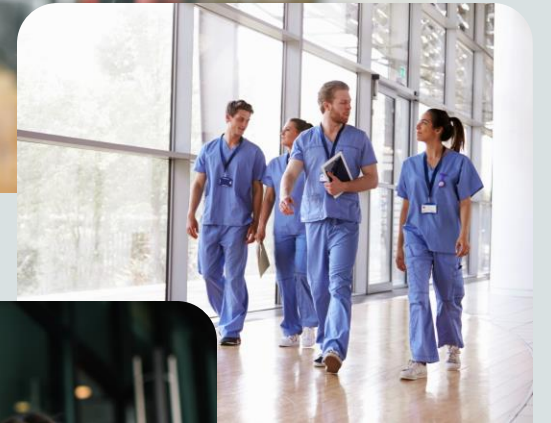# Mapping the path from Excel to AI: An expedition into people analytics

Presented by

Sjoerd van den Heuvel &

Kinsey Li

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Your speaker


Sjoerd van den Heuvel

Associate Professor of Data-Driven Business & People Analytics

Sjoerd helps leadership teams develop data-driven business strategies and trains professionals in their role as analytic translators. His research focuses on the individual competencies and organizational capabilities required for effectively applying people analytics.

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People analytics

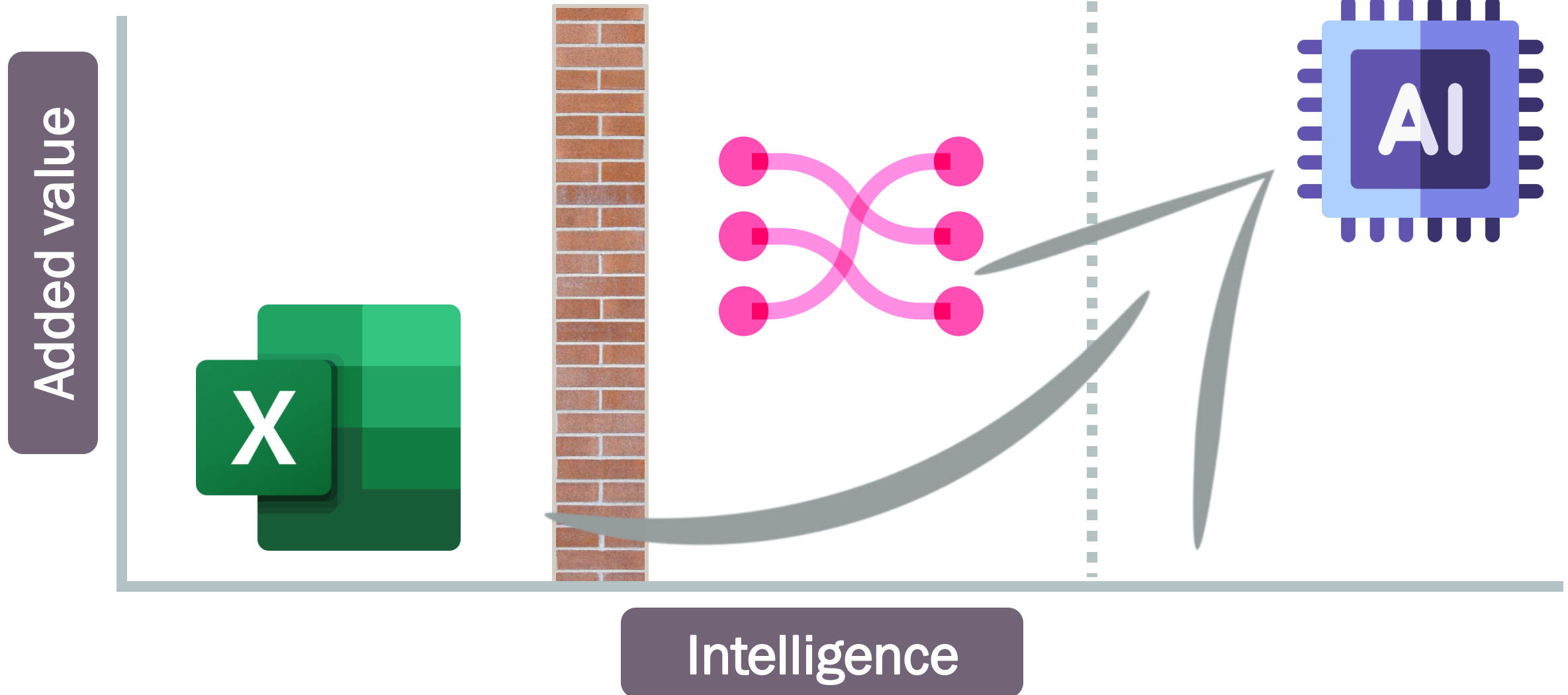What is it? (And what is it not?)

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People analytics is a **mental framework** for **systematically** identifying the **people** factors that have the biggest impact on **organizational** outcomes, to realize **sustainable value** for the organization (HU, 2019)

People factors → Sustainable → Organizational outcomes

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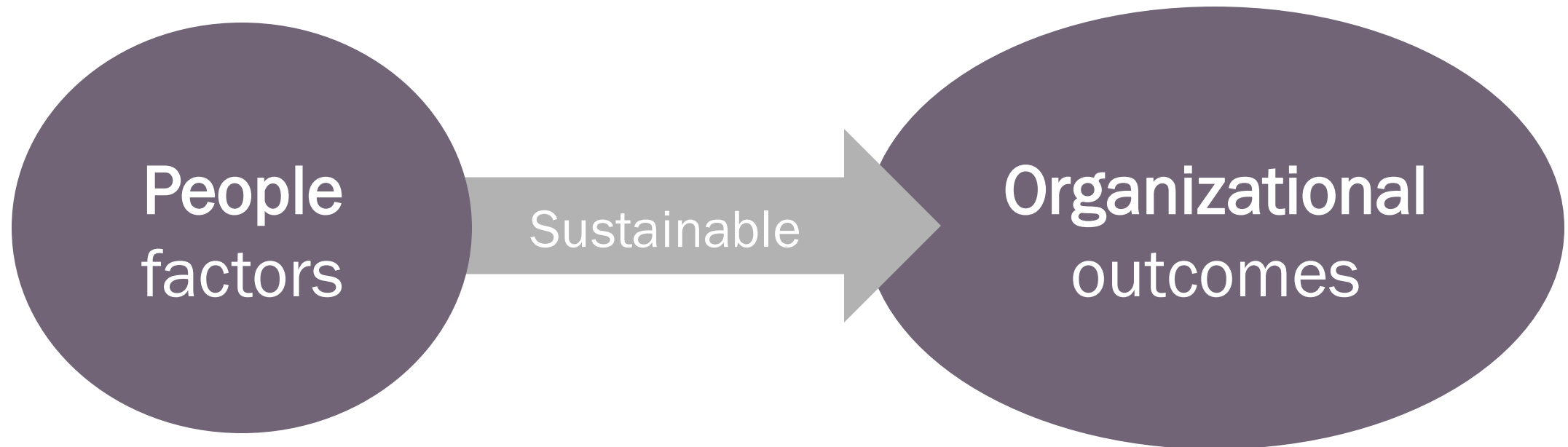
From Excel (via analytics) to AI

People analytics is rapidly evolving

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Where do you want (need) to be?

Added value

Intelligence

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30%
employee
turnover

50%
employee
absenteeism

7%
employee
engagement

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p ≤ 0.05

2022 2023

Engagement

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Group A
#=1000
μ=7
σ=**0.2**

σ

Group B
#=1000
μ=7
σ=**2**

#=680=68%
6.8-7.2

#=680=68%
5-9

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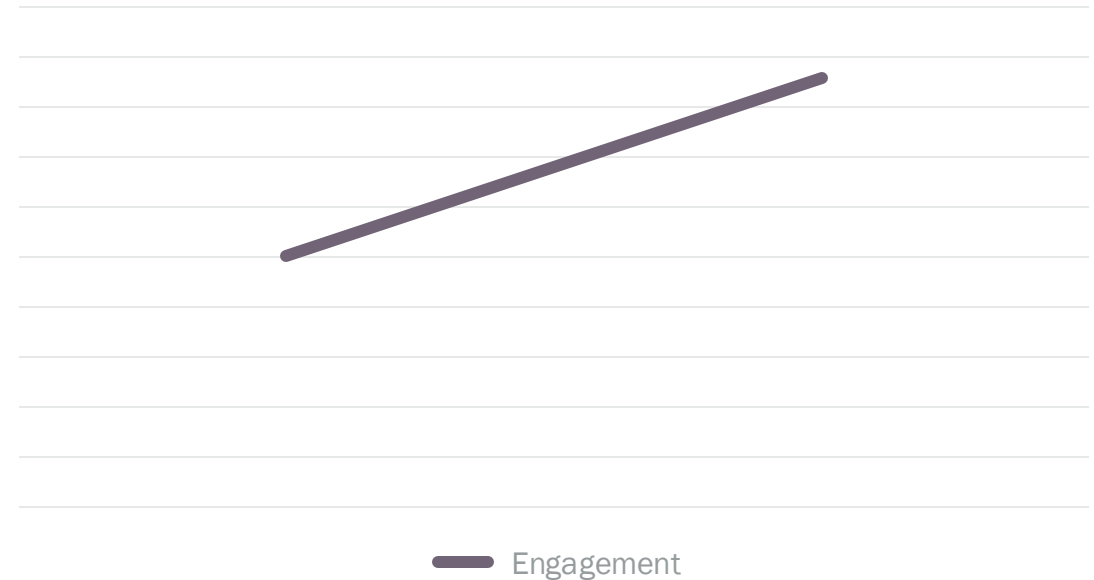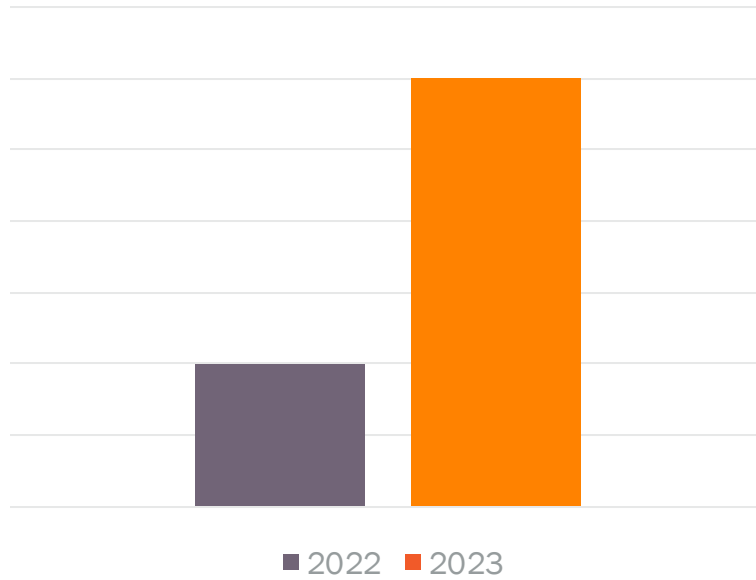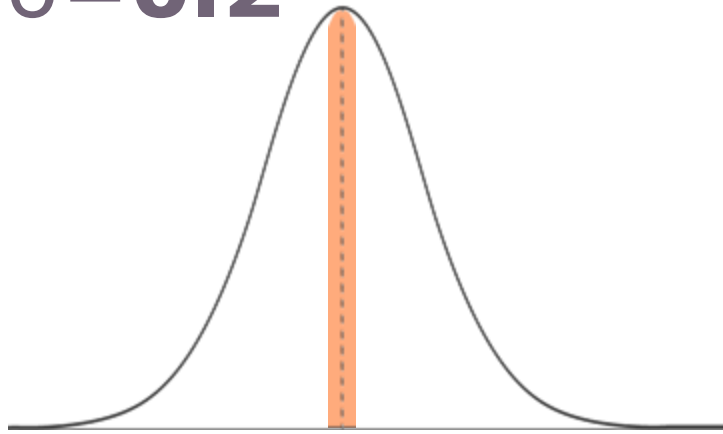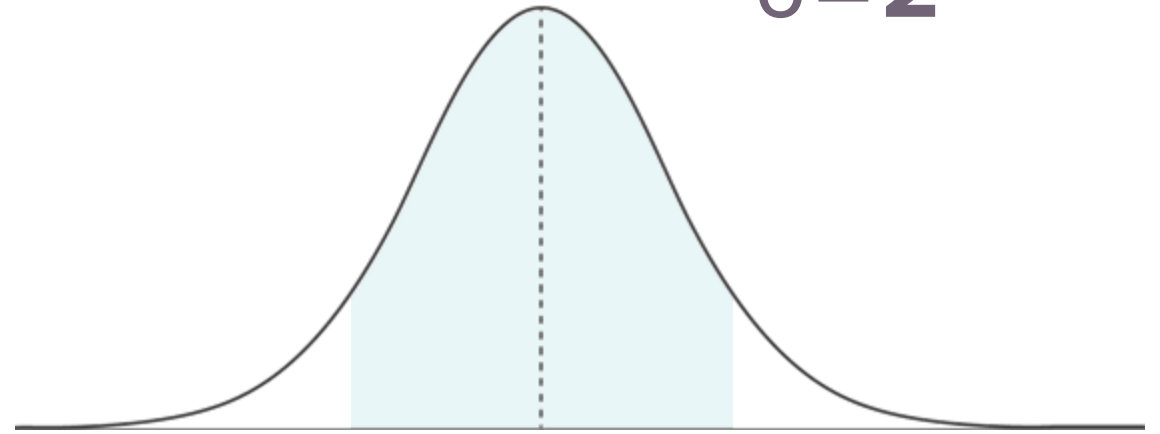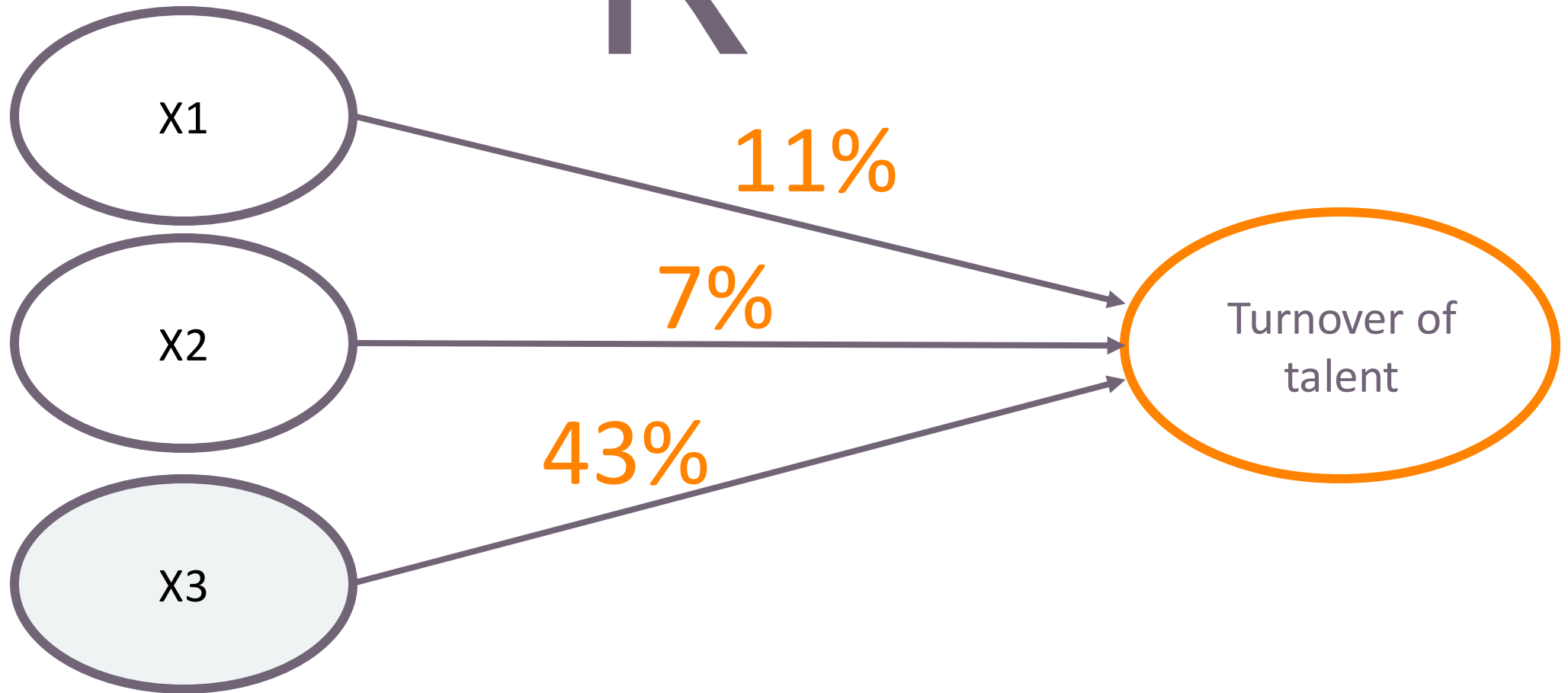
GEN AI IN DASHBOARDING

Link

SENSORING & MACHINE LEARNING
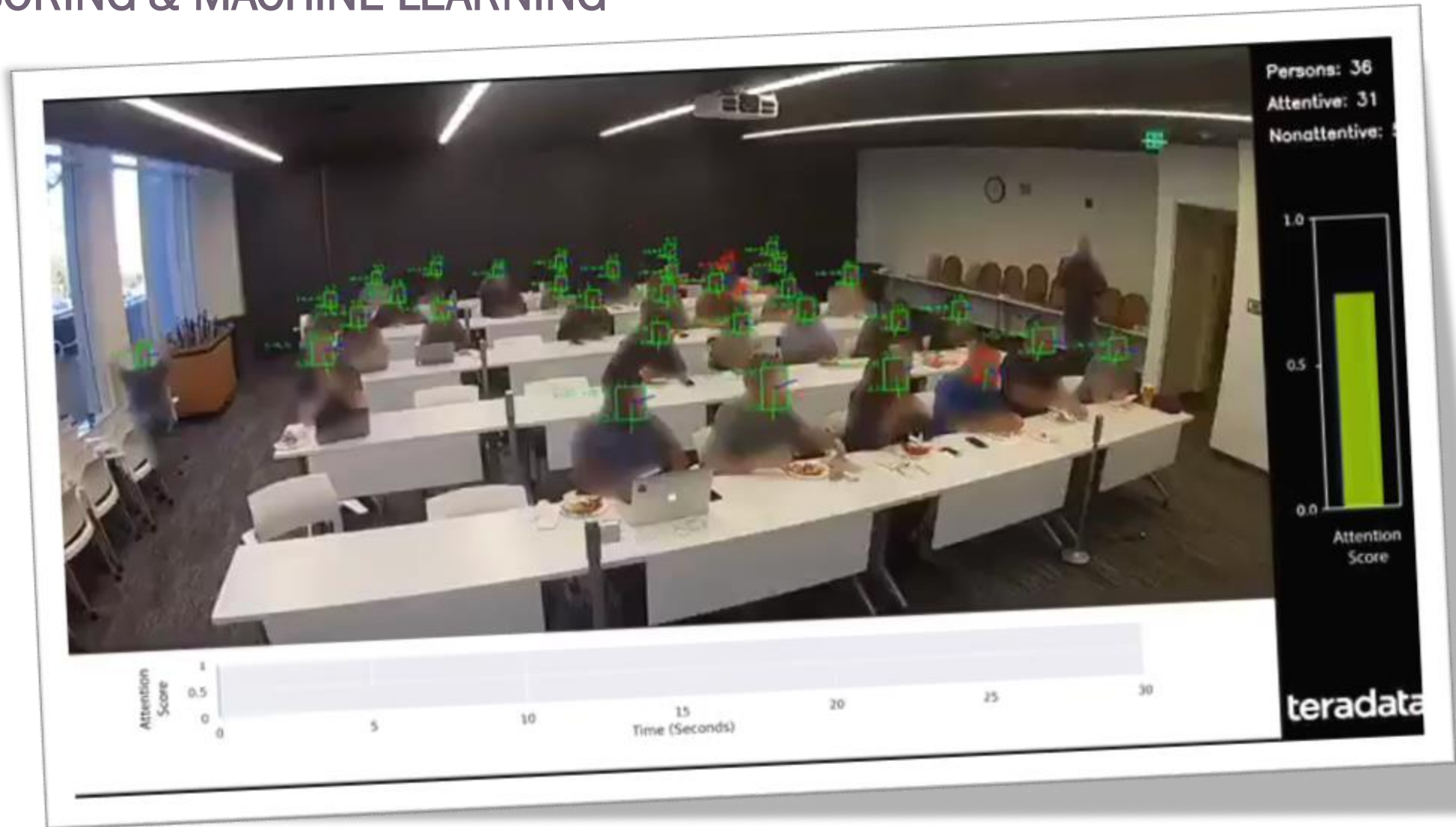
SENSORING & MACHINE LEARNING

ORGANIZATIONAL NETWORK ANALYSIS

PHERIPERAL MEMBERS

CENTRAL MEMBERS

MEDIATOR

NODES ARE EMPLOYEES

SIZE OF NODE INDICATES ON HOW CENTRAL IT IS
Eigenvector, Berweenness, Closeness, PageRank, Katz, ...

LINES(Link/Edge) ARE CONNECTIONS BETWEEN EMPLOYEES
We usually six different types of connections

COLORS WILL IDENTIFY DEPARTMENTS, RANK OR THEMATIC GROUPS

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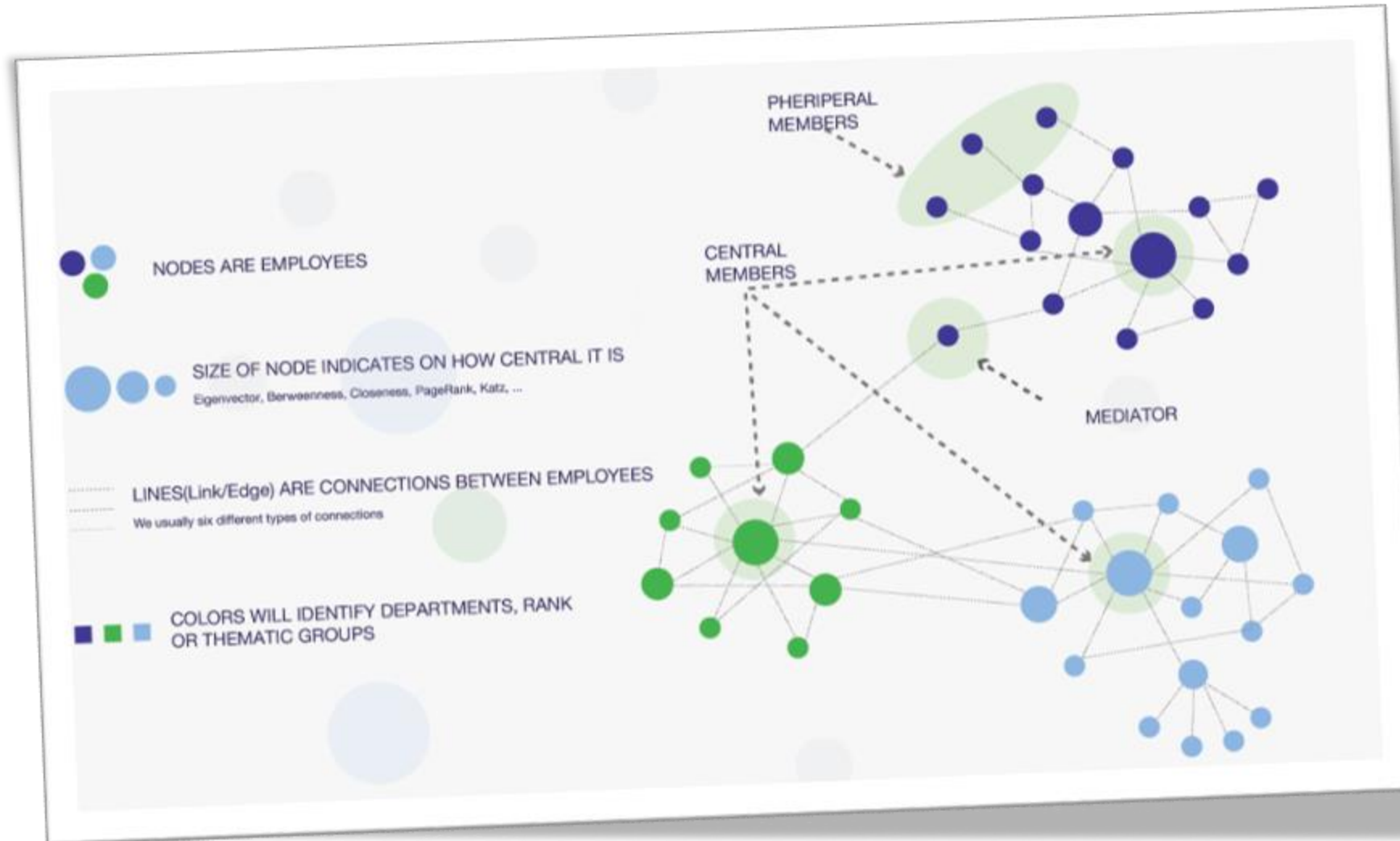
RECOMMENDER SYSTEMS
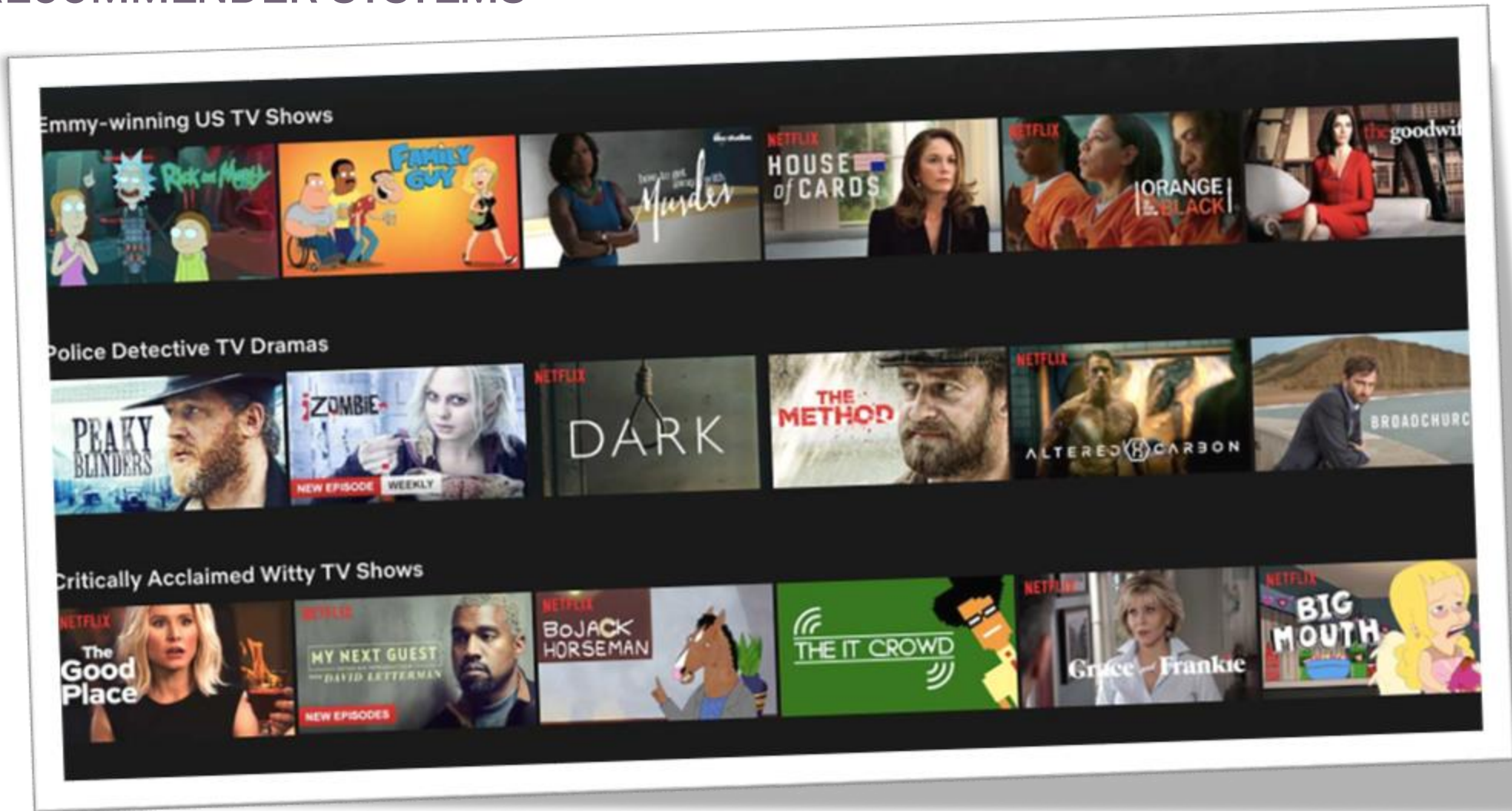
AI VIDEO TRANSLATION WITH LIP-SYNCHING

Hindi

German

Spanish

HeyGen

Link

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WHICH PERSONAS DO YOUR EMPLOYEES RESPOND WELL TO?
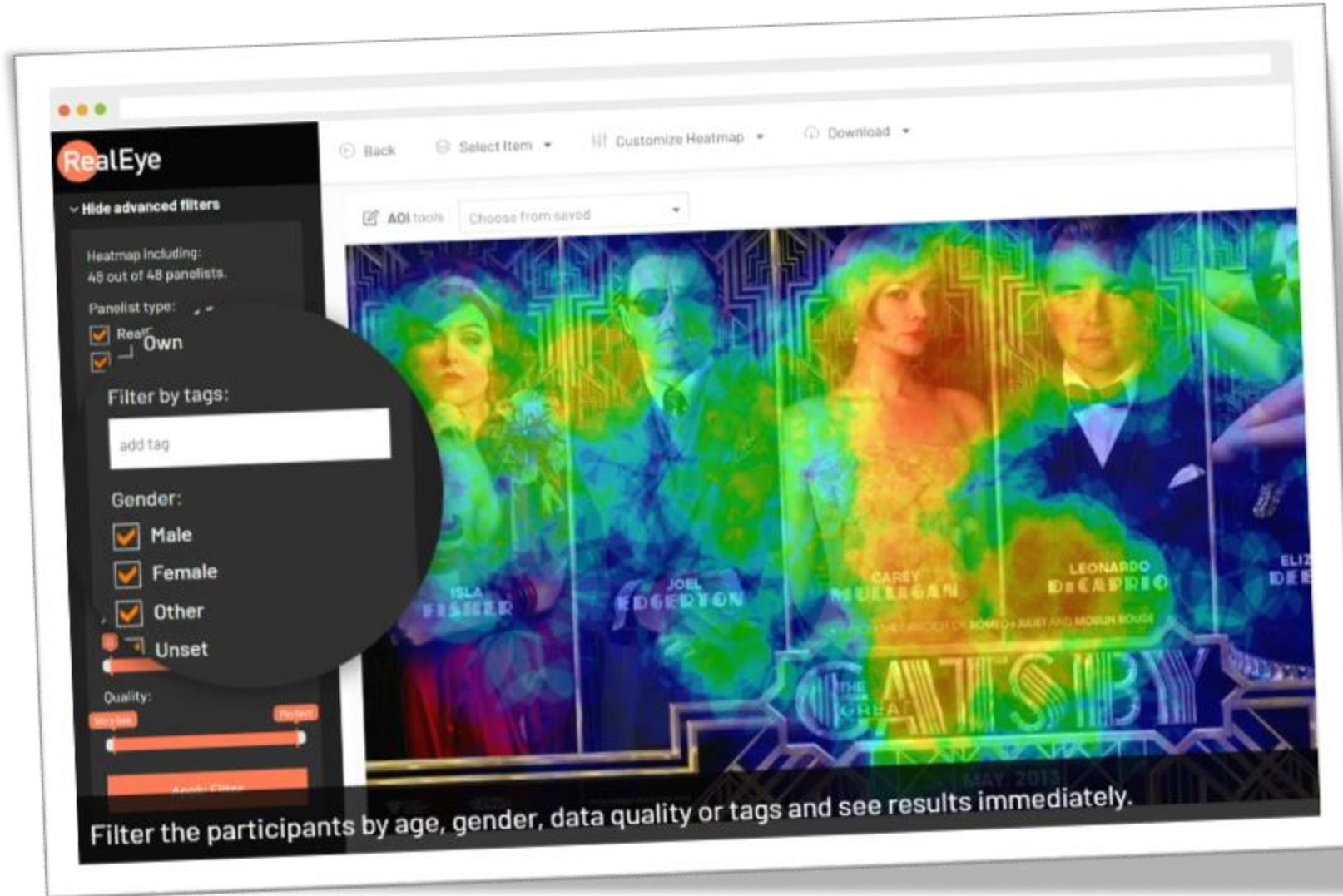
- Machine learning

- Knowledge bots

- Automated call logging (ACL)

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How to transform?

Best practice transformation roadmap towards a data-driven business

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3 parallel tracks

1	Leadership	Systematic context optimization
2	Analytics translators	Use-case development in waves
3	Mass	Data and digital literacy

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1. Leadership
Systematic context optimization

2. Analytics translators

Use-case development in waves

SOCIETAL / ORGANIZATIONAL CONTEXT

BUSINESS PROBLEM

ANALYTICS OBJECTIVE

ANALYTICS QUESTION

CONCEPTUAL MODEL

OPERATIONA-LIZATION

MEASUREMENT / DATA

ANALYTICAL SOLUTION

INSIGHTS

STORYTELLING & VISUALIZATION

DECISION

ACTION

EFFECT MEASUREMENT

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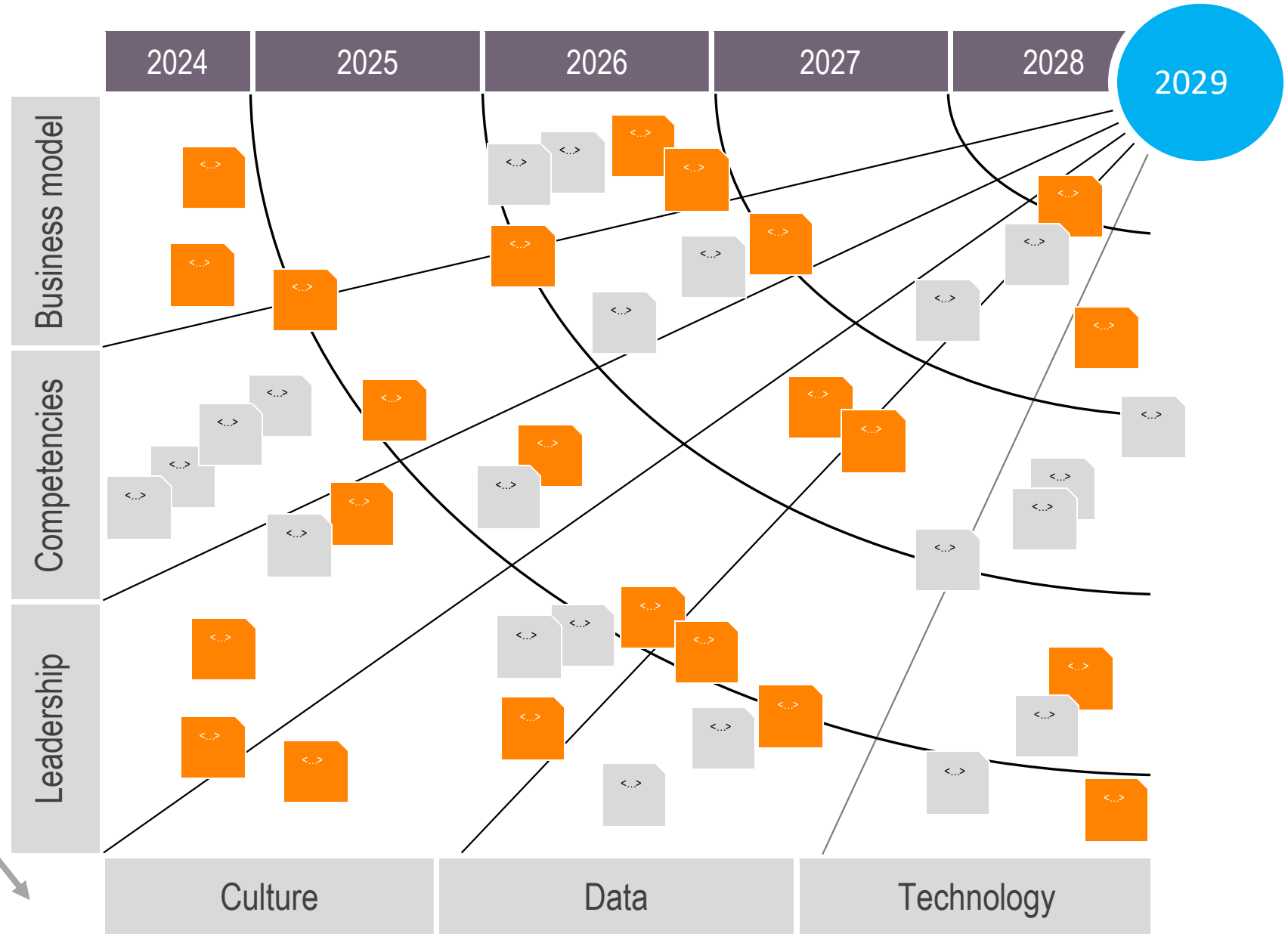
Analytics translator: The new must-have role

Photo credit

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IN SIX HALF-DAYS PARTICIPANTS ARE GUIDED THROUGH THE ANALYTICS TRANSLATOR PROGRAM > UPSKILLING & USE-CASE DEVELOPMENT

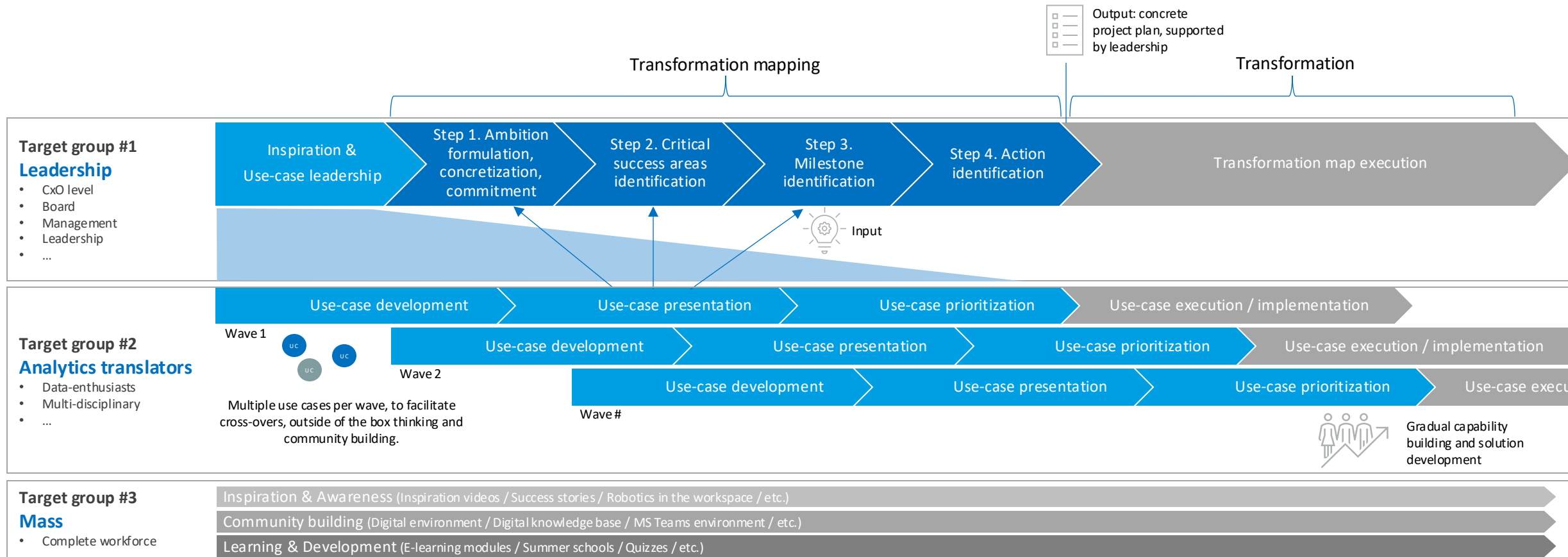| Session 1 0.5 day	Session 2 0.5 day	Session 3 0.5 day	Session 4 0.5 day	Session 5 0.5 day	Session 6 0.5 day
Welcome • Welcome by business leader(s) • Practicalities **Knowledge** • Inspiration from other industries • Inspiration from own industry -- • Data-driven business fundamentals • Analytics translator fundamentals -- • Use-case development process **Use-case** • Step 1: Business Environment Analysis; macro, meso, micro	**Knowledge** • Stakeholder identification • Stakeholder prioritization • Stakeholder management -- • Systematic problem definition development **Use-case** • Step 2: SWOT, confrontation matrix • Step 3: Business problem identification, 5W method • Step 4: Analytics goal • Step 5: Analytics questions	**Use-case** • Step 6: Conceptualization and conceptual modelling **Knowledge** • Data privacy fundamentals • Digital ethics fundamentals **Use-case** • Step 7: Operationalization of concepts	**Storytelling** • Instructions to data scientists & peer feedback **Knowledge** • Data-science fundamentals (quiz) • Descriptive statistics • Inferential statistics • AI (machine learning, deep learning) • Analytics technology fundamentals **Use-case** • Step 8: Data gathering approach	**Storytelling** • Dragon Dens with investors & peer feedback **Knowledge** • Introduction data visualization • Online storytelling • Offline storytelling • Influencing decision making **Use-case** • Step 9: Designing and developing the storytelling to leadership / management **Storytelling** • Call to action	**Use-case event** • Presentation of use cases to leadership / management / colleagues • Identification of preconditions (and barriers) for the success of deploying proposed use cases and developing new use cases • Agreement on next steps to start decision making process or deployment of the solution
Storytelling • Elevator pitch on external-internal fit	**Storytelling** • Midnight phone call with leadership / management	**Storytelling** • Explaining conceptual models to others	**Consultation**	**Consultation**	**Certification and drinks** • Closing remarks by business leader(s) • Plenary signing of certificates • Celebration drinks
Short wrap-up • Reflection • Homework	**Short wrap-up** • Reflection • Homework	**Short wrap-up** • Reflection • Homework	**Short wrap-up** • Reflection • Homework	**Short wrap-up** • Reflection • Homework	

3. Mass

Data and digital literacy

ROADMAP BASED ON BEST PRACTICES

Output: concrete project plan, supported by leadership

Transformation mapping

Transformation

Target group #1
Leadership
- CxO level
- Board
- Management
- Leadership
- ...

| Inspiration & Use-case leadership | Step 1. Ambition formulation, concretization, commitment | Step 2. Critical success areas identification | Step 3. Milestone identification | Step 4. Action identification | Transformation map execution |

Input

Target group #2
Analytics translators
- Data-enthusiasts
- Multi-disciplinary
- ...

| Use-case development | Use-case presentation | Use-case prioritization | Use-case execution / implementation |

Wave 1

UC   UC   UC

| Use-case development | Use-case presentation | Use-case prioritization | Use-case execution / implementation |

Wave 2

Multiple use cases per wave, to facilitate cross-overs, outside of the box thinking and community building.

| Use-case development | Use-case presentation | Use-case prioritization | Use-case execu |

Wave #

Gradual capability building and solution development

Target group #3
Mass
- Complete workforce

Inspiration & Awareness (Inspiration videos / Success stories / Robotics in the workspace / etc.)

Community building (Digital environment / Digital knowledge base / MS Teams environment / etc.)

Learning & Development (E-learning modules / Summer schools / Quizzes / etc.)

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Example > Financial institution - 16K employees

Since 2020:

- 1 or 2 waves per year
- ± 80 analytics translators upskilled per wave
- ± 30 use cases developed per wave
- €1M targeted value per use case
- €13.8M realization of value per use of last wave (2023)

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Where do you want (need) to be?

Added value

Intelligence

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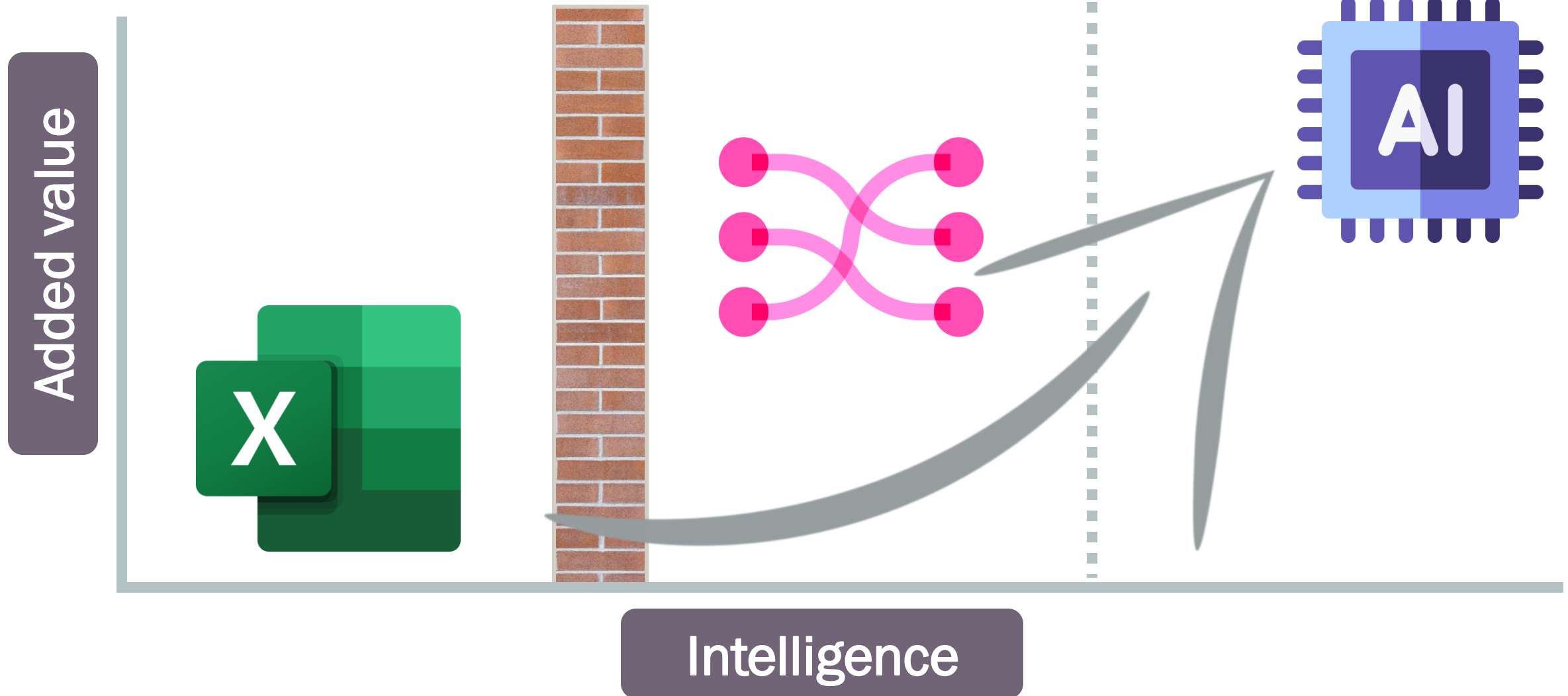
Your speaker

Kinsey Li

People Analytics Leader & Analytics Translator

Having established three people analytics functions and one workforce planning function from the ground up, Kinsey is well-acquainted with the challenges associated with securing buy-in for people analytics and the apprehensions surrounding data presentation.

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People analytics is different from other areas of analytics

Heavy reliance on stakeholder input

The data collected often don't reflect the full picture; people analytics professionals will need external input to gain a fuller picture.

Data subject and sensitivity

Stringent privacy practices and legal compliance can sometimes get in the way of obtaining the information needed.

Causation is near impossible to claim

Outcomes in people analytics are often result of multiple interrelated causes and hard to identify the cause. This makes establishing credibility difficult.

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A different approach therefore is needed for establishing credibility
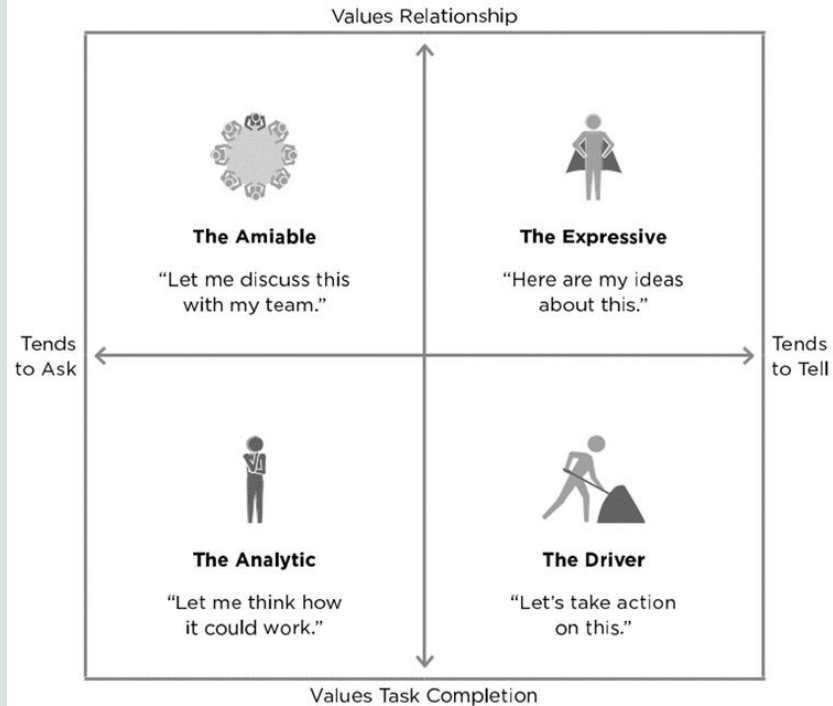
Consultative collaboration

"Lean in" to the strength of HR

Leverage quick wins

Trusted relationship

First step to consultative collaboration is to know your customer

Possible Communication Styles for Stakeholders

Values Relationship

The Amiable — "Let me discuss this with my team."

The Expressive — "Here are my ideas about this."

Tends to Ask ← → Tends to Tell

The Analytic — "Let me think how it could work."

The Driver — "Let's take action on this."

Values Task Completion

Source: CEB analysis; Robert Bolton and Dorothy Grover Bolton, "Social Style/Management Style," AMACOM, 1984.

Guide to Tailoring Your Presentation Based on Stakeholder Communication Style

	Driver	Expressive	Amiable	Analytic
Personal Value Metric	Results	Applause	Attention	Activity
Resource He or She Wants to Save	Time	Effort	Relationships	Face
Needed Climate	Allows Them to Build Their Own Structure	Inspires Them to Reach to Their Goals	Allows Them and Others to Make Suggestions	Provides Details
Description	• Direct • Assertive • Results Oriented • Independent • Decisive • Competitive	• Enthusiastic • Ambitious • Creative • Fast Paced • Optimistic • Confident	• Diplomatic • Loyal • Supportive • Friendly • Considerate • Relaxed	• Organized • Thorough • Logical • Prudent • Accurate • Conscientious
Critical Quality for Your Presentation	Efficient	Stimulating	Agreeable	Accurate
Aspects Your Presentation Should Support	Conclusions and Actions	Dreams and Intuitions	Relationships and Feelings	Principles and Thinking
Question Your Presentation Should Answer	What	Who	Why	How
What to Give Him or Her to Aid Decision Making	Options and Probabilities	Testimony and Incentives	Guarantees and Assurances	Evidence and Service

Source: CEB analysis.

Consultative Collaboration | **'Lean in'** | **Quick Wins**

Adopting a beginner's mindset is often the best approach to establishing a safe and trusted relationship

Burden of Being An 'Expert'

- We tend to think because we are the ones bringing the data to the client, we need to know everything and we need to be right at everything.

- The fact is that we don't. We may have the quantitative numbers but the client will have deep insights into the drivers behind the numbers.

- When a client questions the information or provides extra context not reflected in the data, we are often taken back because we think we should know about it.

A More Consultative Approach

- Ask questions such as: *"What do you see in the data?", "What do you think triggers this trend?"* and *"What should we do about it?"* will prompt the client to think and collaborate.

- Changing the communication from push to pull will give the client more accountability over the outcome and ease your burden.

- Consider changing the meeting to "Insight generation workshop"

- Don't be afraid to say "I will get back to you."

Consultative Collaboration

'Lean in'

Quick Wins

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HR data provides a unique edge in insights for people professionals

Diversity, equity and inclusion

Talent development insights

Leverage employee surveys

Consultative Collaboration

'Lean in'

Quick Wins

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Examples of analysis to help build trusted relationships

"Our recent hires are 40% more diverse in terms of race and ethnicity, but retention rates for underrepresented groups are 15% lower than average."

"Employees who participated in our development programs were 25% more likely to be promoted within 12 months."

"Survey results show that 40% of employees considering leaving cited limited growth opportunities as their primary reason."

"Stay survey results reveal that 65% of employees rank health insurance as the most valued benefit."

"Data shows that international hires have a 20% higher retention rate compared to local hires over the past two years."

| Consultative Collaboration | 'Lean in' | Quick Wins |

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Leveraging "quick wins" can help you do more with less

External insights can provide a refreshing perspective

Using Glassdoor and PayScale to compare your company's benefits, culture, and compensation with competitors can reveal gaps and opportunities to stay competitive in attracting and retaining talent.

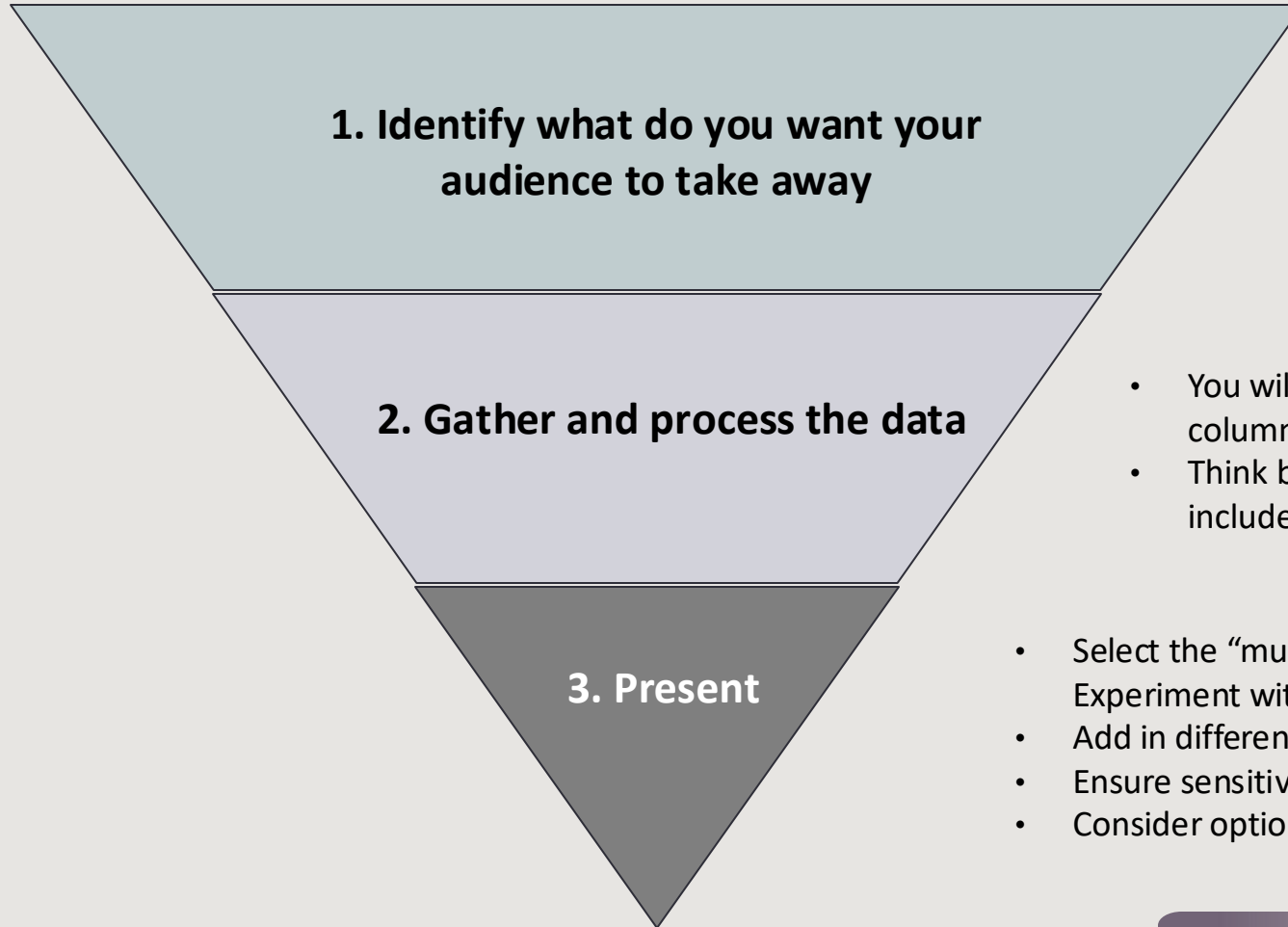**Labour market insights can be key to people decisions**

ONS labour market data reveals rising unemployment in your region, allowing you to adjust recruitment efforts locally and attract a wider pool of talent in response to shifting workforce availability.

If you don't know, just ask

When unsure about best practices for a new HR initiative, you can reach out to ChatGPT for quick insights or connect with professionals in similar roles on LinkedIn to gather industry-specific advice.

| Consultative Collaboration | 'Lean in' | Quick Wins |

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A framework to present your findings

1. Identify what do you want your audience to take away

- Before you start, think about the story you want to tell.
- What do you want the audience to think and re-think?
- Apply consultative lens.

2. Gather and process the data

- You will need to then think about all essential measures as columns. (For example, headcount, gender.)
- Think beyond the KPIs and measures here, you also want to include the fields that you want to drill down on.

3. Present

- Select the "must know" visualizations that will support your story. Experiment with different charts.
- Add in different dimensions to add chapters to the story.
- Ensure sensitive data are protected or removed.
- Consider options to share the story (eg presentation, dashboard).

Consultative Collaboration	'Lean in'	Quick Wins

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Picking the right chart is critical to communicate your message

Chart Suggestions—A Thought-Starter
© 2006 A. Abela — a.v.abela@gmail.com

| Consultative Collaboration | 'Lean in' | Quick wins |
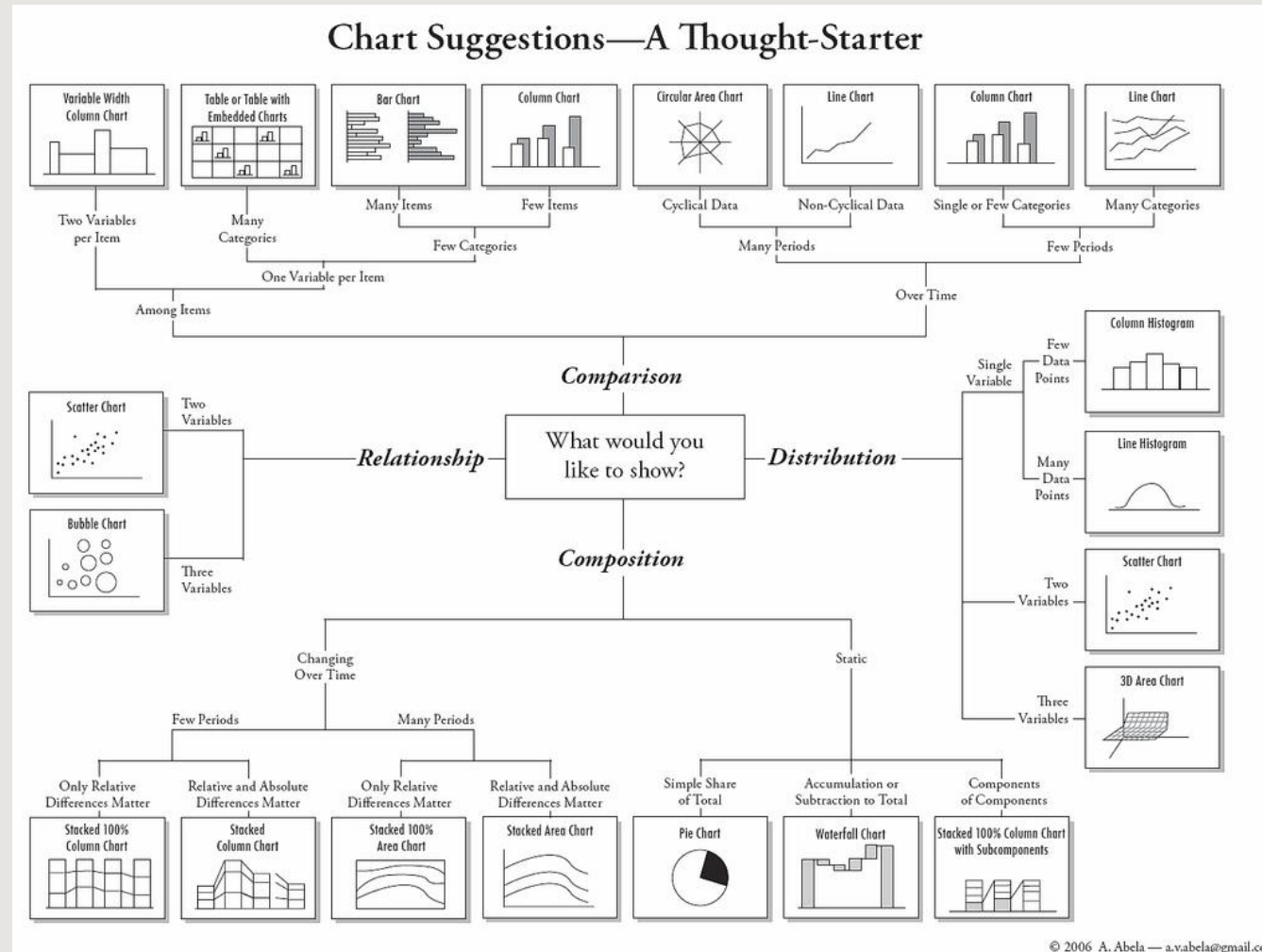
Bonus: A framework to ask ChatGPT

Role: "Please act as a [professional HR analytics consultant from a top analytics consulting firm]."

Purpose: "I want to build a strong relationship with my stakeholder whose role is [insert role]."

Context: "She just started last month and she is still finding her feet."

Action: "Can you suggest 10 ideas on how I can achieve that via giving her performance and engagement-related insights."

Data (follow up): "I like idea 5, Please specify what are the data I will need and give me a step-by-step guide on how to generate the insights."

Consultative Collaboration

'Lean in'

Quick Wins

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Thank you!

Any questions?