Transformation Lead

Application Koen Bothmer

Content

- Short refresher on me

- The job

- The scenario

- Our future together

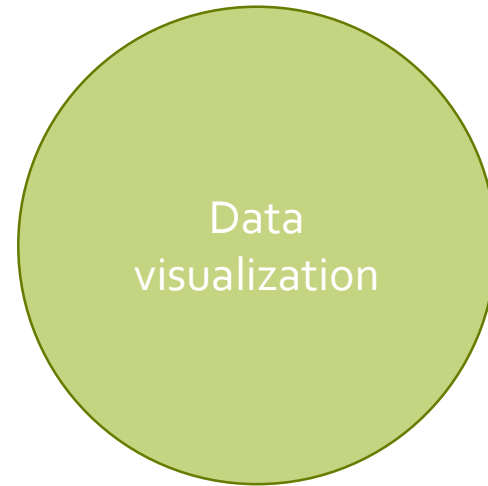- Conclusion

On me

- Our Similarities:

  - Data Driven

    - Innovative pioneer
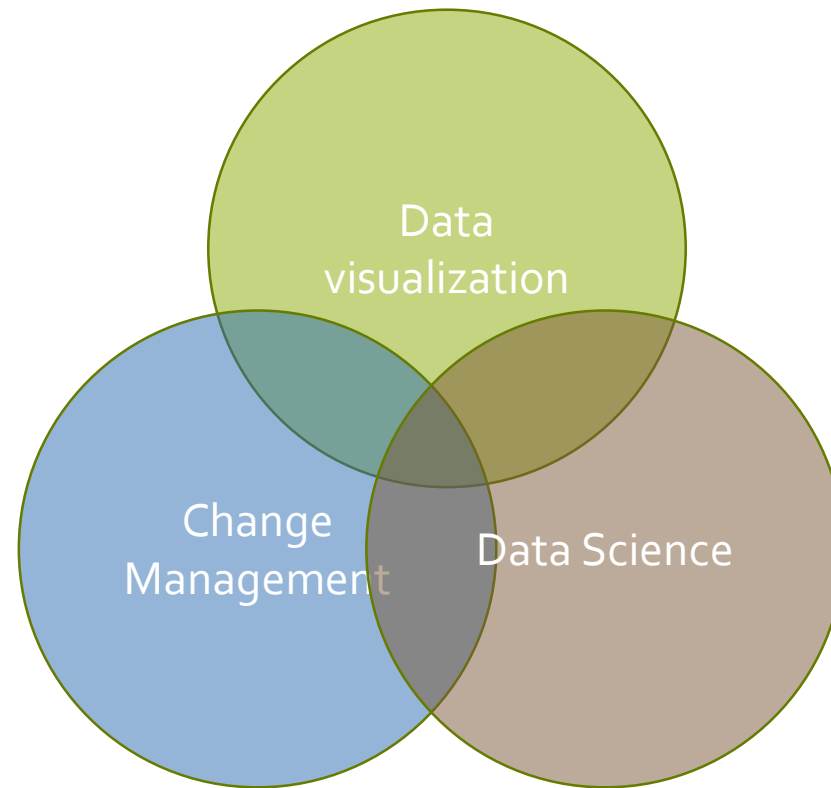
      - Complex process engineering environment
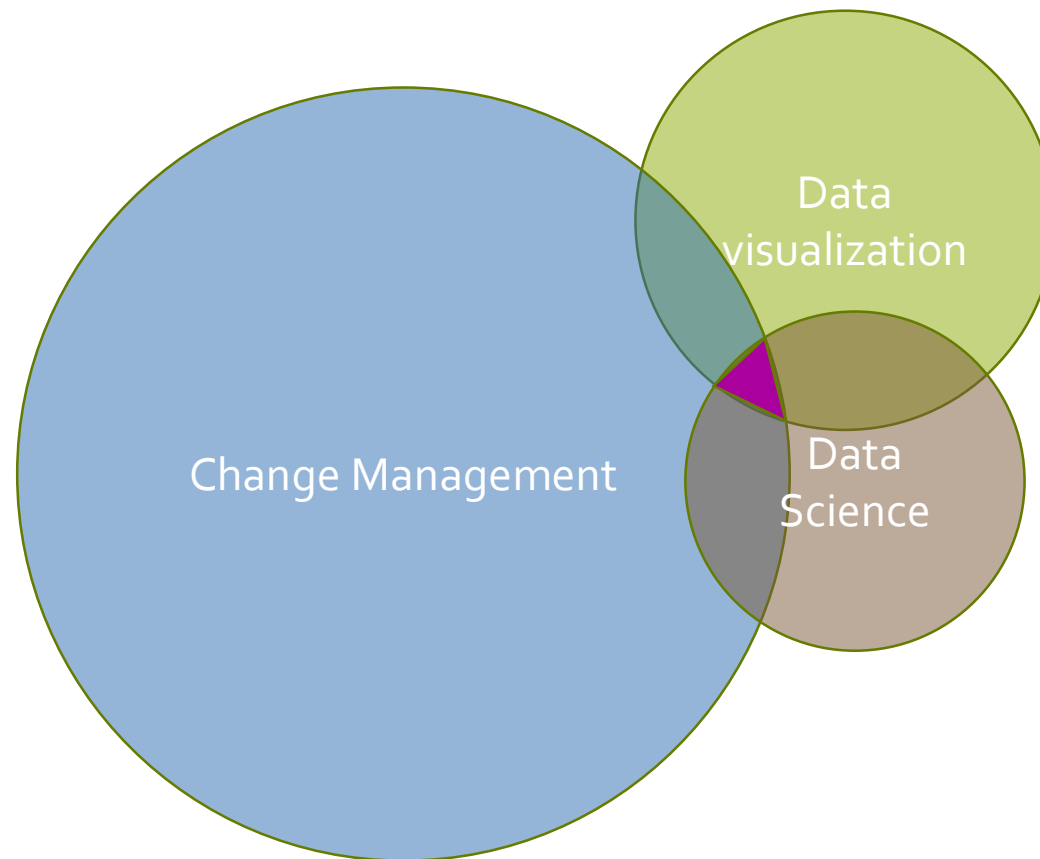

Figure 1. Koen Bothmer.

The Job

Data visualization

The Job

The Job

Figure 2. Developer Central Control Room Venn Diagram

Note: Loosely after the Data Science Venn Diagram (Conway, 2010)

Developer Control Room or Change Catalyst?
(Macpherson 2017)

- 88% of change initiatives fail

- 7/8 of these due to "The Leadership"

- Bridge between Leadership and Employees

Figure 3. Golden Gate Bridge. Adapted from "Bridge Over Calm Waters", by Urbanos, M. , n.d. retrieved from https://unsplash.com/photos/vj_9l2ofzjo

How to change?

Operations | Processing | Decision makers

| Field data Sensor data Local files | → Data → | Central Control Room | → Information → | Dashboards for management and board Process Control |

| Suppliers | Pull | Process | Push | Consumers |
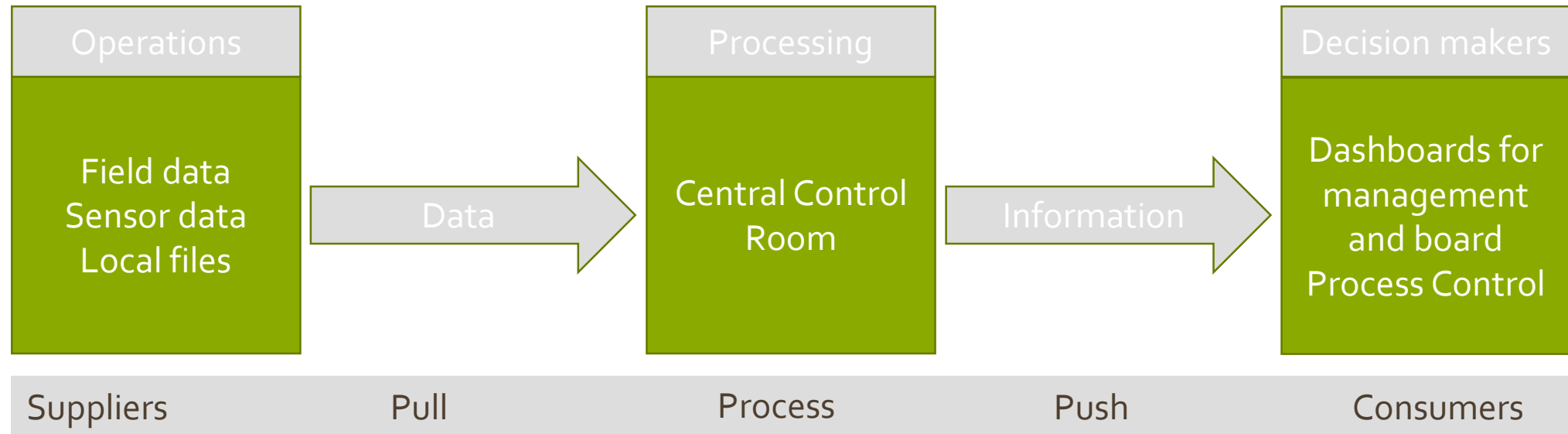
Figure 4. Supplier Consumer Model

How to change?

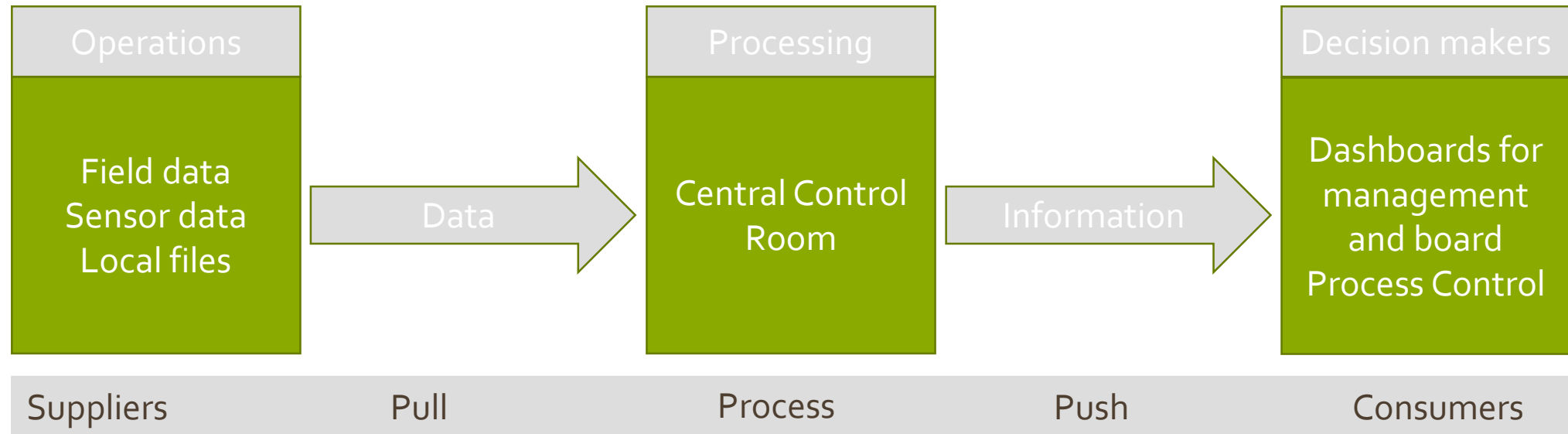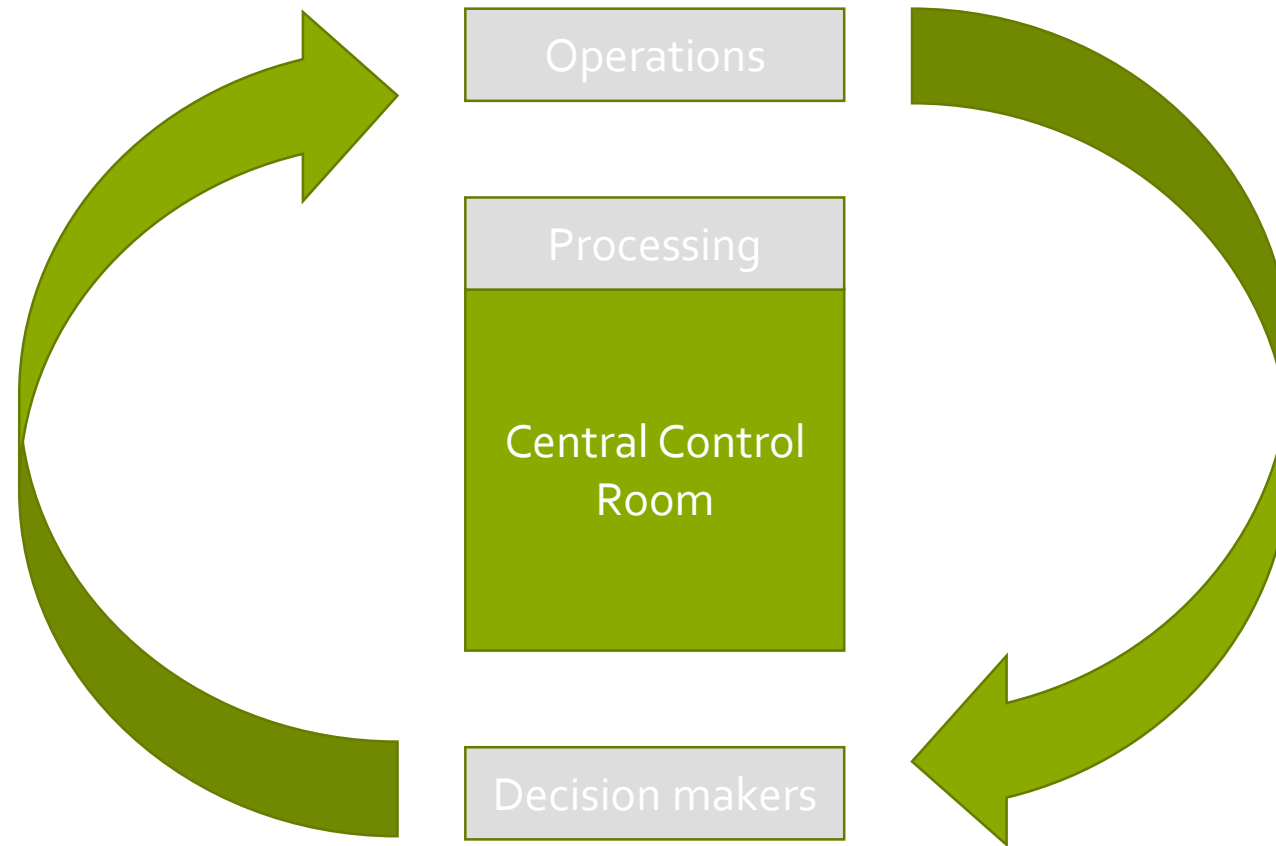| Suppliers | Pull | Process | Push | Consumers |

Figure 4. Supplier Consumer Model

- This is destined to fail as described in paragraph 'The Fallacy of Programmatic Change' (Beer et al, 1990)

Koen Bothmer | Fictional Application Transformation Lead

Alternative model: Feedback Loop

Operations

Processing

Central Control Room

Decision makers

Figure 5. Central Control Room Feedback Loop.

Note: Inspired by Hub and Spoke Model for Data Management (Polarising, 2018)

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How to do change?

Short term Priorities after Eight Step Change Model (Kotter, 1995)

1. Establish a sense of urgency

2. Forming a powerful guiding coalition

3. Creating a vision

4. Communicating the vision

5. Empower others to act on vision

6. Planning for and creating short-term wins

7. Consolidate improvements and producing still more change

8. Institutionalize new approaches

How to do change?

Table 1. Short Term Efforts

	Operational	Tactical	Strategical
Empower others			
Short-term wins			

How to do change?

Table 1. Short Term Efforts

	Operational	**Tactical**	**Strategical**
Empower others	Automation of boring tasks Analytical tools Automated alerts	Visualize status of water system	Visualize progress
Short-term wins			

How to do change?

Table 1. Short Term Efforts

	Operational	Tactical	Strategical
Empower others	Automation of boring tasks Analytical tools Automated alerts	Visualize status of water system	Visualize progress
Short-term wins	Find one common frustration and solve it with data	Quick proof of concept of crucial part of process	Quickly deliver development plan and show results

The Scenario

Table 2. Scenario by Stereotypes

Participants	Stereotype (Atkisson, 2016)	Approach
Pressure from top management and executive board		
Employees of flood defenses department are not willing to cooperate		

The Scenario

Table 2. Scenario by Stereotypes

Participants	Stereotype (Atkisson, 2016)	Approach
Pressure from top management and executive board	Controllers	
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The Scenario

Table 2. Scenario by Stereotypes

Participants	Stereotype (Atkisson, 2016)	Approach
Pressure from top management and executive board	Controllers	Show quick Wins Explain our plan
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The Scenario

Table 2. Scenario by Stereotypes

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Employees of flood defenses department are not willing to cooperate	Laggards, Reactionaries or Curmudgeons?	

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The Scenario

Table 2. Scenario by Stereotypes

Participants	Stereotype (Atkisson, 2016)	Approach
Pressure from top management and executive board	Controllers	Show quick Wins Explain our plan
Employees of flood defenses department are not willing to cooperate	Laggards, Reactionaries or Curmudgeons?	Connect Lead by example Give feedback
Find those most willing to cooperate in the team	Change agents, Transformers	Form coalition Enable them to help others

The Journey

Prescriptive

How to make it happen?

Predictive

What will happen?

Diagnostic

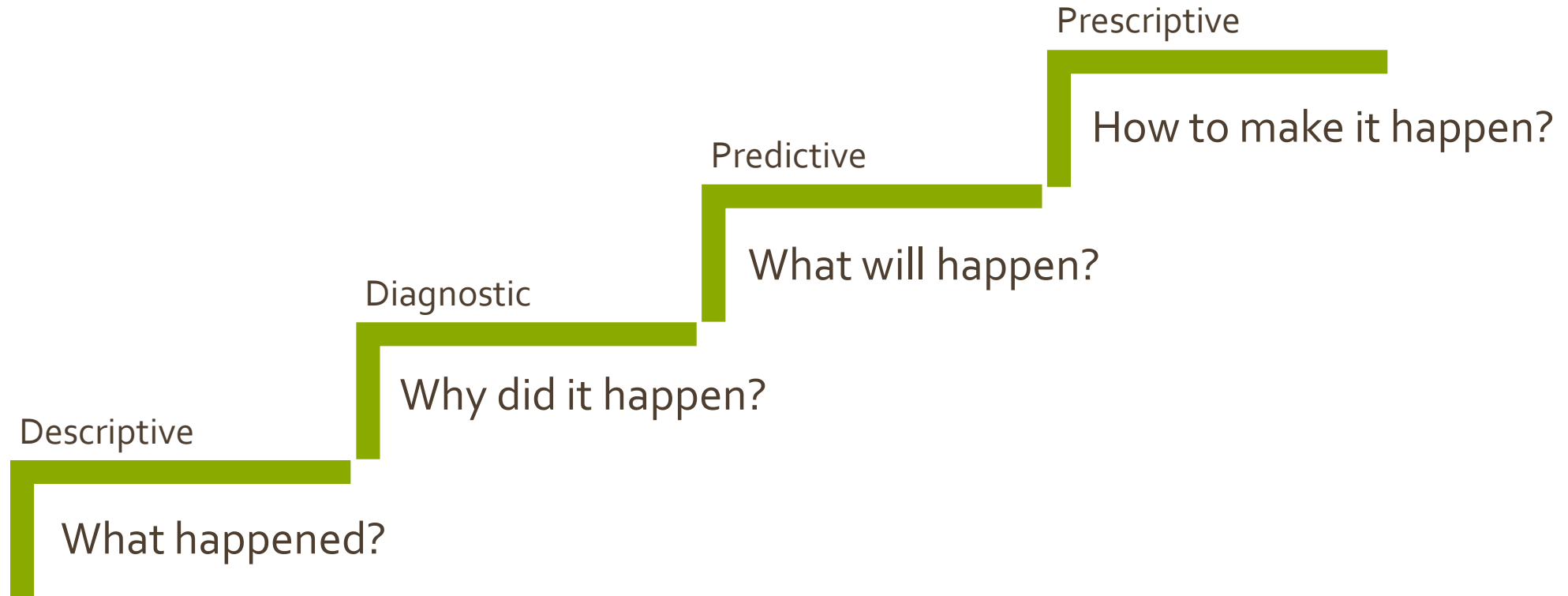Why did it happen?

Descriptive

What happened?

Figure 6. Data Maturity Staircase.

Note: Inspired by "Four Levels of Data Maturity" (Laney & Kart, 2012)

The Journey

Table 3. Rough Outline of Transformation

Short term 6 months	Mid-term 1-2 years	Long-term 3-5 years
Descriptive dashboards	Process monitoring dashboards	Anomaly detection
State of water system	Alert System	Predictive maintenance
Availability of data	**Empower with Analysis tools**	Custom solutions
Stand Up	Walk	Run

Predictive
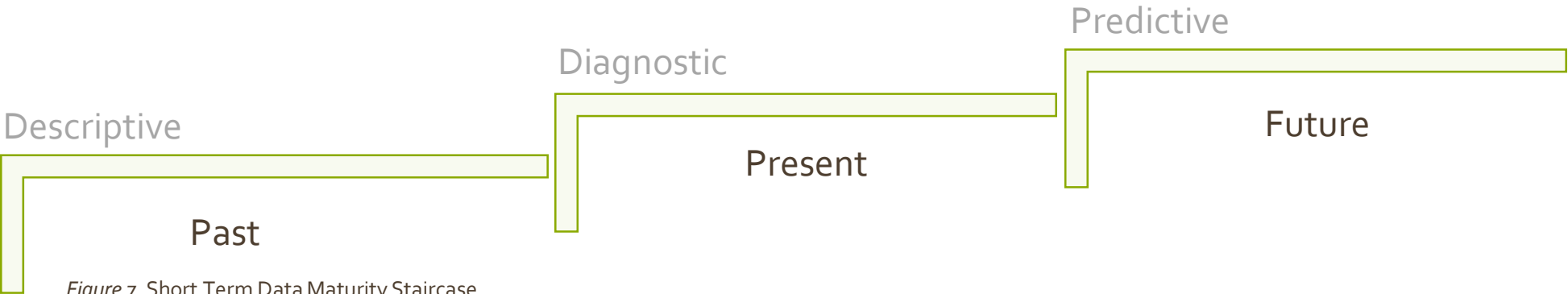
Diagnostic

Descriptive

Present

Future

Past

Figure 7. Short Term Data Maturity Staircase.

Note: Inspired by "Four Levels of Data Maturity" (Laney & Kart, 2012)

Summary

- We have a lot in common
- I can be your Change Catalyst

- We start at the basics
- To empower our people
- And establish lasting Change

- Do these believes match with yours?

Figure 1. Koen Bothmer.

List of Figures

List of Tables

Bibliography

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