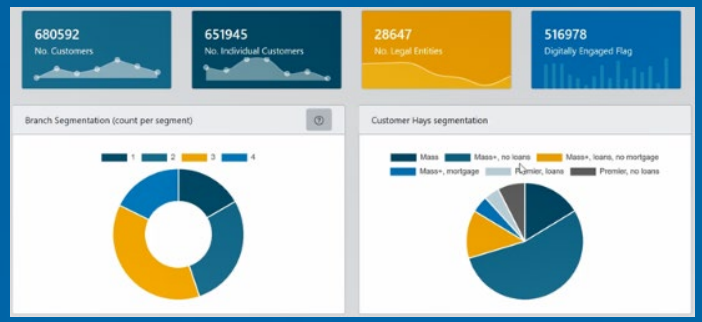
- Optimized locations
- Optimized and focused services
- Customer-centric approach
- Optimized results
- Differentiation from competition
- Support digital transformation initiative



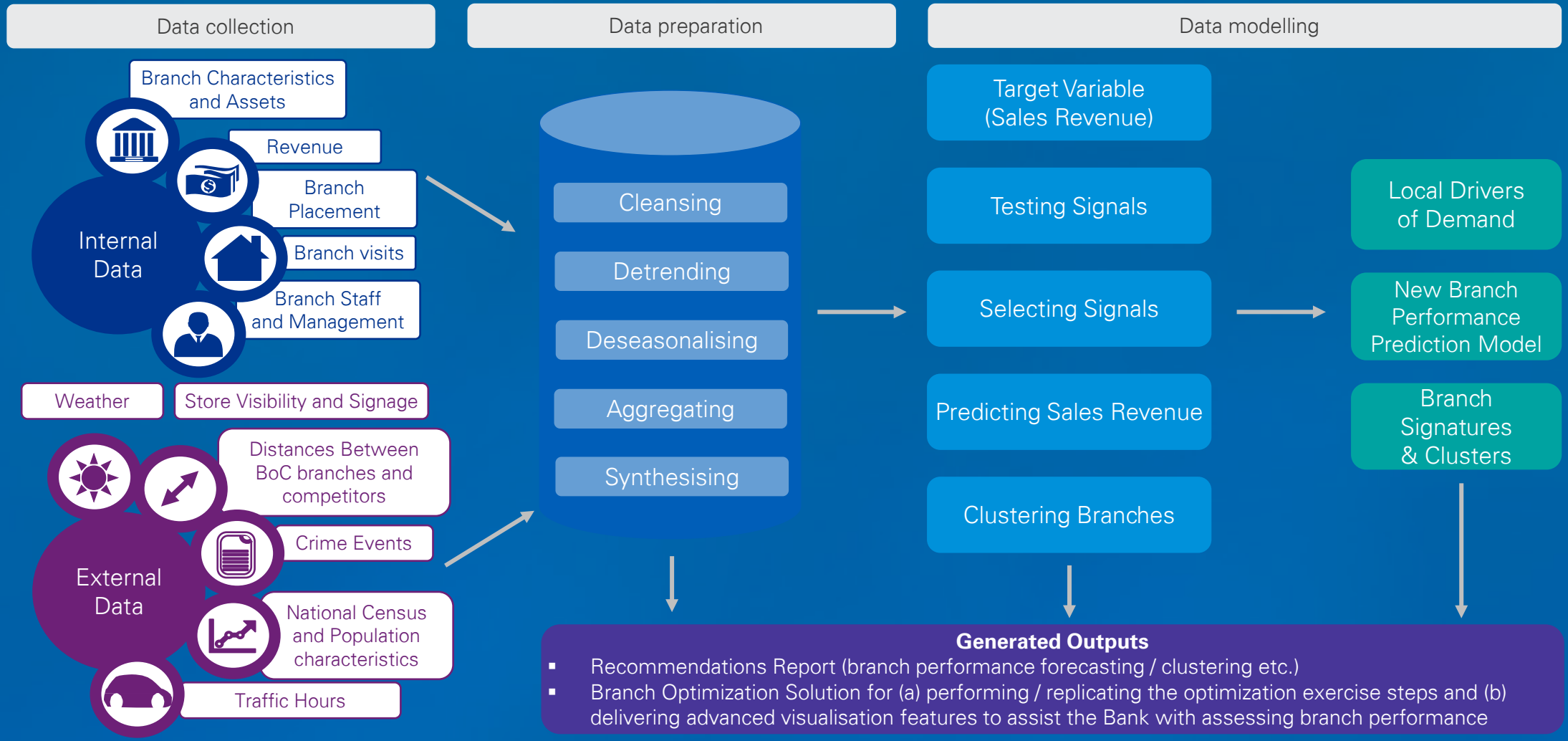
Key features of the solution

We supported the Bank to optimize its branch network based on the business ambition and digital transformation by developing an algorithmic tool with the capabilities of:

- Customer transactional behavioural analysis and segmentation
- Branch network performance analysis
- Calculation of optimal network size based on customer demand and capacity to serve by current number of employees
- Recommendation with regards to which branches should close or open so as to maximize network profitability
- Customer migration within the network in case of closing of their primary branch while maximizing their retention



Our solution's methodology / process



What was the outcome for the client

The Branch Network Optimization solution offered different opportunities to our client:

1. The development process was one of the key exercises for client to understand its customer base behaviour and trends
2. The first automated method for actually measuring the overall branch network performance
3. One of the key initiatives, linked to data-driven decision-making and actions focusing on the branch network and optimizing global profit

How the client utilizes the solution

Optimize the size of the branch network based on the demand, banker capacity and customer preferences mapped by district across the country

Migrate the customers to primary branches that match their banking behaviour and have the skillset they require

Optimize the network workforce based on the optimized network that will provide recommendations for branch network size and customer migration

Decide on optimal locations for opening new branches

Actions taken: 15 (out of 100) stores were closed that resulted in **1.8% profit increase estimation**

Questions

Data monetization in the automotive industry

Ondřej Kulhánek, CZ

Our client, large automotive OEM, wants to uncover customer data potential from both retail and digital worlds

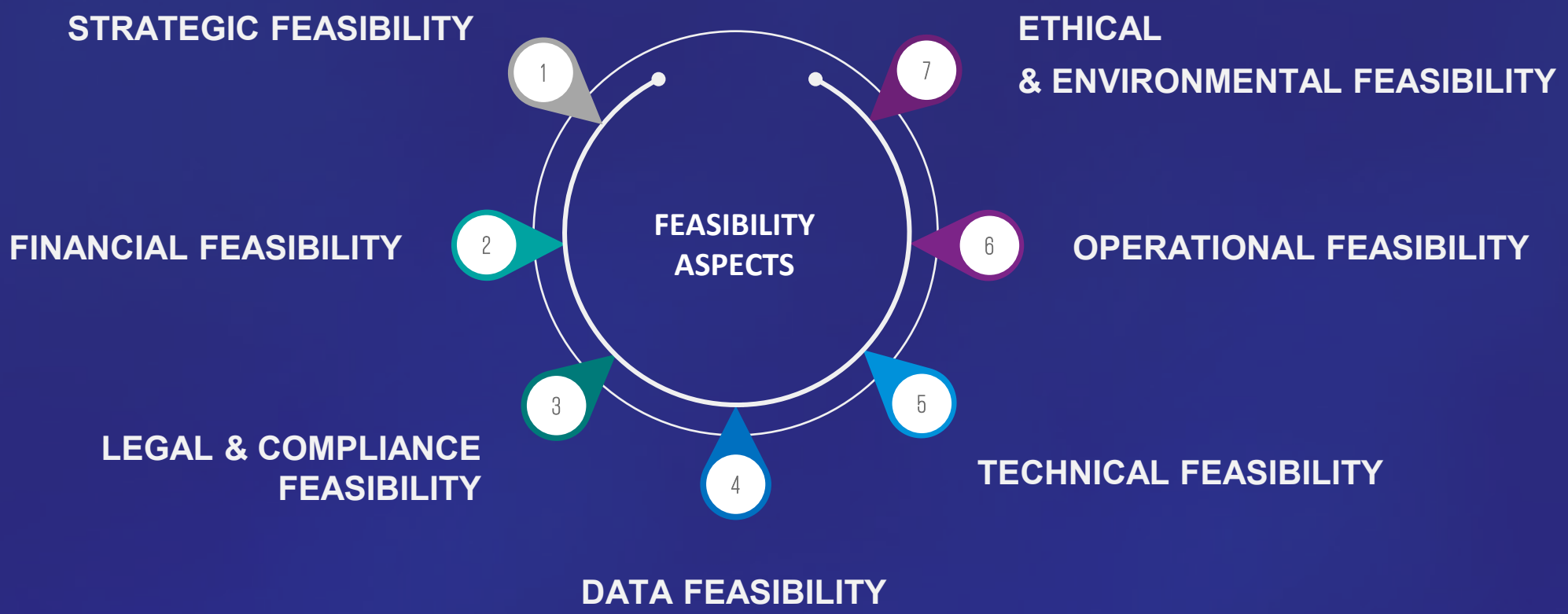
CLIENT MOTIVATION

To effectively share customer data with dealers and thus provide its customers better services

KEY OBJECTIVE

To find most feasible data-driven business use case and discover business potential of customer data by quantifying its benefits

Selection of the most feasible use case



Next Best Action has been selected by top management

The Next Best Action (NBA) is a **customer-centric approach** that describes a **sequence of trigger-action** and their possible combinations along the customer journey.

Buying a new car → Offering new products → Development of new feature / service → Offering new products

EXAMPLES OF SCENARIOS:

- ✓ Test drive offering after car configuration
- ✓ Notification for a client after scheduling a test drive
- ✓ Predelivery upsell offer
- ✓ Driving style tips
- ✓ Merchandise offering after car delivery
- ✓ Expiring warranty notification

Business case calculation of Next Best Action

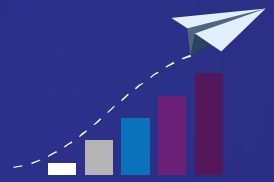
Challenge

What cost and revenue drivers need to be considered (from the car manufacturer's perspective) when calculating the business case for Next Best Action?

Please share your ideas with us now!

KPMG prepared a sophisticated business case model

- ✓ **Referential (generalized) view**
- ✓ **1 market, possibility to scale**
- ✓ **TCO period: 5 years**
- ✓ **HQ point of view**



KEY BENEFIT STREAMS

- ✓ Increased sales (vehicles, services, equipment, merchandise)
- ✓ Saving FTEs (processing of bids, transport time)

OTHER BENEFIT STREAMS

- ✓ Products and inventory optimization
- ✓ Customer satisfaction (NPS)

COST STREAMS (CAPEX & OPEX)

- Advanced Analytics
- Customer Segmentation
- App development
- Data sharing enablement & system integration
- Data quality & Master data management
- External data
- Next Best Action solution maintenance

NBA Business Case showcase

Questions

Summary

Introduction

- ✓ Data monetization
- ✓ KPMG Approach

Case studies

 A user-centric approach to data monetization

 Benefit Tracking

 Leveraging data for optimizing a bank's branch network

 Data monetization in the automotive industry

Q&A

Thank you!

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