

AI/ML Applications in OB/HRM

Bishakha Majumdar
Organizational Behaviour & Human Resource Management
IIM Visakhapatnam

Knowing the jobs, & their KSA's

1. Job Analysis

Deciding HR supply & demand

2. HR Planning

3. Sourcing

Recruitment & placement

4. Training

Orienting employees & bridging skill gaps

Motivating employees

7. Engagement

Deciding salaries, wages, & incentives

6. Compensation

5. Performance Appraisal

Measuring performance

Building leadership pipeline, growth trajectories

8. Career Management

Managing benefits, legal requirements

9. Welfare and Compliance

10. Retention & Attrition

Managing voluntary and involuntary attrition, severance management

Global mega-trends
disrupting HR
practice

What is being disrupted in HR practice?

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

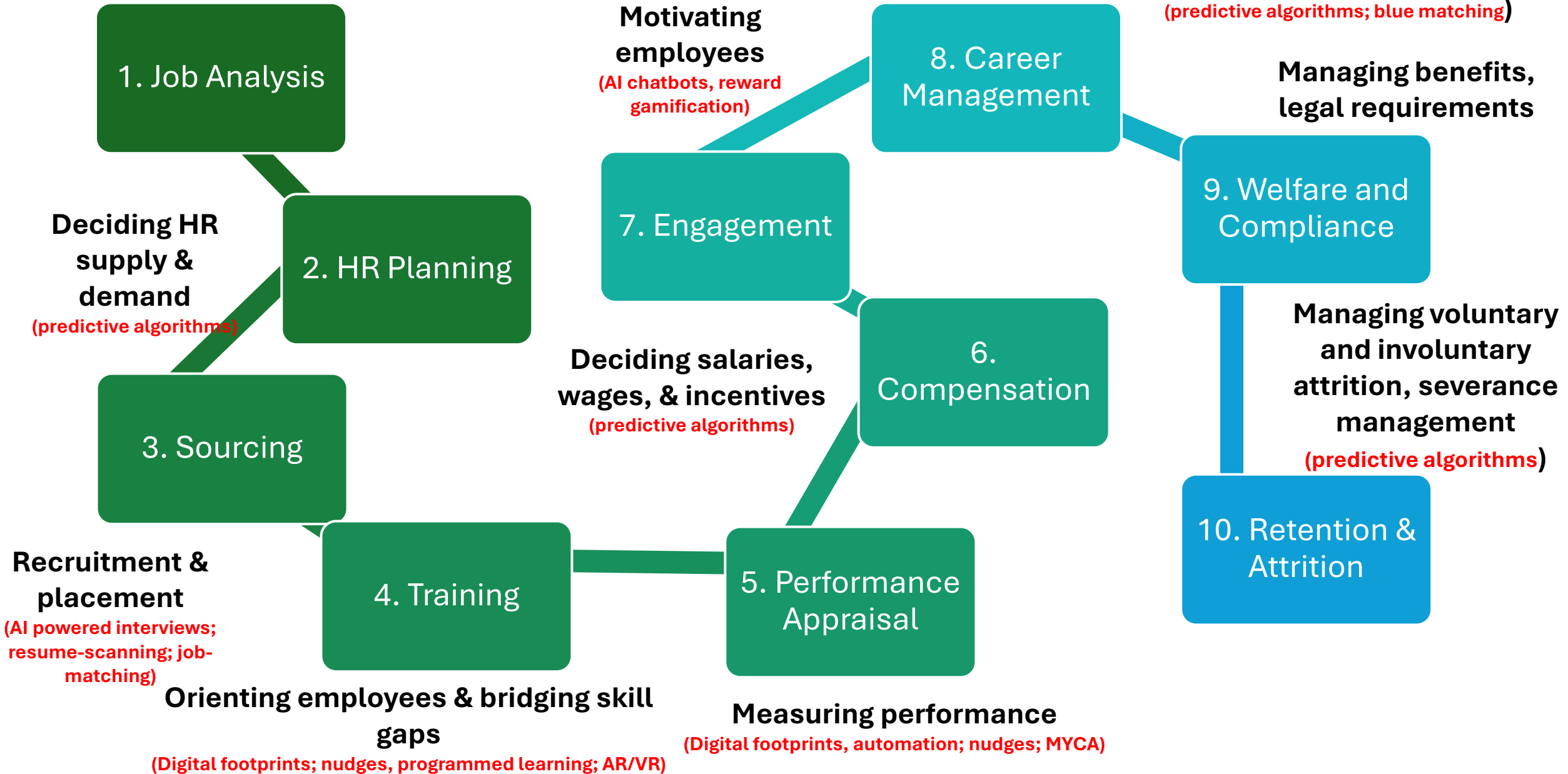
Dana Minbaeva, 2021

Knowing the jobs, & their KSAs

(Quantum Labor analysis)

Building leadership pipeline, growth trajectories

(predictive algorithms; blue matching)



Digitalization 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

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.)

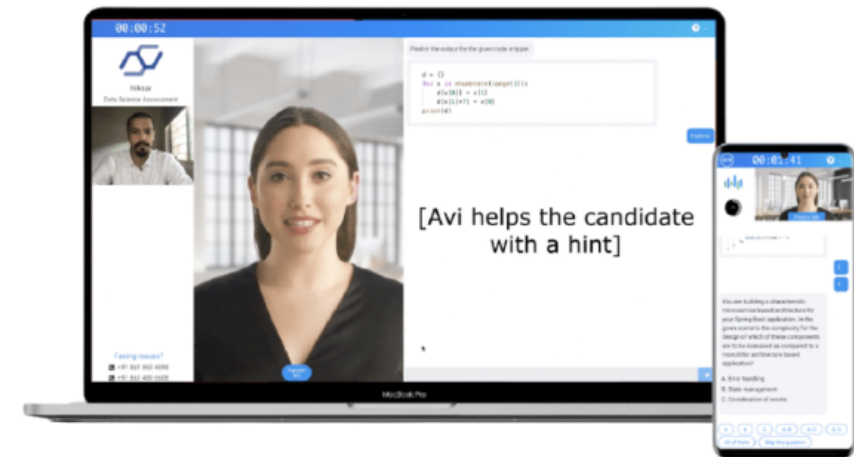
Transform Hiring using our Interview Intelligence Platform

Revolutionize hiring with AI, plan flawless interview structures, take quick AI-powered notes, reduce hiring time, and even train interviewers. Our deep interview insights empower smarter decisions and elevate your hiring.

[Book a Demo](#)

AUTO-EVALUATED VIDEO INTERVIEW PLATFORM

Customizable hard and soft skills assessments that candidates love and recruiters trust. 🤝



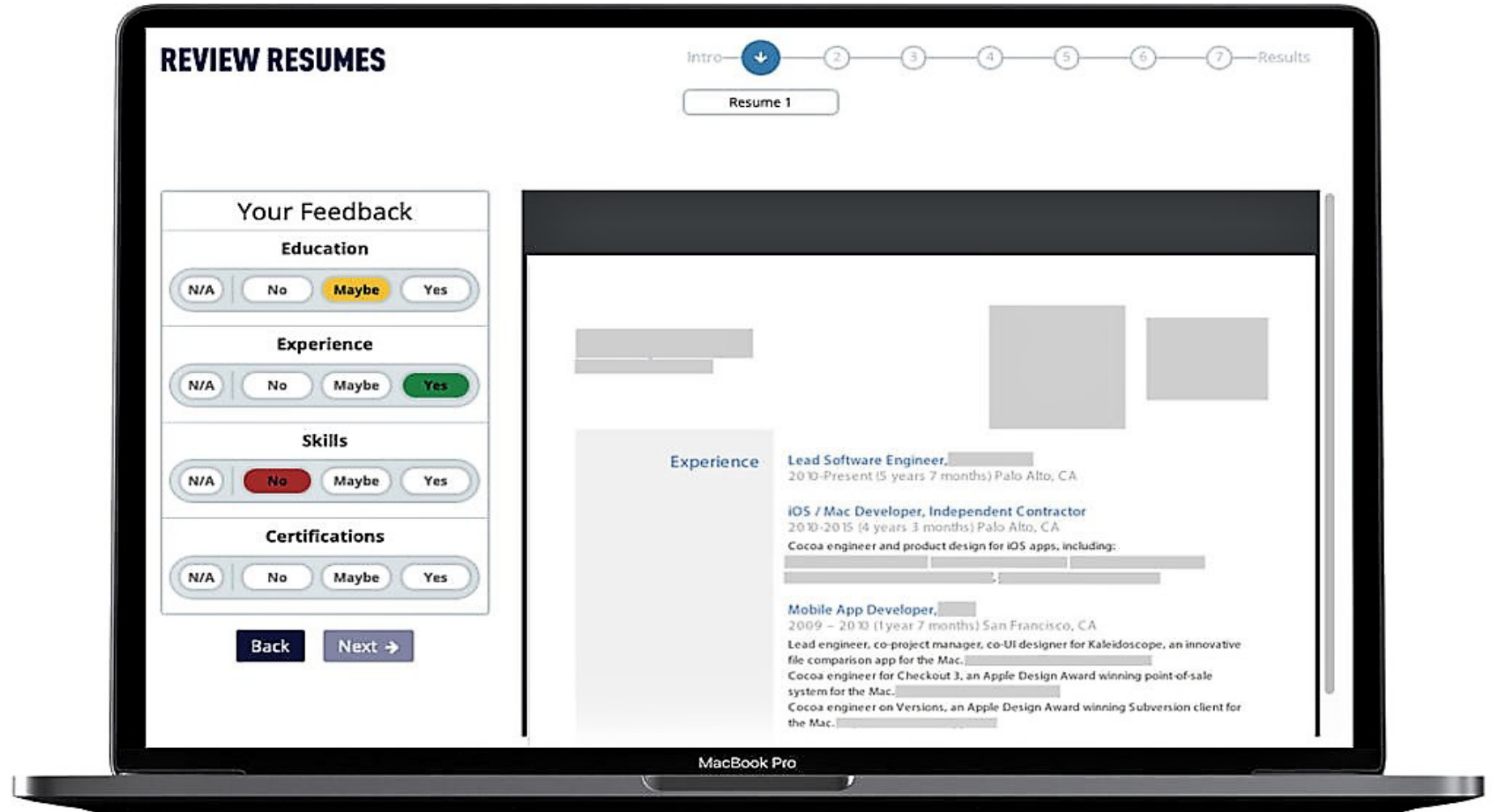
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Intelligence. IIM Visakhapatnam. 30 March 2025.

Bishakha@iimv.ac.in

Blind Hiring - Talvista

Blind resume screening
with redacted:

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



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<https://www.talvista.com/redacted-resume-reviews/>

Unbiased Job Communication - Textio



New Import Help

Document library

Analytics

Ben

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 is a **proven** team player. Instead, you could try to be a **customer service manager** where you will be on leading the team. This would be a **customer service manager** role.

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

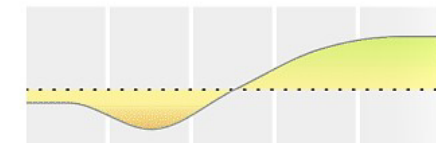


Textio Score
Below Average

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

Digital Transformation in Training

Bishakha Majumdar. AI/ML Applications in HRM. Executive
Certificate Program in Machine Learning and Artificial
Intelligence. IIM Visakhapatnam. 30 March 2025.

Bishakha@iimv.ac.in

How Digital Innovations Impact Training

- Augmented and Virtual Reality: gamification, situational role-playing, remote guidance, safety training
- Training Need Analysis and Evaluation: real-time training need analysis through digital footprints (Skyhive, Watson)
- Training Nudge: personalized feedback and training nudges (MYCA, Humu)
- Personalised Learning Path (PLP): adaptive learning resources, memory anchoring (Carnegie Math, Woonoz)
- Real-Time Training Evaluation: digital footprints

AI in Employee Engagement

Bishakha Majumdar. AI/ML Applications in HRM. Executive
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Bishakha@iimv.ac.in

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

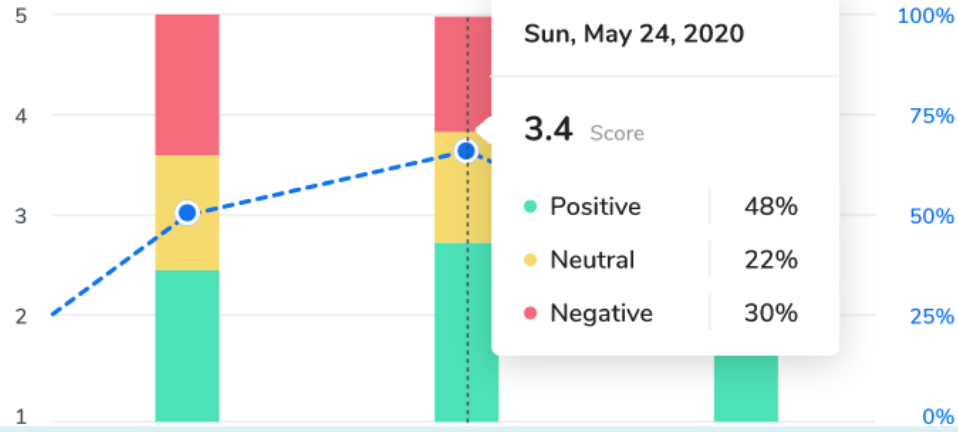


What's the one thing or process you wo implemented here?

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
Designation is Analyst	4.1	14.0% ↑	72/80	Positive

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

<https://leena.ai/about-us>

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<https://www.mercer.com/what-we-do/workforce-and-careers/talent-strategy/allegro-pulse-survey-platform.html>

Bishakha@iimv.ac.in

Empuls

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

Infosys

Home
Recognize & Reward
Reward Budgets
Leaderboard
Surveys
Groups
Outdoor Together 8
Insights

Admin
Reports
Send Gifts
Budget Automation
Manage R&R Program
Apps & Integrations
Org. Settings

Reward Store 4579 Points

Townhall 413 | Happiness is a virtue, not its reward.
Who are you rewarding today? Use '@' to tag a teammate.
Reward Post

Adhy
Congratulation It has been an more! #Work/

Celebrations
Rahul & 3 others birthday is today
Anand & 1 others work anniversary is today
Raj & 2 others joined the team today

Anahita has rewarded you 100 Points for helping her with the design.

1000 pts Apple Gift Card
This gift voucher can be used only on the website at checkout
Collect Gift Card
Terms & Conditions | How to use

amazon Apple Flipkart
Add to cart Add to cart Add to cart

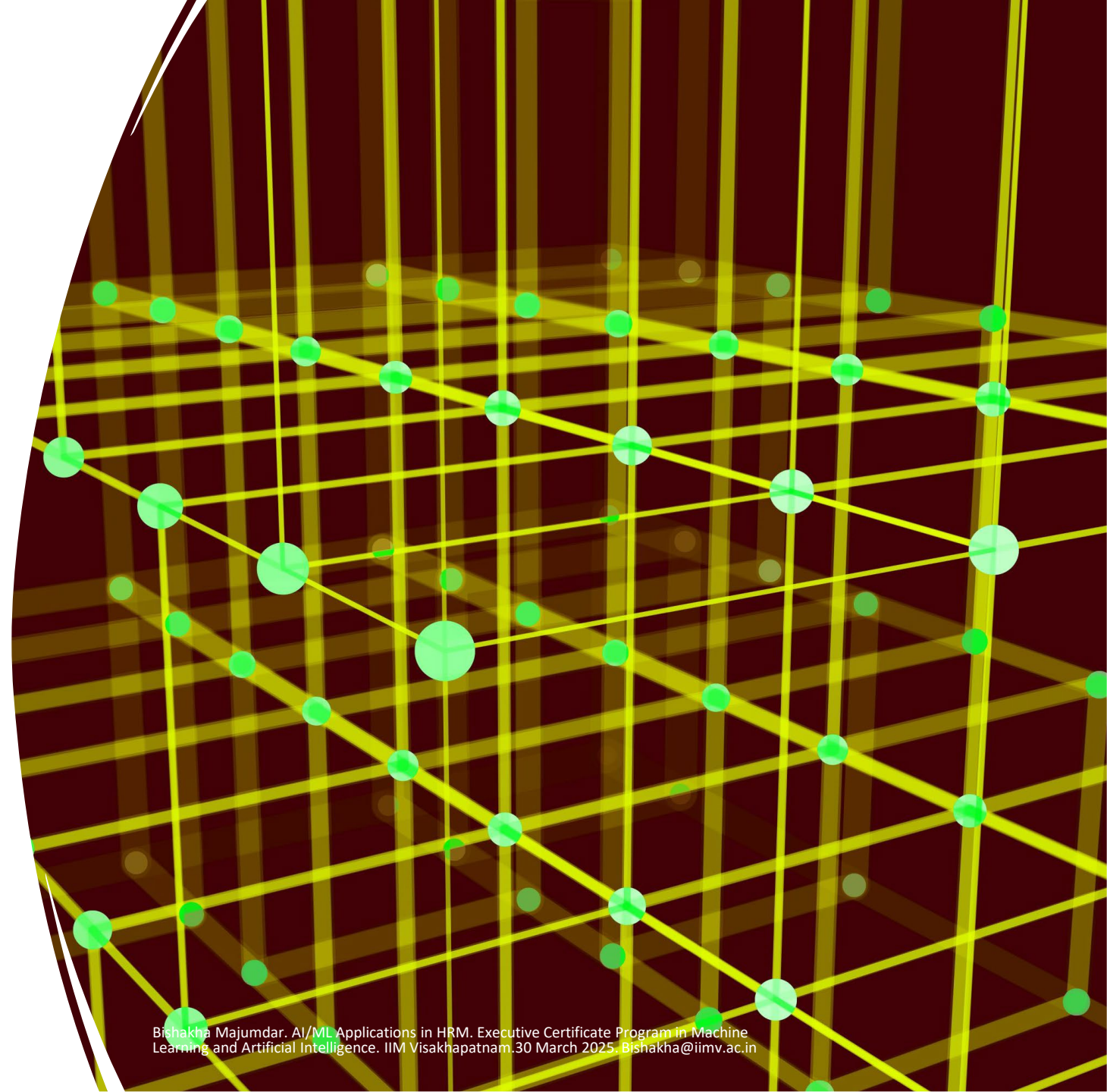
Uber cromā Myntra
Add to cart Add to cart Add to cart

Empuls

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.

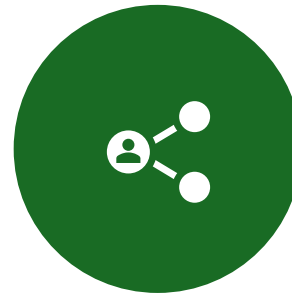
Generative AI and HRM



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

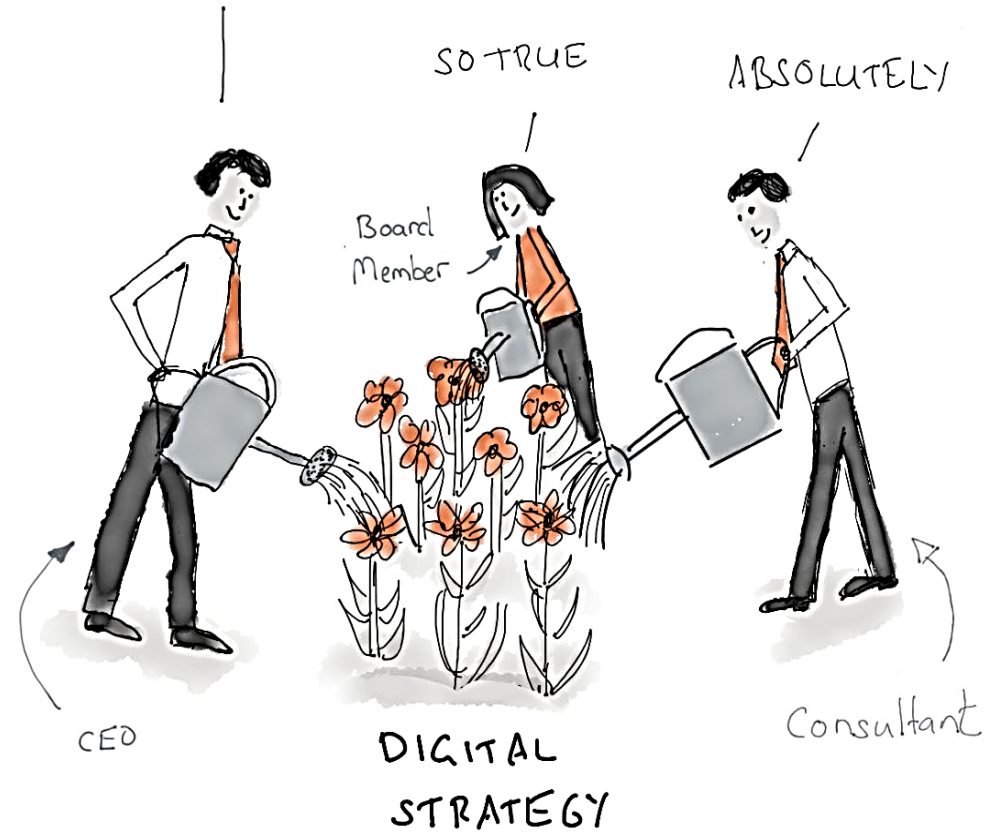
One in four workers prefer interacting with AI over humans

64% of People Trust a Robot More Than Their Manager

Data biases

- Amazon discontinued use of a recruiting algorithm in 2018
 - The data used to create the algorithm were derived from the resumes submitted to Amazon over a 10-year period.
 - The algorithm was taught to recognize word patterns in the resumes to arrive at relevant skill sets
 - These data were benchmarked against the company's engineering department to determine an applicant's fit.
 - The AI software penalized any resume that contained the word "women's" in the text and downgraded the resumes of women who attended women's colleges
- 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

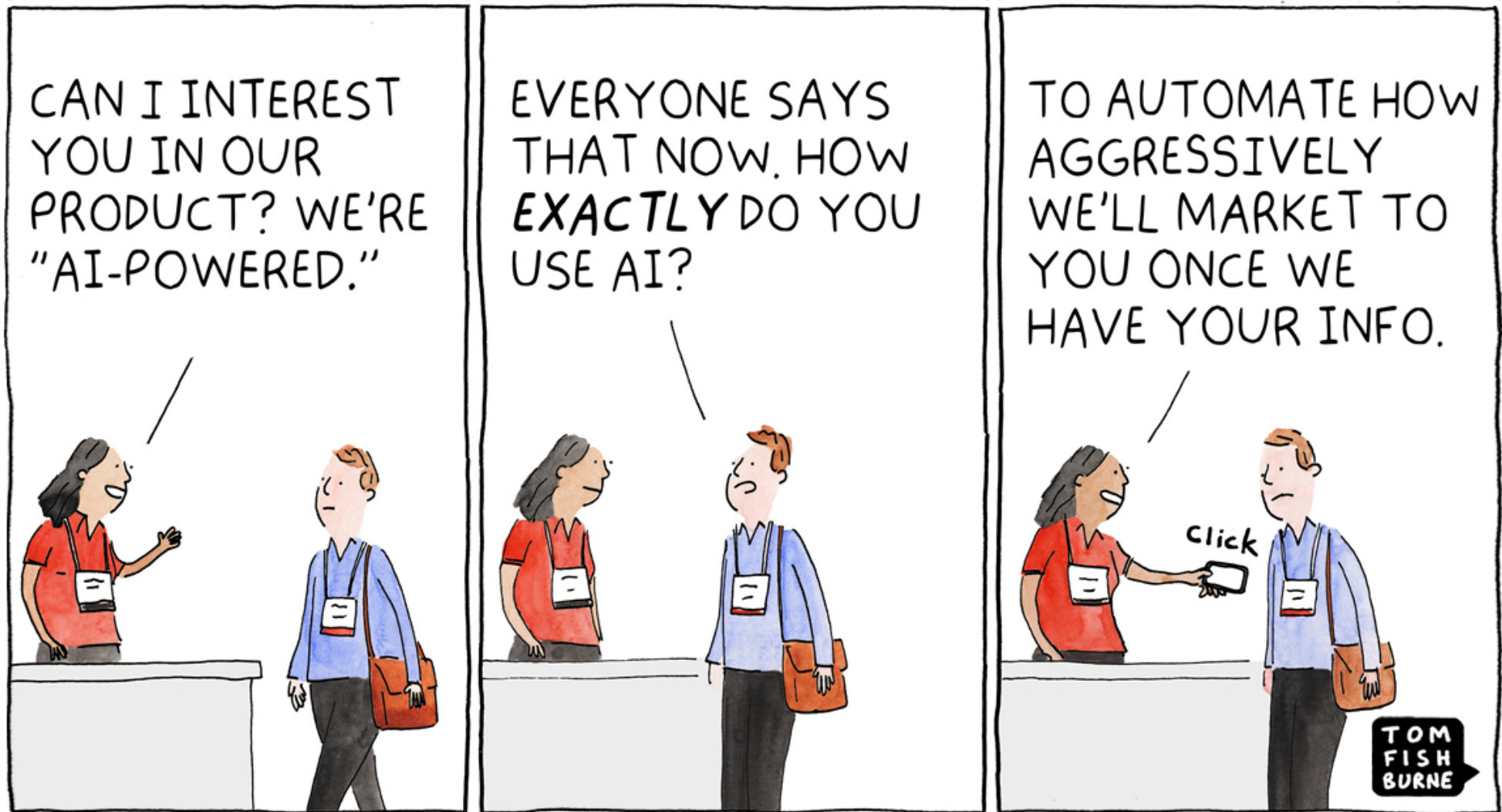
HAVE YOU HEARD...
CULTURE EATS STRATEGY
FOR BREAKFAST!



HELLO!



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



AI washing

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

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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>