

DATA STRATEGIE



Jan Meskens
11 – 2024



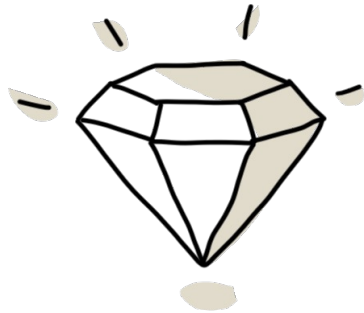
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INTRODUCTION

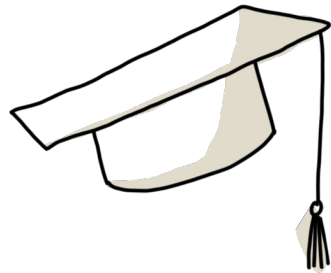




Jan Meskens



Data and AI Strategy
Consultant



Lecturer of several AI and
Data Strategy Trainings



Founder and Manager
of Sievax





Jan Meskens



linkedin.com/in/janmeskens



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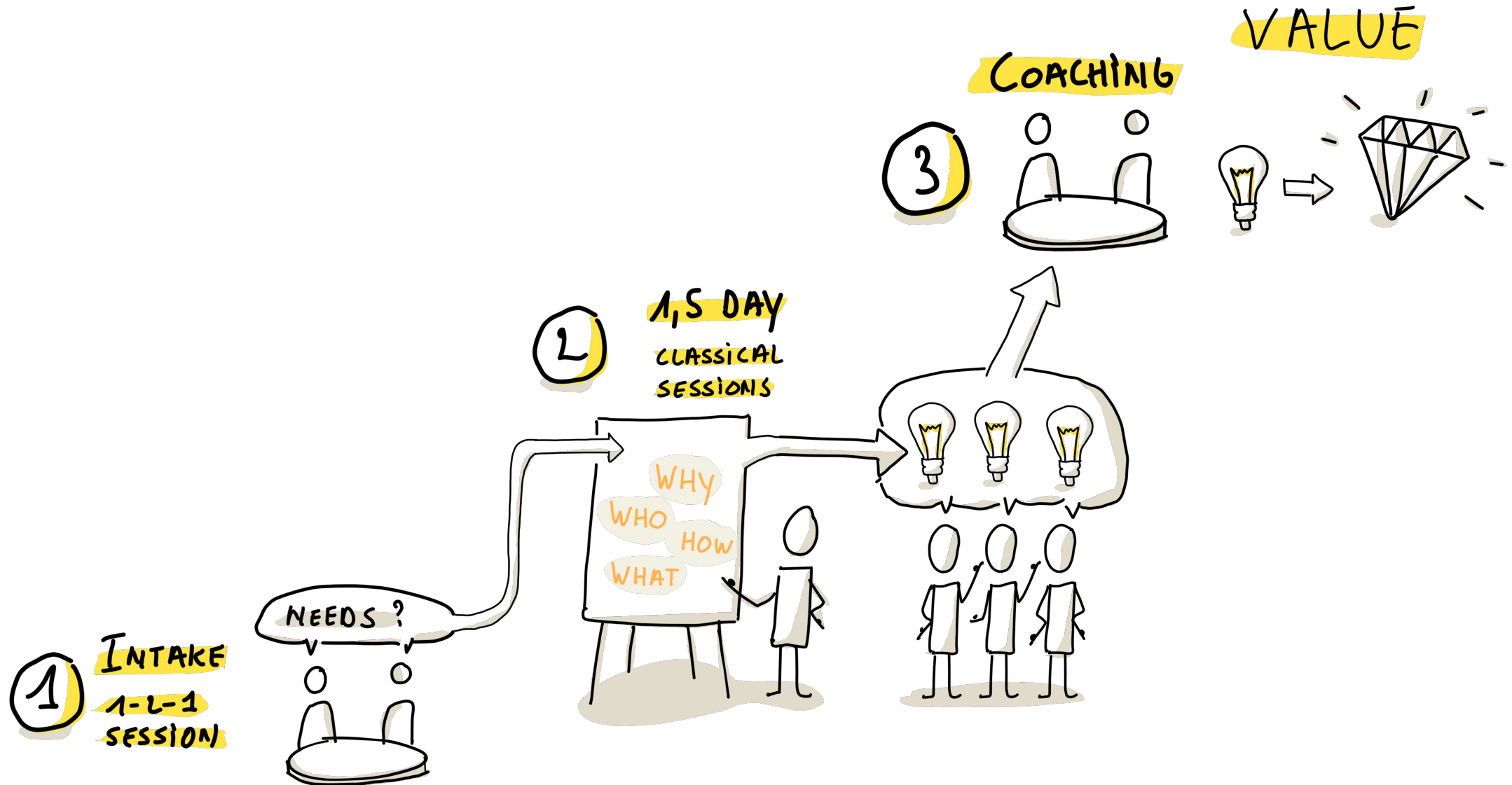




WHO IS WHO?



TRAINING OVERVIEW



TRAINING OVERVIEW

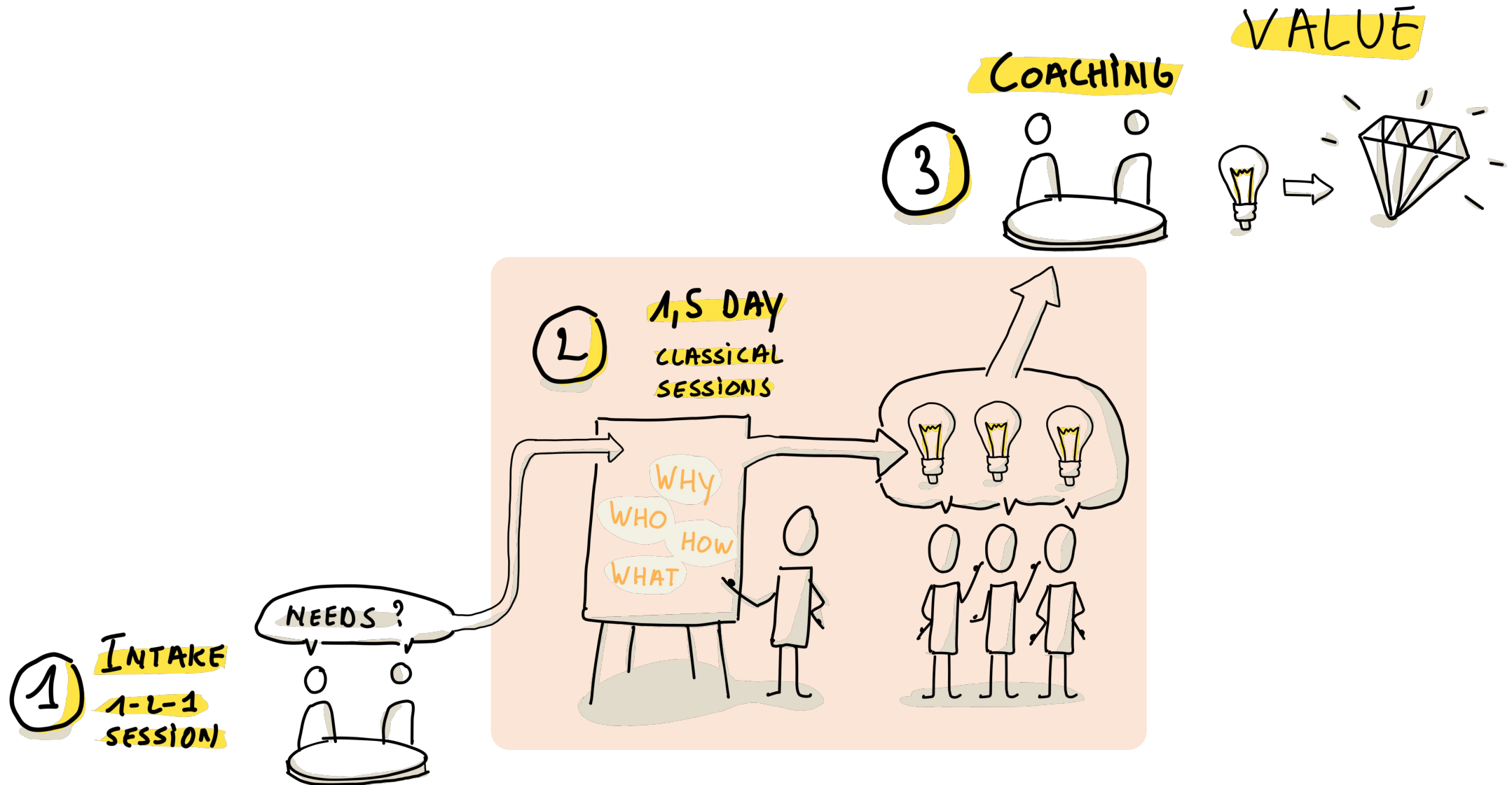


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5. DATA PRODUCTS

6. PROPERTIES & ISSUES

7. SOLUTIONS

8. DATA GOVERNANCE

9. DATA ROADMAP

10. STORY &
COMMUNICATION

11. FINAL ADVICE



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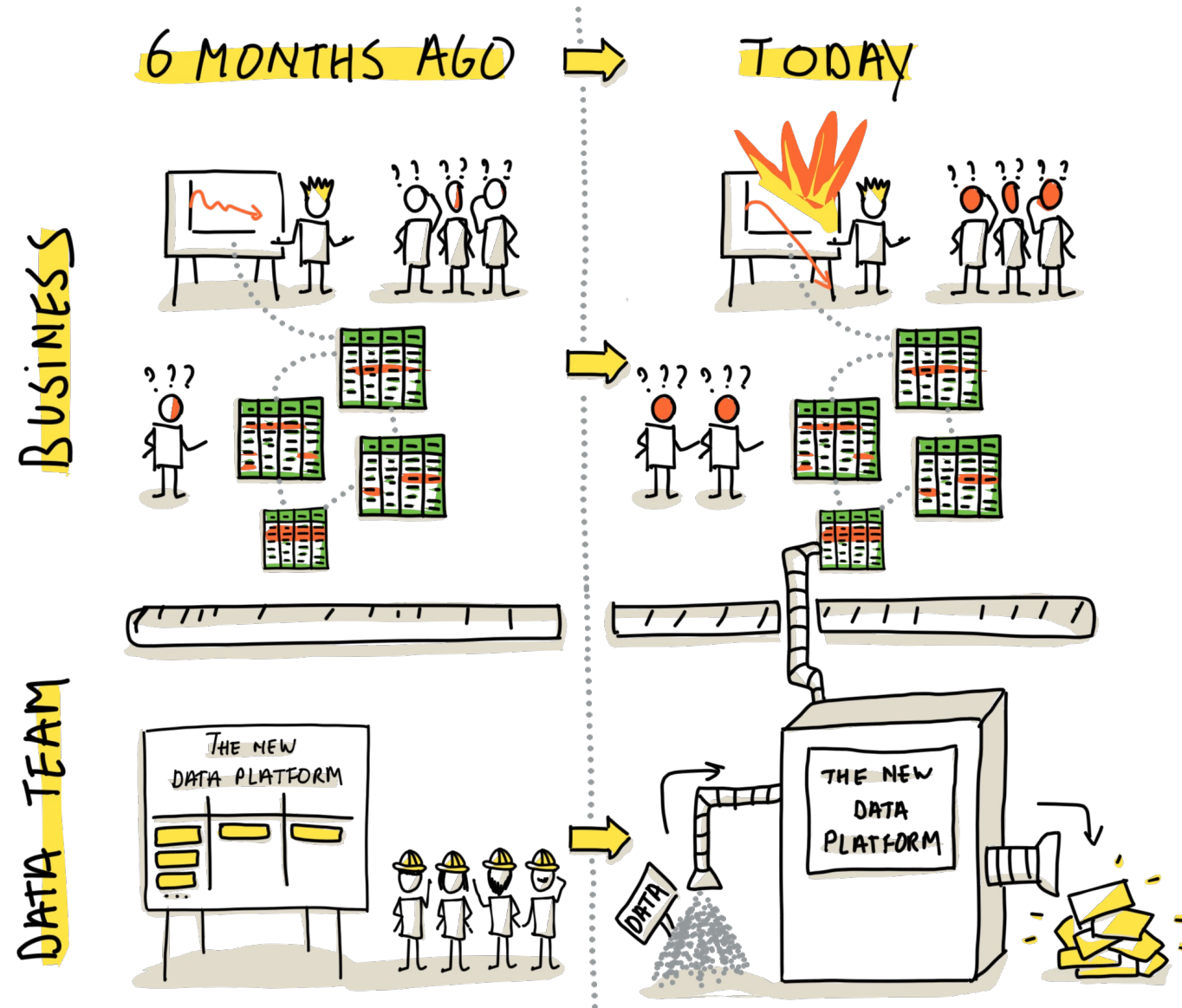


DATA STRATEGY

A scenic mountain landscape with a winding road and a small village. The foreground shows a paved road that curves through a valley. In the middle ground, there are several small buildings and a larger structure, possibly a farm or a small settlement. The background features rolling hills and mountains under a cloudy sky. The overall tone is somewhat muted and atmospheric.

WHY THIS TRAINING?

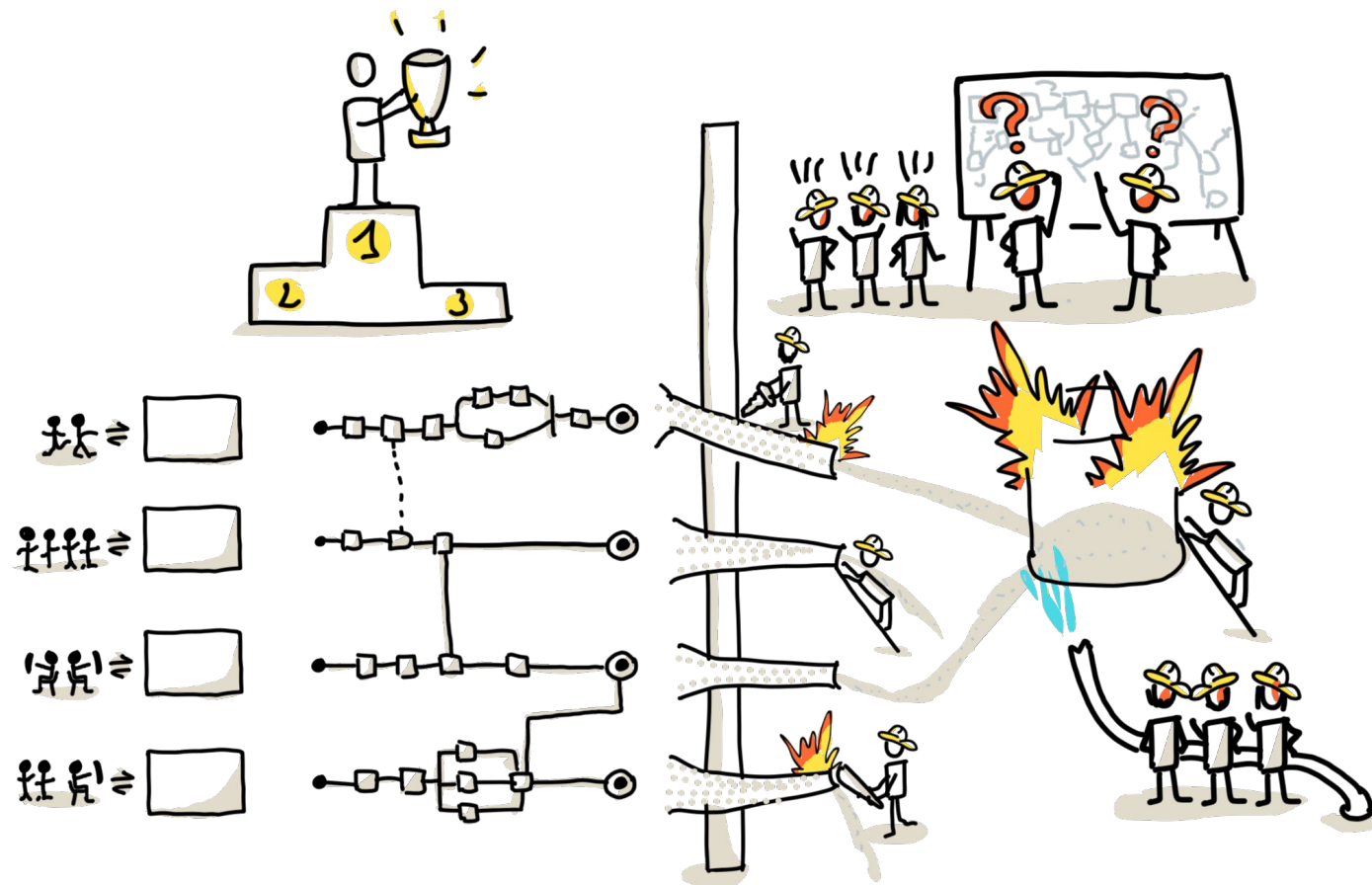
EXPERIENCE 1: BUILDING SOMETHING THAT DOESN'T BRING VALUE



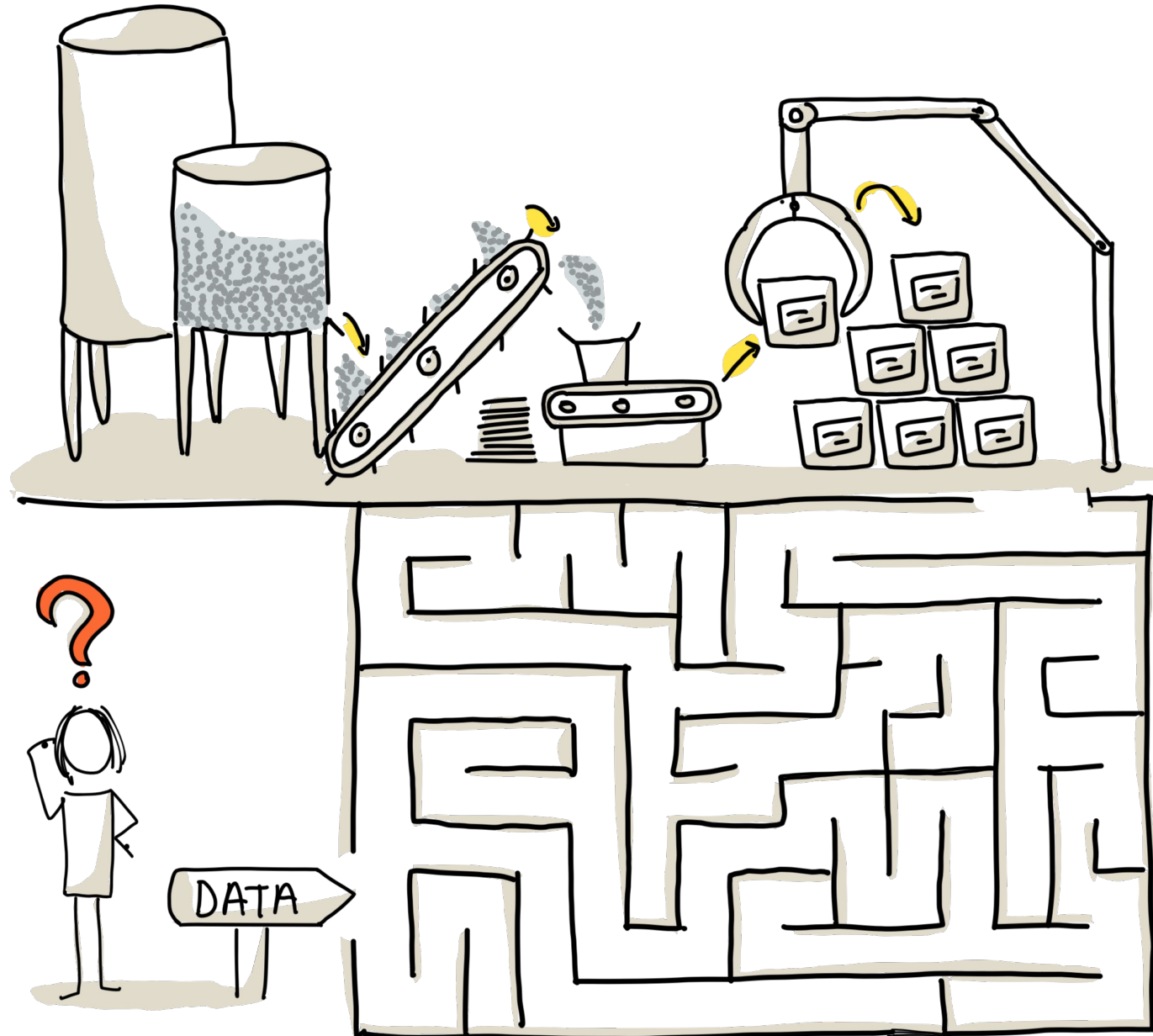
EXPERIENCE 2: DIGITAL TRANSFORMATIONS WITHOUT DATA

PARTY
IN THE FRONT

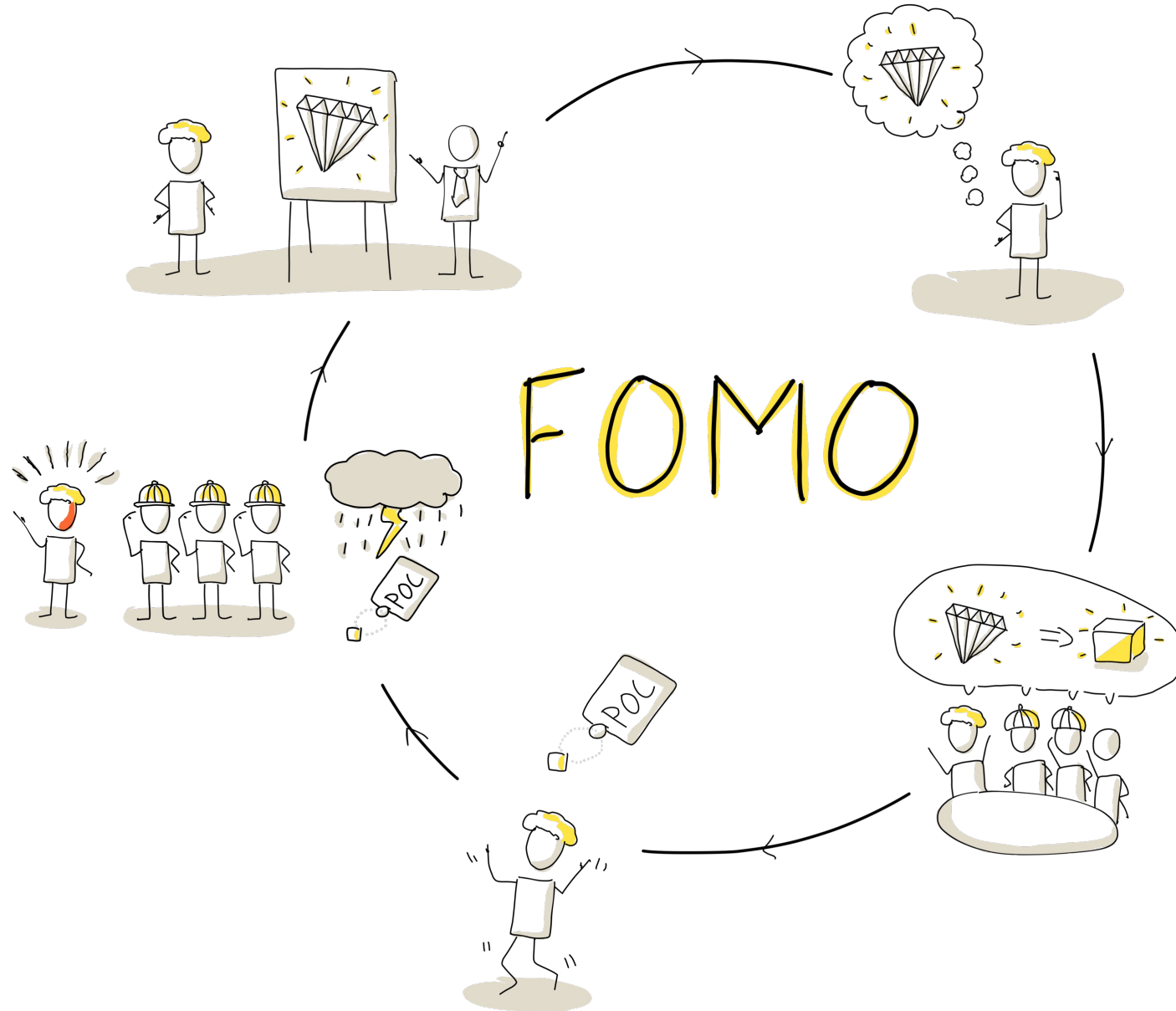
FIREFIGHTING
IN THE BACK



EXPERIENCE 3: DATA IS NEEDED BUT CAN'T BE FOUND



EXPERIENCE 4: FEAR OF MISSING OUT CYCLE



AI-tools boosten vooral de productiviteit van de individuele medewerker, niet die van het bedrijf

Charles Boutens

Mede-oprichter en CEO van de Gentse scale-up Uman • 10:50 • Bijgewerkt op: 10:51 •

Bron: Data News •



FROM WHAT I READ: EXAMPLE 2

The media skepticism around generative AI can be roughly broken down into 4 distinct crises developers face:

- **The data crisis:** The vast troves of data used to train LLMs are diminishing in value. Publishers and online platforms are locking up their data, and our demand for training data might soon exhaust the supply.
- **The compute crisis:** The demand for graphics processing units (GPUs) to process this data is leading to a bottleneck in chip supply.
- **The power crisis:** Companies developing the largest LLMs are consuming more power every year, and our current energy infrastructure is not equipped to keep up with the demand.
- **The use case crisis:** Generative AI has yet to find its “killer app” in the enterprise context. Some especially pessimistic critics suggest that future applications might not meaningfully extend beyond “parlor trick” status.



FROM WHAT I READ: EXAMPLE 3

Is Your Company's Data Ready for Generative AI?

by Thomas H. Davenport and Priyanka Tiwari

March 26, 2024



Illustration by Carl Godfrey

Summary. While CDOs and data leaders are excited about generative AI, they have much work to do to get ready for it. A recent survey of 334 CDOs and data leaders — and a series of interviews with these executives — reveals that companies have not yet created new data strategies or begun to manage their data in the ways necessary to make generative AI work for them. Despite excitement, companies have yet to see clear value from generative AI and need to do significant work to prepare their data. [close](#)

A scenic mountain landscape with a winding road and a small village. The background features misty, layered mountain ranges. The foreground shows a grassy valley with a winding asphalt road that loops through the scene. A small cluster of buildings is visible in the middle ground.

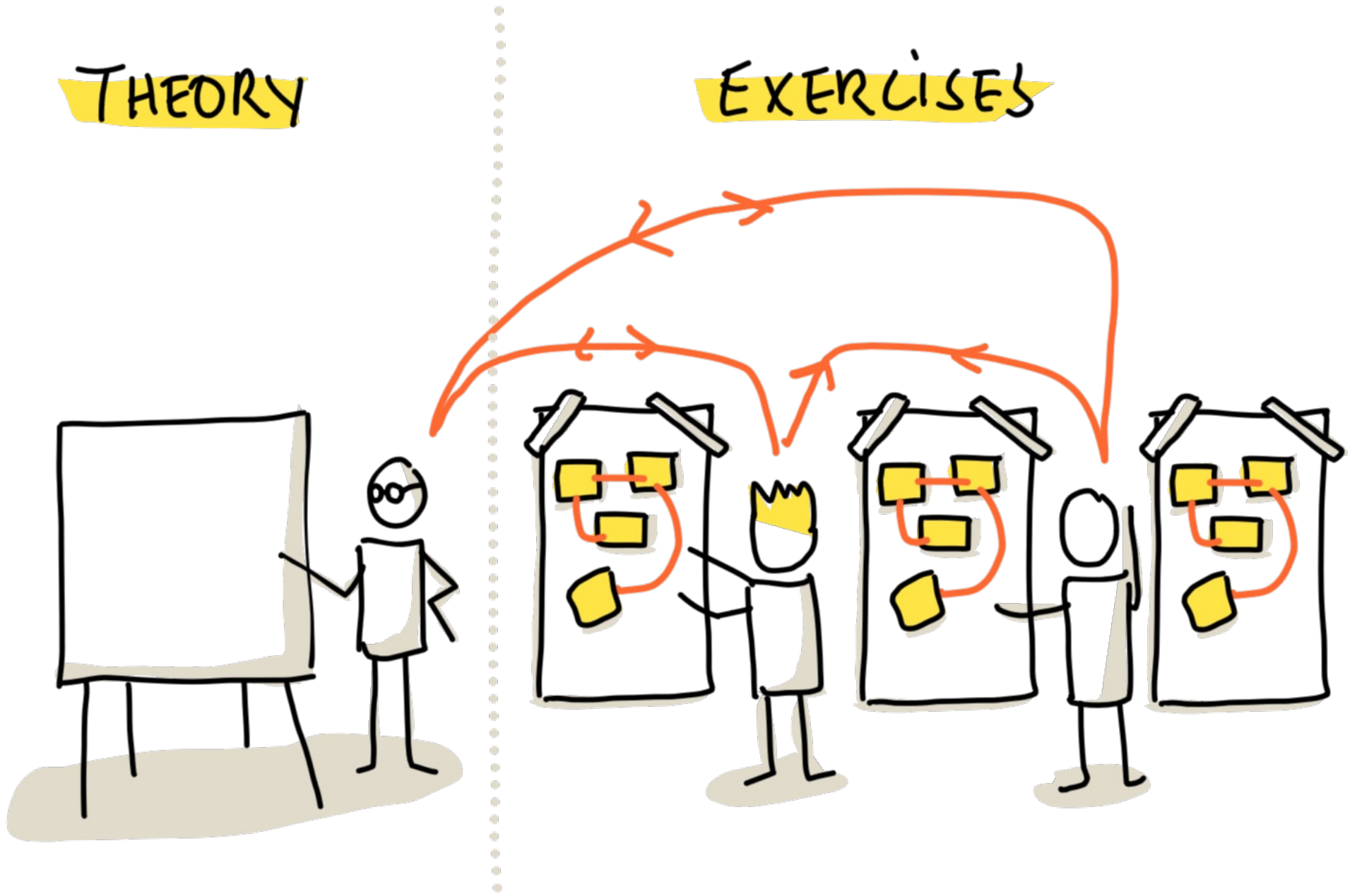
**WE SHOULD BE ABLE
TO DO BETTER!**

DATA STRATEGY TRAINING

APPROACH

THEORY

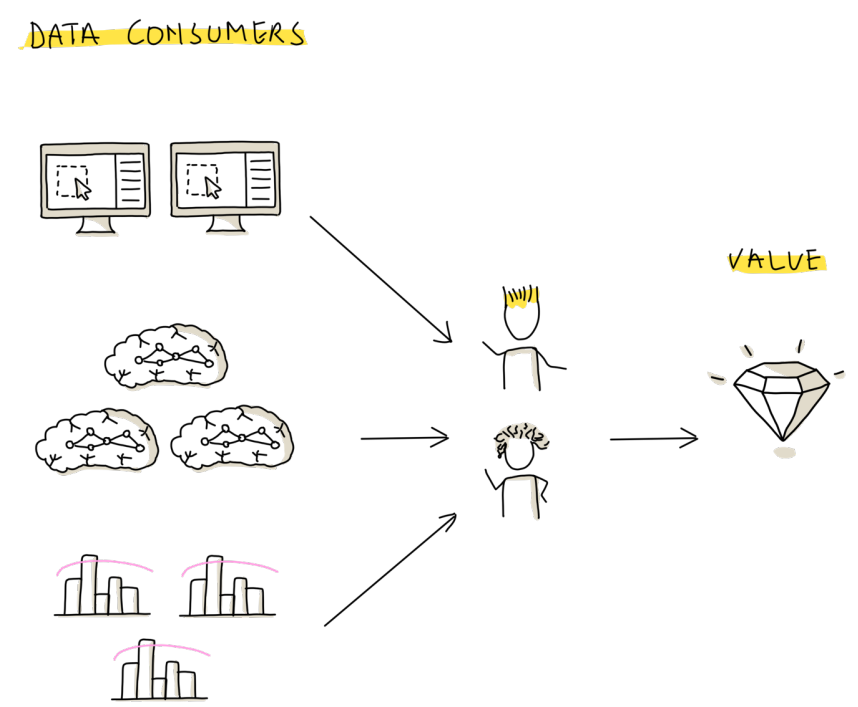
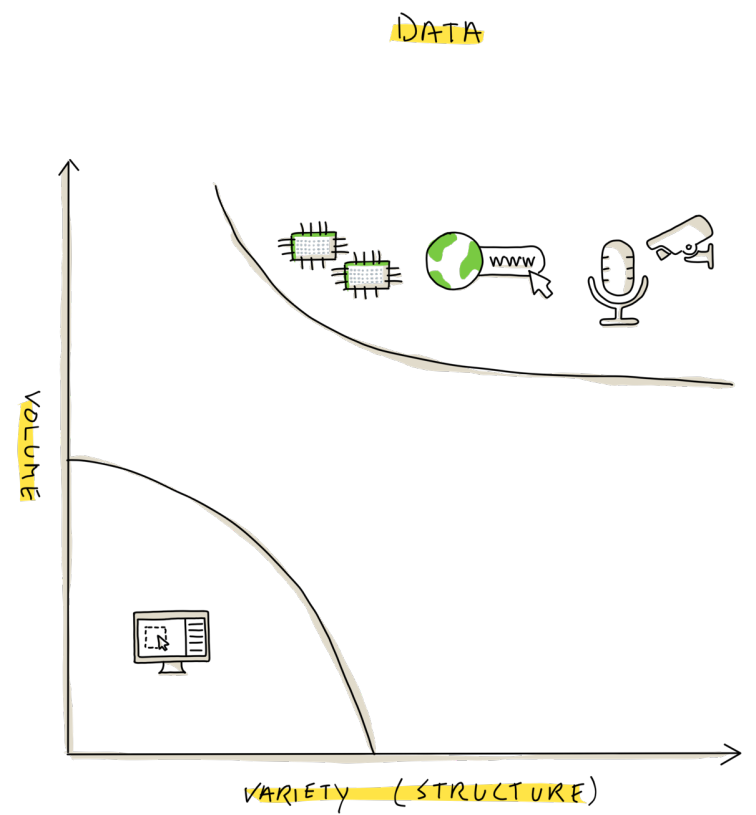
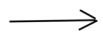
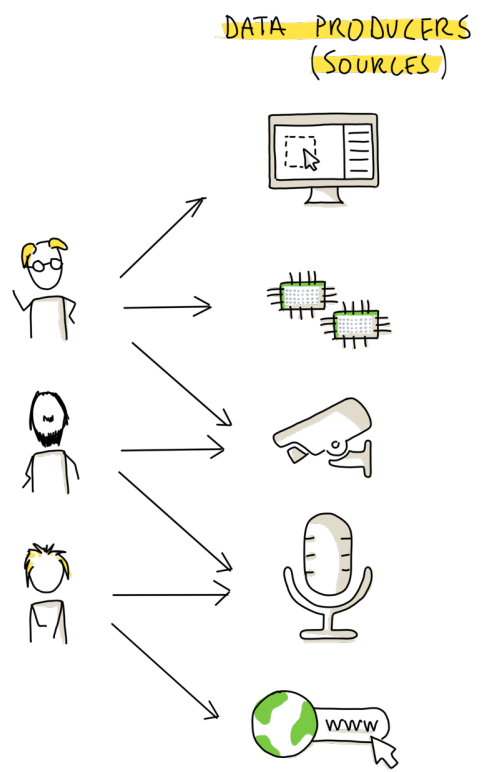
EXERCISES

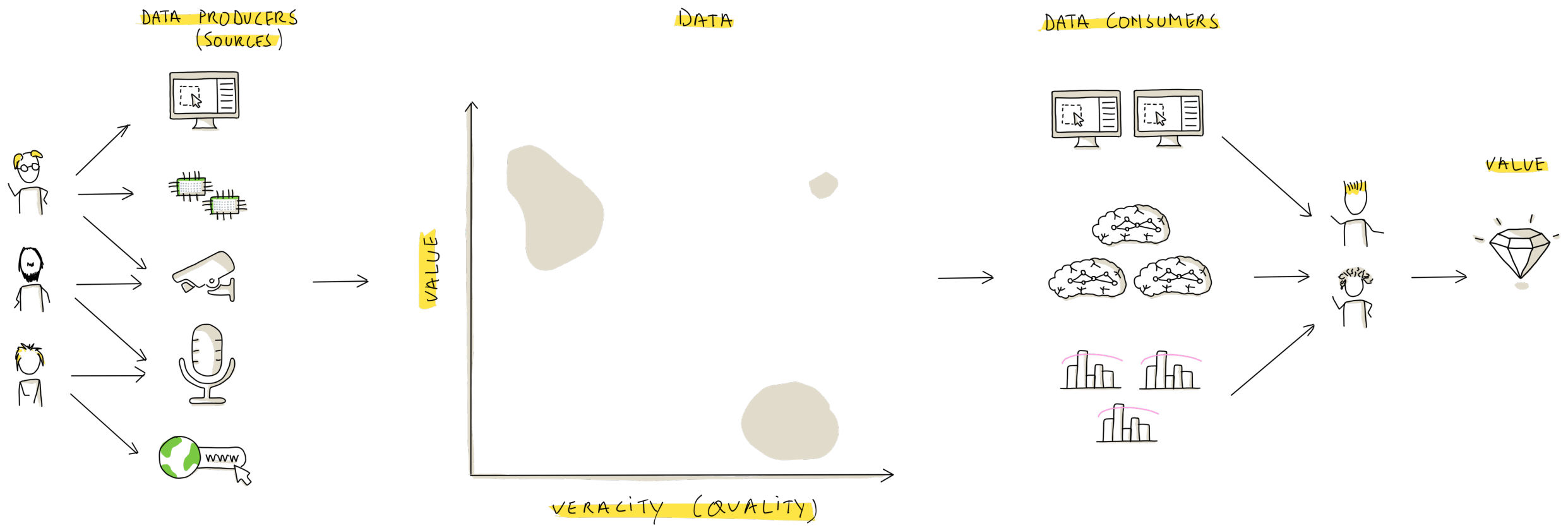


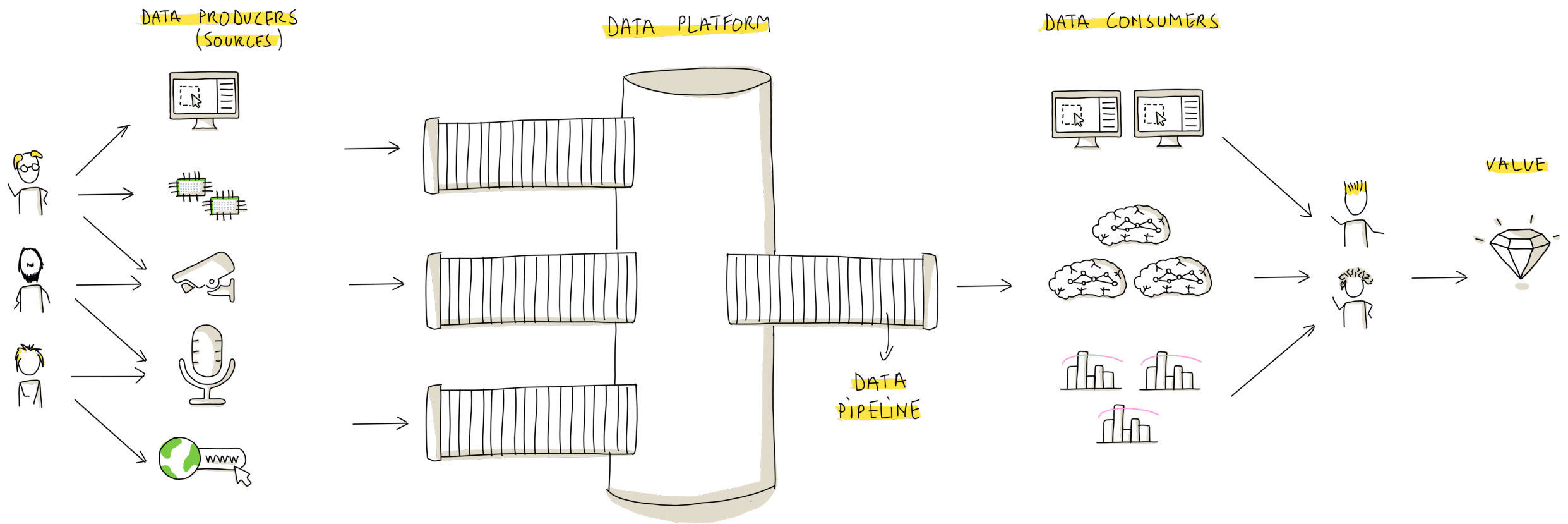
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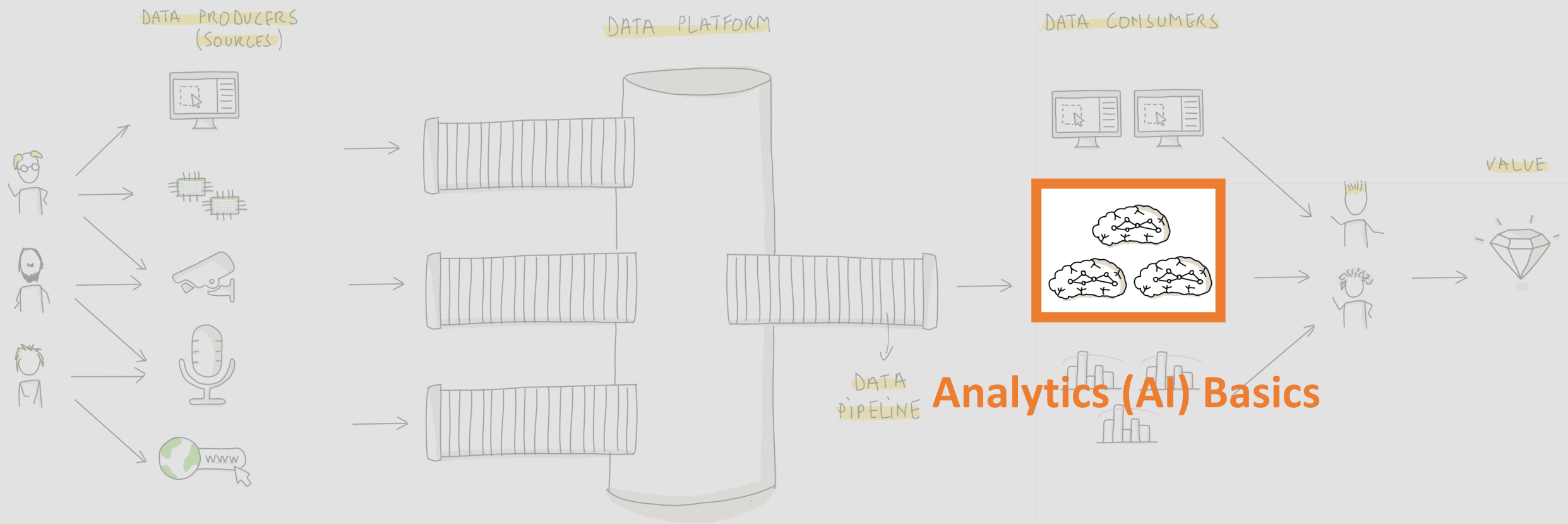
DATA & ANALYTICS BASICS











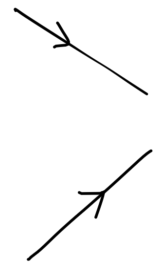
High-Level AI Introduction

DATA



RULES

A > B &
C < A



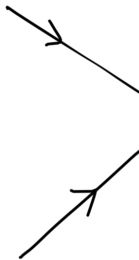
TRADITIONAL PROGRAMMING

→ ANSWERS
(FRAUD : YES/NO)



High-Level AI Introduction

DATA



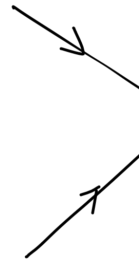
TRADITIONAL PROGRAMMING

→ ANSWERS
(FRAUD: YES/NO)

RULES

$A > B \ \&$
 $C < A$

DATA



ARTIFICIAL INTELLIGENCE

→ RULES
 $A > B \ \&$
 $C < A$

ANSWERS

F: Y
F: N
F: Y
...



High-Level AI Introduction

DATA



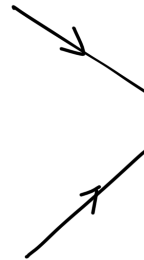
TRADITIONAL PROGRAMMING

→ ANSWERS
(FRAUD: YES/NO)

RULES

$A > B \ \&$
 $C < A$

DATA



ARTIFICIAL INTELLIGENCE

↓
MACHINE LEARNING

→ RULES
 $A > B \ \&$
 $C < A$

ANSWERS

F: Y
F: N
F: Y
...



High-Level AI Introduction

DATA



RULES

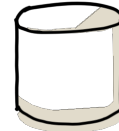
A > B &
C < A



TRADITIONAL PROGRAMMING

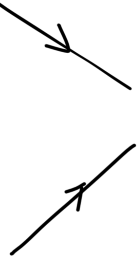
→ ANSWERS
(FRAUD: YES/NO)

DATA



ANSWERS

F: Y
F: N
F: Y
...

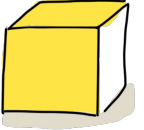


ARTIFICIAL INTELLIGENCE

↓
MACHINE LEARNING



AI MODEL



High-Level AI Introduction

TRAINING

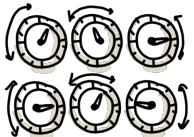
DATA



PREPROCESSING



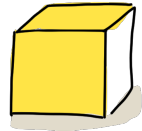
TRAINING



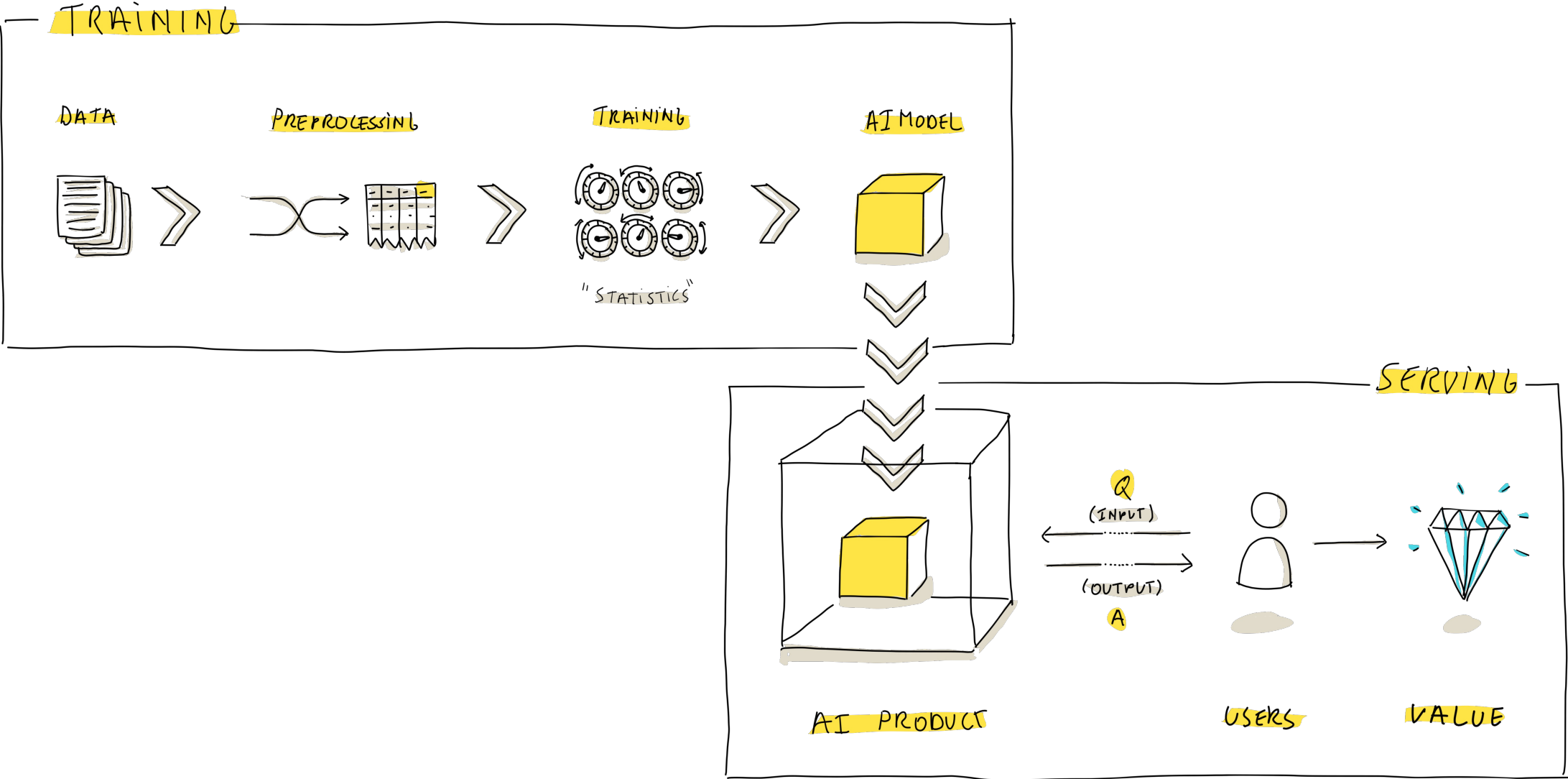
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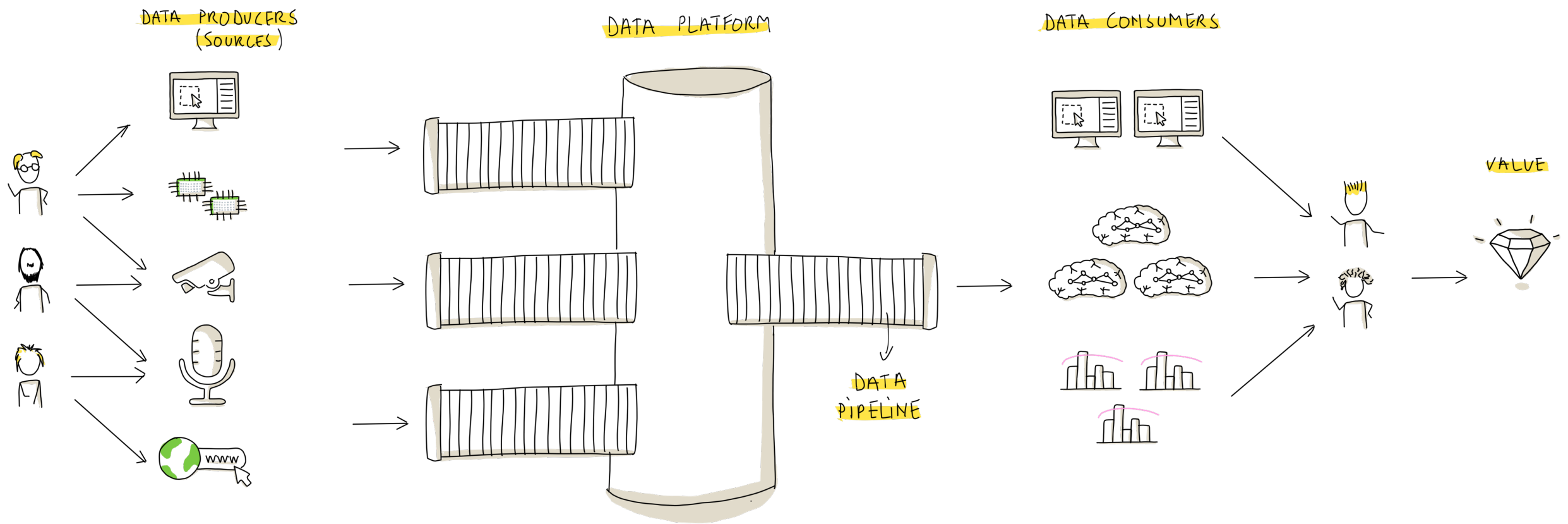


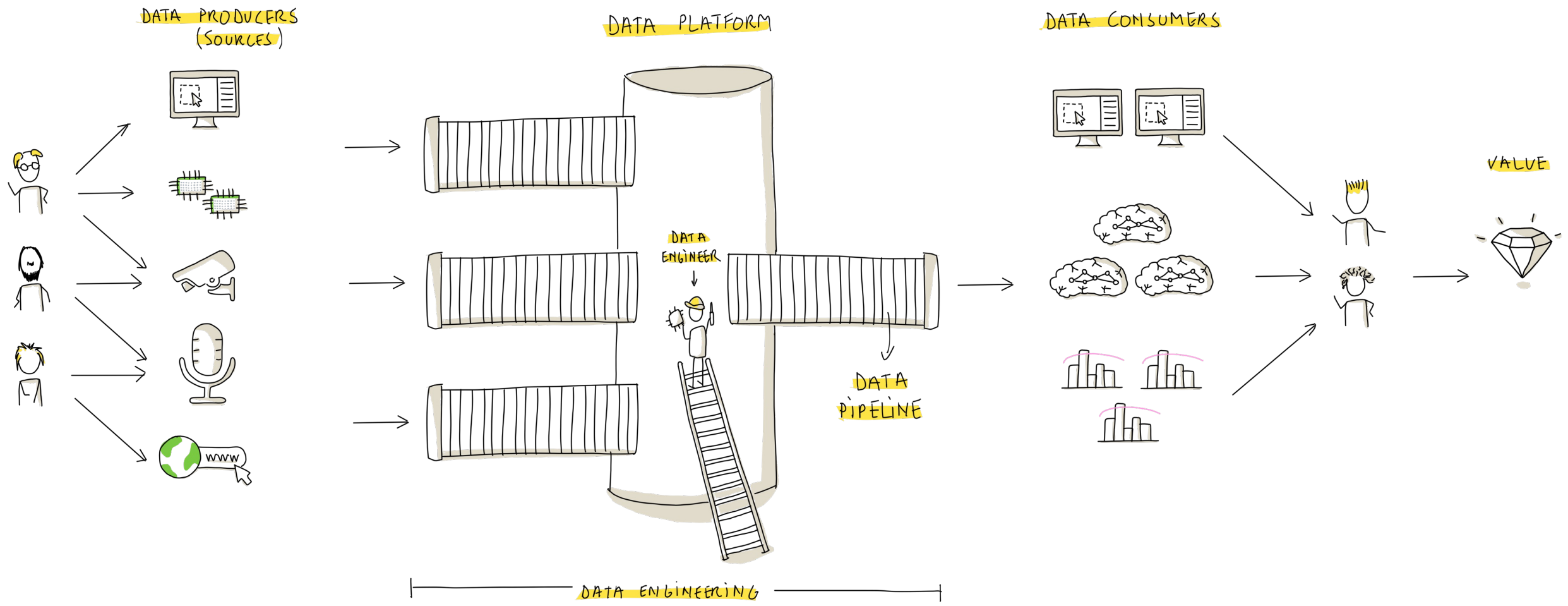
AI MODEL

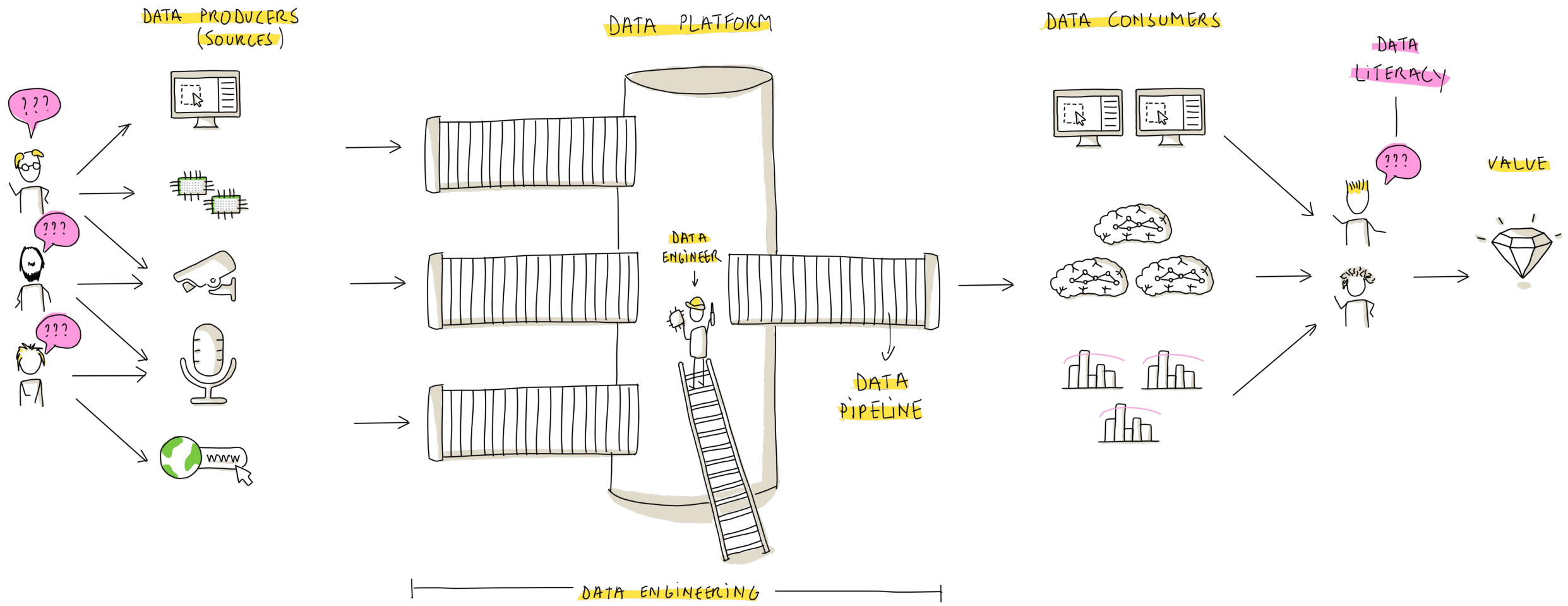


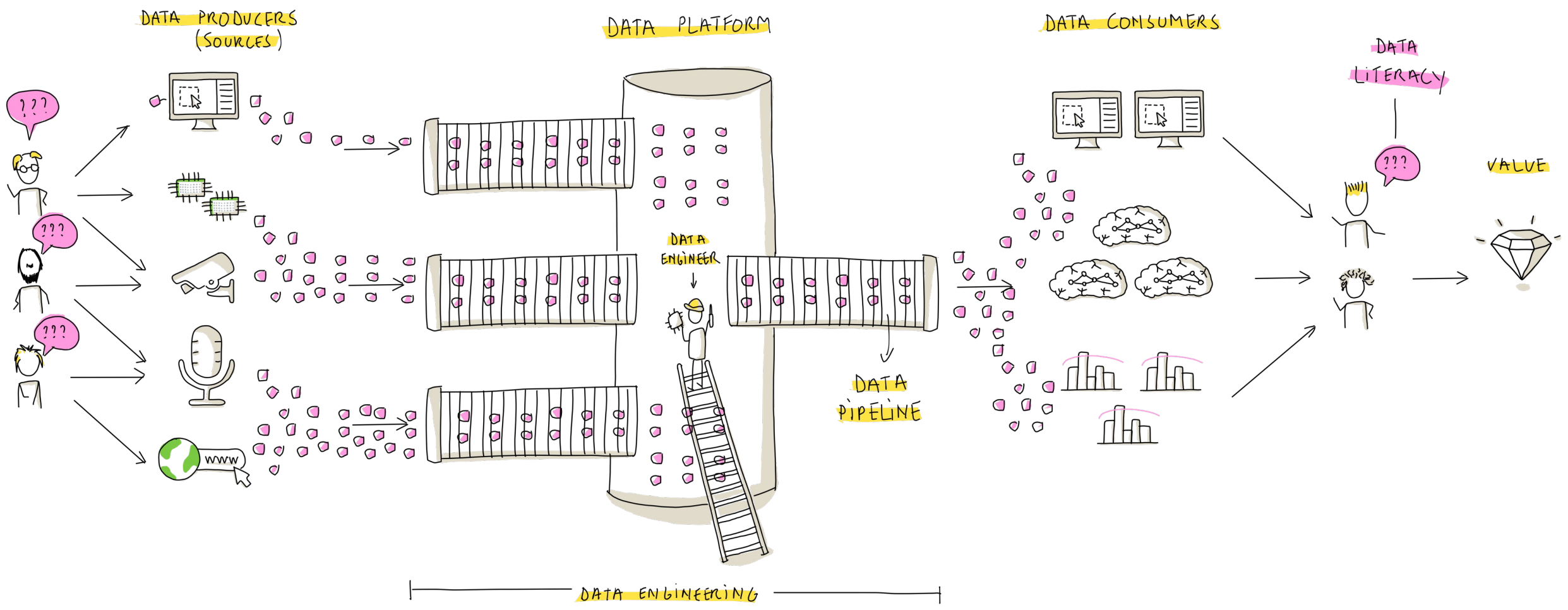
High-Level AI Introduction

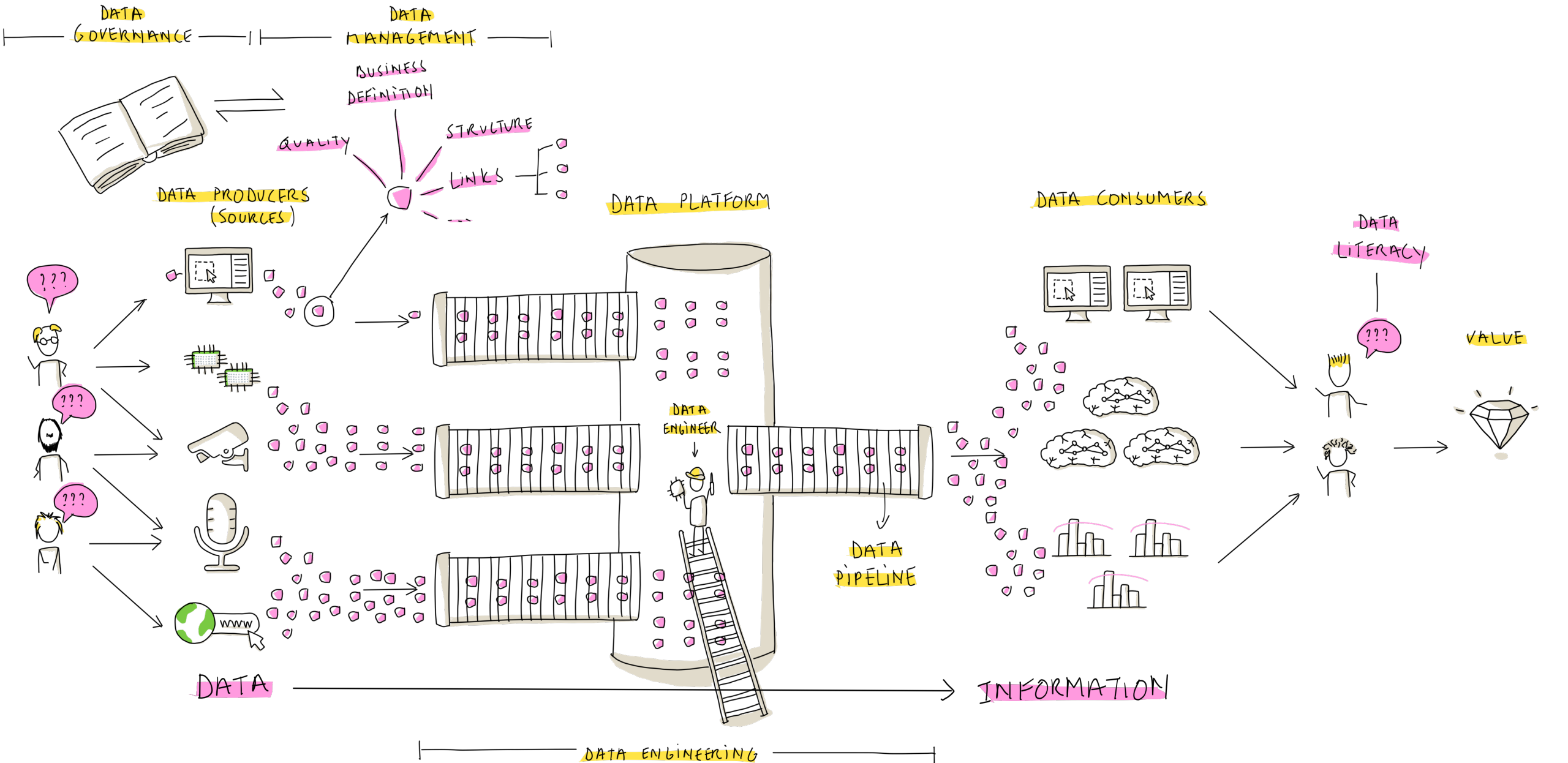






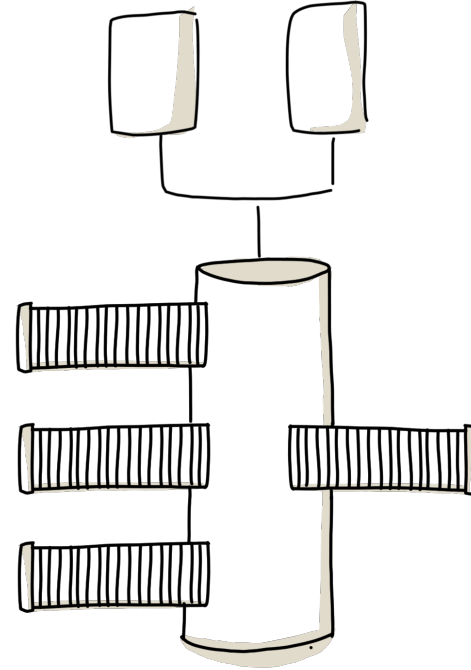
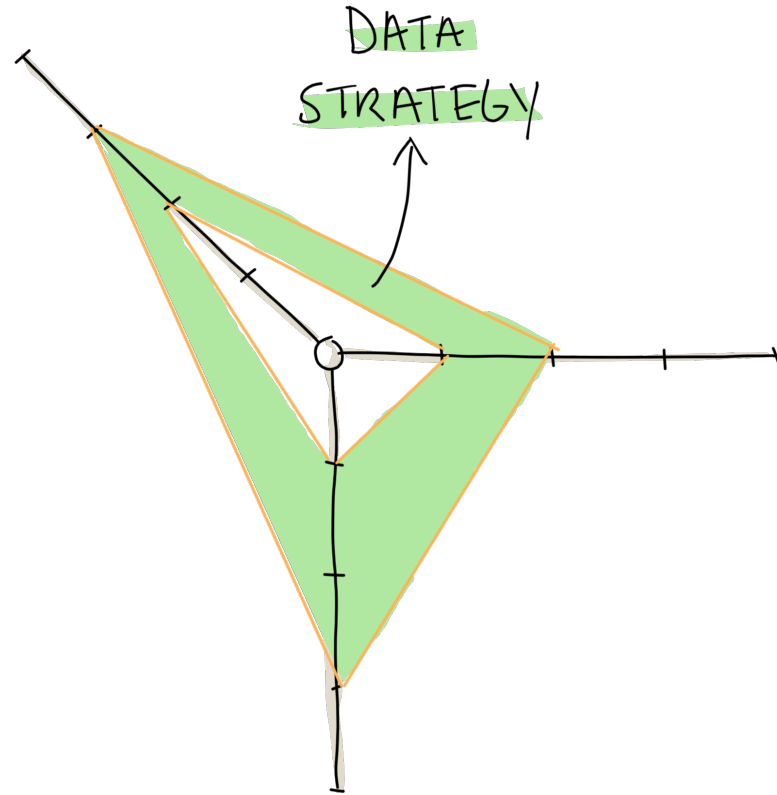




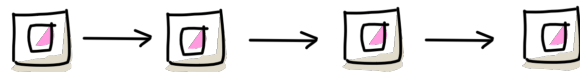




PEOPLE



TECHNOLOGY



PROCESS



2.

DATA STRATEGY?



1



2



3



1



2



3



STRATEGY ?



STRATEGY ?

A STRATEGY DESCRIBES how the **GOALS** will be achieved by the **MEANS** (resources). Strategy can be intended (**PLAN**) or can emerge as a **PATTERN OF ACTIVITY** as the organization adapts to its environment or competes.

[Wikipedia, Consulted October 2024]

STRATEGY ?

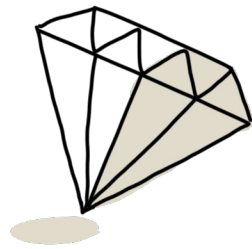


STRATEGY ?

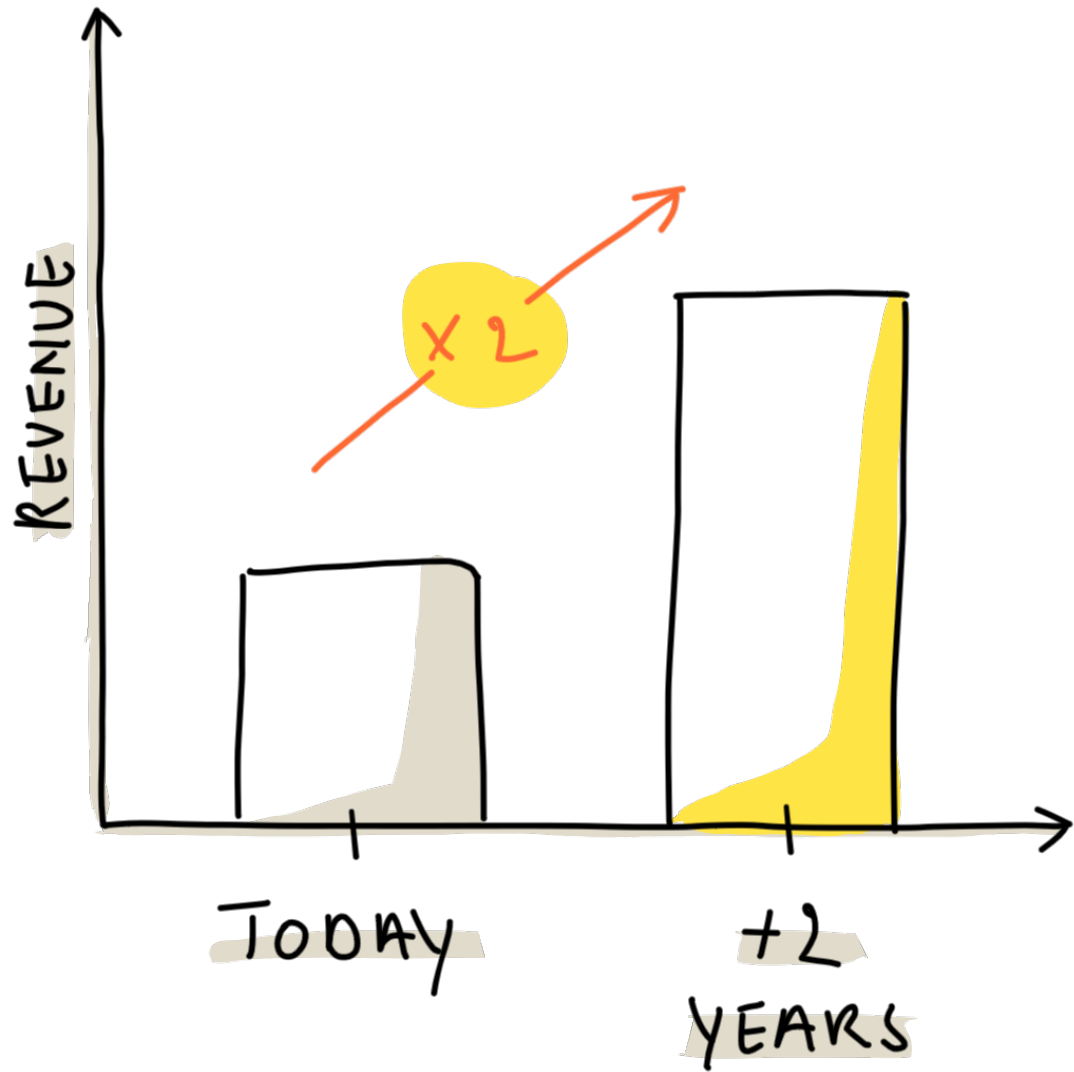


STRATEGY ?

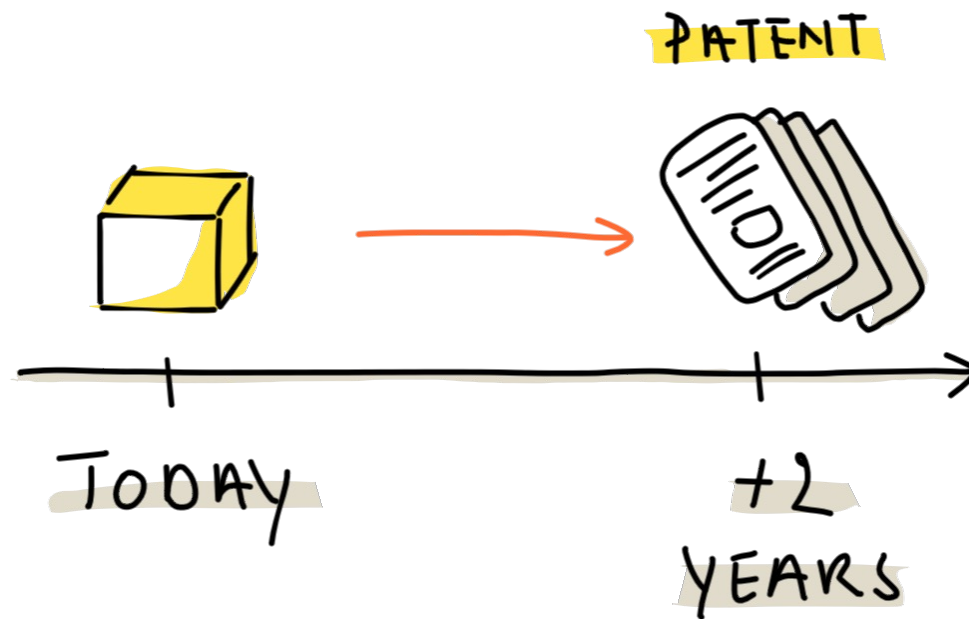
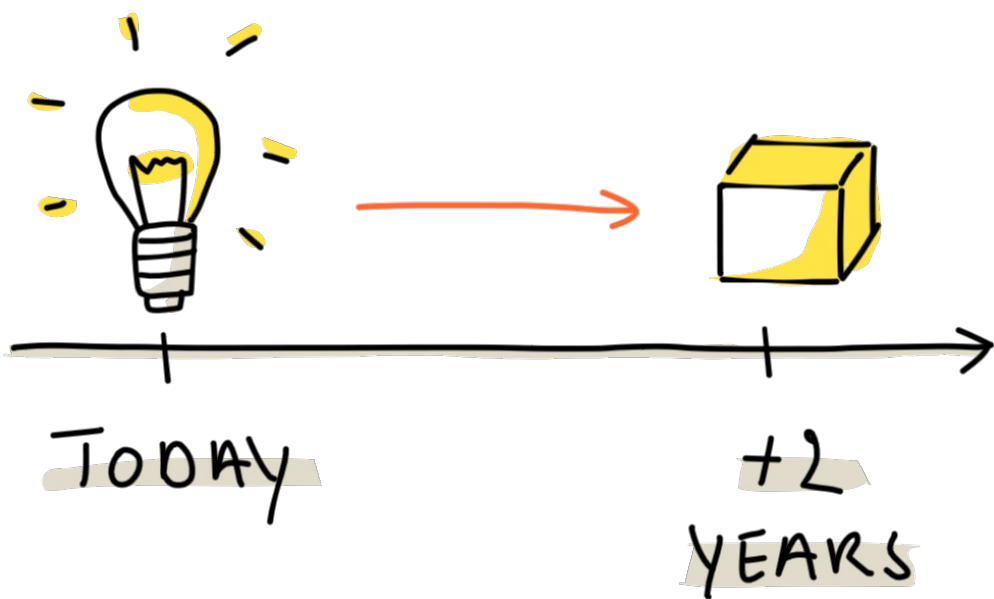
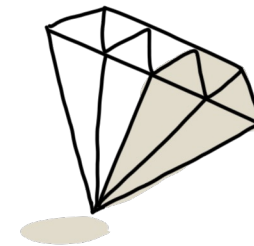




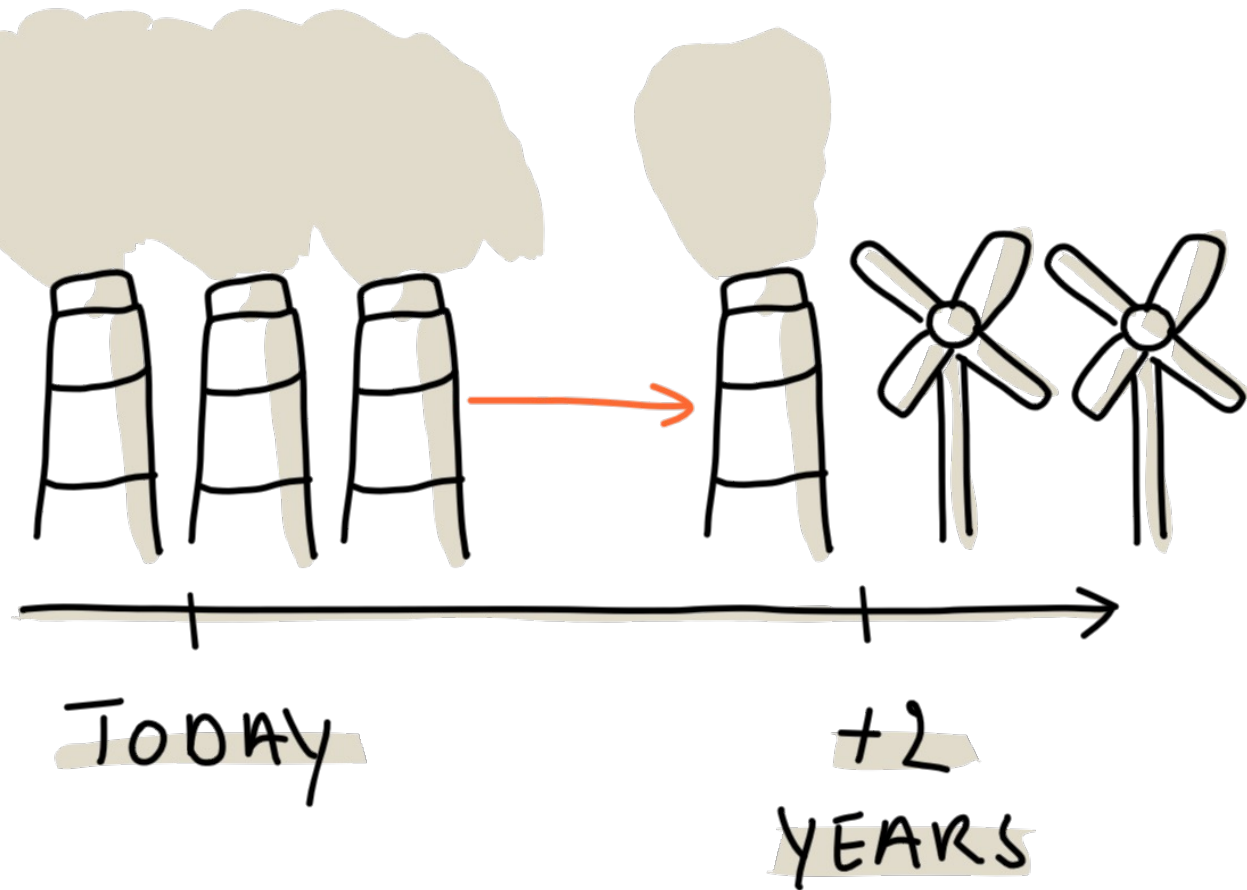
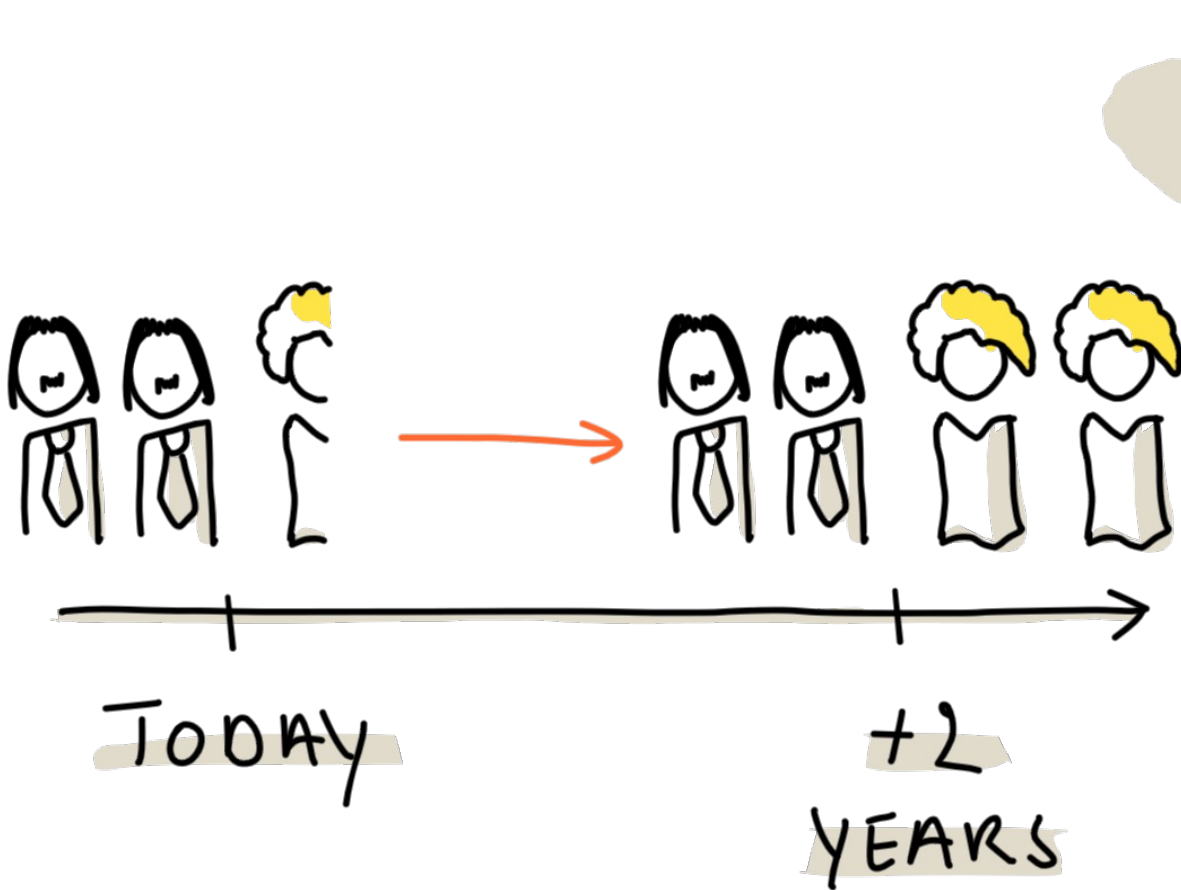
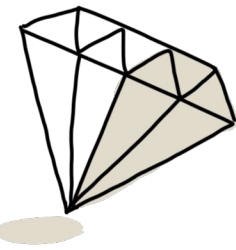
Financial



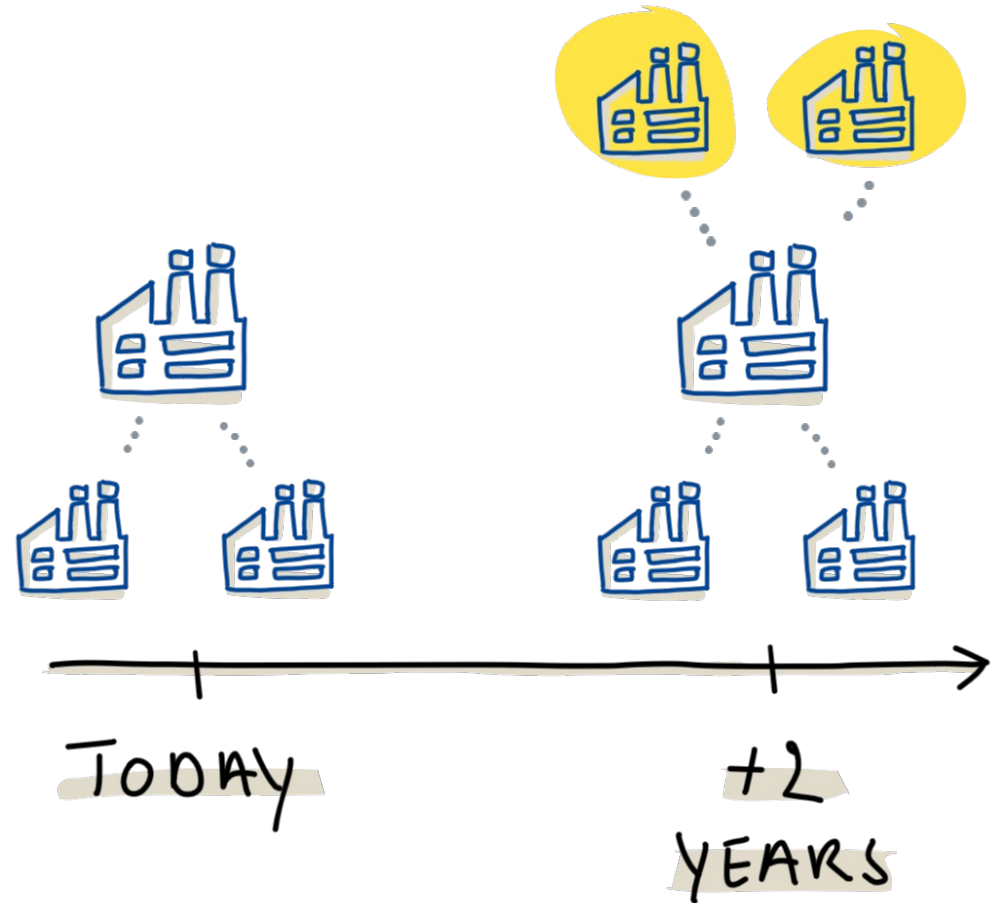
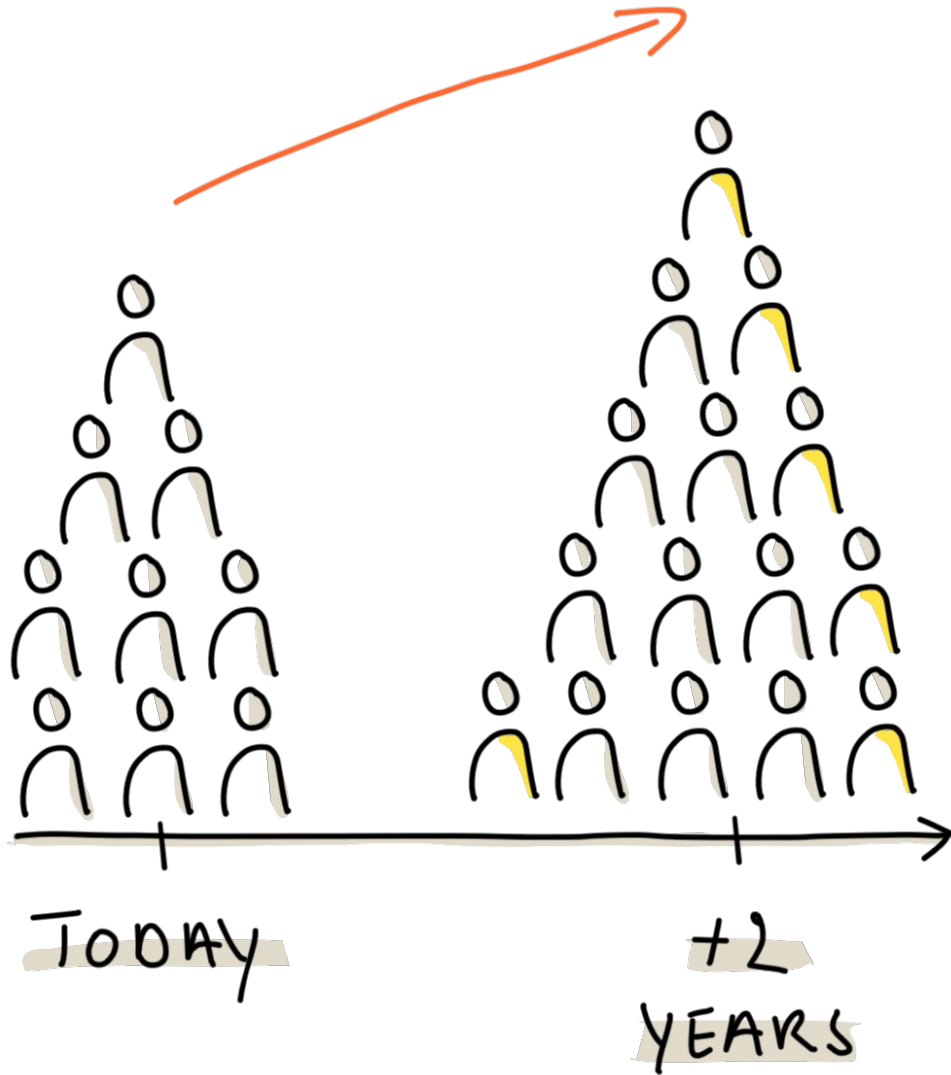
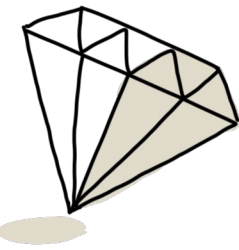
R&D



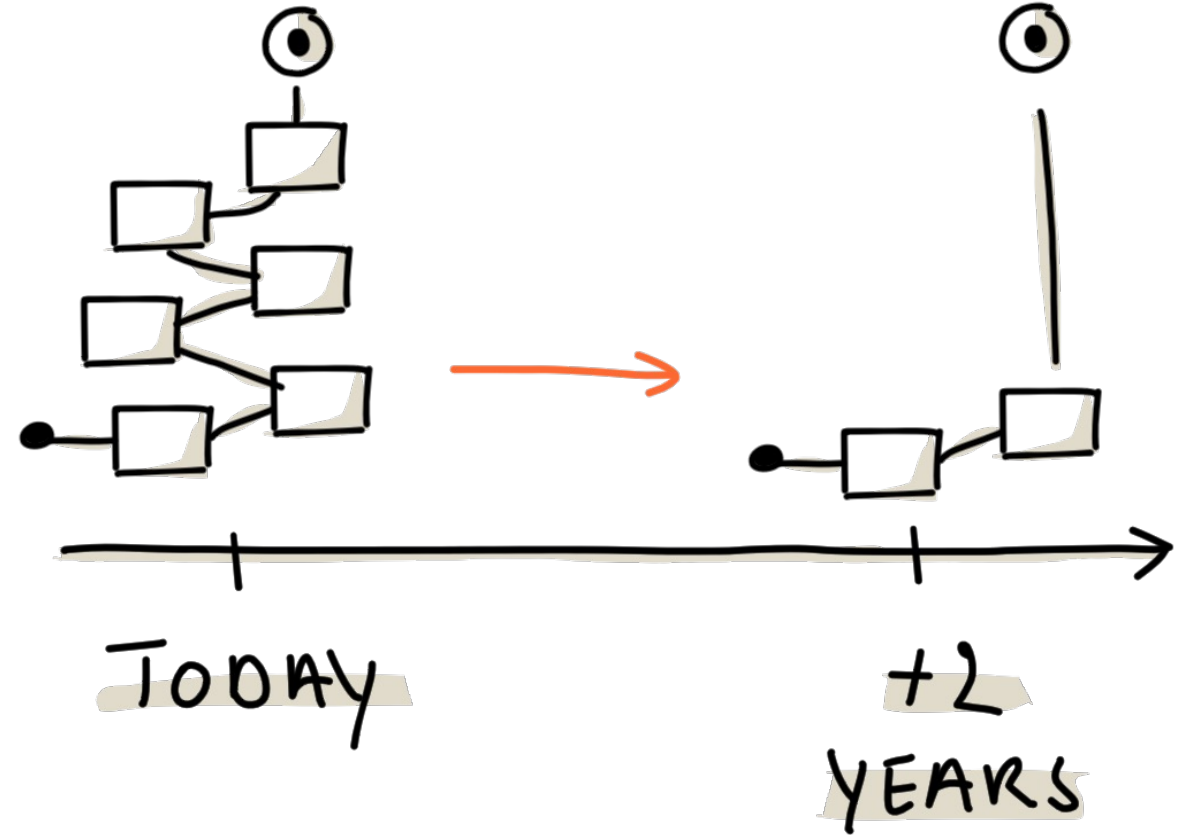
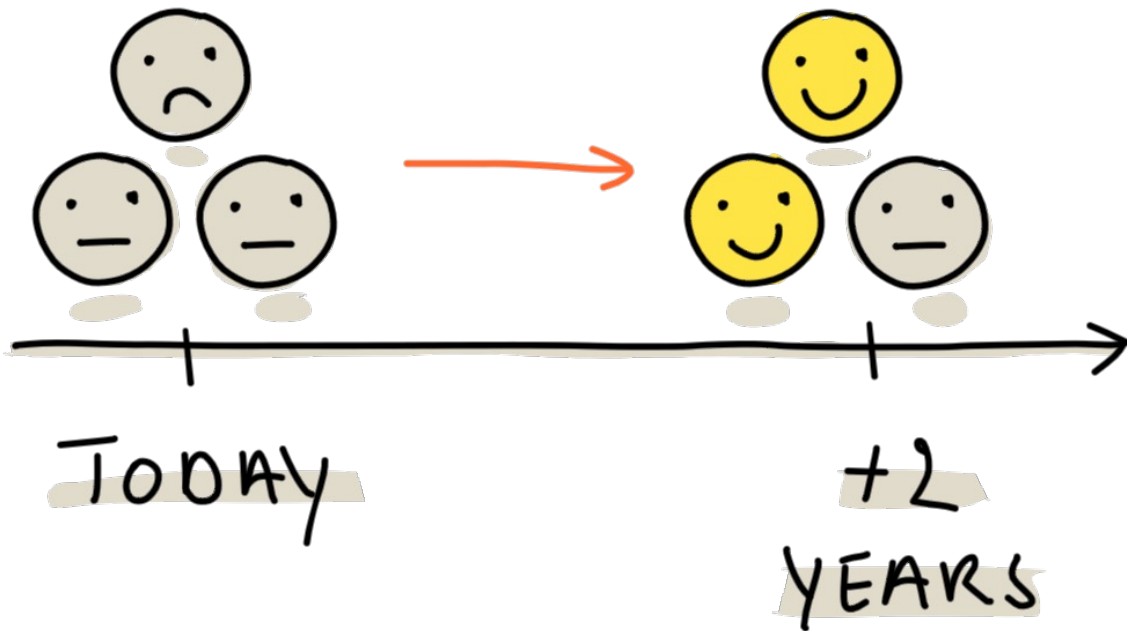
Sustainability



Growth



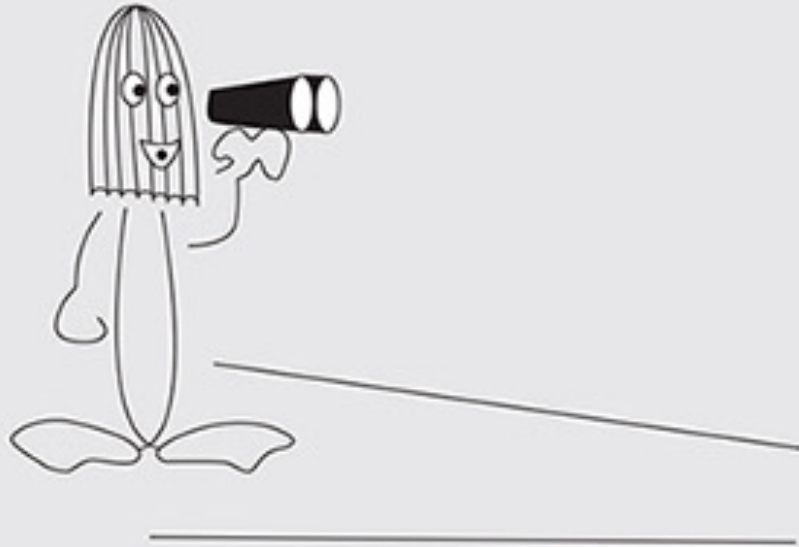
Internal Improvement



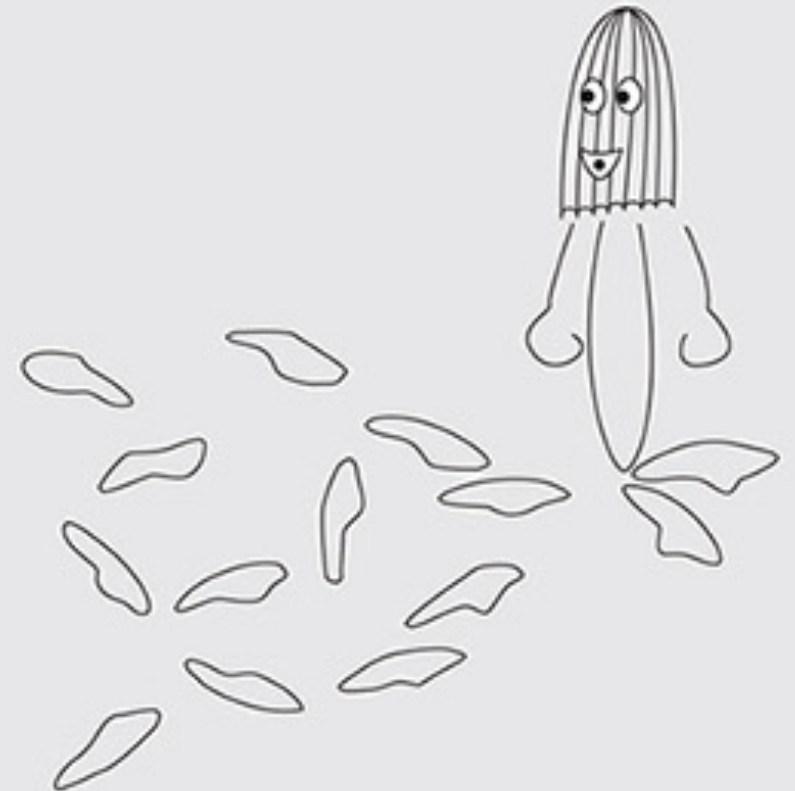
STRATEGY ?

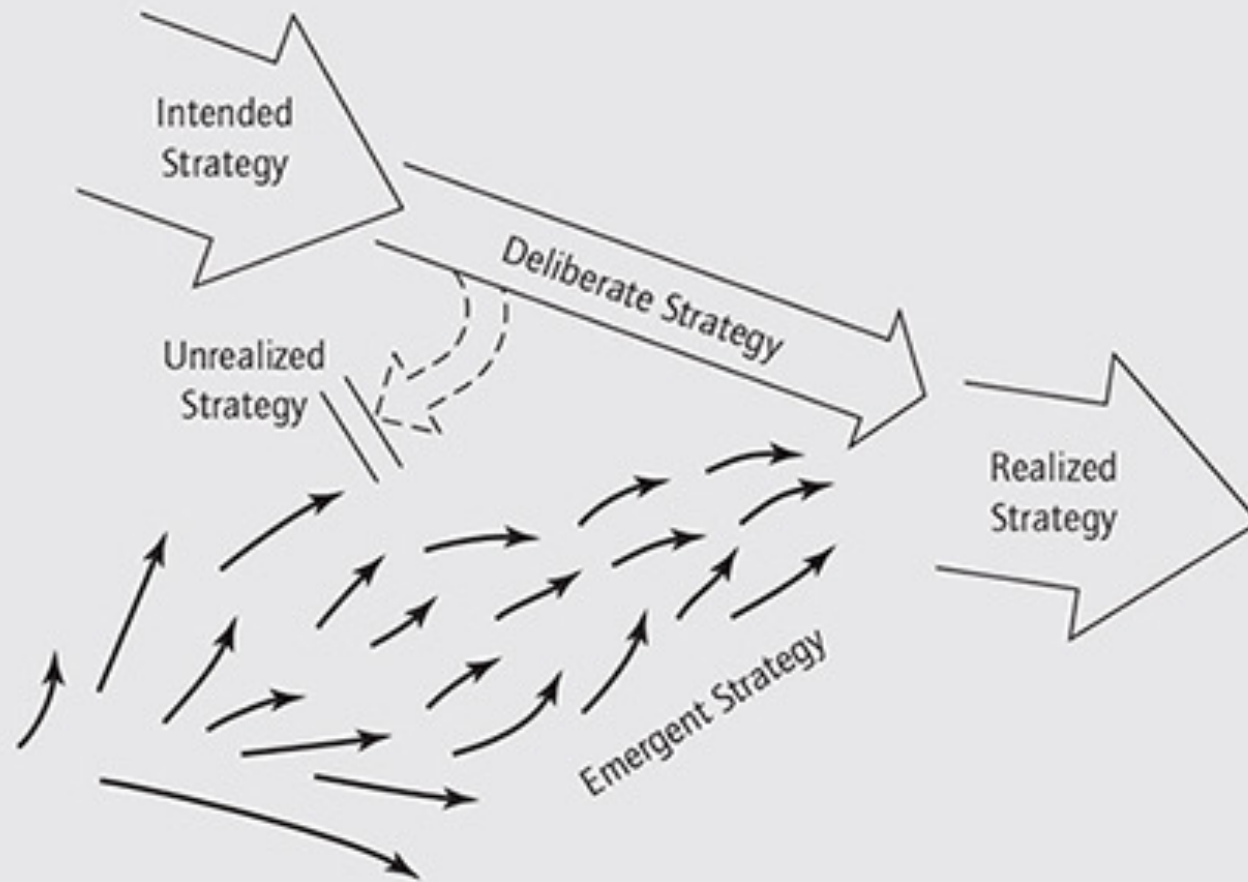


PLAN (intended)

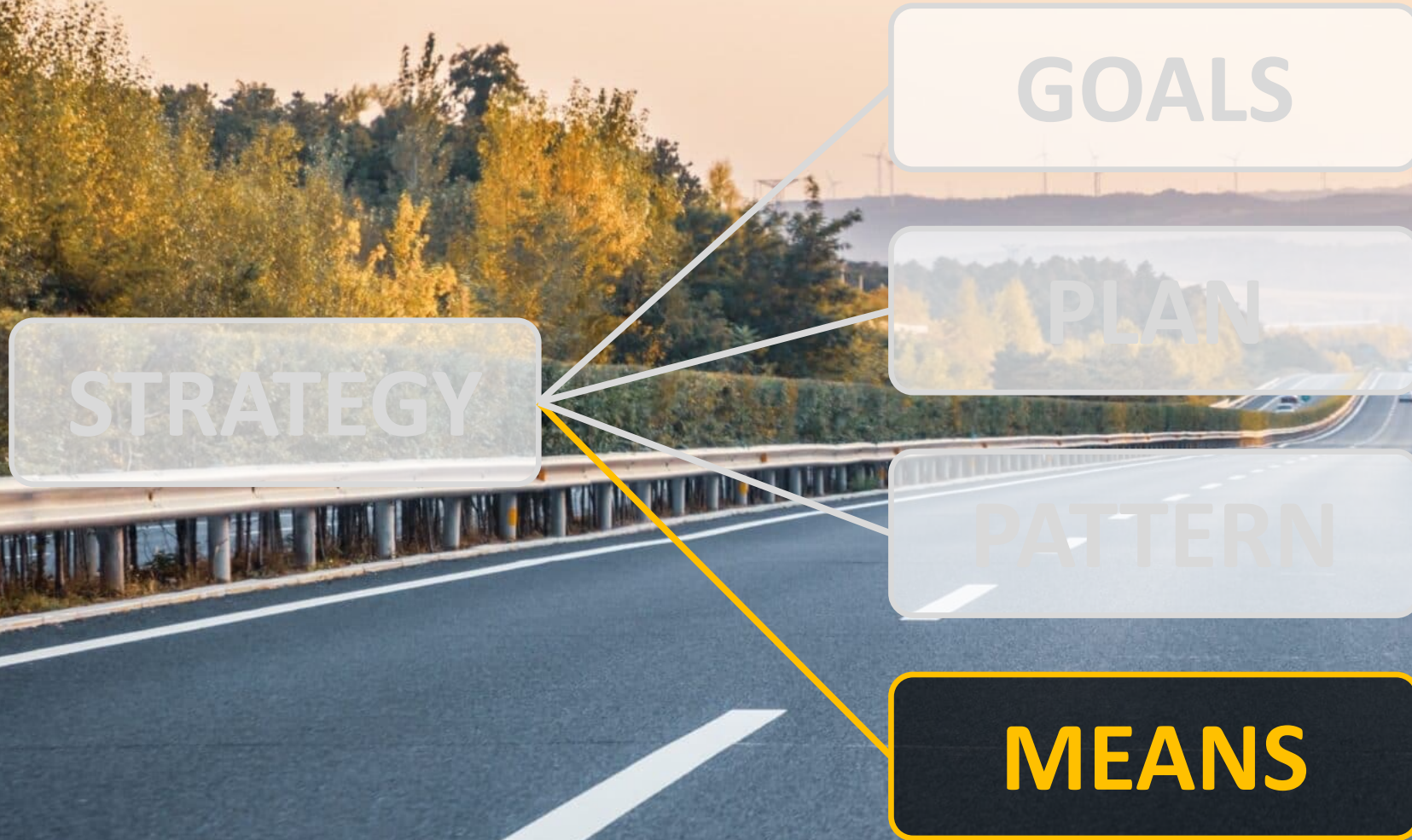


PATTERN (Realized)





STRATEGY ?

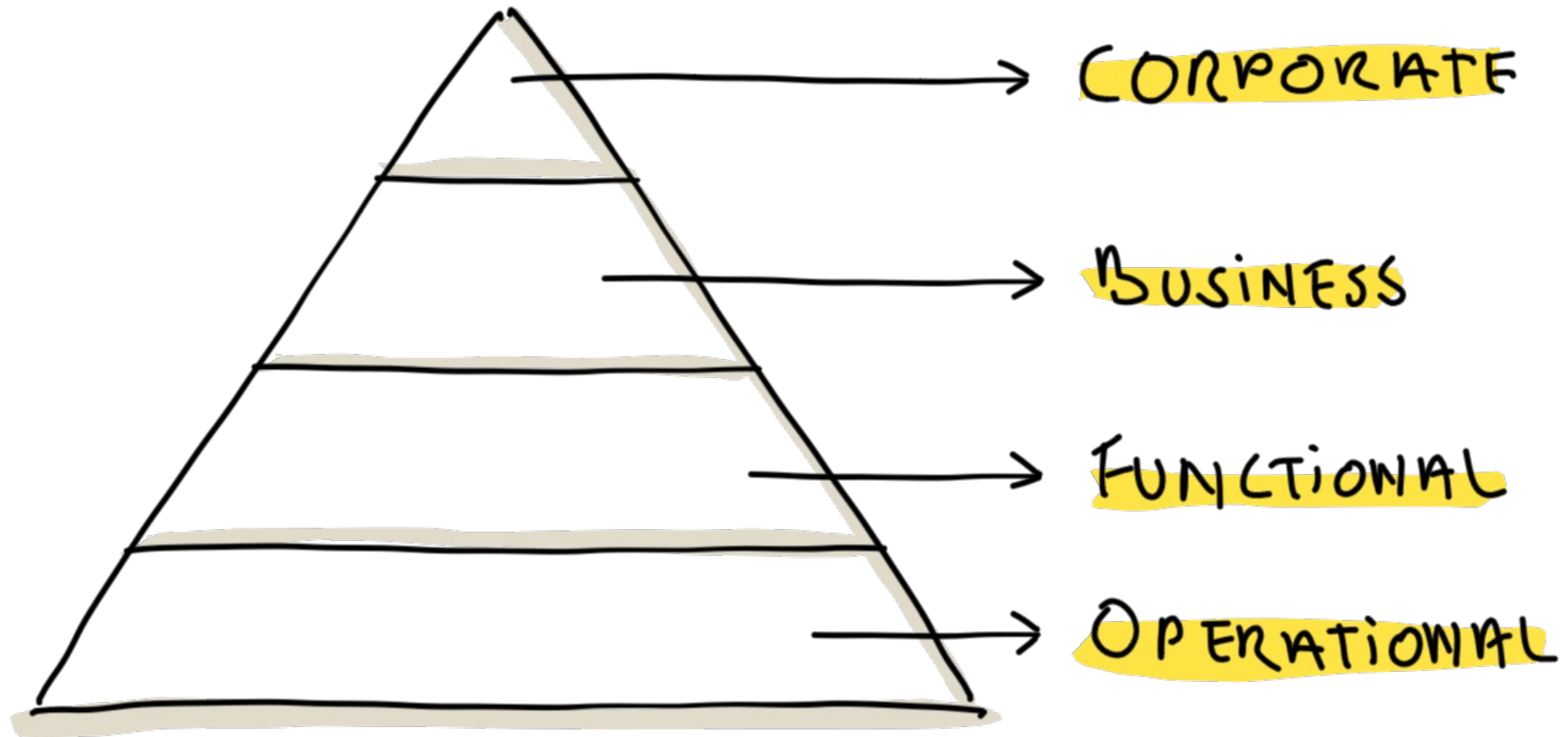


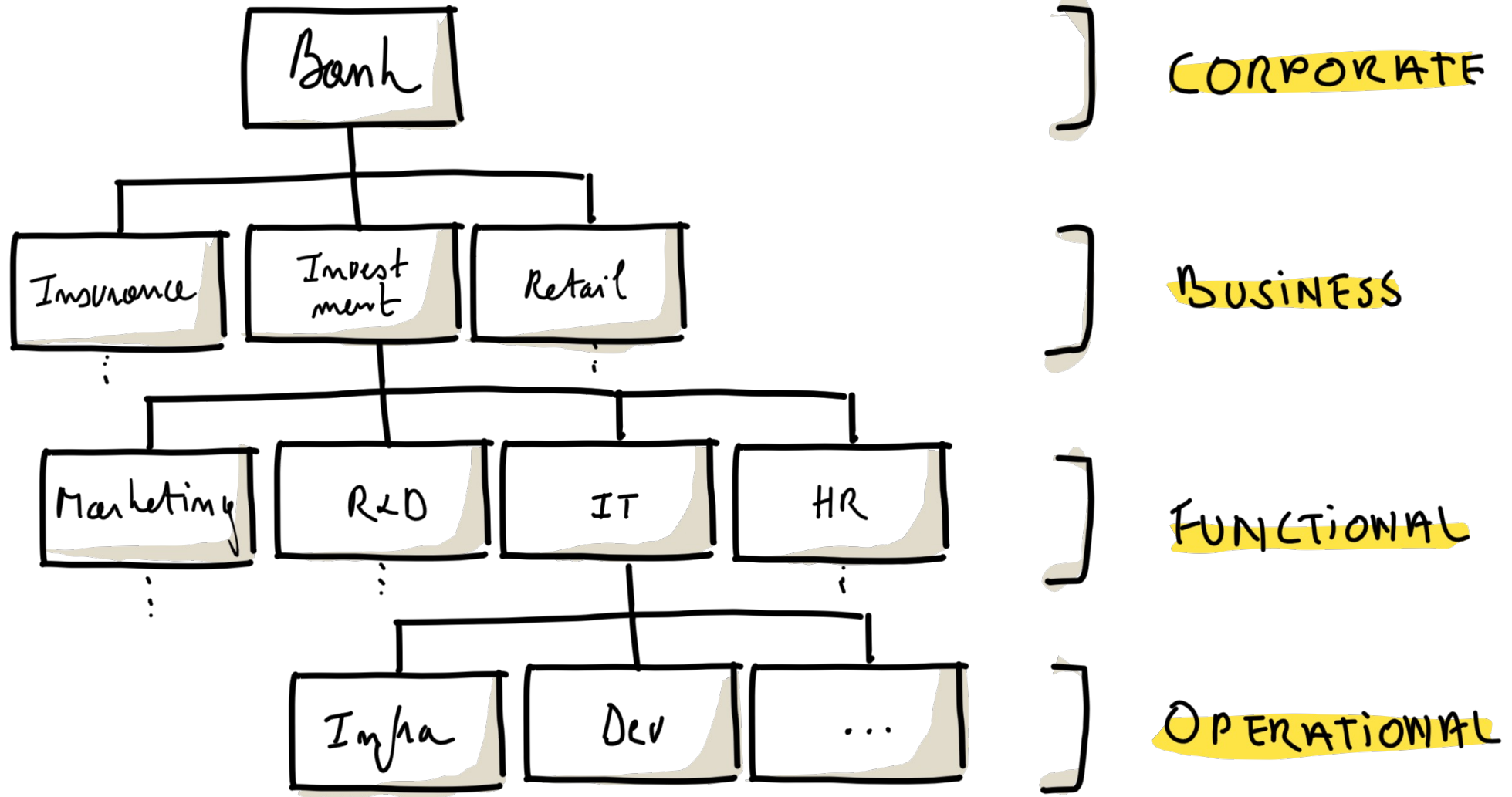


STRATEGY LEVELS

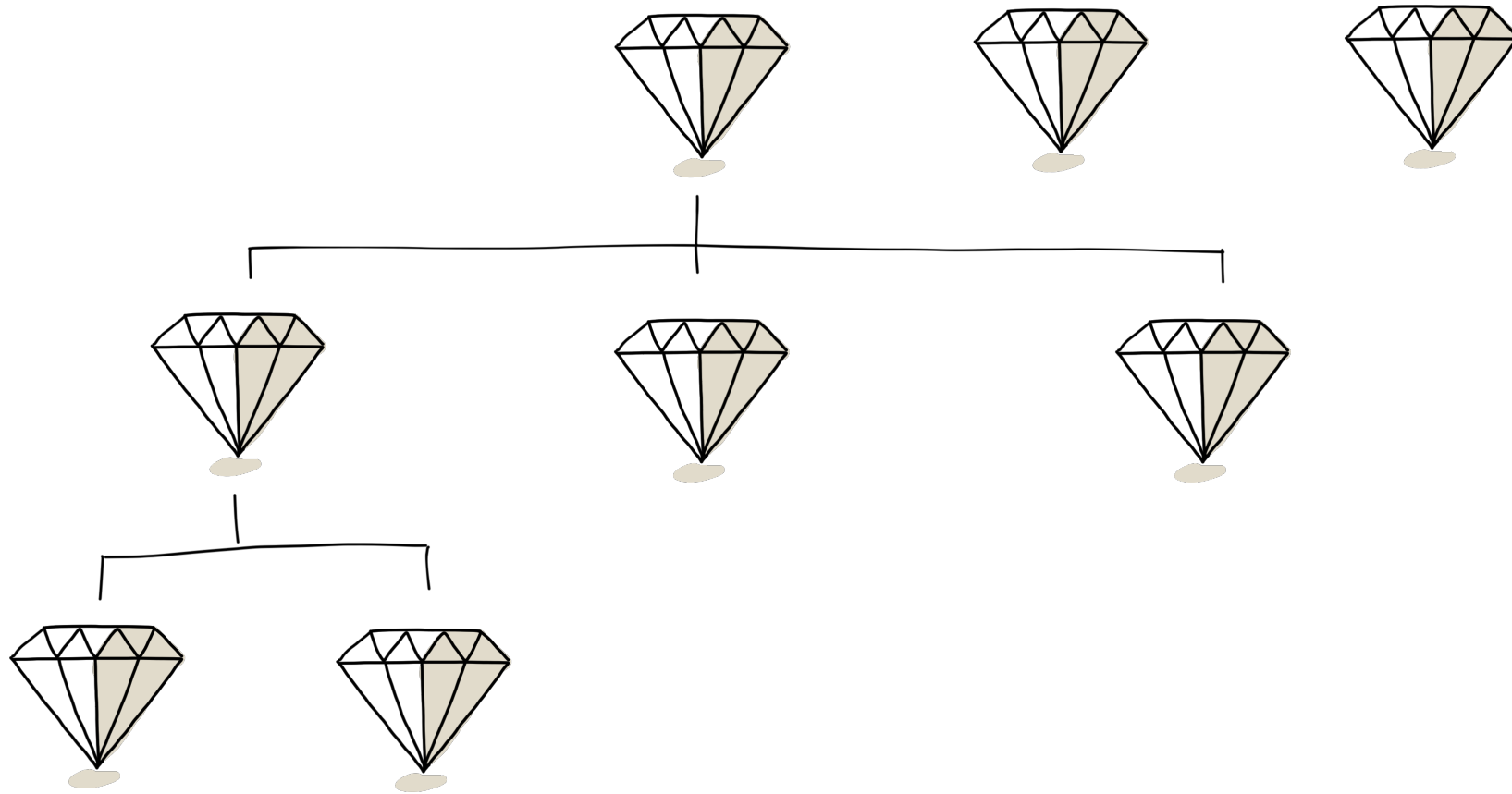


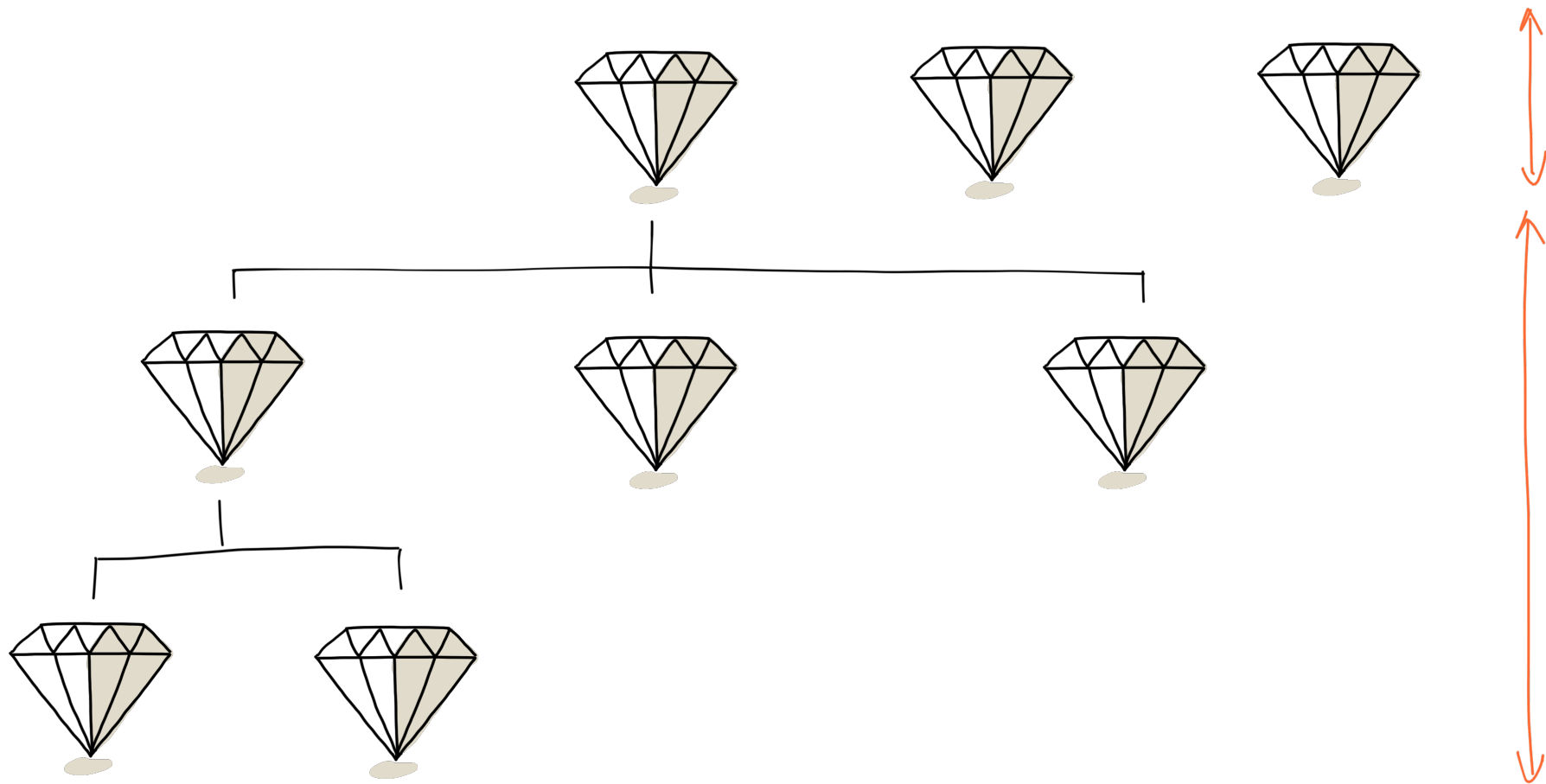
A Company has Strategies on Many Levels





Tree of Goals

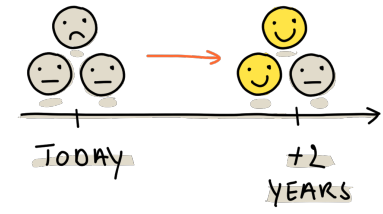
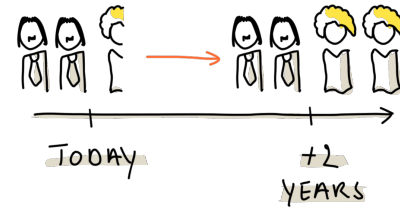
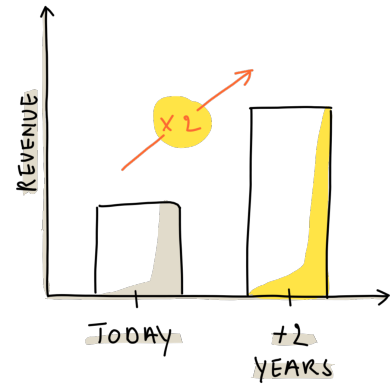


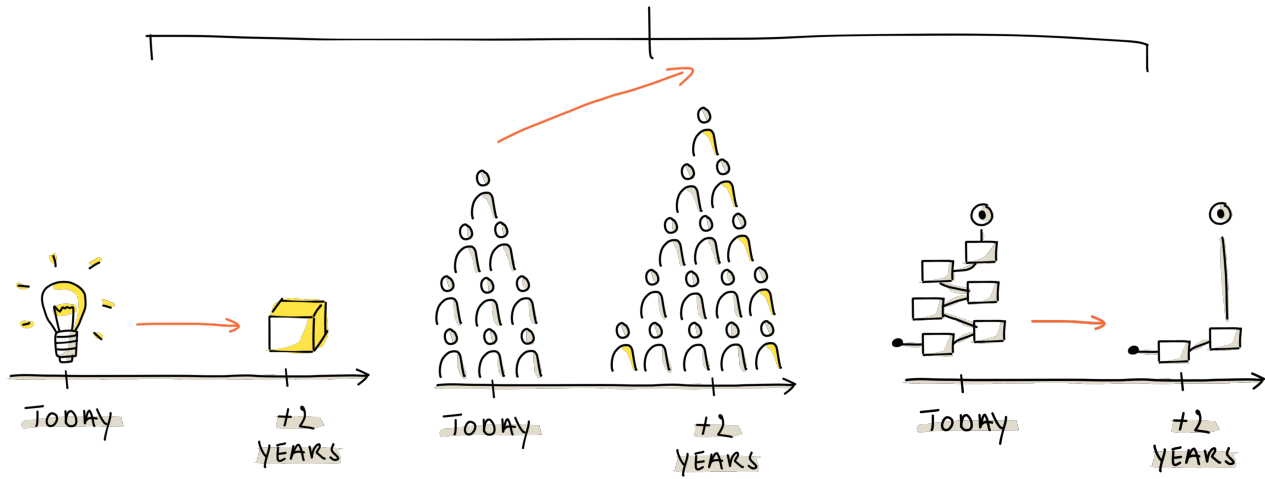
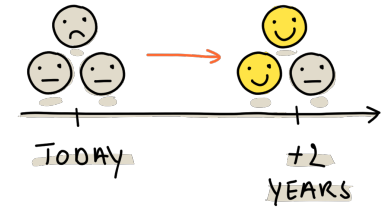
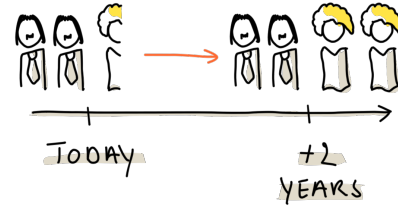
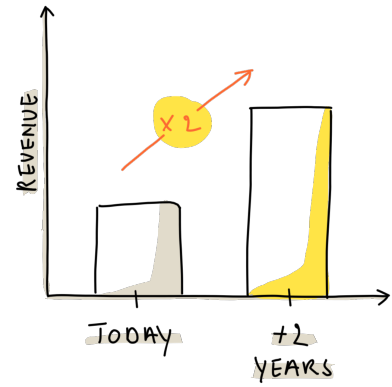


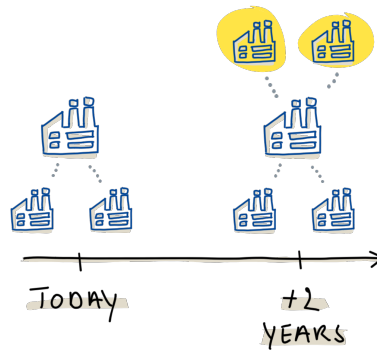
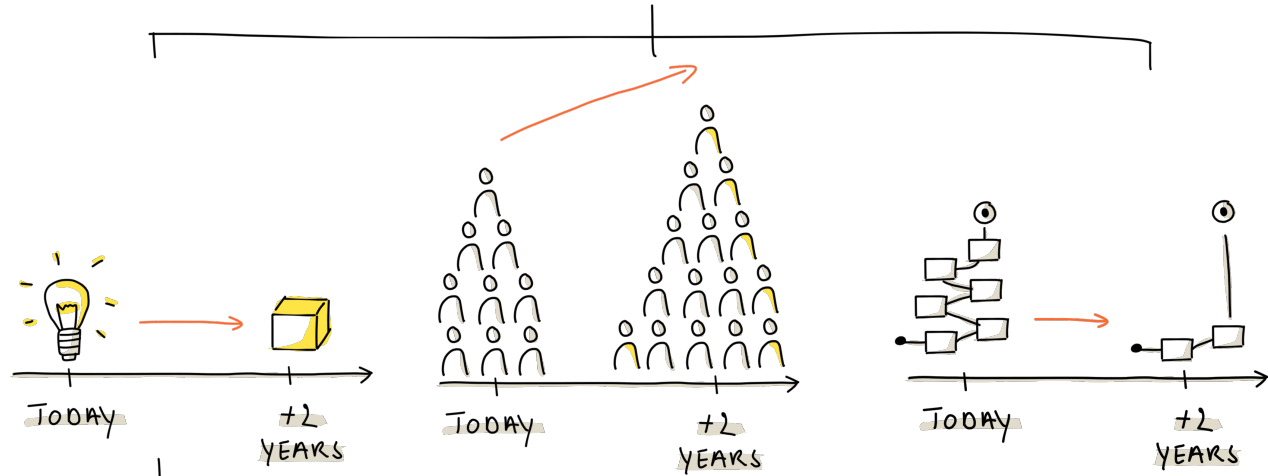
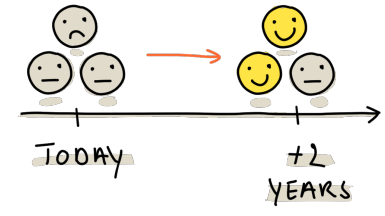
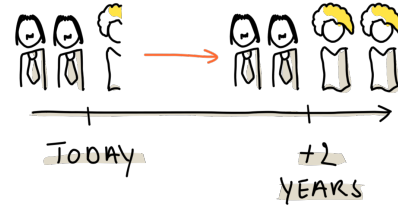
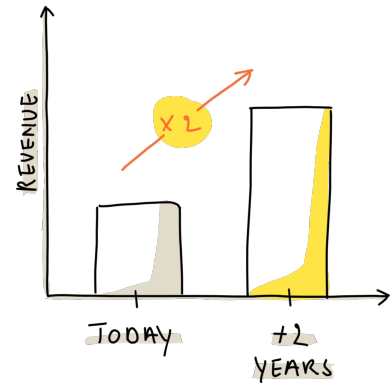
CORPORATE GOALS

SUPPORTING GOALS









EXERCISE: WHAT ARE THE GOALS OF YOUR ORGANIZATION?

1. List max 3 goals of your organization
2. Explain these goals to the other participants



1



2



3



DATA STRATEGY?



A data strategy is a **highly dynamic process** employed to support the **acquisition, organization, analysis, and delivery** of **data** in support of **business objectives**.



A data strategy is a **long-term plan** that defines the **technology, processes, people, and rules** required to **manage** an organization's **information** assets.



Data Strategy is a **master plan or blueprint** for confronting day-to-day business challenges and **meeting pre-defined business goals** using data. To that end, the Data Strategy spells out the interrelationships between **technologies, processes, and people** – all linked through their data **roles and responsibilities**.



A data strategy is a **highly dynamic process** employed to support the **acquisition, organization, analysis, and delivery of data** in support of **business objectives**.

The Gartner logo, consisting of the word "Gartner" in a bold, blue, sans-serif font with a registered trademark symbol.

A data strategy is a **long-term plan** that defines the **technology, processes, people, and rules** required to **manage** an organization's **information assets**.

The AWS logo, featuring the lowercase letters "aws" in a dark blue, sans-serif font, with a curved orange arrow underneath that points from the 'a' to the 's'.

Data Strategy is a **master plan or blueprint** for confronting day-to-day business challenges and **meeting pre-defined business goals using data**. To that end, the Data Strategy spells out the interrelationships between **technologies, processes, and people** – all linked through their data **roles and responsibilities**.

The DATAVERSITY logo, featuring a stylized icon of a building with three columns on the left, followed by the word "DATAVERSITY" in a blue, sans-serif font with a registered trademark symbol.

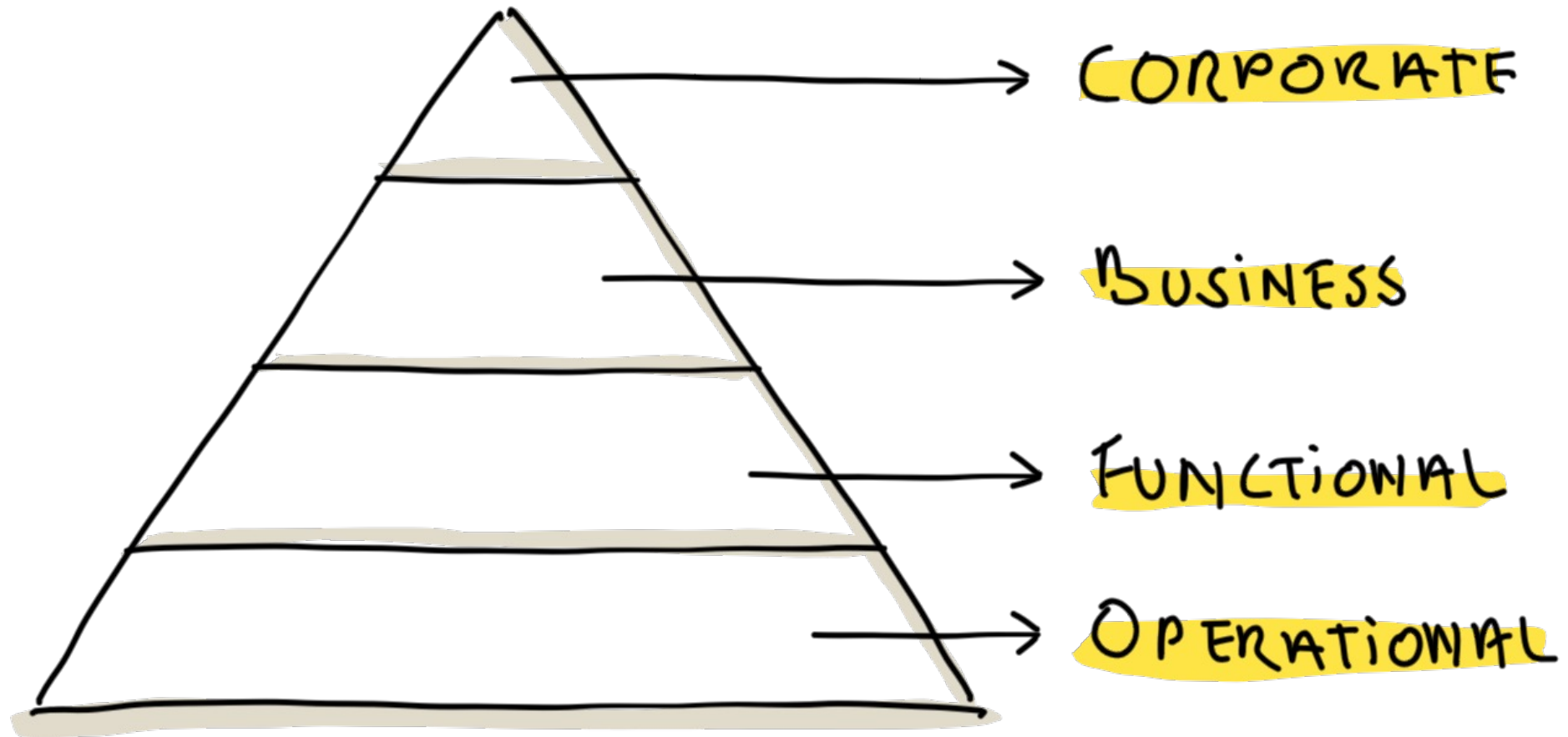
DATA STRATEGY?

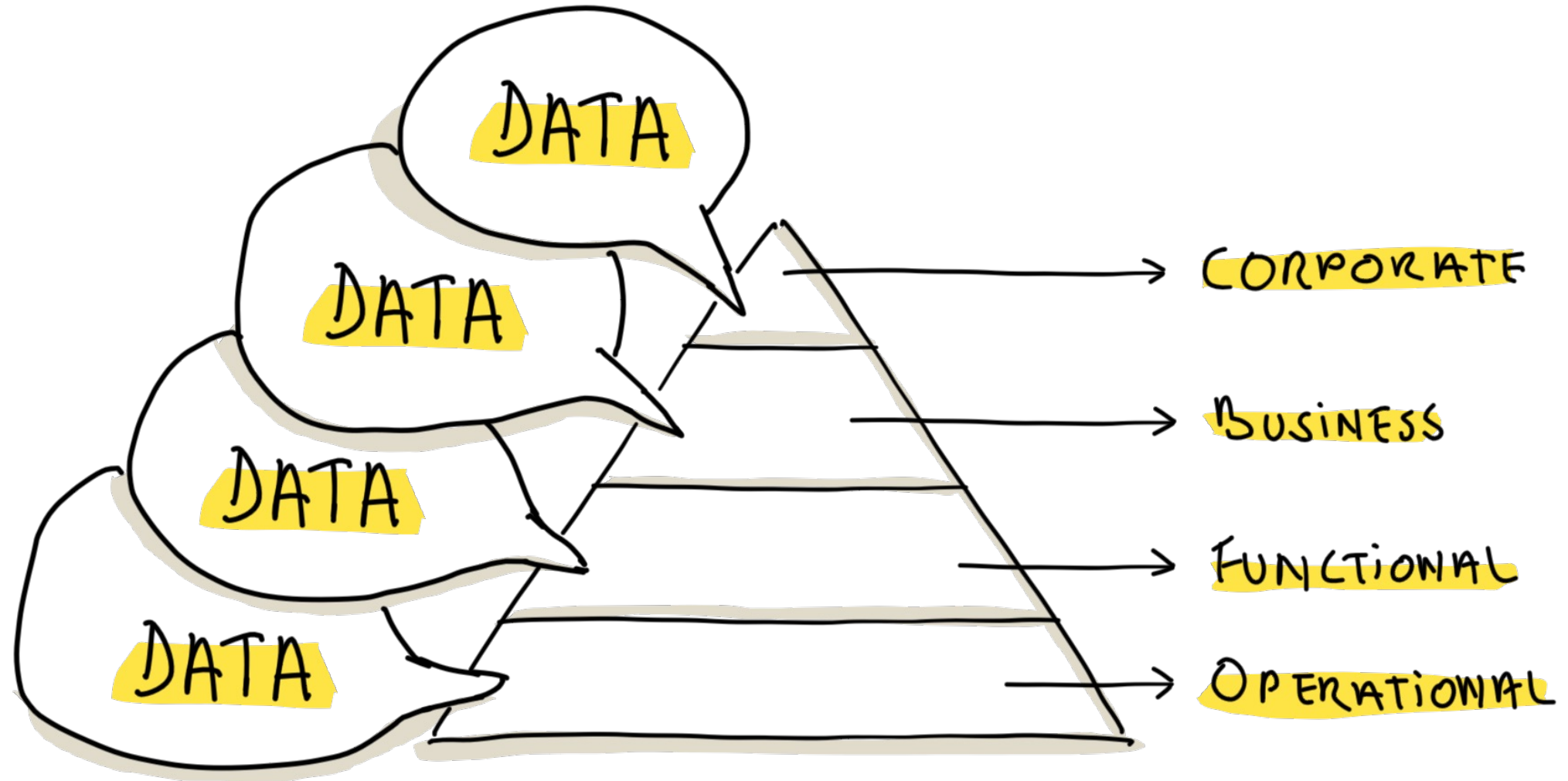


DATA STRATEGY LEVELS?



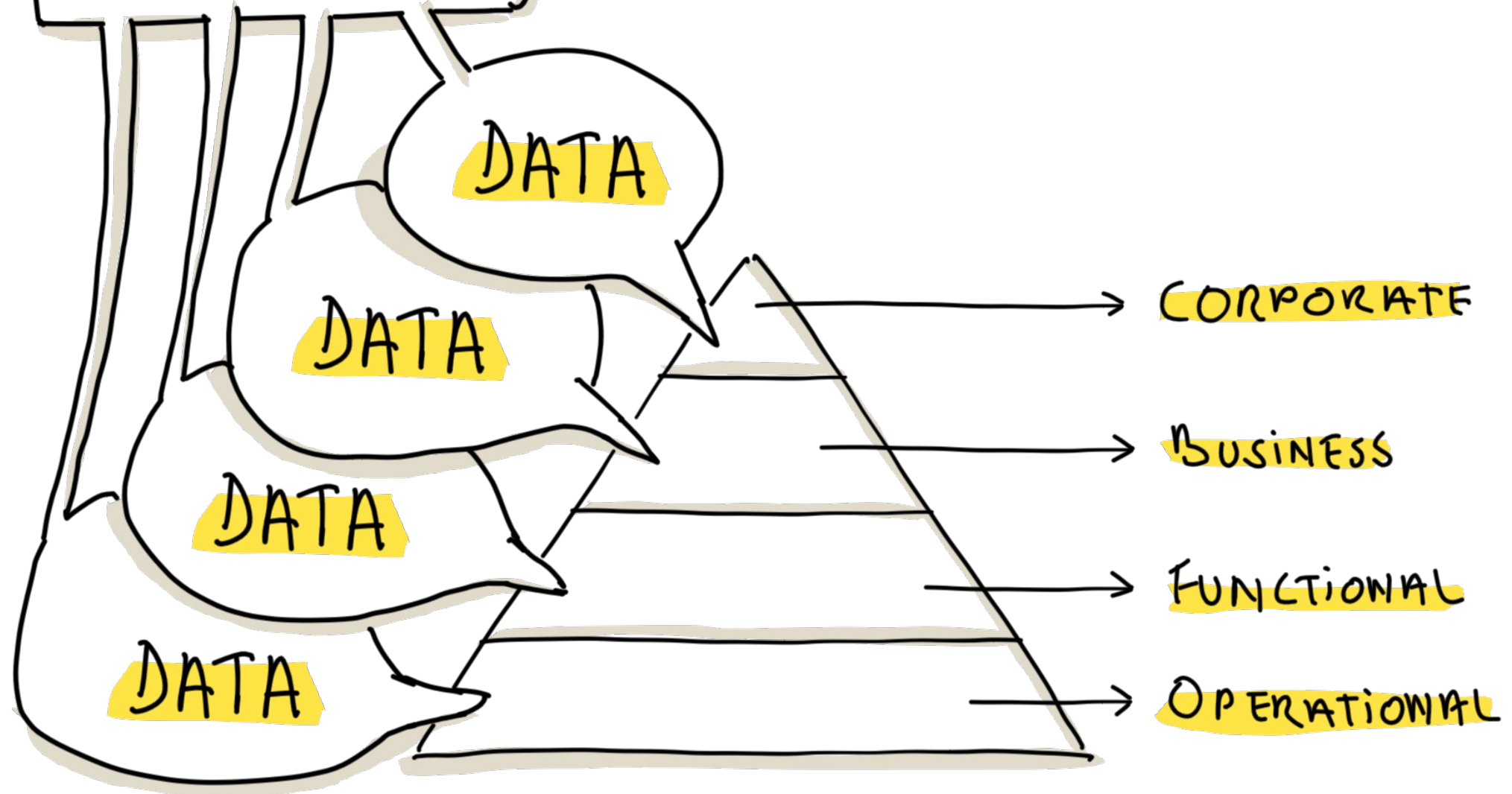
A Company has Many Strategic Levels

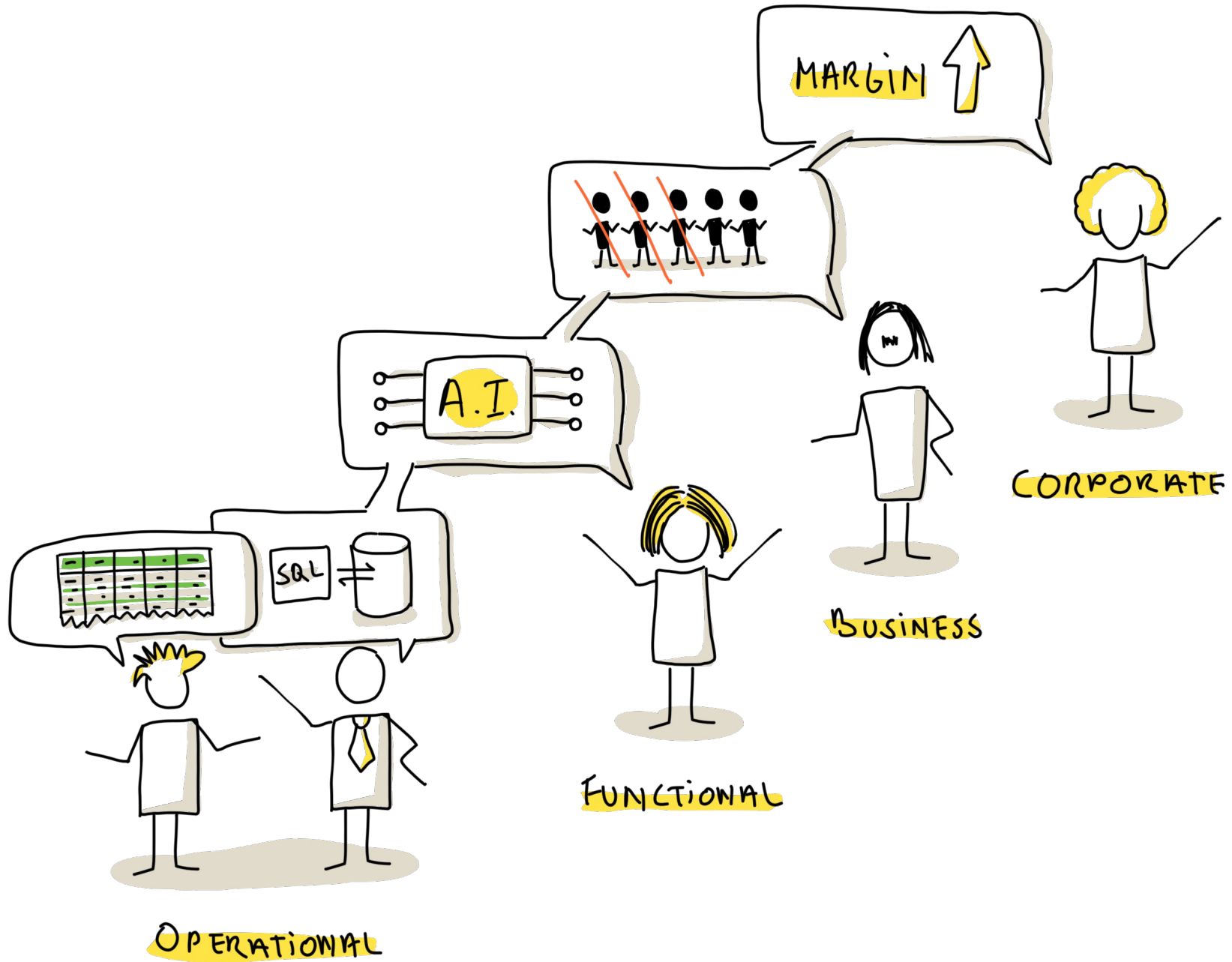


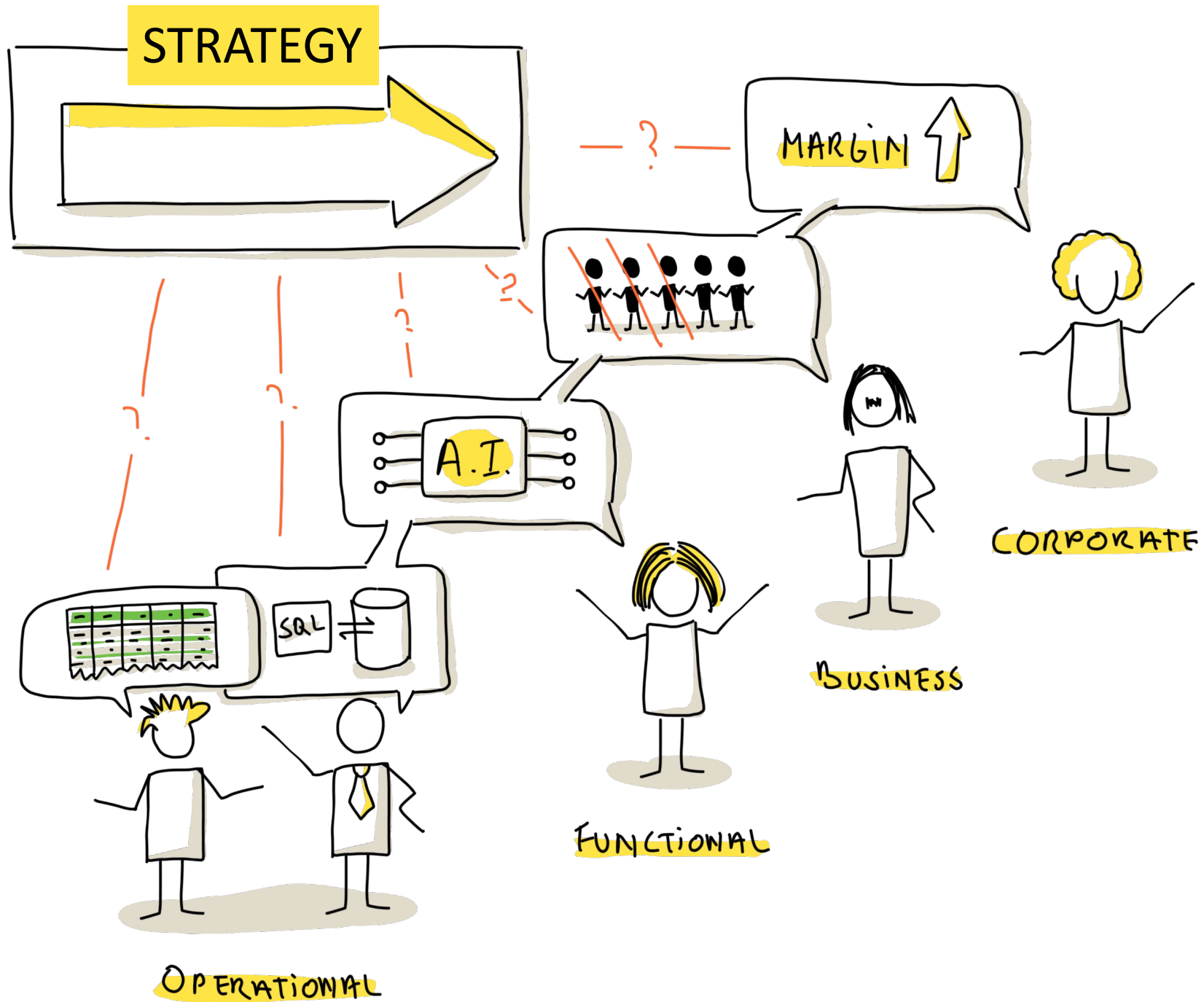


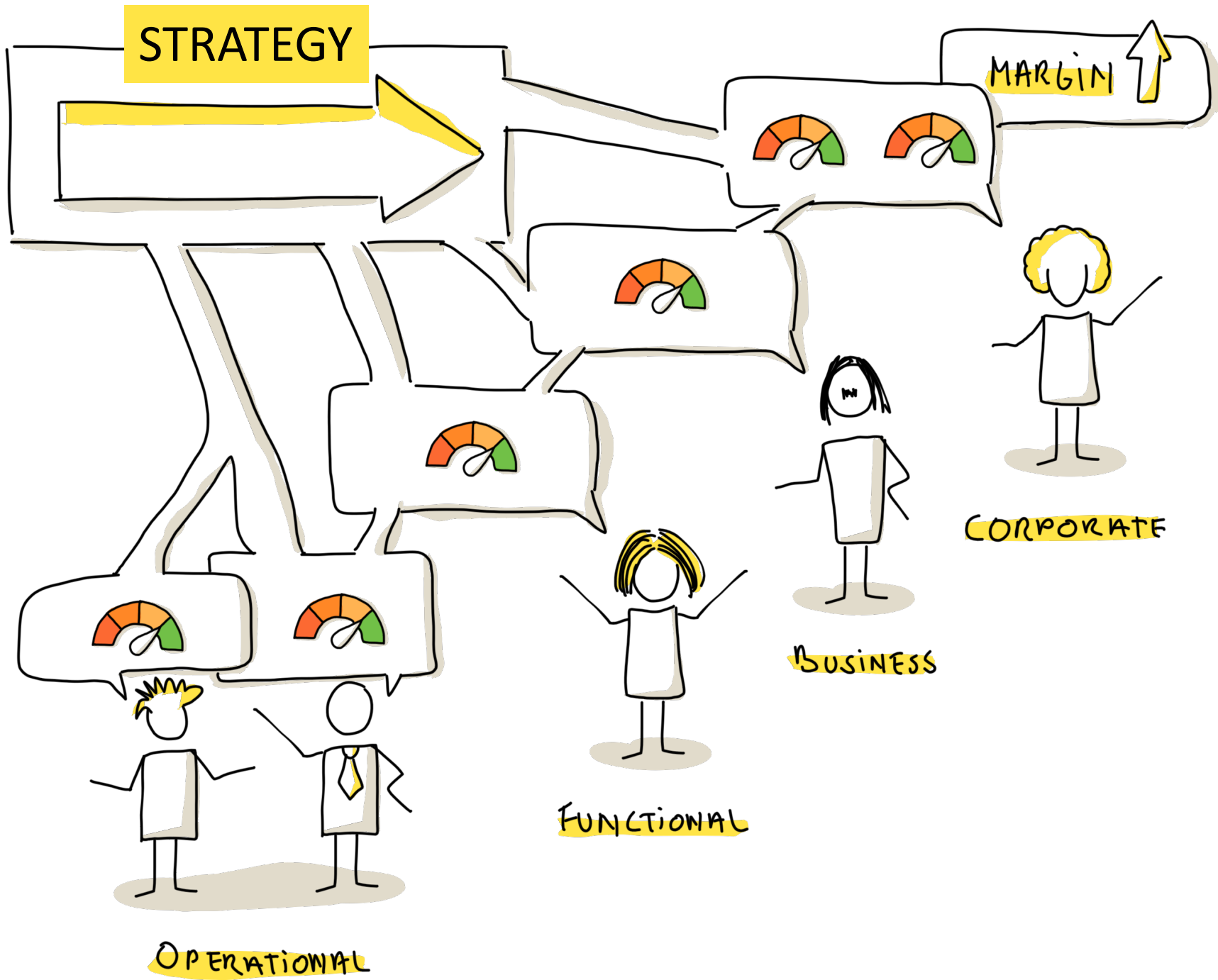
DATA STRATEGY

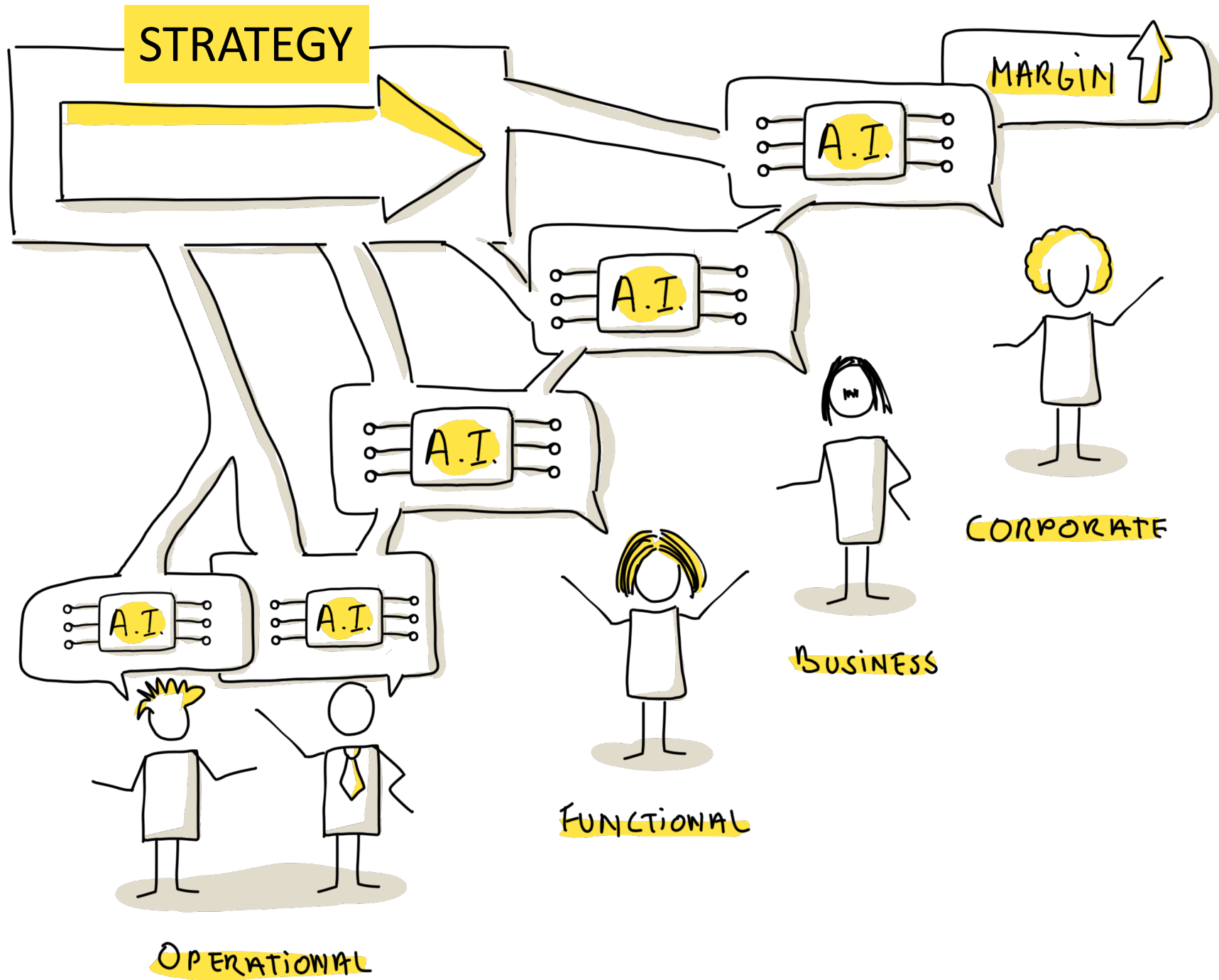
= THE CHALLENGE











1



2



3

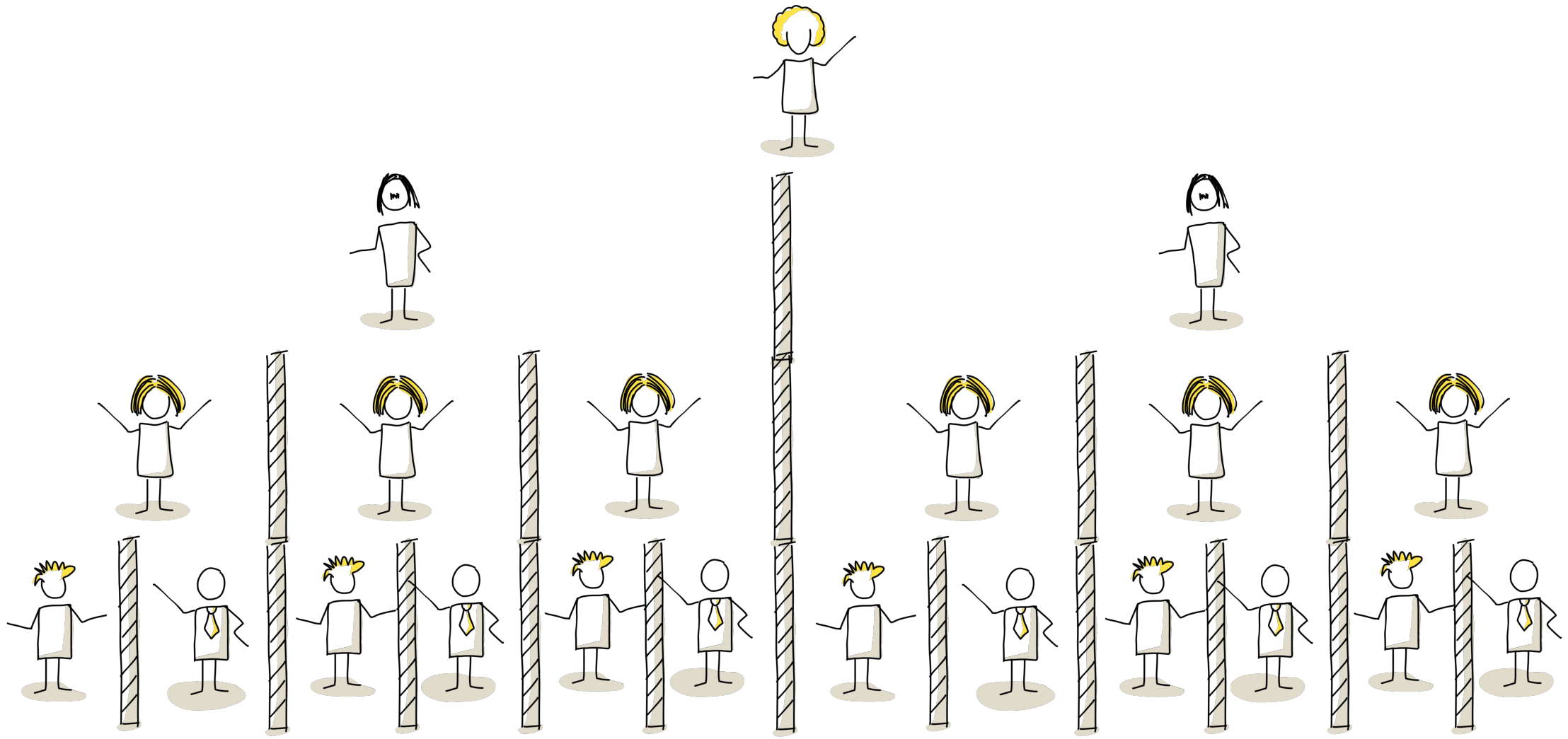


WHY is it HARD to MAKE A DATA STRATEGY?

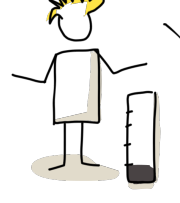
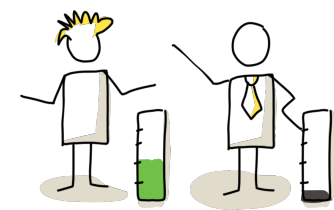
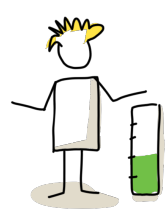
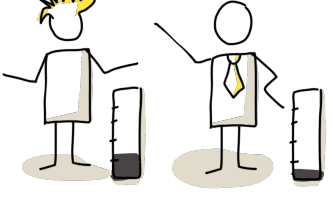
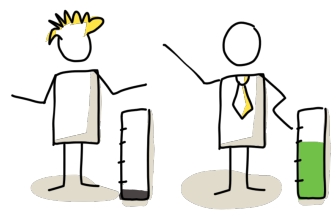
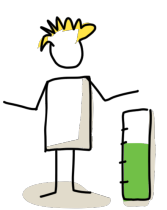
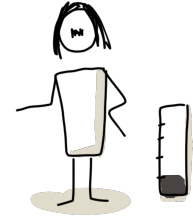
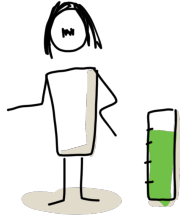


I Give you 3 Reasons!

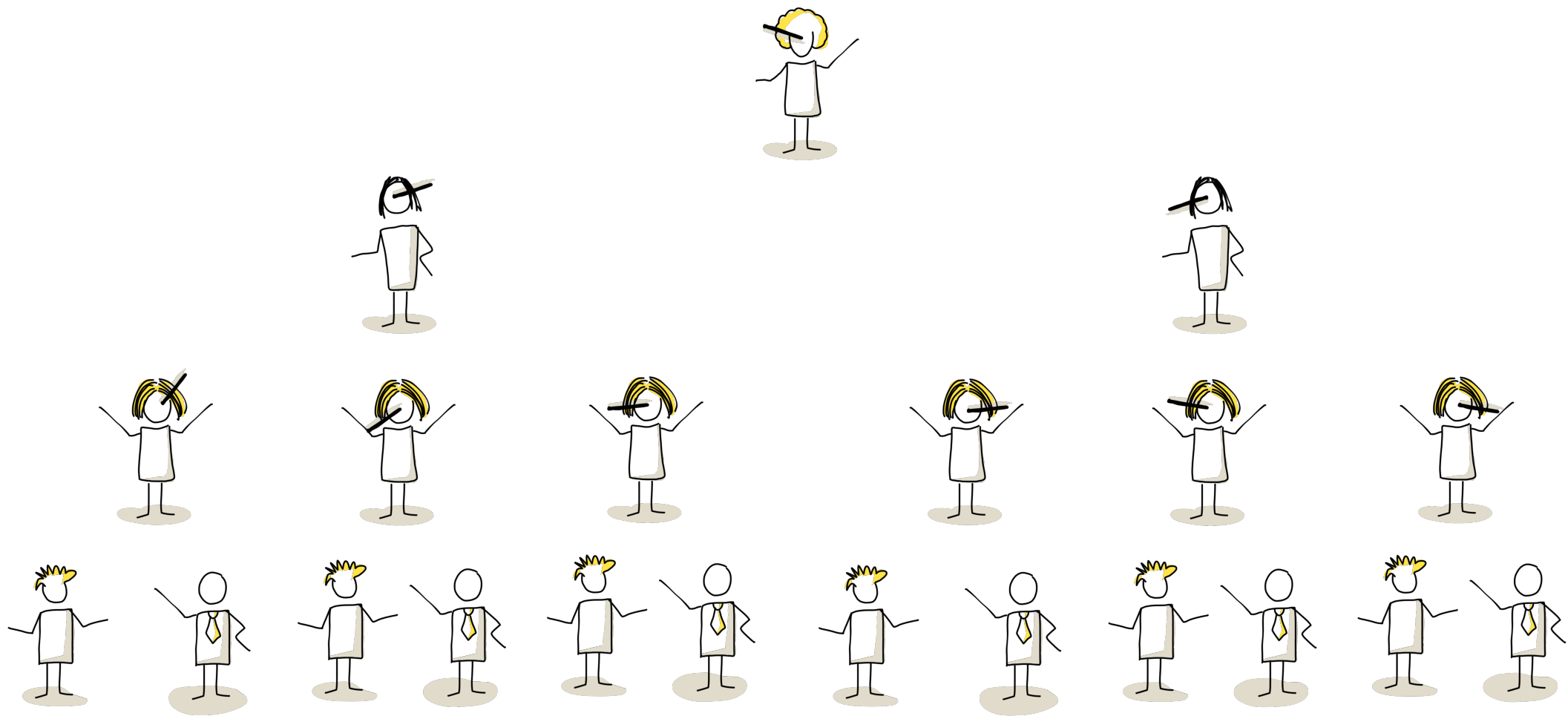
1 Silo Thinking



2 Varying Data Literacy

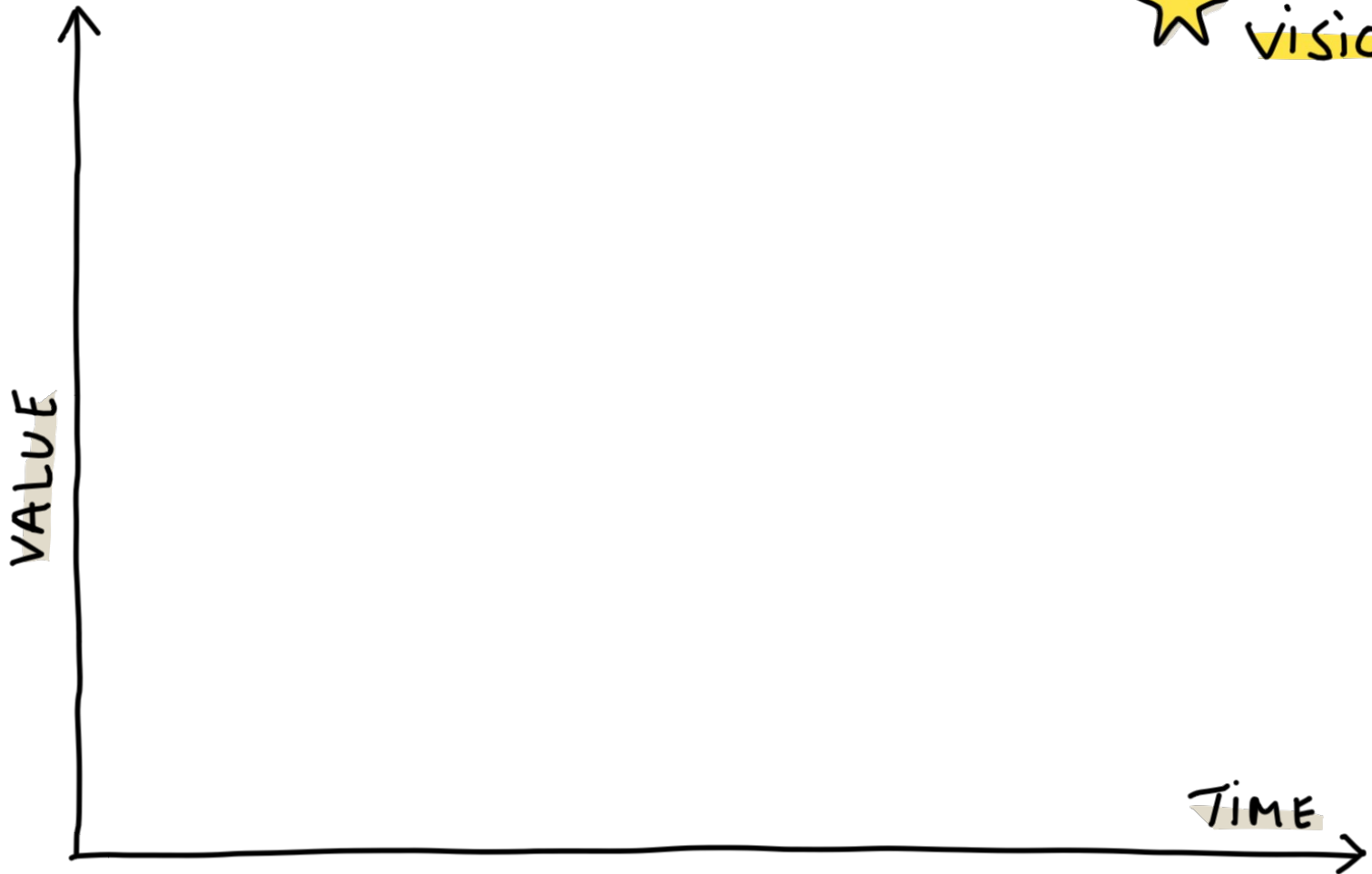


3 No Data Leadership



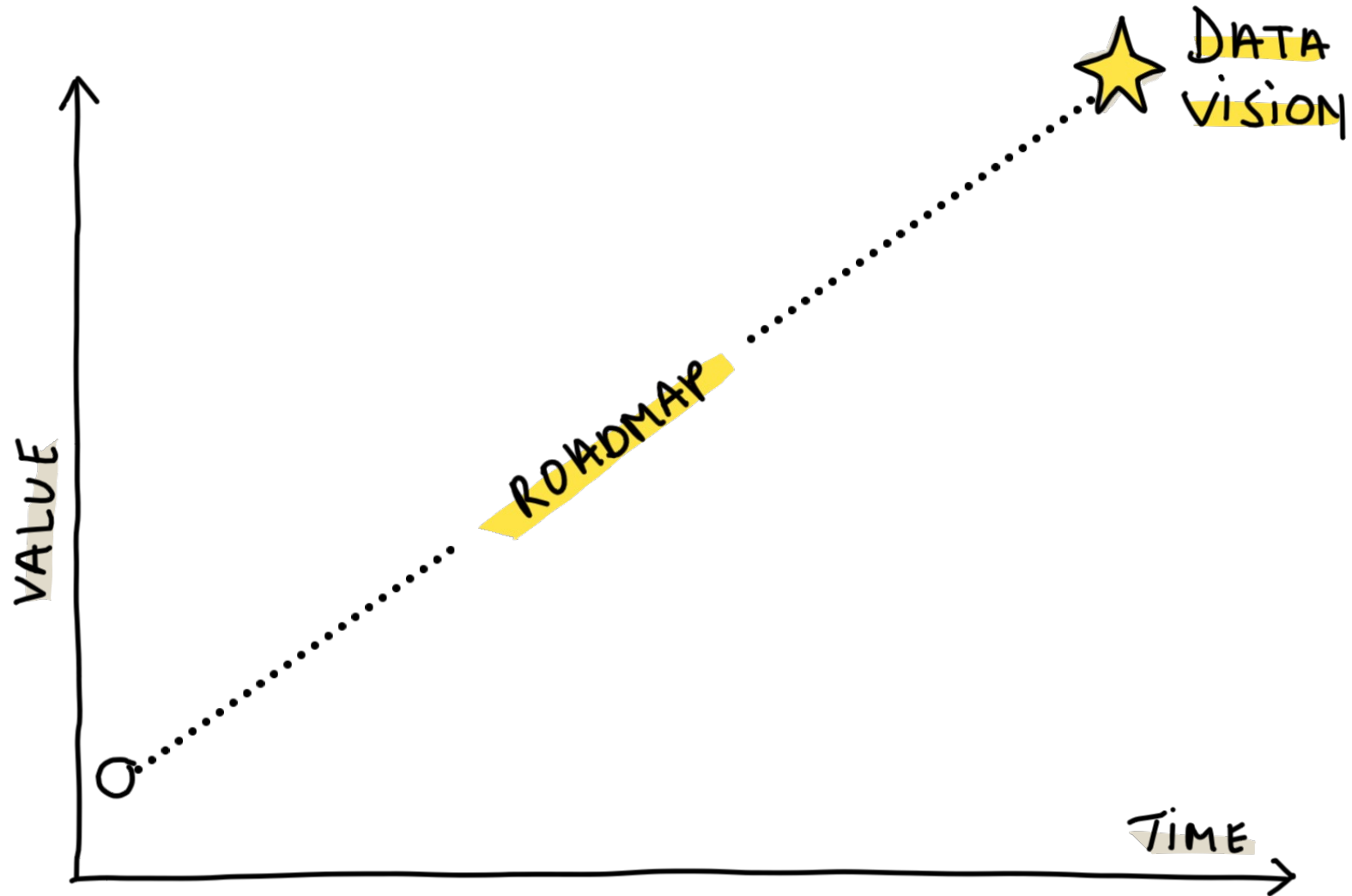
DATA STRATEGY: *TYPICAL DELIVERABLES*

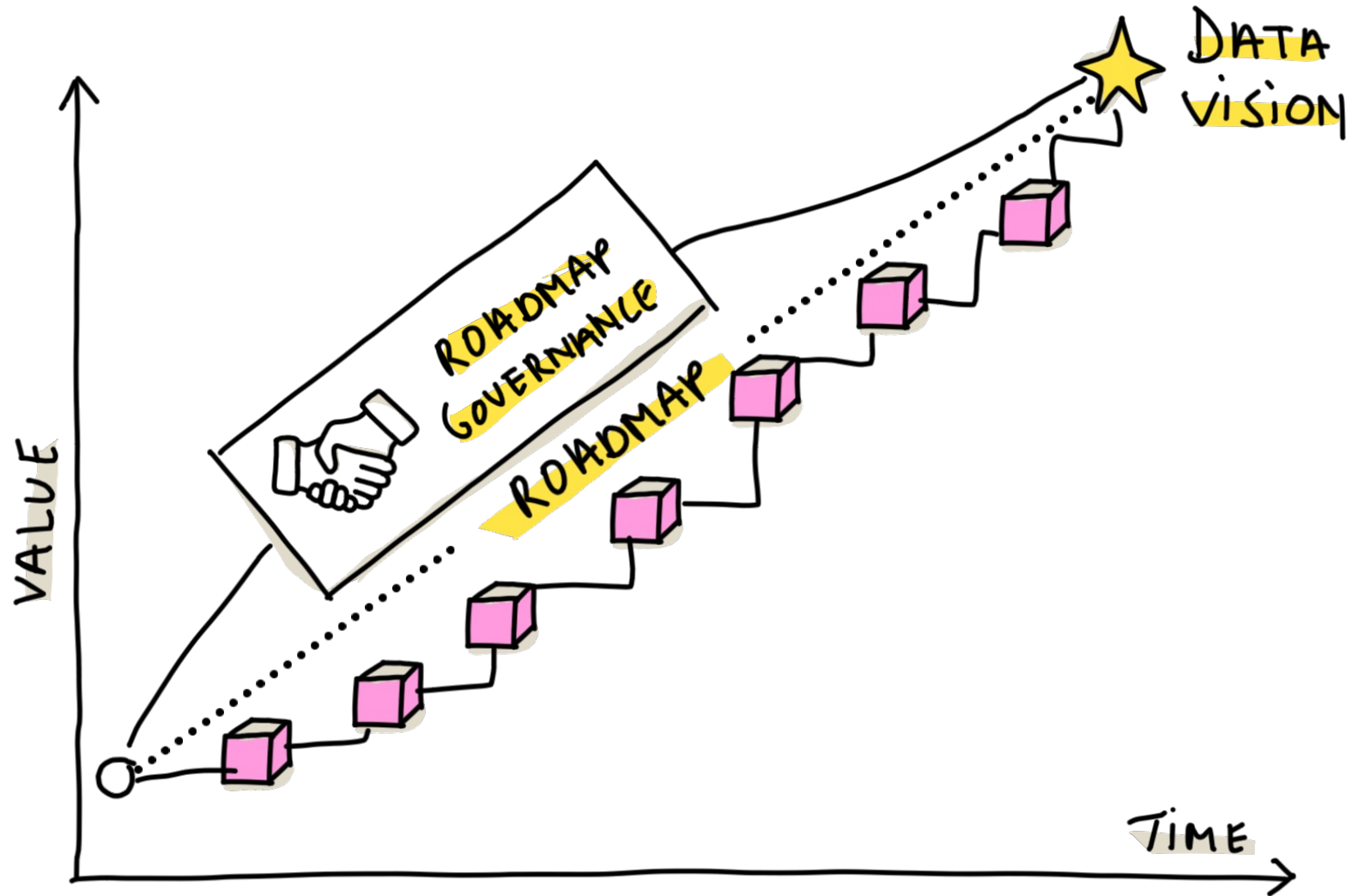


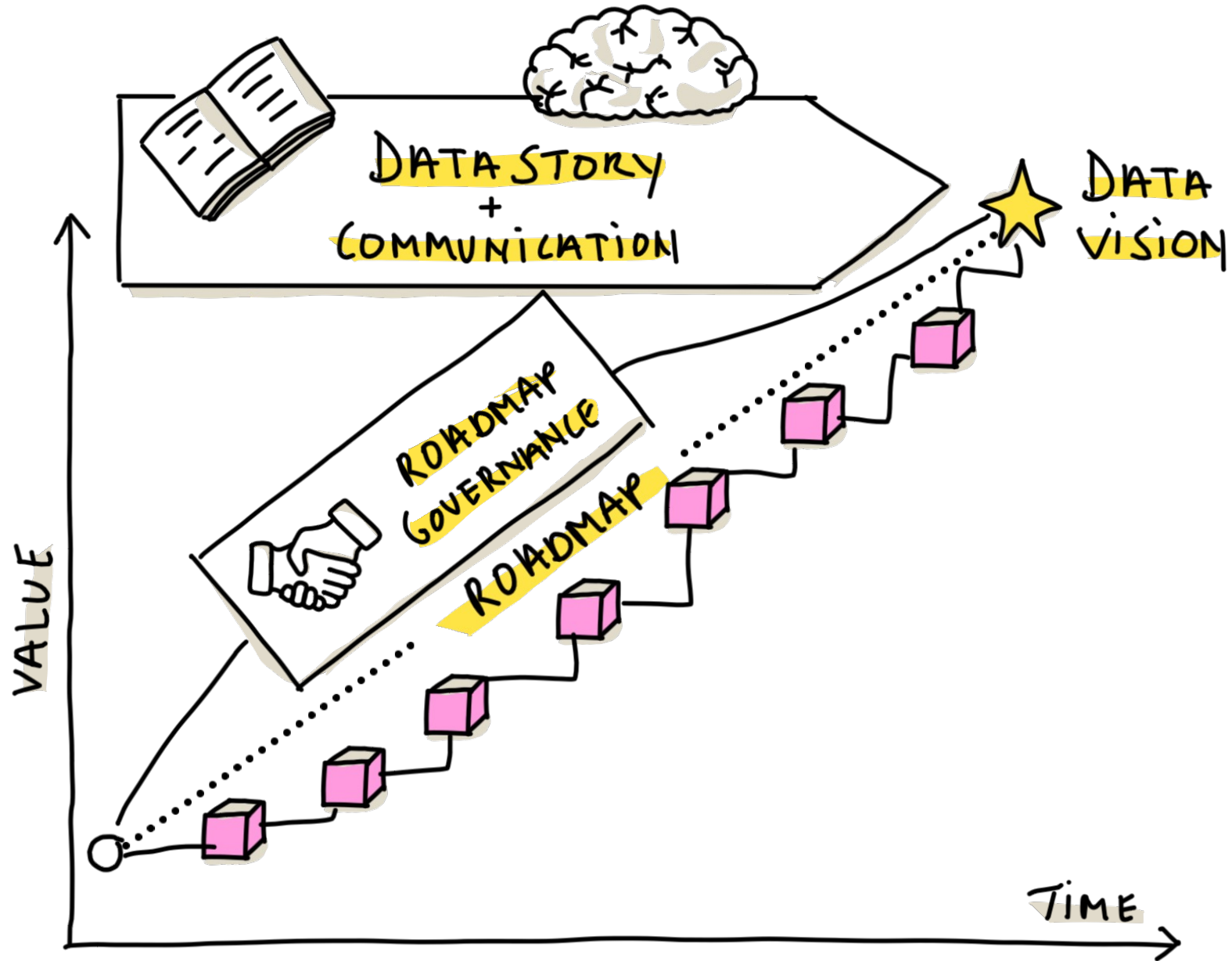


★ DATA
VISION





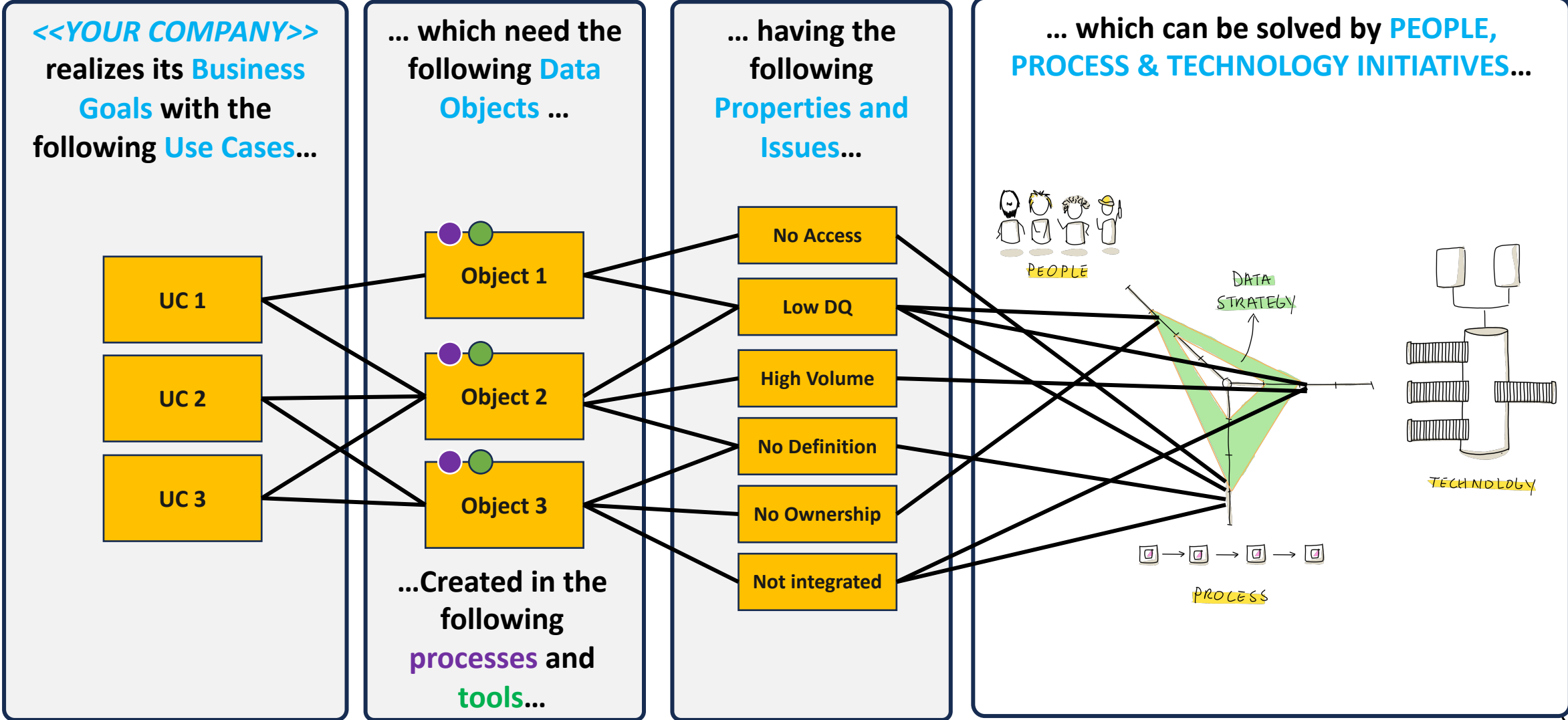




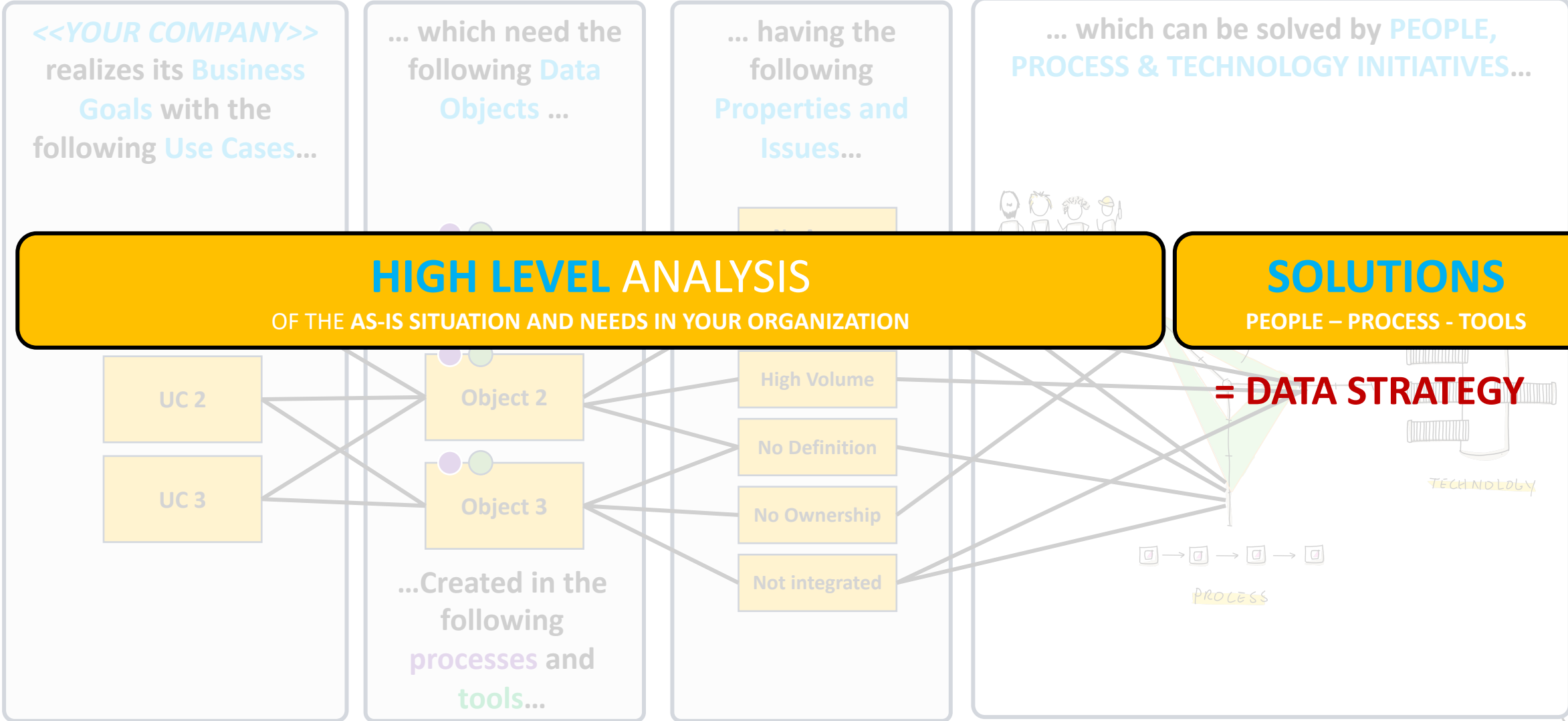
DATA STRATEGY FRAMEWORK

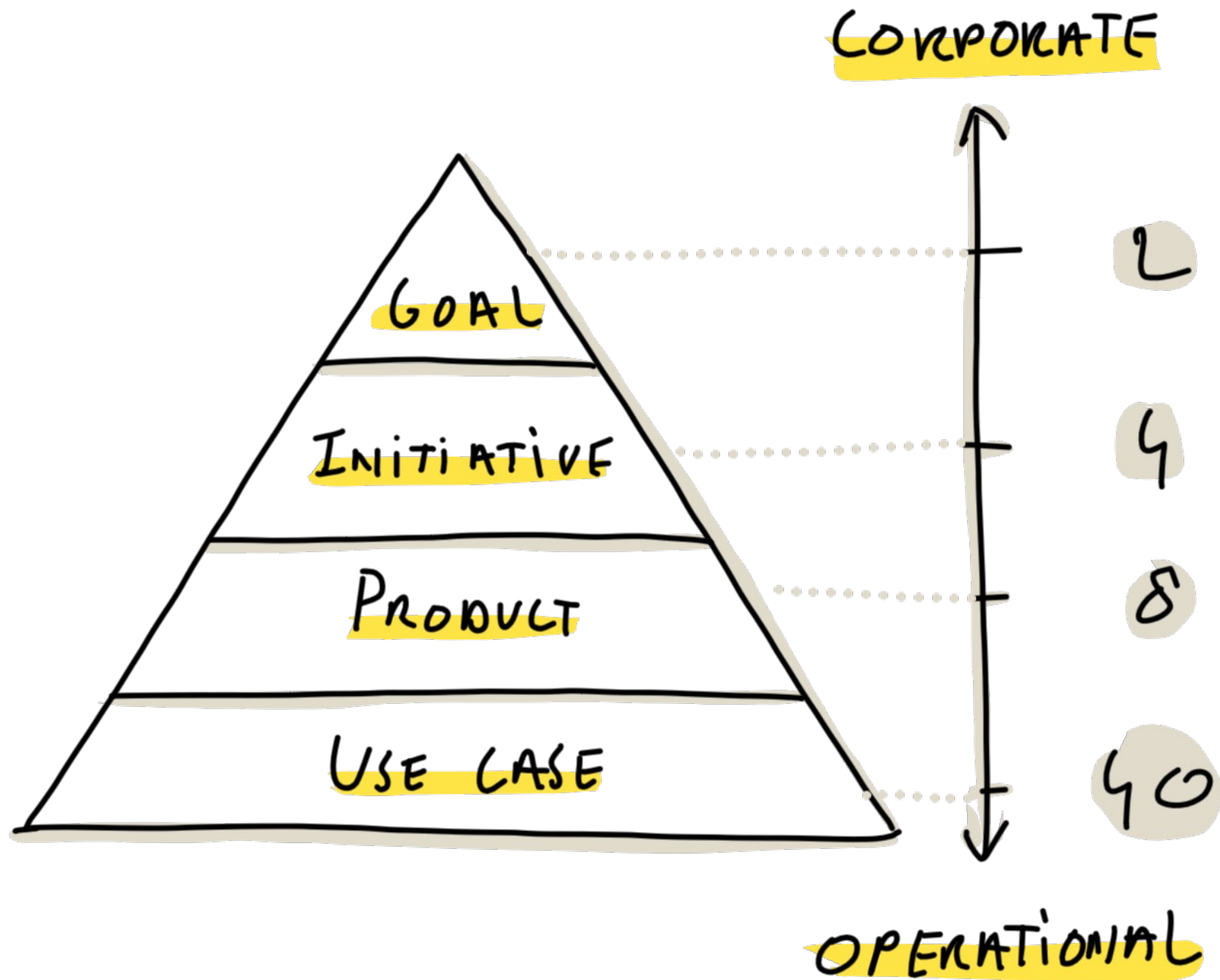


Data Strategy Framework

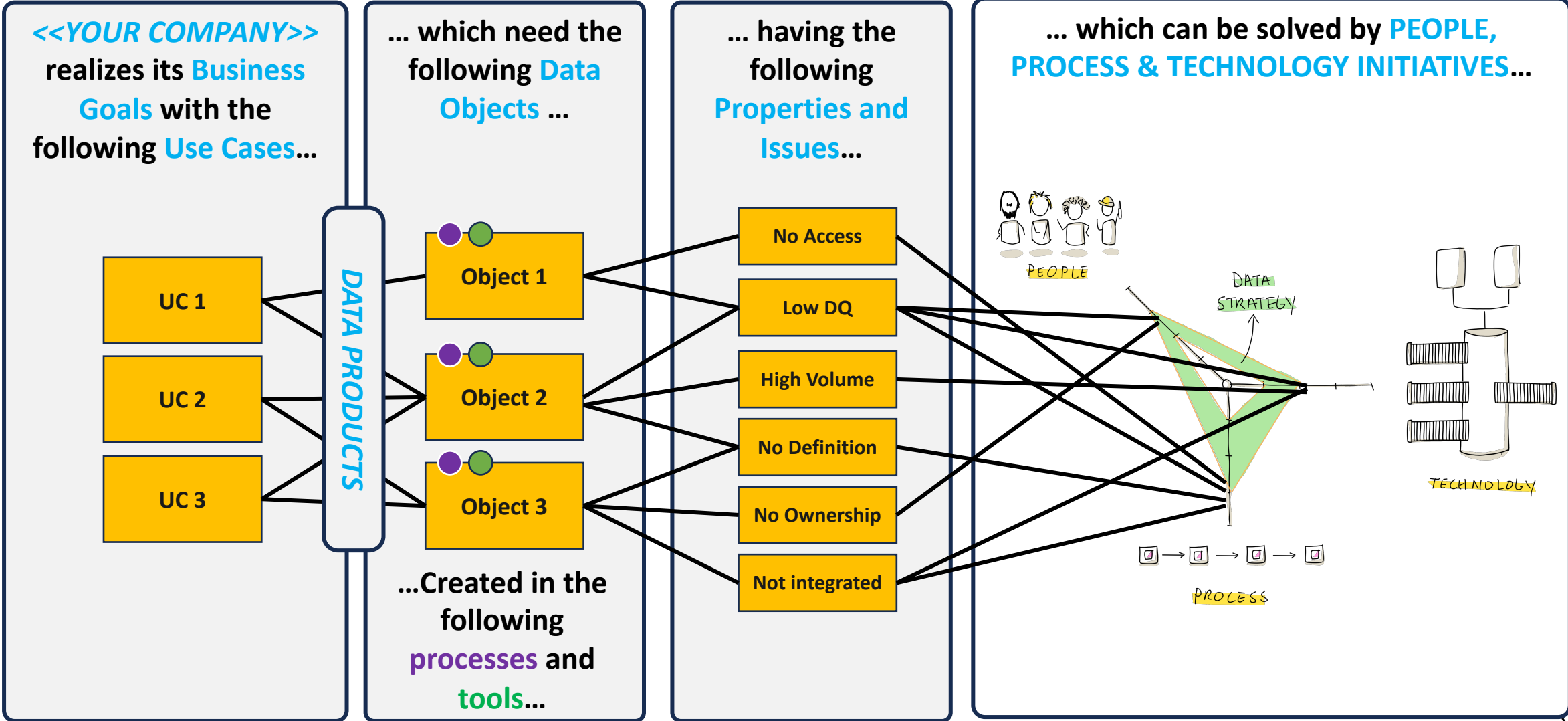


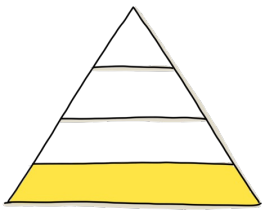
Data Strategy Framework





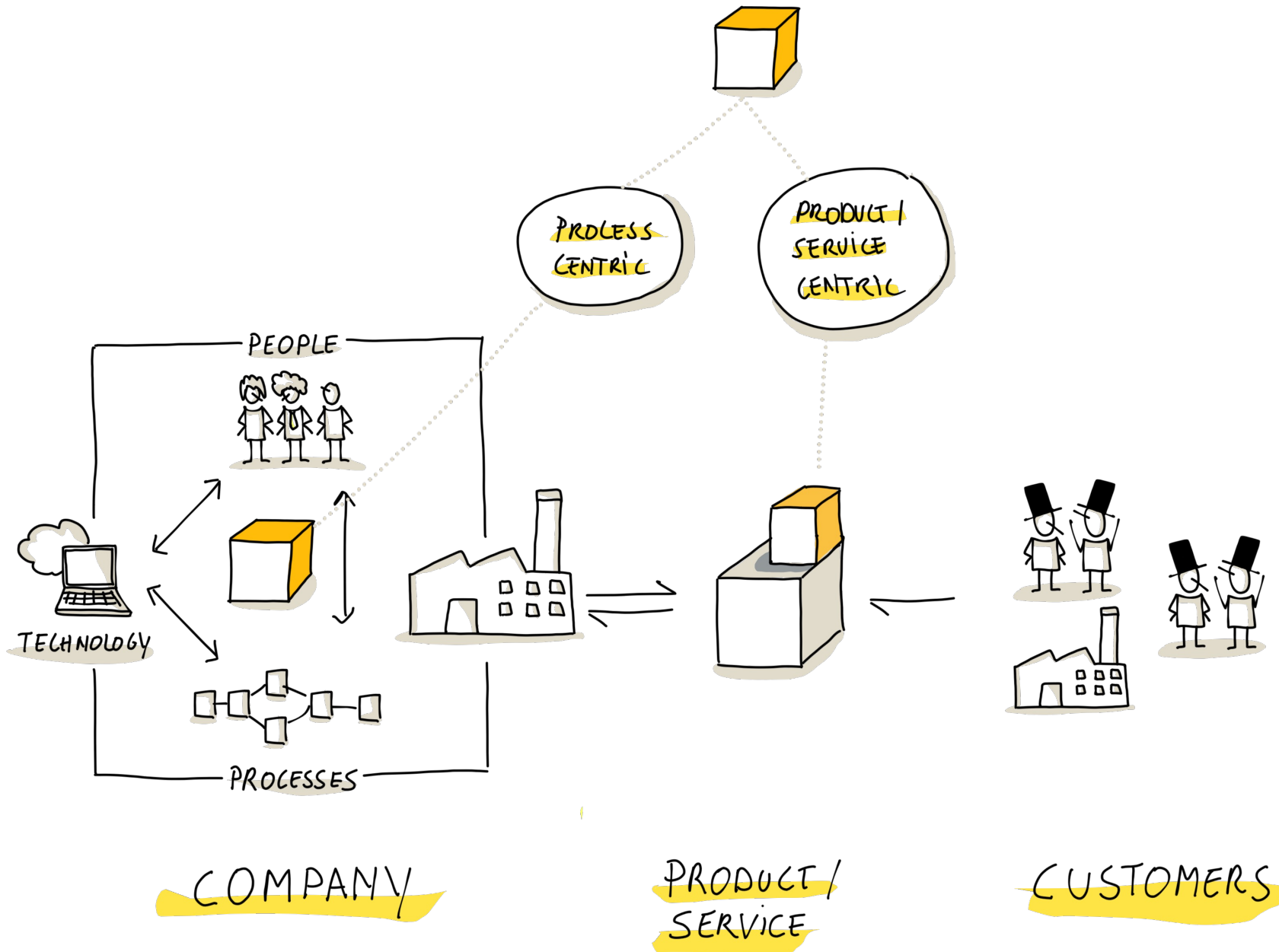
Data Strategy Framework

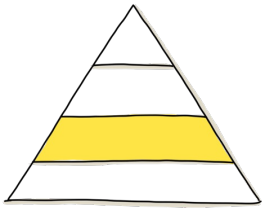




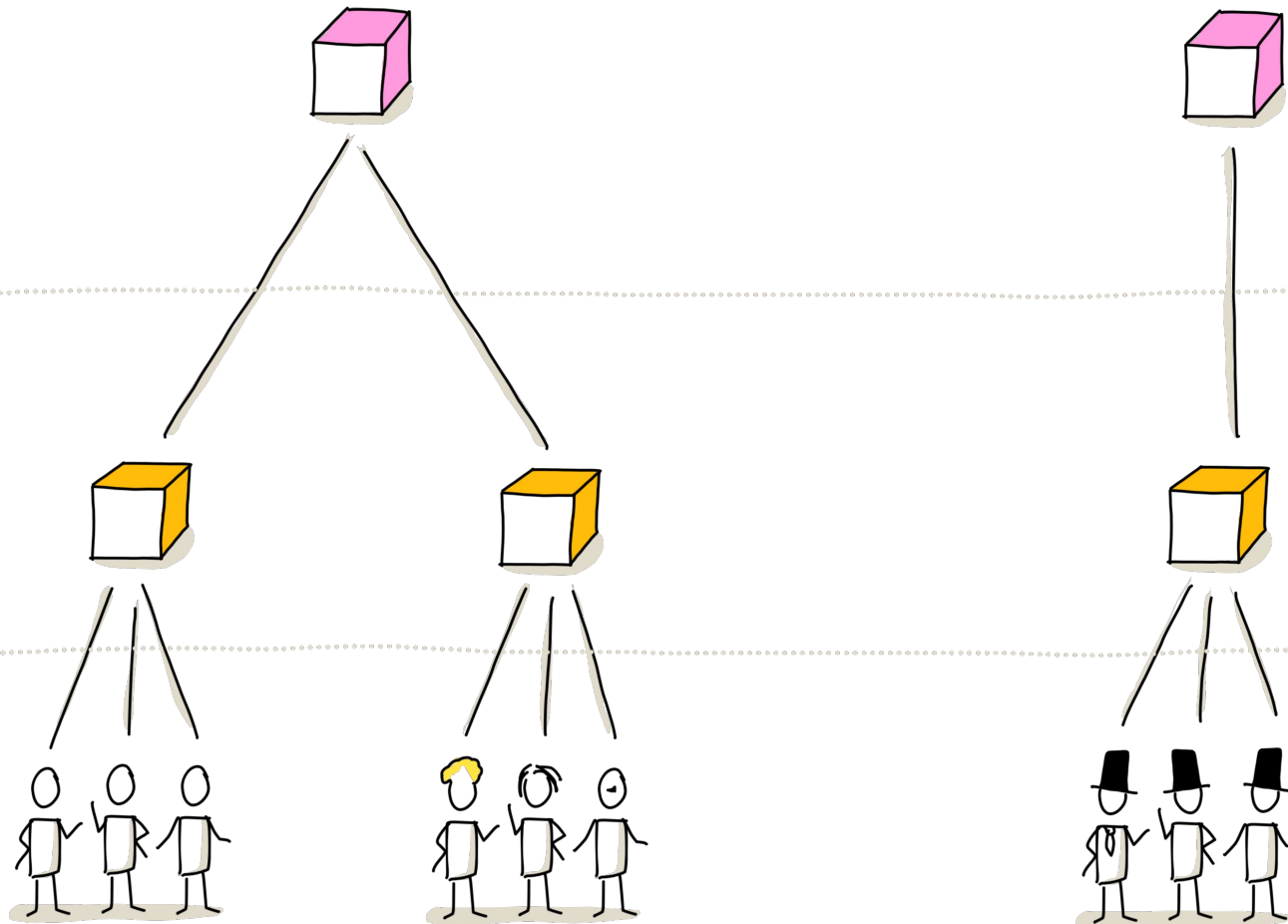
USE CASES

DATA USE CASE





PRODUCTS

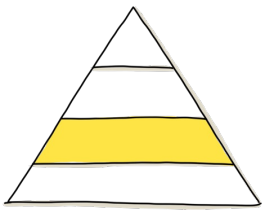


DATA PRODUCT

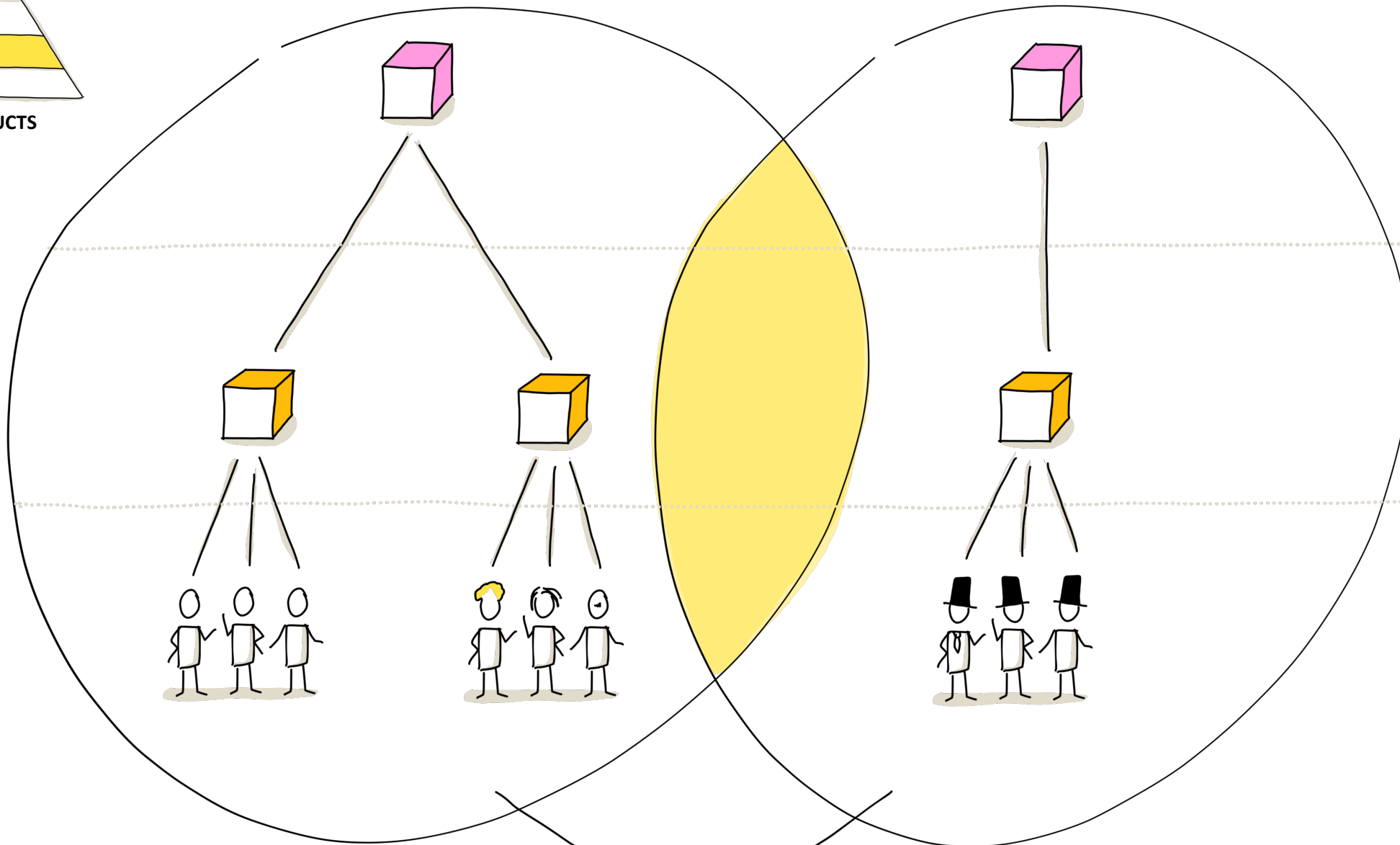
DATA
USE CASE

USERS





PRODUCTS



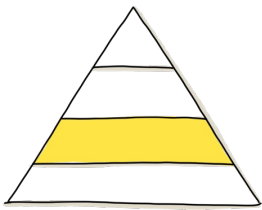
DATA PRODUCT

DATA USE CASE

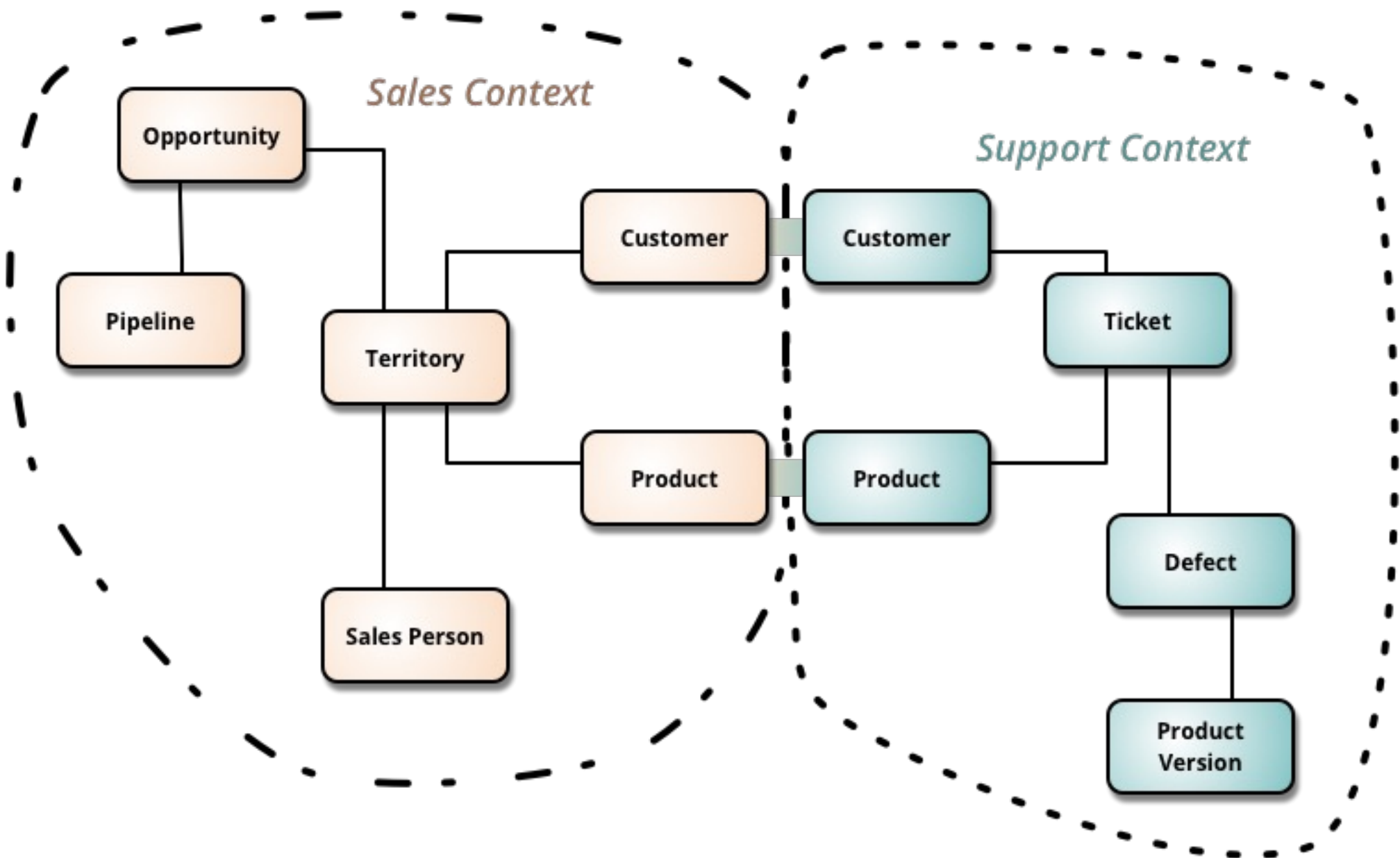
USERS

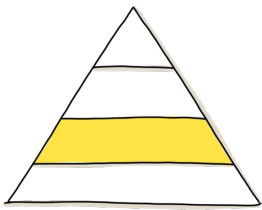
BOUNDED CONTEXT





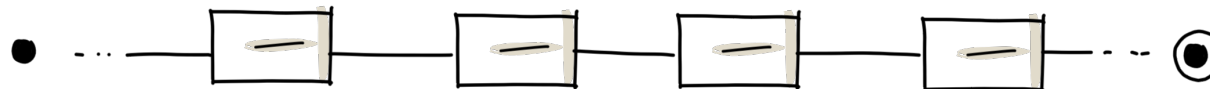
PRODUCTS





PRODUCTS

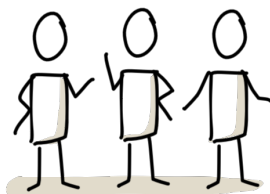
PROCESS



PAYMENT TEAM

SUBSCRIPTION TEAM

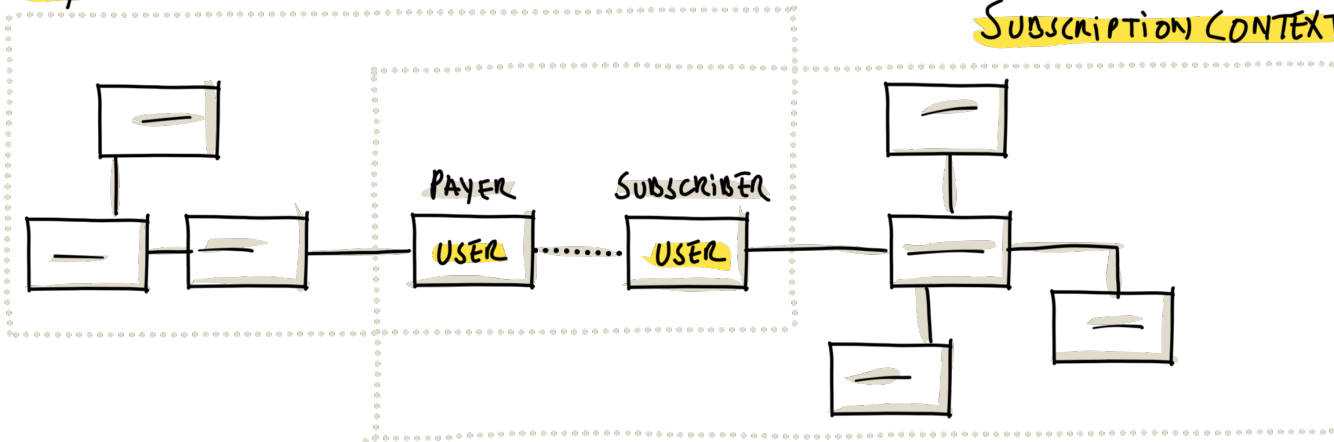
ORGANIZATIONAL
LEVEL

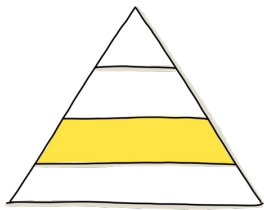


CONTEXT
LEVEL

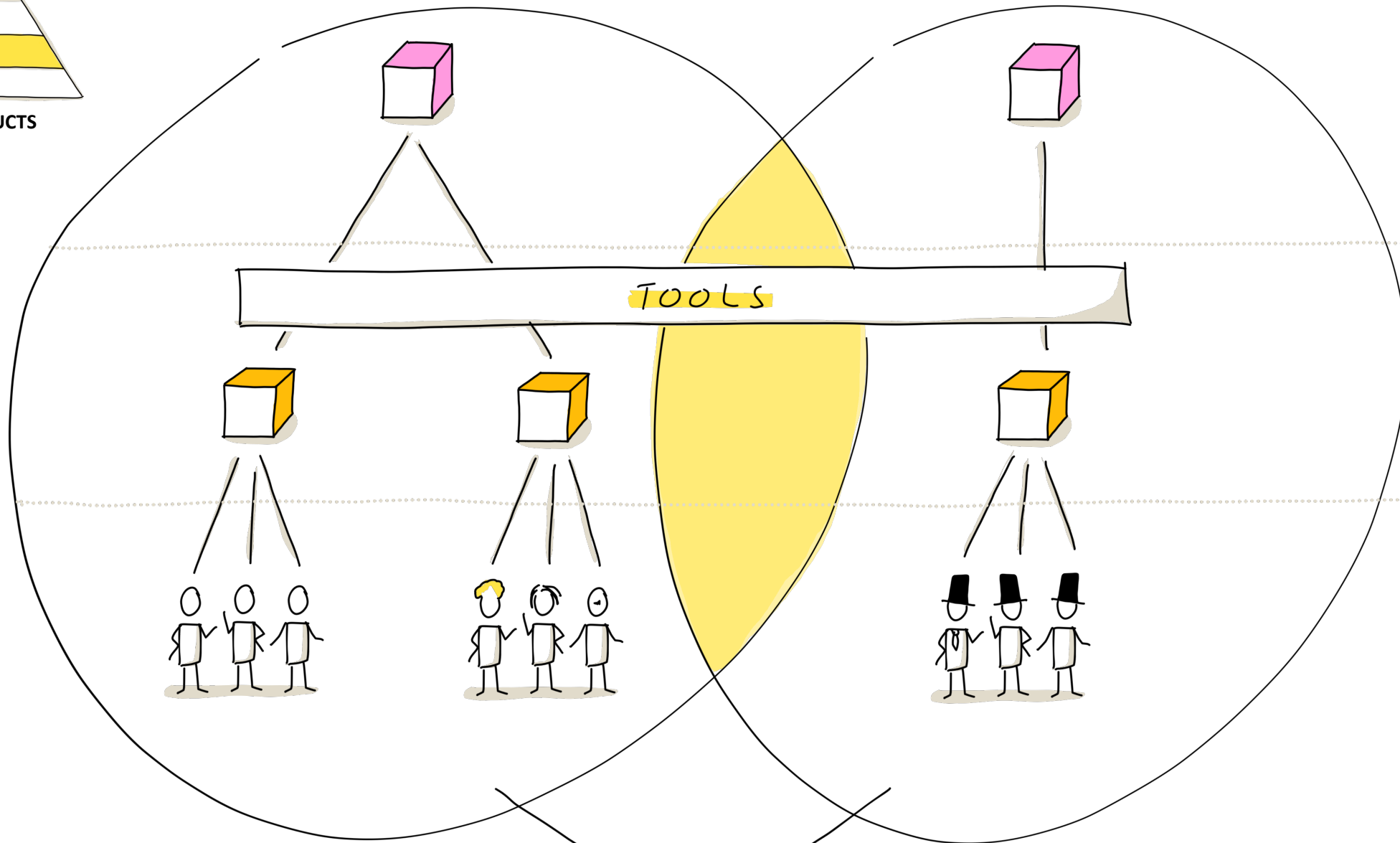
PAYMENT CONTEXT

SUBSCRIPTION CONTEXT





PRODUCTS



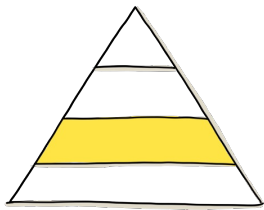
DATA PRODUCT

DATA
USE CASE

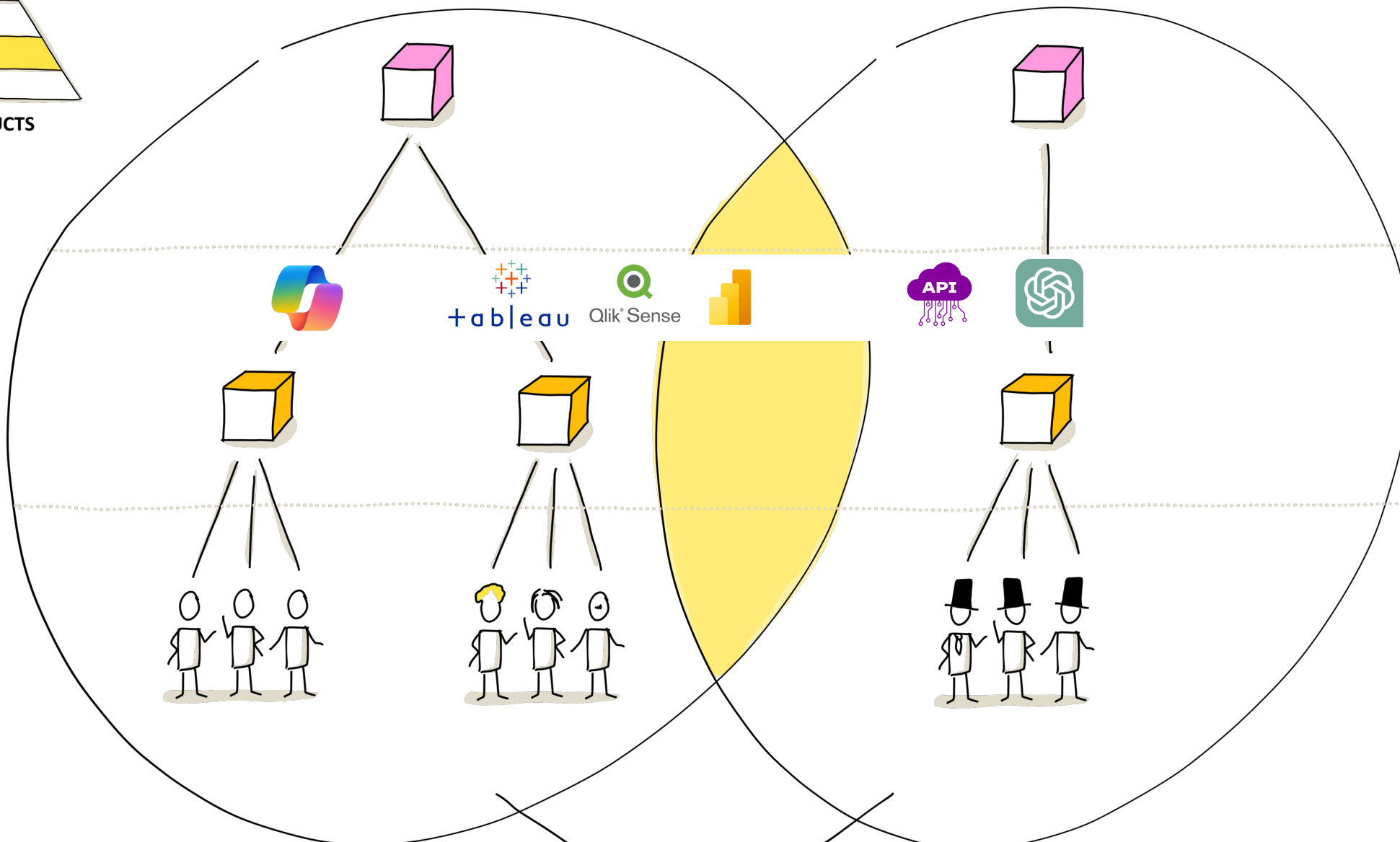
USERS

BOUNDED CONTEXT





PRODUCTS



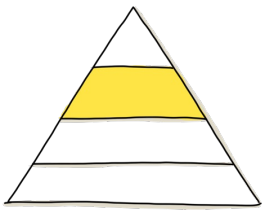
DATA PRODUCT

DATA USE CASE

USERS

BOUNDED CONTEXT





INITIATIVES

DATA STEWARDSHIP

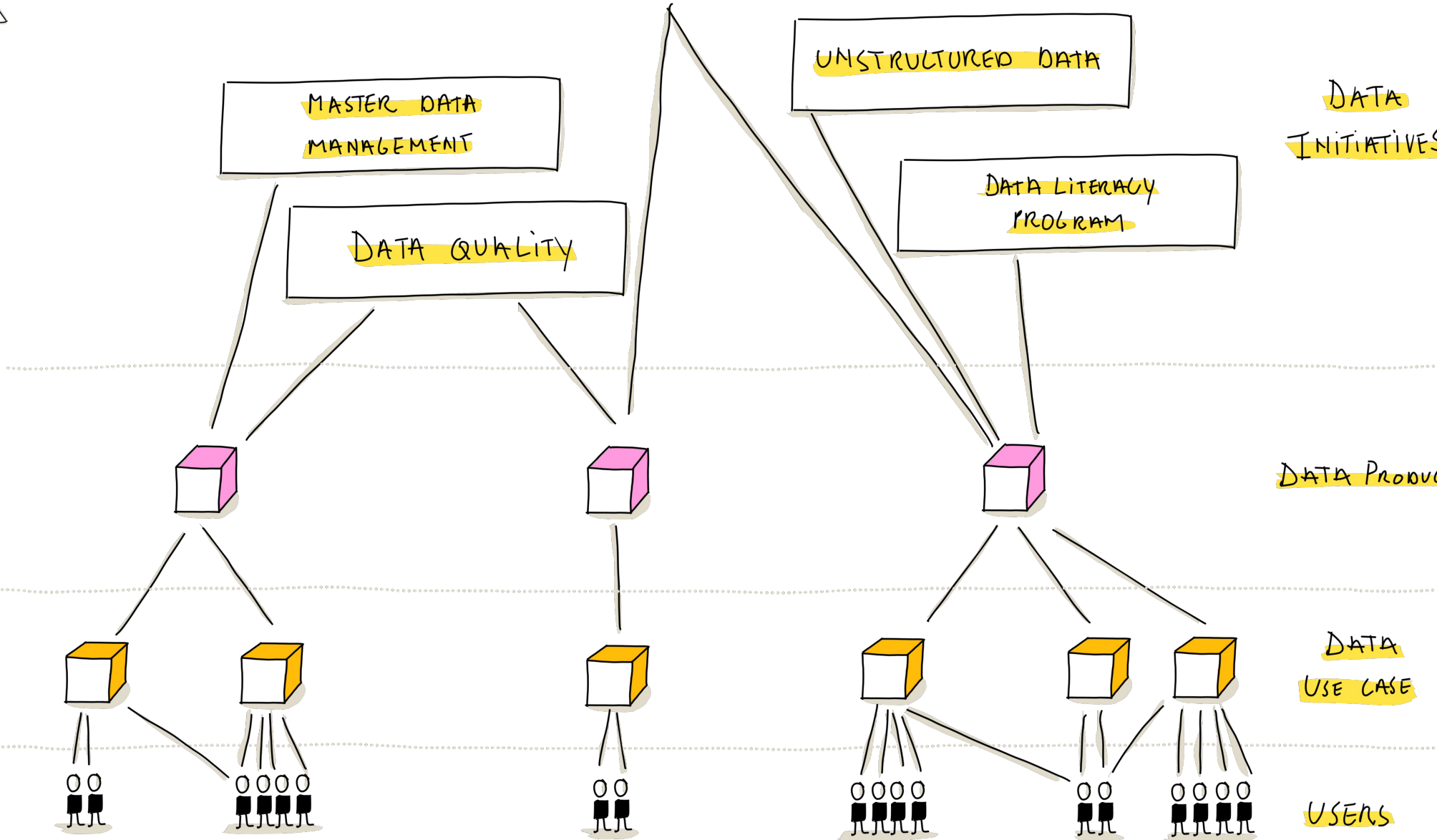
MASTER DATA MANAGEMENT

DATA QUALITY

UNSTRUCTURED DATA

DATA LITERACY PROGRAM

DATA INITIATIVES

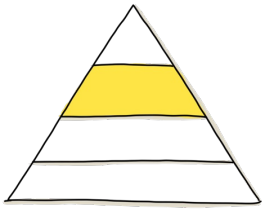


DATA PRODUCT

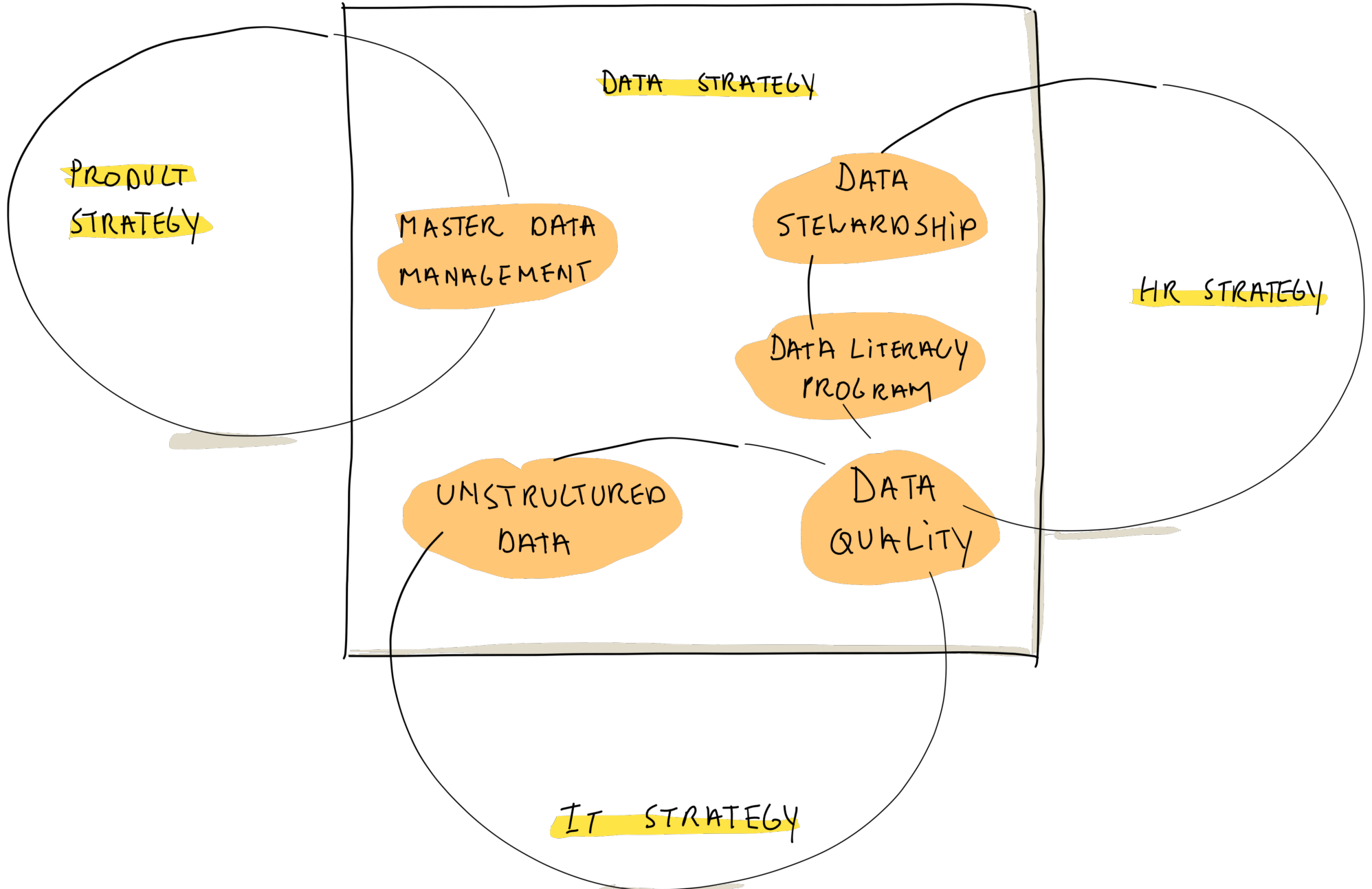
DATA USE CASE

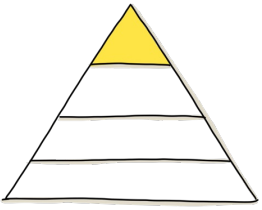
USERS



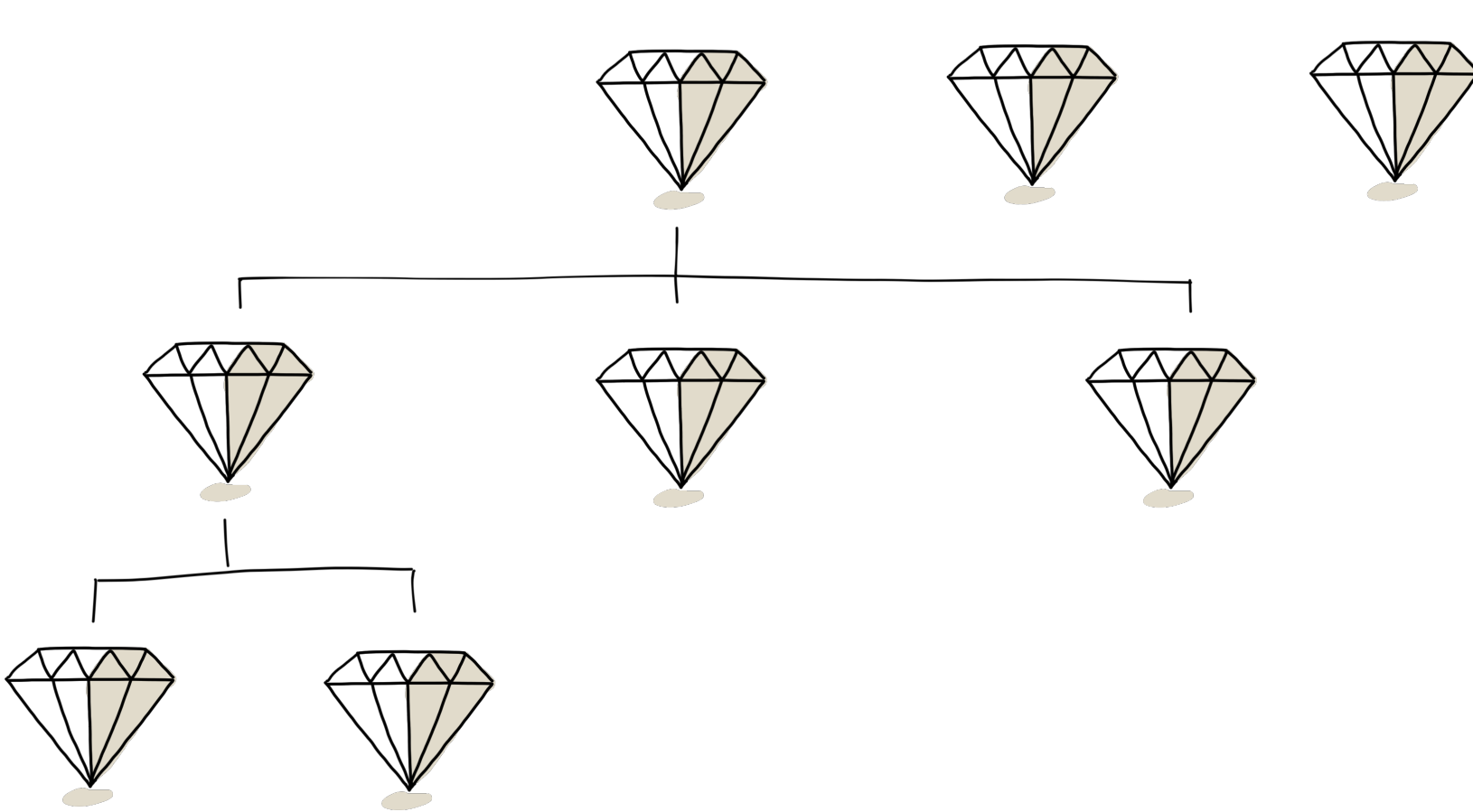


INITIATIVES





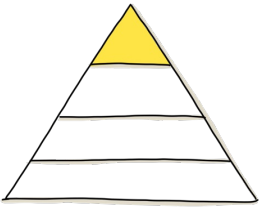
CORPORATE GOALS



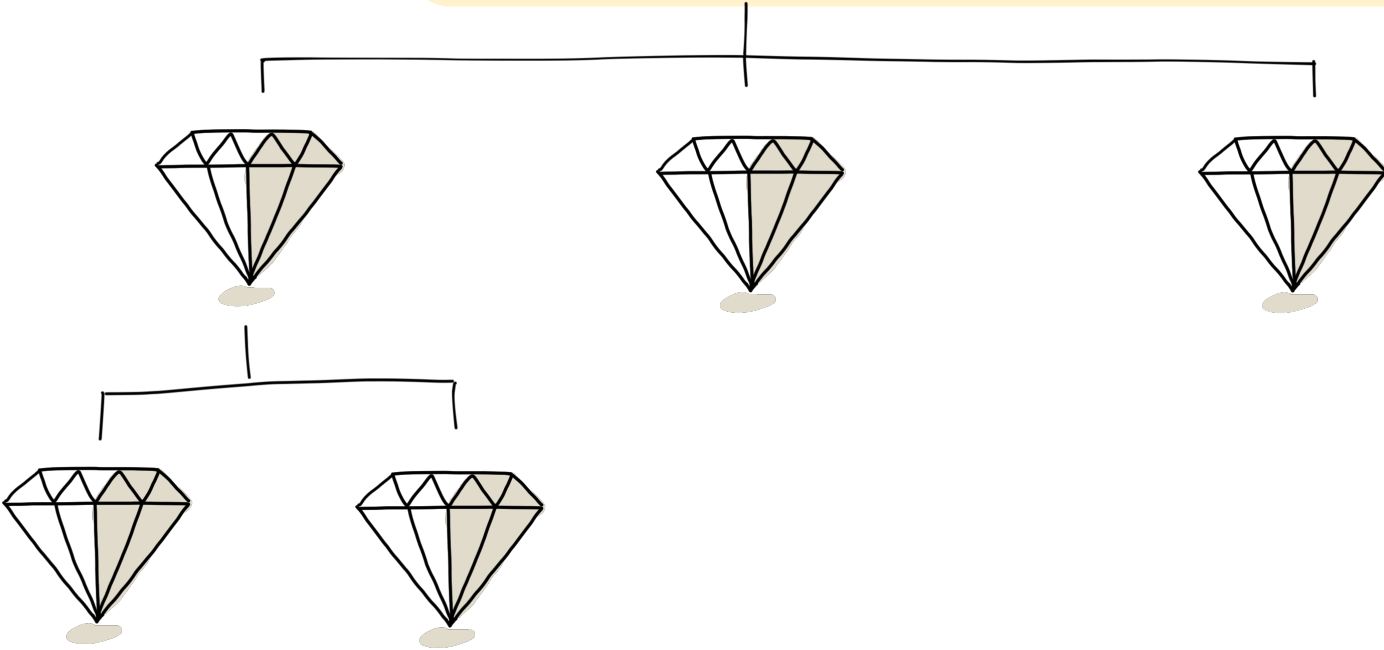
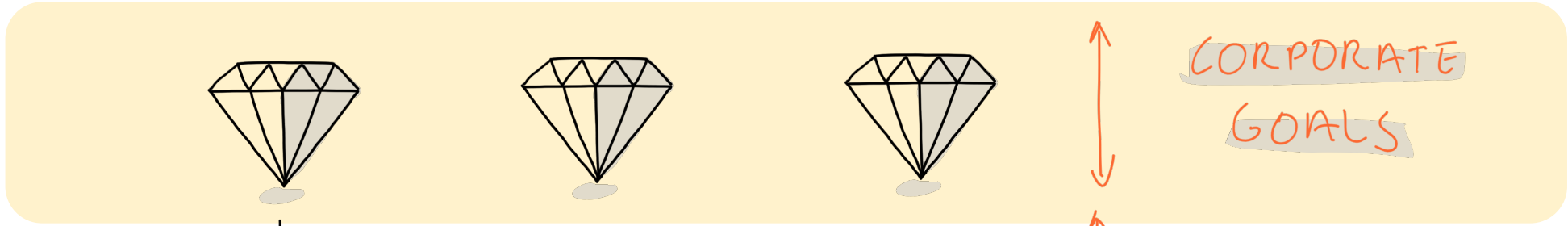
CORPORATE GOALS

SUPPORTING GOALS



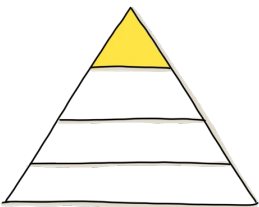


CORPORATE GOALS



SUPPORTING GOALS





CORPORATE GOALS

KEY BENEFITS OF ISO 27701



Safeguard and Reputation

By protecting and building trust in consumer/personal information.

By facilitating effective business agreements.



Target and Compliance

By assisting in demonstrating compliance with GDPR and other Data Protection laws, Regulations, and Standards.



Identify and Mitigate Risk

By implementing rigorous privacy controls.



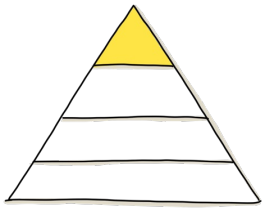
Inspire Stakeholder Trust

By establishing data protection at the heart of your business.

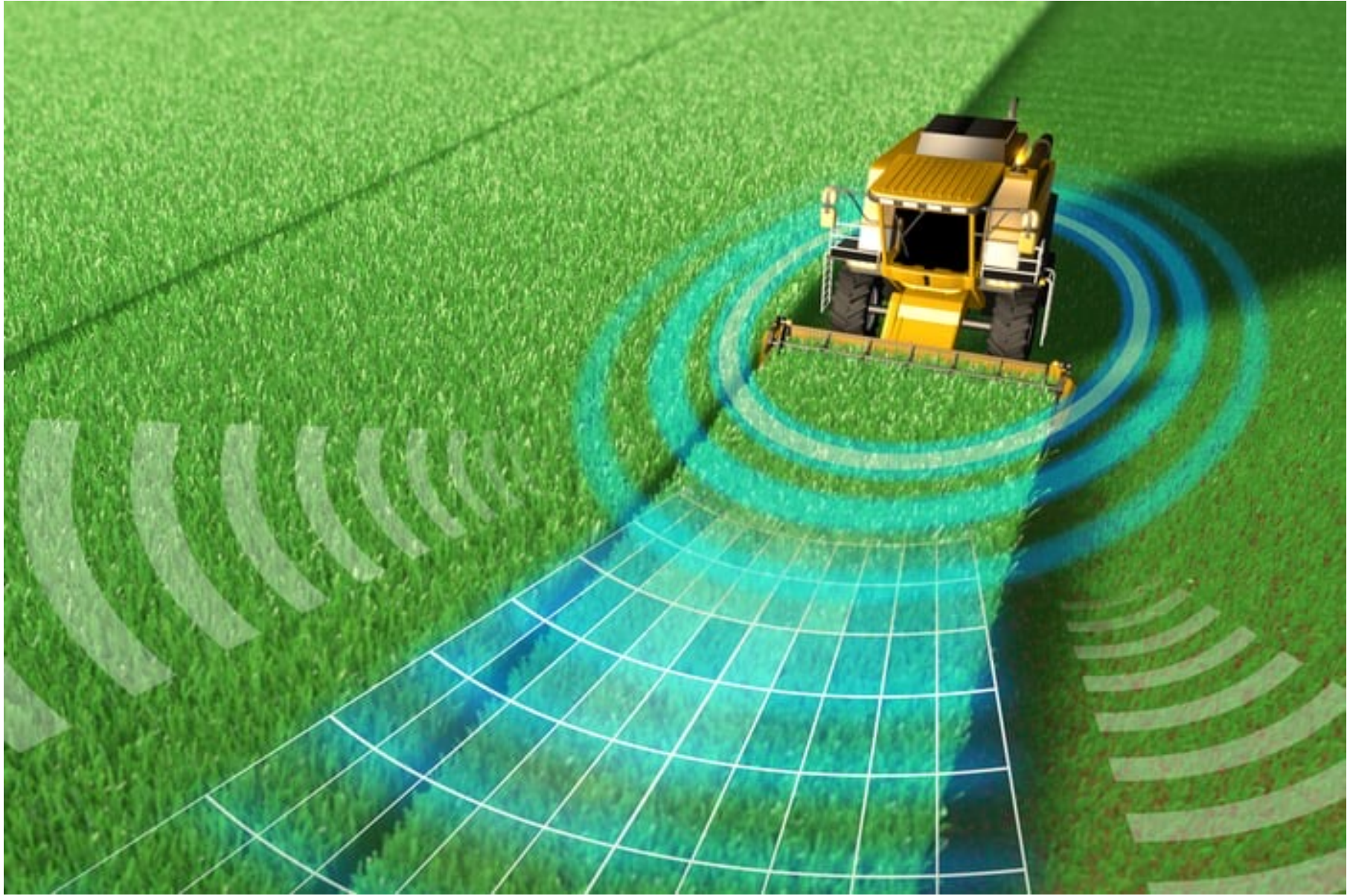
By providing transparency between stakeholders.

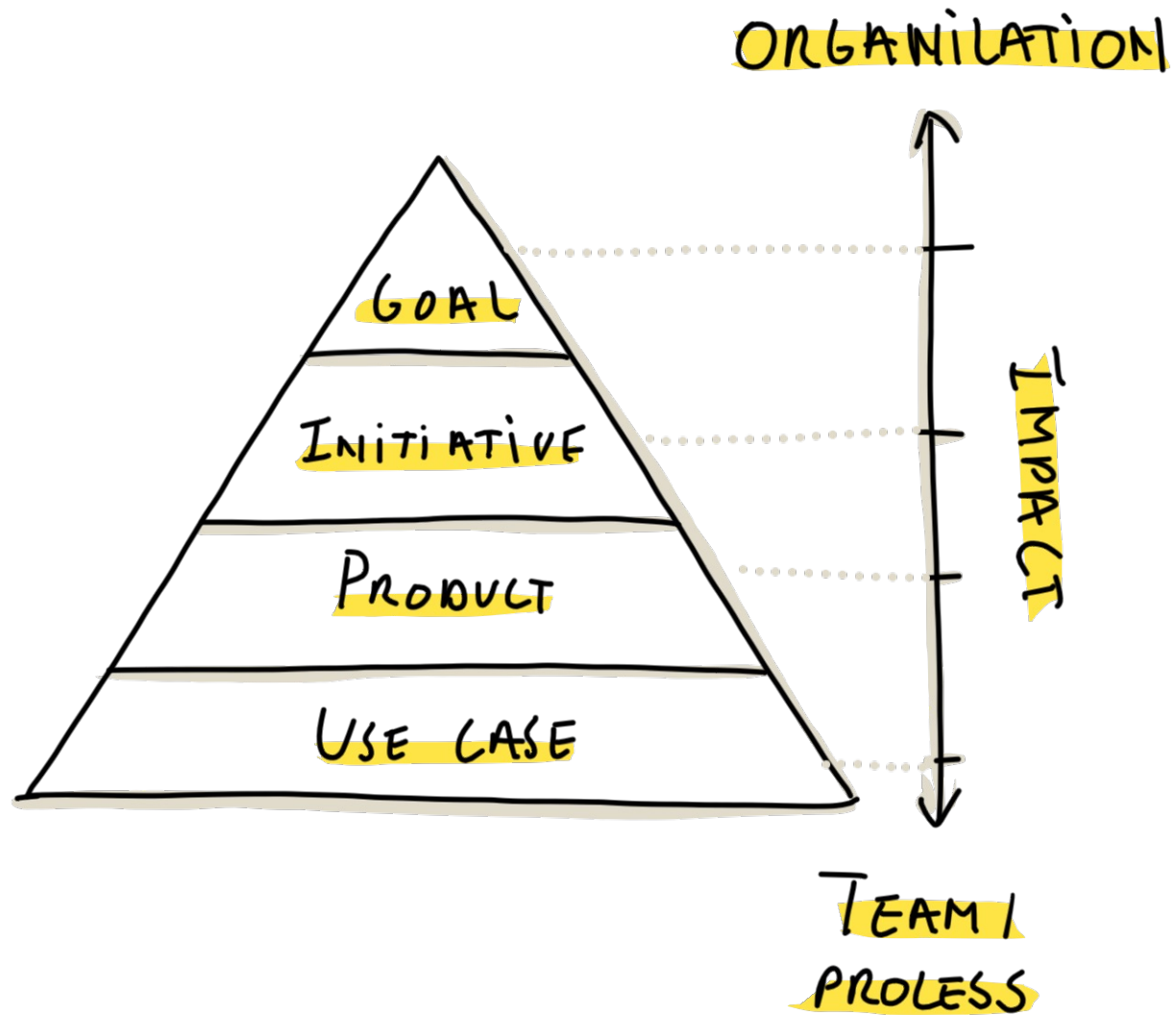
By integrating the industry-leading information security standard ISO 27001 to reduce complexity.





CORPORATE GOALS



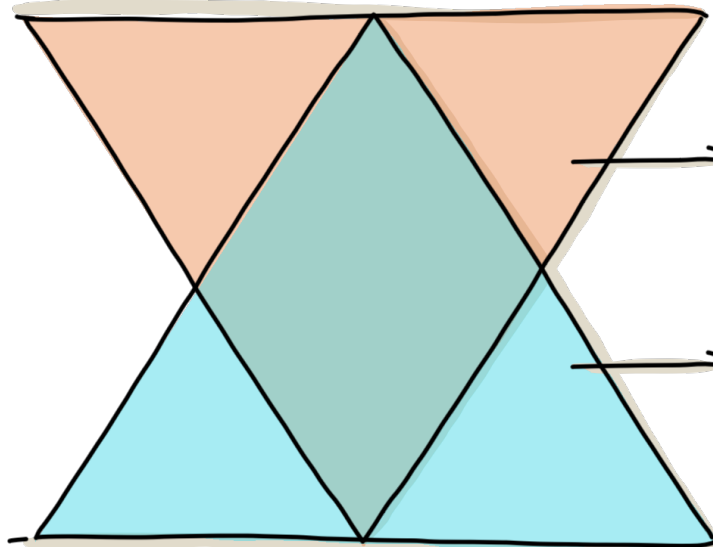


VISION



NORTH STAR

BUSINESS GOALS



DATA LEADERSHIP

DATA LITERACY

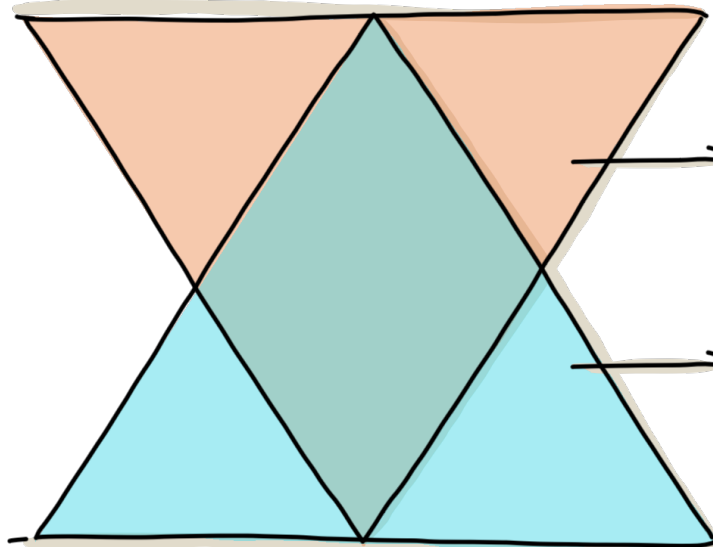


VISION



NORTH STAR

BUSINESS GOALS

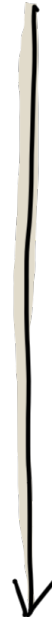


DATA LEADERSHIP

DATA LITERACY

BOTTOM UP

TOP DOWN

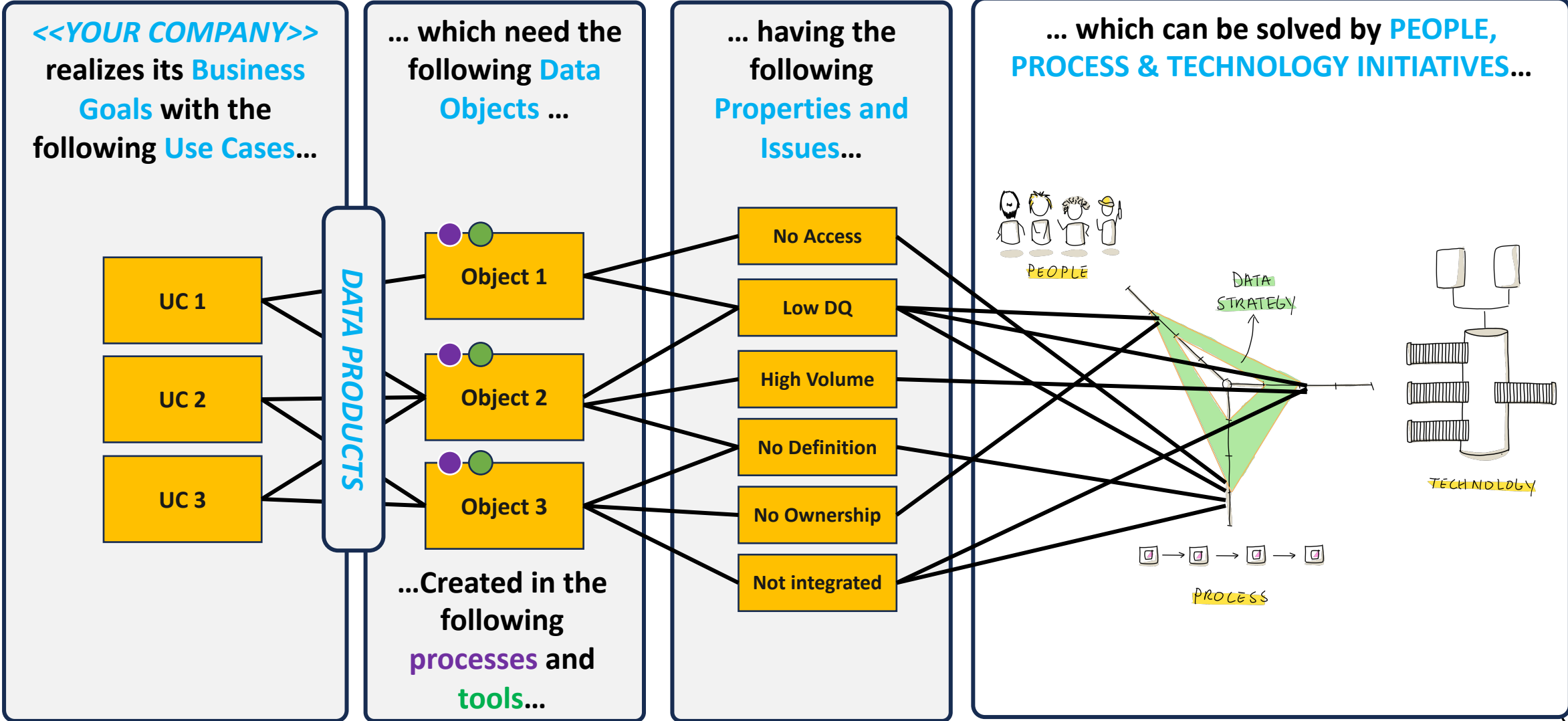


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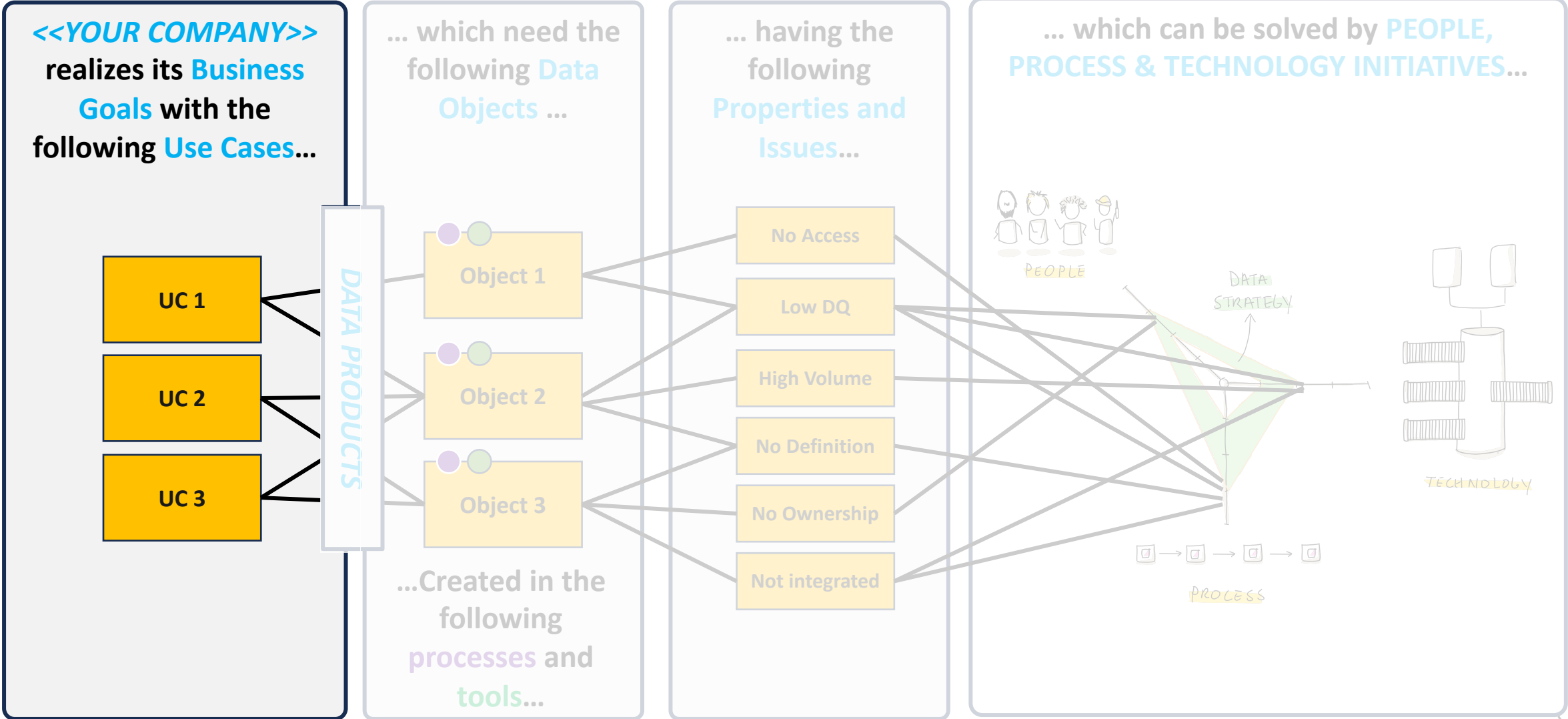
DATA USE CASES



Data Strategy Framework



Data Strategy Framework



Data Use Cases

- Value Streams
- Data & AI Use Cases
- Business Value Pyramids
- Exercise



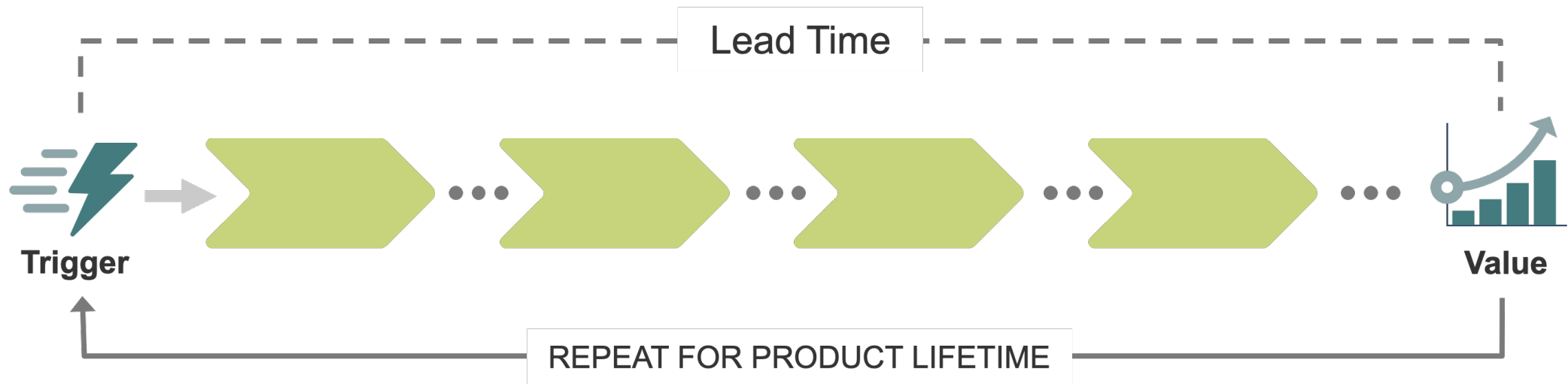
Data Use Cases

- **Value Streams**

- Data & AI Use Cases
- Business Value Pyramids
- Exercise



Value Stream



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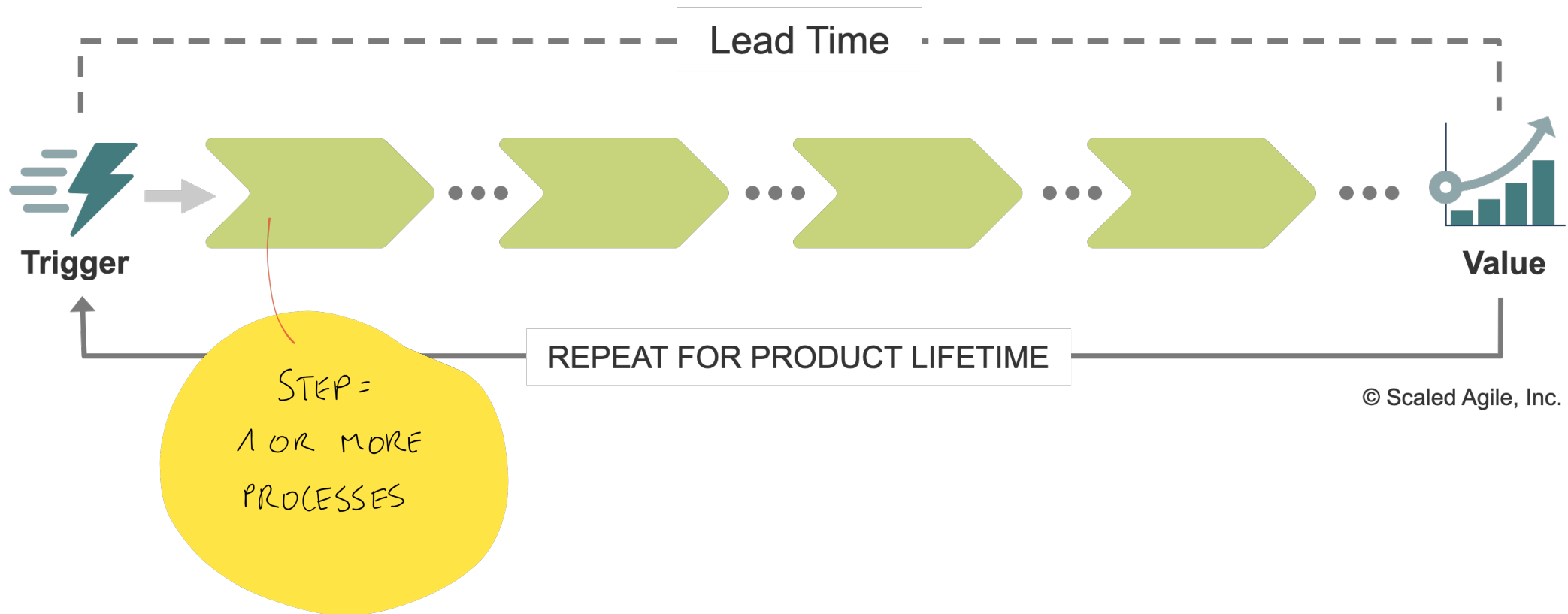


Value Stream

- The sequence of activities needed to deliver a product or service to a customer.
- Components:
 - **Trigger** - A request for a product or service, initiates the flow.
 - **Steps** – Activities needed to process the order. Each step takes time to complete.
 - **Lead time** - The sum of all the processing-step times, plus the delay periods between them, is the ‘total lead time’
 - **Value** – The delivered added value by the product or service for the customer



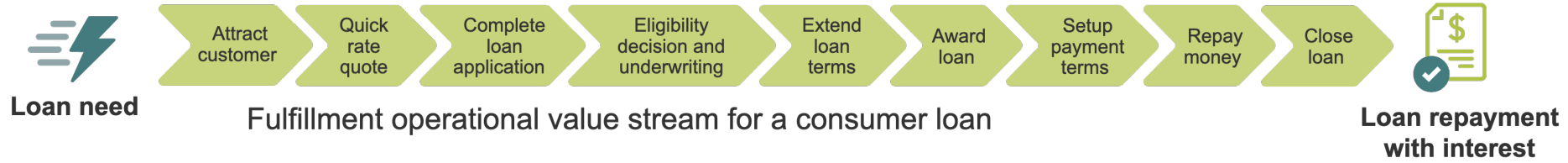
Value Stream



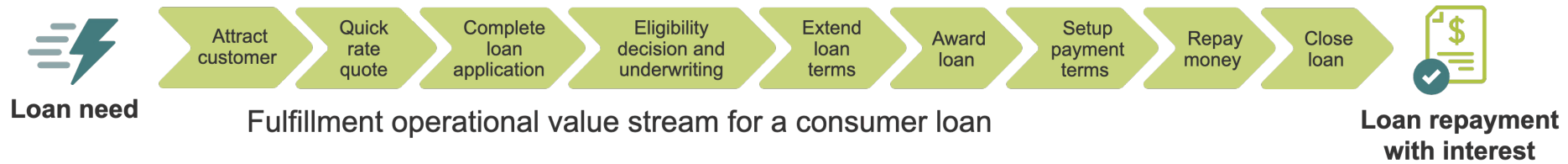
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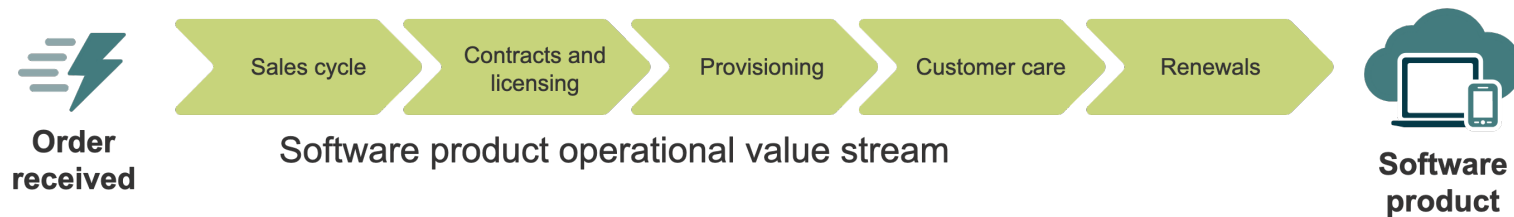
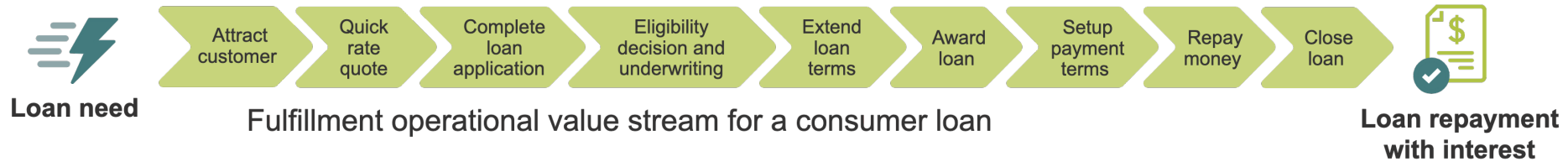
Value Stream: Examples



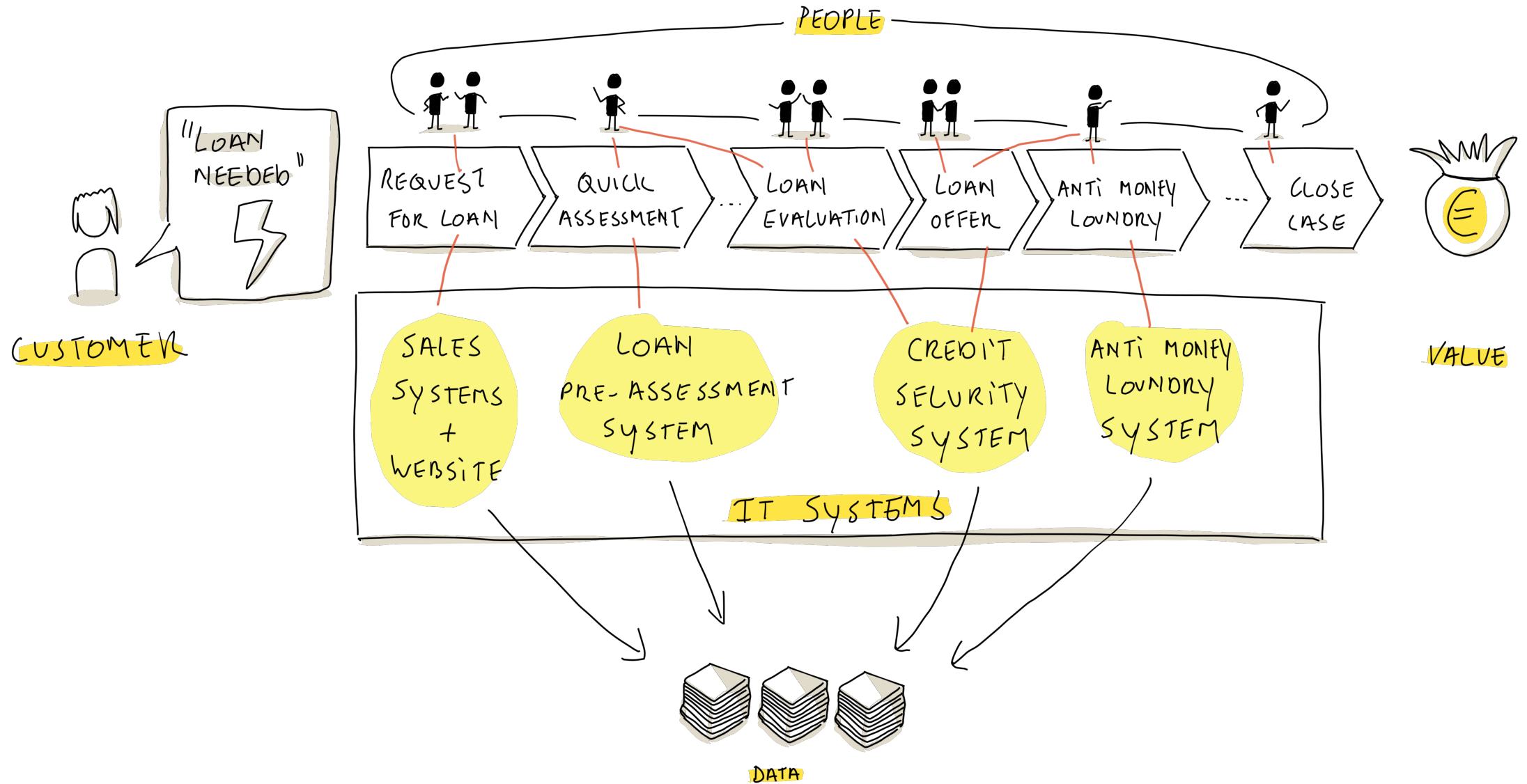
Value Stream: Examples



Value Stream: Examples



Value Streams & Data



Data Use Cases

- Value Streams
- **Data & AI Use Cases**
- Business Value Pyramids
- Exercise

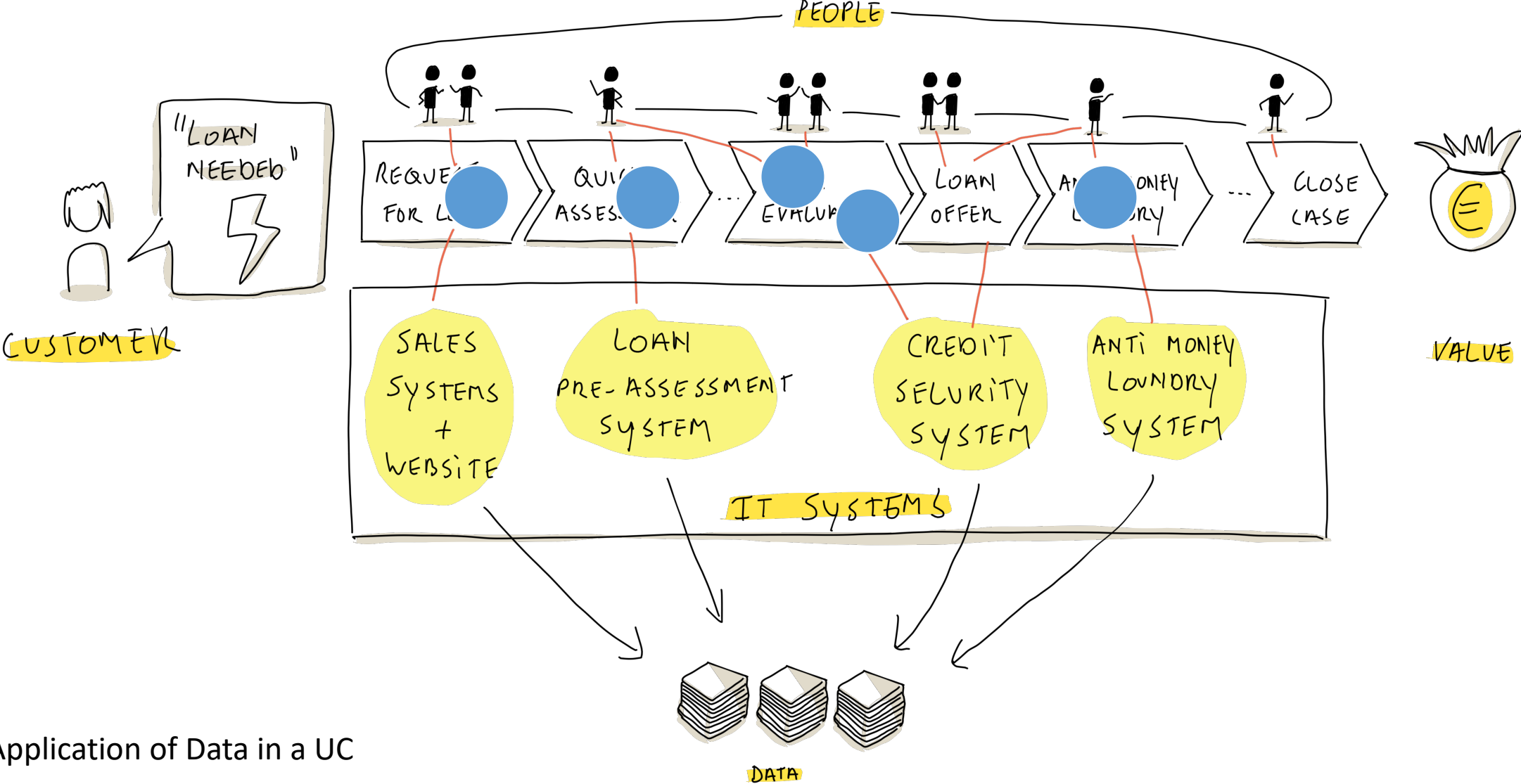


Data & AI Use Case (UC)

- = A specific scenario in which data is leveraged to achieve a **Particular Business Objective** or solve a business problem.
- Demonstrate how data can Improve the Value Chain of an organization to add **Measurable Business Value**.
- **Business Value** = The overall benefit that an organization derives from its value chain (activities, processes, or assets) encompassing both tangible and intangible outcomes.
- Business Value is created for company stakeholders:
 - Customers,
 - Employees,
 - Shareholders,
 - Society



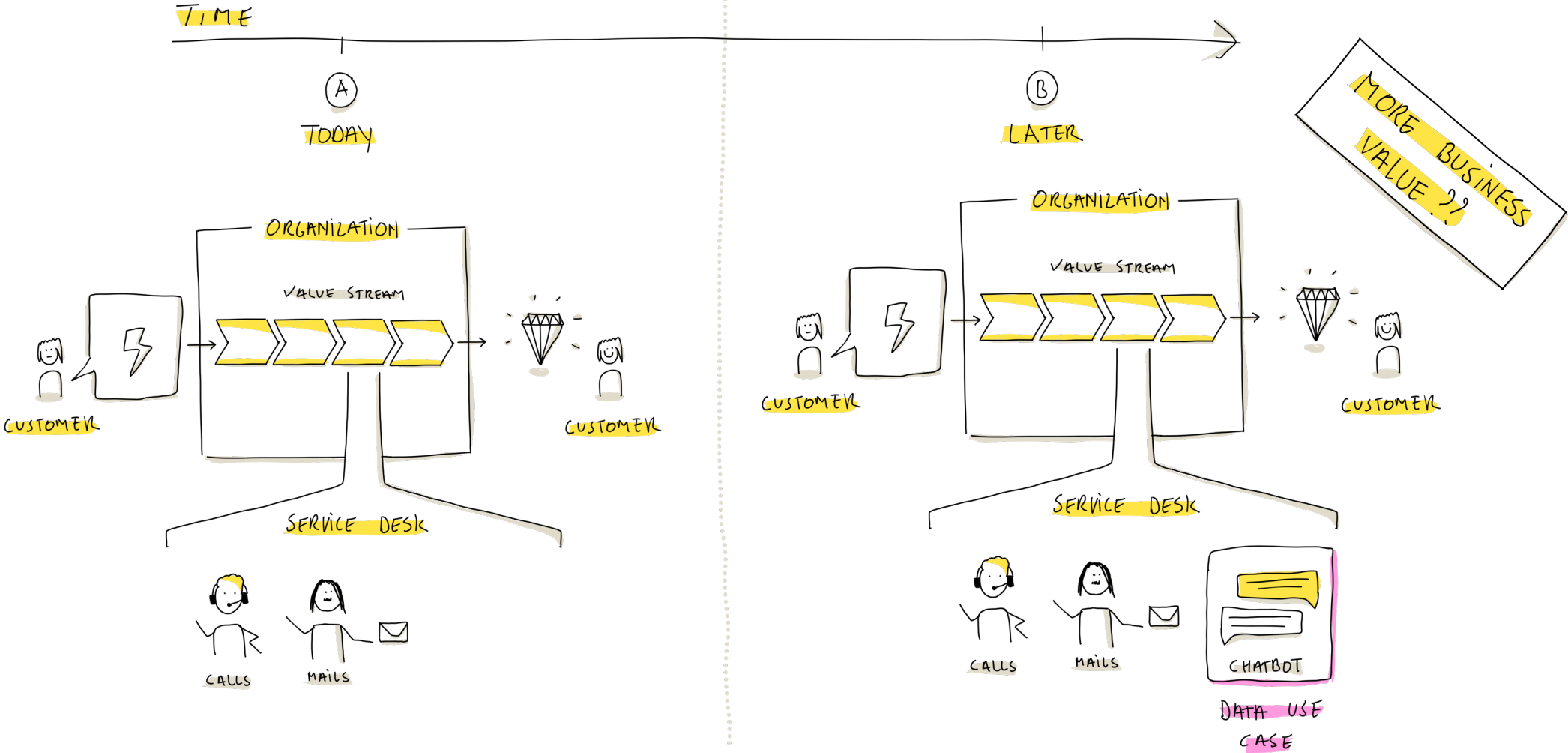
Use Cases in the Value Stream



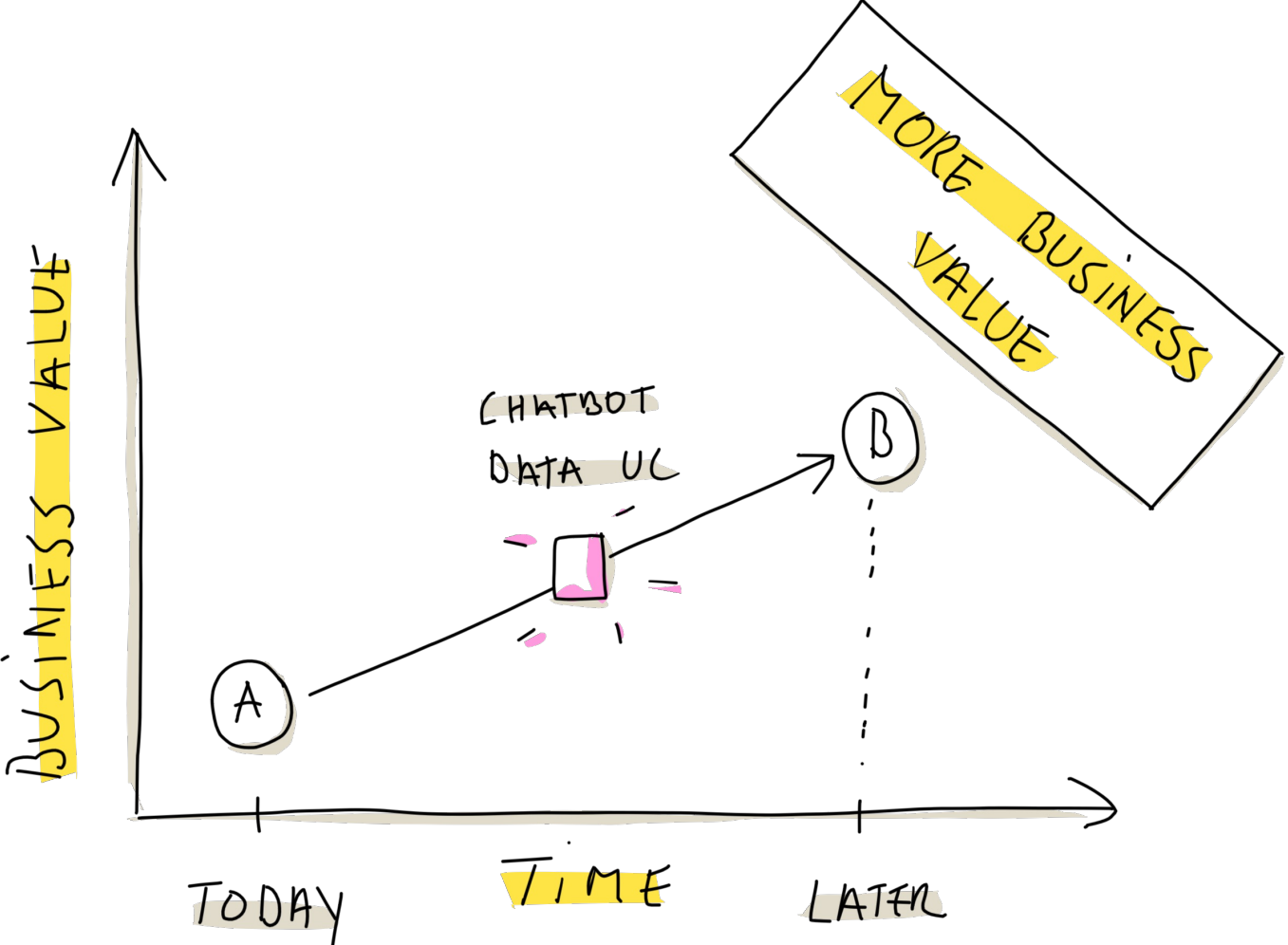
 = Application of Data in a UC



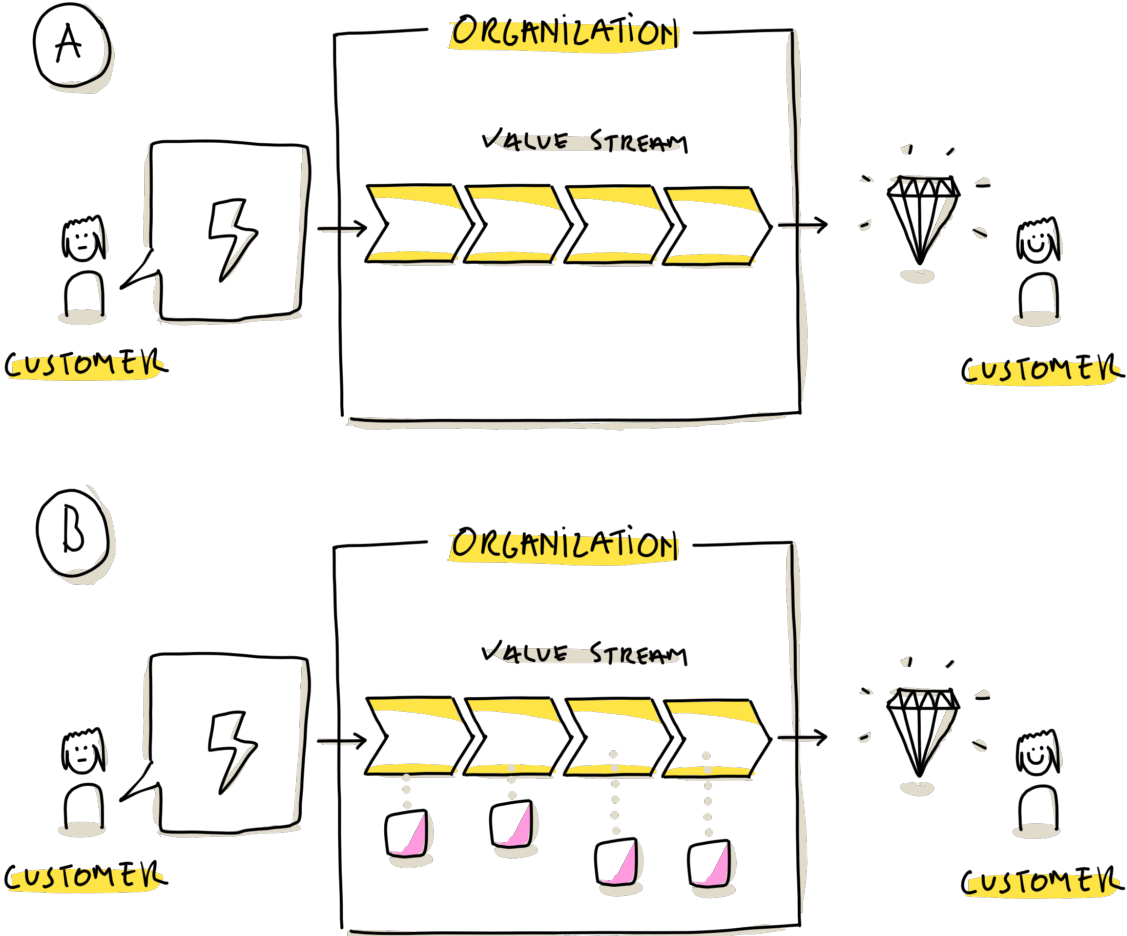
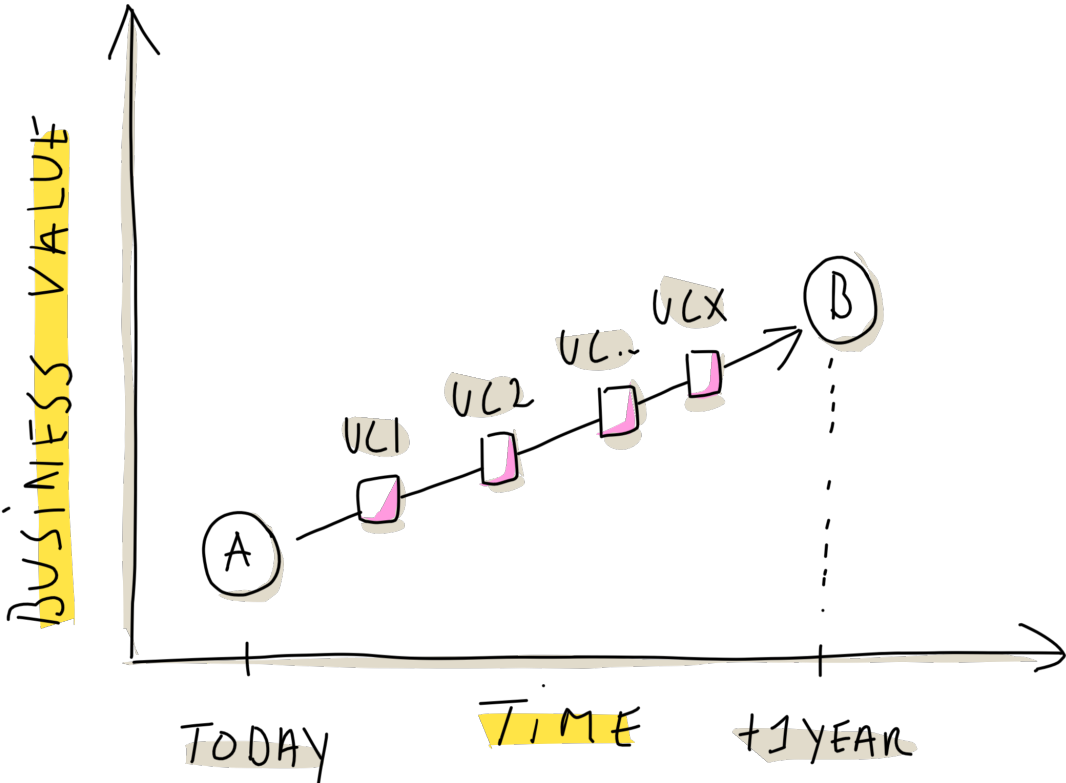
Data UC: Service Desk Example



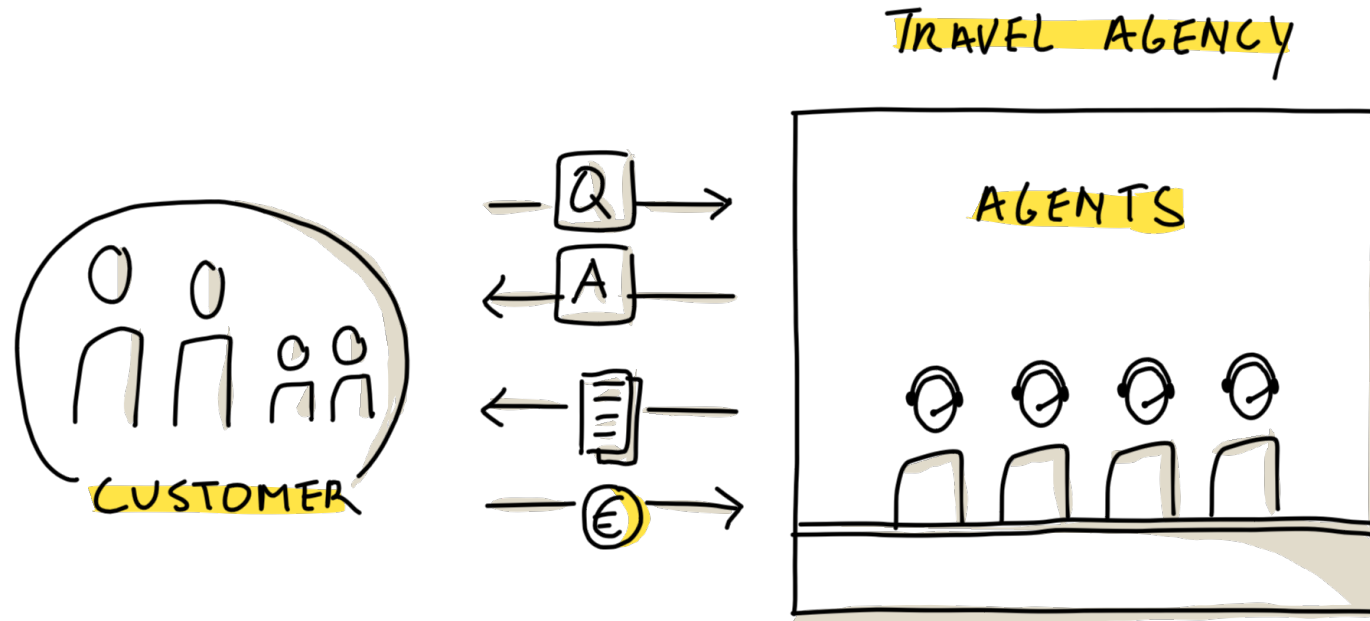
Data UC: Service Desk Example



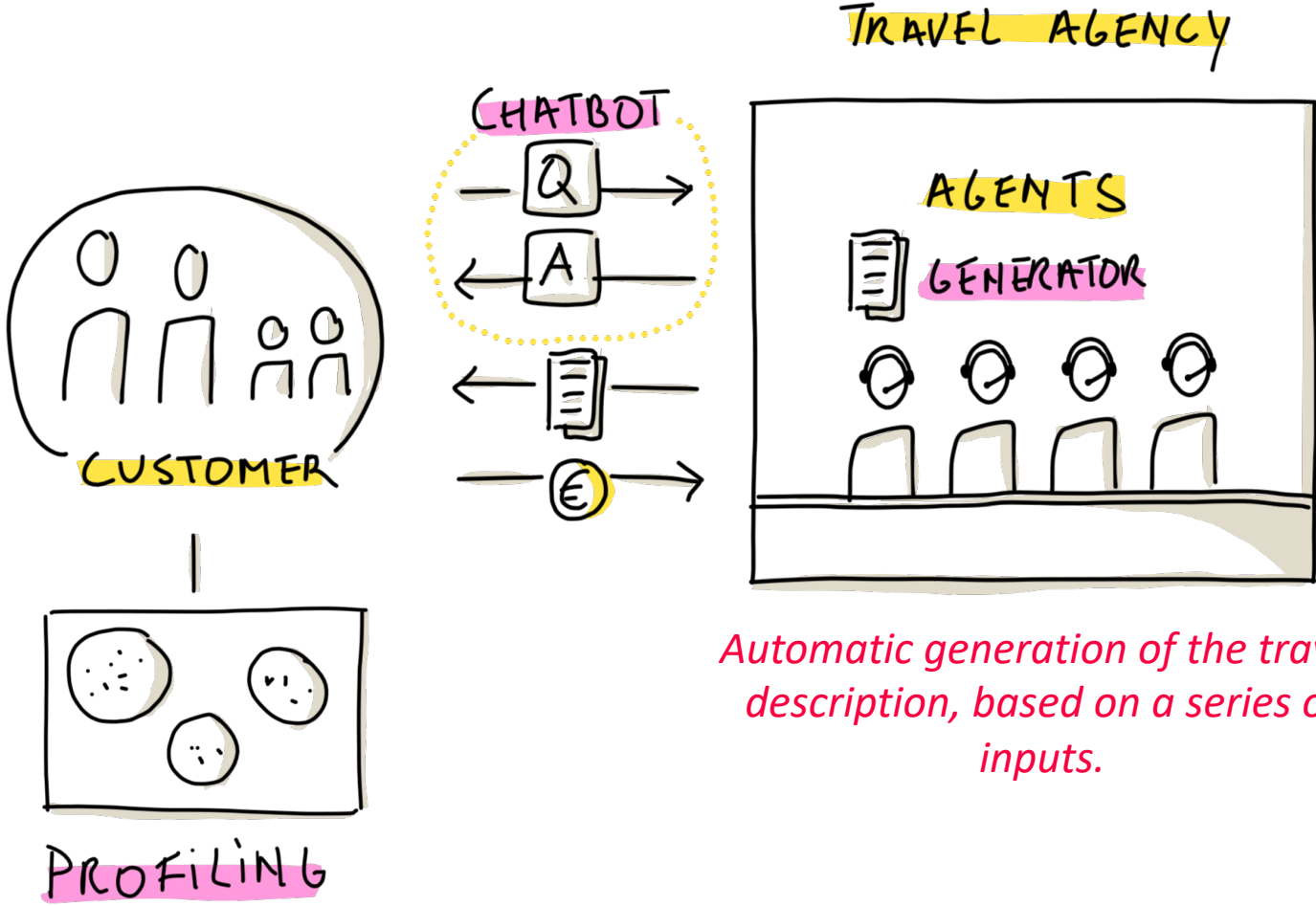
Data UCs: Generic Overview



Example: Travel Agency



Example: Travel Agency

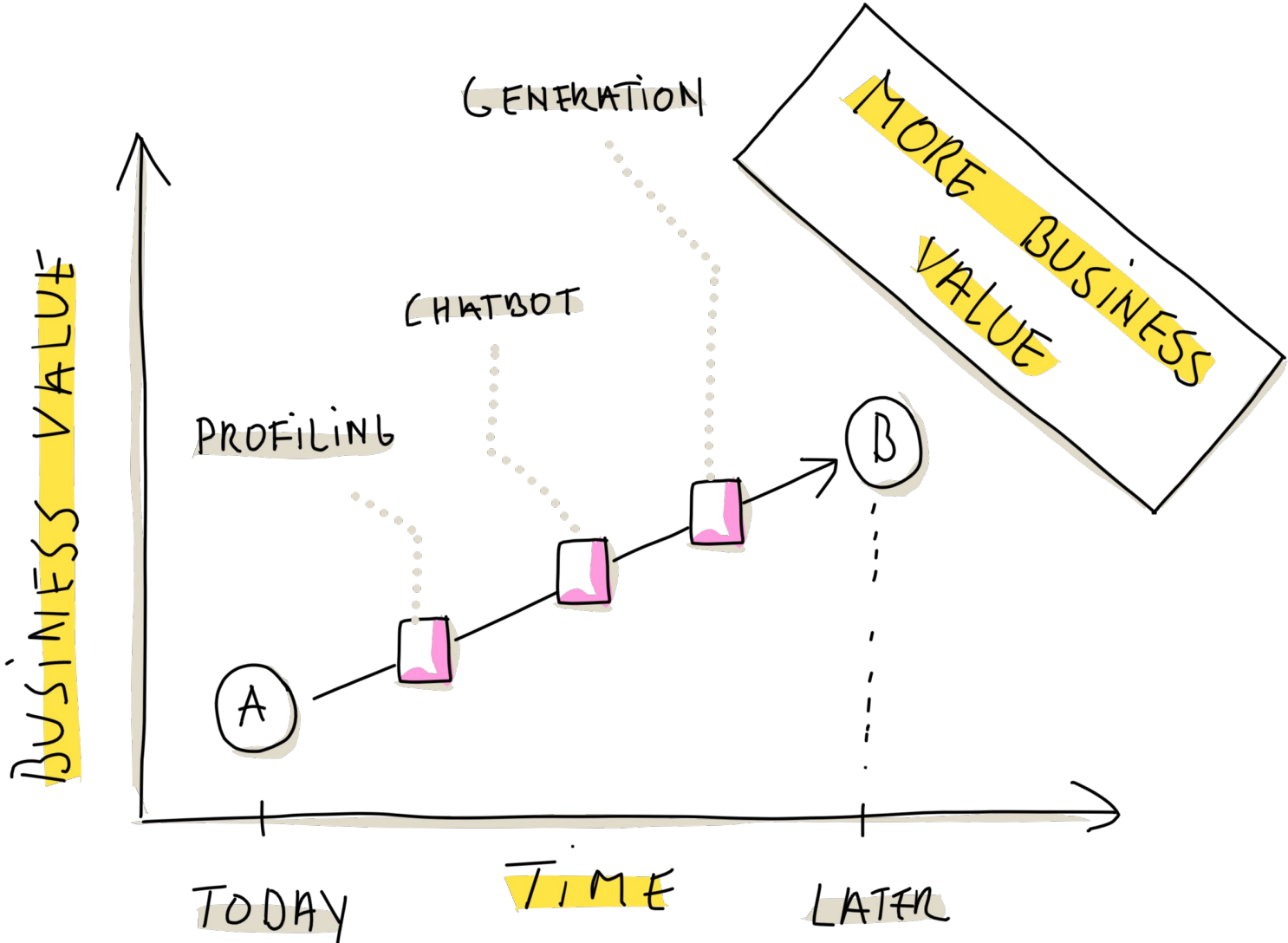


Data-driven profiling of your customers (group travelers, big spenders, ...)

Automatic generation of the travel description, based on a series of inputs.



Example: Travel Agency



Data Use Cases

- Value Streams
- Data & AI Use Cases
- **Business Value Pyramids**
- Exercise



Value Pyramids

- Delineate the objective and subjective **Criteria of Business Value** for various stakeholders.
- **Business-to-Consumer (B2C)** Pyramid:
 - Stakeholder focus: The customer
 - Question: What motivates customers to buy your product or service?
 - Value: The more customers, the more value for your organization
- **Business-to-Business (B2B)** Pyramid:
 - Stakeholder focus: Your organization, company owner and its shareholders
 - Question: How to reach your organization's business objectives?
- Online reference: [Bain Inc. – Elements of Value](#)



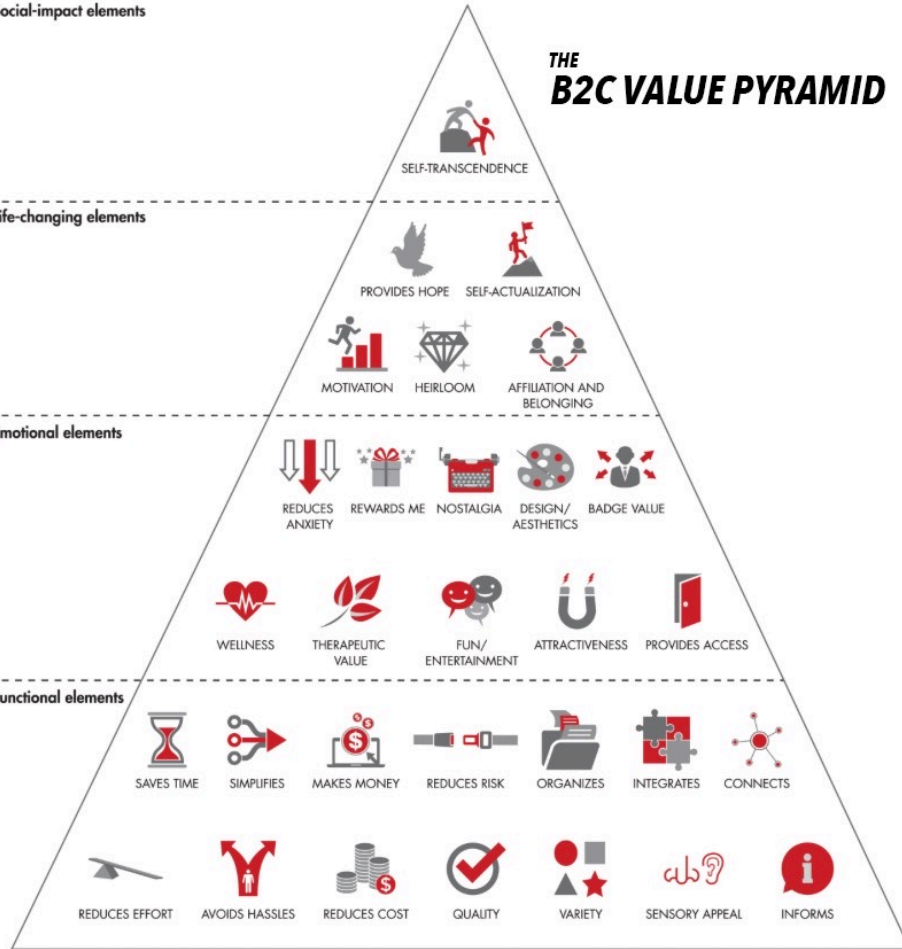
Social-impact elements

Life-changing elements

Emotional elements

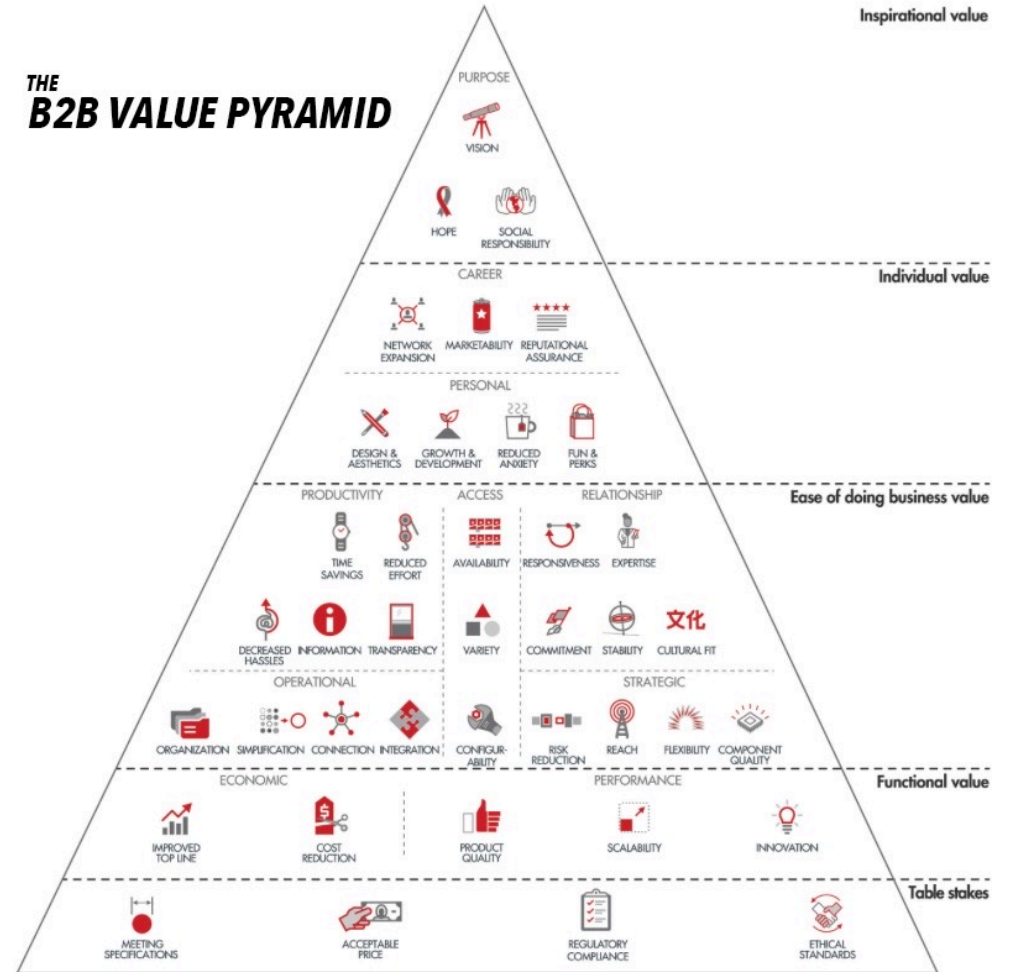
Functional elements

THE B2C VALUE PYRAMID



Inspirational value

THE B2B VALUE PYRAMID



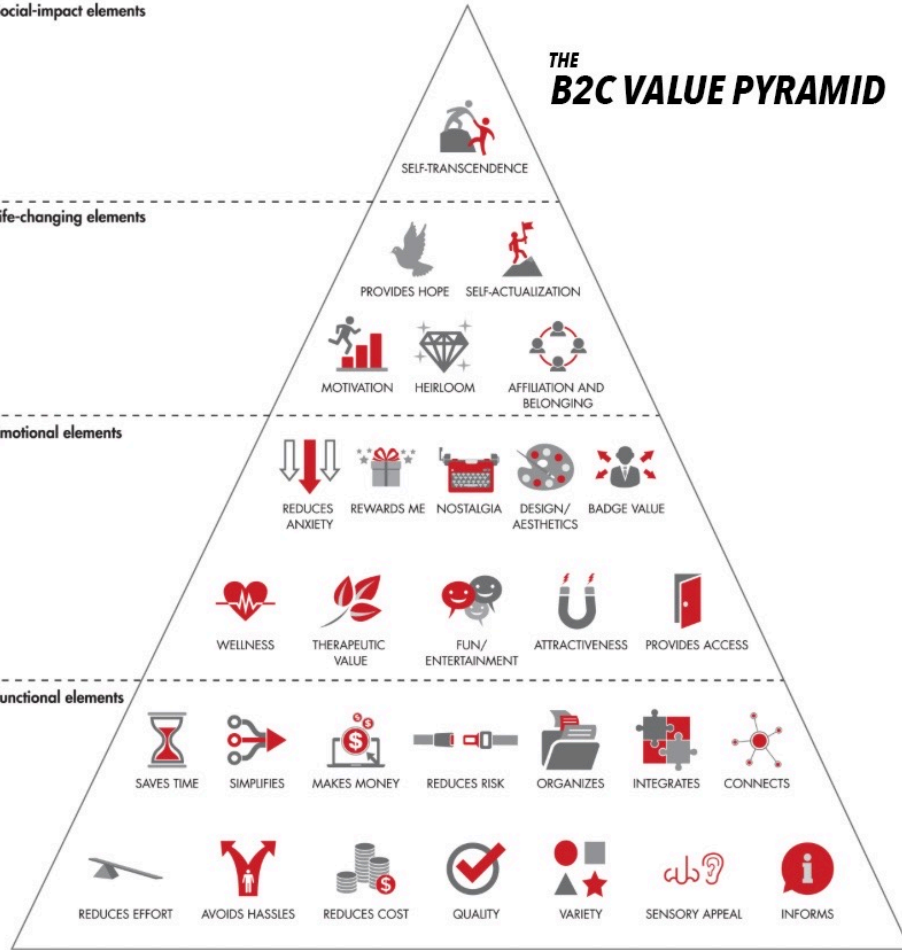
Social-impact elements

Life-changing elements

Emotional elements

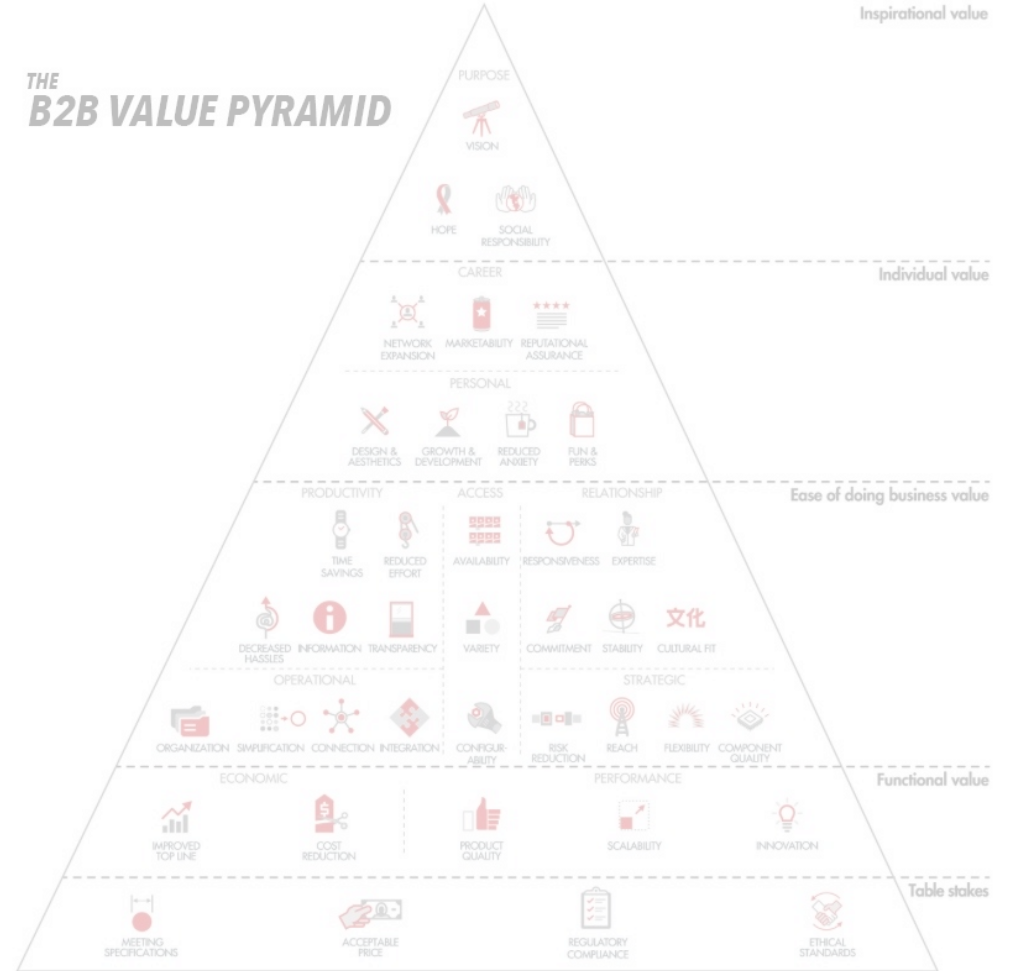
Functional elements

THE B2C VALUE PYRAMID



Inspirational value

THE B2B VALUE PYRAMID



B2C Value Pyramid: WHAT MOTIVATES CUSTOMERS TO BUY YOUR PRODUCT OR SERVICE?

Social-impact elements

THE B2C VALUE PYRAMID



SELF-TRANSCENDENCE

Life-changing elements



PROVIDES HOPE



SELF-ACTUALIZATION



MOTIVATION



HEIRLOOM



AFFILIATION AND BELONGING

Emotional elements



REDUCES ANXIETY



REWARDS ME



NOSTALGIA



DESIGN/AESTHETICS



BADGE VALUE



WELLNESS



THERAPEUTIC VALUE



FUN/ENTERTAINMENT



ATTRACTIVENESS



PROVIDES ACCESS

Functional elements



SAVES TIME



SIMPLIFIES



MAKES MONEY



REDUCES RISK



ORGANIZES



INTEGRATES



CONNECTS



REDUCES EFFORT



AVOIDS HASSLES



REDUCES COST



QUALITY



VARIETY



SENSORY APPEAL



INFORMS

SOCIAL IMPACT ELEMENTS

Customers buy your product because it connects with something larger, such as other **people**, **nature**, or a **higher power**.



TRIGGER

LIFE CHANGING ELEMENTS

Customers buy your product instead of others because it **guides them in life changing events**. For example, **providing hope** or **motivation**



TRIGGER

EMOTIONAL ELEMENTS

Customers buy your product instead of others because it triggers emotions. For example, **nostalgia** or a **fun/entertaining factor**.



TRIGGER

FUNCTIONAL ELEMENTS

Customers buy your product because it **fulfills their needs**. For example, it helps them to **make money** or it **reduces effort**



TRIGGER



B2C Value Pyramid: WHAT MOTIVATES CUSTOMERS TO BUY YOUR PRODUCT OR SERVICE?

Social-impact elements

THE B2C VALUE PYRAMID



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TRIGGER



B2C

B2B

SAVES TIME

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

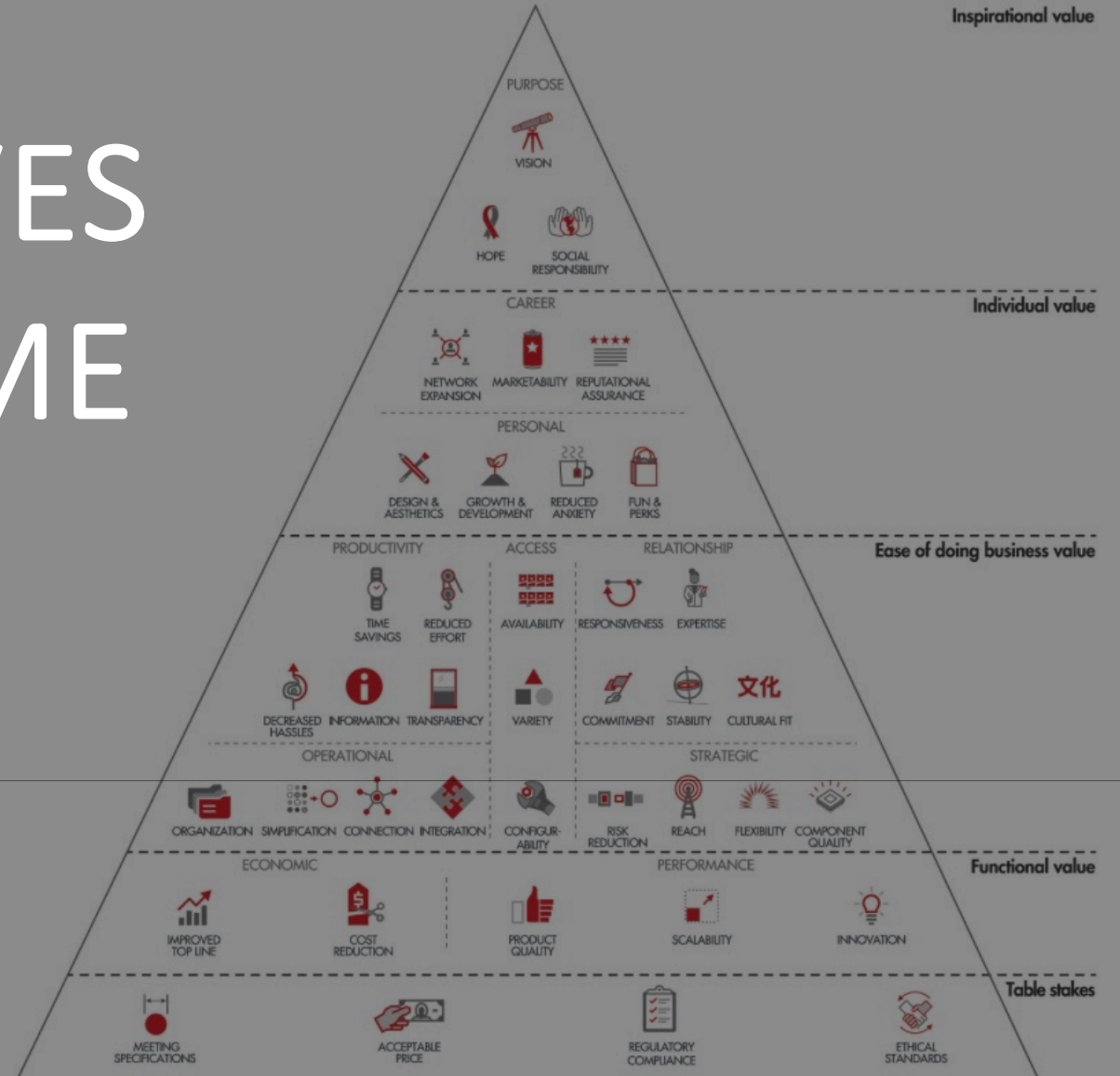
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



trivago

trivago



Park Hotel

★★★★ Hotel

Rome, Italy

8.7 Excellent (1402 reviews)



Hotel site

\$220

per night

View deal >

Hotels.com

\$250

per night

Our lowest price

\$220

per night



B2C

B2B

MAKES MONEY

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

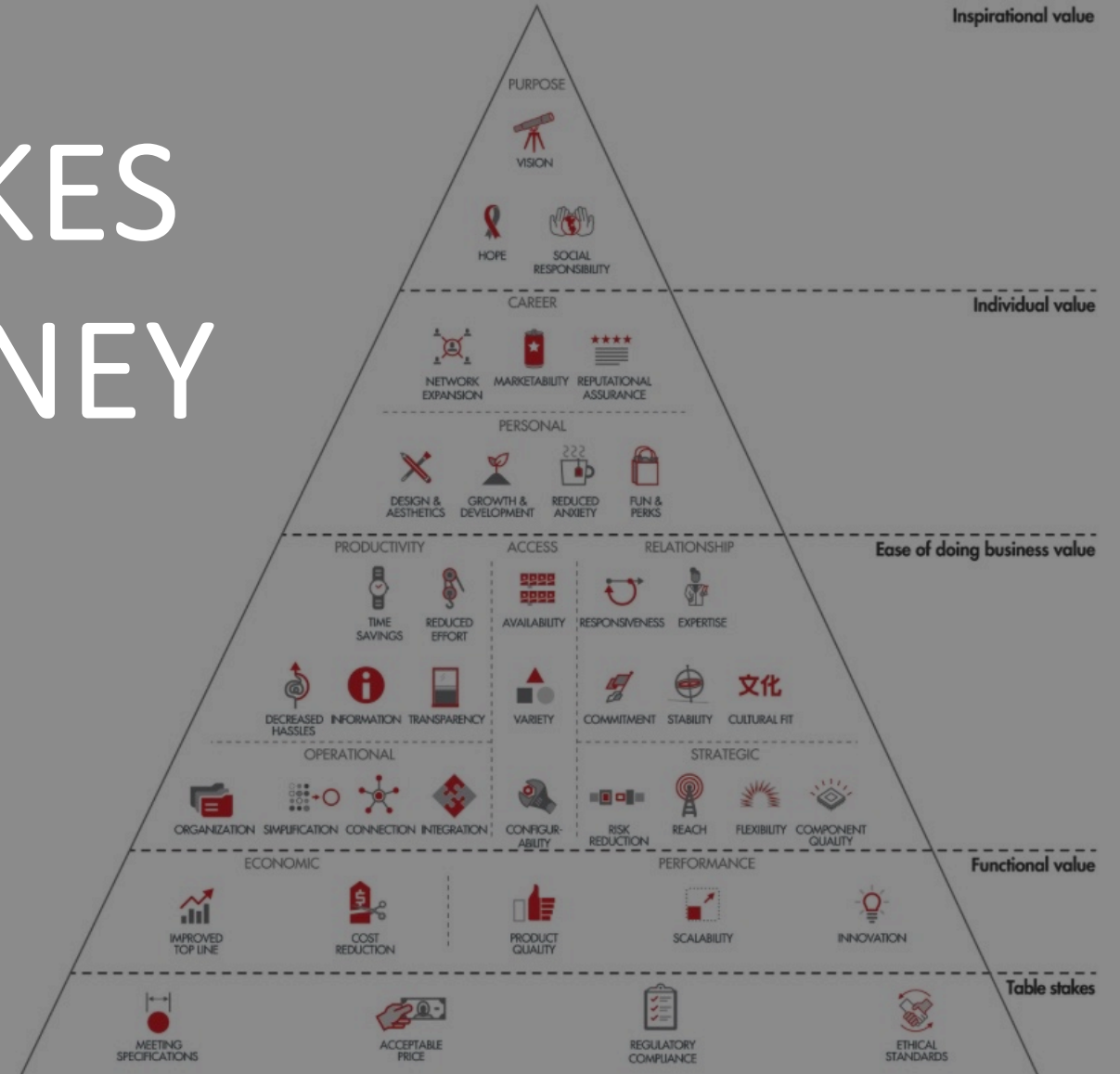
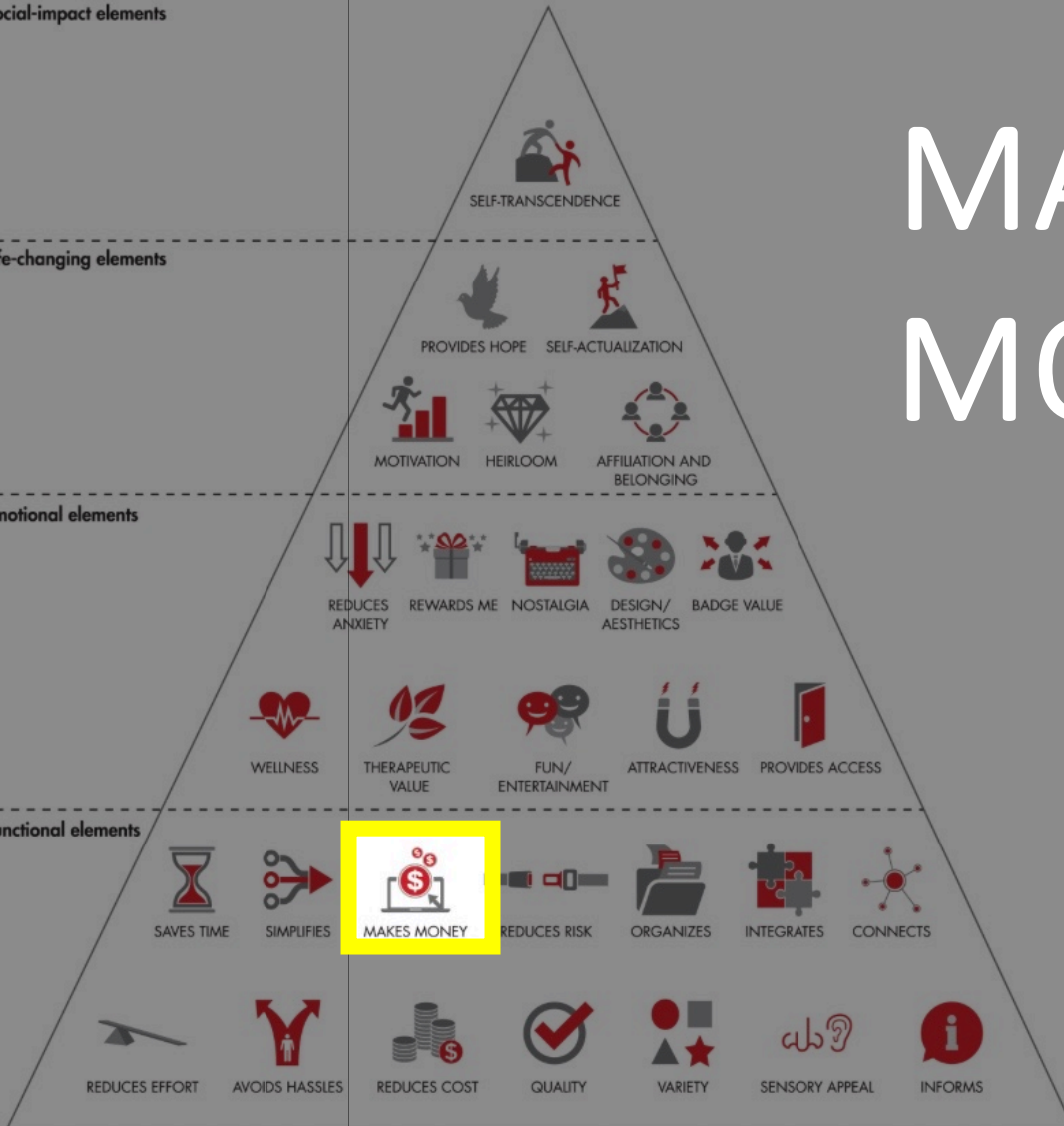
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes





B2C

B2B

INFORMS

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

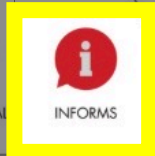
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



Round trip 1 Economy

Chicago ORD ↔ Los Angeles LAX Fri, Feb 24 < > Mon, Feb 27 < >

All filters Stops Airlines Bags Price Times Emissions Connecting airports Duration




Track prices Feb 24-27 Any dates

Date grid Price graph

Travel Feb 25-27 for \$118
Change dates


Best departing flights

Ranked based on price and convenience Prices include required taxes + fees for 1 adult. Optional charges and bag fees may apply.

	6:00 AM – 8:46 AM Spirit	4 hr 46 min ORD-LAX	Nonstop	166 kg CO ₂ -6% emissions	\$184 round trip
	6:10 PM – 8:26 PM United	4 hr 16 min ORD-LAX	Nonstop	157 kg CO ₂ -11% emissions	\$250 round trip
	5:15 PM – 7:44 PM American	4 hr 29 min ORD-LAX	Nonstop	178 kg CO ₂ Avg emissions	\$268 round trip

Prices are currently typical for your search View price history

Other departing flights

	2:10 PM – 8:10 PM Delta	8 hr ORD-LAX	1 stop 43 min SEA	364 kg CO ₂ +105% emissions	\$239 round trip
---	----------------------------	-----------------	----------------------	---	---------------------



B2C

B2B

REDUCES EFFORT

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

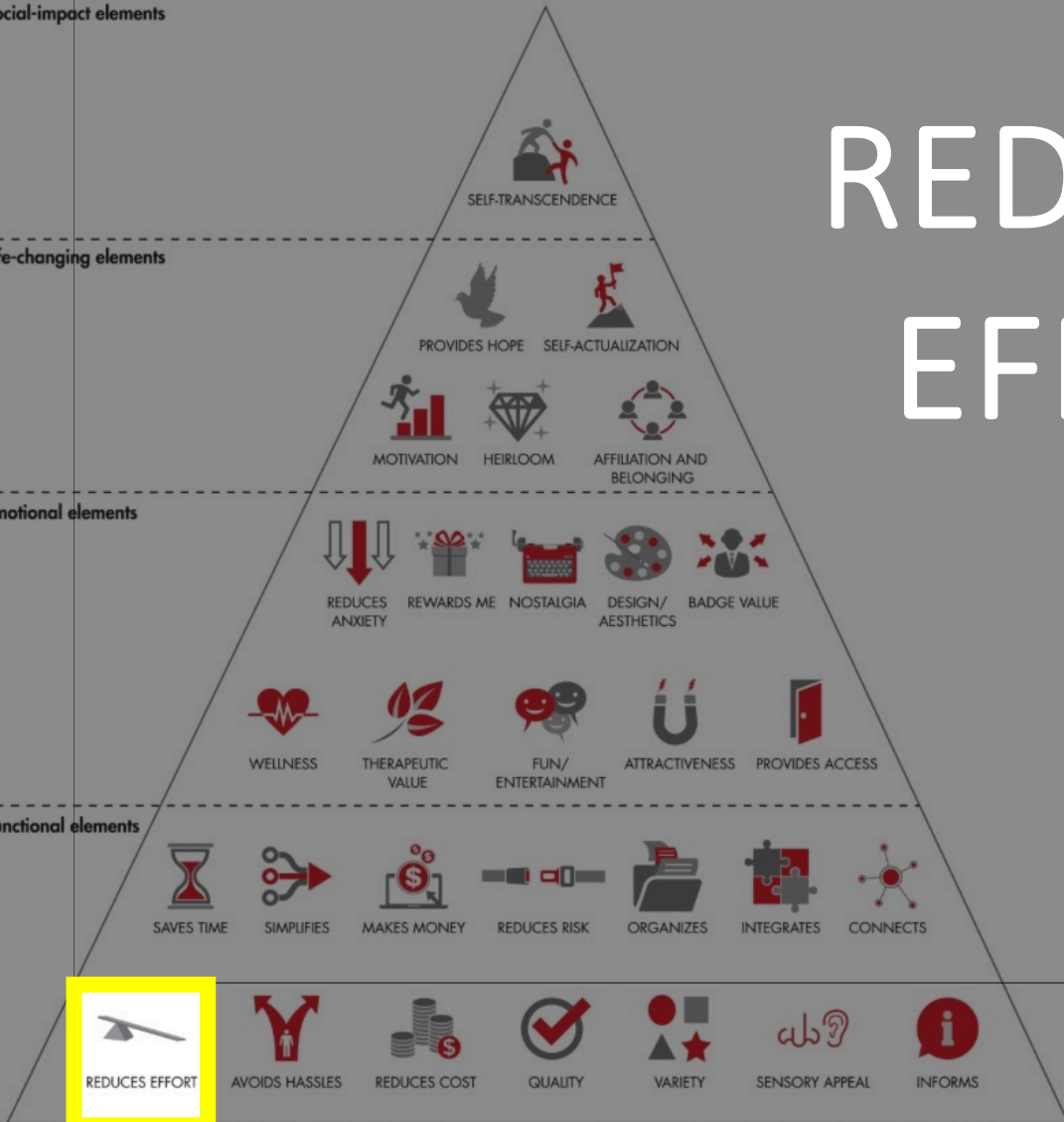
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



Verizon 9:25 PM 50%

Italy Trip
You owe \$119.56

Settle up Balances More

May 2016

- Tip for dinner Sorrento *you borrowed* \$3.75
Jeff G. paid \$15.00
- Dinner in Sorrento *you borrowed* \$38.00
2 people paid \$152.00
- Car to Sorrento *you lent* \$67.50
You paid \$90.00
- Pizze in Praiano *you borrowed* \$5.00
Astrid paid \$20.00
- Drinks at Praiano Beach *you lent* \$11.25
You paid \$15.00

Friends Groups + Activity Me

Verizon 9:26 PM 49%

Edit bill Save

With you and: All of Italy Trip

Wine near museum
\$35.65

Paid by you and split equally

Today	Italy Trip	
1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
.	0	ⓧ

Friends Groups + Activity Me

Verizon 9:26 PM 49%

SPLITWISE

you owe \$119.56 you are owed \$0.00 total balance - \$119.56

Italy Trip *you owe* \$119.56

- You owe Astrid \$87.10
- You owe Jeff G. \$23.15
- You owe Cocoa! \$9.31

Non-group expenses no expenses

+ Start a new group

Friends Groups + Activity Me



B2C Value Pyramid: WHAT MOTIVATES CUSTOMERS TO BUY YOUR PRODUCT OR SERVICE?

Social-impact elements

THE B2C VALUE PYRAMID



SELF-TRANSCENDENCE

Life-changing elements



PROVIDES HOPE



SELF-ACTUALIZATION



MOTIVATION



HEIRLOOM



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TRIGGER



B2C

B2B

NOSTALGIA

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

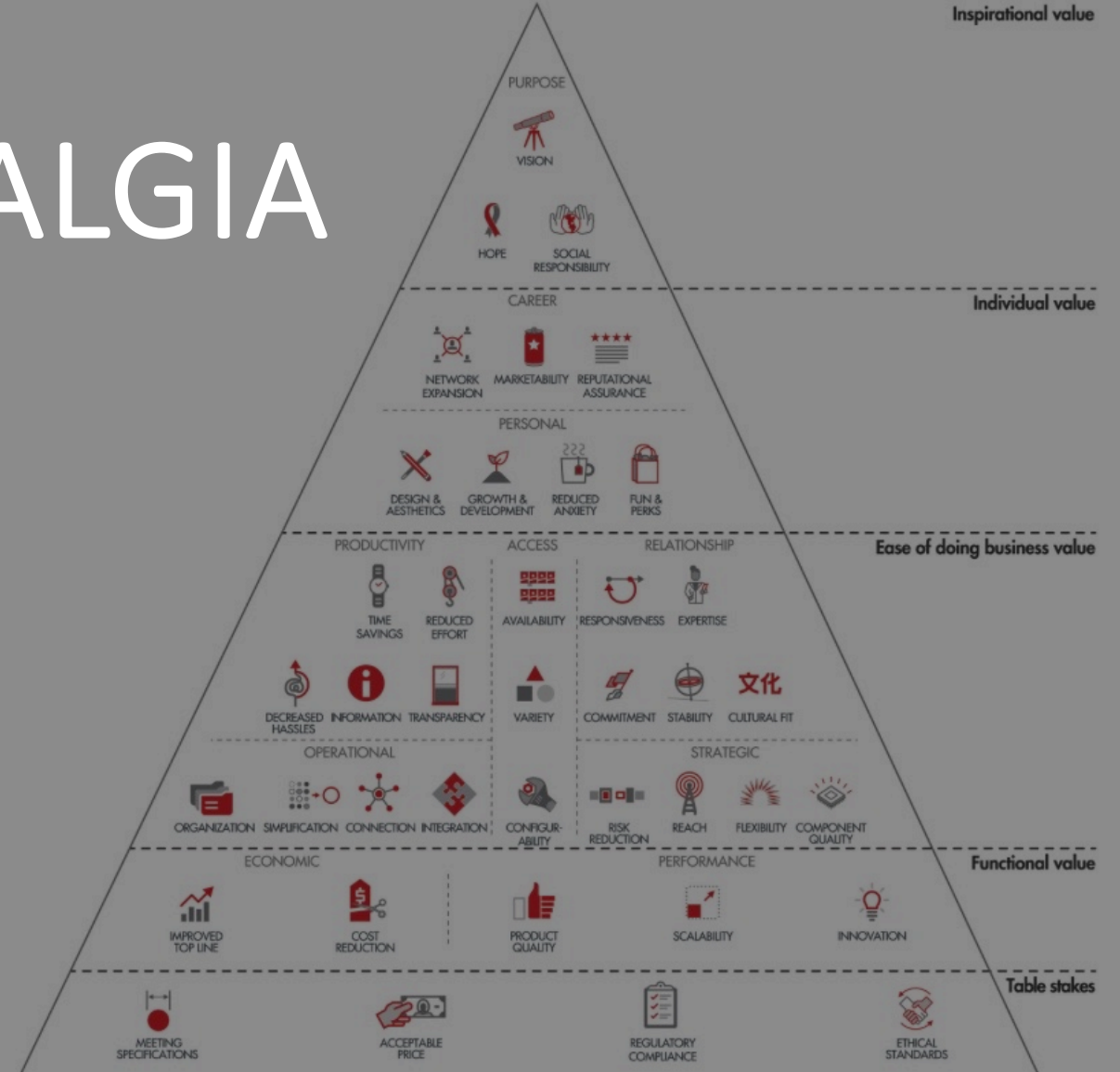
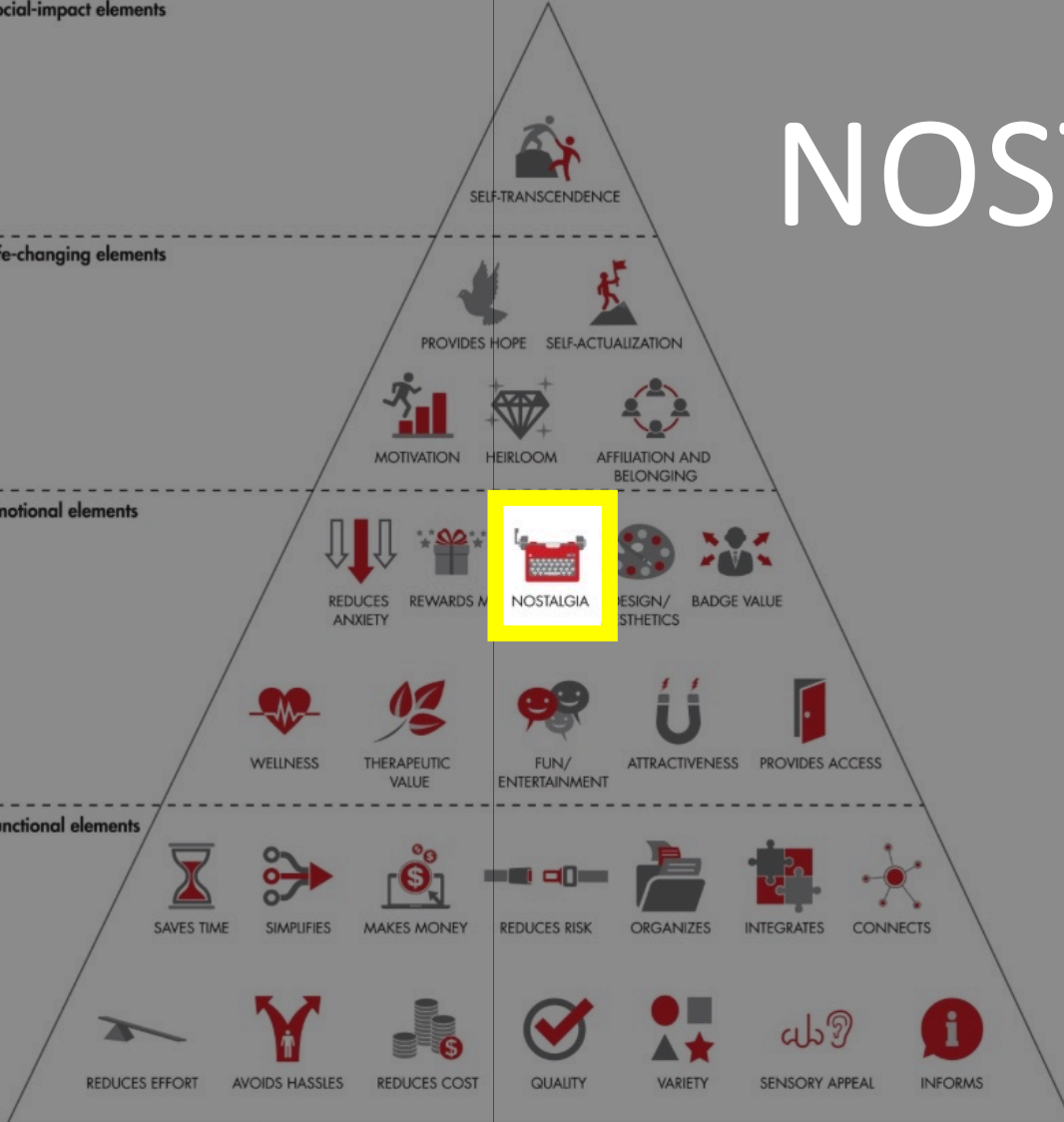
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



AI YearBook



B2C Value Pyramid: WHAT MOTIVATES CUSTOMERS TO BUY YOUR PRODUCT OR SERVICE?

Social-impact elements

THE B2C VALUE PYRAMID



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B2C

B2B

MOTIVATION

Social-impact elements

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Emotional elements

Functional elements

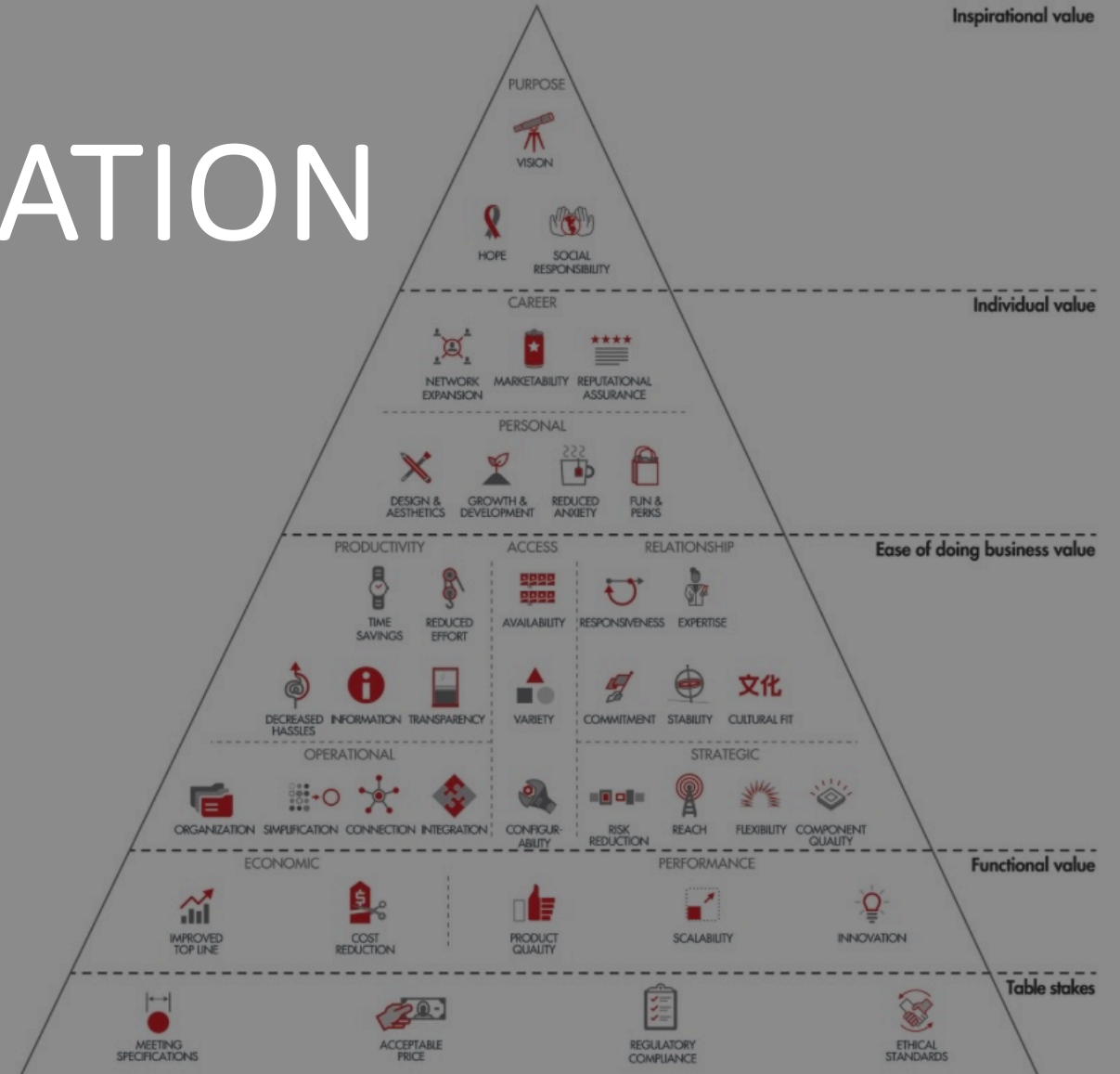
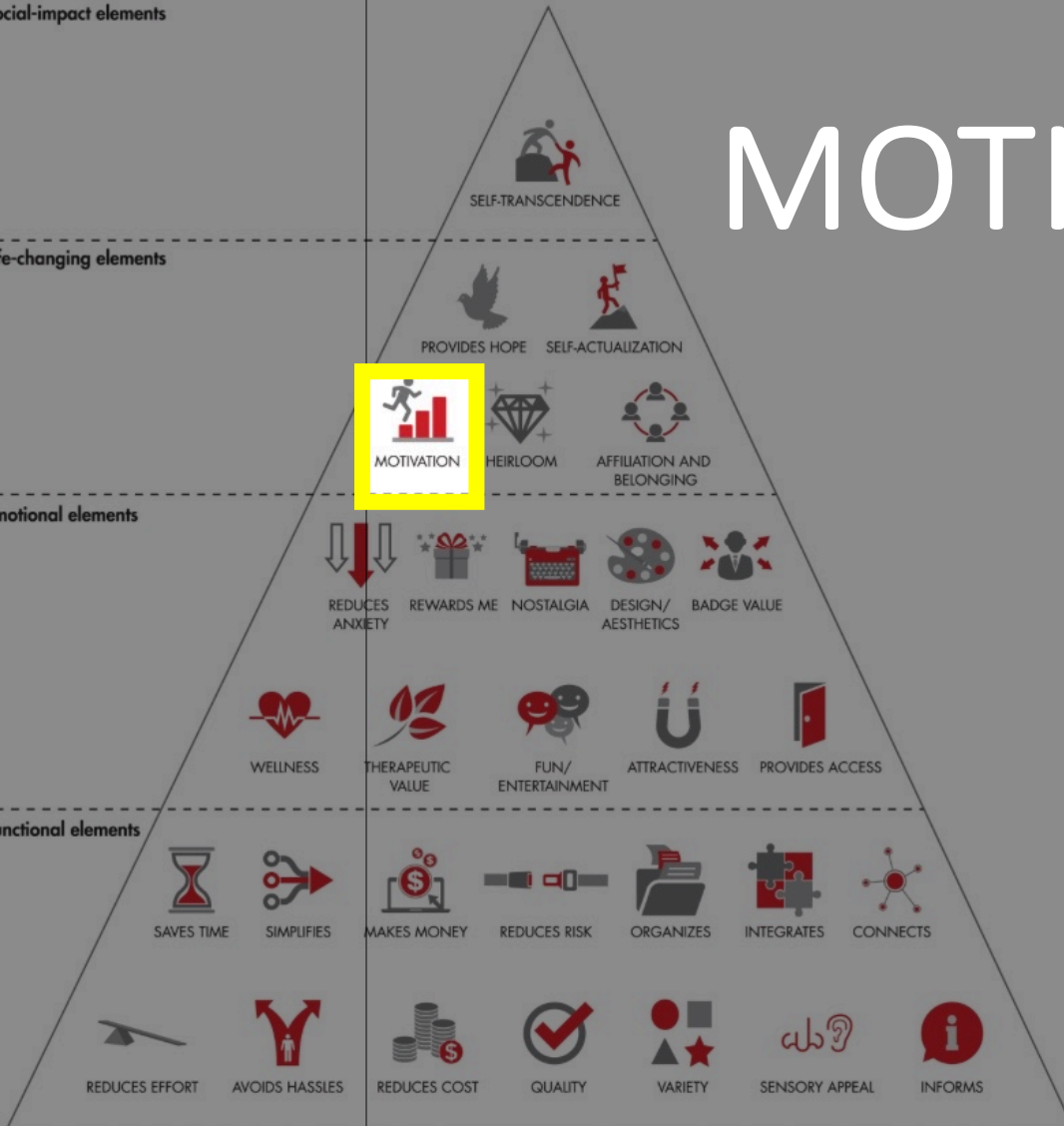
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



AI optimized training

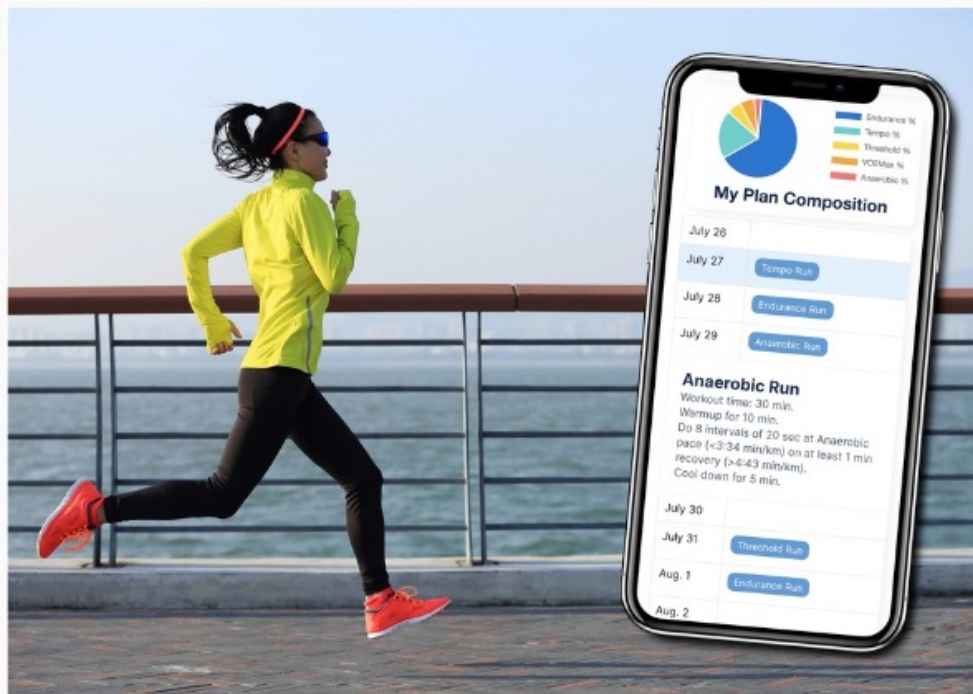
A scientific, data-driven training plan that actually improves your performance - we have the data to back it up. Artificial intelligence is your edge.

Whether you're a runner, cyclist, or triathlete, AI Endurance helps you get the best results from the time you invest in training. Our app creates personalized training plans using AI, to prepare you for any race or to simply keep you in shape.

Try 14 days FREE with no upfront payment information required!

Get Started

Learn More



B2C

B2B

PROVIDES HOPE

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

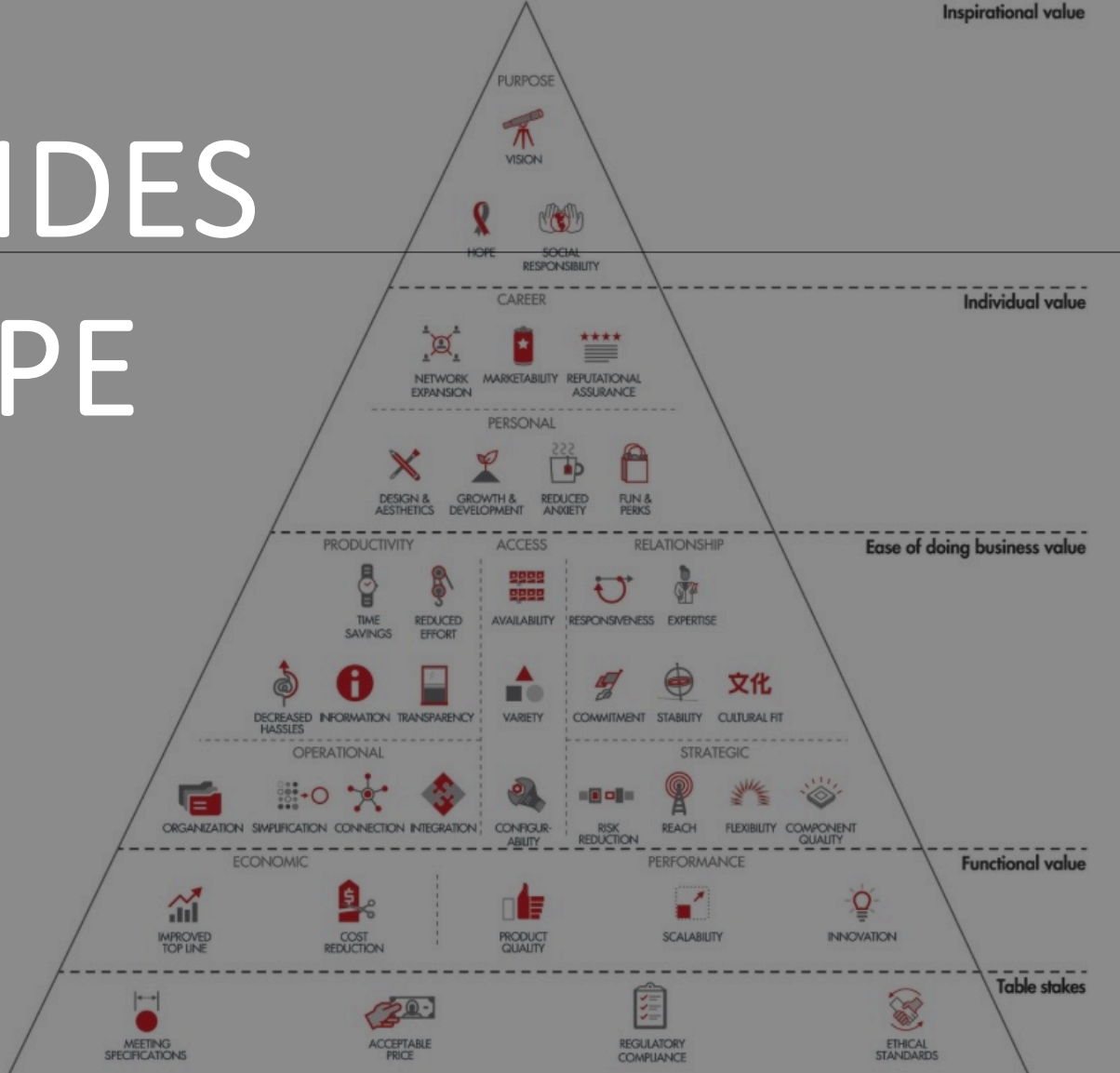
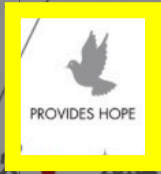
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



09:05 📶 🔋

⚙️ Dashboard 🏠 ⋮

Time smoke free 🔗

3m 2d 16h

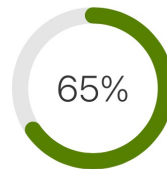


EXPLORE

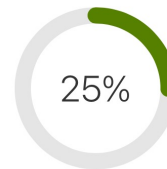
Your health improvements 🔗



Gum texture



Immunity and lung function



Reduced risk of heart disease



Dashboard



Support



Diary



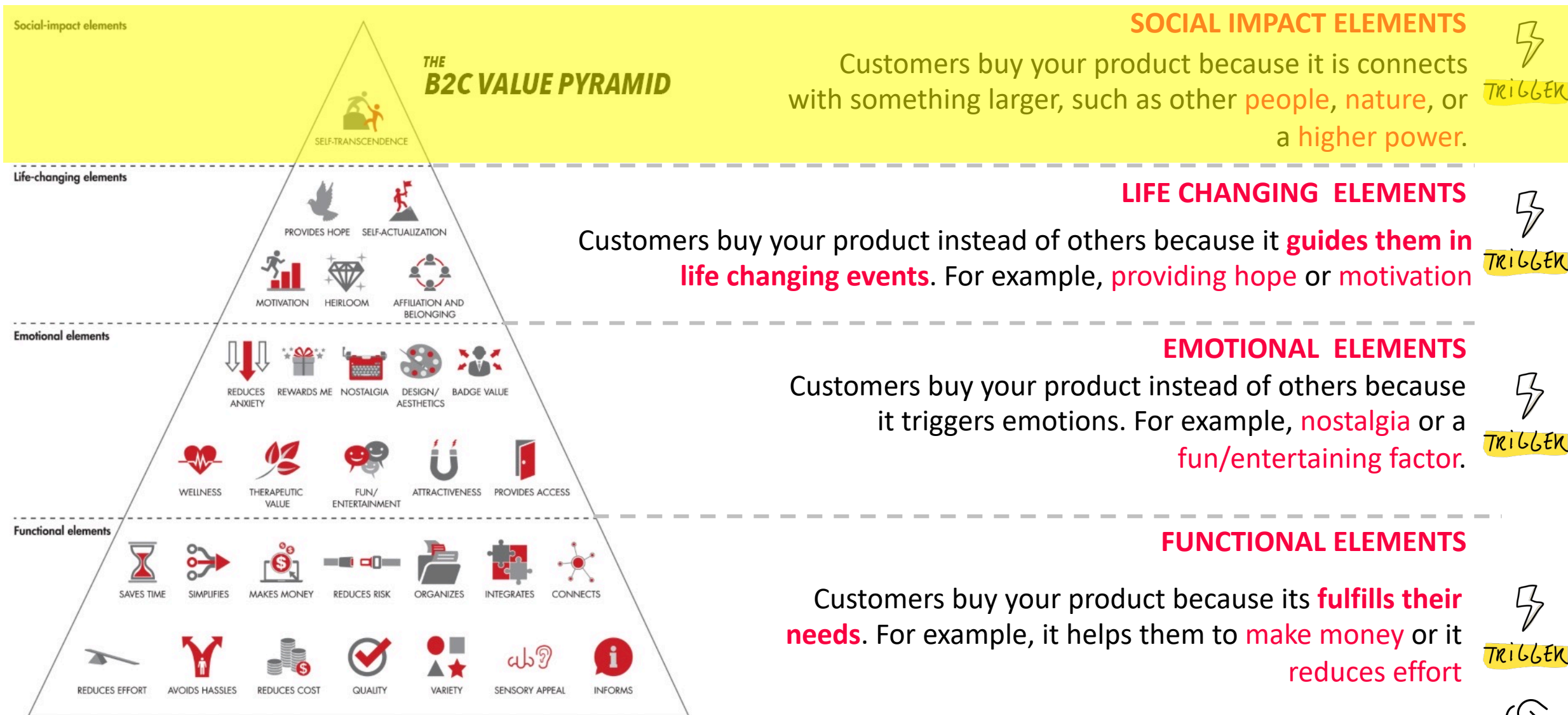
Cravings



Missions



B2C Value Pyramid: WHAT MOTIVATES CUSTOMERS TO BUY YOUR PRODUCT OR SERVICE?



B2C

B2B

Social-impact elements

Inspirational value

Life-changing elements

Individual value

Emotional elements

Ease of doing business value

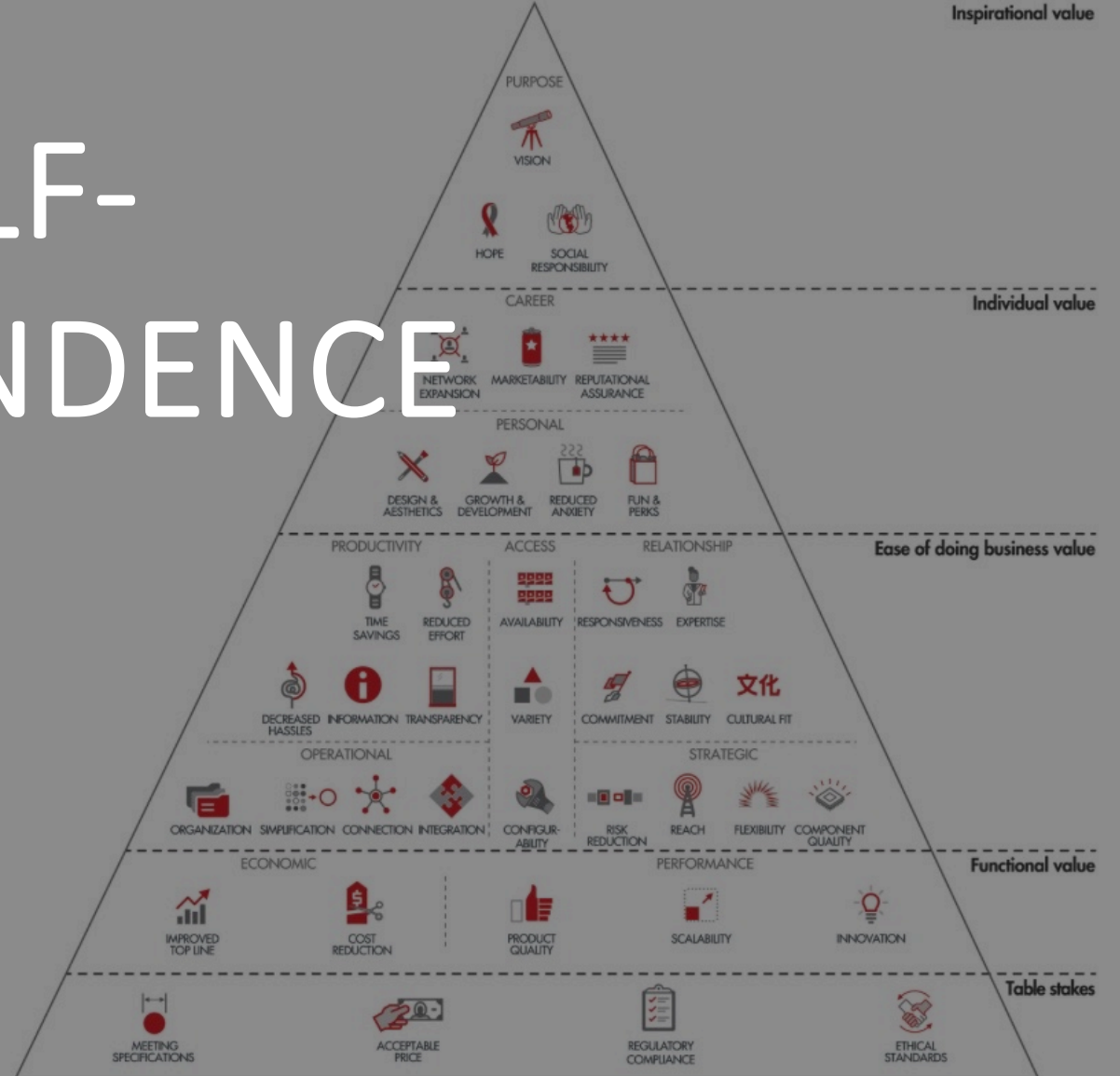
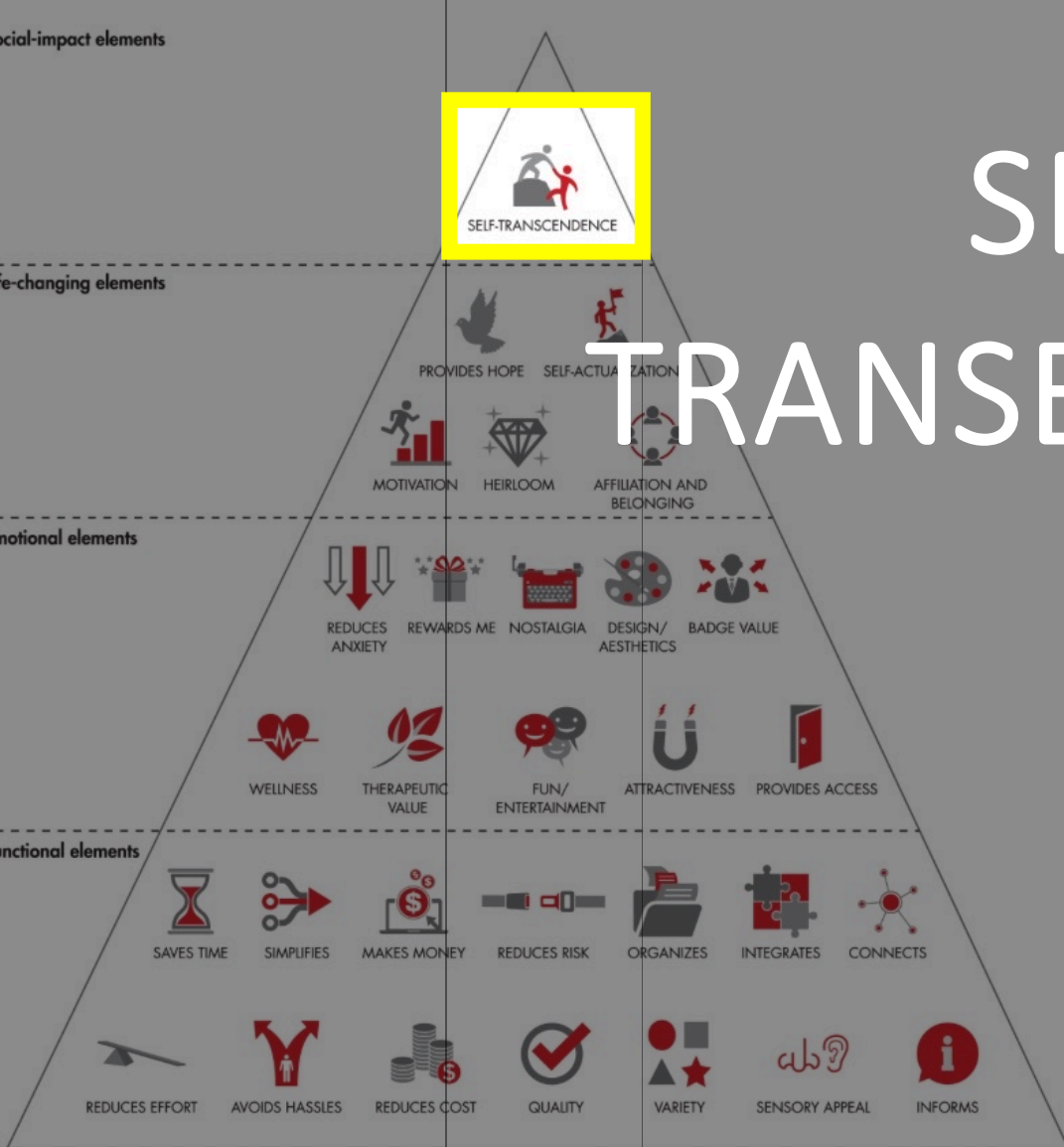
Functional elements

Functional value

Table stakes



SELF-TRANSCENDENCE





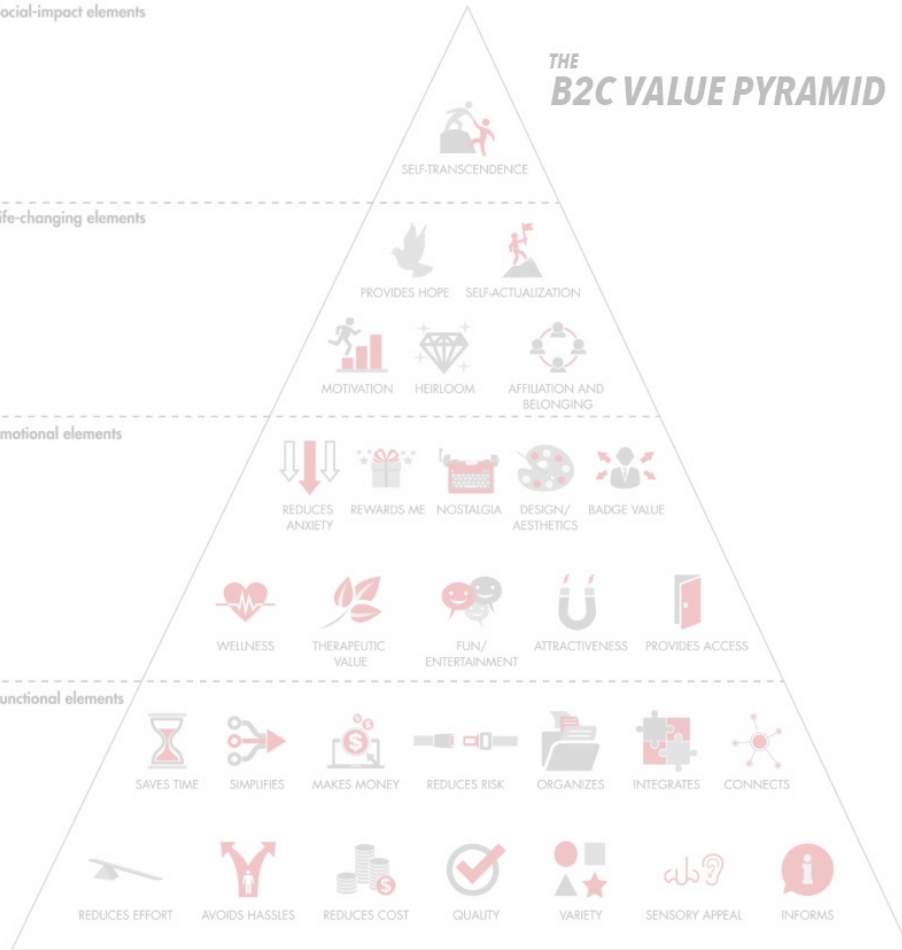
Social-impact elements

Life-changing elements

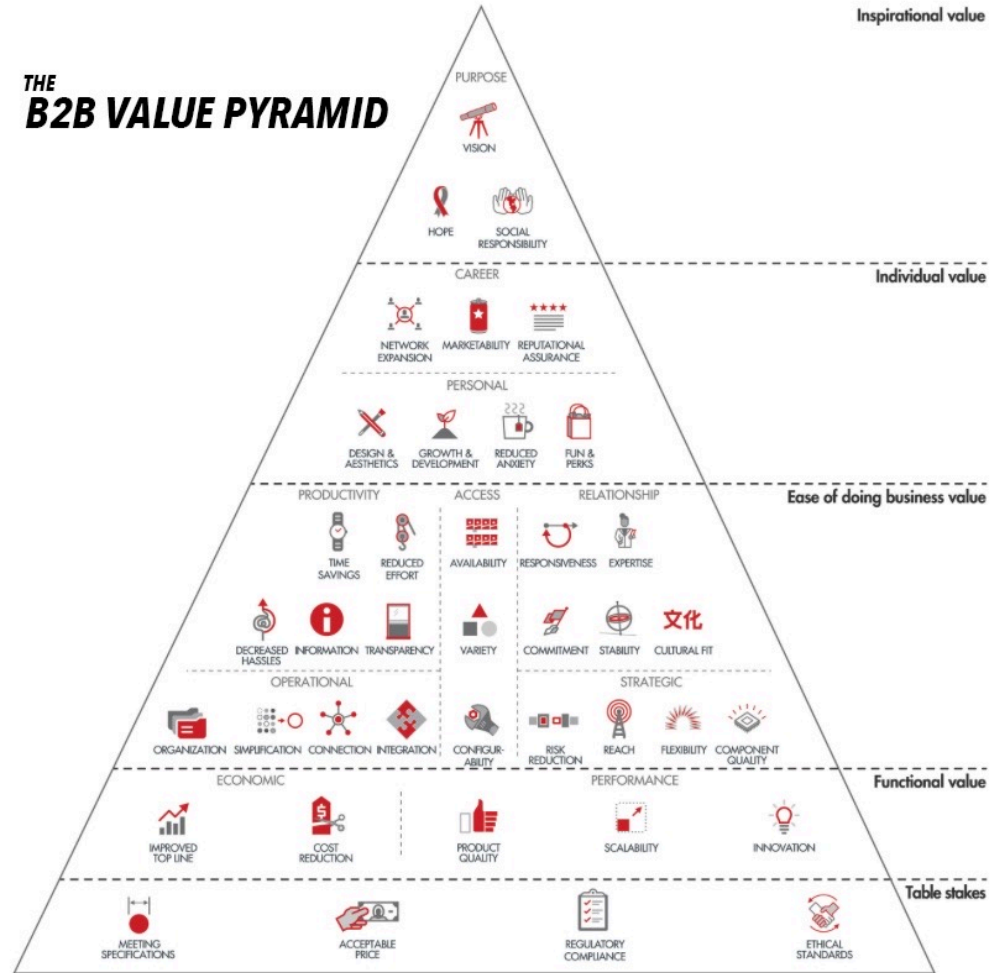
Emotional elements

Functional elements

THE B2C VALUE PYRAMID

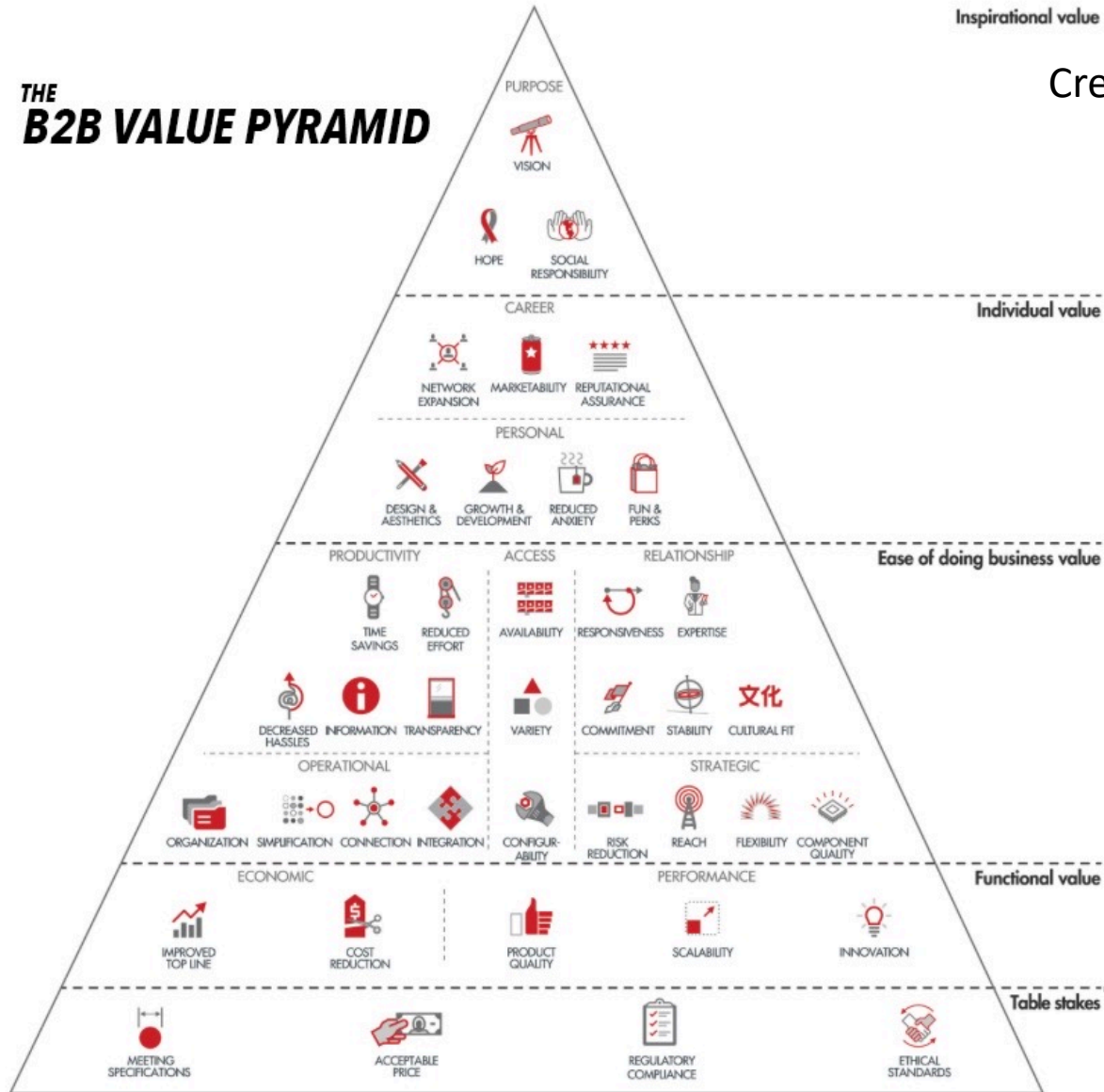


THE B2B VALUE PYRAMID



B2B Value Pyramid: HOW TO REACH YOUR ORGANIZATION'S BUSINESS OBJECTIVES?

THE B2B VALUE PYRAMID



INSPIRATIONAL VALUE

Creating an inspiring organization that gives purpose to its stakeholders
 E.g. : **Helping to be more Social Responsible**

INDIVIDUAL VALUE

Helping colleagues and other stakeholders to improve
 E.g. : **Personal Development, Making employees more marketable**

EASE OF DOING BUSINESS VALUE

Improving how an organization is doing business.
 E.g. : **Increase productivity or become more accessible**

FUNCTIONAL VALUE

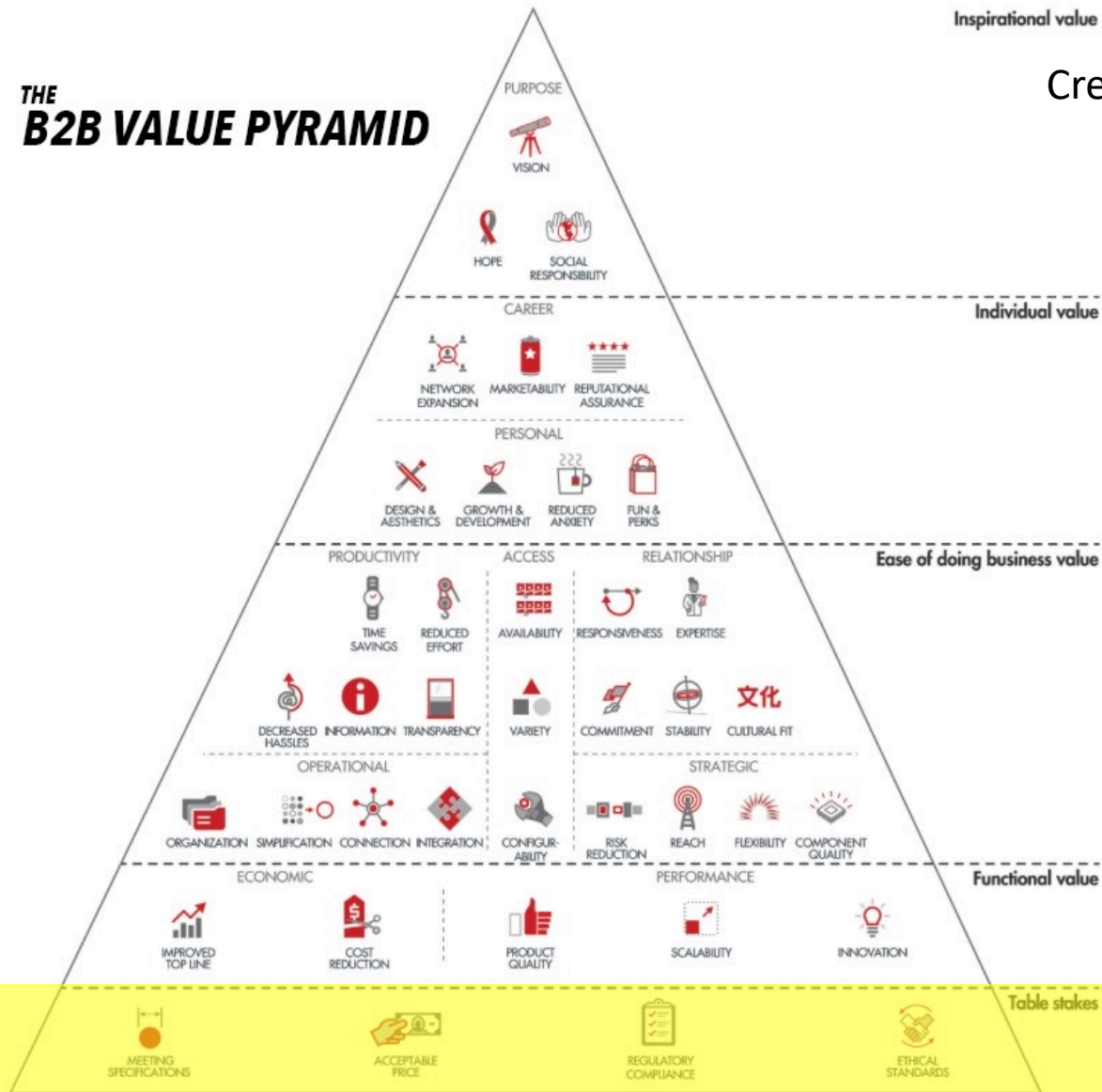
Improving the organization's way of working.
 E.g.: **Deliver Better Product or Service Quality**

TABLE STAKES

Improving the basics of the product/service. E.g.: **Ethical**

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B2C

B2B

REGULATORY COMPLIANCE

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

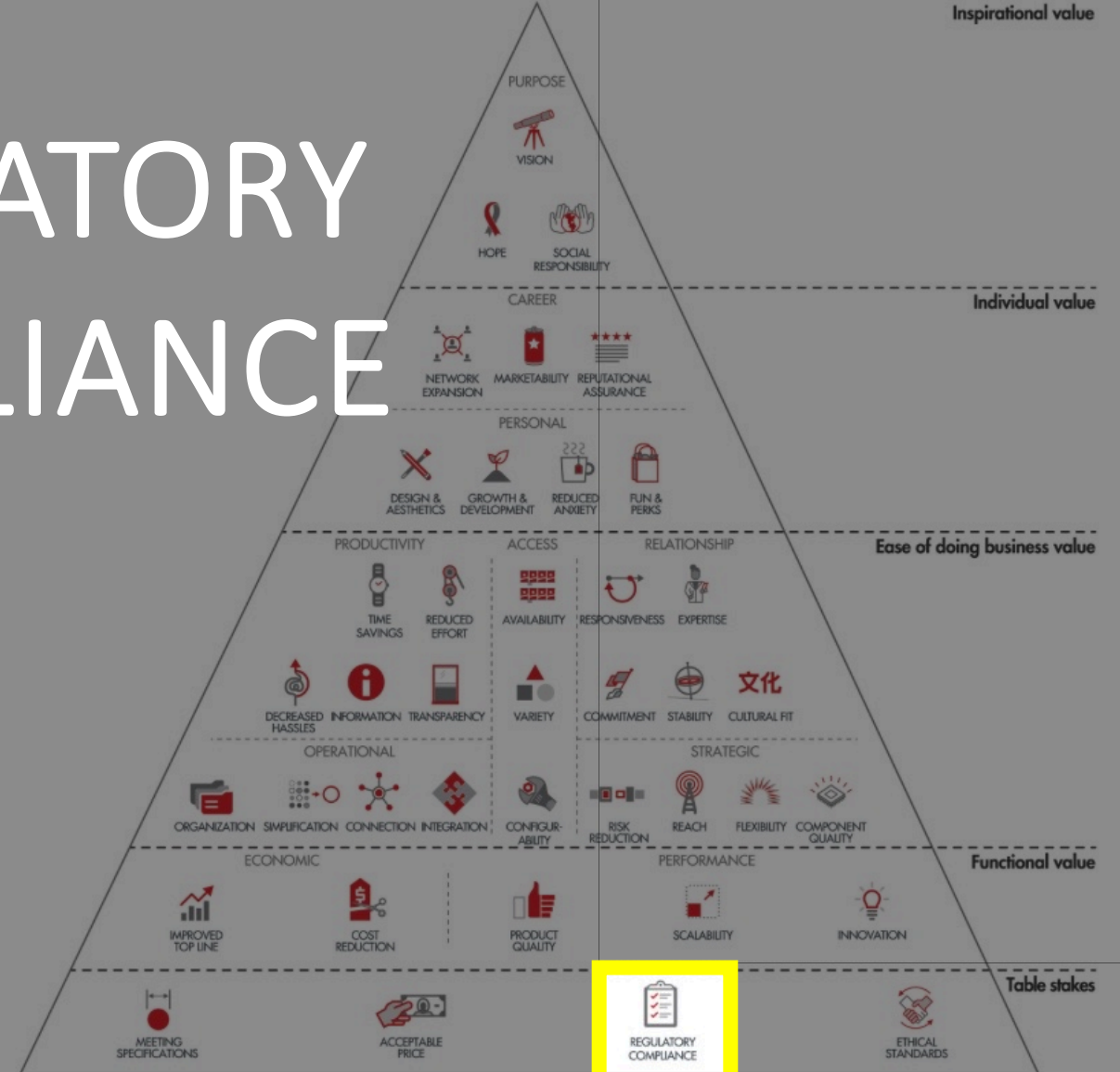
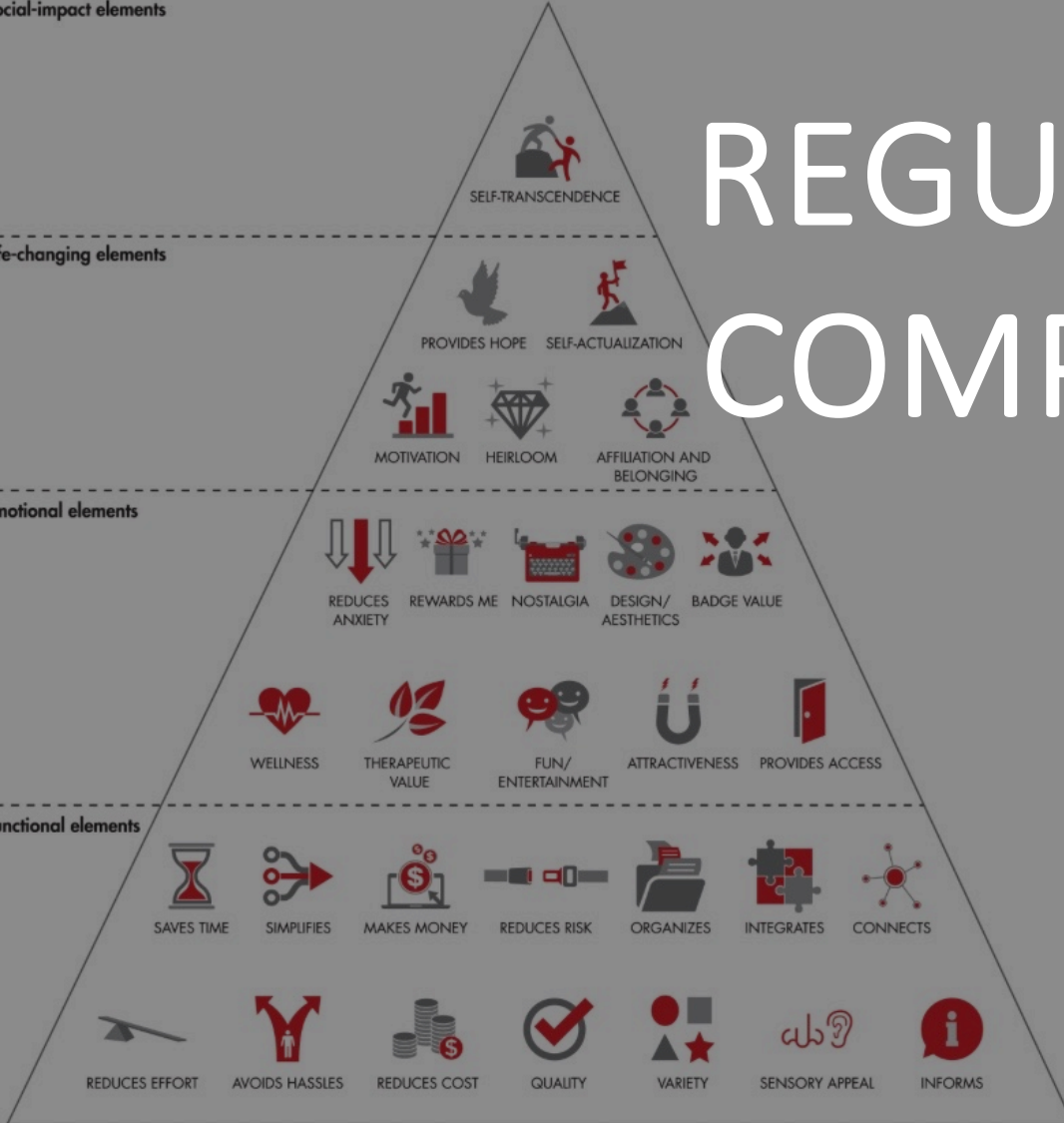
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



Data Regulations

Compliance with data regulations is a fundamental requirement; failure to do so can result in significant fines for your organization.



Reports to local government,
company group, global office, ...

B2C

B2B

ETHICAL STANDARDS

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

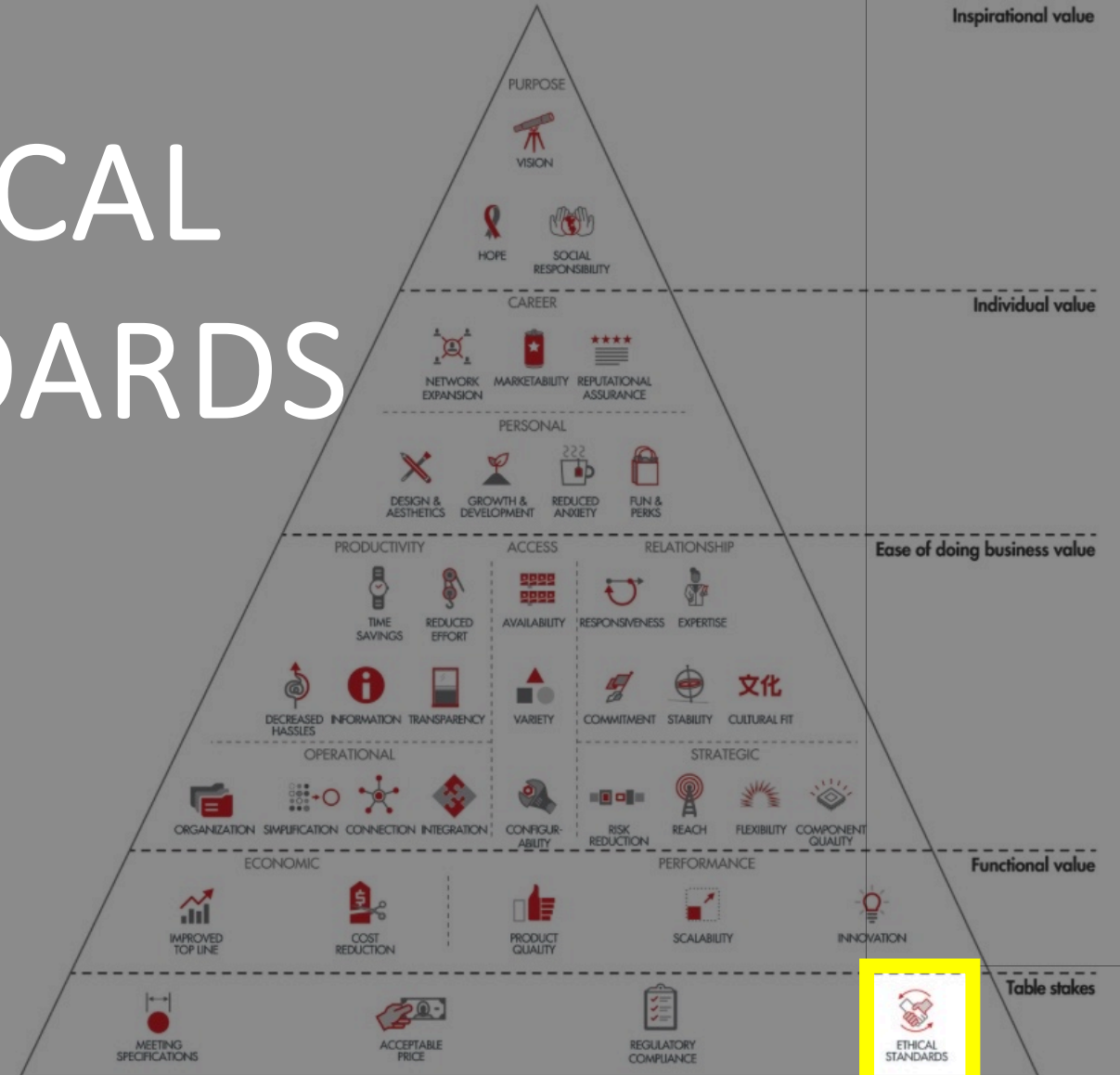
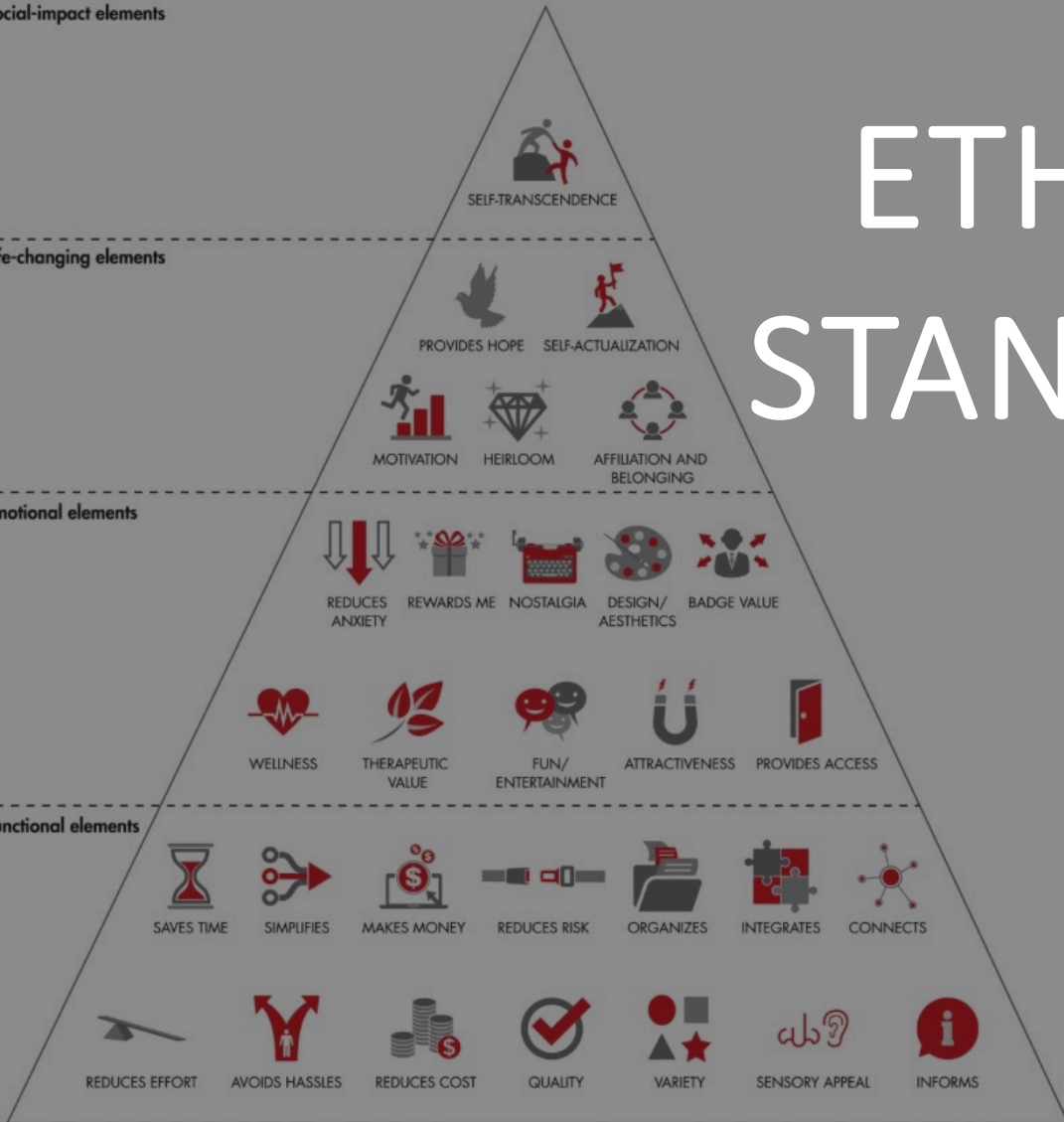
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



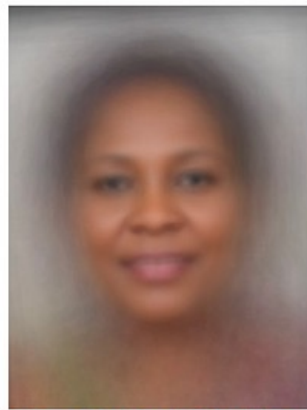
Ethical Face Recognition

98.7%



**DARKER
MALES**

68.6%



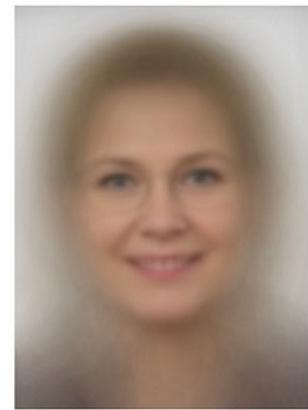
**DARKER
FEMALES**

100%



**LIGHTER
MALES**

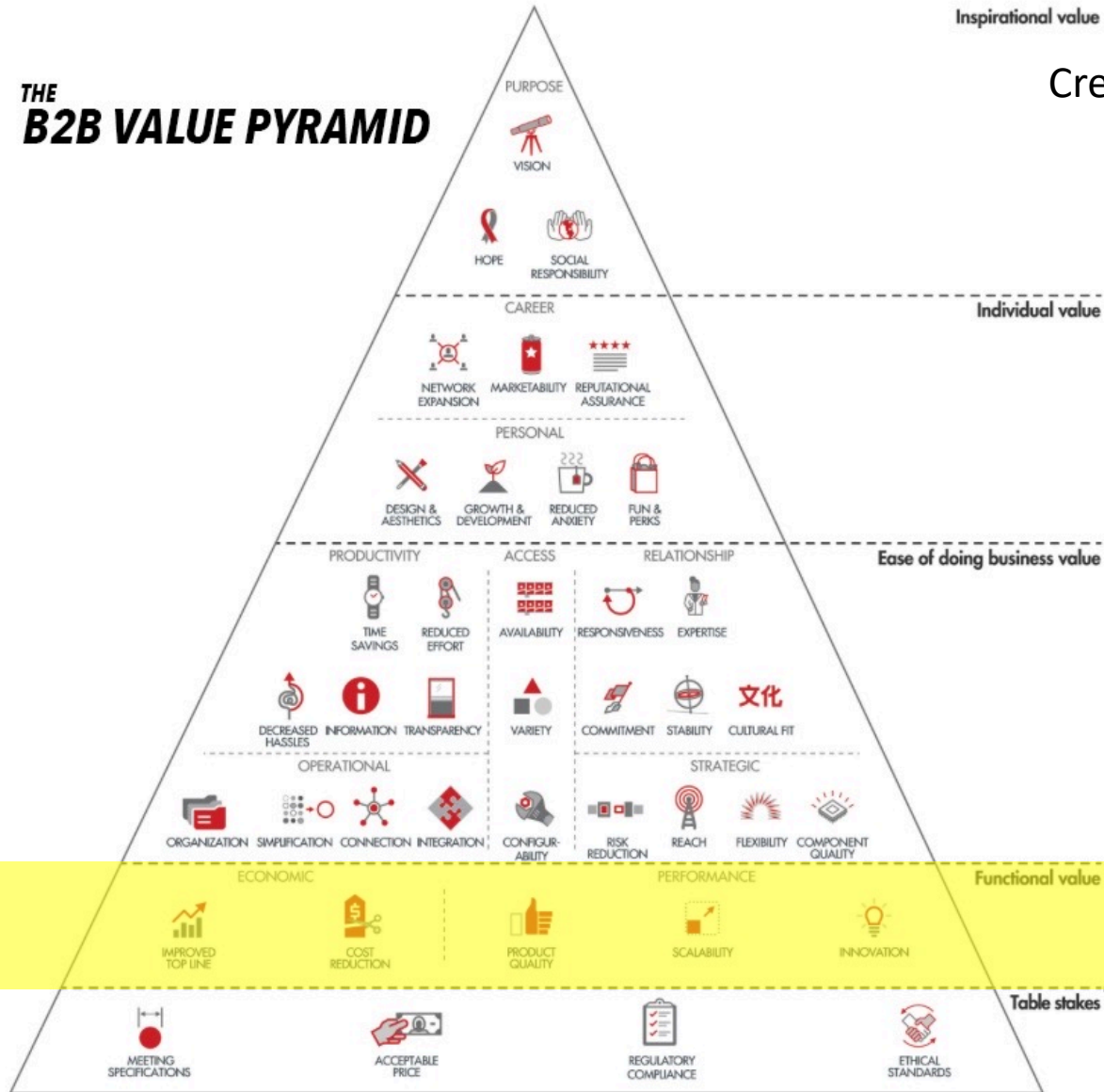
92.9%



**LIGHTER
FEMALES**

B2B Value Pyramid: HOW TO REACH YOUR ORGANIZATION'S BUSINESS OBJECTIVES?

THE B2B VALUE PYRAMID



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FUNCTIONAL VALUE

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E.g.: Deliver Better Product or Service Quality

TABLE STAKES

Improving the basics of the product/service. E.g.: Ethical

B2C

B2B

Product Quality

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

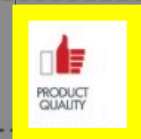
Inspirational value

Individual value

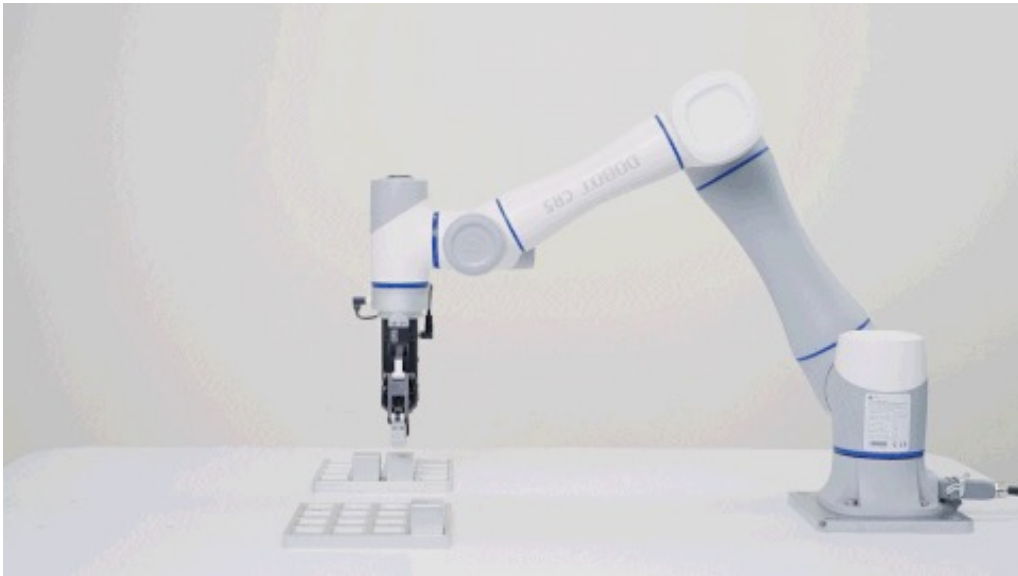
Ease of doing business value

Functional value

Table stakes



Automating Repetitive Work for Consistent Results



**Cobots: Automating
Production Steps**

A screenshot of a software interface titled 'Edit Item'. The form contains several fields: 'Item type' with the value 'Physical', 'Name' with the value 'Coffee Mug', and 'Description' with the value '12 oz, frosted, personalized, witty, names, favorite color'. There is a 'Generate' button below the description field. To the right of the form is a grey box with the text 'Co' and an 'Edit' button below it. At the top right of the interface are 'Actions' and 'Save' buttons. Below the description field is a dashed box with the text 'Drag image here, upload or browse image library.' and a 'Locations' dropdown menu.

AI-Based Product Description



B2C

B2B

Scalability

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

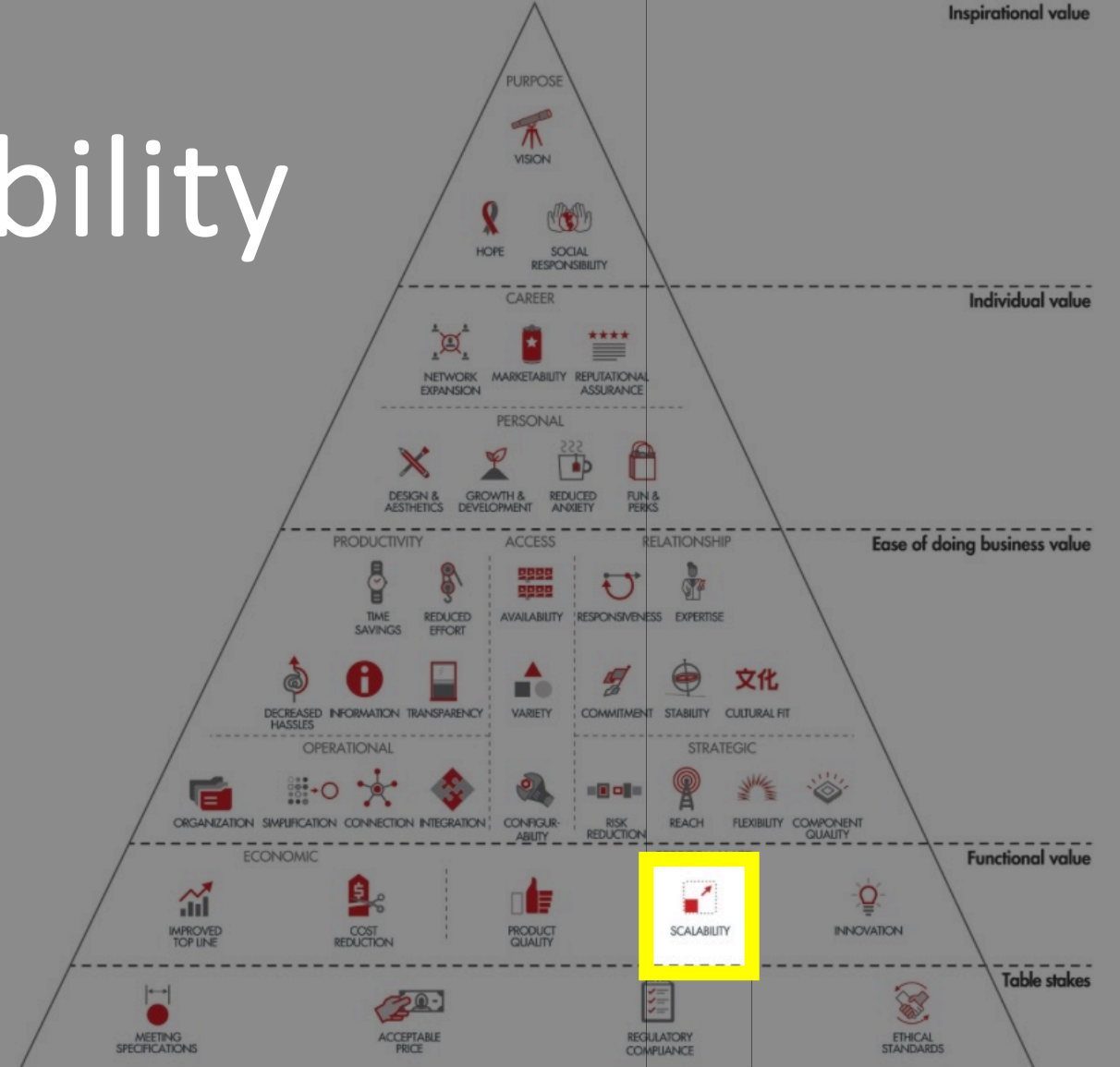
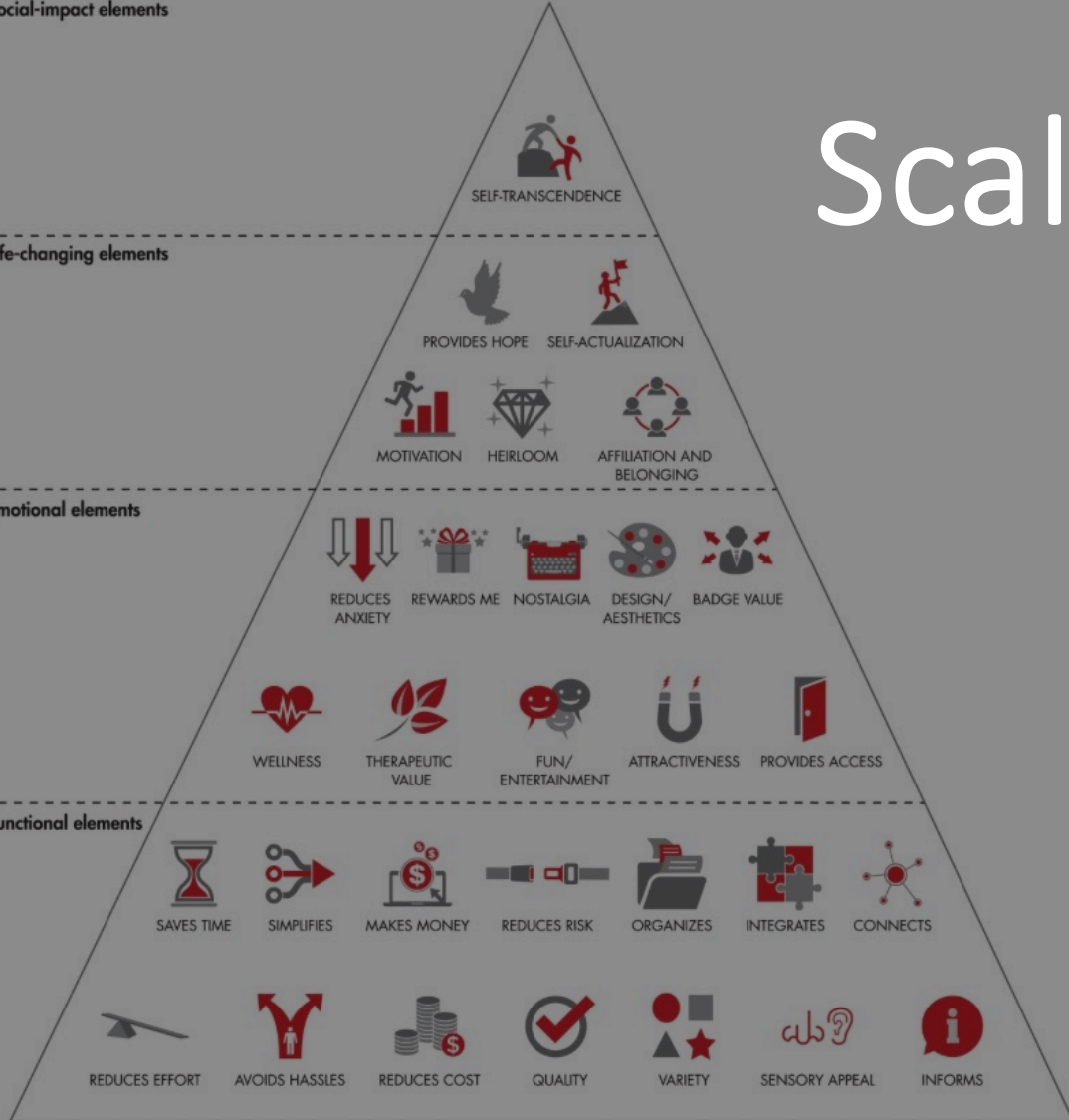
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



Automated Shelf Auditing

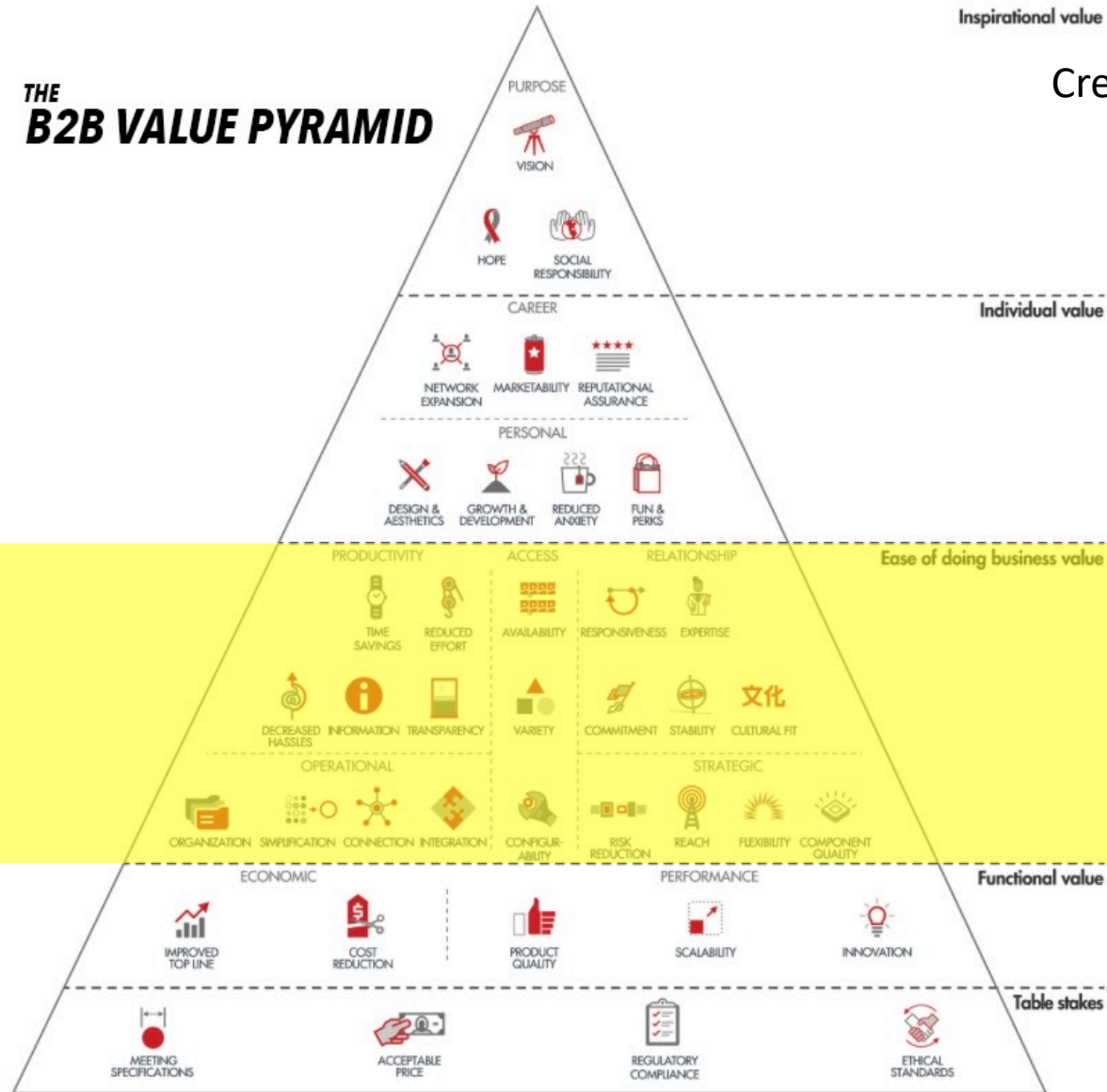


Automatically detect nearly empty shelves and restock them without human intervention, enabling supermarkets to efficiently scale during periods of high demand.



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TRANSPARENCY

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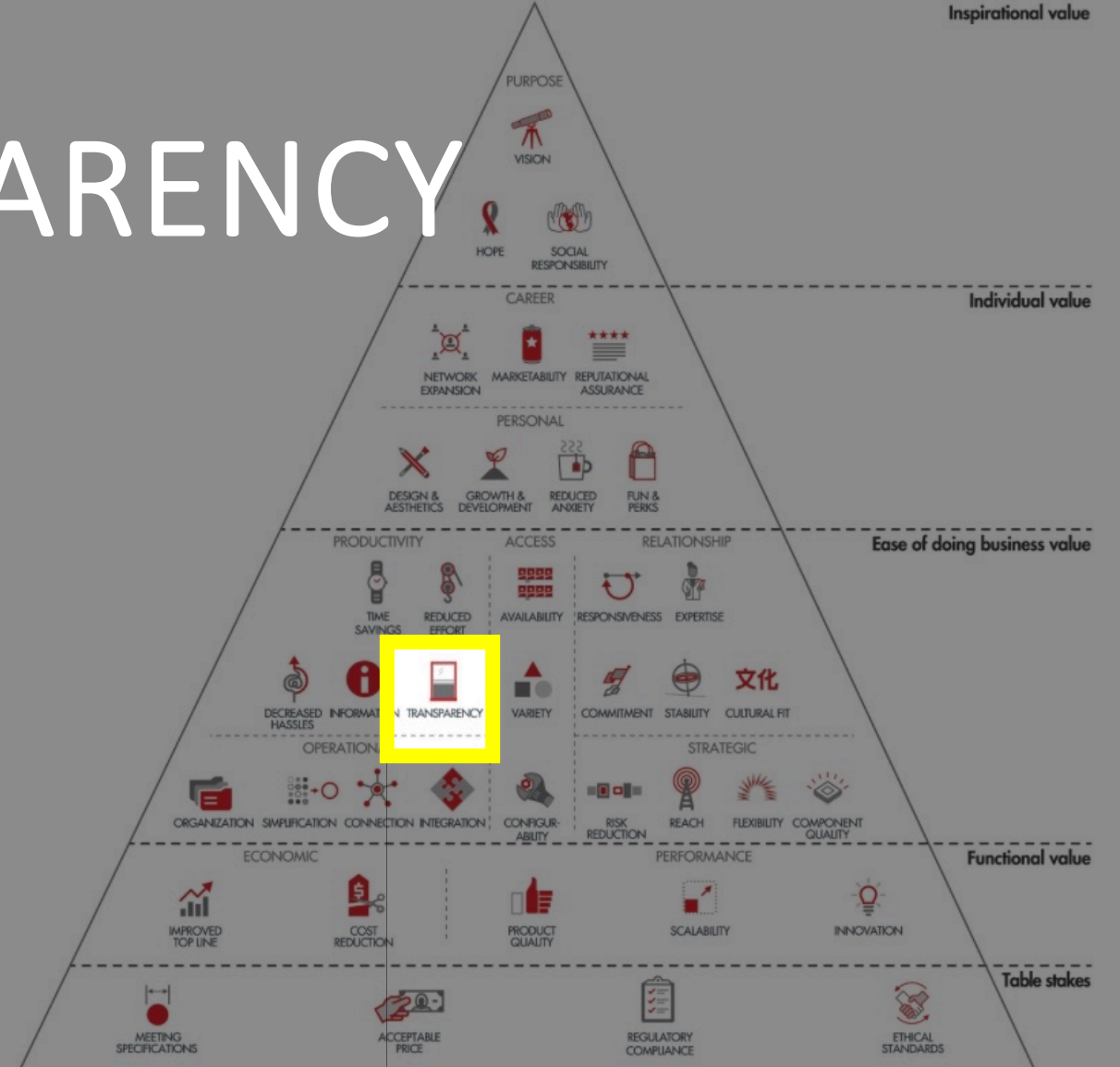
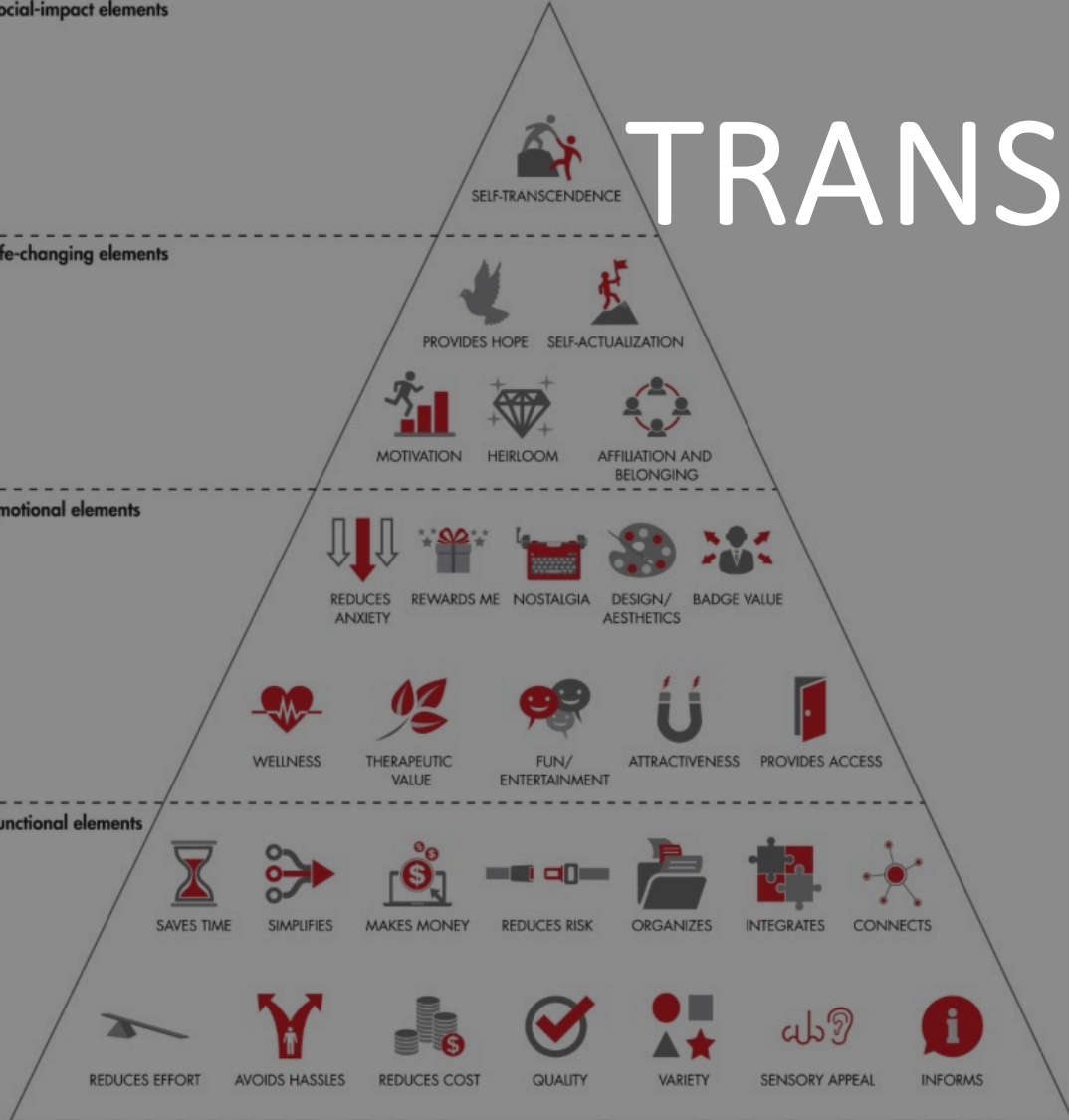
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Individual value

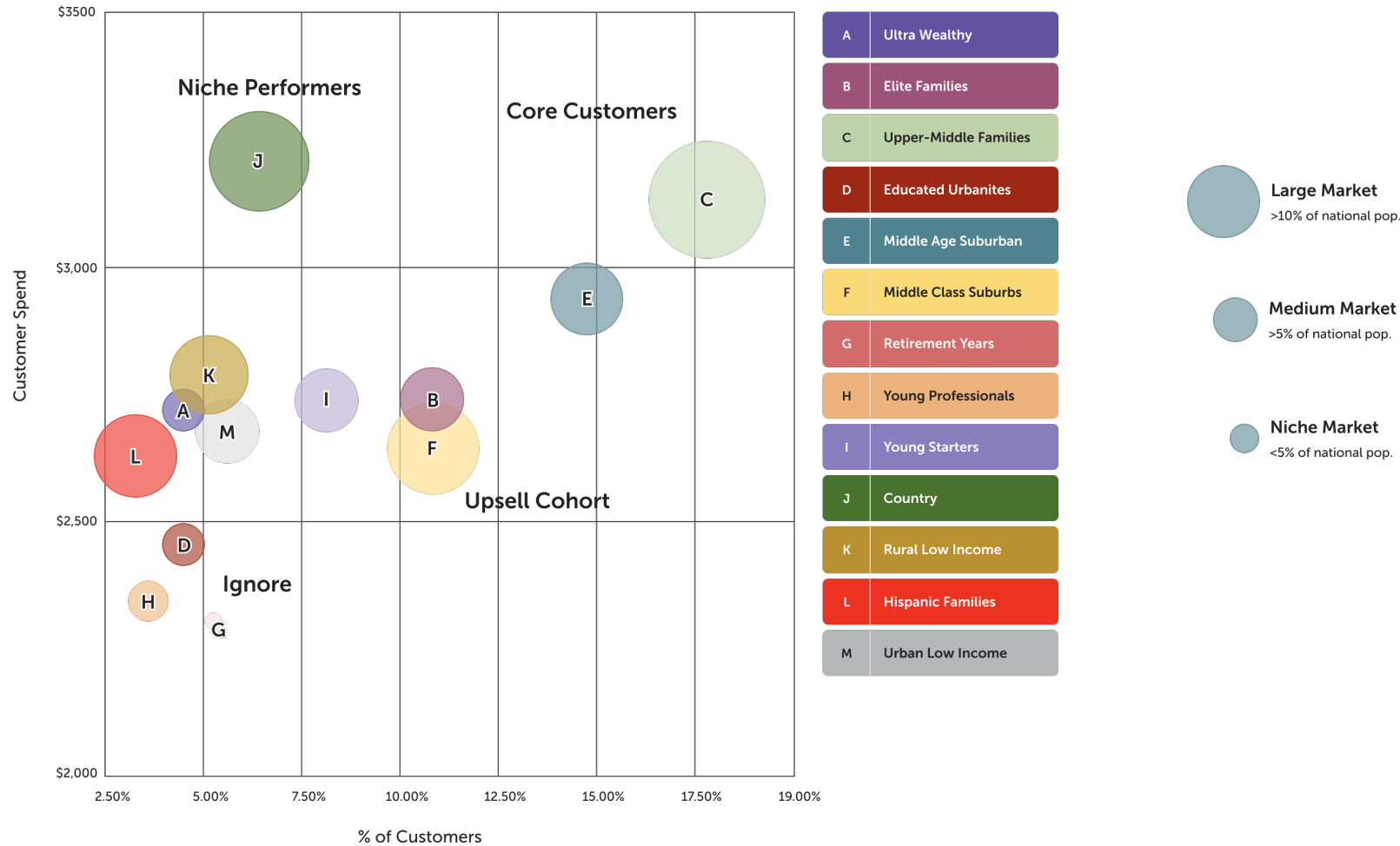
Ease of doing business value

Functional value

Table stakes



Customer Segmentation



Reports provide a transparent and unbiased perspective on various aspects of the organization, enabling data-driven, fact-based decision-making.



B2C

B2B

AVAILABILITY

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



Chatbot

Jimmy 5:41 PM

How can I change my password?

Pete the Chatbot 5:42 PM

Please give me your email address.
I'll send you a special link.

Jimmy 5:41 PM

jimmy@sample.com

Pete the Chatbot 5:42 PM

Thanks! Please check your
email inbox! 📧❤️

× support × password × newsletter



B2C

B2B

PRODUCTIVITY

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

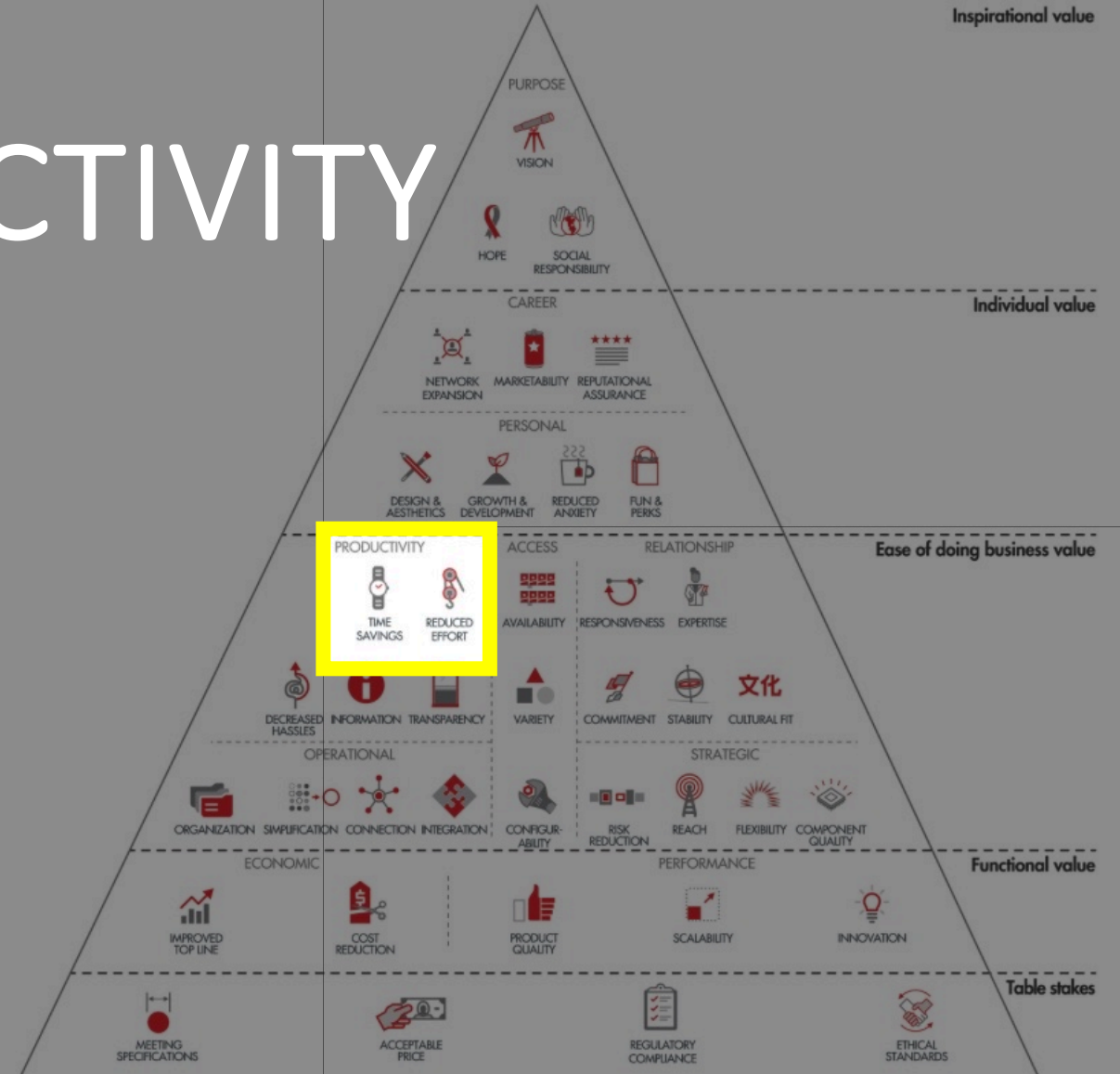
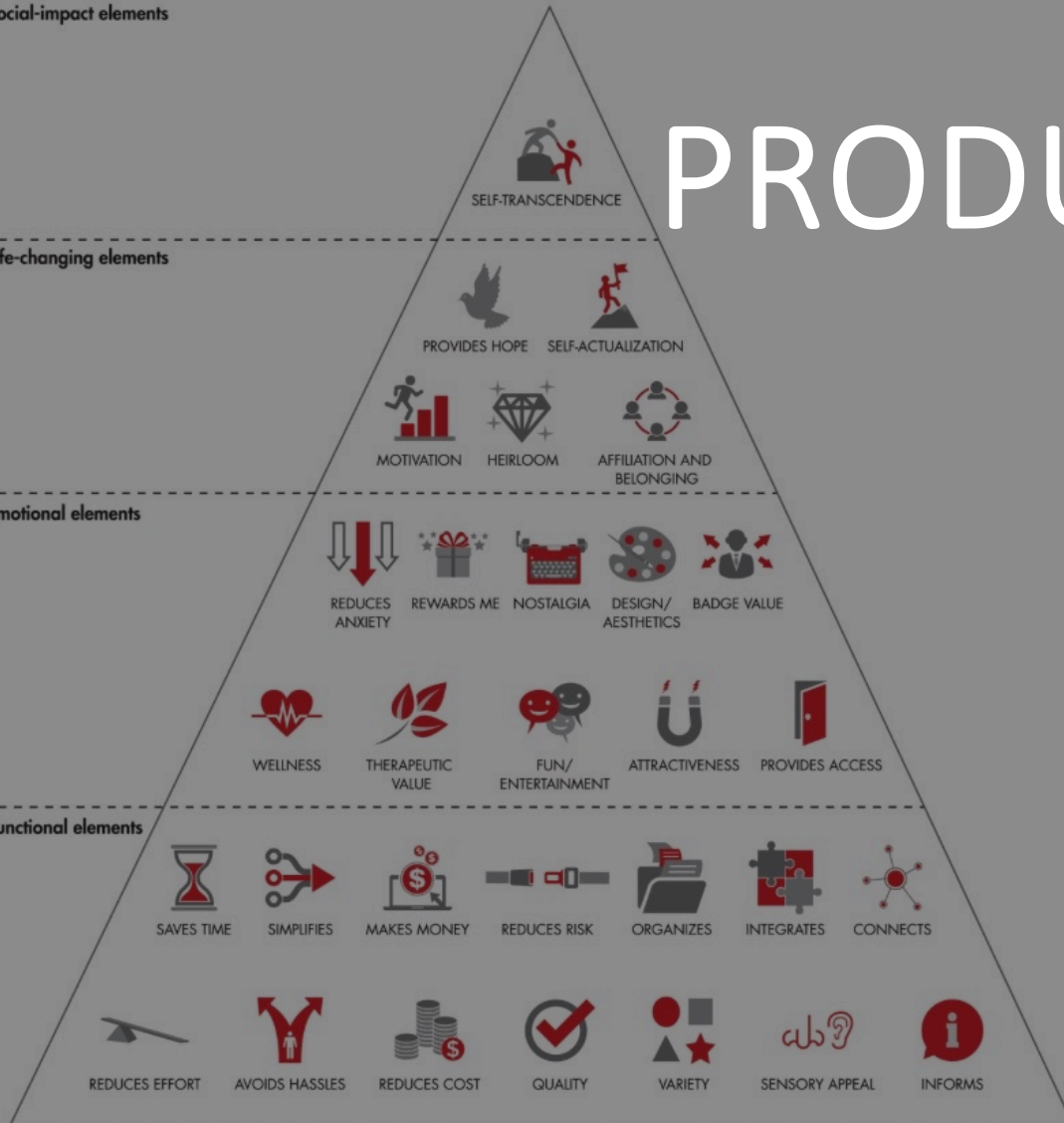
Inspirational value

Individual value

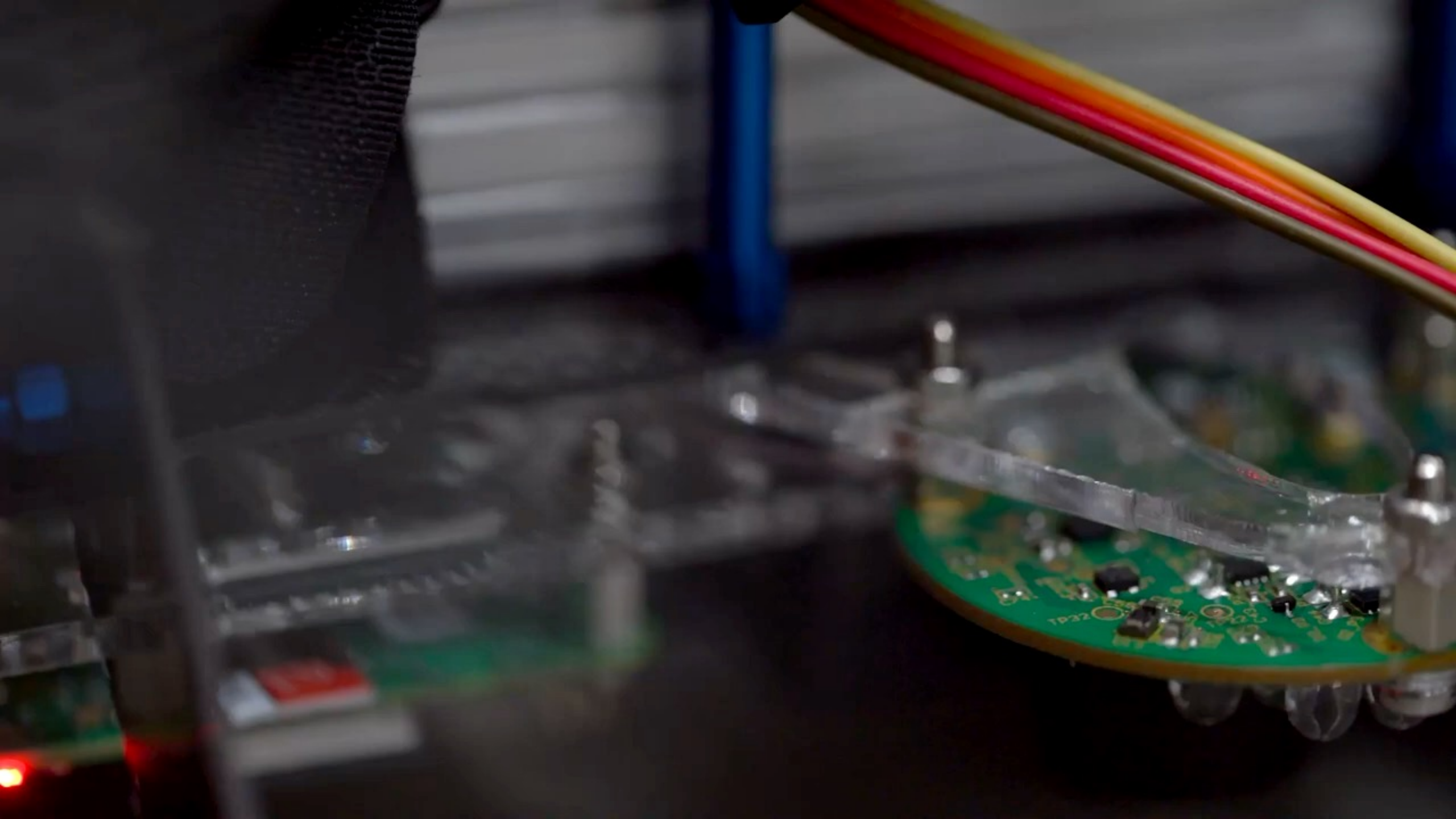
Ease of doing business value

Functional value

Table stakes

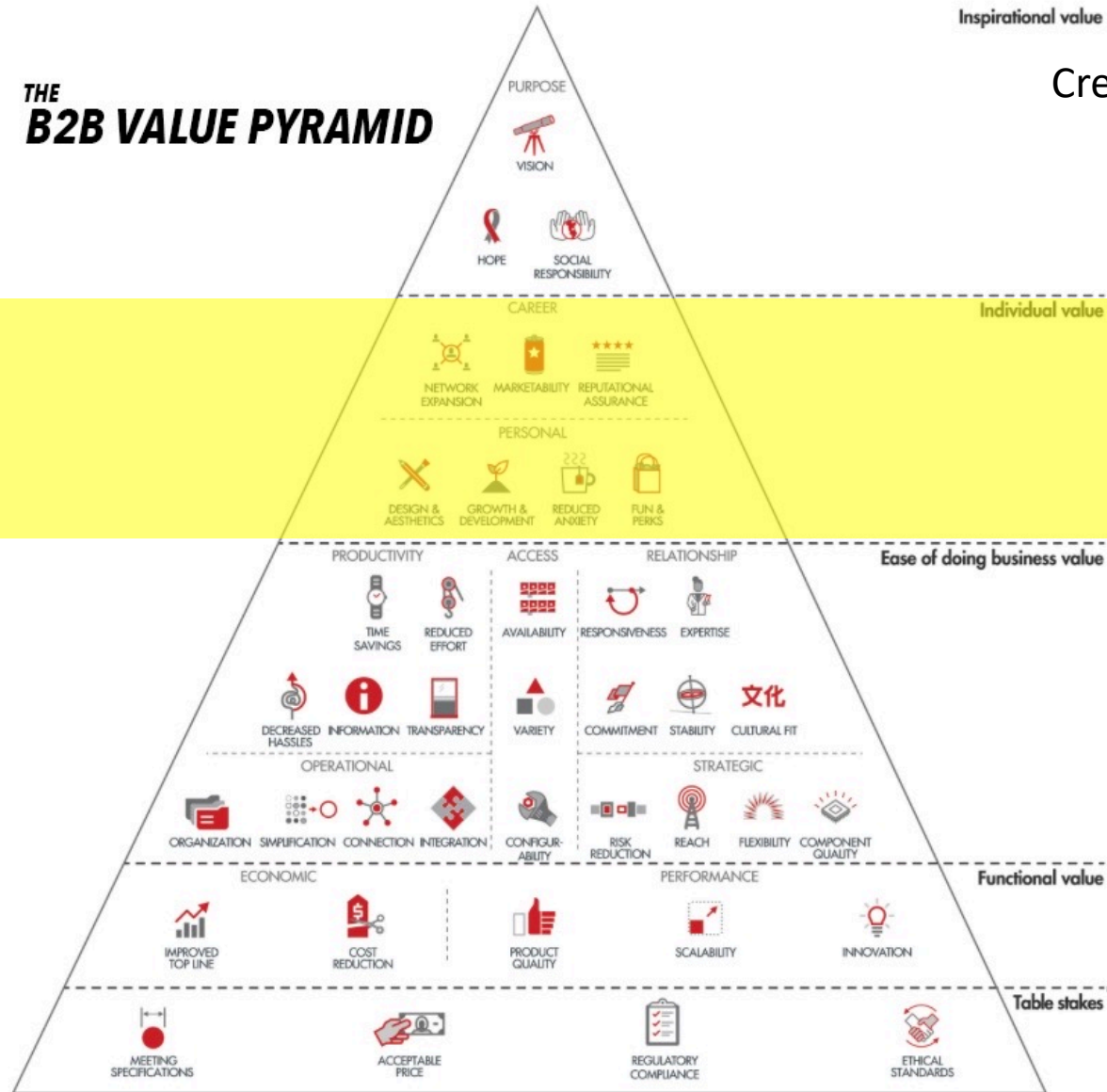






B2B Value Pyramid: HOW TO REACH YOUR ORGANIZATION'S BUSINESS OBJECTIVES?

THE B2B VALUE PYRAMID



INSPIRATIONAL VALUE

Creating an inspiring organization that gives purpose to its stakeholders
E.g. : Helping to be more Social Responsible

INDIVIDUAL VALUE

Helping colleagues and other stakeholders to improve
E.g. : Personal Development, Making employees more marketable

EASE OF DOING BUSINESS VALUE

Improving how an organization is doing business.
E.g. : Increase productivity or become more accessible

FUNCTIONAL VALUE

Improving the organization's way of working.
E.g.: Deliver Better Product or Service Quality

TABLE STAKES

Improving the basics of the product/service. E.g.: Ethical

B2C

B2B

Marketability

Social-impact elements

Life-changing elements

Emotional elements

Functional elements

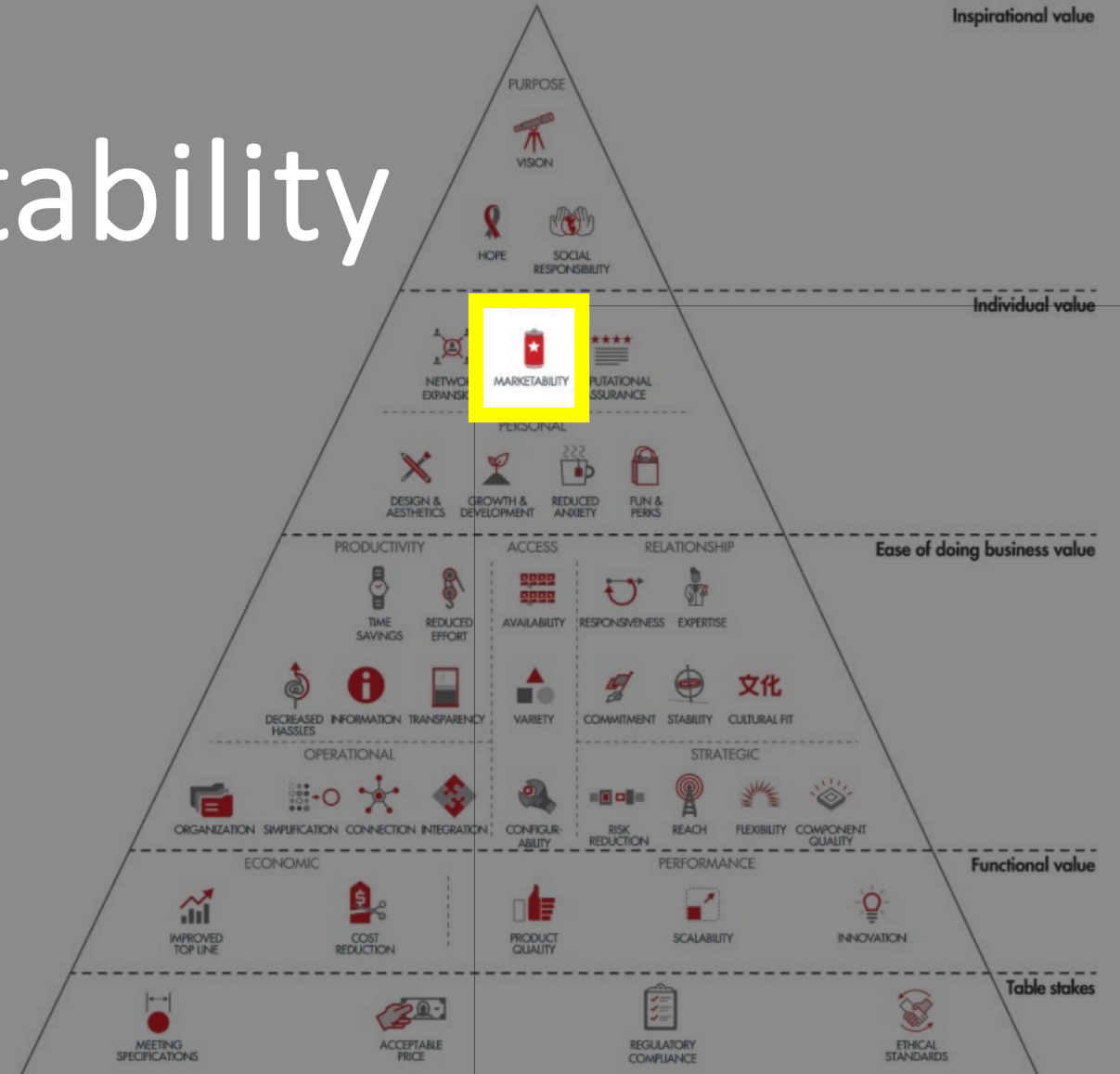
Inspirational value

Individual value

Ease of doing business value

Functional value

Table stakes



Marketability

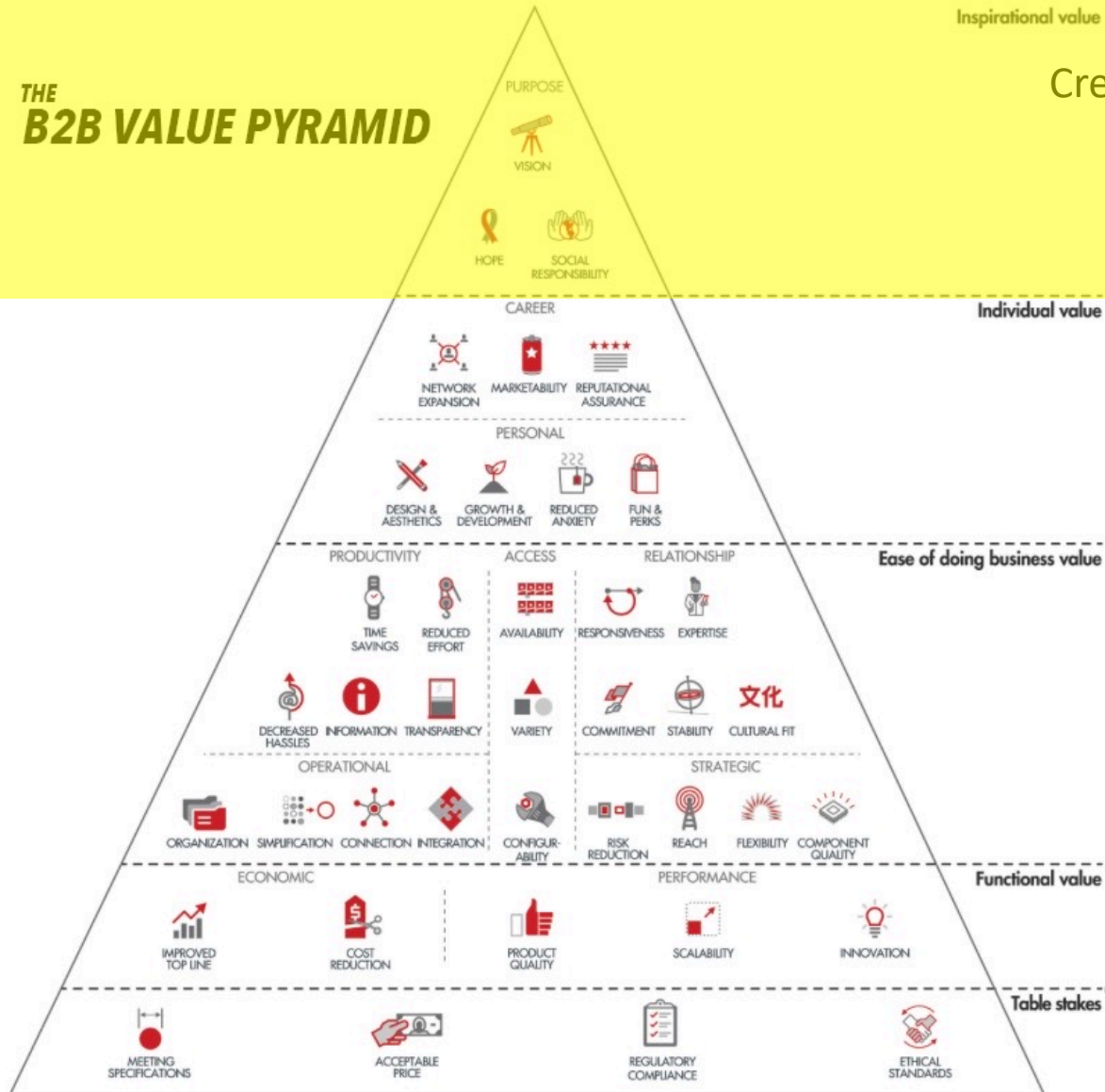


Certifications about data knowledge (such as Datacamp) are industry-recognized credentials for data professionals.



B2B Value Pyramid: HOW TO REACH YOUR ORGANIZATION'S BUSINESS OBJECTIVES?

THE B2B VALUE PYRAMID



INSPIRATIONAL VALUE

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B2C

B2B

Social-impact elements

Inspirational value

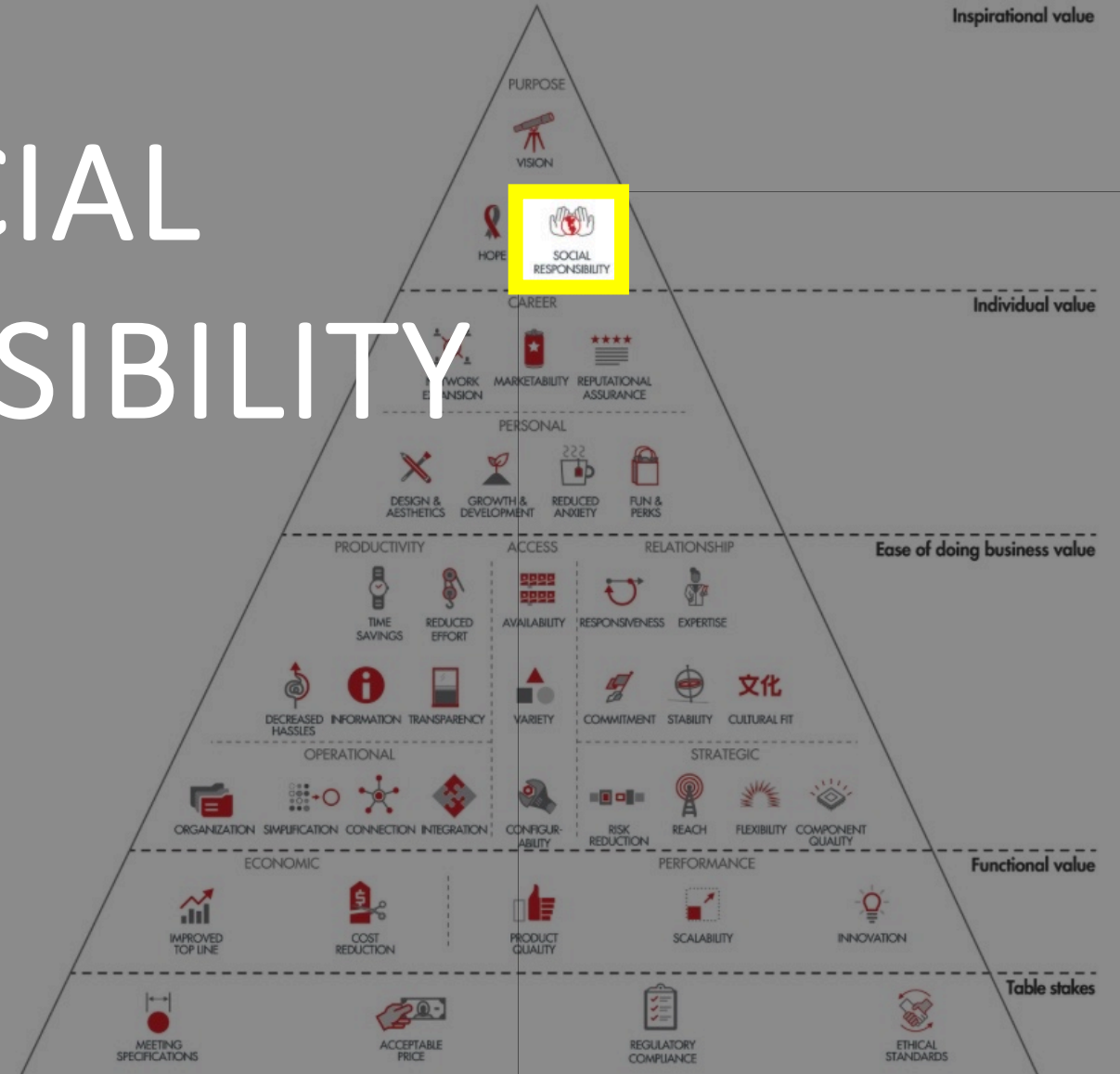
Life-changing elements

Emotional elements

Functional elements

SOCIAL

RESPONSIBILITY



Data Use Cases

- Value Streams
- Data & AI Use Cases
- Business Value Pyramids
- **Exercise**





Our  **help(s)**  **who**

products and services *customer segment*

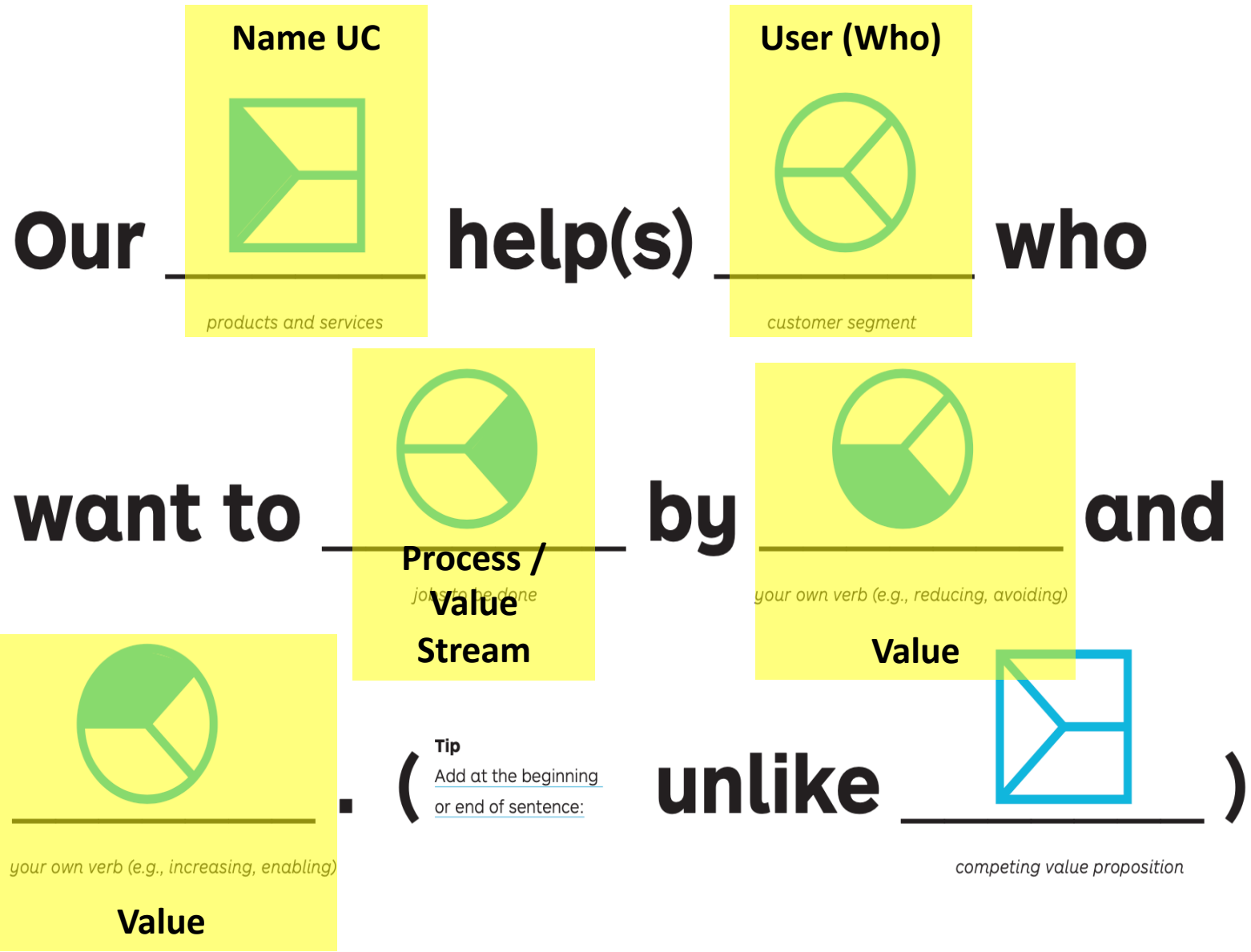
want to  **by**  **and**



jobs to be done *your own verb (e.g., reducing, avoiding)*



 **unlike**  **)**



your own verb (e.g., increasing, enabling) *competing value proposition*

Tip
Add at the beginning
or end of sentence:



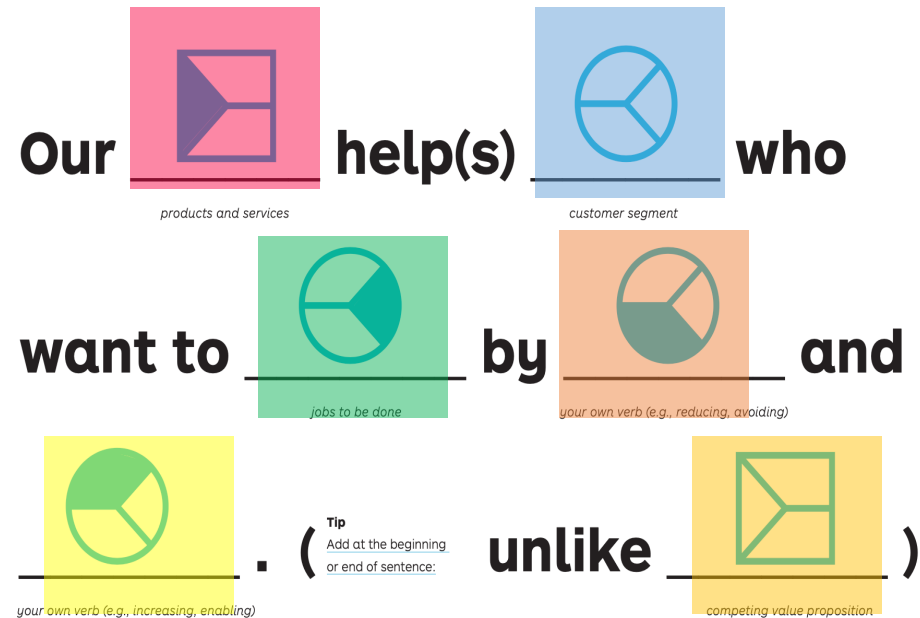
Our  help(s)  who
products and services customer segment

want to  by  and
jobs to be done your own verb (e.g., reducing, avoiding)

 . (Tip
Add at the beginning
or end of sentence: unlike )
your own verb (e.g., increasing, enabling) competing value proposition

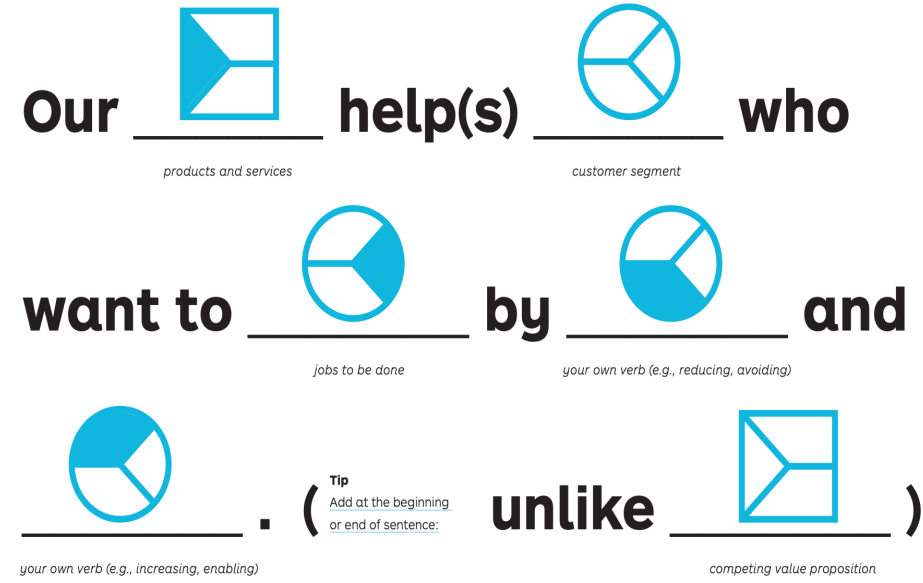
"De CarrièreNavigator stelt onze recruiters in staat om kandidaten efficiënt te koppelen aan passende vacatures bij onze klanten, door het identificeren van toekomstgerichte opleidingspaden die aansluiten bij hun carrièrepotentieel."





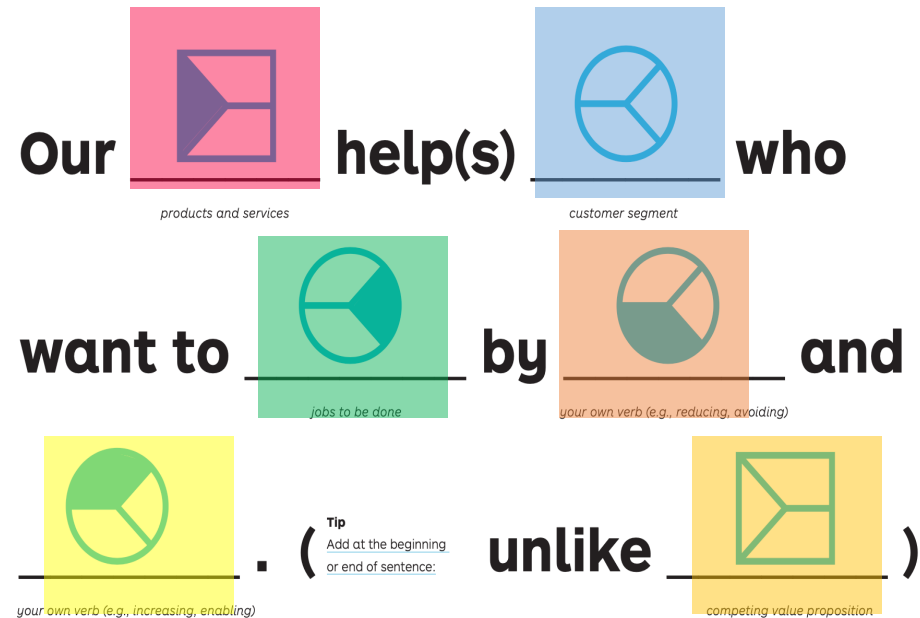
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"InsightX helpt de R&D engineer om de verbanden tussen de producteigenschappen en procesparameters beter te voorspellen. Hierdoor kunnen ze hun kwaliteit verhogen, kosten besparen en een snellere time to market realiseren."





"InsightX helpt de R&D engineer om de verbanden tussen de producteigenschappen en procesparameters beter te voorspellen. Hierdoor kunnen ze hun kwaliteit verhogen, kosten besparen en een snellere time to market realiseren."



EXERCISE: PITCH YOUR USE CASES

Our  **help(s)**  **who**

products and services *customer segment*

want to  **by**  **and**

jobs to be done *your own verb (e.g., reducing, avoiding)*

 **unlike**  **)**

your own verb (e.g., increasing, enabling) *competing value proposition*

Tip
Add at the beginning
or end of sentence:

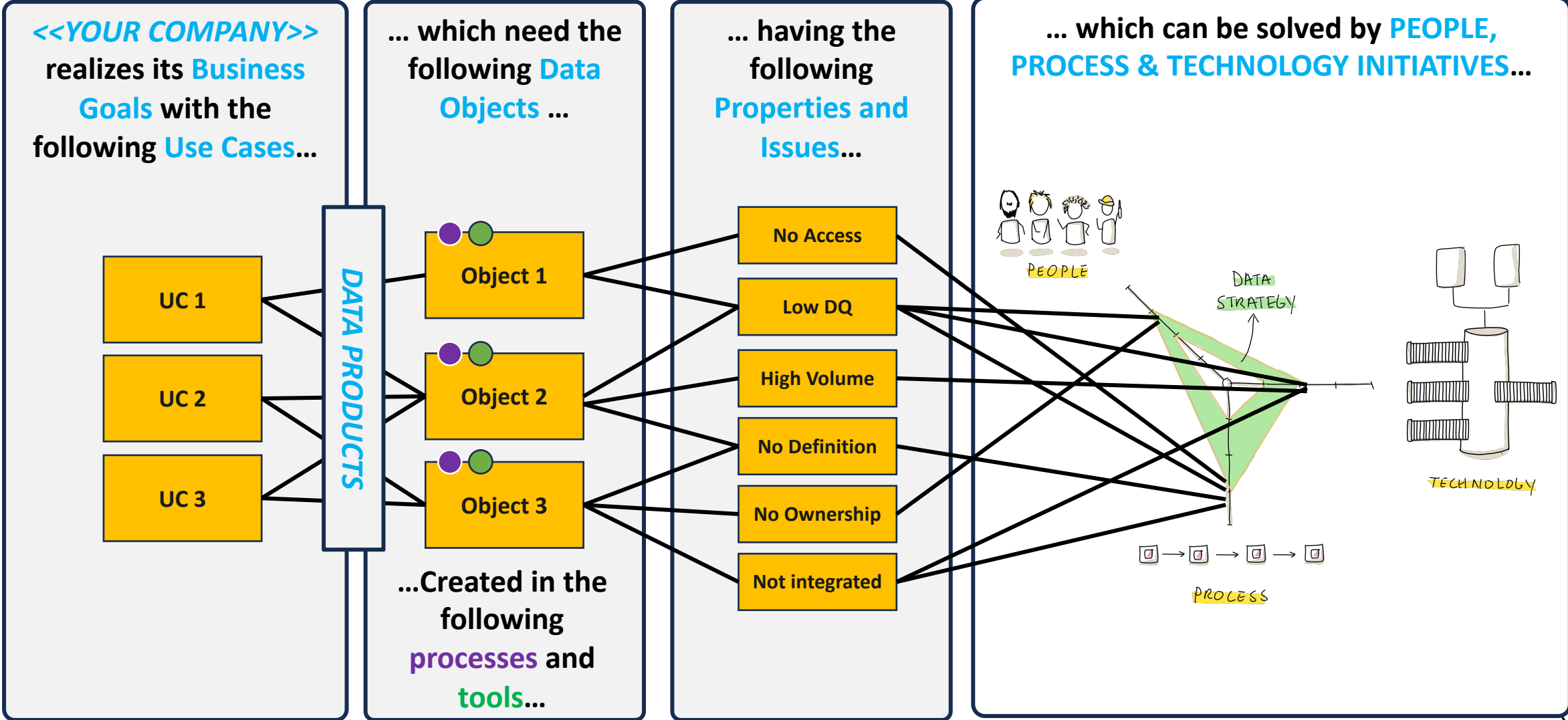


4.

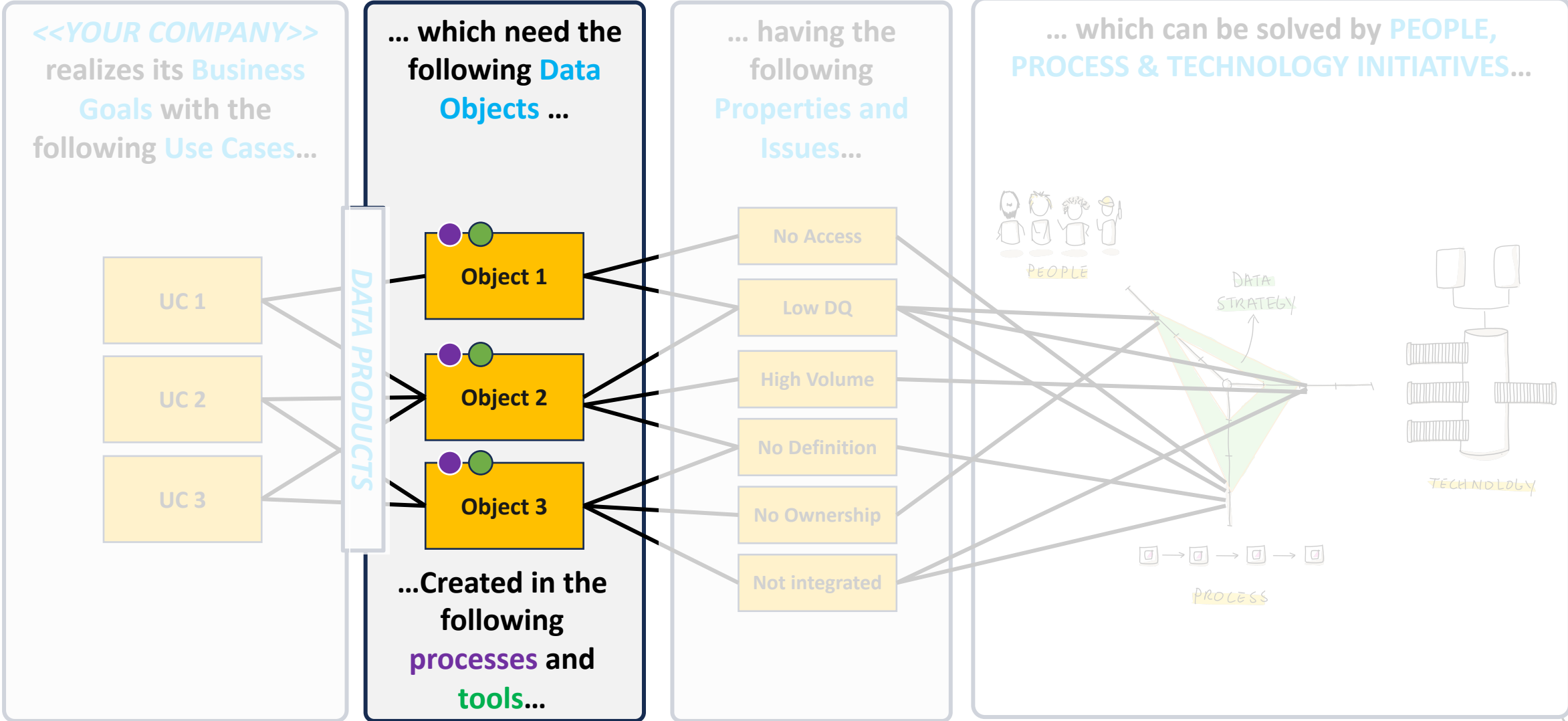
DATA ARCHITECTURE



Data Strategy Framework



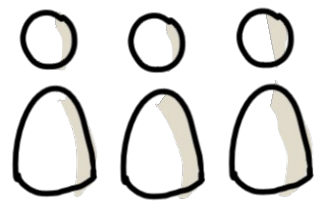
Data Strategy Framework



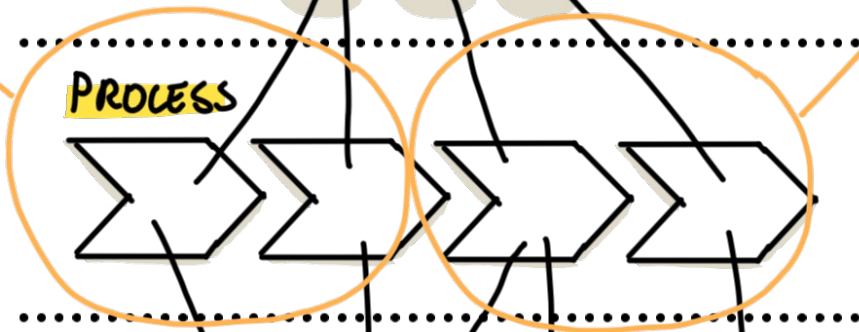
BUS. DOMAINS:

SALES

PEOPLE

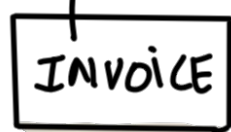
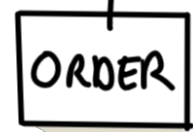
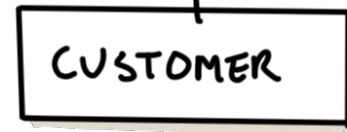
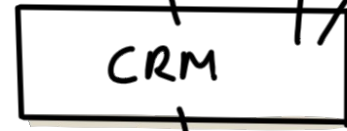


PROCESS



FINANCE/
ACCOUNTING

TECHNOLOGY



DATA (ENTITIES)



Business Domain

A specific **area of expertise or knowledge within a company** that focuses on particular business functions or industries. For example, "Finance" or "Human Resources" are business domains. It defines the scope of responsibilities, rules, and activities in a specific field.

Business Process

A series of tasks or steps carried out to achieve a specific business goal. **It's how work gets done within an organization.** For example, the **order-to-cash process** includes all the steps from receiving an order to collecting payment.



Entities

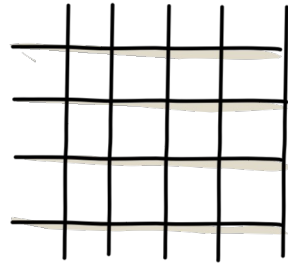
An entity is a **conceptual representation of something relevant to a business**, usually a tangible or abstract entity, **that groups data**. Examples:

- **Customer**, grouping data like name, address, and purchase history
- **Product**, grouping data like product ID, price, and stock level.

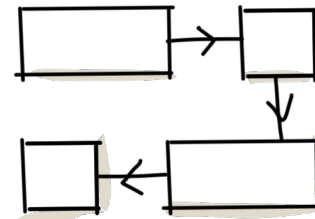


Data Architecture

MATRIX

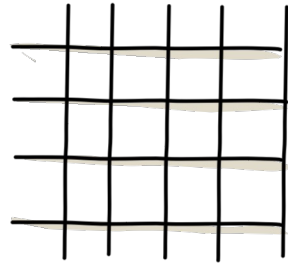


DATA FLOW

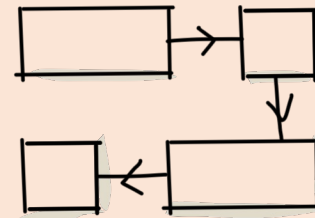


Data Architecture

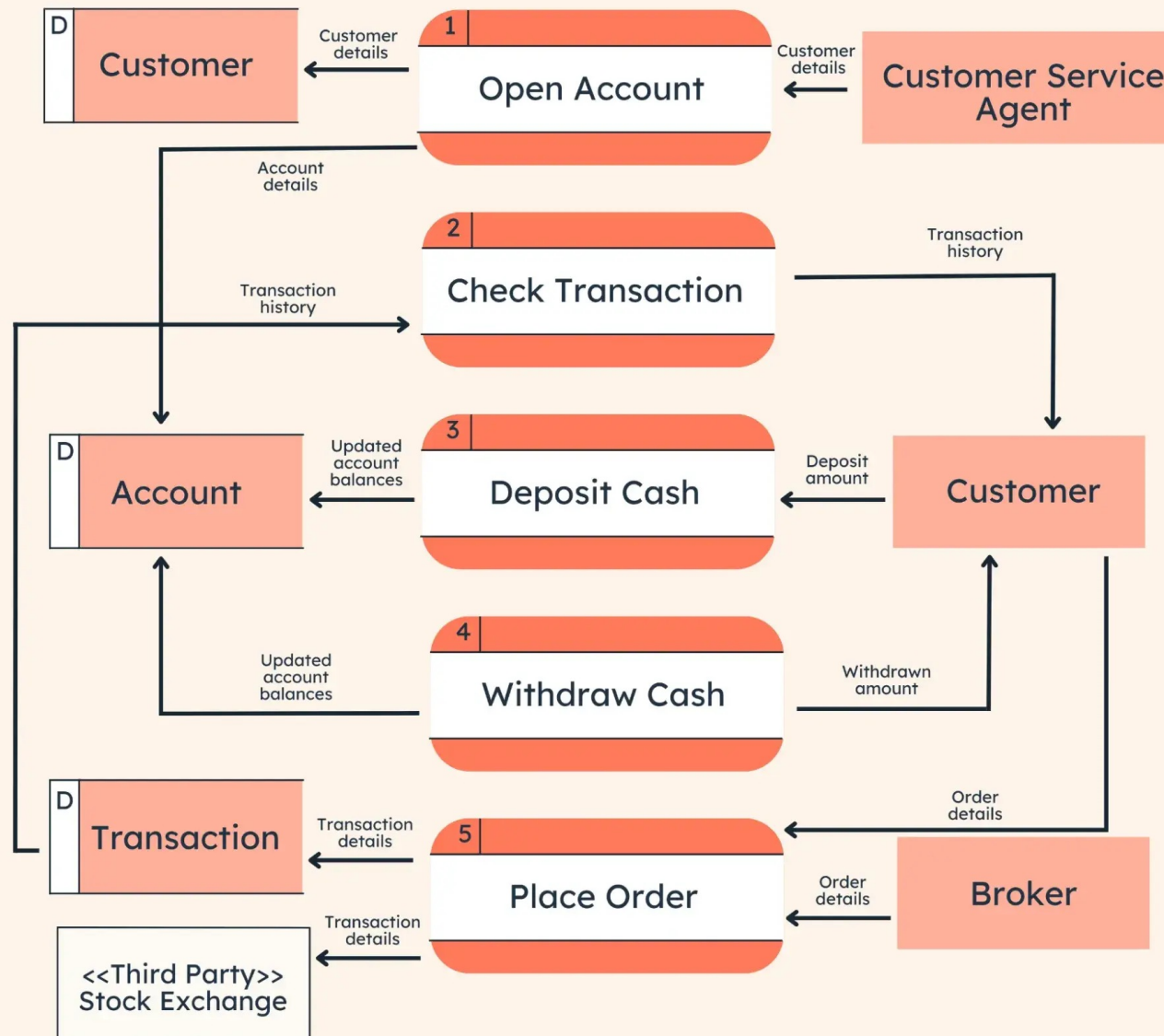
MATRIX

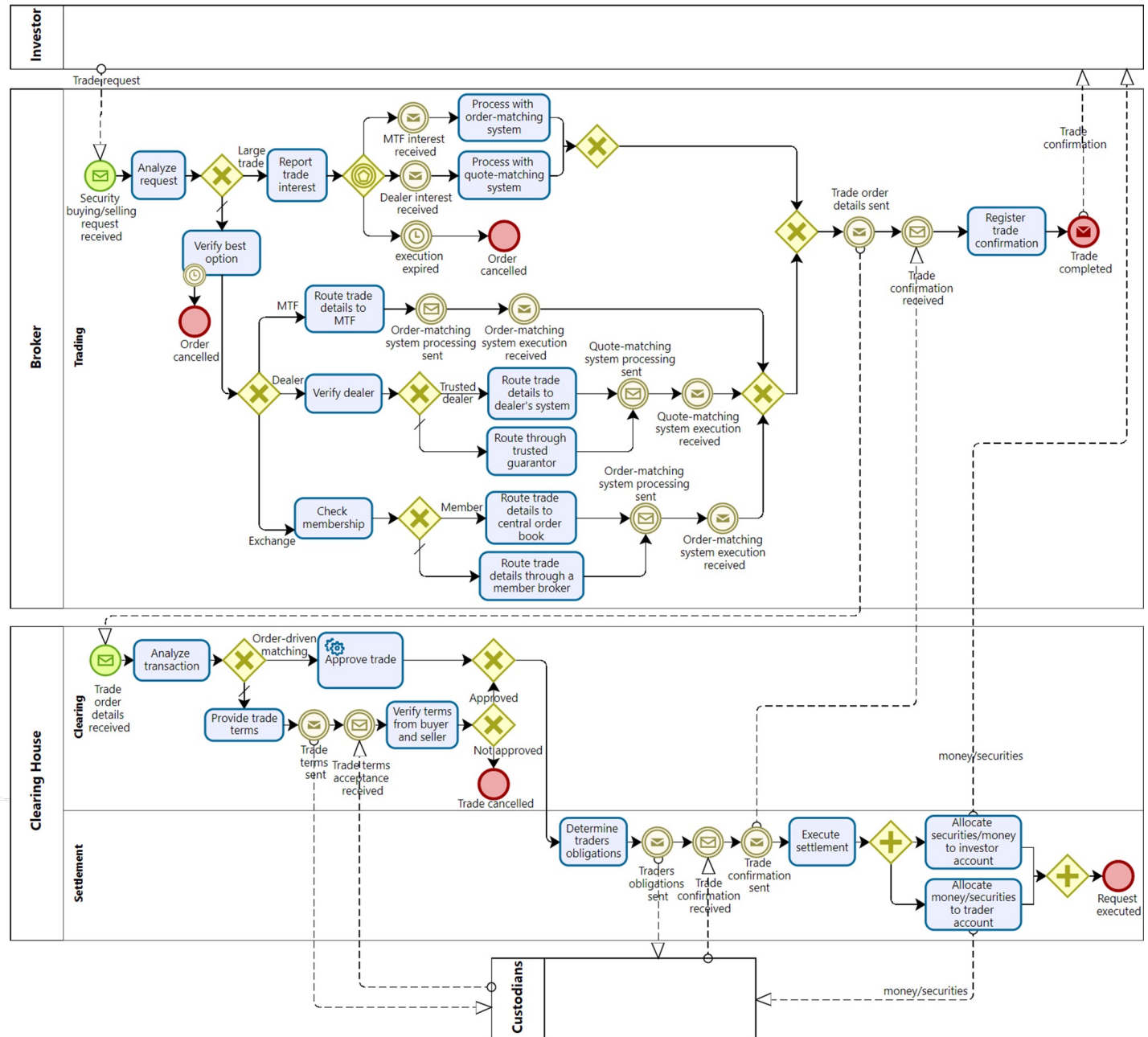


DATA FLOW



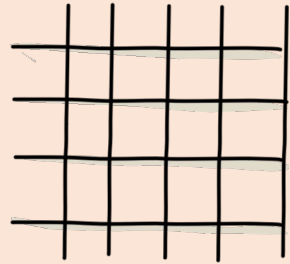
Data Flow Diagram – Processes & Data



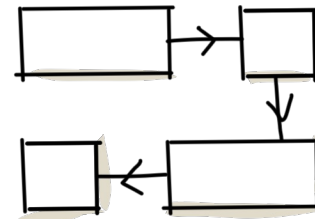


Data Architecture

MATRIX



DATA FLOW

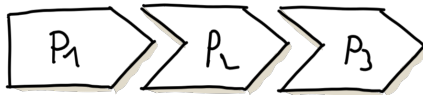


Domains, Processes and Entities

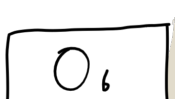
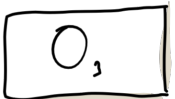
BUSINESS DOMAINS



BUSINESS PROCESSES



DATA ENTITIES



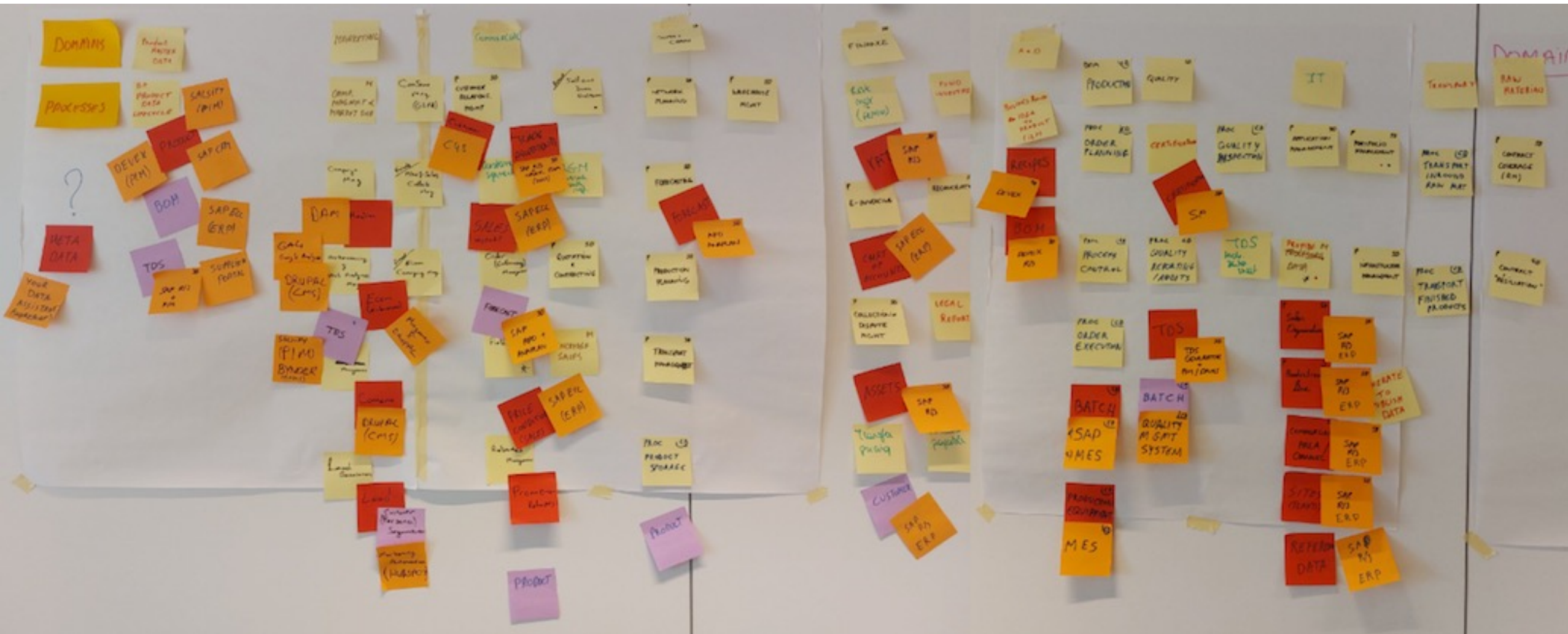
● = CREATE

● = USE

● = UPDATE

“Process **P1** (part of Domain **DA**) creates Entity **O1**. This entity is updated in Process **P2** and used in Process **P4**.”





EXERCISE: DATA ARCHITECTURE MATRIX

1. Focus: Entities relevant for your UC
2. Processes & domains that contribute to these entities
3. Software systems that contribute to these entities

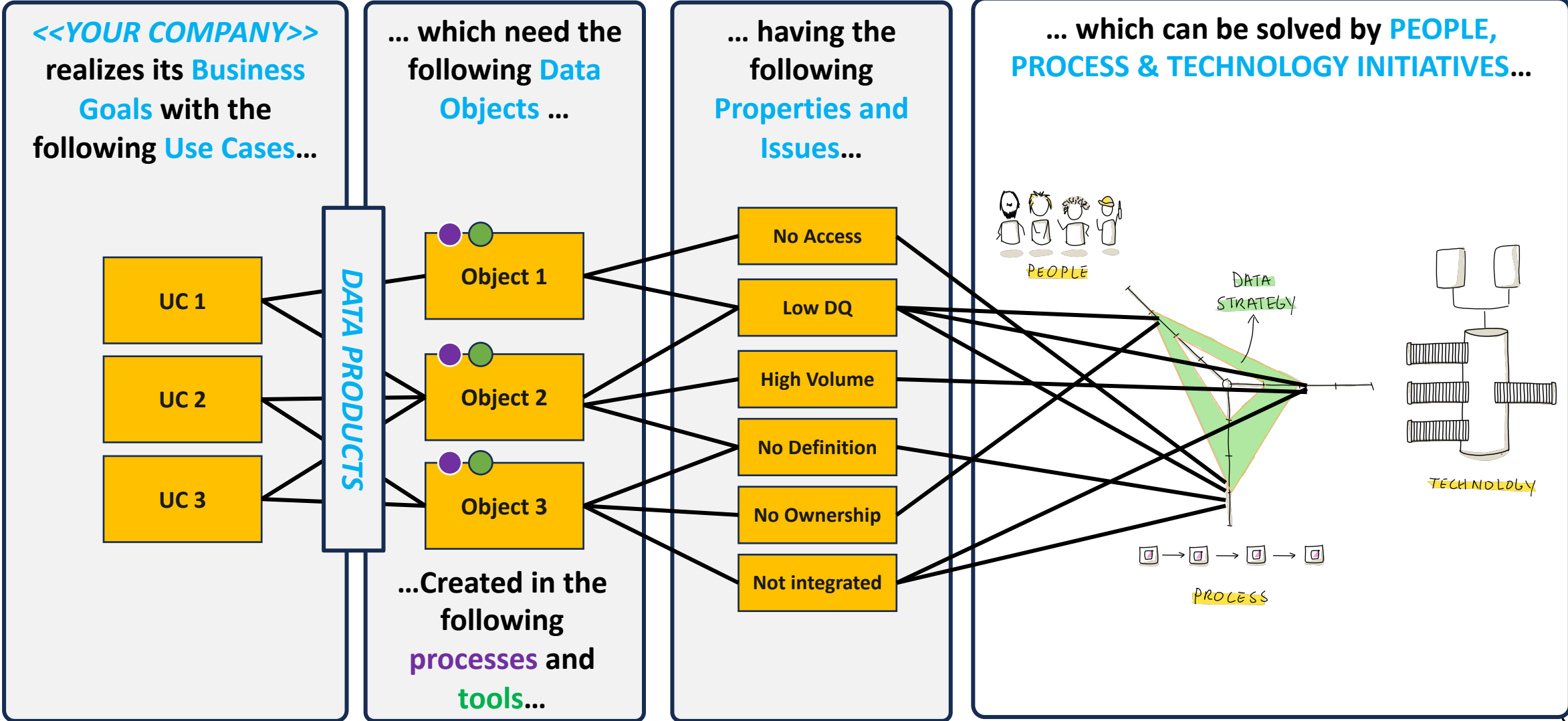


5.

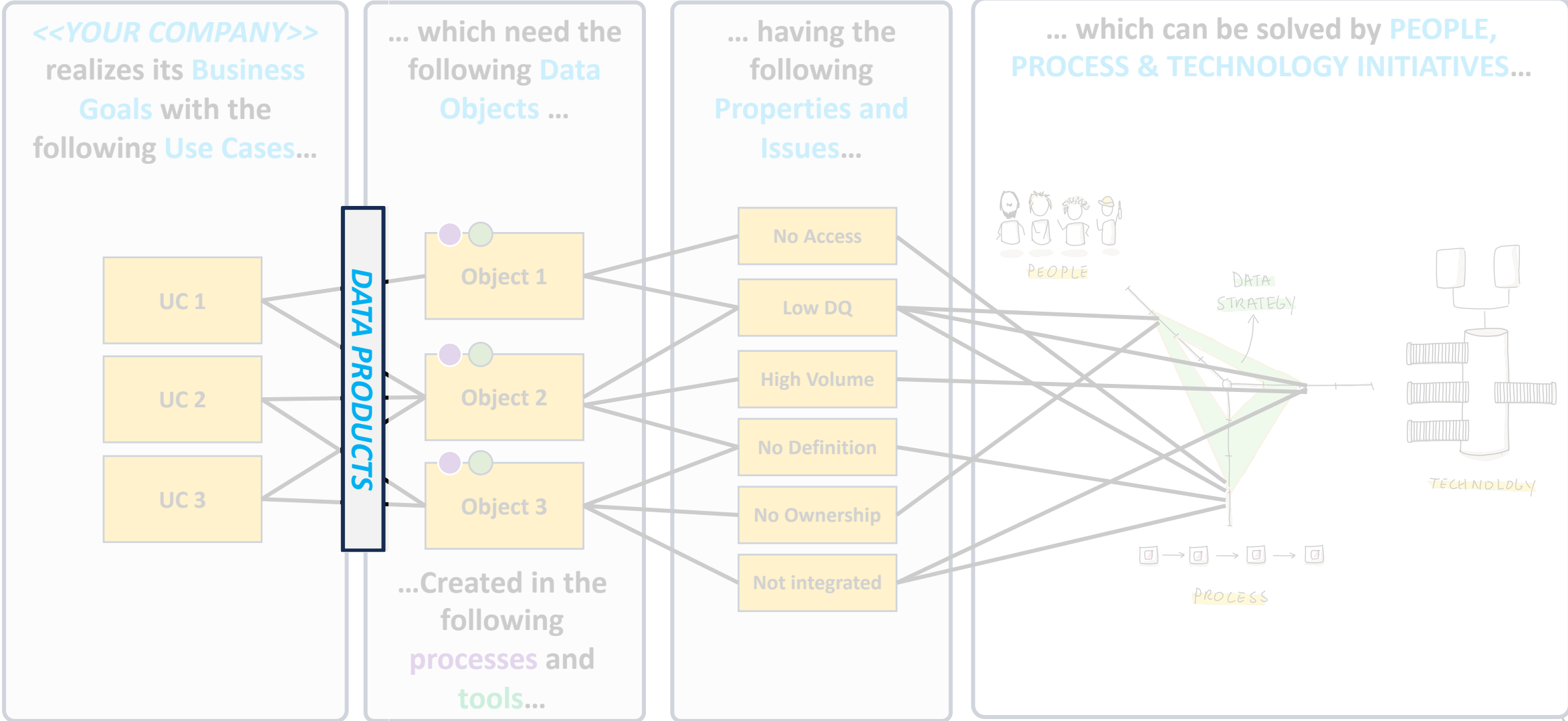
DATA PRODUCTS

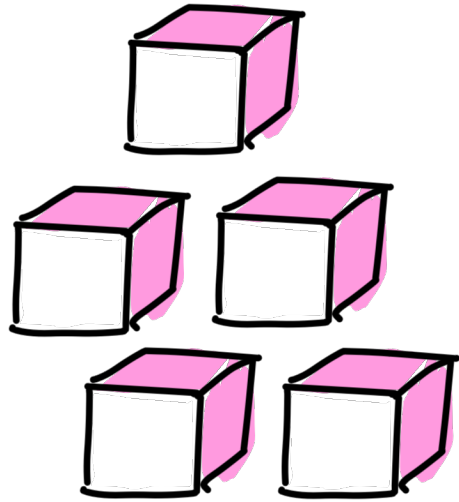


Data Strategy Framework

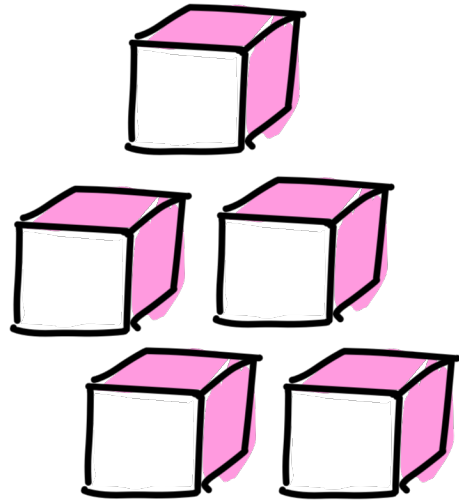


Data Strategy Framework





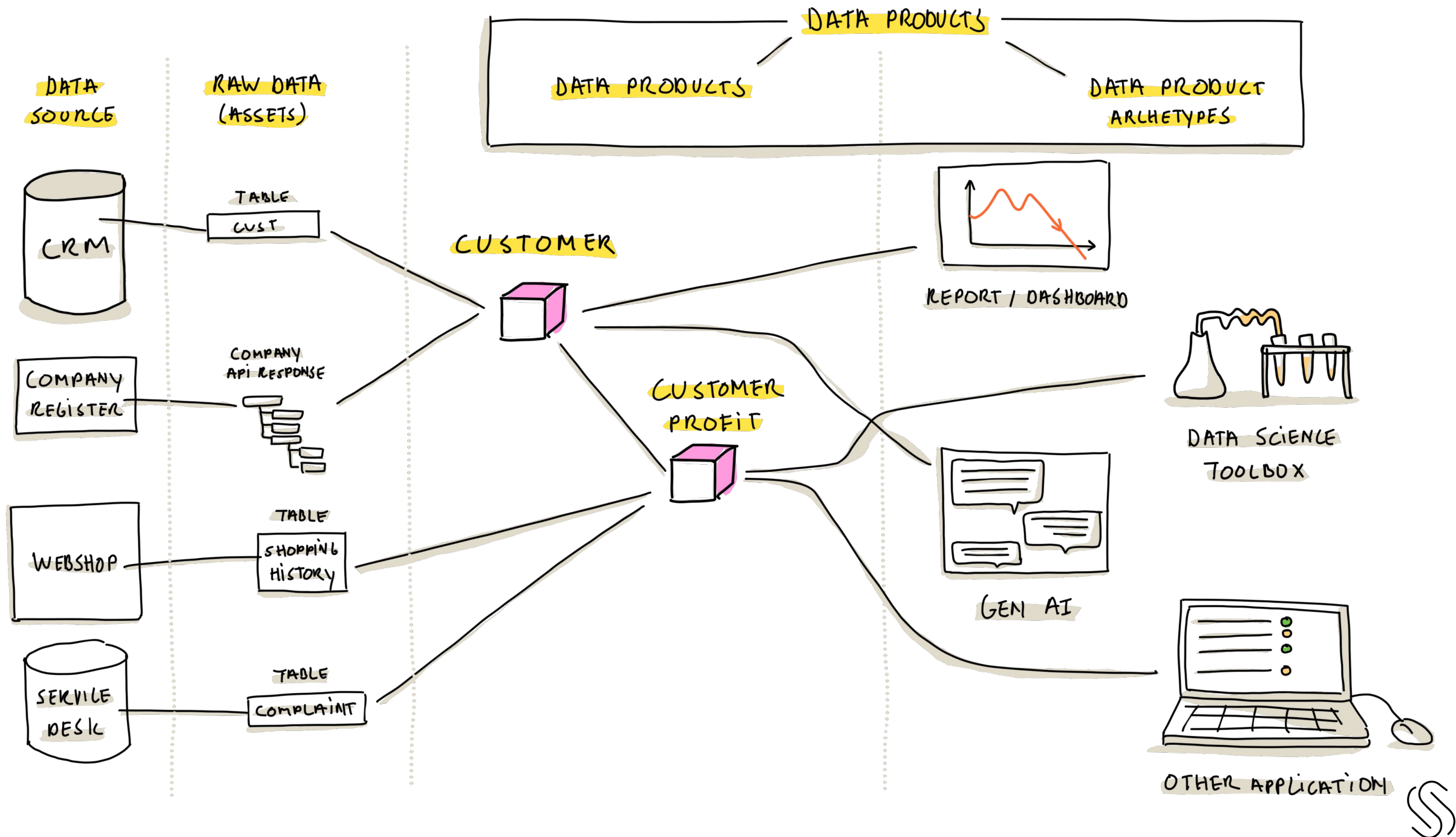
DATA PRODUCTS



DATA PRODUCTS

= A **REUSABLE** DATA ASSET THAT BUNDLES **DATA** TOGETHER WITH **EVERYTHING NEEDED** TO MAKE IT INDEPENDENTLY **USABLE** BY AUTHORIZED CONSUMERS.





DATA SOURCE

RAW DATA (ASSETS)

DATA PRODUCTS

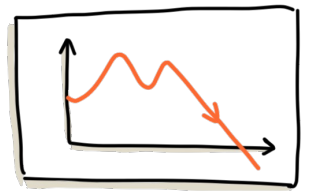
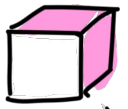
DATA PRODUCTS

DATA PRODUCT ARCHETYPES



TABLE CUST

CUSTOMER

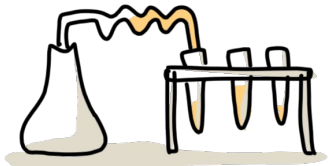
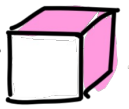


REPORT / DASHBOARD



COMPANY API RESPONSE

CUSTOMER PROFIT



DATA SCIENCE TOOLBOX

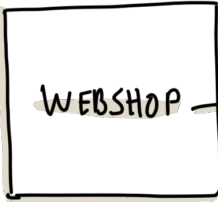


TABLE SHOPPING HISTORY



GEN AI



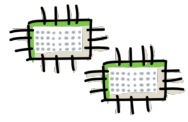
TABLE COMPLAINT



OTHER APPLICATION



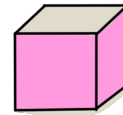
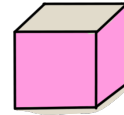
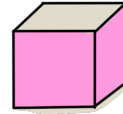
DATA SOURCE



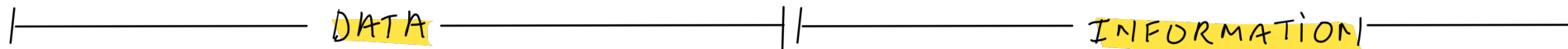
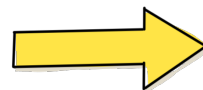
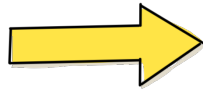
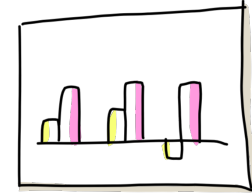
RAW DATA



DATA PRODUCT(S)



DATA USE CASE



DATA

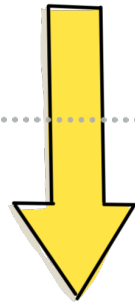
INFORMATION

ENTITIES

PRODUCTS



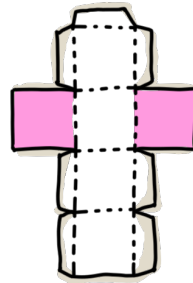
RAW DATA



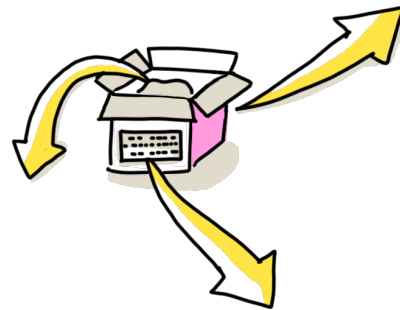
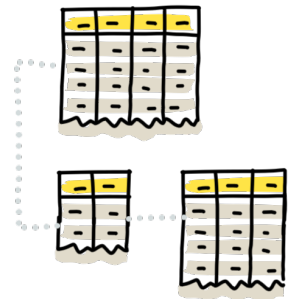
Data as it appears in the **data sources**

Usable data for analytical purposes

PHYSICAL FORMAT



DATASET



META DATA



RAW DATA



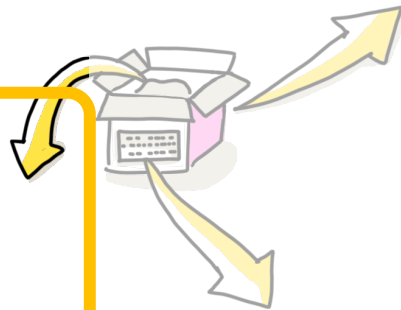
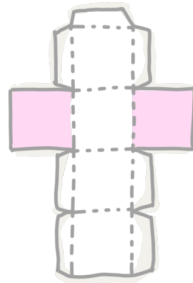
OPERATIONAL DATA WORLD

Data as it appears in the **data sources**

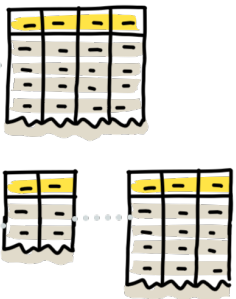
Usable data for analytical purposes



PHYSICAL FORMAT



DATASET



META DATA



ANALYTICAL DATA WORLD



Tables

users

id	full_name	enabled	last_login
1	John Smith	f	2017-10-25 10:26:10.015152
2	Alice Walker	t	2017-10-25 10:26:50.295461
3	Harry Potter	t	2017-10-25 10:26:50.295461
5	Jane Smith	t	2017-10-25 10:36:43.324015

checkouts

id	user_id	book_id	checkout_date	return_date
1	1	1	2017-10-15 14:43:18.095143-07	
2	1	2	2017-10-05 16:22:44.593188-07	2017-10-13 13:05:12.673382-05
3	2	2	2017-10-15 11:11:24.994973-07	2017-10-22 17:47:10.407569-07
4	5	3	2017-10-15 09:27:07.215217-07	

books

id	title	author	published_date	isbn
1	My First SQL book	Mary Parker	2012-02-22 12:08:17.320053-03	981483029127
2	My Second SQL book	John Mayer	1972-07-03 09:22:45.050088-07	857300923713
3	My Third SQL book	Cary Flint	2015-10-18 14:05:44.547516-07	523120967812

addresses

user_id	street	city	state
1	1 Market Street	San Francisco	CA
2	2 Elm Street	San Francisco	CA
3	3 Main Street	Boston	MA

reviews

id	book_id	reviewer_name	content	rating	published_date
1	1	'John Smith'	'My first review'	4	2017-12-10 05:50:11.127281-02
2	2	'John Smith'	'My second review'	5	2017-10-13 15:05:12.673382-05
3	2	'Alice Walker'	'Another review'	1	2017-10-22 23:47:10.407569-07



Tables + Relations (= Model)

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3	2	'Alice Walker'	'Another review'	1	2017-10-22 23:47:10.407569-07



Denormalized vs Normalized

Denormalized Table

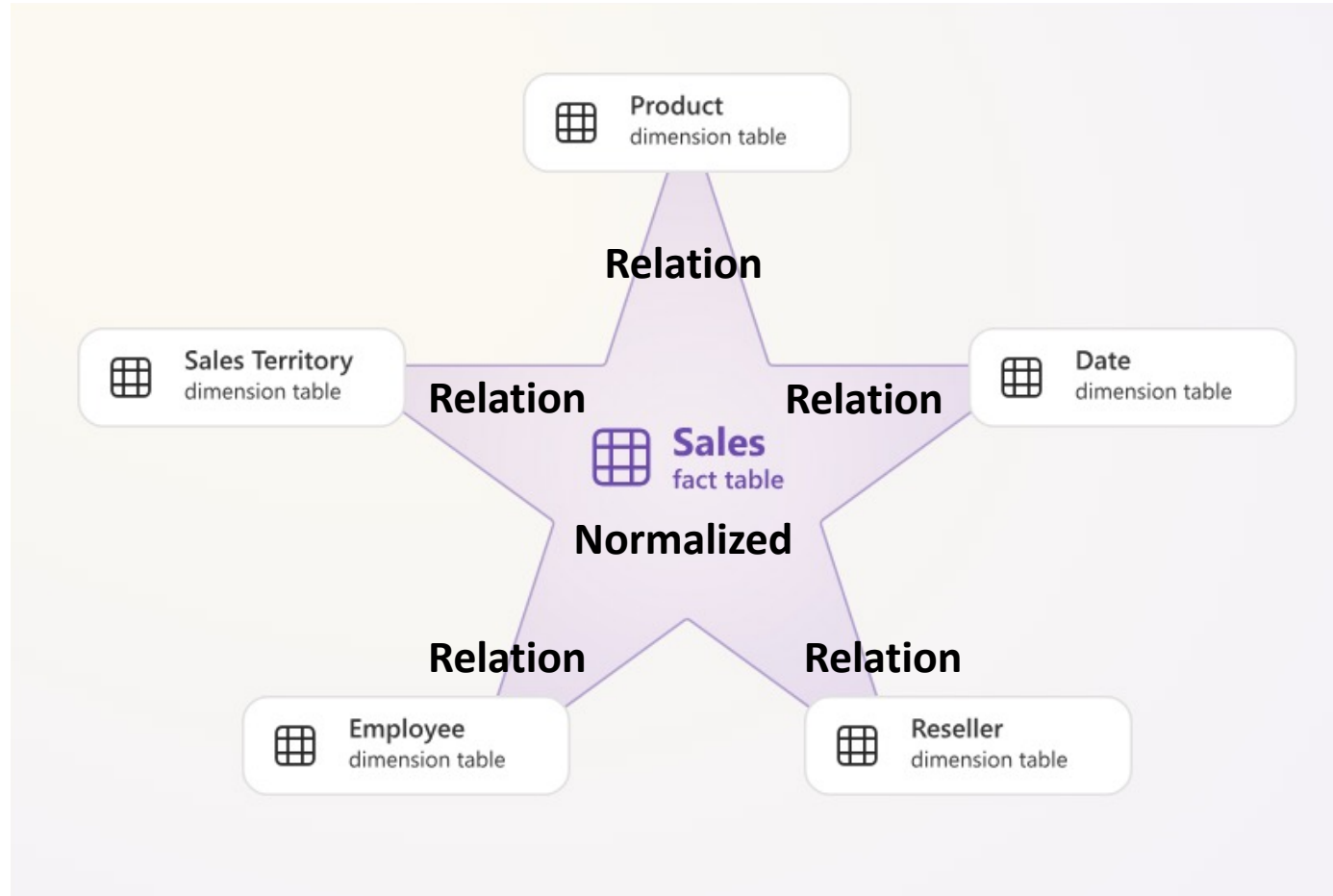
OrderNumber	OrderDate	ProductKey	Product	Category	Color	Size	ResellerKey	SalesAmount
SO69561	2024-05-04	594	Mountain-500 Silver, 48	Bikes	Silver	48	546	226.00
SO69560	2024-05-04	513	ML Mountain Frame-W - Silver, 46	Components	Silver	46	100	218.45
SO69560	2024-05-04	594	Mountain-500 Silver, 48	Bikes	Silver	48	100	113.00
SO69539	2024-04-31	243	HL Road Frame - Red, 44	Components	Red	44	529	858.90
SO69539	2024-04-31	378	Road 250 - Black, 52	Bikes	Black	52	529	1146.01

Normalized Table

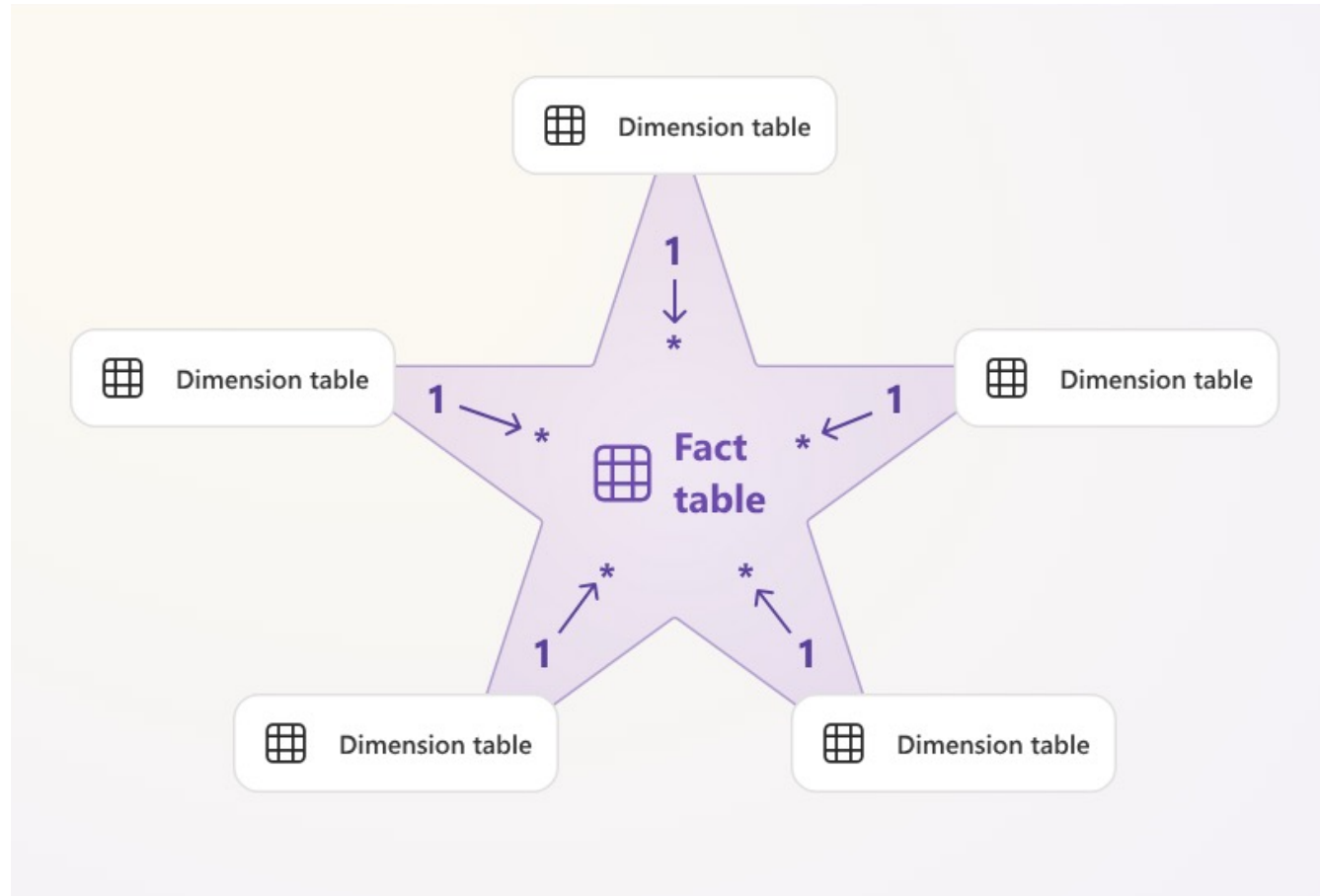
OrderNumber	OrderDate	ProductKey	ResellerKey	SalesAmount
SO69561	2024-05-04	594	546	226.00
SO69560	2024-05-04	513	100	218.45
SO69560	2024-05-04	594	100	113.00
SO69539	2024-04-31	243	529	858.90
SO69539	2024-04-31	378	529	1146.01



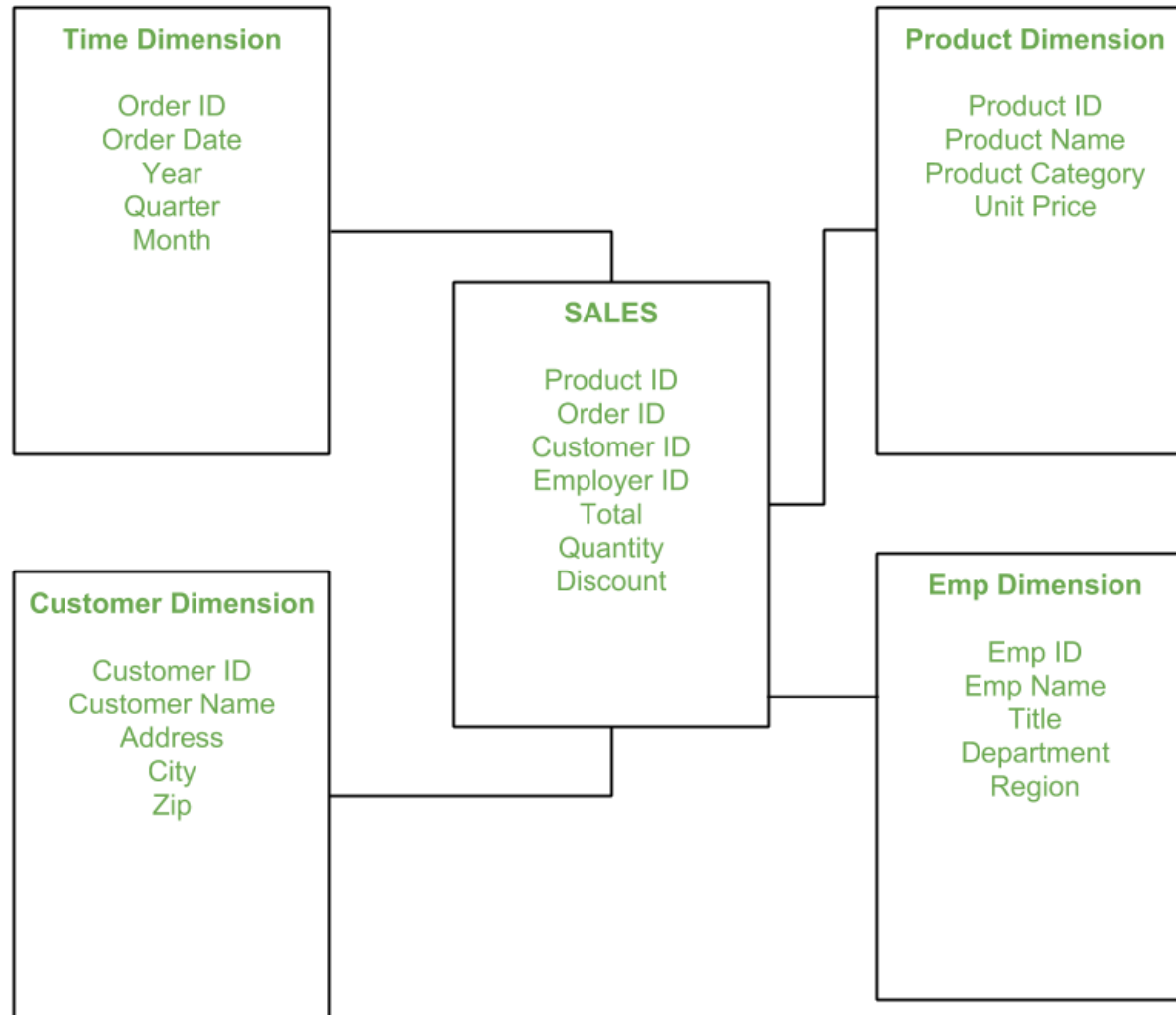
Starschema (Common Method)



Starschema (Common Method)



Starschema (Common Method)



RAW DATA



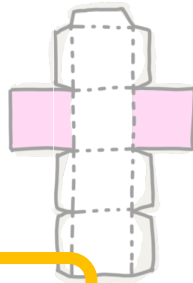
OPERATIONAL DATA WORLD

Data as it appears in the **data sources**

Usable data for analytical purposes



PHYSICAL FORMAT



DATASET



META DATA



ANALYTICAL DATA WORLD

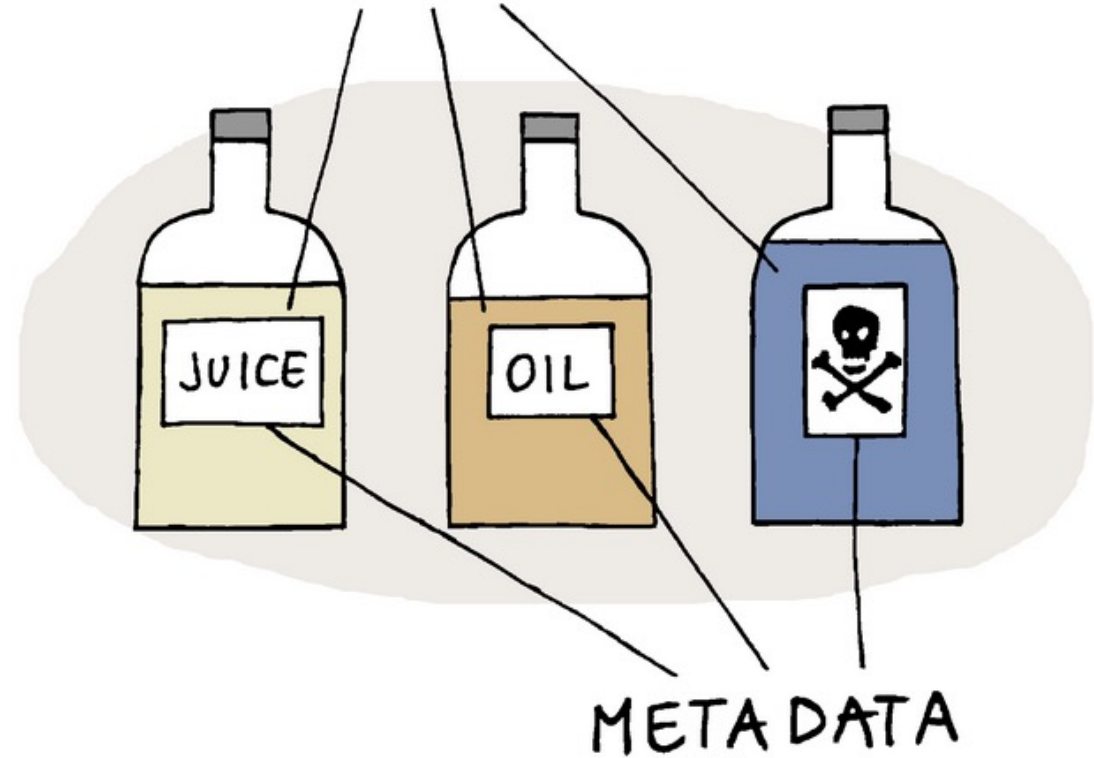


DATA

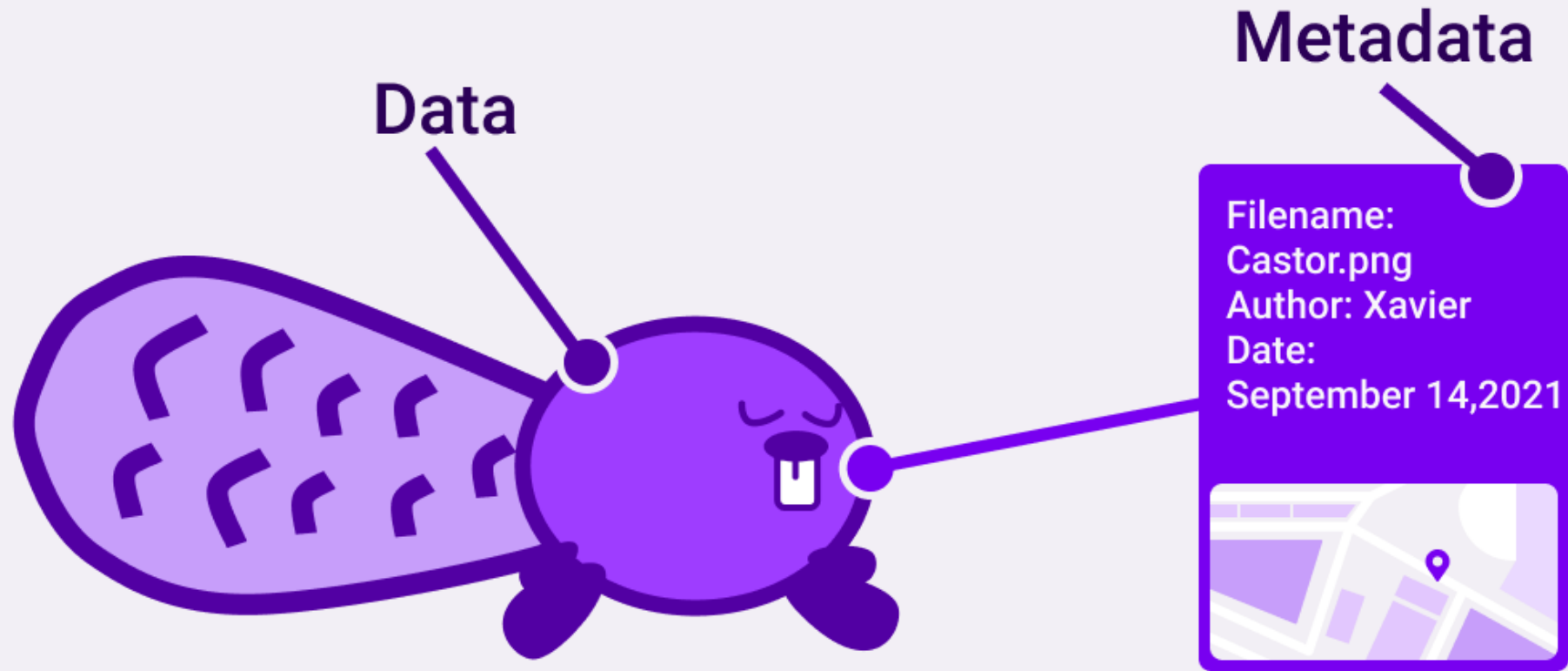
METADATA



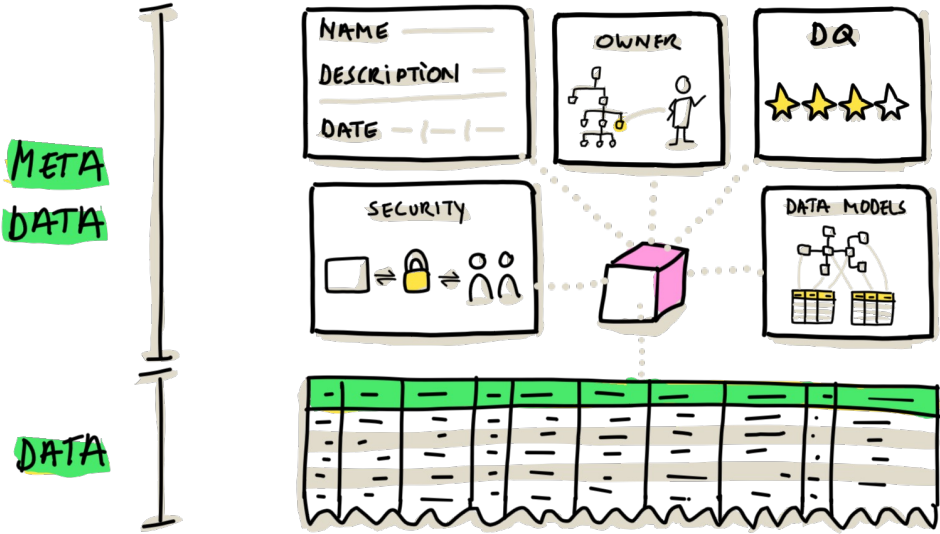
DATA

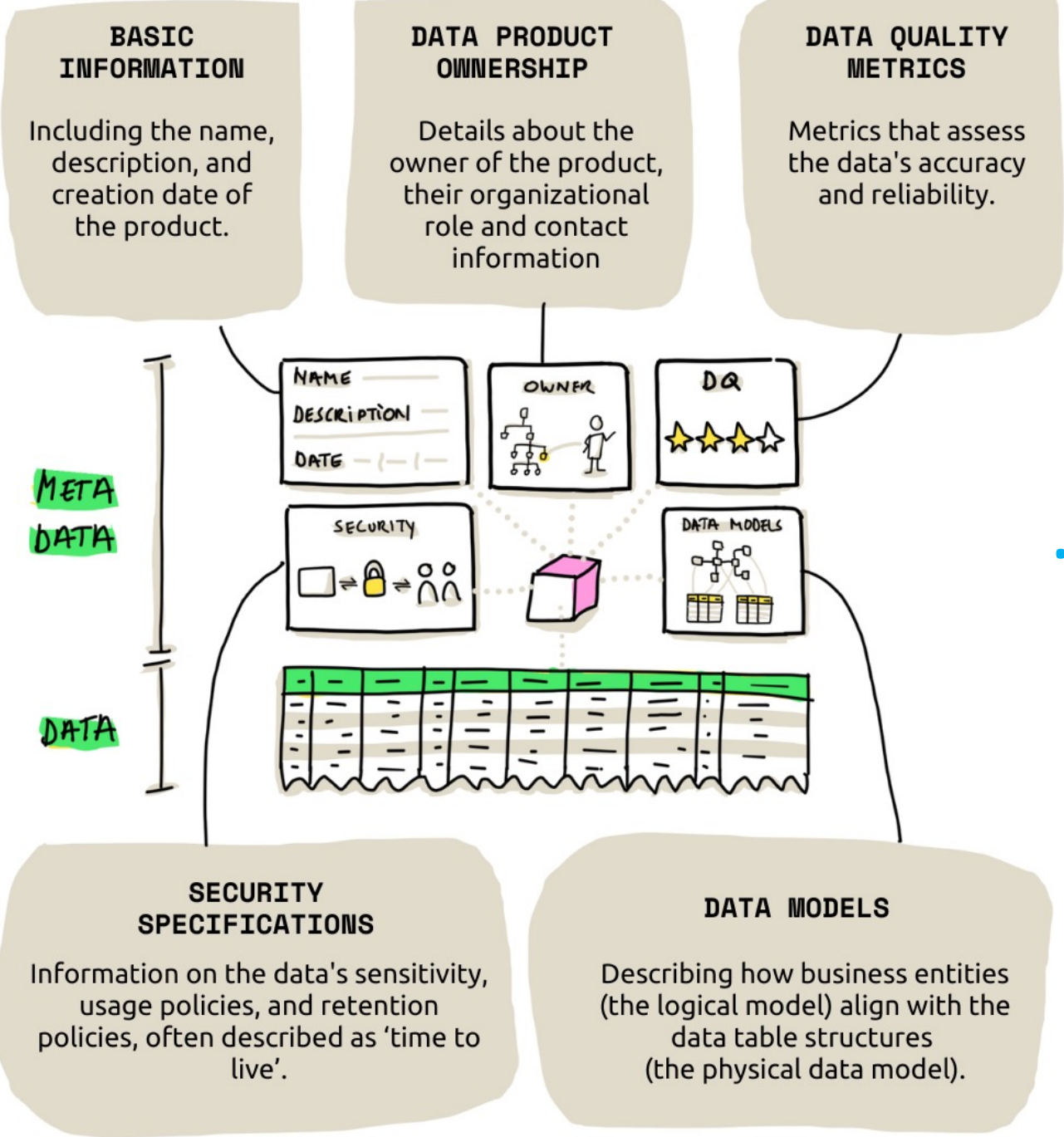


Metadata = “Data about Data”



A Data Product contains Data (in the dataset) & Metadata





Metadata Example: Data Lineage

Tool: DBT (Data Build Tool)

Data Movement Tracking



Data Source:

Dataset element:



Dependency: stg_eltool_orders depends on warehouse.orders



Metadata Example: Business Glossary

The screenshot displays the Atlan Business Glossary interface. On the left is a navigation sidebar with sections for 'Assets', 'Glossary', and 'Insights'. The 'Glossary' section is active, showing a list of glossaries including 'Aisle', 'Concepts', 'Consumer Product Goods', 'COVID-19', 'Example Glossary', 'Instacart', 'KPIs', and 'Metrics'. Under 'Metrics', 'Customer Acquisition Cost' is selected.

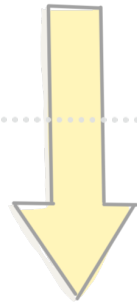
The main content area shows the 'Customer Acquisition Cost' term page. The title is 'Customer Acquisition Cost' with a green checkmark and a 'TERM' label. Below the title are tabs for 'Overview' (selected) and 'Linked Assets'. The 'Readme' section contains two methods:

- Simple method:** Described as dividing total marketing costs by the total number of customers acquired. The formula is $CAC = \frac{MCC}{CA}$.
 - CAC = Customer Acquisition Cost
 - MCC = total marketing cost for acquiring customers (not regular customers)
 - CA = total customers acquired
- Complex method:** Includes sales and marketing wages, software costs, and overhead costs. The formula is $CAC = \frac{MCC + W + S + PS + O}{CA}$.
 - CAC = Customer Acquisition Cost
 - MCC = total marketing cost for acquiring customers (not regular customers)
 - W = wages connected with sales and marketing
 - S = all the marketing and sales associated software cost (inc. E-Commerce-Platform,

The right sidebar shows the 'Overview' tab with a red box highlighting the 'Owners' and 'Classification' sections. The 'Owners' section lists 'chris'. The 'Classification' section lists 'Confidential'. Below this, the 'Certificate' section shows a 'Verified' status with a green checkmark and 'chris 3 months ago'. The 'Categories' section states 'This term does not belong to any category'. The 'Related Terms' section lists 'Average Selling Price', 'Churn Rate', and 'Customer Lifetime Value'. The 'Custom Metadata' section lists 'Great Expectations', 'PO number', and 'Airflow ETL Details'.



RAW DATA



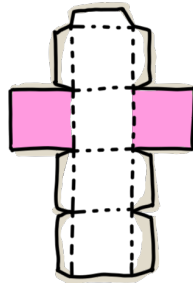
DATASET



META DATA



PHYSICAL FORMAT



OPERATIONAL DATA WORLD

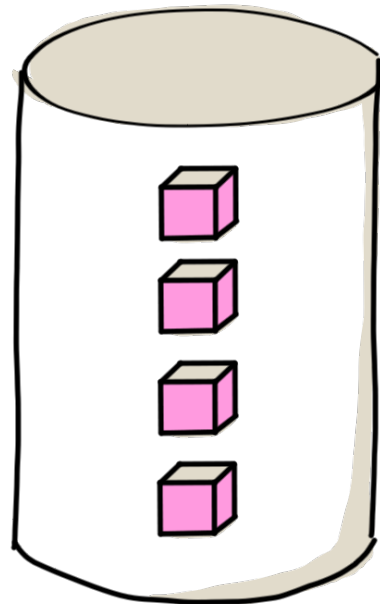
Data as it appears in the **data sources**

Usable data for analytical purposes

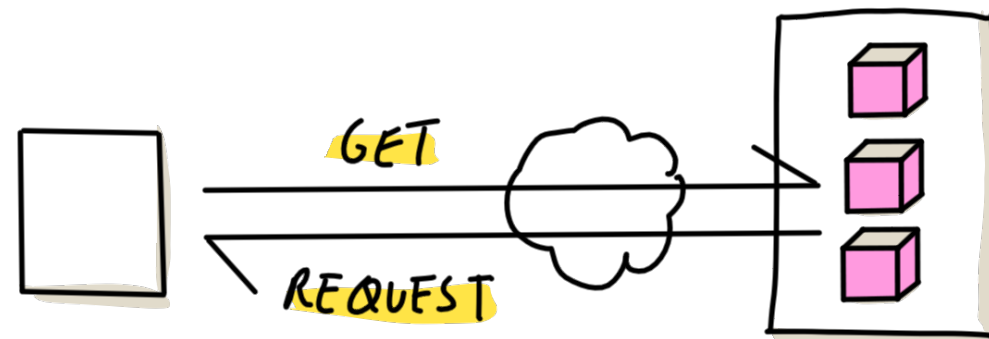
ANALYTICAL DATA WORLD



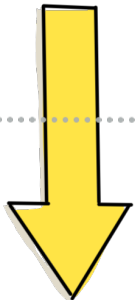
Database



API



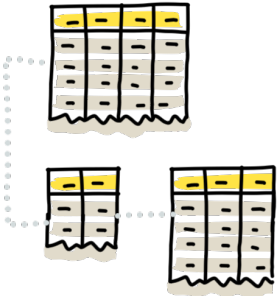
RAW DATA



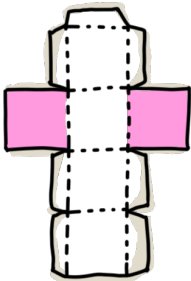
Data as it appears in the data sources

Usable data for analytical purposes

DATASET



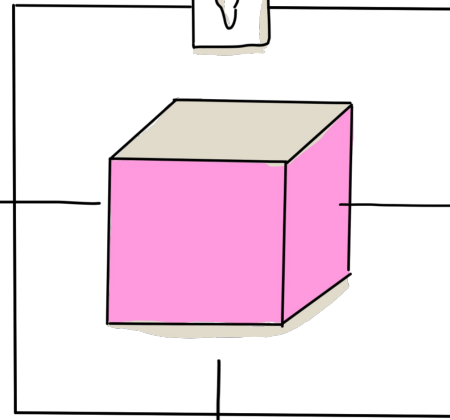
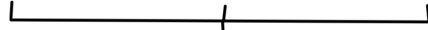
PHYSICAL FORMAT



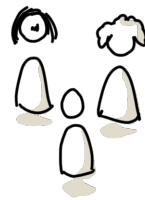
META DATA



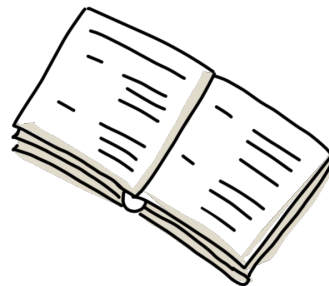
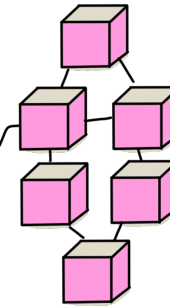
SECURITY & PRIVACY



OWNERSHIP



INTEROPERABILITY

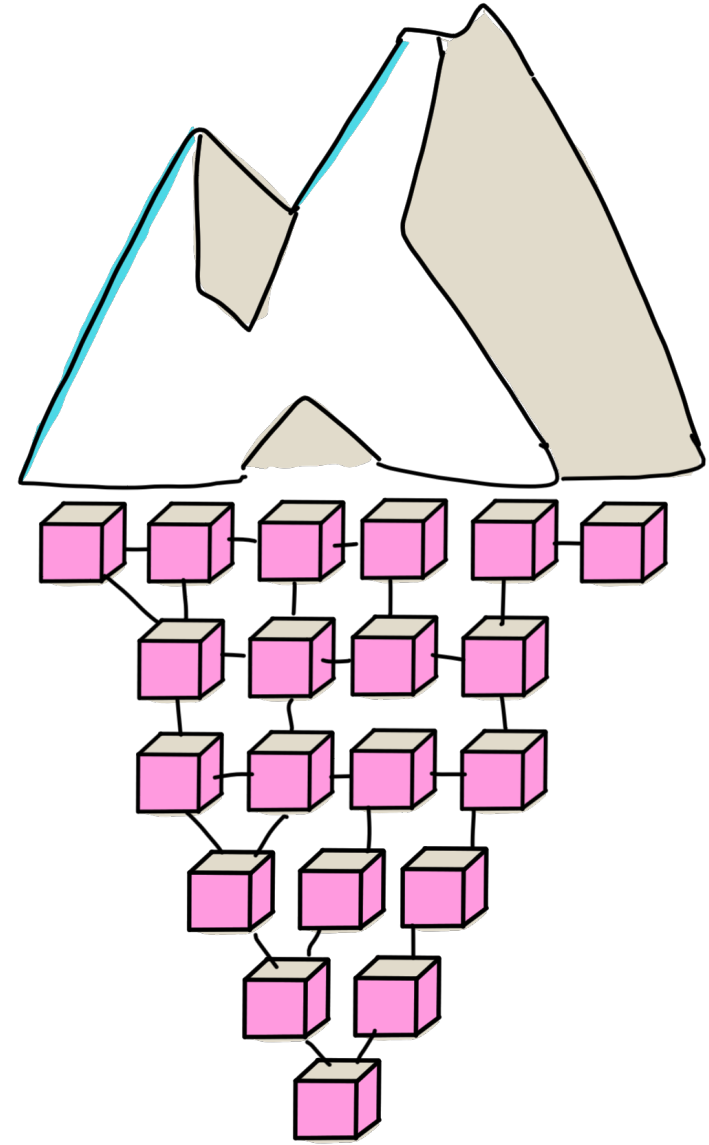
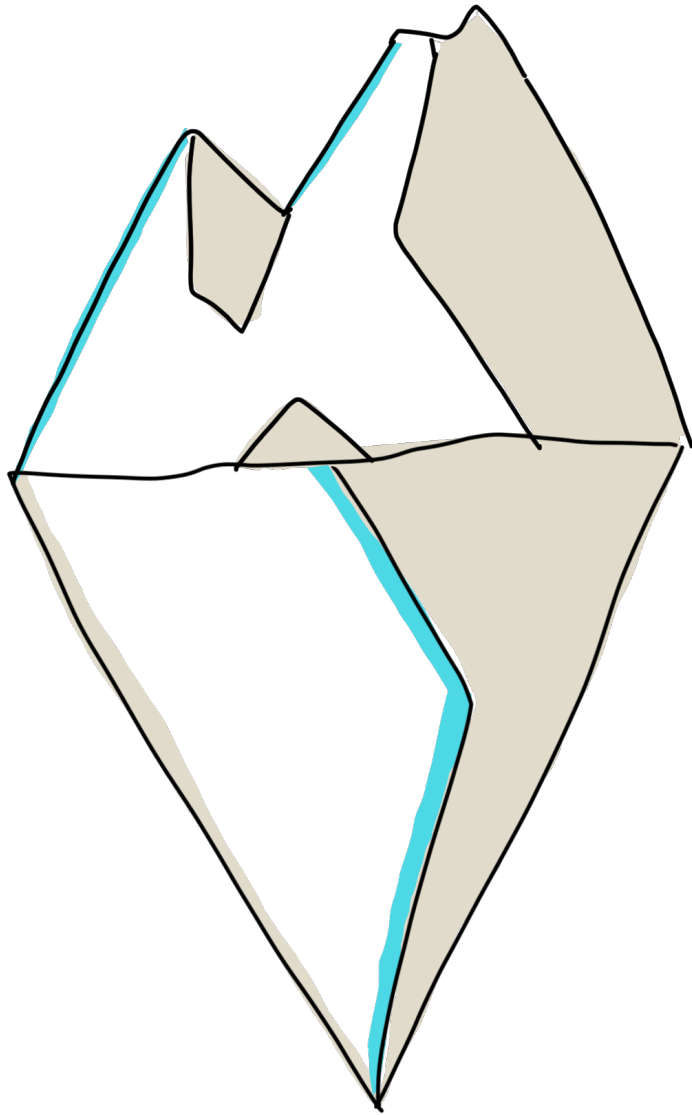


USABILITY

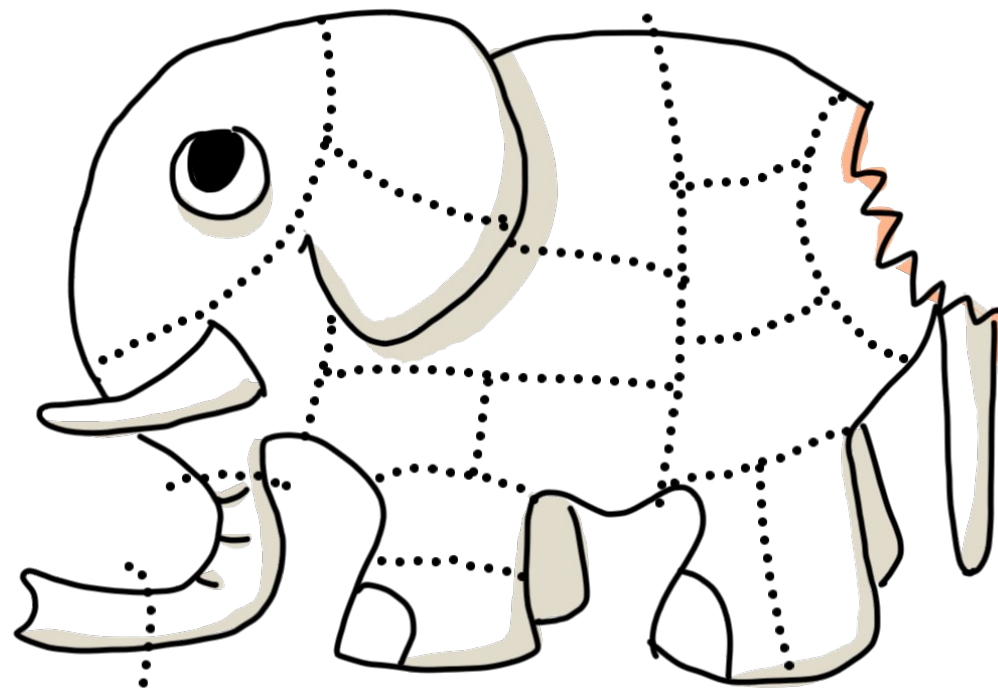
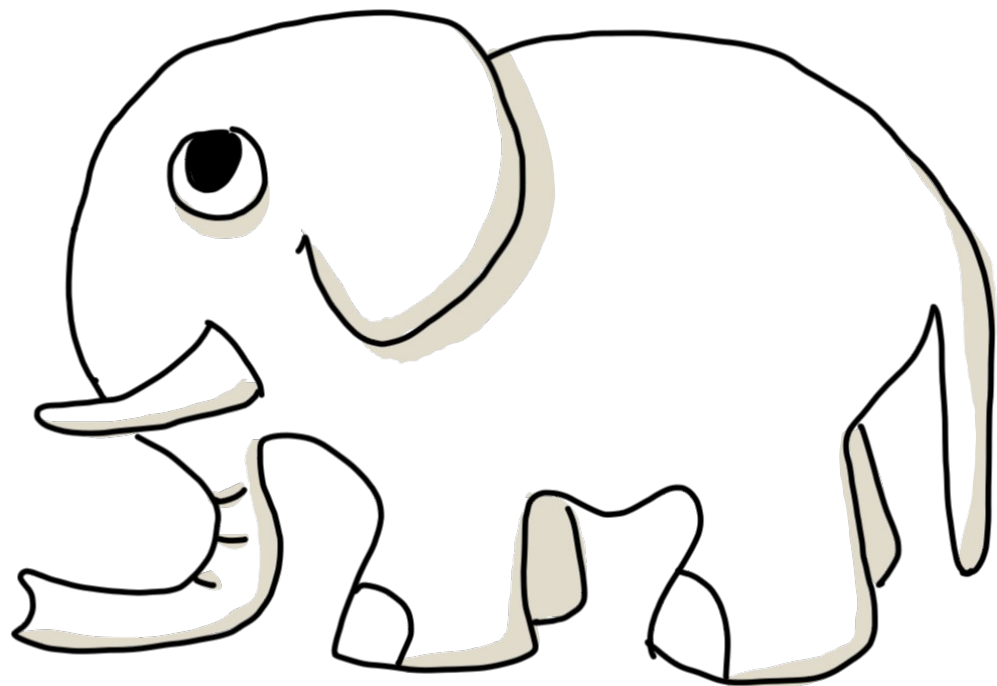


USE CASES

FOUNDATIONS

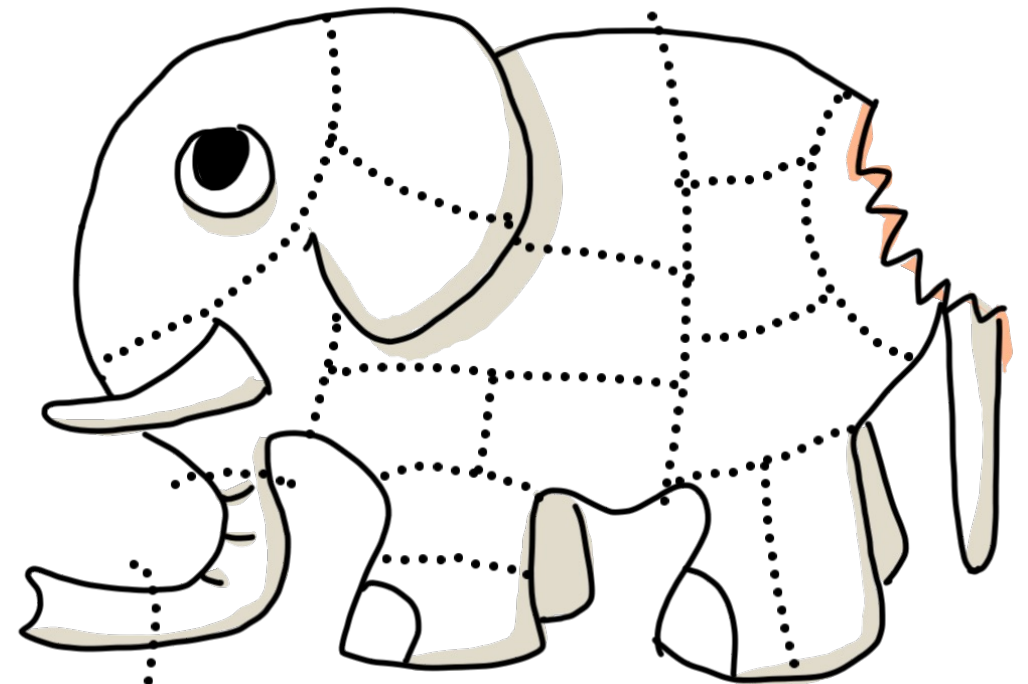
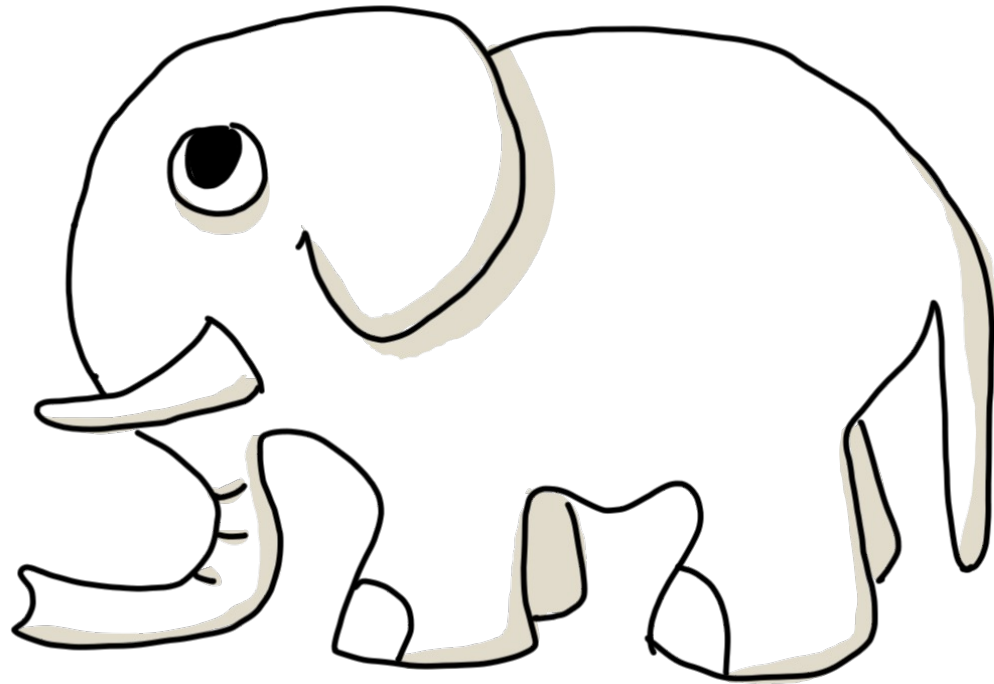


How to Eat an Elephant?



One bite at a time

How to execute a Data Strategy ?



**Data Product
by Data Product**

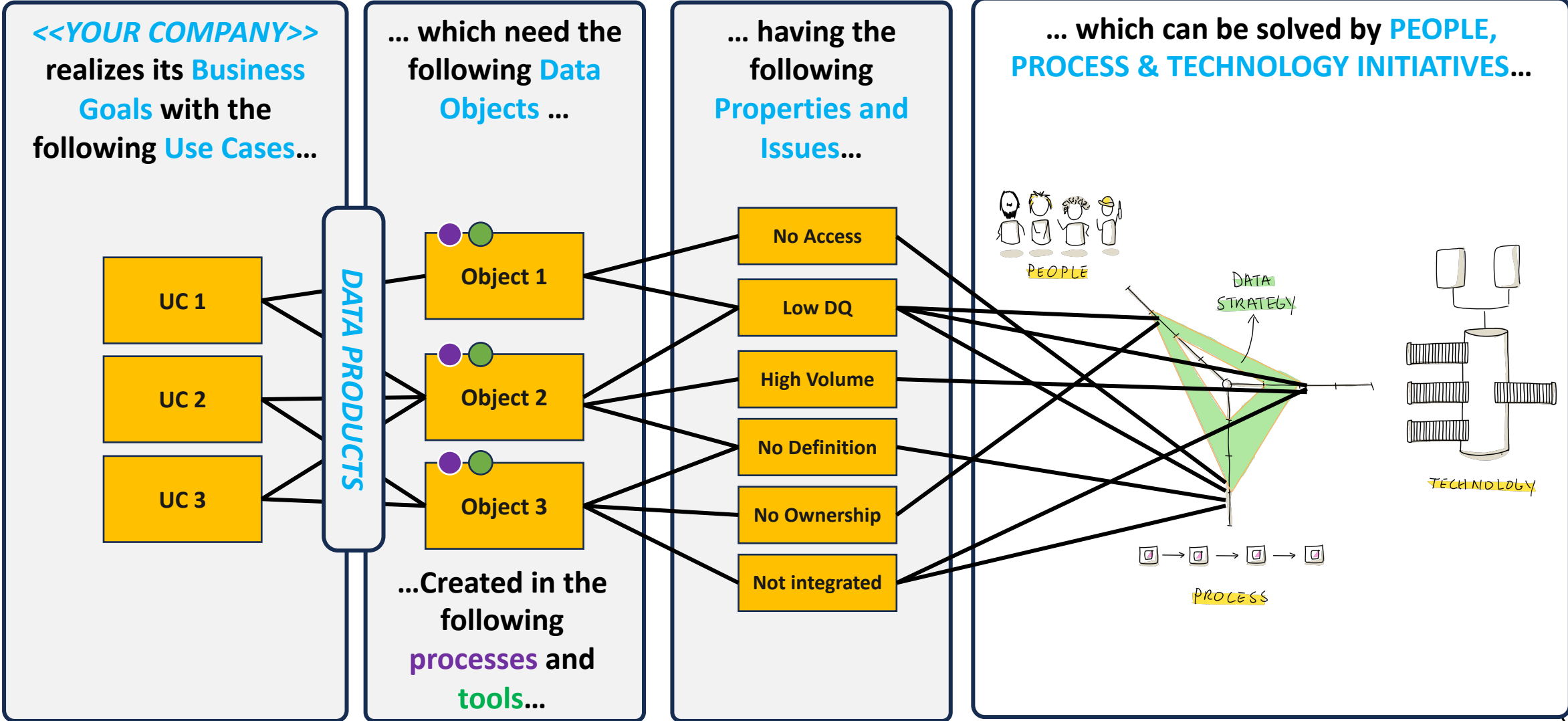


6.

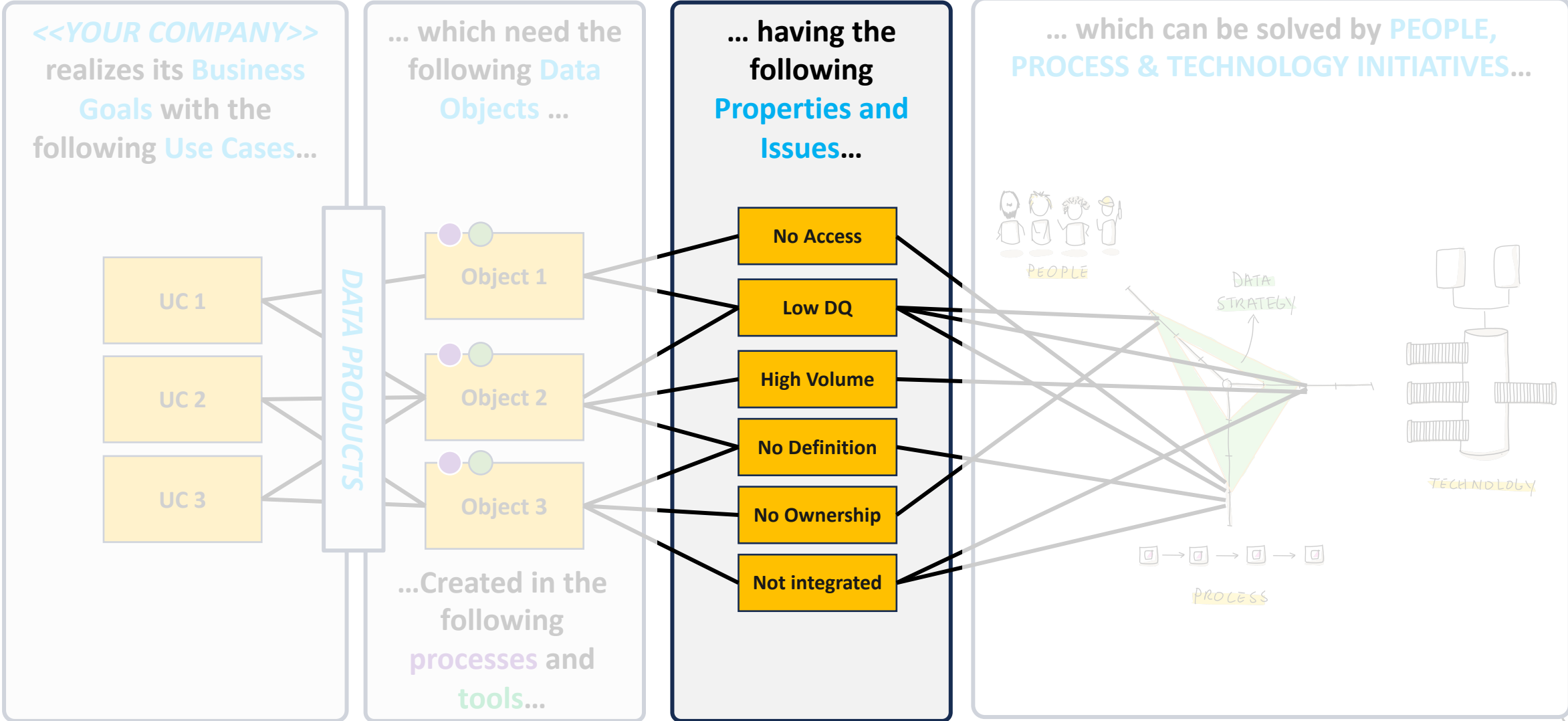
PROPERTIES & ISSUES



Data Strategy Framework



Data Strategy Framework

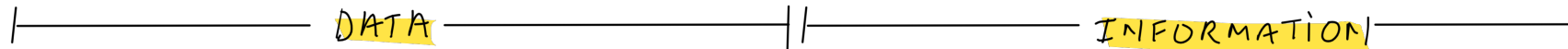
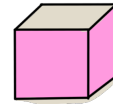
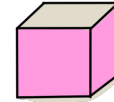


DATA SOURCE

RAW DATA

DATA PRODUCT(S)

DATA USE CASE



DATA

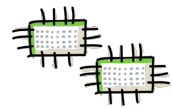
INFORMATION

ENTITIES

PRODUCTS



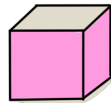
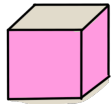
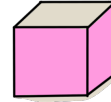
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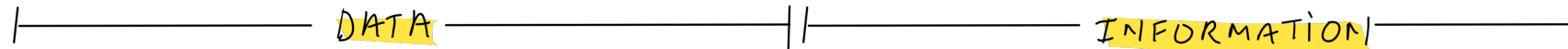
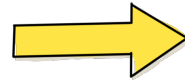
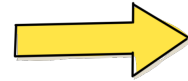
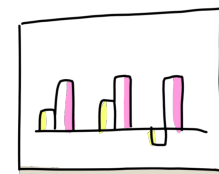
RAW DATA



DATA PRODUCT(S)



DATA USE CASE



DATA

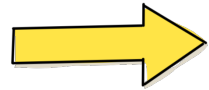
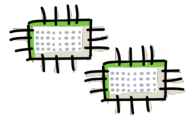
INFORMATION

ENTITIES

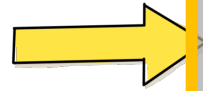
PRODUCTS



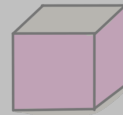
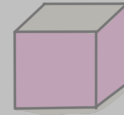
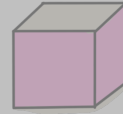
DATA SOURCE



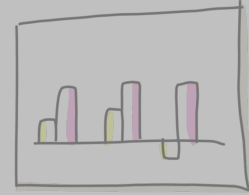
RAW DATA



DATA PRODUCT(S)



DATA USE CASE



DATA

INFORMATION

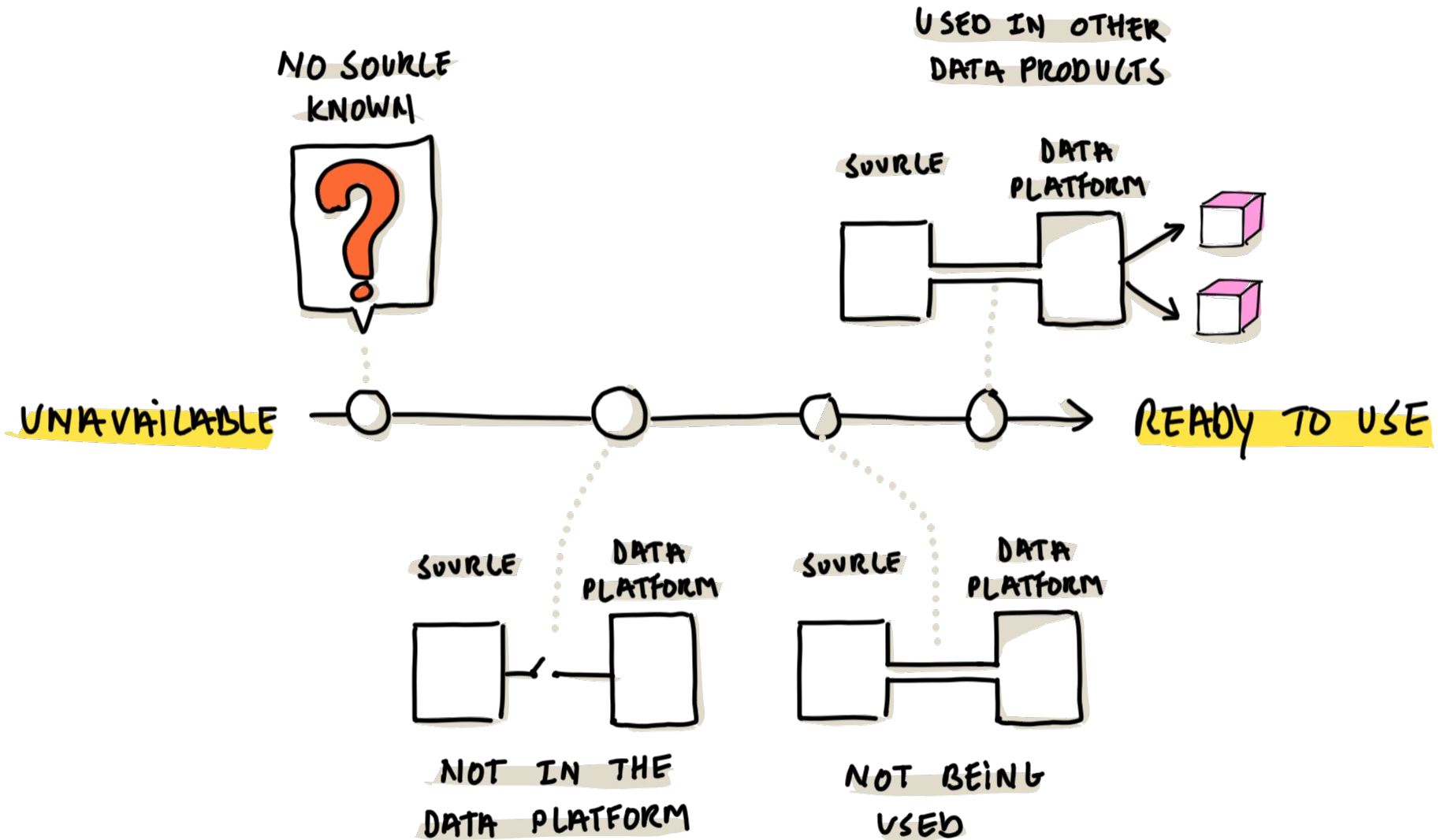
ENTITIES

PRODUCTS

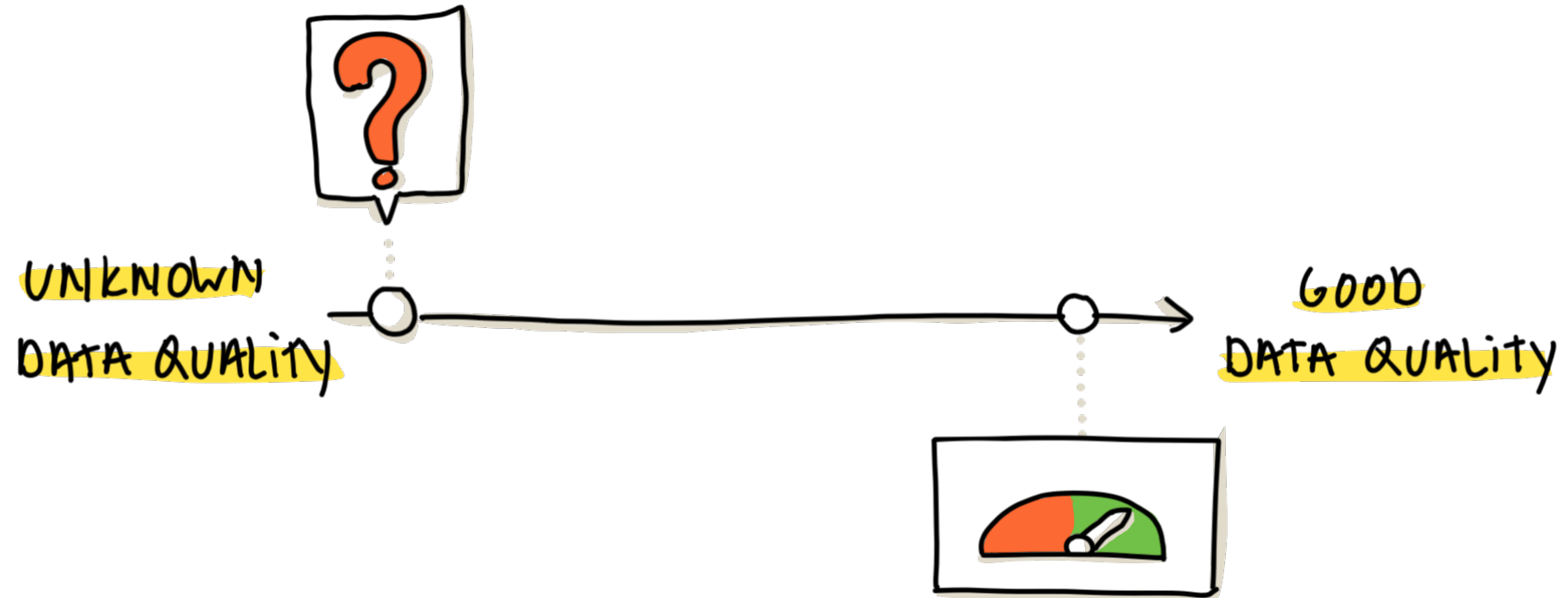


	O ₁	O _L	O _S	O ₃
AVAILABLE?	Y	Y	?	Y
ACCESSIBLE?	N	?	?	?
QUALITY	50%	80%	20%	?
VOLUME	XXL	L	XL	S
TYPE	?	{ - }	cup	stack of papers
VELOCITY	SEC	DAY	YEAR	?
CONFIDENTIALITY	1 document	2 documents	1 document	3 documents

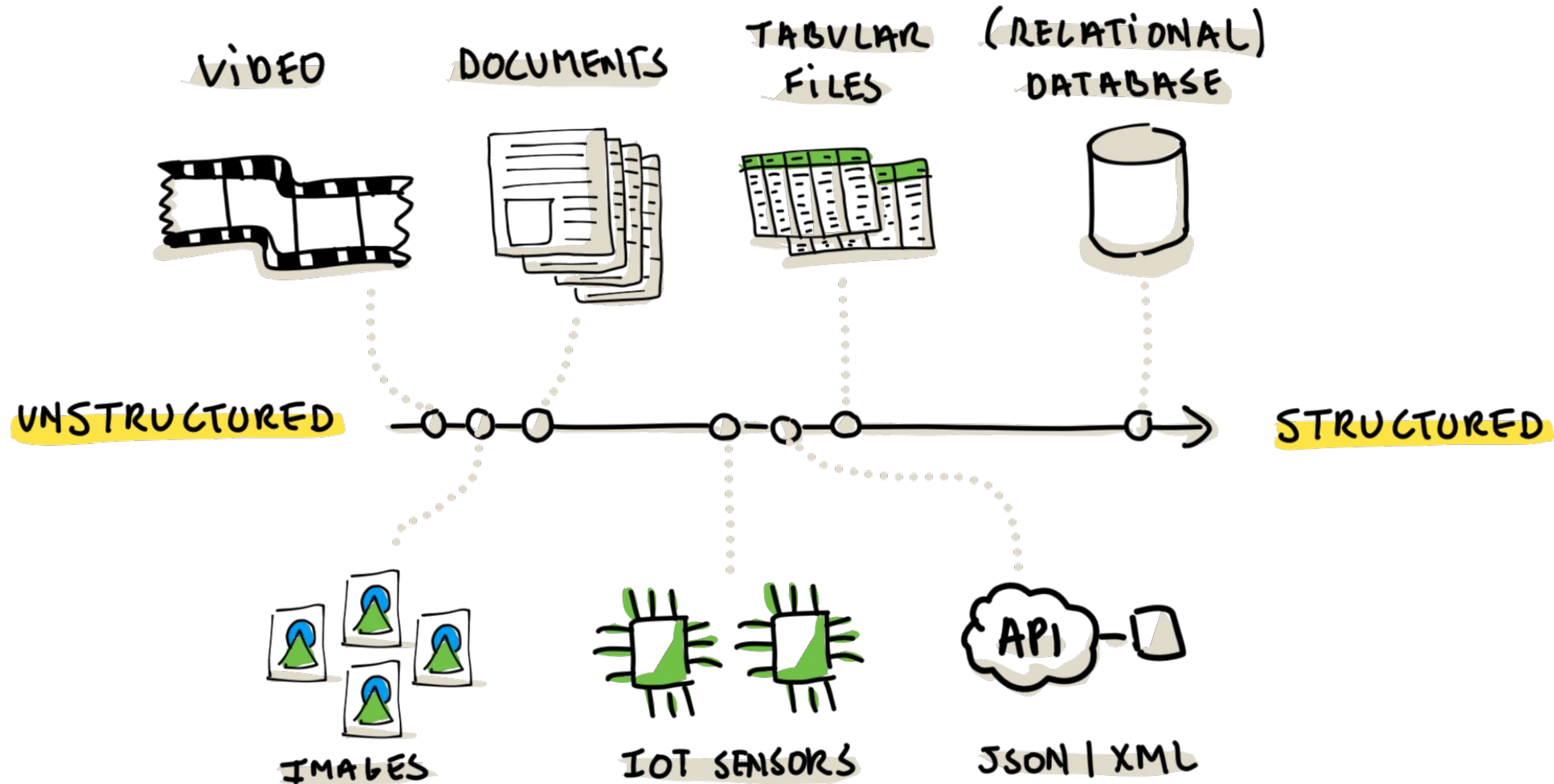
Data Accessibility



Data Quality



Type of Data



Data Volume



Data Velocity

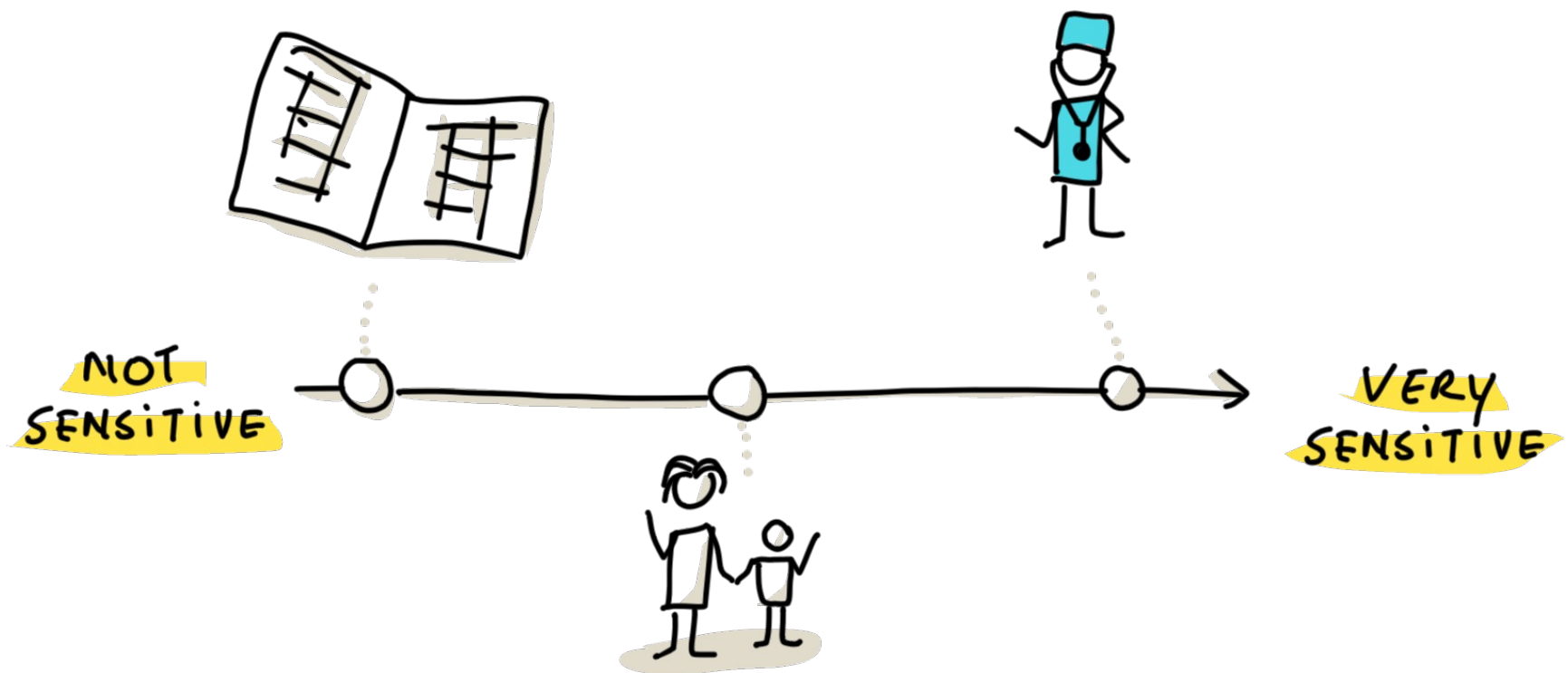
CHANGES
NEVER



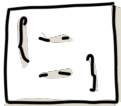









CHANGES
EVERY SECOND



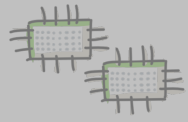
Data Sensitivity / Confidentiality



EXERCISE

	O_1	O_2	O_3	O_3
AVAILABLE?	Y	Y	?	Y
ACCESSIBLE?	N	?	?	?
QUALITY	50%	80%	20%	?
VOLUME	XXL	L	XL	S
TYPE	?			
VELOCITY	SEC	DAY	YEAR	?
CONFIDENTIALITY		 		  

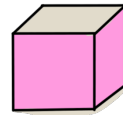
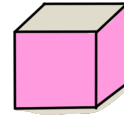
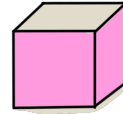
DATA SOURCE



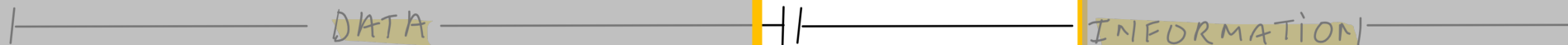
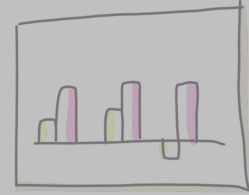
RAW DATA



DATA PRODUCT(S)



DATA USE CASE



DATA

INFORMATION

ENTITIES

PRODUCTS



O_1 O_2 O_S O_3

DATA
KNOWLEDGE



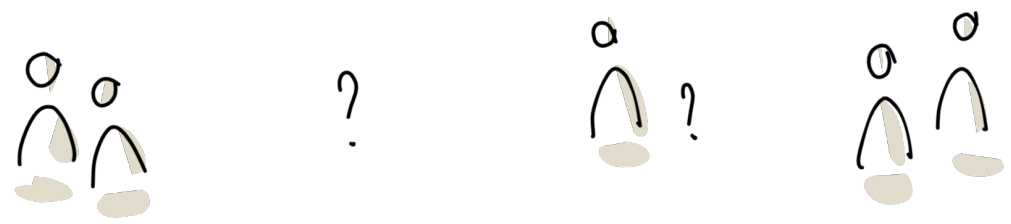
EXPERTISE
REACHABILITY



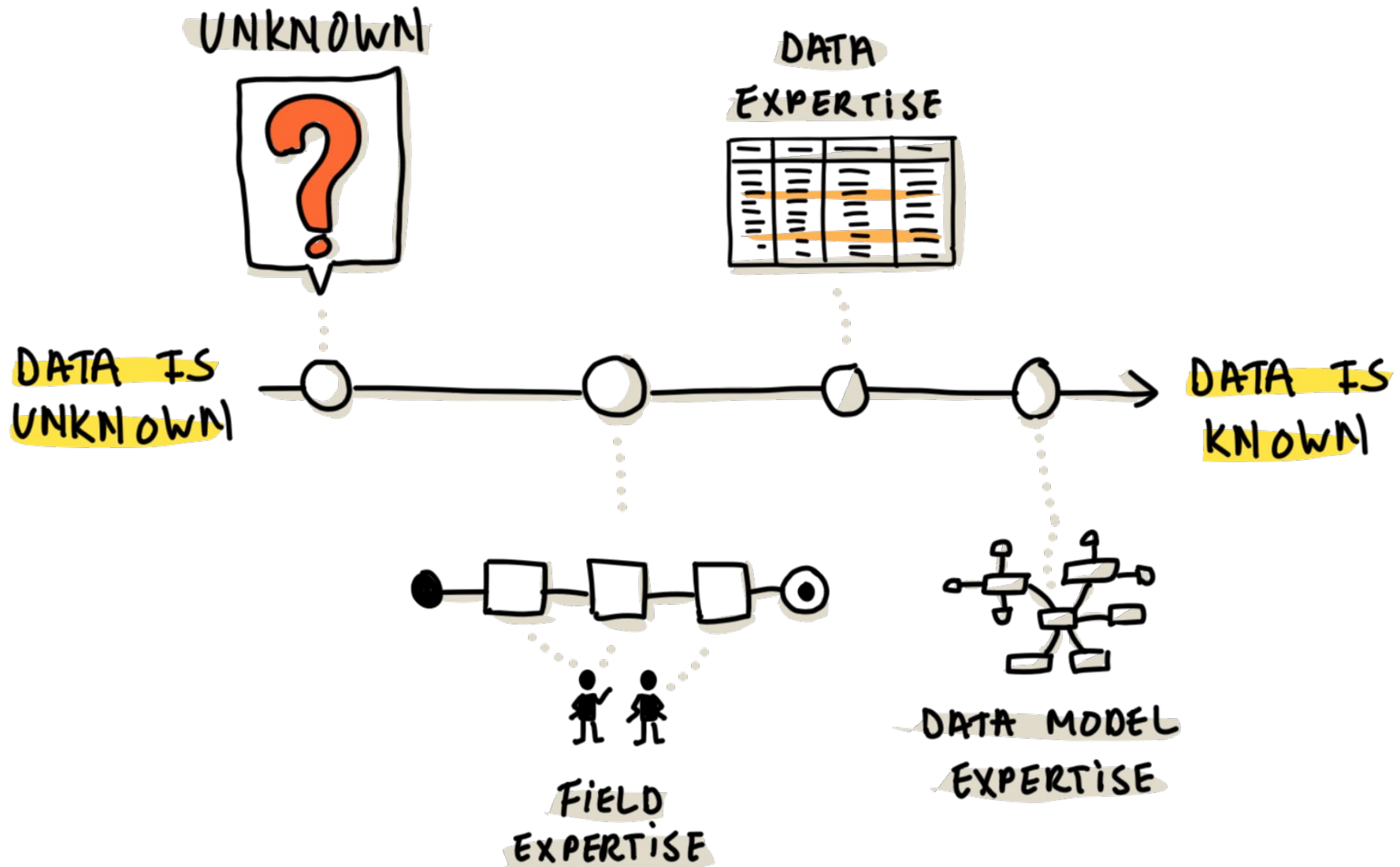
PROCESS | JOB
KNOWLEDGE



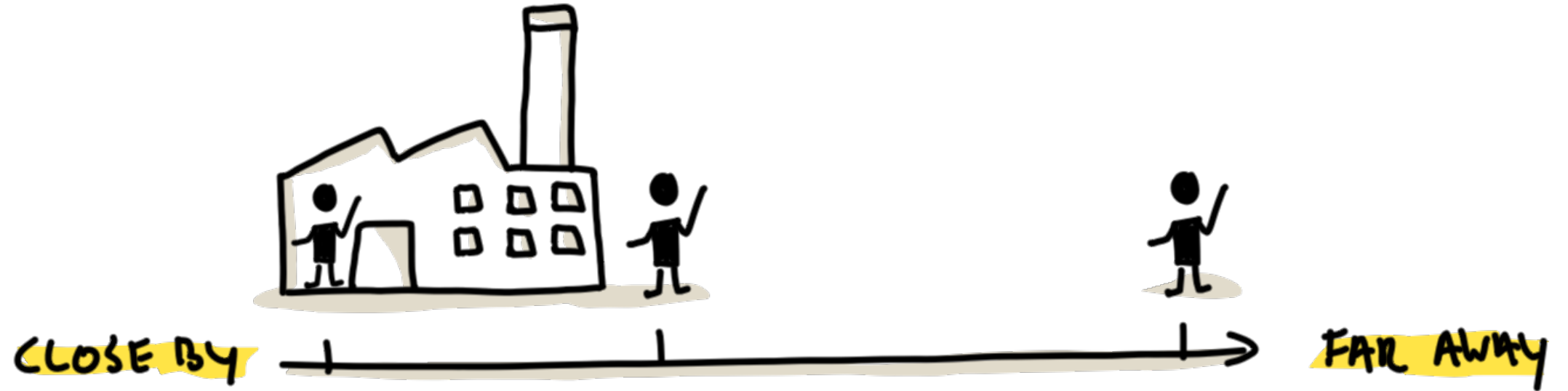
OWNERSHIP



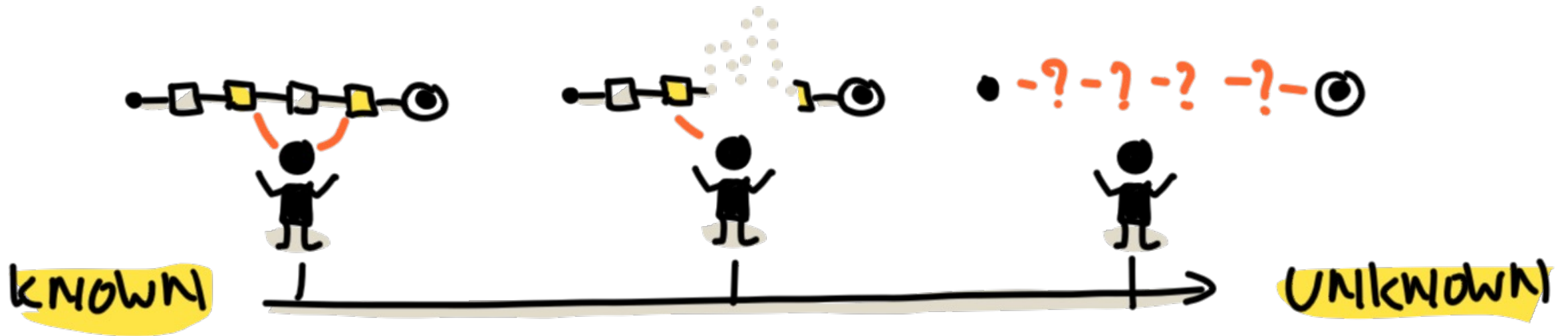
Data Knowledge



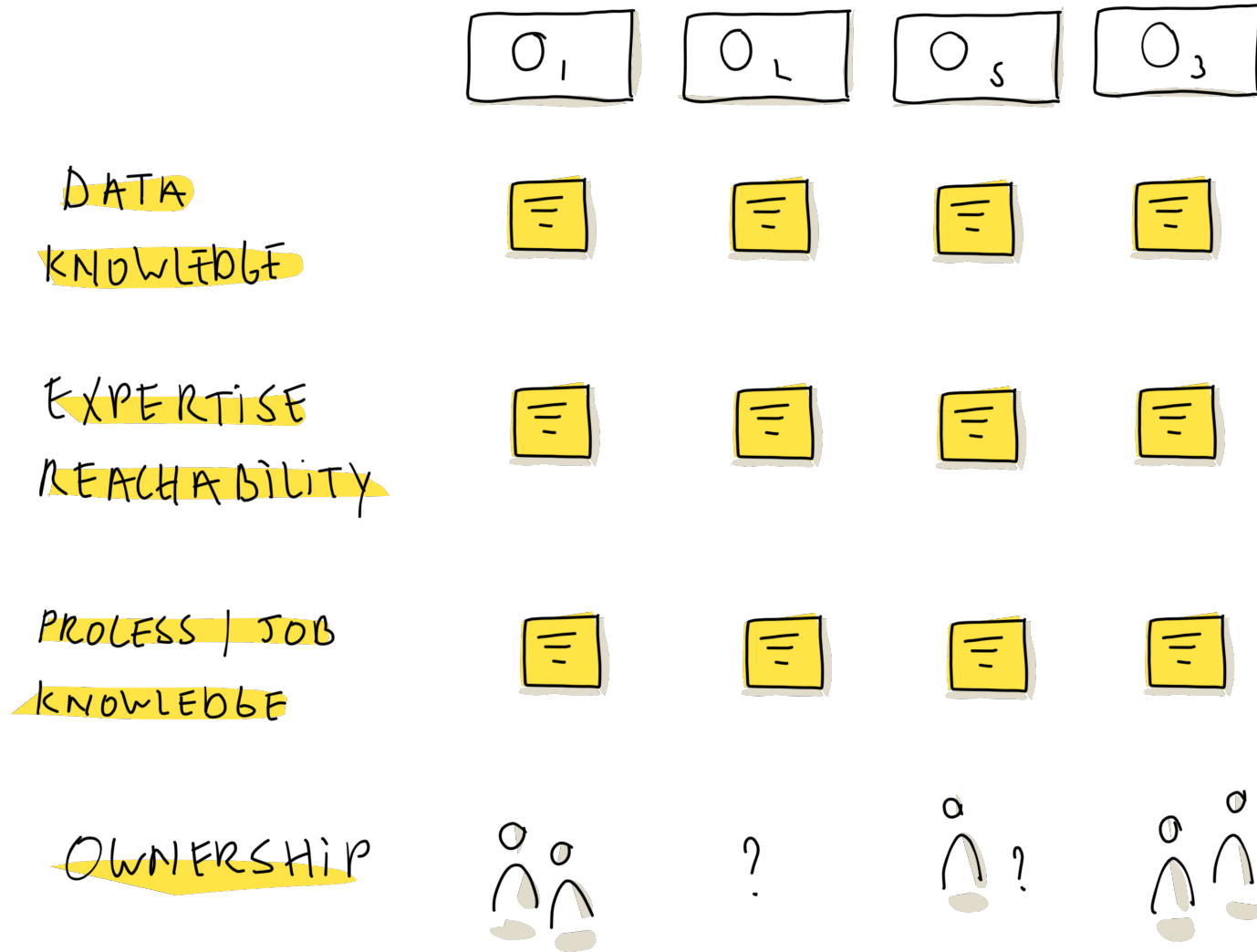
Expertise Reachability



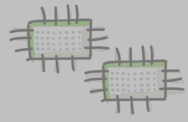
Process / Job knowledge



EXERCISE



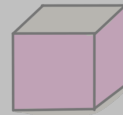
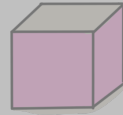
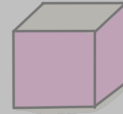
DATA SOURCE



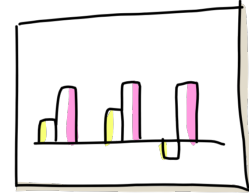
RAW DATA



DATA PRODUCT(S)



DATA USE CASE

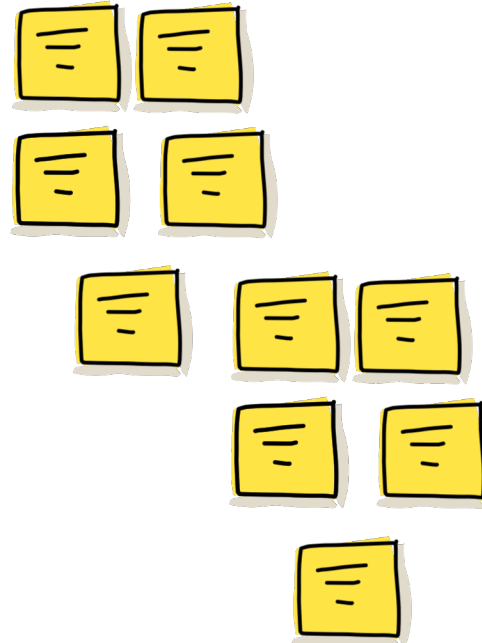


ENTITIES

PRODUCTS



GENERAL
ISSUES



EXERCISE

GENERAL
ISSUES

