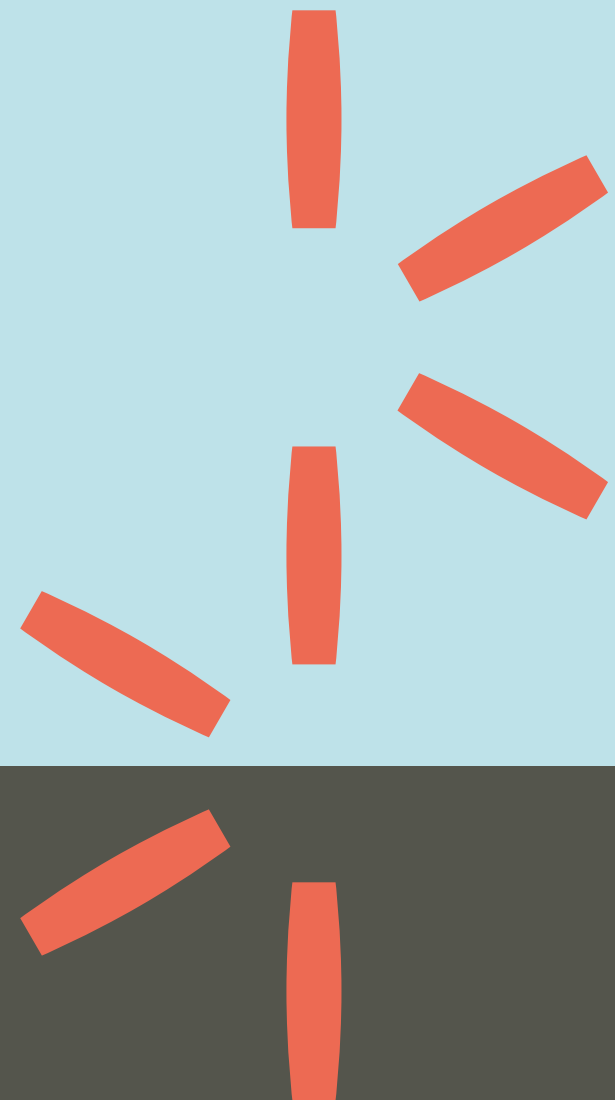


# Digitaal Transformeren

16 december 2024  
Heerenveen  
Ron Rijkers



GIS



esri

THE  
SCIENCE  
OF  
WHERE



AUTODESK®

Make anything.

BIM







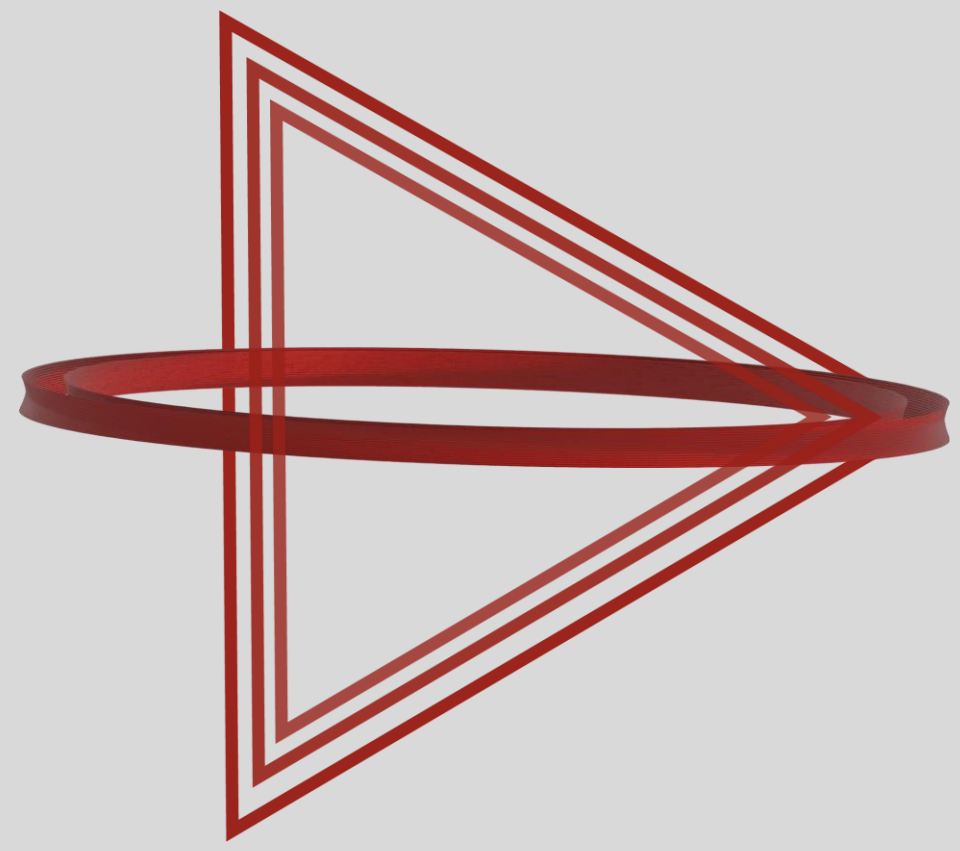






Question 1  
Problem 1  
Opportunity 1

Question 2  
Problem 2  
Opportunity 2



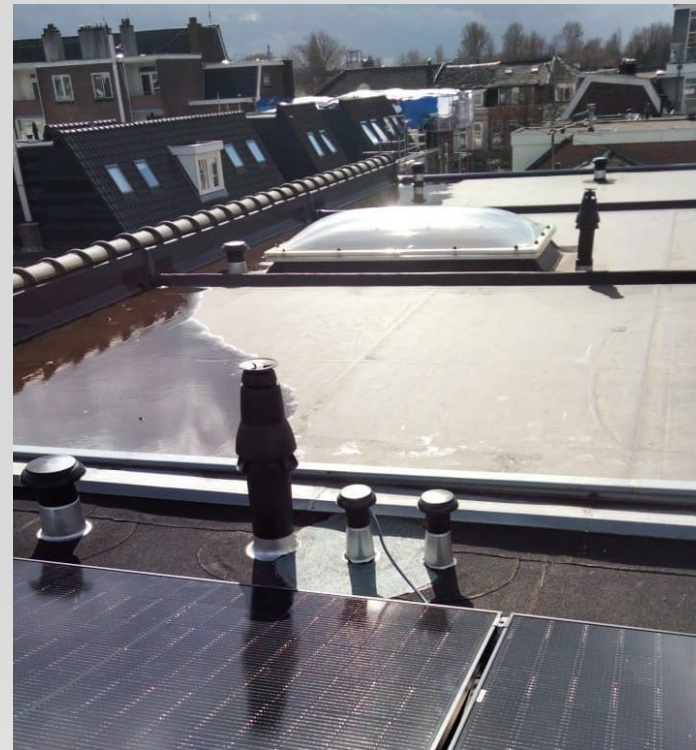
# Chapter 1

## Introduction



# Introduction

## Solar energy



ENPHASE



DAG WEEK MAAND JAAR LEVENSDUUR AANGEPASTE

< 30 MEI 2023 >

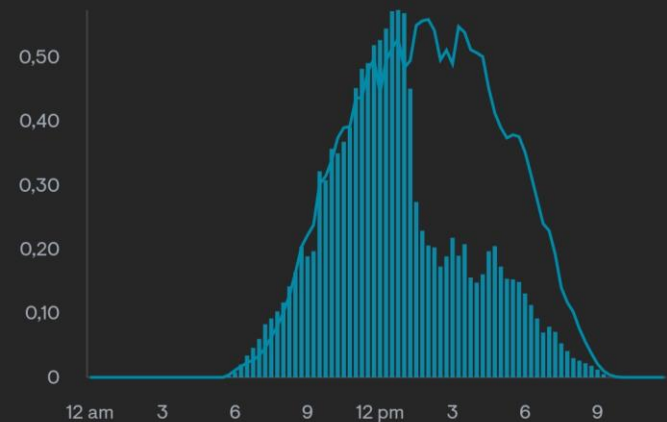
16°C

 **Geproduceerd Energie**  
Geüpdatet 3 minuten geleden

**12,9 kWh**  
mei 30, 2023

**19,1 kWh**  
mei 29, 2023

kWh



mei 30, 2023

mei 29, 2023

PRESTATIE

STATUS

ENERGIE

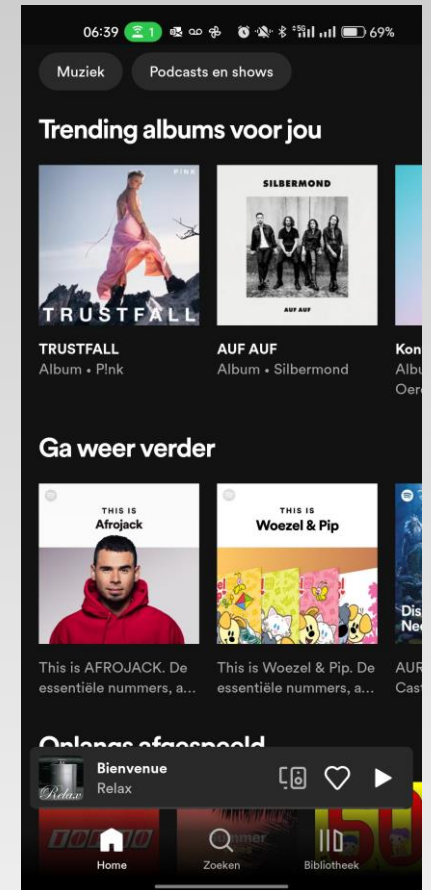
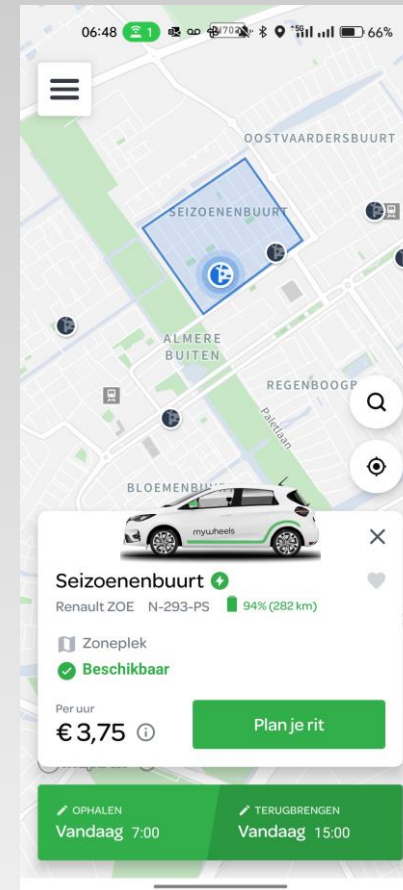
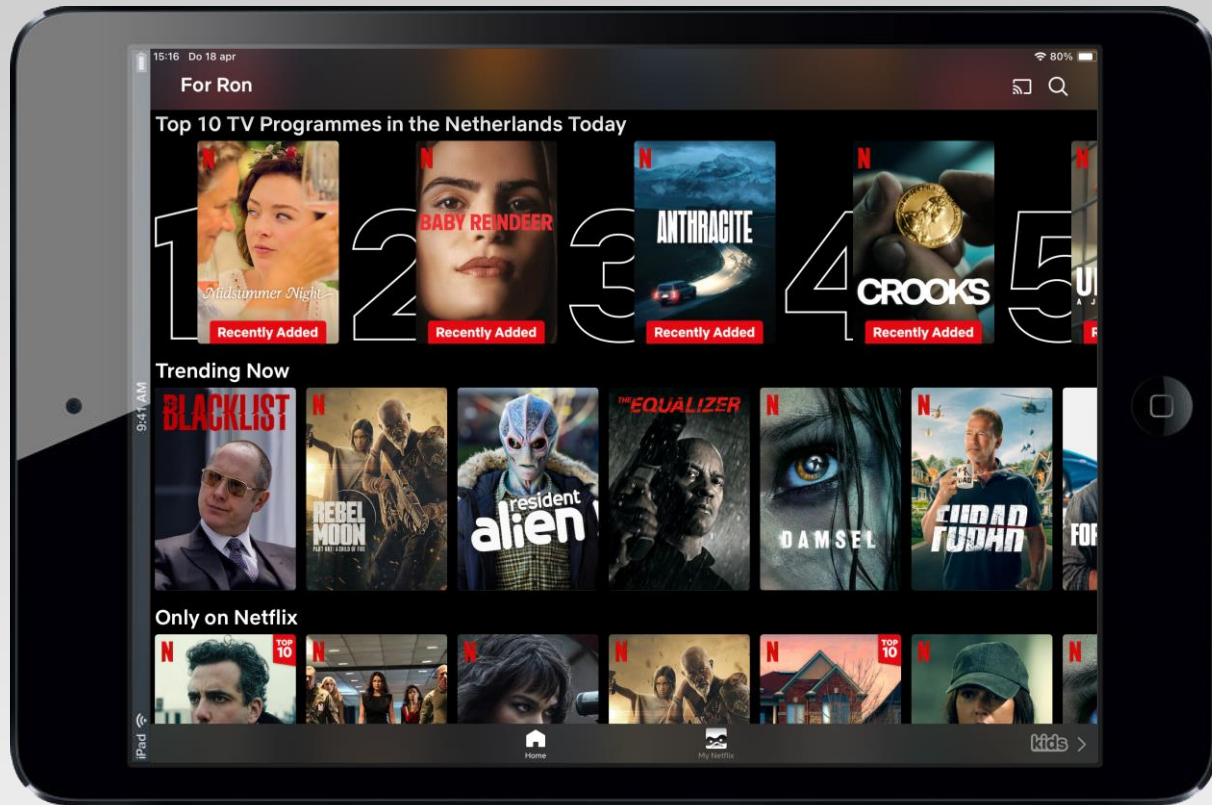
SERIE

MENU



# Introduction

On demand & Pay per use





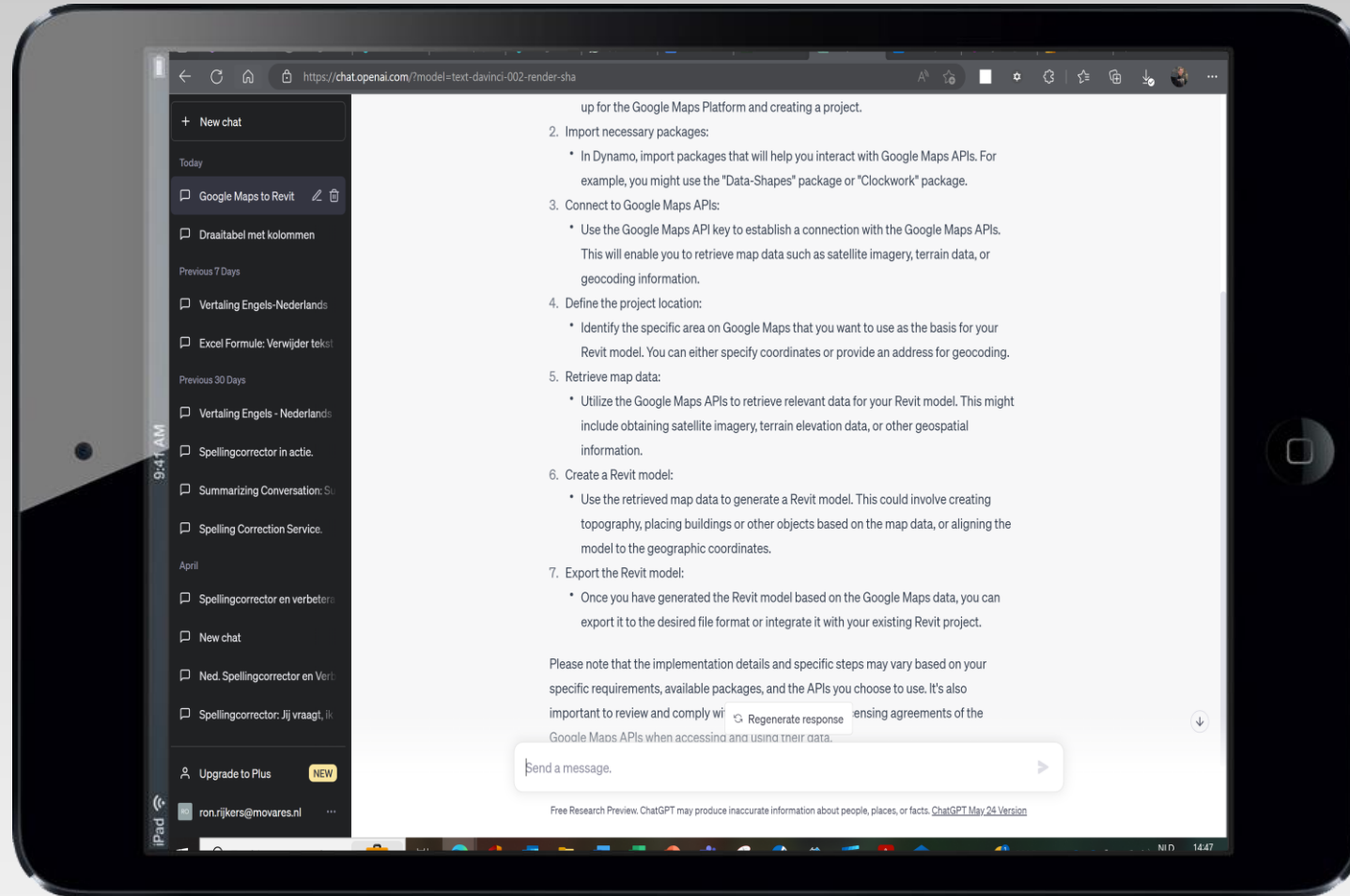
# Introduction

Vacuum cleaner robot



# Introduction

## Artificial Intelligence (AI)





# Introduction

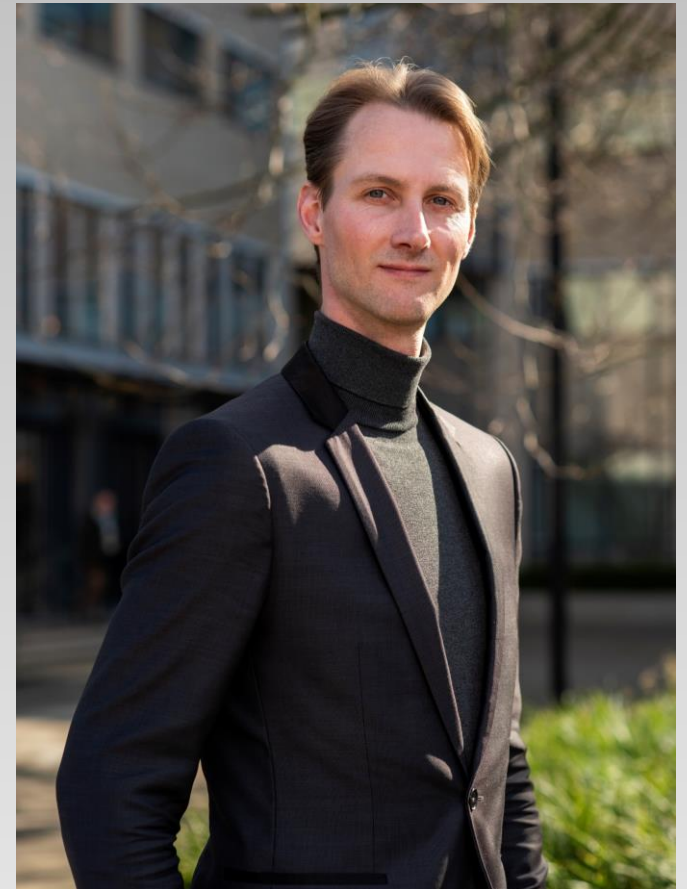
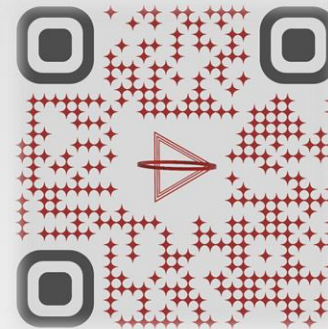
**"So why is digitization so different  
within existing companies?"**



# Introduction

## Experience & Scope

- **Bachelor** of Built Environment – Architecture & Engineering
- Retail engineering & construction – modular, prefab and supply chain integration
- Management for: 3D engineering, 3D interior design, 3D scanning, BIM consultancy
- Innovation management: Process optimization and Automation
- **MBA** – (change)Management (Cum Laude)
- **Movares**
  - Manager Integral Building Design
  - BIM Manager – BIM governance and implementation
- **Ron Rijkers Management** – Digital transformation
- Author
- Management consultant
- Innovator



“BIM is a way of thinking that enhances collaboration”

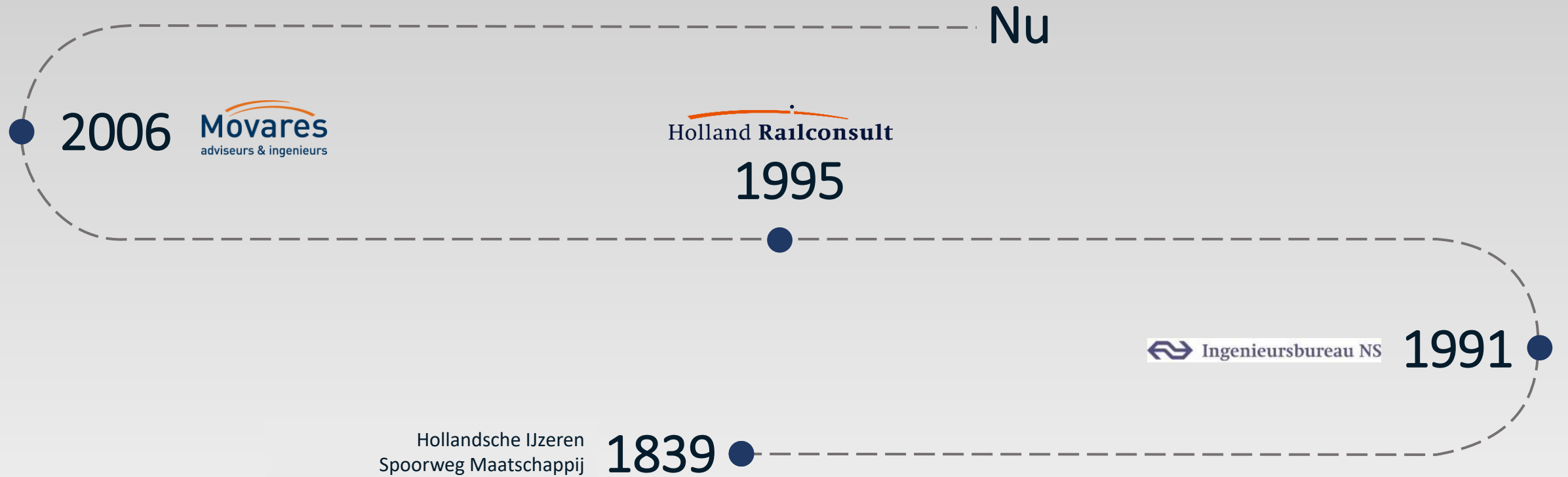
[info@RRijkersManagement.com](mailto:info@RRijkersManagement.com)

[www.linkedin.com/in/ronrijkers](http://www.linkedin.com/in/ronrijkers)



# Introduction

## Movares History





# Introduction

## Movares - Integral Building Design





# Introduction

## Movares - Integral Building Design

### Total engineering - 6 disciplines

- Architects
- Technical managers
- Engineering advisers
- Modelers
- E- & M- installation advisers
- Structural engineers

**Complex technical / logistical buildings**

**Sustainable junctions of society**





# Introduction

## Movares - Integral Building Design

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**Complex technical / logistical buildings**

**Sustainable junctions of society**





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**Complex technical / logistical buildings**

**Sustainable junctions of society**





# Digital Transformation

## BIM Manager





# Digital Transformation

Software implementation



**AUTODESK**  
Construction Cloud

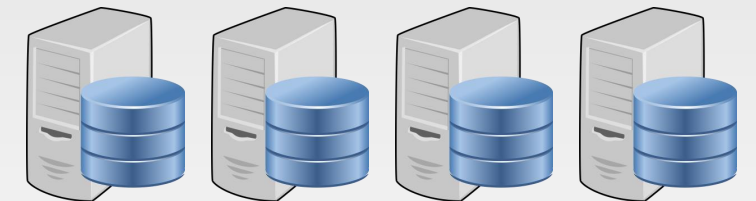
 SharePoint

 Microsoft 365



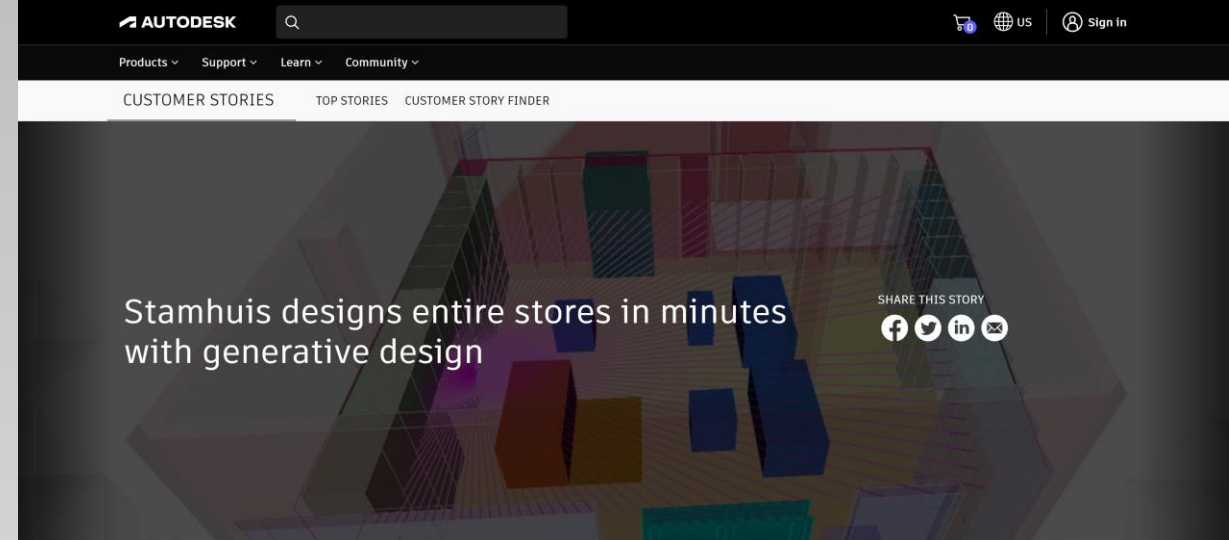
Microsoft Dynamics 365  
Business Central

 Microsoft  
Dynamics® NAV



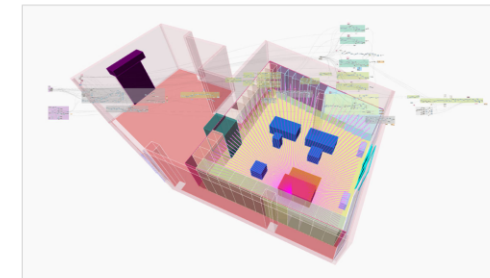
# Digital Transformation

## Proces optimization



### Accelerating design when time is money

Since its founding in 1926, Stamhuis has built a reputation for quality and dependability. Based in the Netherlands, the firm specializes in retail shop construction and renovations and works closely with their clients to create custom solutions that are tailor-made to help them get the most out of their retail spaces. Stamhuis has been exploring the possibilities offered by construction software in boosting their efficiency and creating added value.



Script in Dynamo with the building contour and store design visually in the background. The automated design is based on the standard set variable.

### Stamhuis will do 60 or more projects in a year for one customer alone

With clients ranging from supermarkets to liquor and convenience stores, Stamhuis will do 60 or more projects in a year for one customer alone. The volume of work is further complicated by timing, especially for redesigns where the entire construction from start to finish must be completed in one week. Such is the reality of retail.

### BIM and prefabrication, the backbone of the company's success

"We know that if a store is closed and a customer goes to a different store, then they are likely to remain a customer there by the third visit," says Ron Rijkers, Team Manager for BIM and Innovation, Stamhuis. "That's why we really need to open a store within a week in order for our client to retain their own customers."

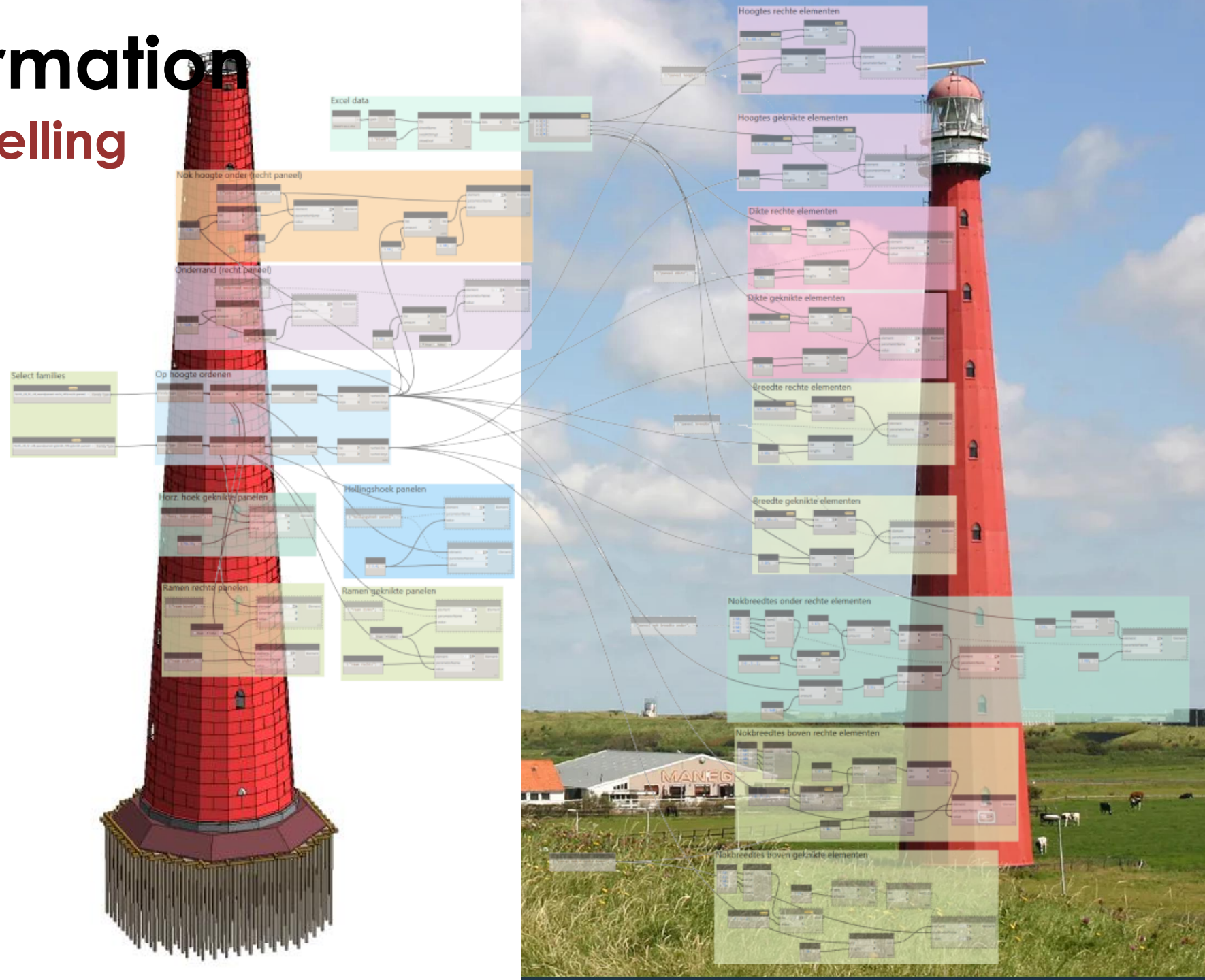
"We realized that if we don't start with generative design now, we would be way behind in a few years. We think generative design is the future."

—Ron Rijkers, Team Manager for BIM and Innovation, Stamhuis



# Digital Transformation

## Computational modelling



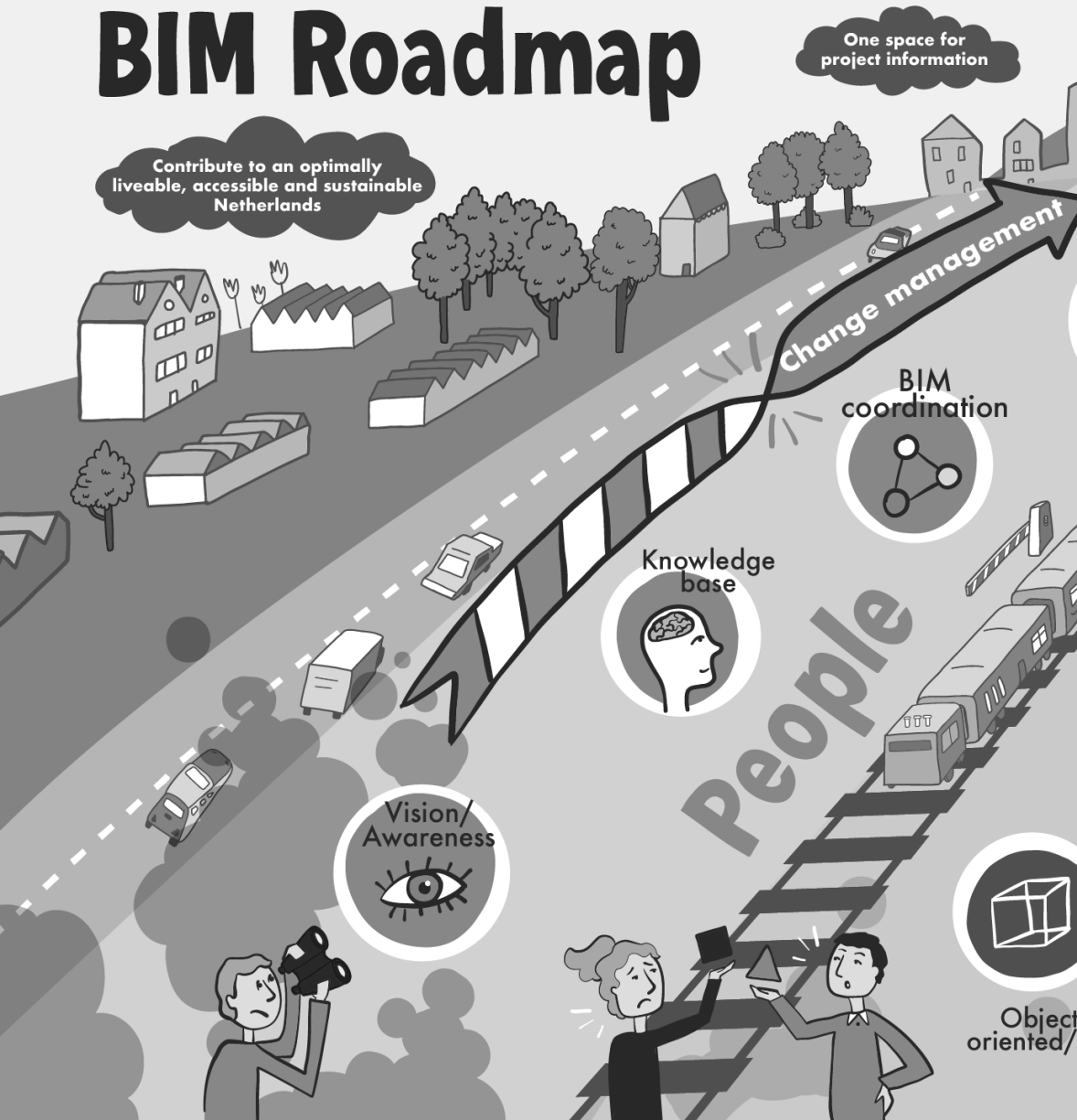
# Digital Transformation

## Digital Transformation Roadmap



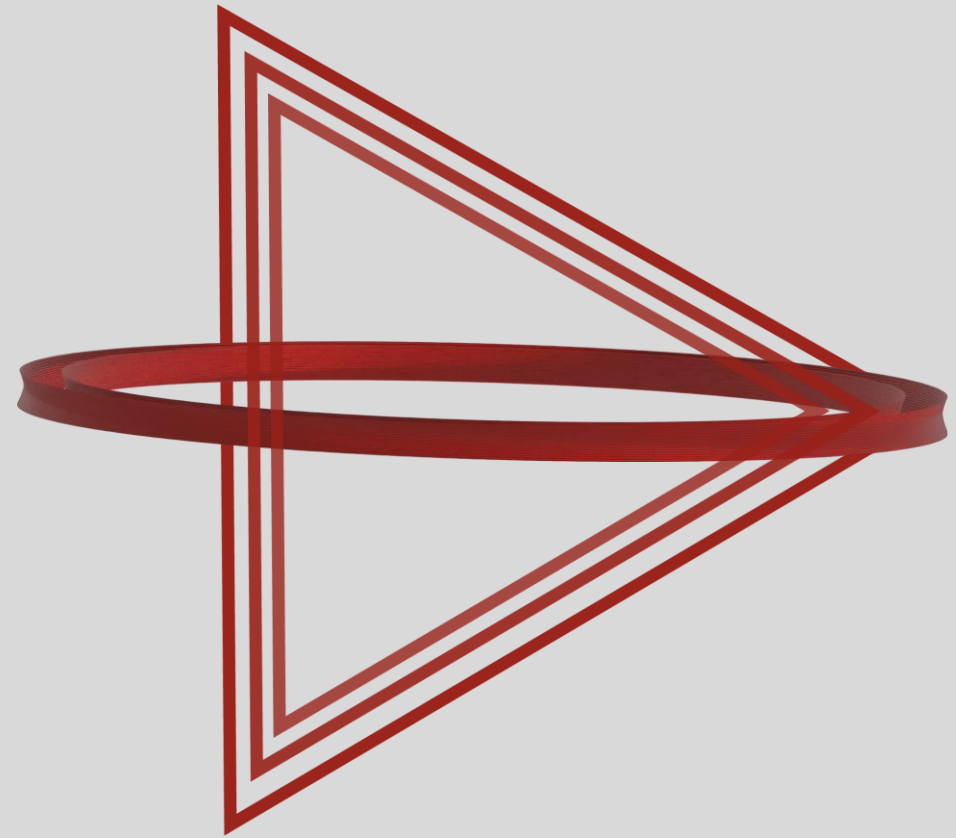


# BIM Roadmap



How do I leverage BIM?

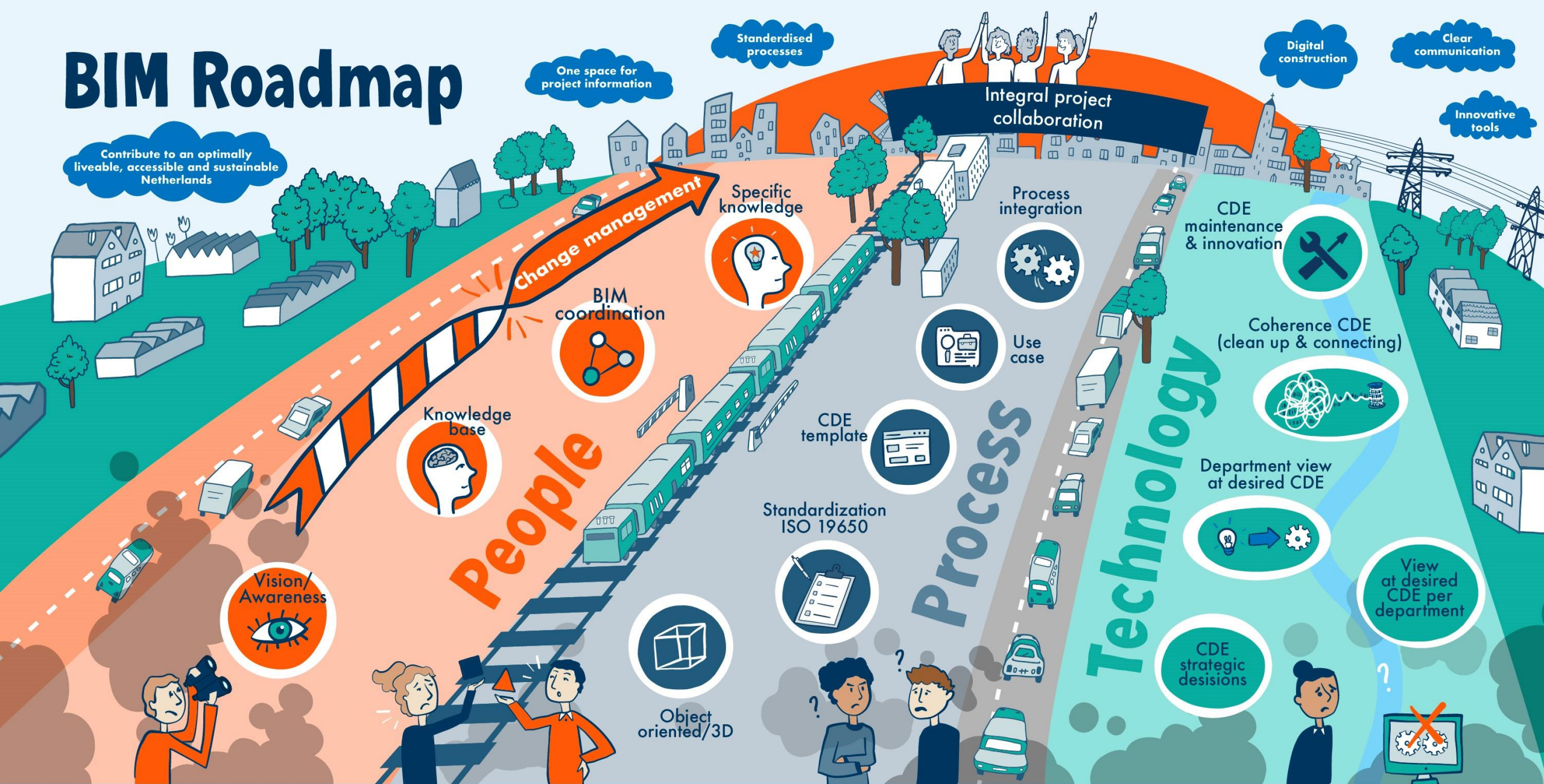
What do I need to know to practice BIM?



## Chapter 2

Movares BIM Roadmap

# BIM Roadmap



How do I leverage BIM?

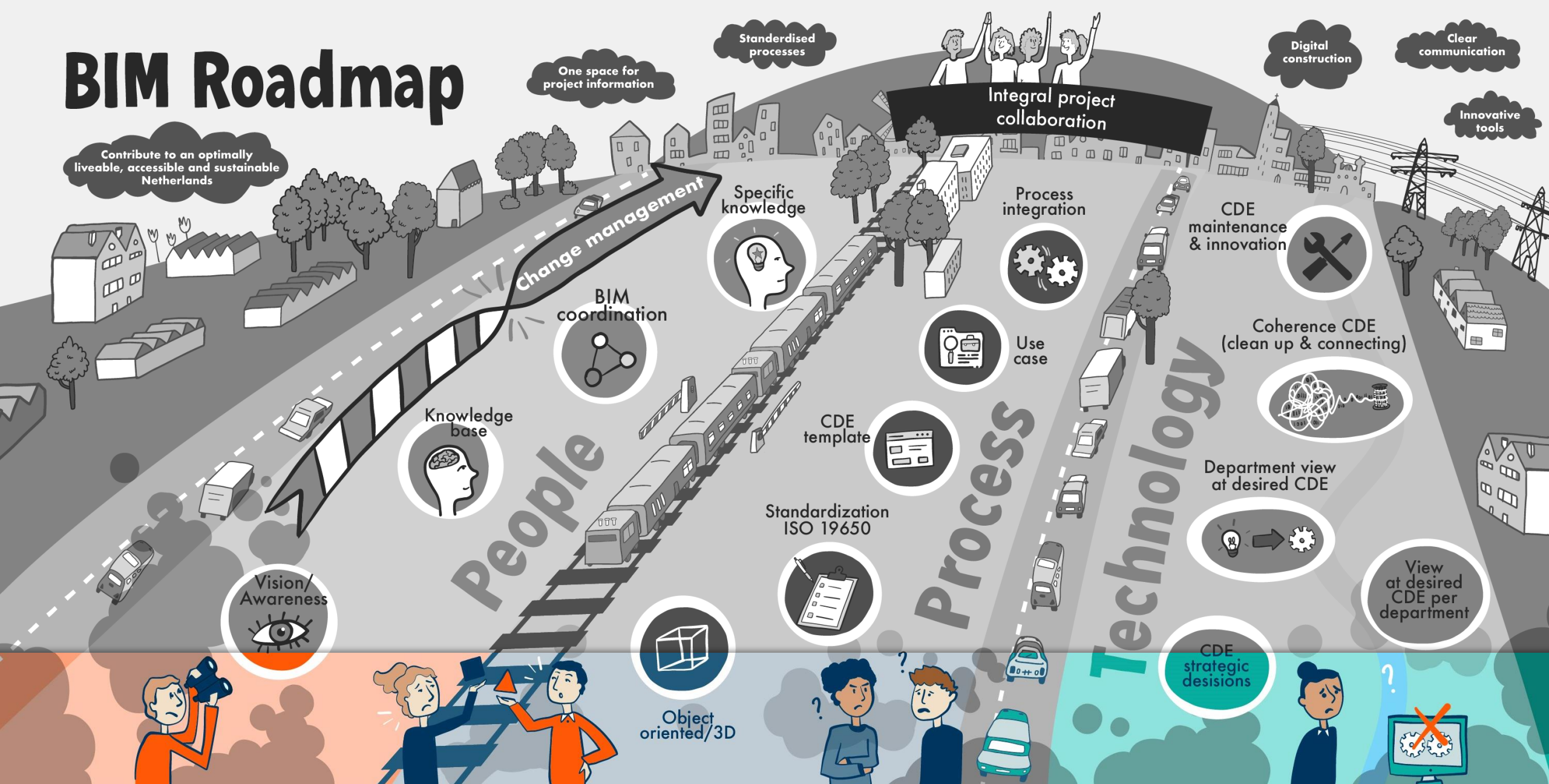
What do I need to know to practice BIM?

Who can help me with BIM and who makes the decisions?

The software is not up to date and illogical



# BIM Roadmap



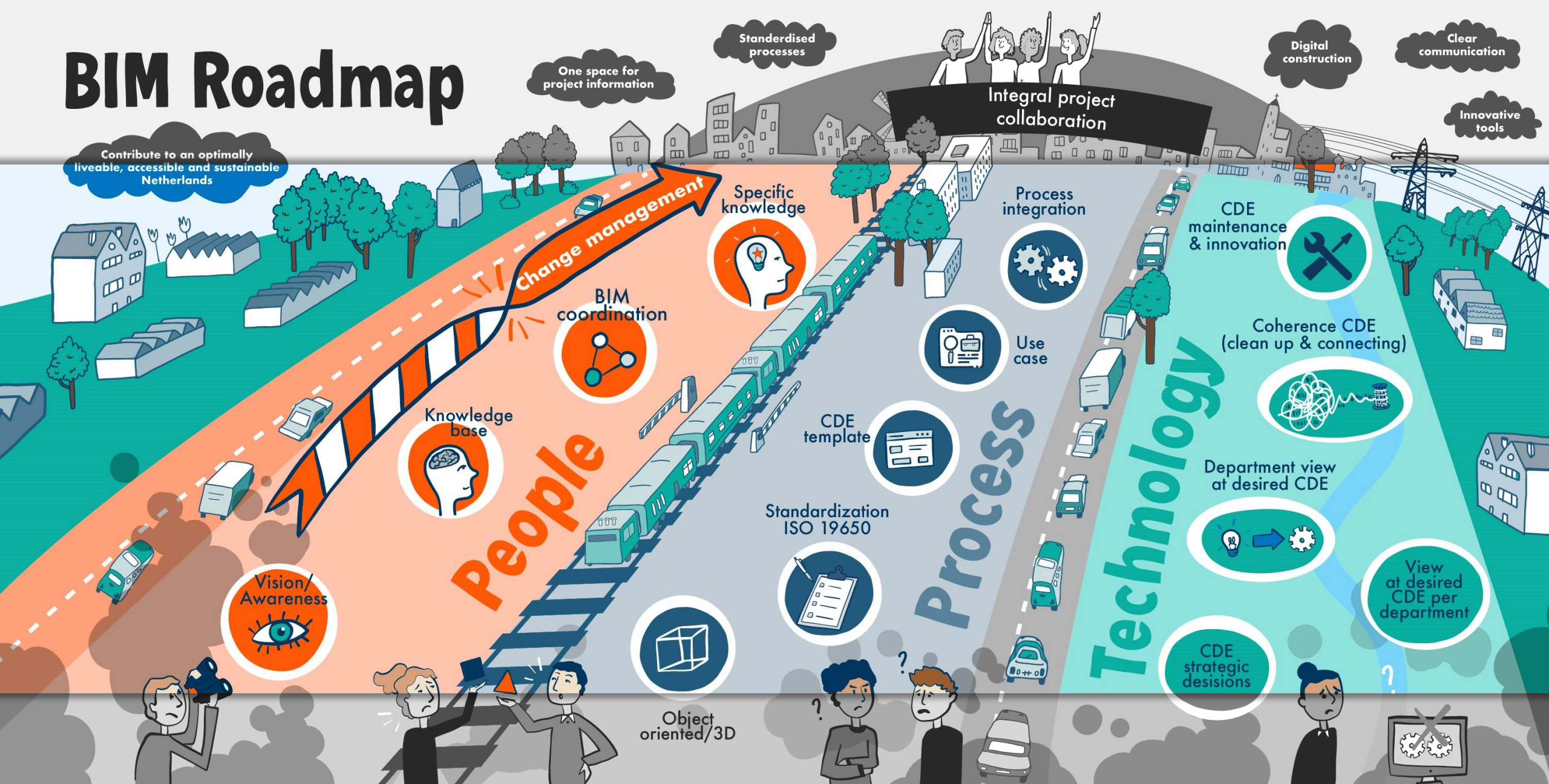
How do I leverage BIM?

What do I need to know to practice BIM?

Who can help me with BIM and who makes the decisions?

The software is not up to date and illogical

# BIM Roadmap



How do I leverage BIM?

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# BIM Roadmap

Contribute to an optimally liveable, accessible and sustainable Netherlands

One space for project information

Standardised processes

Digital construction

Clear communication

Innovative tools

Integral project collaboration

Change management

Specific knowledge

Process integration

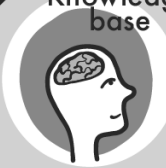
CDE maintenance & innovation

BIM coordination



Coherence CDE (clean up & connecting)

Knowledge base



Use case

CDE template



Standardization ISO 19650



Department view at desired CDE



Vision/Awareness



People



Object oriented/3D

Process

Technology

CDE strategic decisions



View at desired CDE per department



How do I leverage BIM?

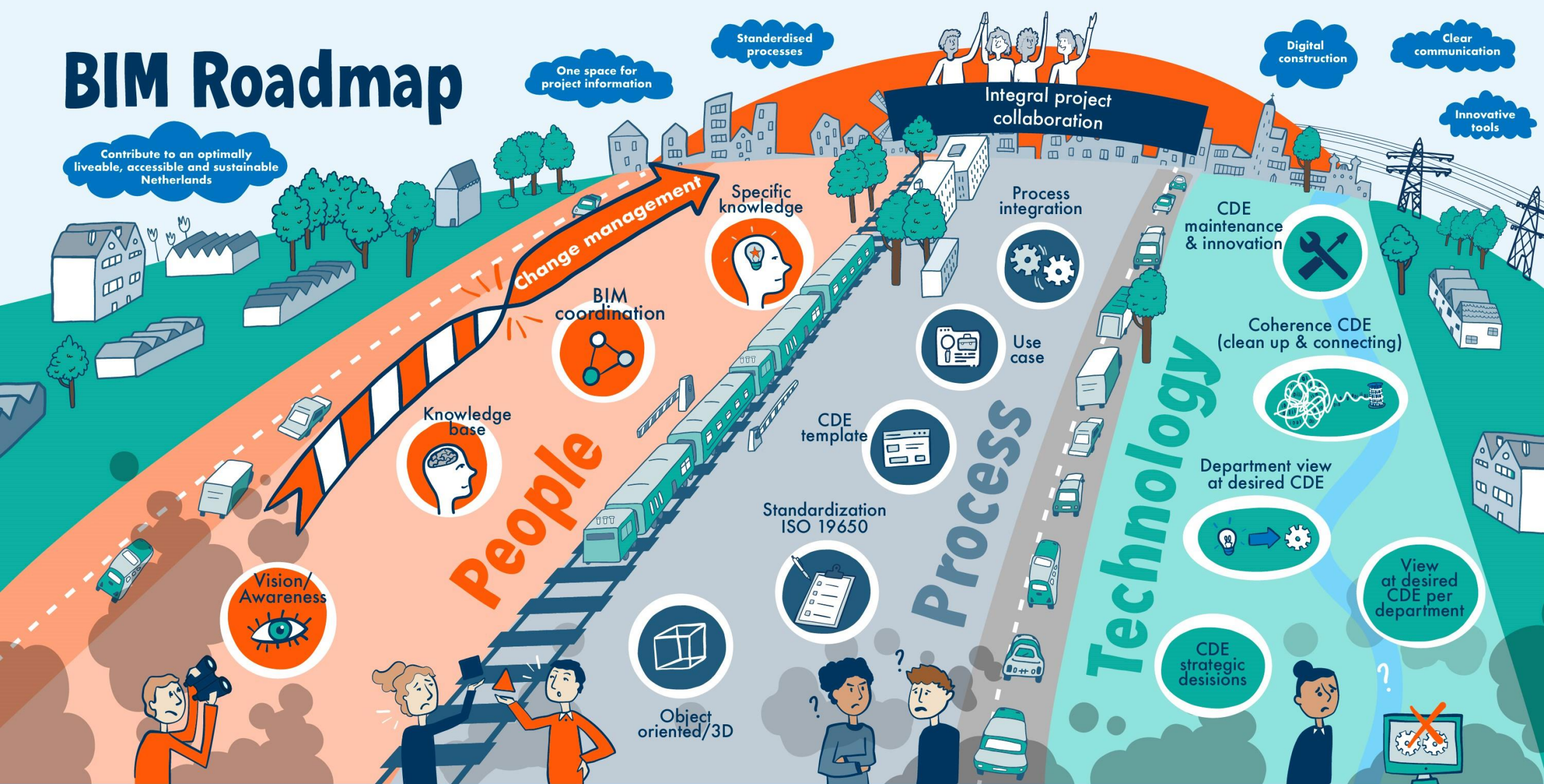
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# BIM Roadmap



How do I leverage BIM?

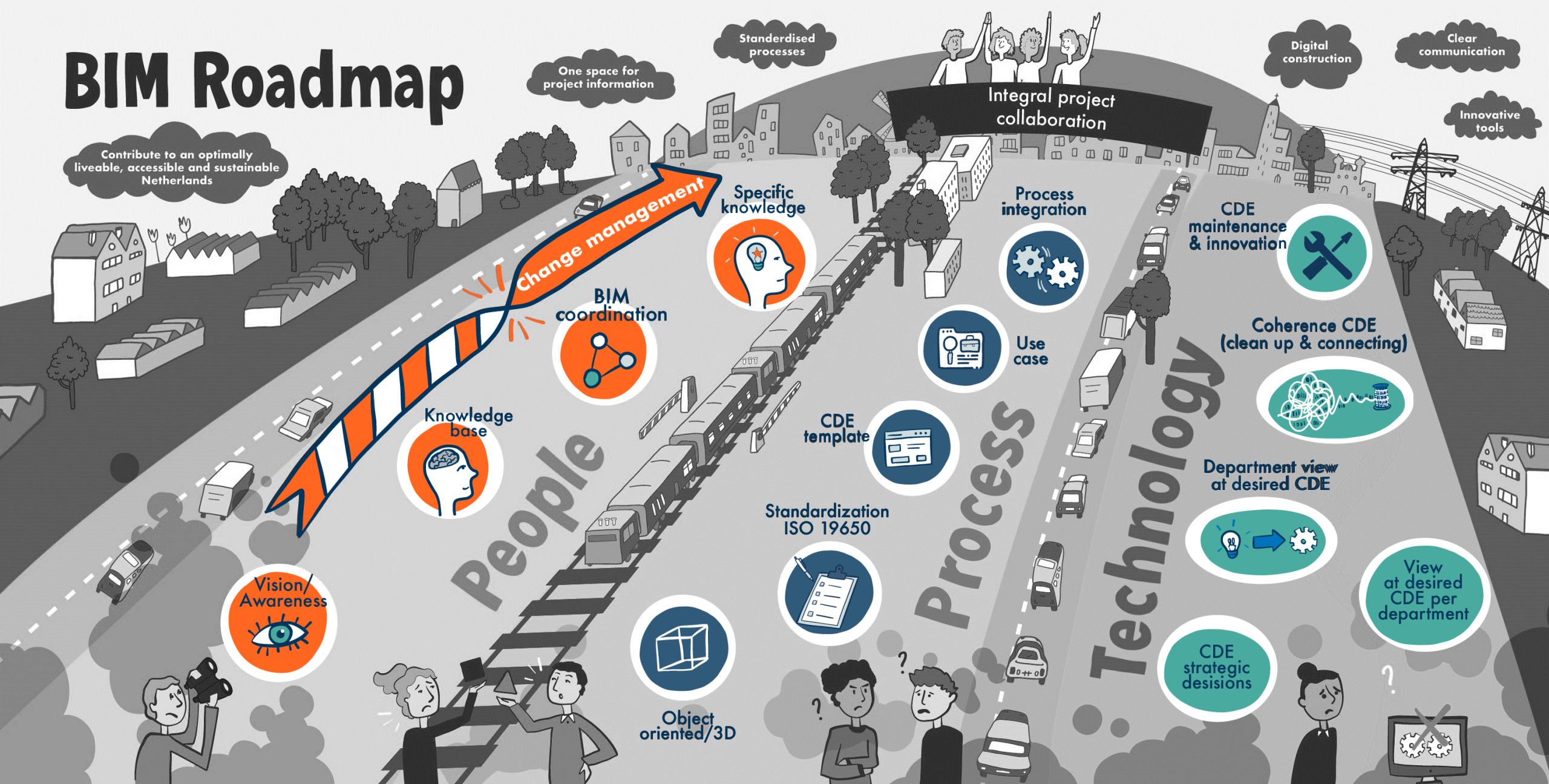
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# BIM Roadmap



How do I leverage BIM?

What do I need to know to practice BIM?

Who can help me with BIM and who makes the decisions?

The software is not up to date and illogical



# BIM Roadmap

## BIM knowledge



Home | Microsoft 365 | Google | Mint - Home | BIM Coördinator | Bibliotheek | Aanmelden

https://movares.studytube.nl/learning-tracks/18738?query=bim

### Optionele externe trainingen

Externe opleiding

**ARKANCE SYSTEMS**

Aanvraag ontbreekt

14 uren

**BIM coördinator Inspiratie workshop | Incompany**

OKT 05

BIM coördinator Inspiratie workshop  
Wat komt er allemaal kijken bij het...

€ 500,00

Externe opleiding

Aanvraag ontbreekt

2 dagen

**Cursus Navisworks Manage**

OKT 03

Faalkosten en verspilling zijn  
verleden tijd Fouten dienen al in ee...

+2 data

€ 699,00  
€ 664,00

### Opdracht

Document

**BIM Coördinator**

Opdracht

2 uren

2

**BIM Coördinator opdracht**

Document

**BIM Coördinator**

Project voorbeeld

Naam spreker

**Template opdracht BIM Coördinator**

In deze PowerPoint template kan je de  
opdracht voor BIM Coördinator maken....

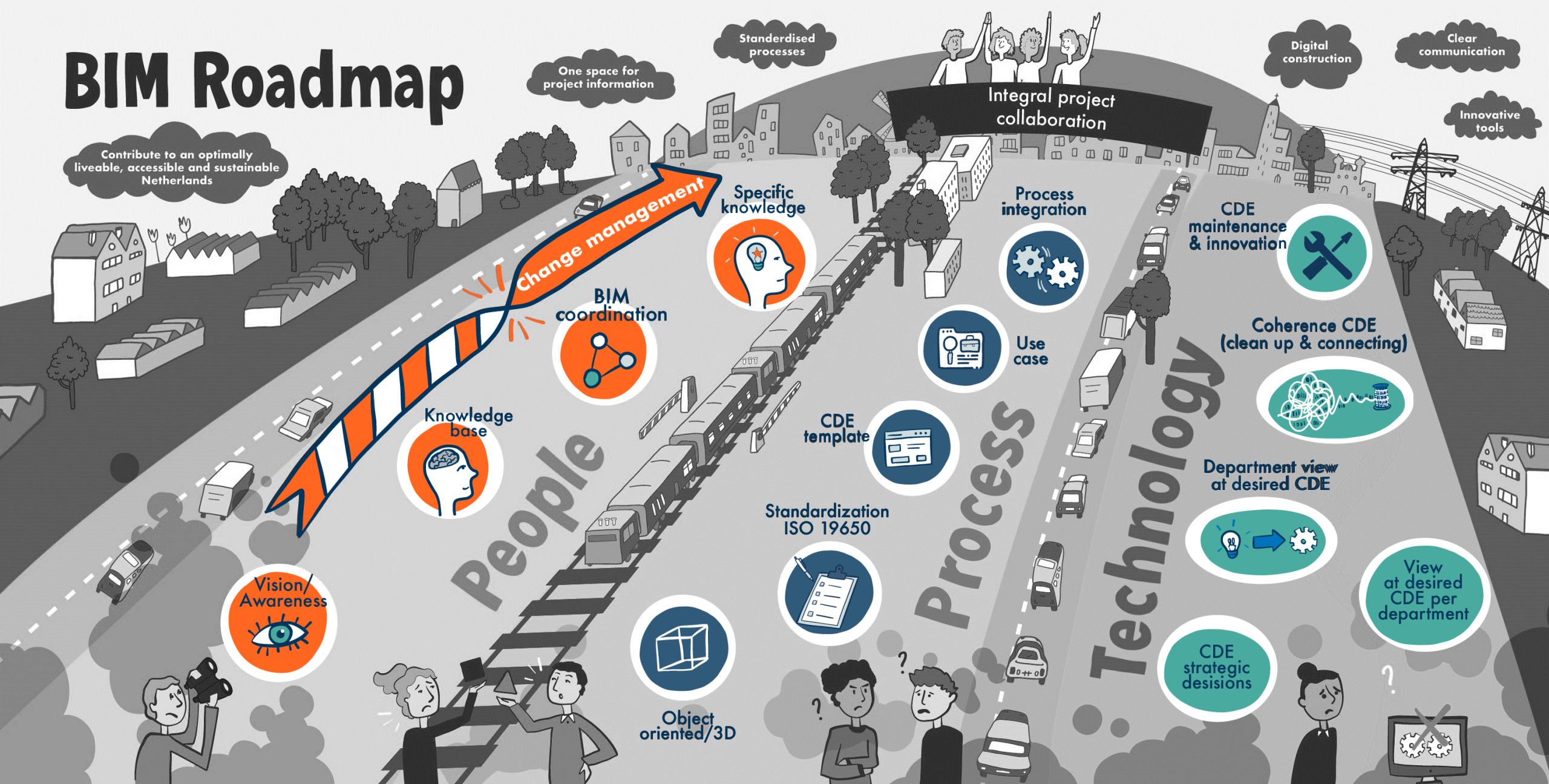
00:22

Verlaat Leerlijn

Taal: Nederlands



# BIM Roadmap



How do I leverage BIM?

What do I need to know to practice BIM?

Who can help me with BIM and who makes the decisions?

The software is not up to date and illogical



# BIM Roadmap

## ISO19650

Standardization  
ISO 19650



Movares samen werkt het

BIM UITVOERINGSPLAN

titel

Ondertitel

Versie: 2.2  
Status: Vrijgegeven  
Datum: 26-01-2023  
Kenmerk: B60-HS-PPL-22003448

### Inhoud

<b>1</b>	<b>Introductie</b>	<b>3</b>
1.1	Scope van het BIM Uitvoeringsplan	3
1.2	Informatiemanagement	3
1.3	Randvoorwaarden en richtlijnen opdrachtgever	3
1.4	Overige relevante startdocumenten	4
1.4.1	Ondersteunende bestanden	4
<b>2</b>	<b>Projectgegevens</b>	<b>4</b>
2.1	Doelen en toepassingen	4
2.2	Belangrijkste aandachtspunten en risico's	5
<b>3</b>	<b>Proces</b>	<b>5</b>
3.1	Projectteam	5
3.2	Rollen, taken en verantwoordelijkheden	6
3.3	Overlegstructuur	6
3.4	Documentmanagement	6
3.5	Proces modeluitwisseling	7
3.5.1	Vrijgavestroom	8
3.5.2	Projectplanning (MDIP)	8
3.6	Naamgeving model	8
3.7	Demarcatie van modellen	9
3.8	Communicatie van issues	9
<b>4</b>	<b>Mobilisatie</b>	<b>10</b>
4.1	Capaciteit	10
4.2	Kennis en ervaring	10
4.3	Software/ Hardware	10
4.4	Mobilisatieactiviteiten	10
4.4.1	Planning	10
<b>5</b>	<b>3D-modelafspraken</b>	<b>10</b>
5.1	Lokale positie	10
5.2	Bouwlaagindeling	11
5.3	Correct gebruik entiteiten bij een IFC-export	11
5.4	Structuur en naamgeving van objecten	11
5.5	Classificatiesystematiek	12
5.5.1	SBS – Systems Engineering	12
5.6	Gebruik propertysets	12
5.7	Doublures en doorsnijdingen	12
5.8	Ruimten	12
5.9	Installatietechnische systemen	12
5.10	Dragend/niet dragend	12
5.11	Inwendig/uitwendig	13
5.12	Brandveiligheid	13

### Offertebrief

BIM

BIM van toepassing?

Organization

Client

Organization

Projectmanager name

Projectmanager telephone

Projectmanager email



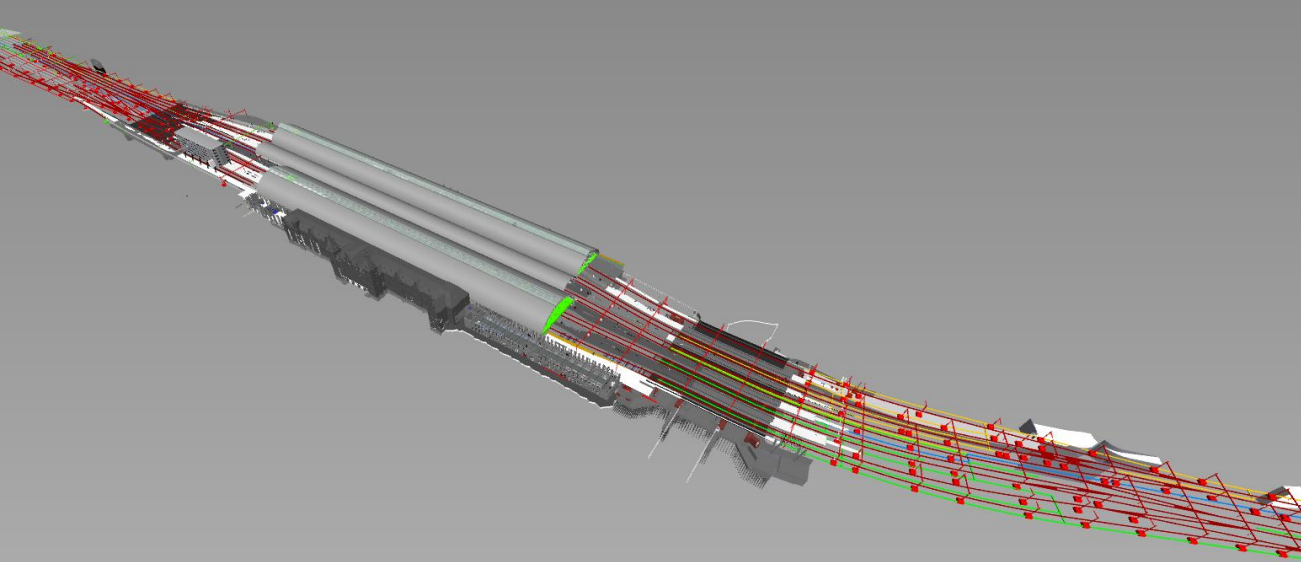


# BIM Roadmap

## Complete GeoBIM model

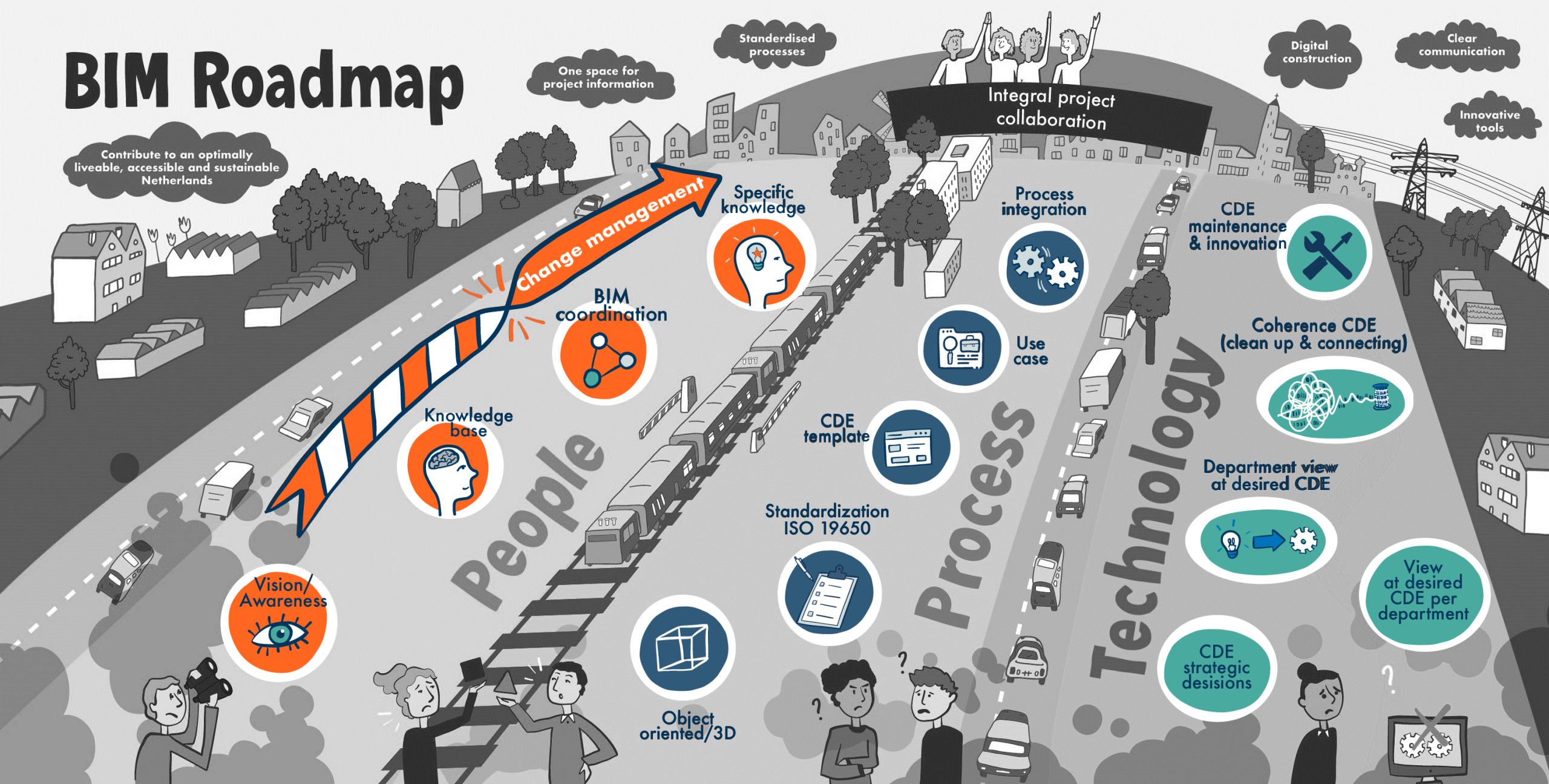


Object oriented/3D





# BIM Roadmap



How do I leverage BIM?

What do I need to know to practice BIM?

Who can help me with BIM and who makes the decisions?

The software is not up to date and illogical



# BIM Roadmap

## Common Data Environment (CDE)



ArcGIS®



**AUTODESK**  
Construction Cloud





# BIM Roadmap

Contribute to an optimally liveable, accessible and sustainable Netherlands

The Movares BIM Roadmap contains MBA change management knowledge and combines it with over a decade of digitization experience. This roadmap helps guide the process engage stakeholders to stand out in digitization.

At first people were sceptical about the BIM program. Now they recognize the roadmap visual and see the progress. We created hero's and people want to join in because they see the success. It's a great way to get your human talent on board and activated.

How do I leverage BIM?

What do I need to know to practice BIM?

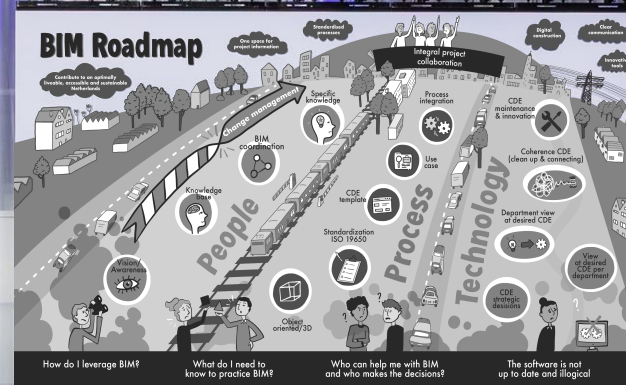
Who can help me with BIM and who makes the decisions?

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# BIM Roadmap

## Digital Transformation Roadmap





# BIM Roadmap

## Digital Transformation Roadmap





A large, glowing sphere with a complex, multi-colored internal structure of blue, orange, and purple lines. The sphere is set against a night sky with a sunset or sunrise glow on the right. In the background, there are silhouettes of buildings and a tall tower. The foreground shows a modern building with a parking lot and some vehicles.

**AUTODESK**  
Make Anything







# BIM Roadmap

## Digital Transformation Roadmap

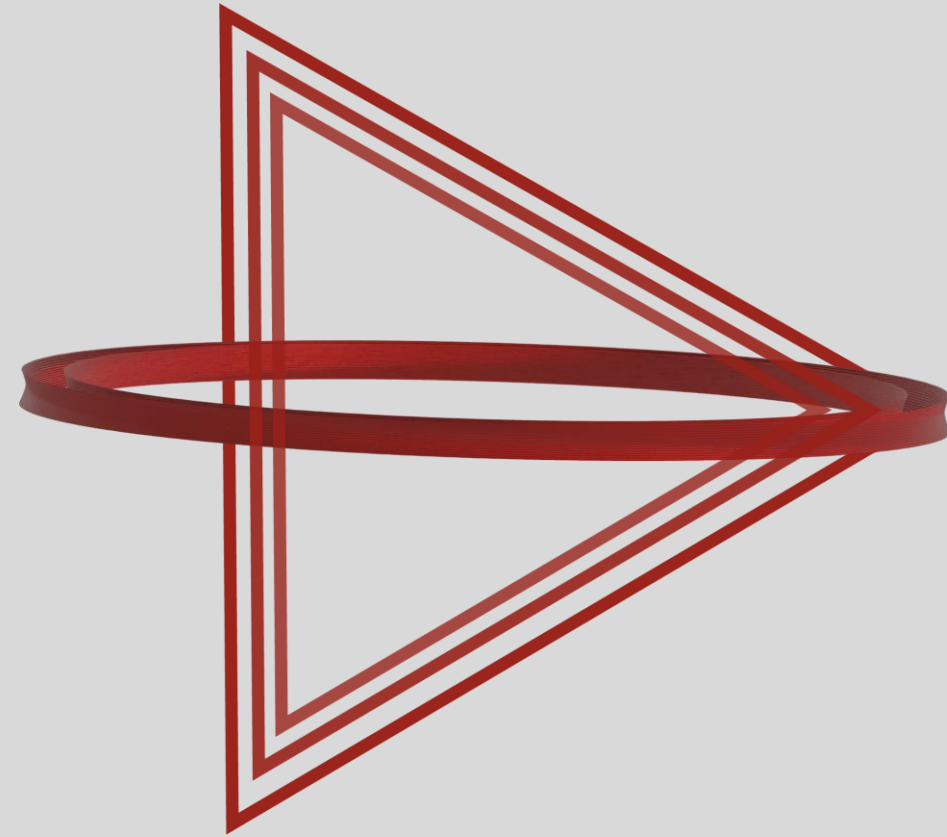






Question 1  
 Problem 1  
 Opportunity 1

Question 2  
 Problem 2  
 Opportunity 2



# Chapter 3

## Digital Transformation Roadmap



# Goal of the Transformation

## PEOPLE

### Change management

- Specific knowledge
- Implementation
- Knowledge base
- Vision/Awareness

## PROCESS

- Process integration
- Use case
- Templates
- Data structure
- Process Standardization

## TECHNOLOGY

- IT maintenance & innovation
- IT coherence (clean up & connect)
- Implementation plan
- Individual view at desired IT
- IT strategic decisions

- Culture / Behavior
- Rituals / Values
- Rituals / Values
- Rituals / Values
- Rituals / Values

Company vision - mission

Question 1  
Problem 1  
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Question 2  
Problem 2  
Opportunity 2

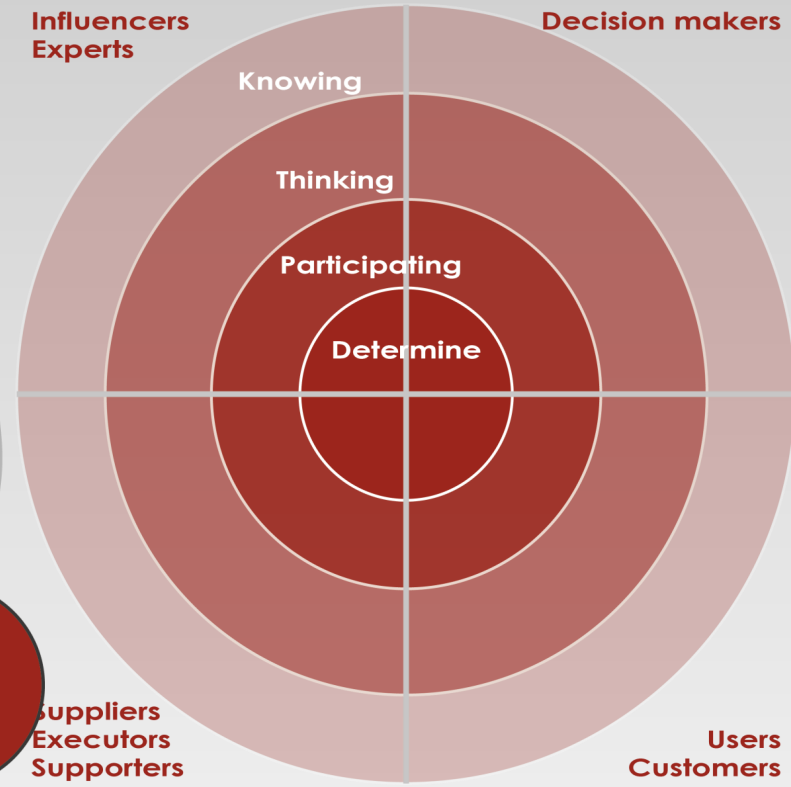
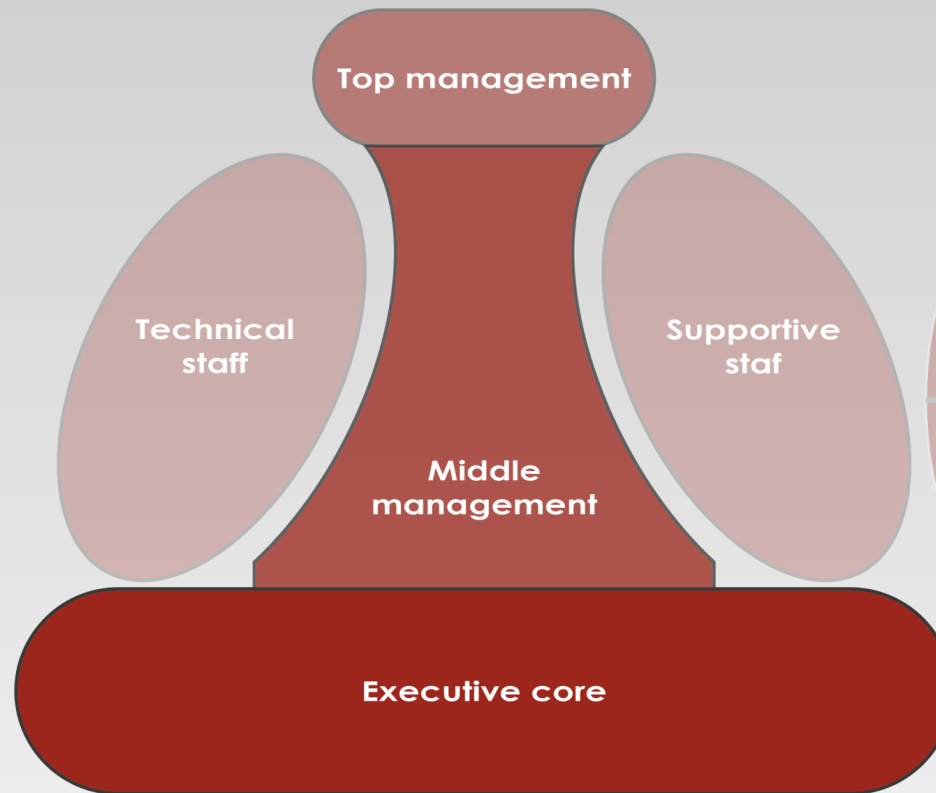
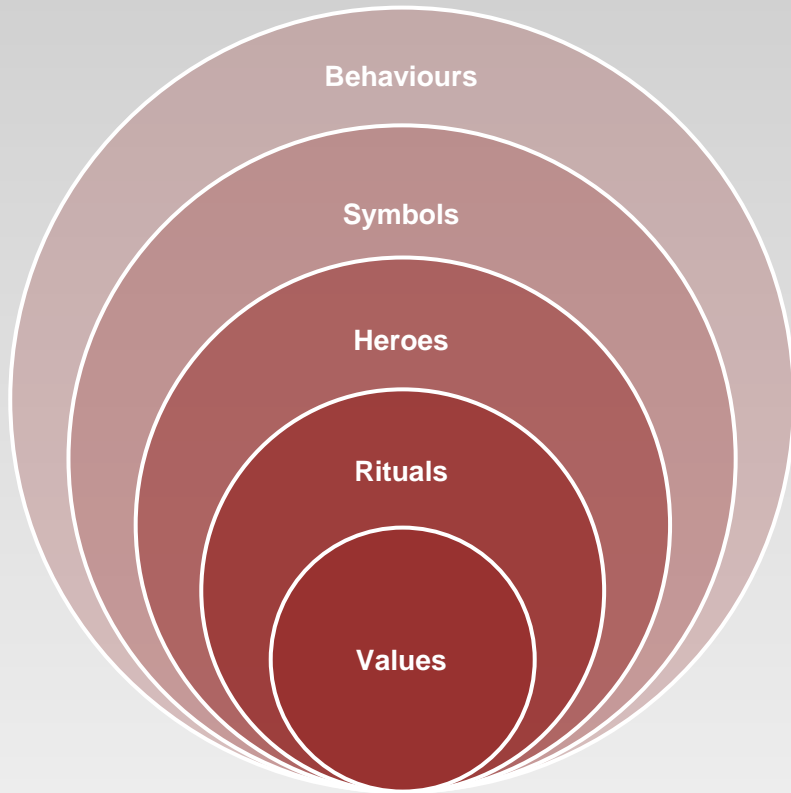
Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4



# Background

## Principles & models



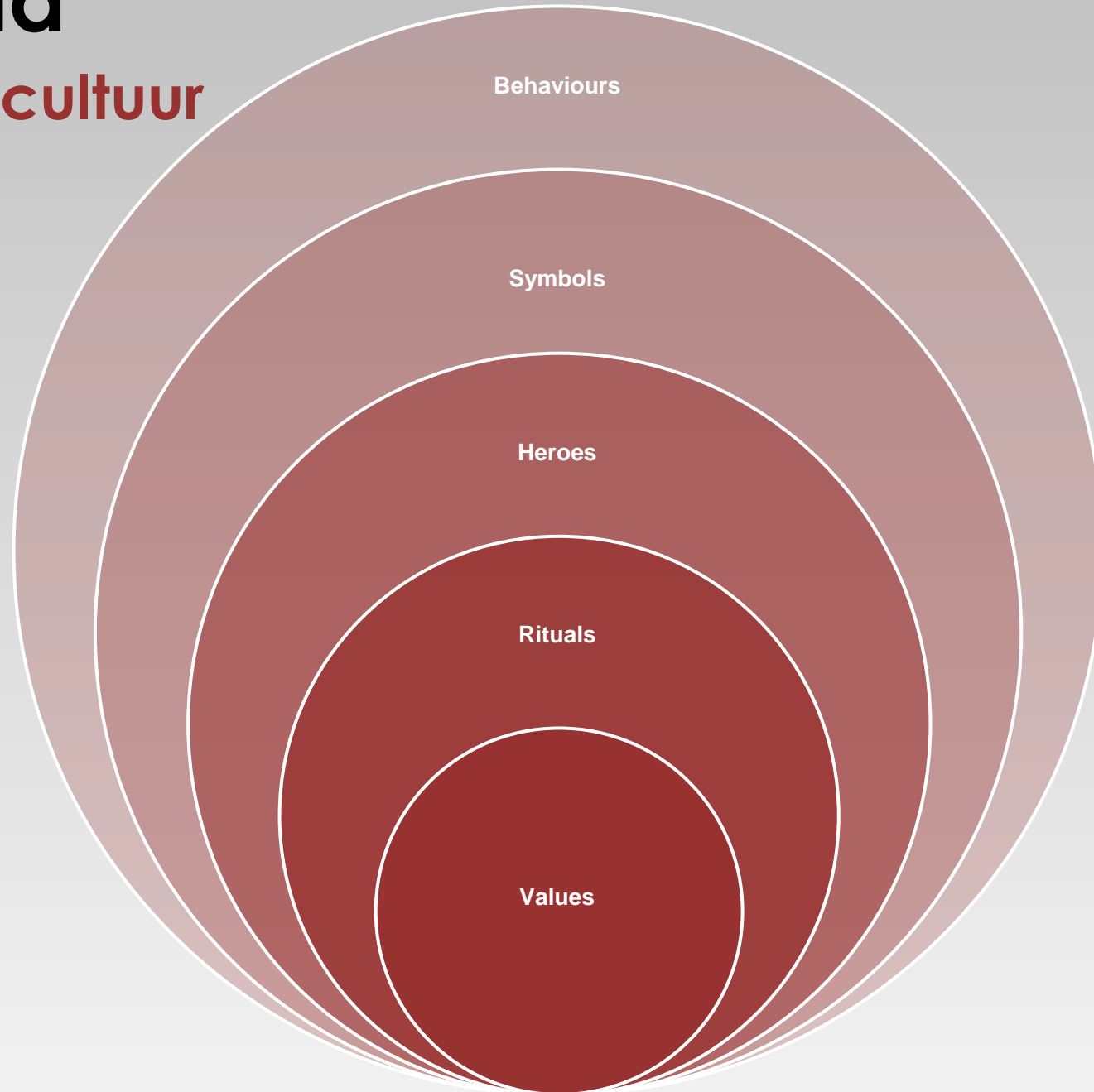


# Background

## Organizational cultuur

Geert Hofstede

Social psychologist



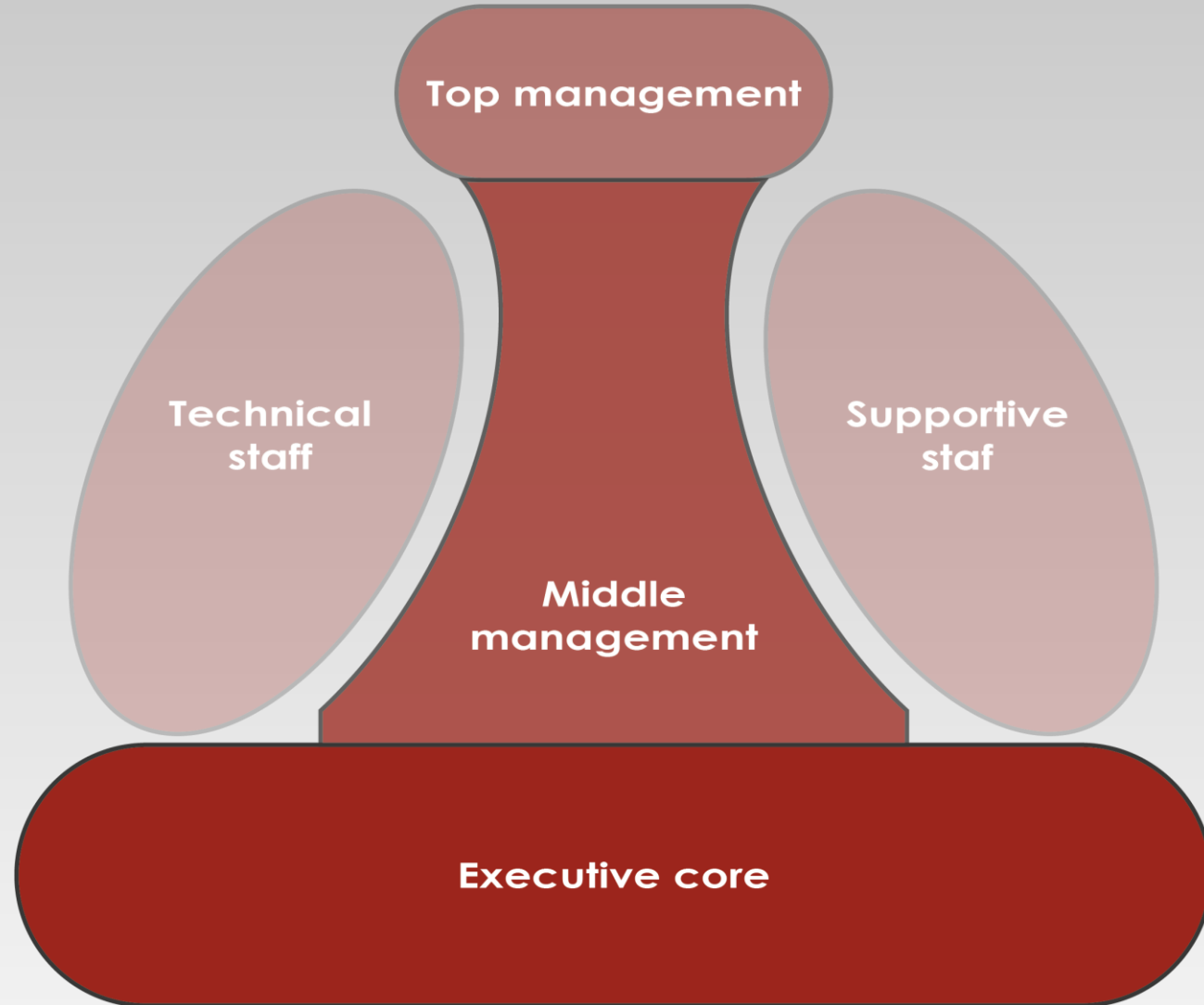


# Background

## Organizational structure & determine stakeholders

Henry Mintzberg

Management scientist



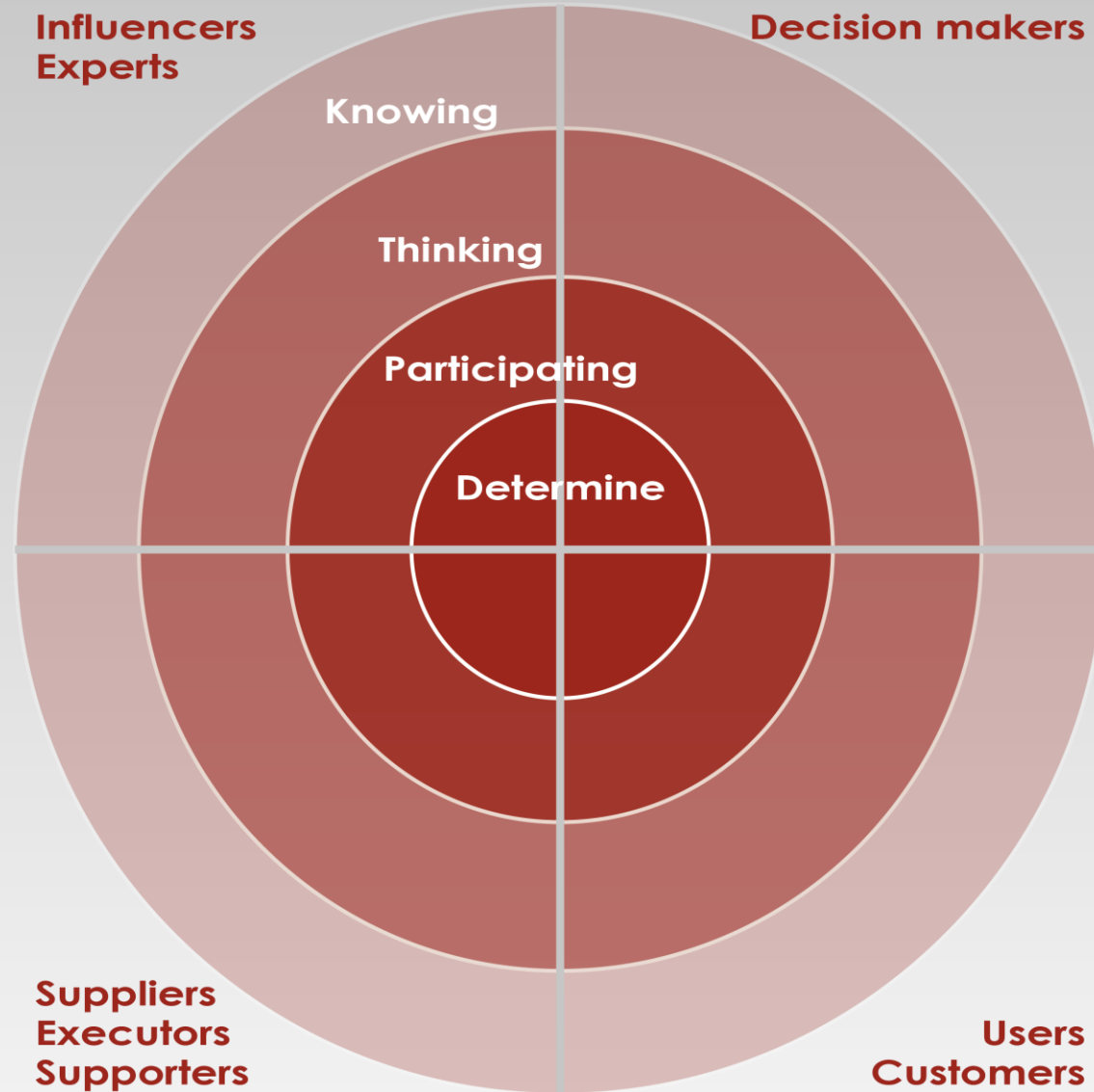


# Background

## Stakeholderanalysis & communication

Stephen Covey

Circles of influence

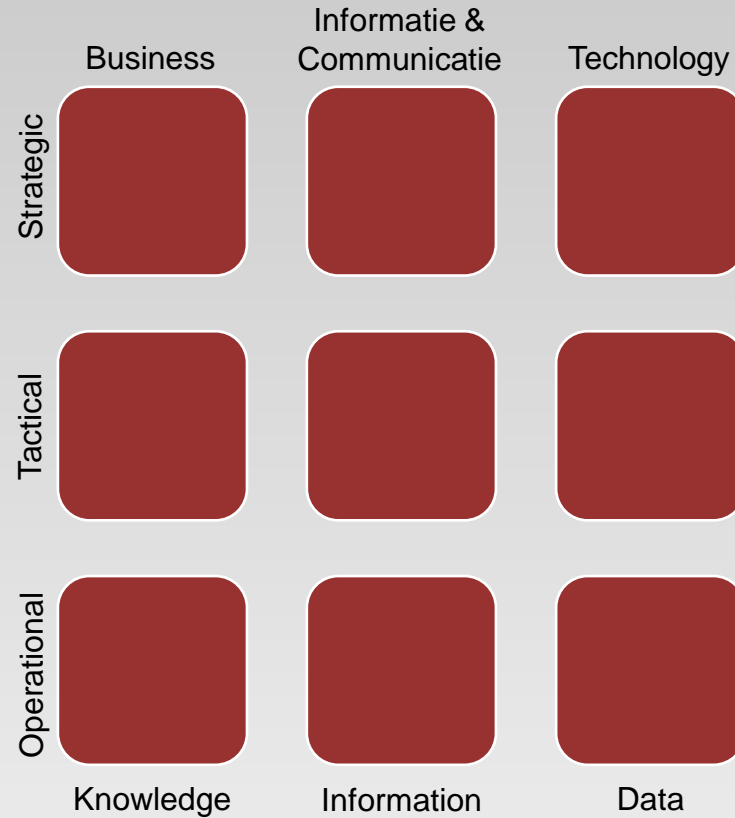


# Background

## AIM-model

Rik Maes

IT in the organization



Source: Nine-plane model of Rik Maes, officially called the Amsterdam Informatiemanagement Model (AIM).



Company vision - mission

Culture / Behavior

Rituals / Values

Rituals / Values

Rituals / Values

Rituals / Values

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Opportunity 2

Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4

# Goal of the Transformation

Company vision - mission

Culture / Behavior

Rituals / Values

Rituals / Values

Rituals / Values

Rituals / Values

PEOPLE

Change management

PROCESS

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Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4



# Goal of the Transformation

PEOPLE

Change management

Vision/  
Awareness



Knowledge base

Implementation



Specific knowledge

TECHNOLOGY



Process integration

Use case



Templates

Data structure



Process Standardization



IT maintenance & innovation

IT coherence  
(clean up & connect)



Implementation plan

Individual view  
at desired IT



IT strategic decisions

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Problem 2  
Opportunity 2

Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4

Culture / Behavior

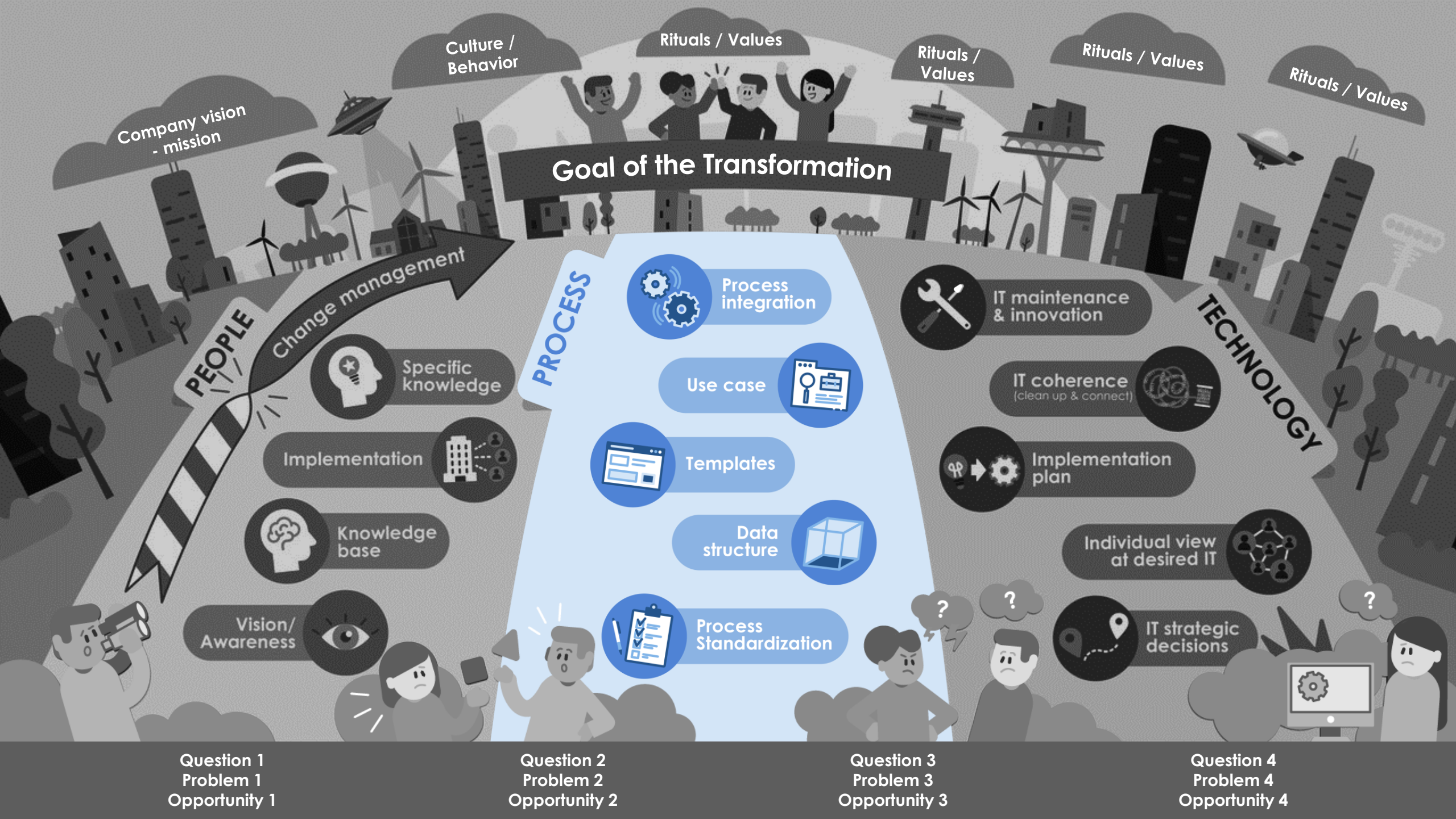
Rituals / Values

Rituals / Values

Rituals / Values

Rituals / Values

Company vision - mission



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Problem 3  
Opportunity 3

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Opportunity 4



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Rituals / Values

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Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4



**PEOPLE**

Change management

**PROCESS**

**TECHNOLOGY**

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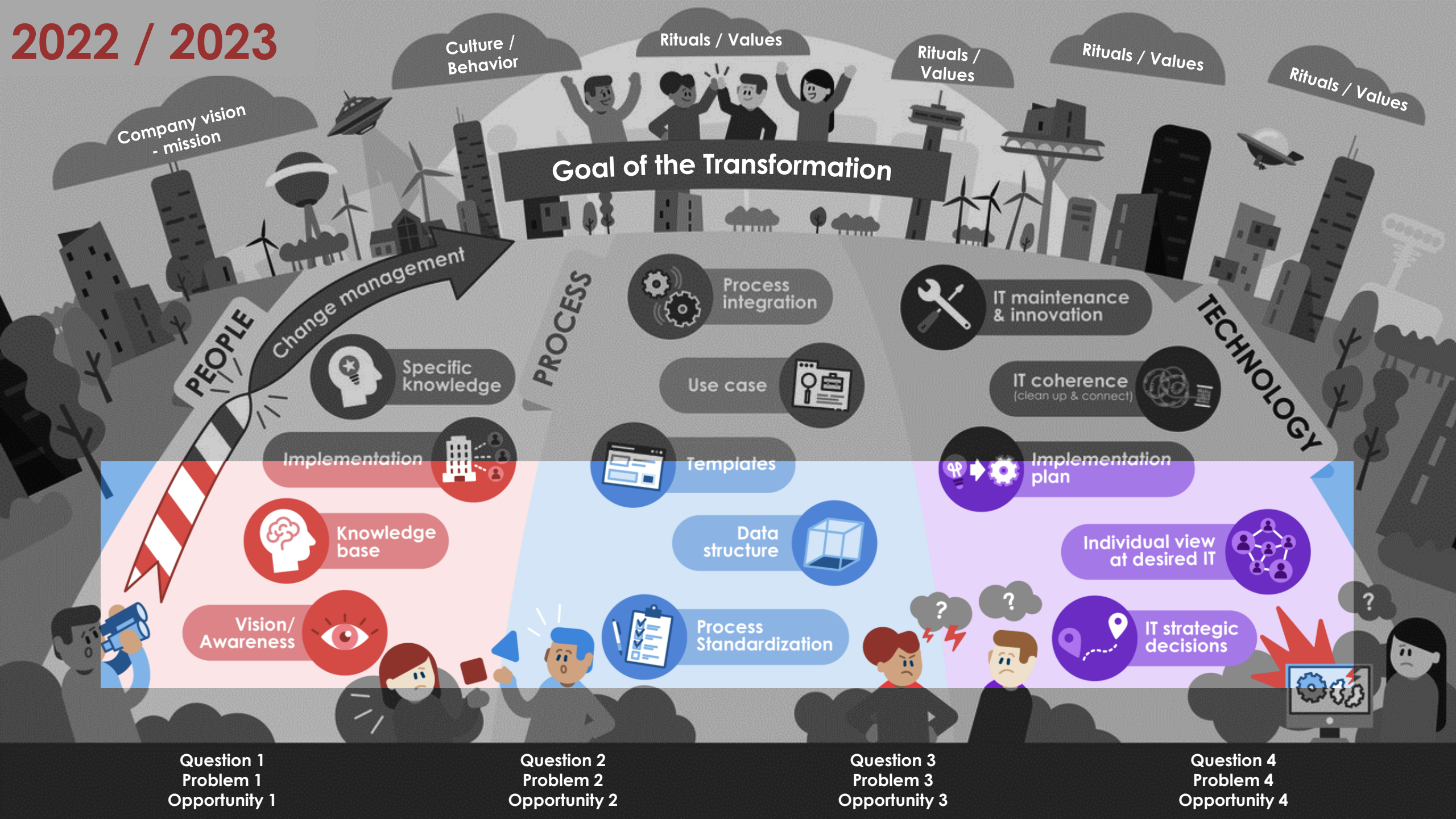
Question 1  
Problem 1  
Opportunity 1

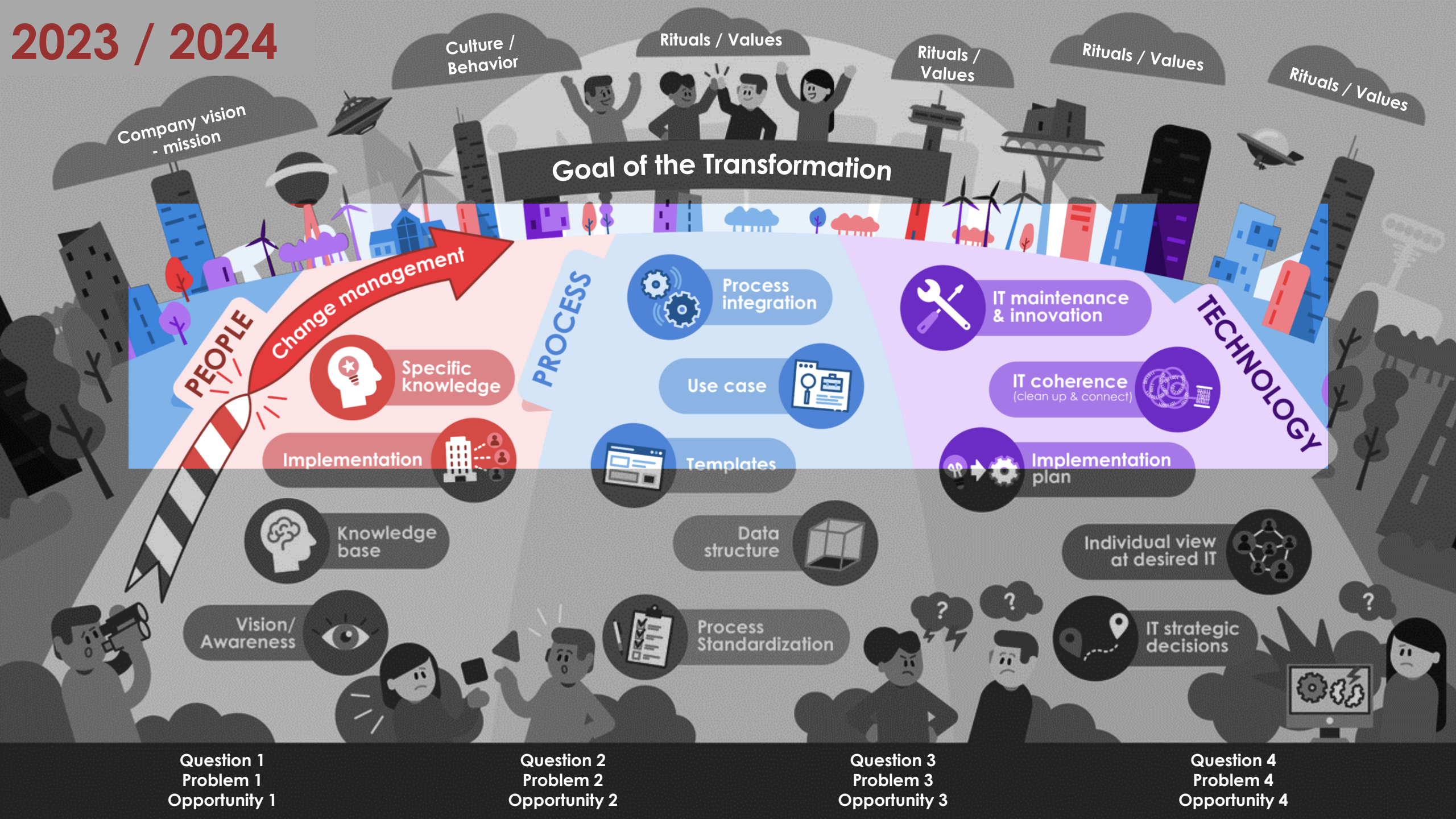
Question 2  
Problem 2  
Opportunity 2

Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4







Company vision - mission

Culture / Behavior

Rituals / Values

Rituals / Values

Rituals / Values

Rituals / Values

## Goal of the Transformation

### PEOPLE

**Change management**

Specific knowledge

Implementation

### PROCESS

Process integration

Use case

Templates

Data structure

Process Standardization

### TECHNOLOGY

IT maintenance & innovation

IT coherence (clean up & connect)

Implementation plan

Individual view at desired IT

IT strategic decisions

Question 1  
Problem 1  
Opportunity 1

Question 2  
Problem 2  
Opportunity 2

Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4



Company vision - mission

Culture / Behavior

Rituals / Values

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# Goal of the Transformation

Change management

PEOPLE

PROCESS

TECHNOLOGY

Specific knowledge

Implementation

Knowledge base

Vision/Awareness

Process integration

Use case

Templates

Data structure

Process Standardization

IT maintenance & innovation

IT coherence (clean up & connect)

Implementation plan

Individual view at desired IT

IT strategic decisions

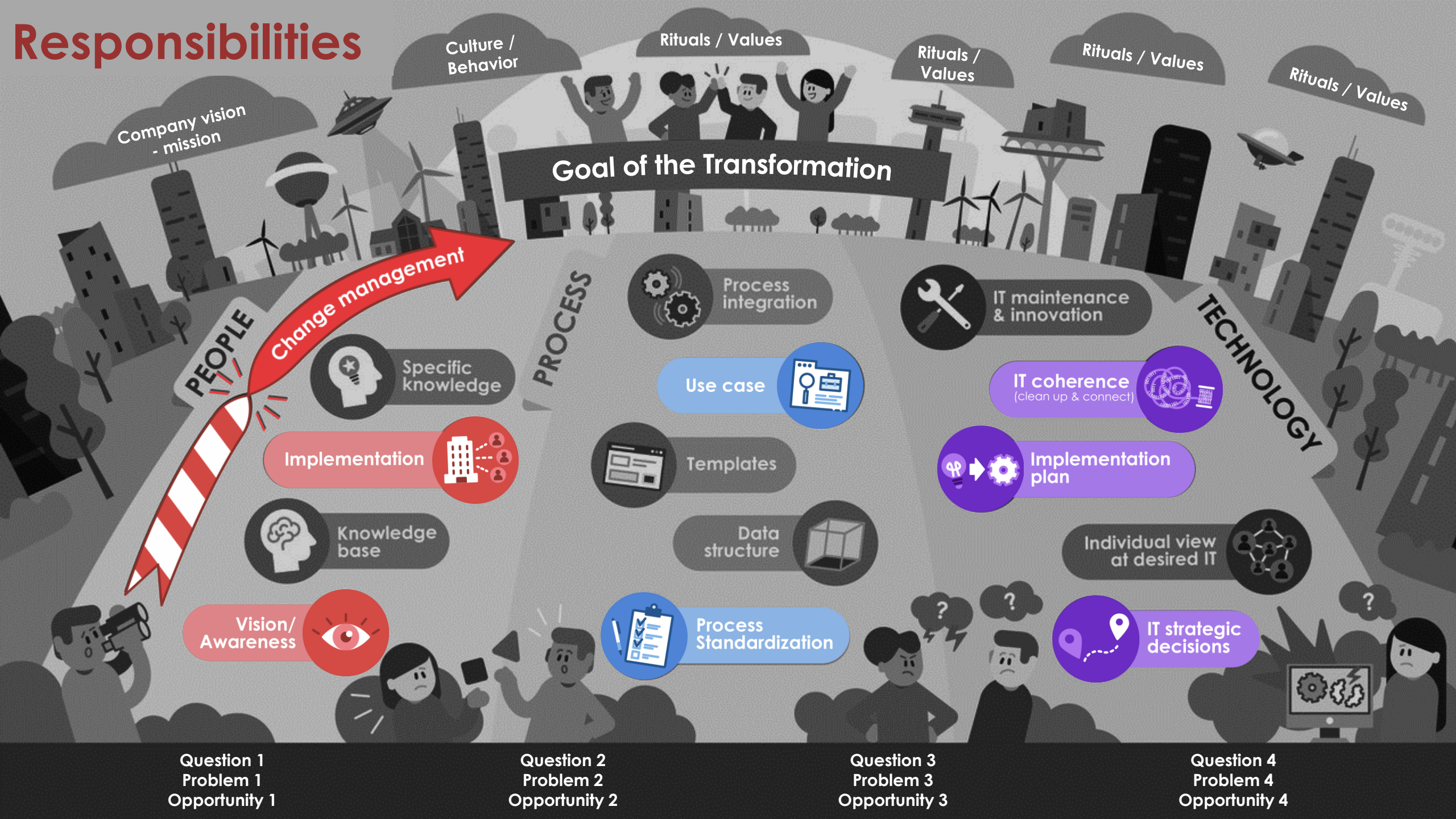
Question 1  
Problem 1  
Opportunity 1

Question 2  
Problem 2  
Opportunity 2

Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4

# Responsibilities



Question 1  
Problem 1  
Opportunity 1

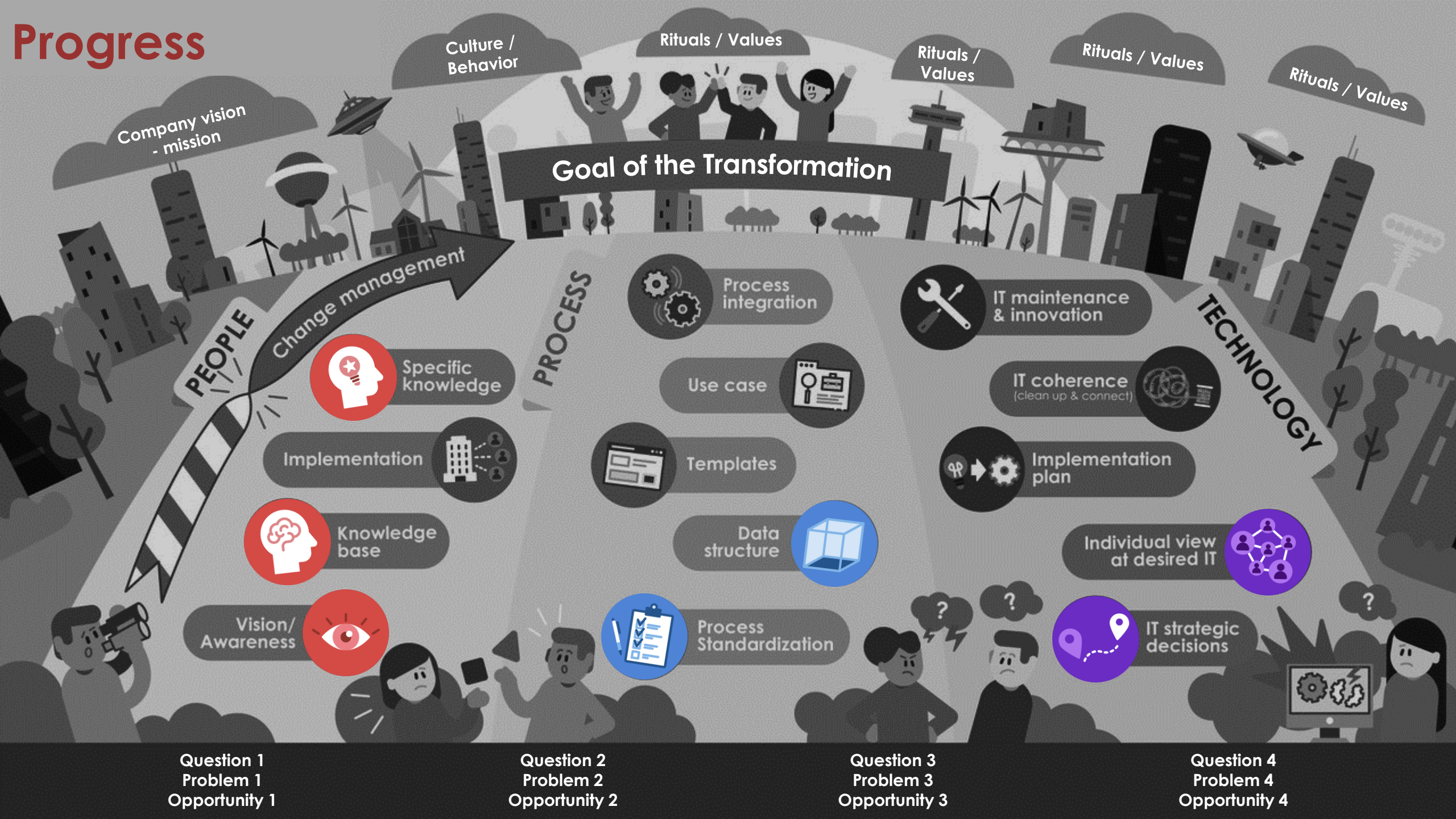
Question 2  
Problem 2  
Opportunity 2

Question 3  
Problem 3  
Opportunity 3

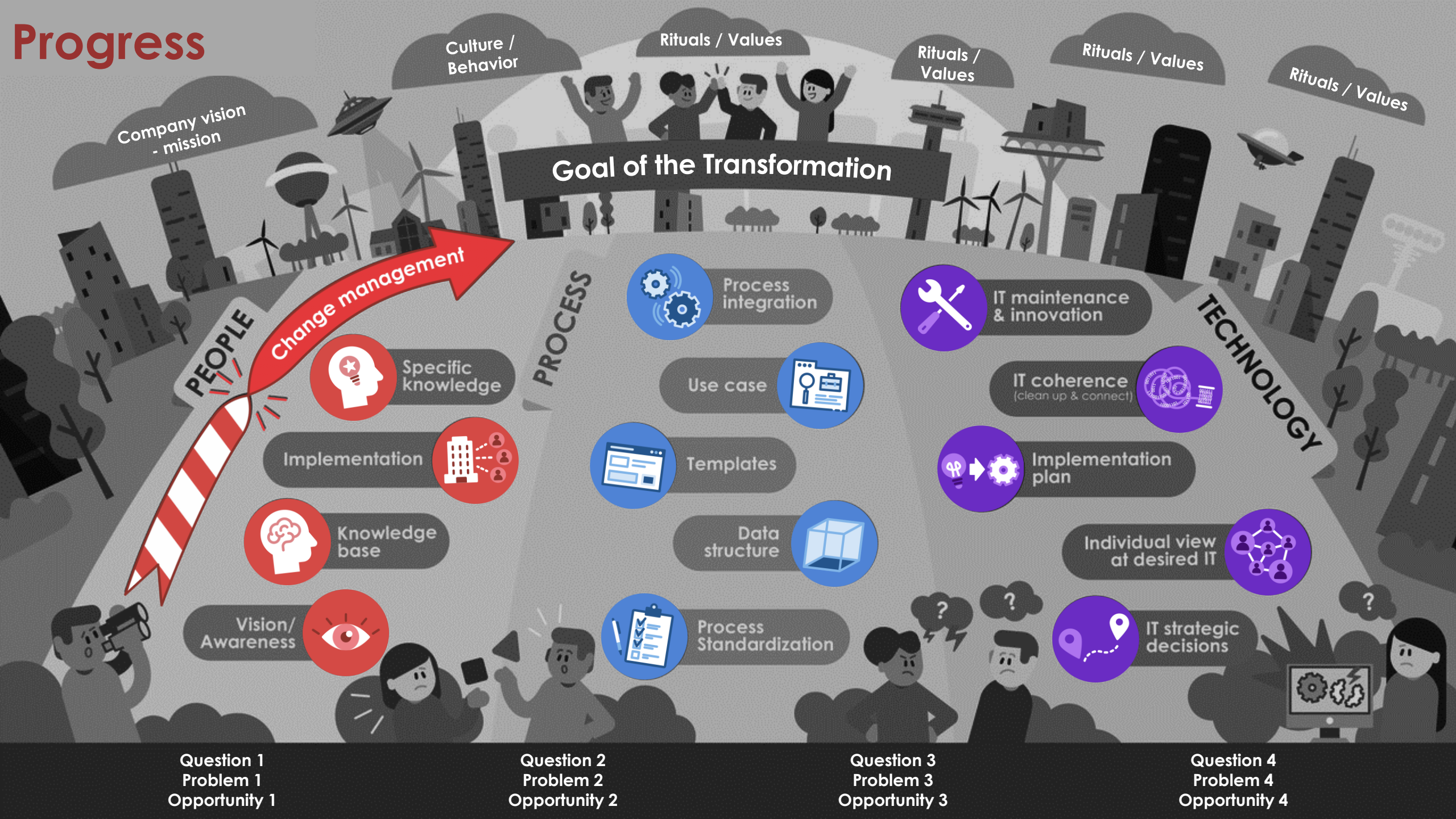
Question 4  
Problem 4  
Opportunity 4



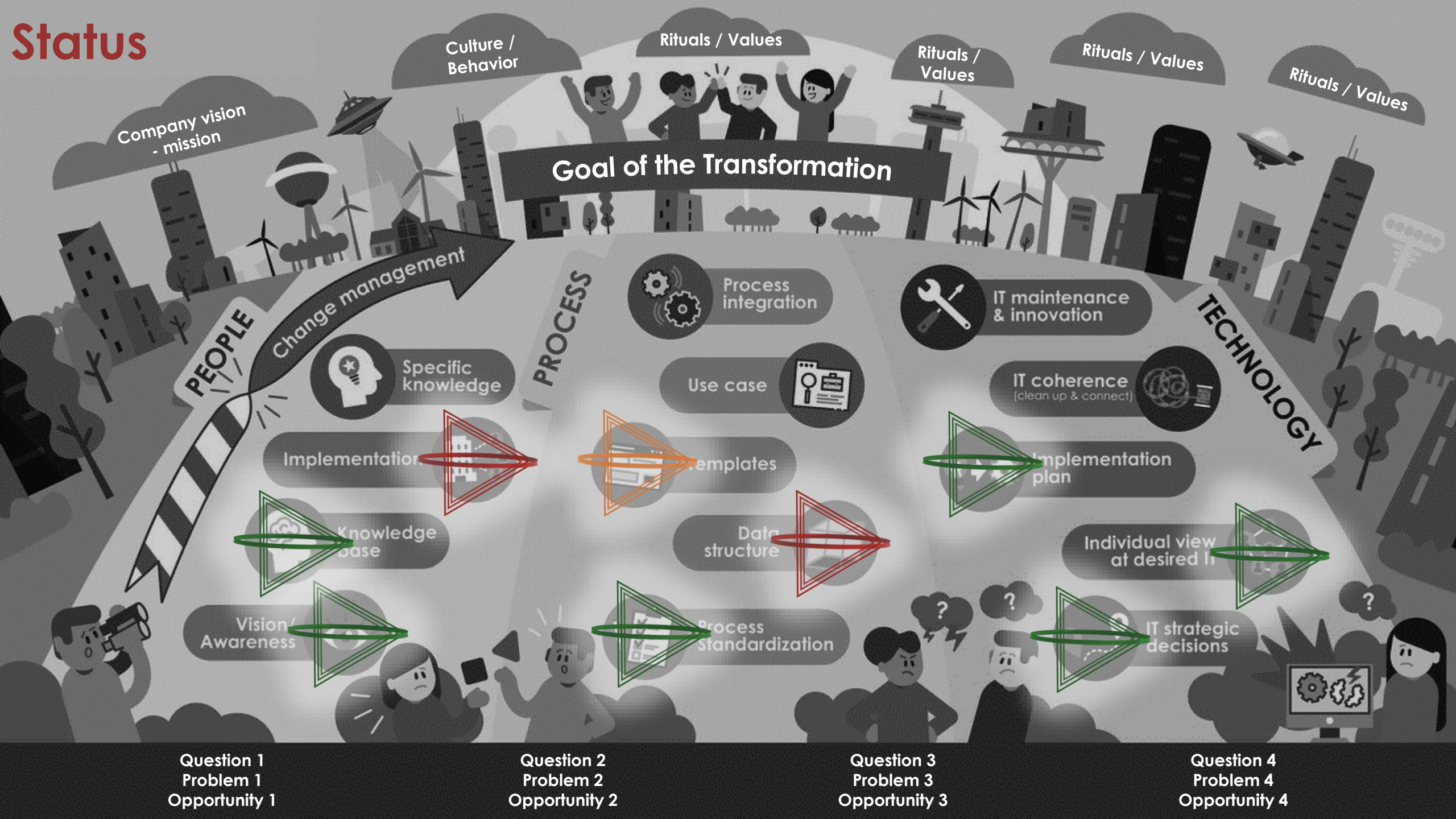
# Progress



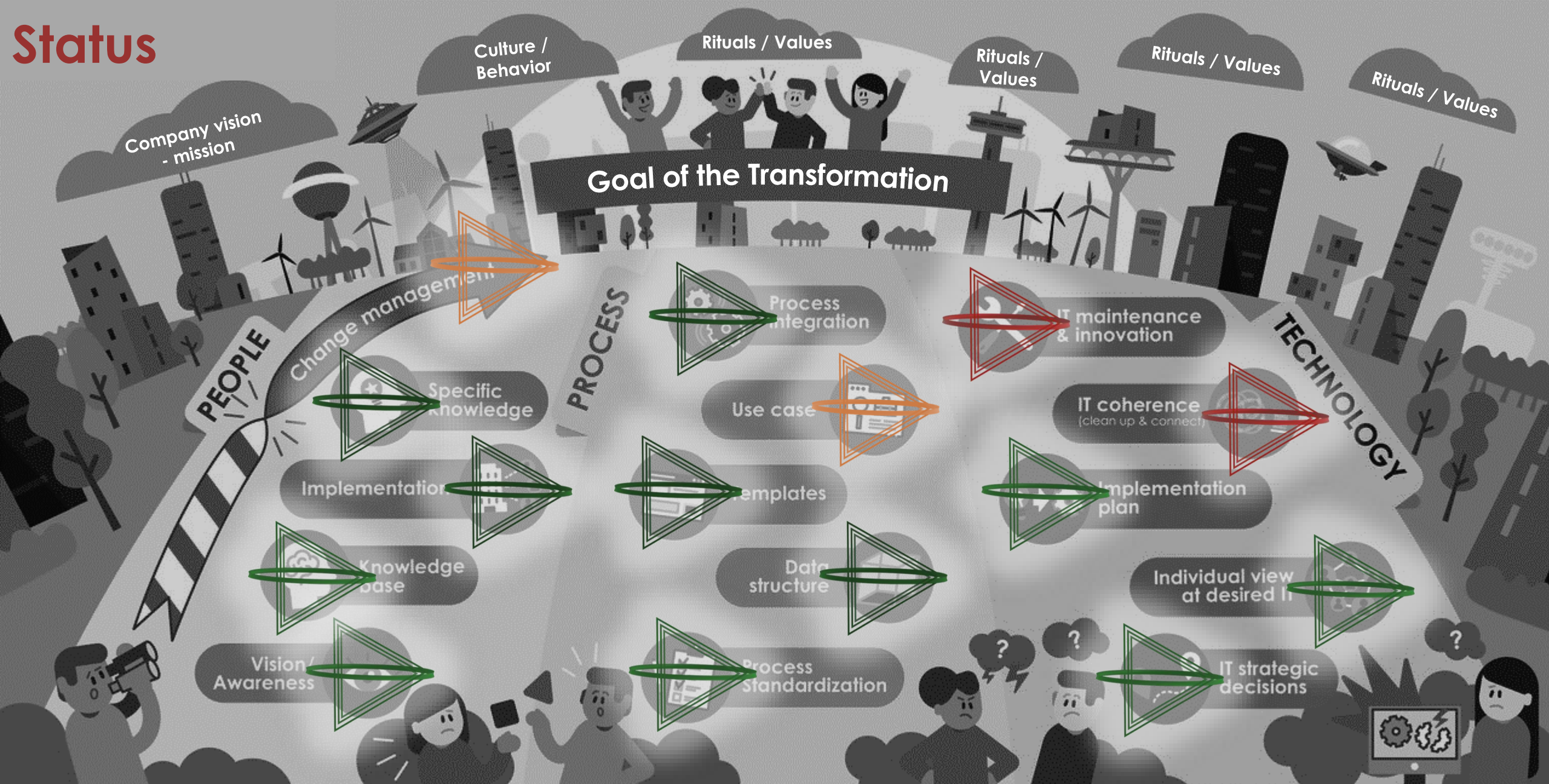
# Progress











Question 1  
Problem 1  
Opportunity 1

Question 2  
Problem 2  
Opportunity 2

Question 3  
Problem 3  
Opportunity 3

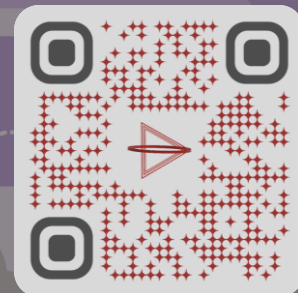
Question 4  
Problem 4  
Opportunity 4



The Digital Transformation Roadmap is a proven method for digitization and change management. Every company should be able to use this tool to save time for digital transformation, have a better Return On Investment (ROI) and more success and fun with taking a step into the future. That's why I wrote a book to explain how to leverage this roadmap method.

The digital transformation roadmap – with examples of the BIM implementation at Movares.

If you're interested have a look at:  
[RRijkersManagement.com](http://RRijkersManagement.com)



Question 1  
Problem 1  
Opportunity 1

Question 2  
Problem 2  
Opportunity 2

Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4

# Goal of the Transformation

## PEOPLE

### Change management

- Specific knowledge
- Implementation
- Knowledge base
- Vision/Awareness

## PROCESS

- Process integration
- Use case
- Templates
- Data structure
- Process Standardization

## TECHNOLOGY

- IT maintenance & innovation
- IT coherence (clean up & connect)
- Implementation plan
- Individual view at desired IT
- IT strategic decisions

- Culture / Behavior
- Rituals / Values
- Rituals / Values
- Rituals / Values
- Rituals / Values

Company vision - mission

Question 1  
Problem 1  
Opportunity 1

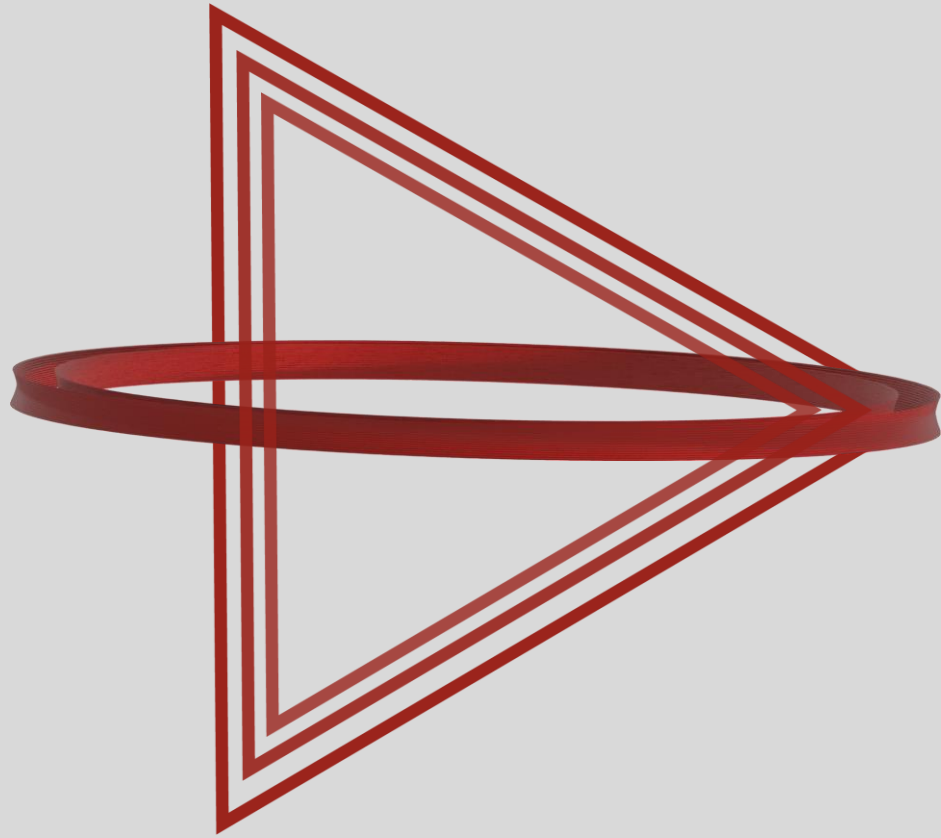
Question 2  
Problem 2  
Opportunity 2

Question 3  
Problem 3  
Opportunity 3

Question 4  
Problem 4  
Opportunity 4

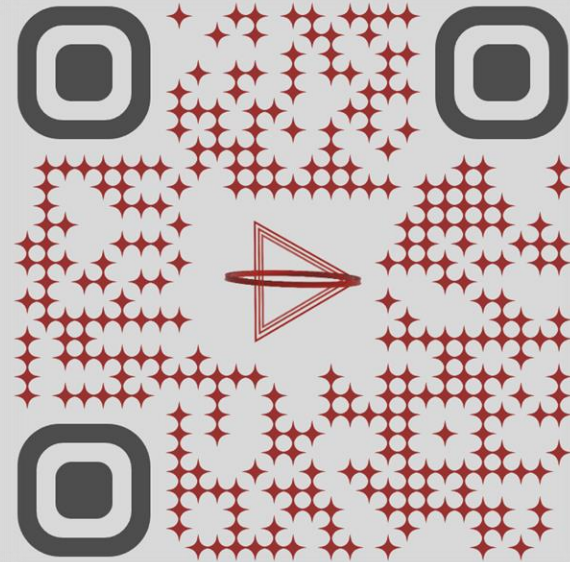






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