

# AI/ML Applications in OB/HR

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Global mega-trends  
disrupting HR  
practice

What is being disrupted in HR practice?

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Flexible workforce

The concept that employment relations take place within a bounded space and a structured time, and with a task-based job description

Digitalization of  
business  
models

Need to reinvent HR's organizational value proposition by switching the focus from employees to customers

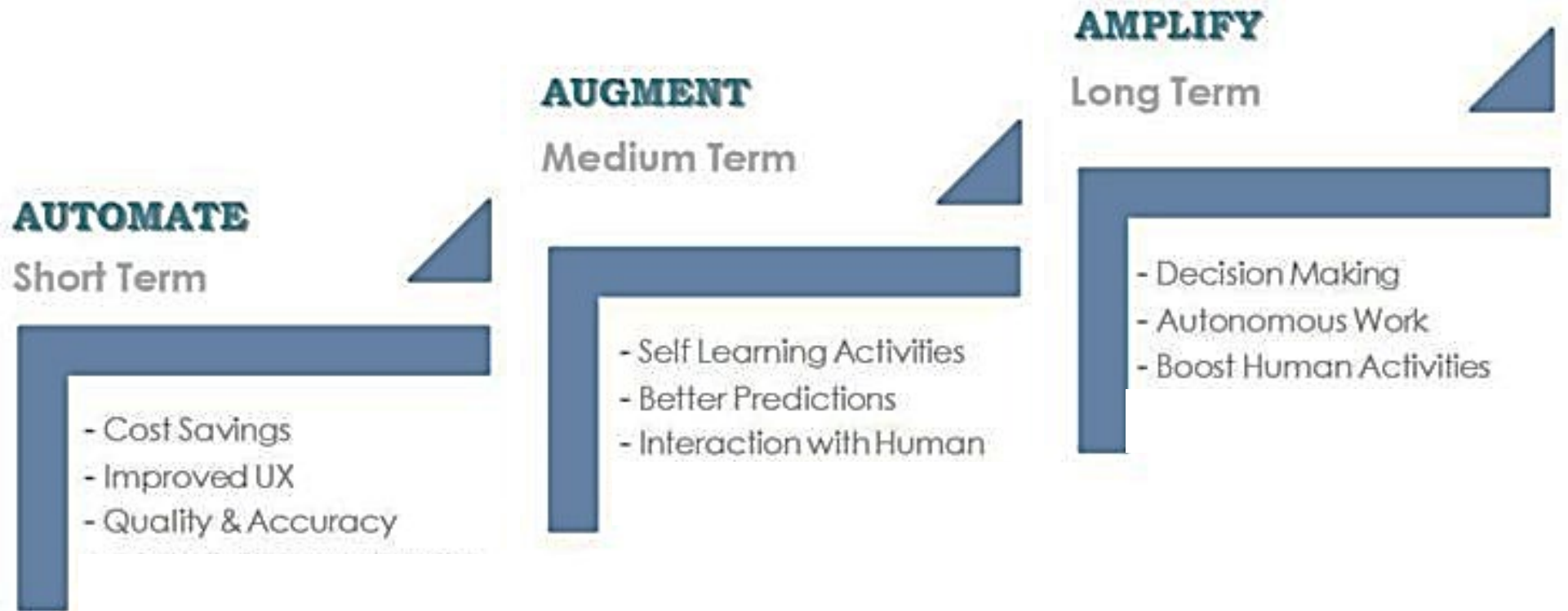
AI and machine  
learning

Need to embed AI and machine learning in existing HR processes without triggering unintended consequences

Dana Minbaeva, 2021

# What is the Role of Technology in HRM?

**DIGITALIZE**



AI and Automation journey @soumyasanto

# AI in HRM: Major Applications

- Data gathering and analysis
  - Access to and analysis of millions of datapoints, inside or outside the organizations, on a real-time basis
- Automatization of operations
  - use of chatbots, personalized nudges, application sorting, performance monitoring, etc.
- Strategic decision making
  - Decision-making on HR operations using data-driven insights

# AI in Recruitment

# How does AI-powered Hiring work?

- Job Description – identification of keywords
- Employee rating of competencies
- Content analysis of responses
- Intonations
- Facial expressions
- Grammar, domain knowledge, engagement, personality

*(speech recognition, pattern recognition, NLP, machine learning, etc.)*



# AutoView

Artificial Intelligence powered interview bot

Automated AI based evaluation; not a mere video recording tool.

- Virtual interview platform that mimics actual face-to-face interview
- Automatically evaluates candidates' body language, voice emotion and answer relevance
- Accommodates customized interview formats, flow and questions in minutes
- Detailed analytics and scores support in making informed hiring decisions



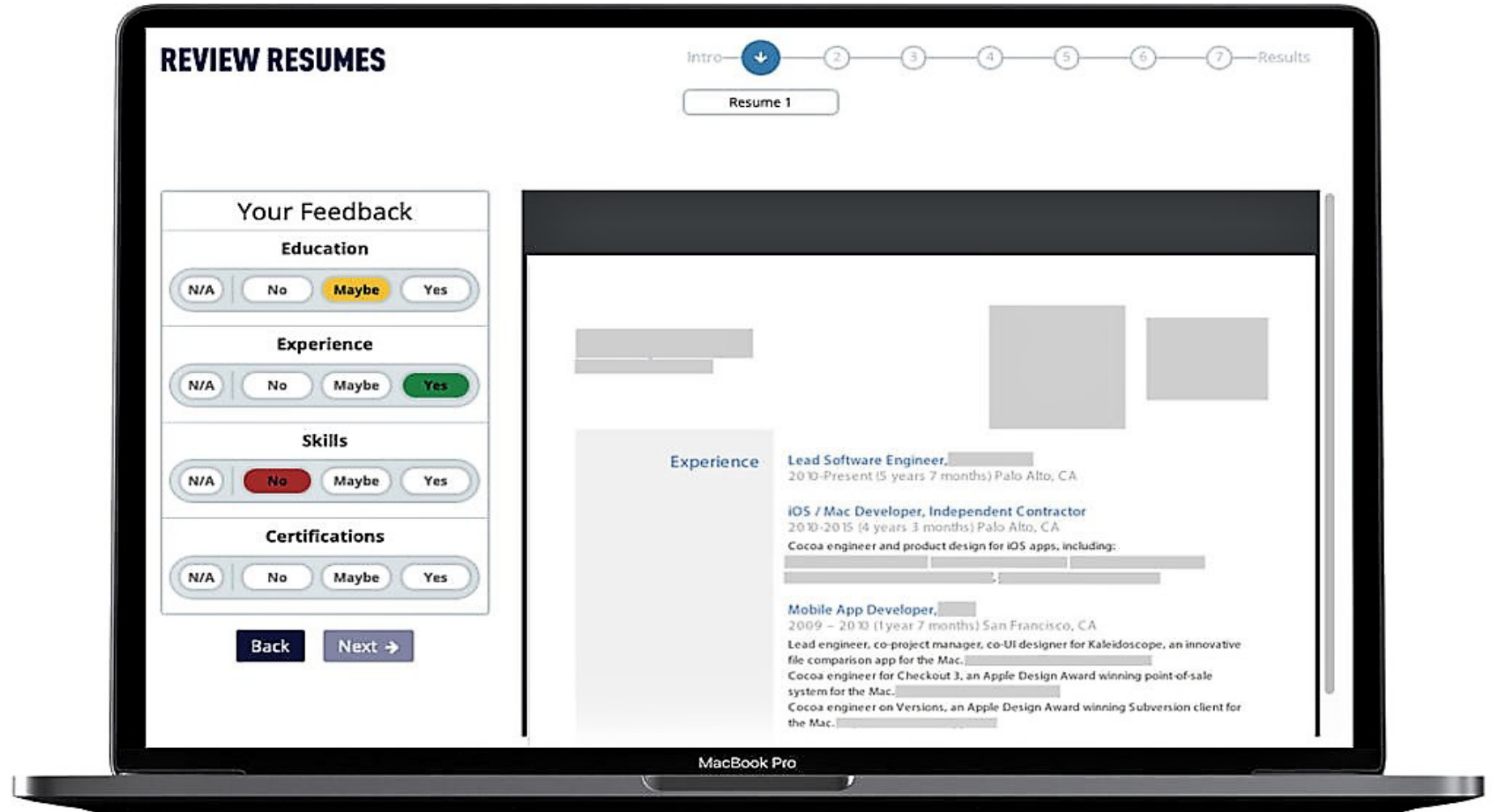
Get In Touch

## AutoView evaluates

# Blind Hiring - Talvista

Blind resume screening  
with redacted:

- Names
- Email Addresses
- Social Media URLs
- Headshots
- University/School
- Previous Employer



# Unbiased Job Communication - Textio

## Customer Service Manager

Job post for a Customer service role in Chicago

Our **passionate** team is hiring a **competitive** and **results-driven** customer service manager. We're a fun, **fast-paced** company, but we always **work hard**. As **our team** is rapidly **expanding**, we are looking for a customer service manager who is also a **forward-thinking** leader. This is a role where you will be more than just a cog in the system. We are looking for a **phenomenal** customer representative who will be a **proven** team player. Instead, you could try to be a **proven** team player.

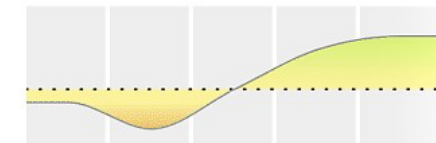
You could attract more women to apply by changing your language.



Slightly masculine tone



Appeals to older people



- **Hiring score:** Likelihood that this job will fill faster than similar jobs (passivity score, active candidates, comparison with others)
- **Bias meter:** Hidden gender bias, possible replacements
- **Flow:** AI-assisted content generation

# AI in Employee Engagement

## Overall Mood Score

4.2 / 5



GREAT

Keep up the good work.

+ 2%

### Sentiment distribution

72%

Positive

13%

Neutral

15%

Negative

Sameera | Developer | 06 Mar, 2020 | 😊

What's the one thing or process you wo implemented here?

More communication & accountability in **team**

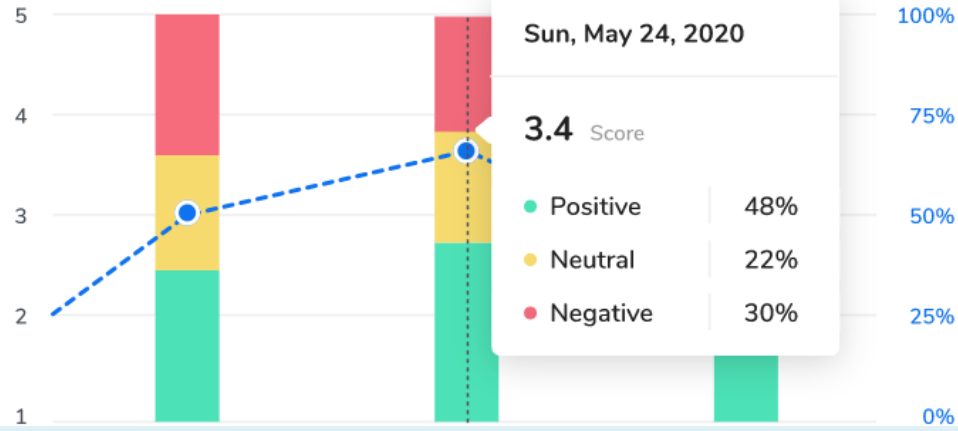
Steve | Designer | 06 Mar, 2020 | 😊

What's the one thing or process you wo implemented here?

There can be a **fun team session** so that people who with their team get to know there team better

## Mood Score Overtime

Last 3 months



Segment	Score	Change	User	Sentiment
Designation is Manager	4.5	10.0% ↑	72/85	Positive
Designation is Director	3.1	No change	34/41	Neutral
Department is Sales	4.6	12.0% ↑	69/88	Positive
Location is New York	4.4	8.0% ↓	21/26	Positive
Designation is Developer	3.6	6.0% ↑	102/114	Neutral
Designation is Accountant	3.2	20.0% ↑	93/102	Neutral
Location is Los Angeles	4.1	14.0% ↑	51/89	Positive
Designation is Designer	3.6	20.0% ↓	220/321	Neutral
Location is Ontario	4.8	12.0% ↓	135/152	Positive

Bishakha Majumdar. AI/ML Applications in OB/HRM. EPC in Machine Learning and Artificial Intelligence. IIM

# AI-Enabled Engagement Surveys

- Rapid, automated design and administration of surveys, reminders
- Response time, bounce rate
- Automated quantitative and qualitative analysis of data using NLP
- Trend analysis, industry analysis, predictive analytics
- Action planning, pre-built action plans
- Assessment

# Empuls

- Social Intranet
- Virtual Recognition
- Rewards
- Engagement surveys
- Perks and Benefits (*offers and exclusive discounts, early wages and payday loans, tax-saving prepaid cards*)

The image displays the Empuls social intranet interface. On the left, a navigation menu includes: Home, Recognize & Reward, Reward Budgets, Leaderboard, Surveys, Groups (Outdoor Together, 8), Admin (Reports, Send Gifts, Budget Automation, Manage R&R Program, Apps & Integrations, Org. Settings), and Reward Store (4579 Points). The main content area features a post from 'Townhall' (413 likes) with the text 'Happiness is a virtue, not its reward.' and a prompt 'Who are you rewarding today? Use '@' to tag a teammate.' Below the post is a 'Reward' button and a 'Post' button. To the right, a 'Celebrations' section lists: 'Rahul & 3 others birthday is today', 'Anand & 1 others work anniversary is today', and 'Raj & 2 others joined the team today'. A notification bubble states 'Anahita has rewarded you 100 Points for helping her with the design.' The bottom section shows a 'Reward Store' with a grid of gift cards: Amazon, Apple (1000 pts), Flipkart, Uber, cromā, and Myntra. A 'Collect Gift Card' button is visible for the Apple card. A small gift icon is in the bottom right corner.

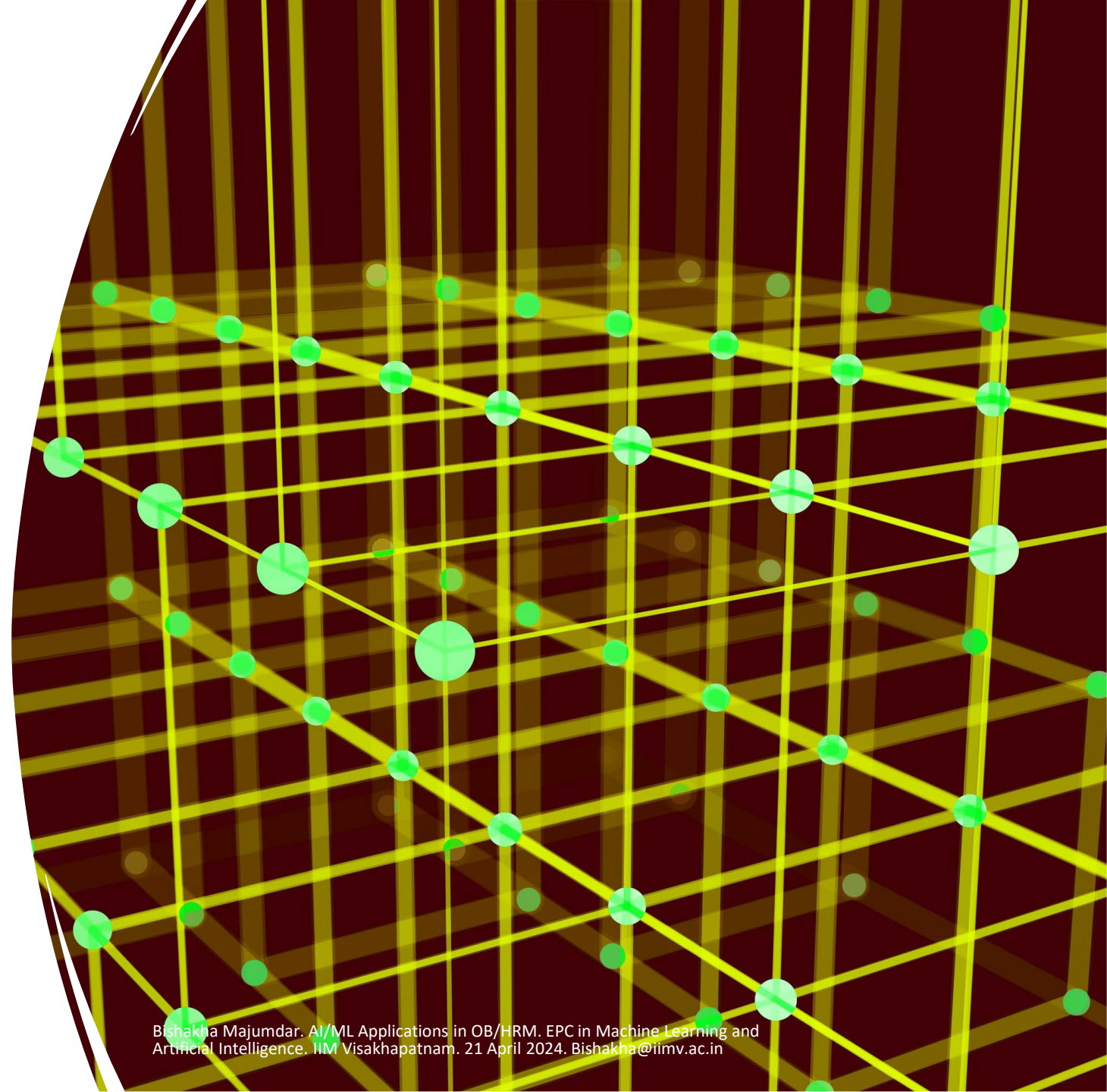
# Emplus

## Em - AI bot

- nudges to take proactive actions, such as welcoming new employees, sending birthday wishes, congratulating peers who receive awards, redeeming reward points, utilizing the reward budget to appreciate others, completing surveys on time, etc.
- assigns engagement scores for every employee action taken on the platform and create healthy competition by displaying each employee's cumulative score and rankings on a leaderboard.

# Generative AI and HRM

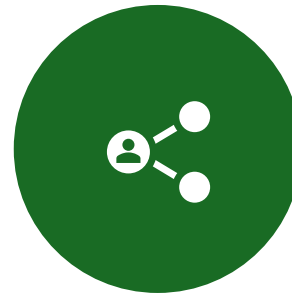
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# Applications of Generative AI



**Generate new content:** job descriptions, images, and emails for recruitment, corporate communication, and employer-branding exercises



**Synthesize data to prepare reports:** 360-degree feedback reports, skill-gap analysis reports, training need profiles, scenario mapping



**Communicate:** AI-powered HR chatbots



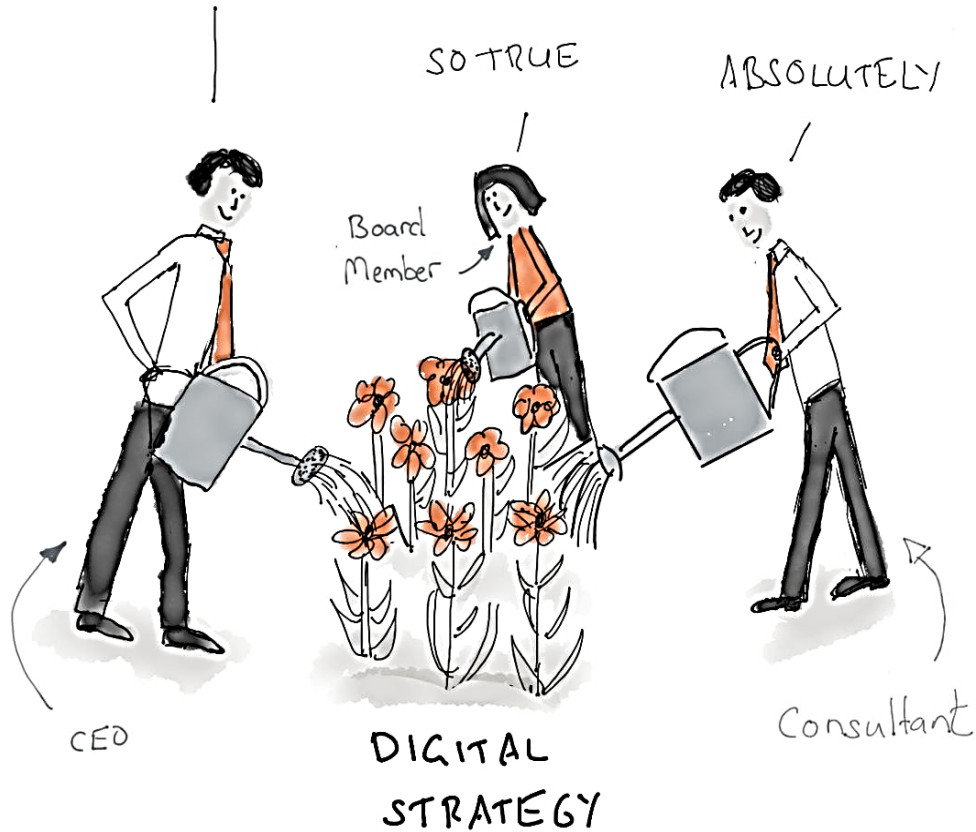
**Generating codes to analyze data**

# Challenges?

# Data biases

- Algorithms run the risk of replicating and even amplifying human biases
- AI systems that are not ethically governed can promote exclusion and feel too intrusive—and even threatening—to those impacted by their decisions

HAVE YOU HEARD...  
CULTURE EATS STRATEGY  
FOR BREAKFAST!



HELLO!



- Technology adoption and skilling do not happen at the same pace
- AI algorithms and solutions remain a 'black box', making employees hesitant to challenge them
- Tech adoptions are often non-strategic

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# AI washing

- Request evidence:** what models or code libraries the product uses; watch out for vague answers
- Involve IT in purchasing: let IT raise more nuanced technical concerns.**
- Look at the product holistically.** look at the whole product and consider all the potential benefits and challenges associated
- Stay up to date on industry news:** learn what does and doesn't work from other companies' trials and tribulations.

# Garbage in, garbage out!

- Transparency – of processes and technology
- Market Audits/HR Audits – (e.g., *Compa-Ratio: salary/market rate*)
- Algorithmic hygiene
- Data Governance
- Take precautions against AI washing: *ask for code libraries and models, involve the IT in purchases, stay updated on what did not work for others*

Zhang et al, 2019

<https://www.techtarget.com/whatis/feature/AI-washing-explained-Everything-you-need-to-know>