Big Data or Big Brother?

What is the impact of HR Analytics on Employee Trust in the Employer in Switzerland?

Imagine a workplace, where …

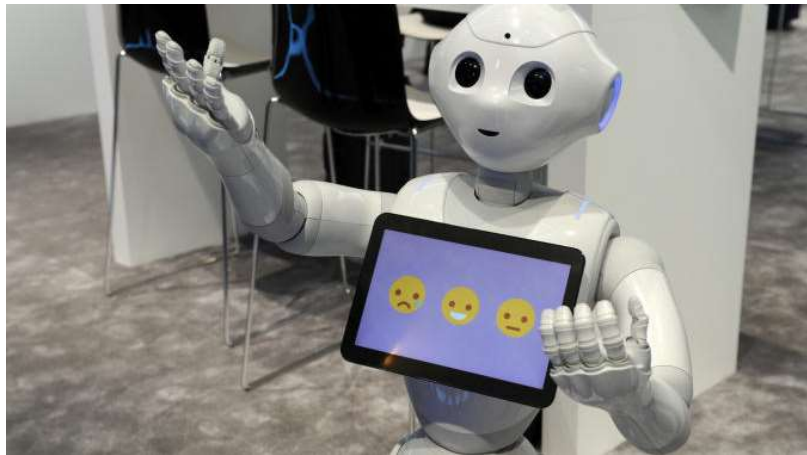**You might have noticed already …**

… it's reality in Business!

Why is it relevant to study HR Analytics and Trust?

Big Data is HR's most important natural resource (cf. Smedley, 2015)

BUT

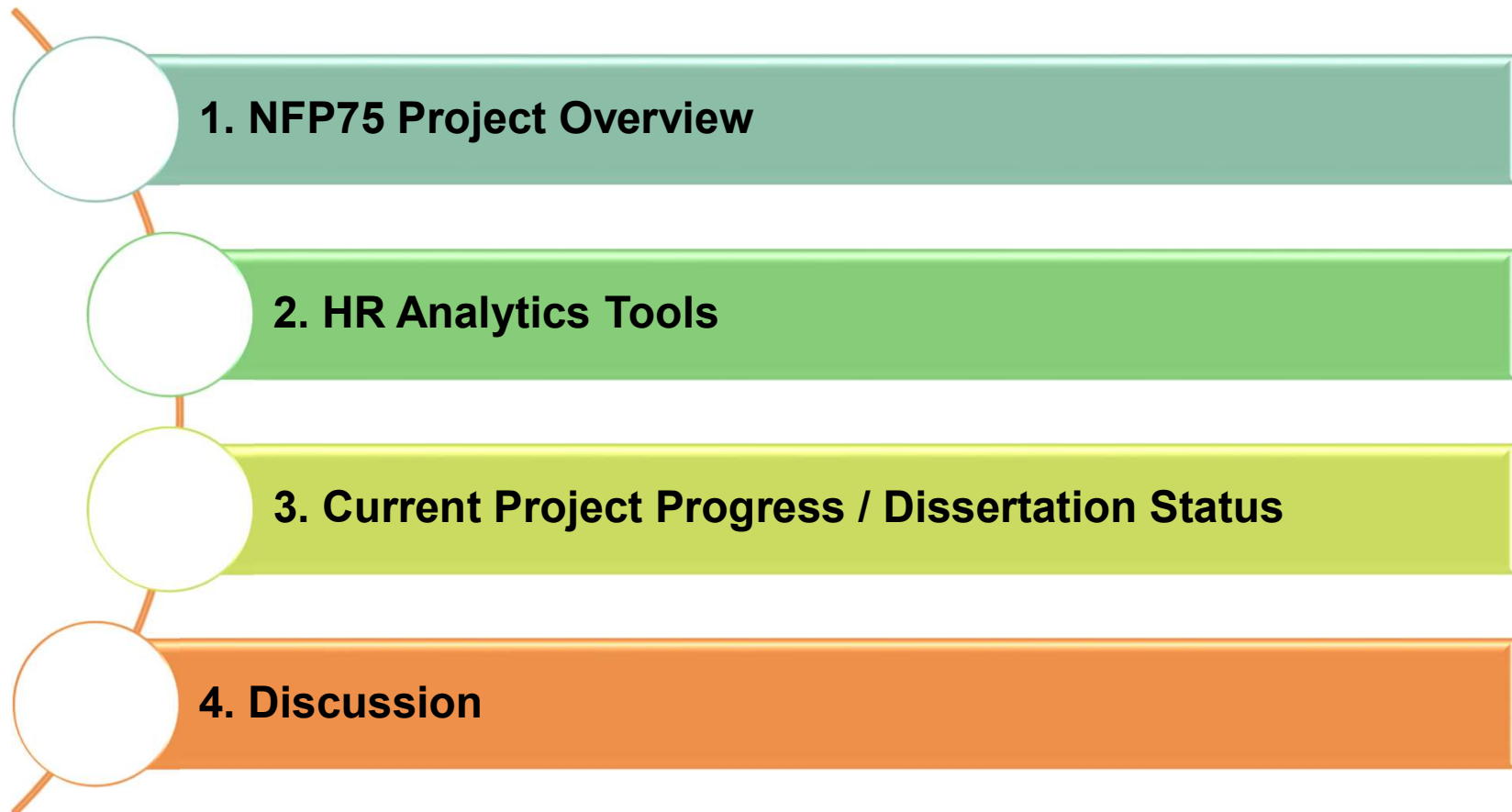Trust is relevant for all these obstacles

- Oftentimes, HR Analytics are used in a careless manner
  (cf. Lewis & Liao, 2014)

- HR „competence gap" (cf. Madden, 2014)

- Media reports on ethical breaches of organizational integrity

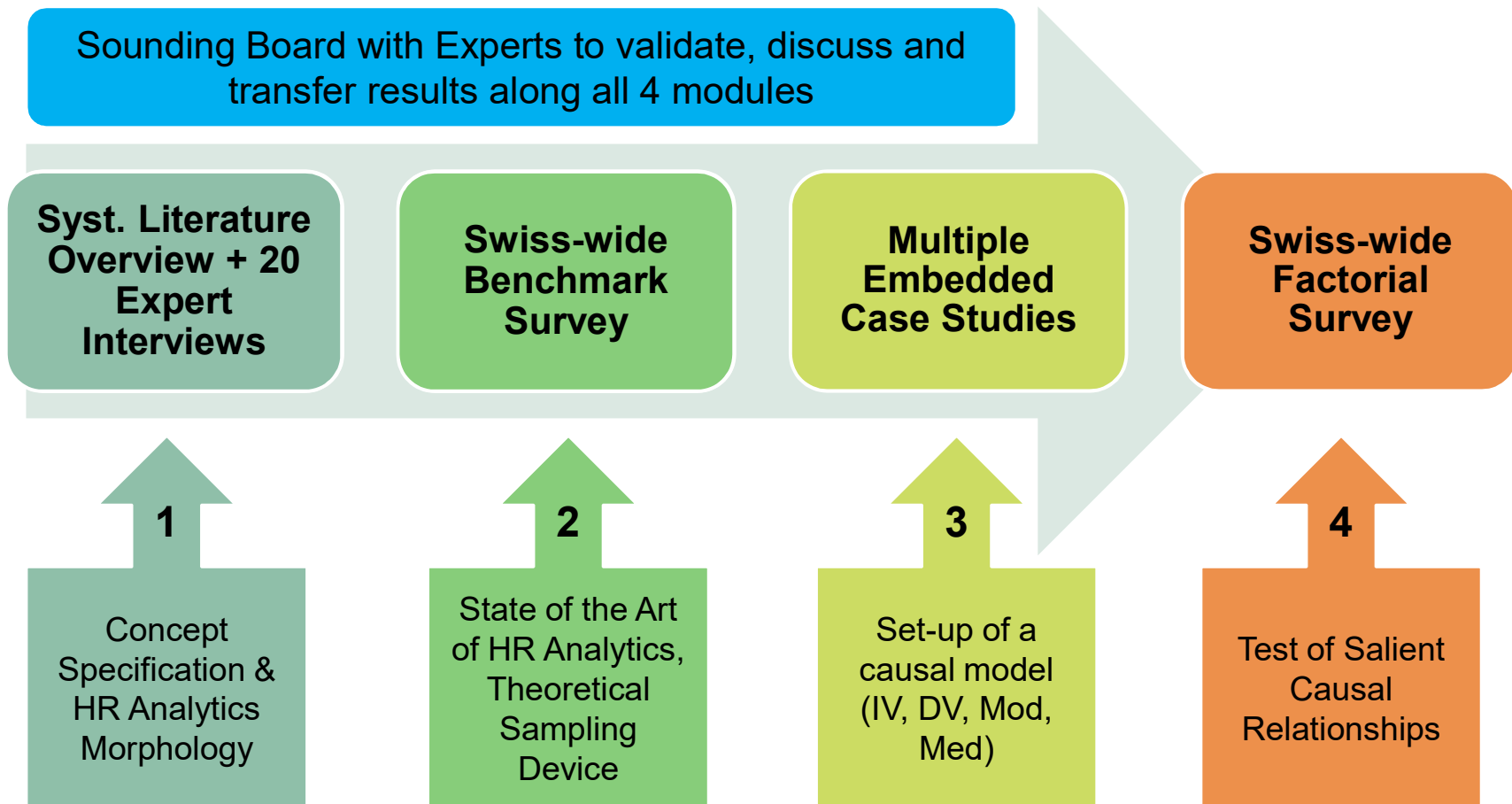- Creates a perfect control illusion and might thus lead to micromanagement

AS A RESULT

- **Expected sceptic reaction of the workforce!**

1. NFP75 – Project Overview

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HR/Trust
Business Ethics
Labor/Data Protection Law

Sounding Board with Experts to validate, discuss and transfer results along all 4 modules

Syst. Literature Overview + 20 Expert Interviews	Swiss-wide Benchmark Survey	Multiple Embedded Case Studies	Swiss-wide Factorial Survey
1	**2**	**3**	**4**
Concept Specification & HR Analytics Morphology	State of the Art of HR Analytics, Theoretical Sampling Device	Set-up of a causal model (IV, DV, Mod, Med)	Test of Salient Causal Relationships

Research Question:

What is the impact of big data-based HR Control Practices on Employees' Trust in the Employer?

What on earth are we talking about when we refer to big data-based HR control practices ?

2. Concept Specification & Overview

Organizational Control Literature (cf. Weibel et al., 2016; Cardinal, 2001; Sitkin, Cardinal & Bijlsma-Frankema, 2012)

→ *Big data based* **"formal HR control practices"** (Snell, 1992; Snell & Youndt, 1995)

Integrating Various Data Sources	Non-task related Performance	Predict Behavior and Performance	Machine Learning, AI
• consolidates profiles of employee data • *Angrave et al. (2016)*	• Non-task related performance • Employee behavior outside the workplace • Mood, Emotions • *Kopp & Sokoll (2015)*	• Not just describe status quo but predict likelihoods (of turnover, absences …) • *Son (2015); Voegli (2016)*	• Decision automation (Hiring and Firing by Algorithm) • *Hongo (2015)*

Thats it? → *We need an organizing framework of HR Analytics Tools*

2. Concept Specification & Overview, cont'd

New, complex/mutlilayered phenomenon

Scarcity of academic publications → no clear theory

Huge surplus on non-scientific publications

Broad Spectrum of HR Analytics Applications

- Analytical & conceptual fuzzyness
- No detailed exploration on specific dimensions, categories, building blocks and/or constituting features of HR Analytics Tools
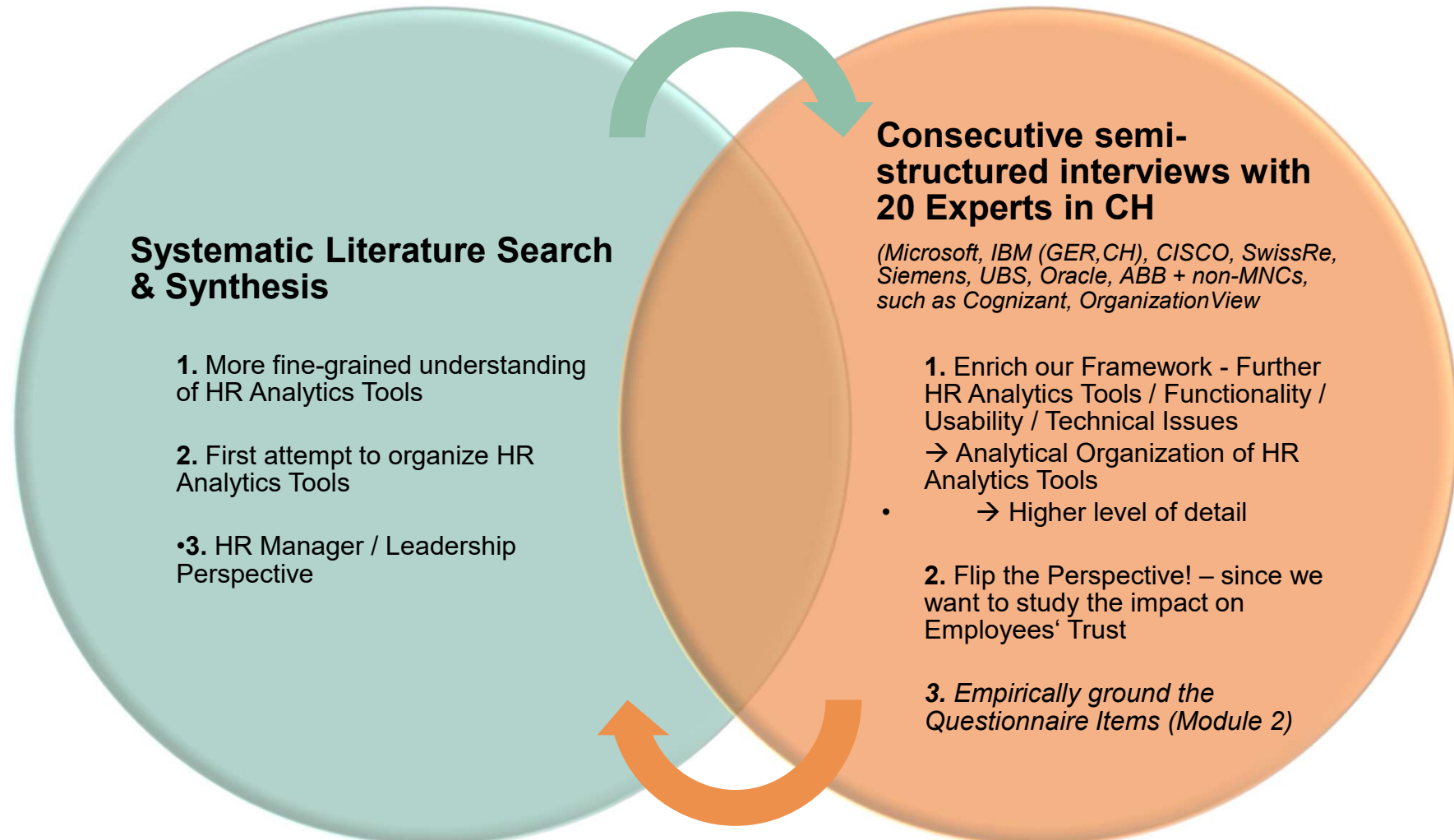
What is our Independent Variable?

3. Our approach: Design Thinking

Design Thinking allows us to:

→ be abductive (both deductive and inductive at the same time)

→ be non-linear and iterative between theory and reality

   (Dubois & Gadde, 2002)

→ continuously compare our findings with literature and expert/peer/informant

   validation, throughout the entire DT/research process (analysis + data gathering)

→ pave the way to a formative theoretical construct

→ investigate multidimensional, multilayered problems, difficult to quantify (Ritchey, 2006; 2012)

→ come up with relevant (interdependent) parameters and their respective dimensions

   (Frow et al., 2015) → thick description

→ select speficic dimensions of each parameter, which create a „morphotype", hence

   represent „a solution to the issue under study"

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3.1 Design Thinking – *Problem Space*

Systematic Literature Search & Synthesis

1. More fine-grained understanding of HR Analytics Tools

2. First attempt to organize HR Analytics Tools

•**3.** HR Manager / Leadership Perspective

Consecutive semi-structured interviews with 20 Experts in CH

(Microsoft, IBM (GER,CH), CISCO, SwissRe, Siemens, UBS, Oracle, ABB + non-MNCs, such as Cognizant, OrganizationView

1. Enrich our Framework - Further HR Analytics Tools / Functionality / Usability / Technical Issues
→ Analytical Organization of HR Analytics Tools
•   → Higher level of detail

2. Flip the Perspective! – since we want to study the impact on Employees' Trust

3. Empirically ground the Questionnaire Items (Module 2)

3.2 *Solution Space*

This is, on what we are currently working on!

Happy to discuss our proposals!

3.3 Module 2: Swiss-wide Benchmarking Survey

Aim: Device for Theoretical Sampling of Theory Building Case Studies
(Module 3; Eisenhardt, 1989) + further Empirical Validation of Solution Space

- We ask HR-Managers (AND/OR related functions) on the application
  and use of big data based HR-control practices (IV)

  - Example: To what extent do you use HR Analytics Tools, such as [XXX]? How do
    you expect the maturity level of HR Analytics inside your company?

- For means of theoretical sampling, we also need to ask proxies for
  employees' trust in the employer (DsV)

  - We focus on HR-Managers' perception of his/her company's HR philosophy (Miles et
    al., 1978), corporate trust climate/culture (Huff & Kelly, 2003; Butler, 1999), HR Role Models (Caldwell,
    2003), Transformational Leadership Climate (Menges et al., 2011), Strength of HR Systems
    (Bowen & Ostroff, 2004), Type of HR use (Ulrich, 1997), inter alia.

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3.3 How does the Survey impact Case Sampling?

Trust Proxys

min. 2sd

HR Analytics
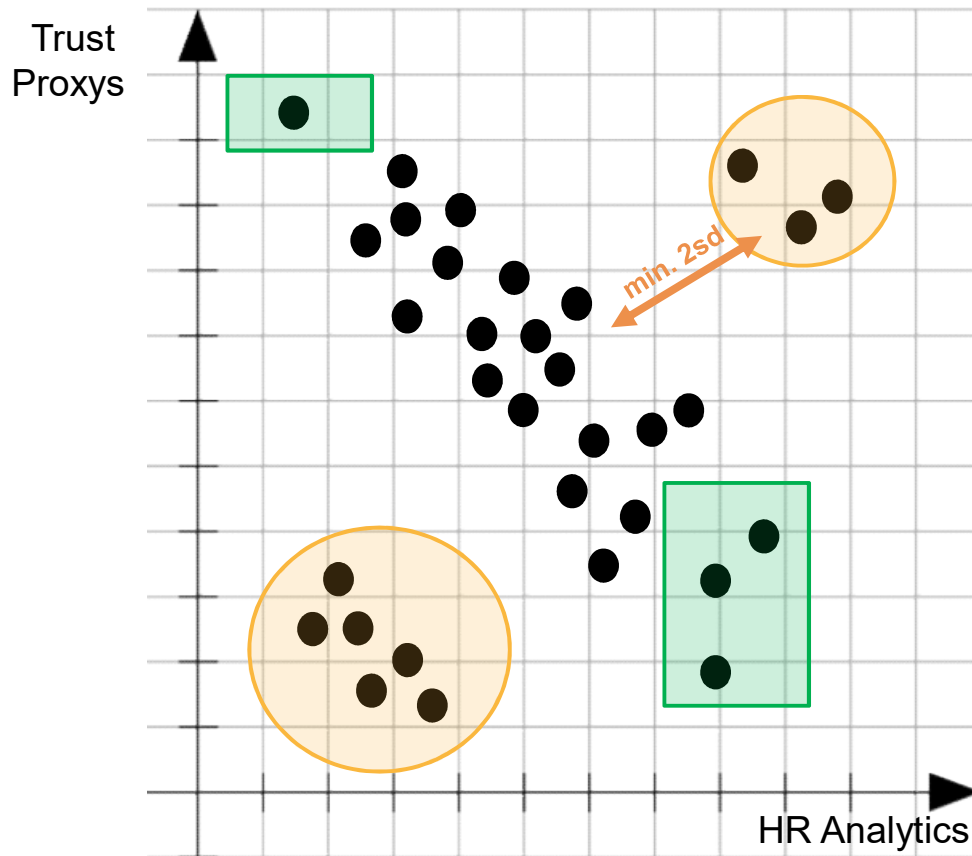
1. Deviant Cases –
«Prediction Outliers»

→ Formulation of propositions

2. Extreme Cases –
«Model-Fit Outliers»

→ Improvement of model coherence
and internal validity

(Eisenhardt, 1989; Gerring, 2006; Yin, 2013)

3. Embeddedness Dimensions:
- Before the advent of big data / now
- Future scenarios after the enactment of GDPR

4. Result: testable model (Module 3)
for salient causal relationships in
Module 4

Happy to answer
questions and discuss!

"From insight
to impact"

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