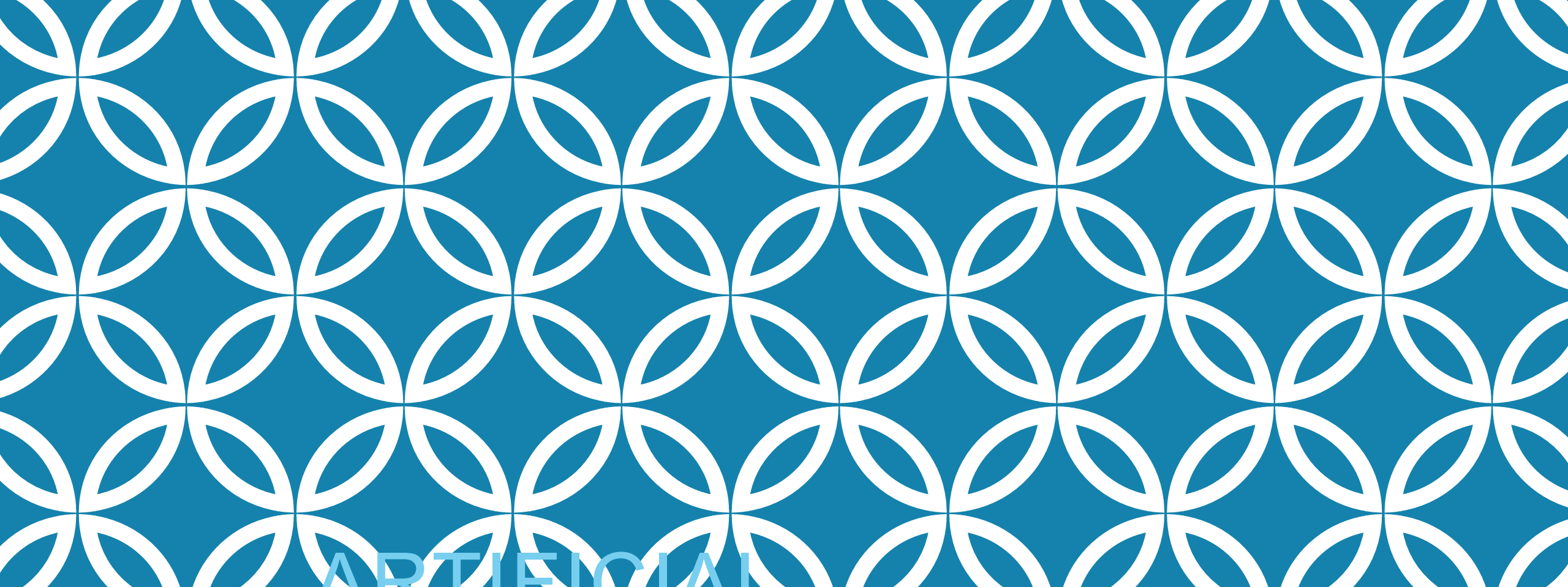# ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT

Adelia Gafurova | Noelia Medina Jurado | Taher Al-ahwal

WHAT IS ARTIFICIAL INTELLIGENCE (AI)?

Development of "thinking" computer systems

Deep Learning

Machine Learning

Natural Language Processing

Robotics

Predictive Analytics

Expert Systems

Image Recognition

Neural Network(s)

Knowledge Engineering

Process Automation

AI in HR
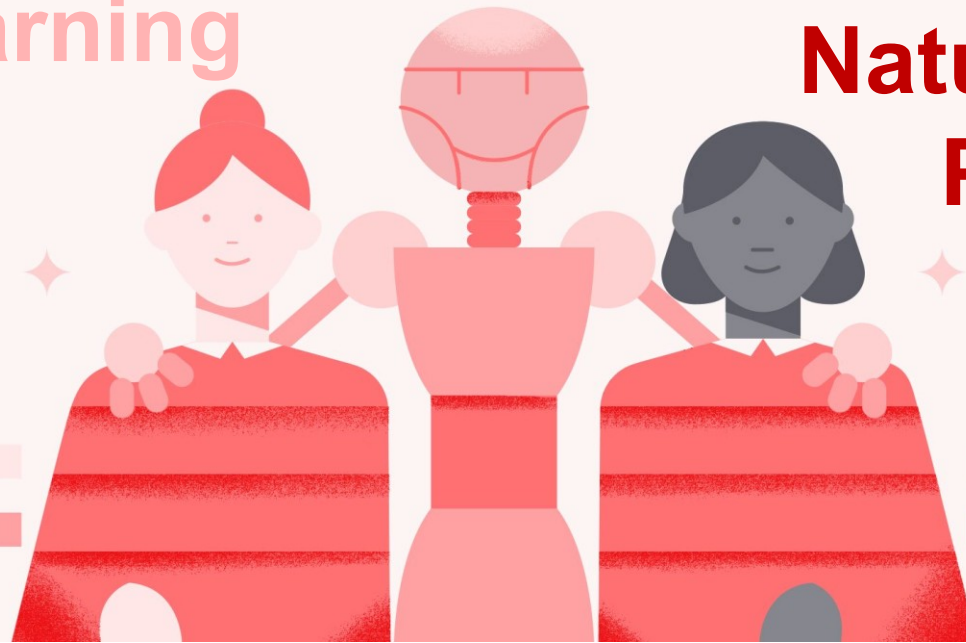
WHAT IS ARTIFICIAL INTELLIGENCE (AI)?

Definition:

❑ AI the ability of a machine to perform cognitive functions associated with human minds (such as perceiving, reasoning, learning, and problem solving), includes a range of capabilities that enable AI to solve business problems – by the *use of algorithms*.

❑ AI is pushing humans and machines closer together.

Is it?!

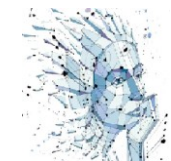AI in HR
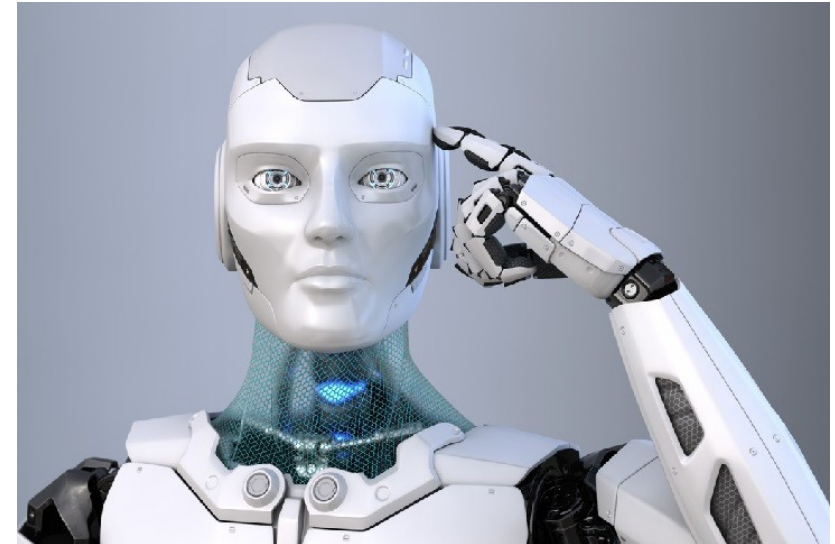
WHERE IS AI USED?

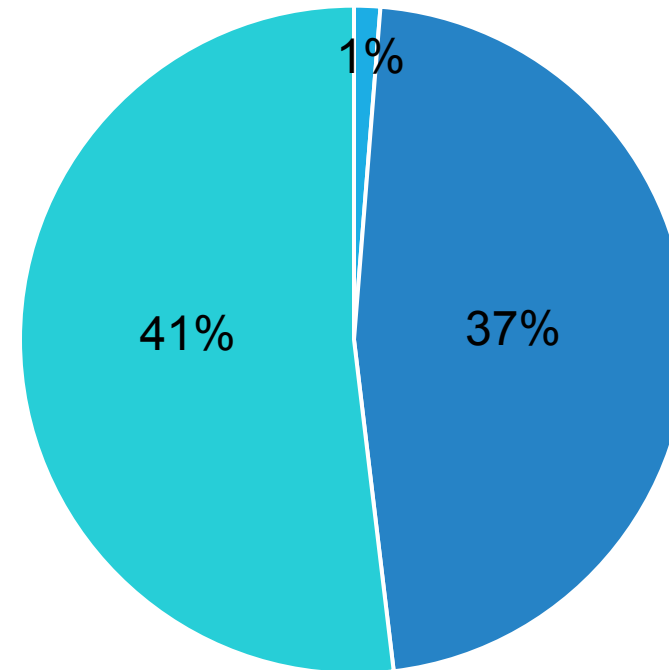❑ Wherever tasks call for intelligent, analysis-based behavior.

❑ Main uses in:
  ❖ Telecom
  ❖ High-tech
  ❖ Financial services

❑ 2017 : 20% used AI

❑ 2018 : 47% used AI

❑ Popularity of AI is increasing.

AI in HR

DOES AI HAVE ADDED-VALUE?

McKinsey & Company

Global Survey:

Adding Value to Businesses by Using AI

1%

41%

37%

- No or Little Value
- Moderate Value
- Significant Value

AI IN DIFFERENT BUSINESS FUNCTIONS?

	Service operations	Product and/or service development	Marketing and sales	Supply-chain management	Manufacturing	Risk	Human resources	Strategy and corporate finance
Telecom	75	45	38	26	22	23	17	15
High tech	48	59	34	23	20	17	21	17
Financial services	49	26	33	7	6	40	9	14
Professional services	38	34	36	19	11	15	16	11
Electric power and natural gas	46	41	15	14	19	14	15	14
Healthcare systems and services	46	28	17	21	9	19	18	13
Automotive and assembly	27	39	15	11	49	2	8	6
Travel, transport, and logistics	51	34	32	18	4	4	2	3
Retail	23	13	52	38	7	9	8	0
Pharma and medical products	31	31	27	13	28	3	6	4

AI in HR

AI IN HR

- ❑ **Recruitment (Talent Acquisition)**
- ❑ **Automation of Administrative Tasks**
- ❑ **Onboarding**
- ❑ **Employee Training**
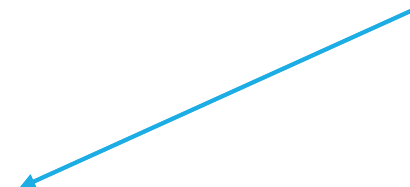- ❑ **Retention**
- ❑ **Knowledge Sharing**

Exploring
AI-supporting
applications designed
to improve operations

AI in HR

HR
IN THE AGE OF
AI
EVERY COMPANY IS A TECHNOLOGY COMPANY

What does that mean??

AI in HR

1. RECRUITMENT (TALENT ACQUISITION)

❑ The ability to identify suitable candidates accordingly to Job Descriptions.

❑ Speeding up the preliminary screening processes (100's of applications in fraction of time). Is there a problem ??! YES. Possible Loss of Creativity would go unrecognized

❑ AI helps eliminate human bias.

❑ Managers use AI to search database of past applications of new positions.

❑ According to Forbes, by using AI 16% increase in competitive advantage in talent acquisition.

AI in HR

2. AUTOMATION OF ADMINISTRATIVE TASKS

❑ Pre-screening questions and interview scheduling to speed up recruitment process.

❑ Allocating office space and providing certain equipment saves HR staff time.

❑ Study shows 19% increase in effectiveness in administrative tasks done by HR using AI-support

❑ Use of smart chatbot of company-related information.

❑ Chatbots give HR sta view of the organization.

What is a smart chatbot?

AI in HR

2. AUTOMATION OF ADMINISTRATIVE TASKS

❑ It is a bot made to chat about anything, which is one of the main reasons that make it so human-like

❑ Talk to Mitsuku for a while when getting bored.

❑ It replies to your questions most humane way and understanding mood with the language you

❑ AI annual competition (Loebner) awarded to Mitsuku ch
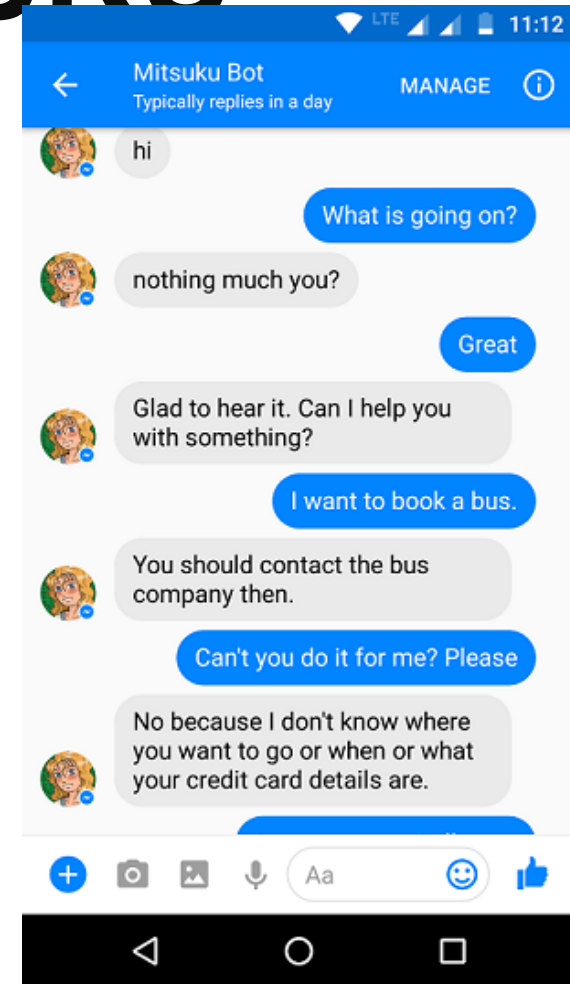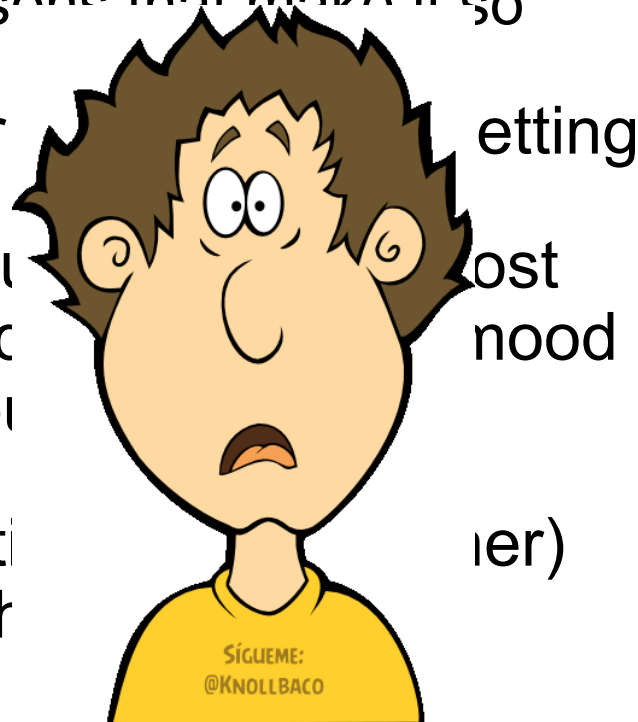
2. AUTOMATION OF ADMINISTRATIVE TASKS

❑ Employee doubts about policies and procedures can be resolved by way of simple queries with prompt answers.

❑ Submission and processing of leave forms.

❑ Decreasing 'low-value' tasks helps HR focus/improve workplace bonds and relationships.

AI in HR

3. ONBOARDING

❑ With the use of artificial intelligence, onboarding can be customized to individual employees, their pos

❑ AI algorithms can be used for:

❖ briefing about job profile, tasks, benefits

❖ informing employees about important company contacts

❖ identifying and answering repetitive employee questions

❖ verifying documents

AI in HR
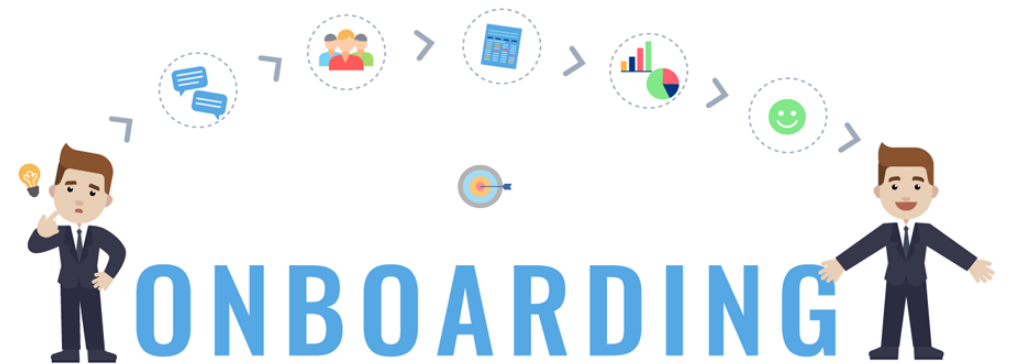
3. ONBOARDING

❑ A crucial part of successful employment.

❑ Glassdor: strong onboarding improves new hire retention by 82% and increases productivity by 70%

❑ Click Onboarding: ~ 75% of employees "are more likely to stay with a company for three years if they experienced great onboarding."

4. EMPLOYEE TRAINING

❑ Use of large databases of job profiles and skills to tailor training programs.

❑ Personalized training to fill skill gaps and polish existing ones.

❑ Career pathing: draw possible career directions.

AI in HR

5. RETENTION

❑ AI-based analysis of individual preferences and employee performance helps HR Dept. identify who should get a raise and who is likely to resign.

❑ AI applications predict which employee plans to quit, with 95% accuracy, e.g, IBM AI Tech.

❑ Identifying who might quit helps HR Dept decrease talent lose.

❑ Retention-oriented AI technologies prepa surveys and reward systems.
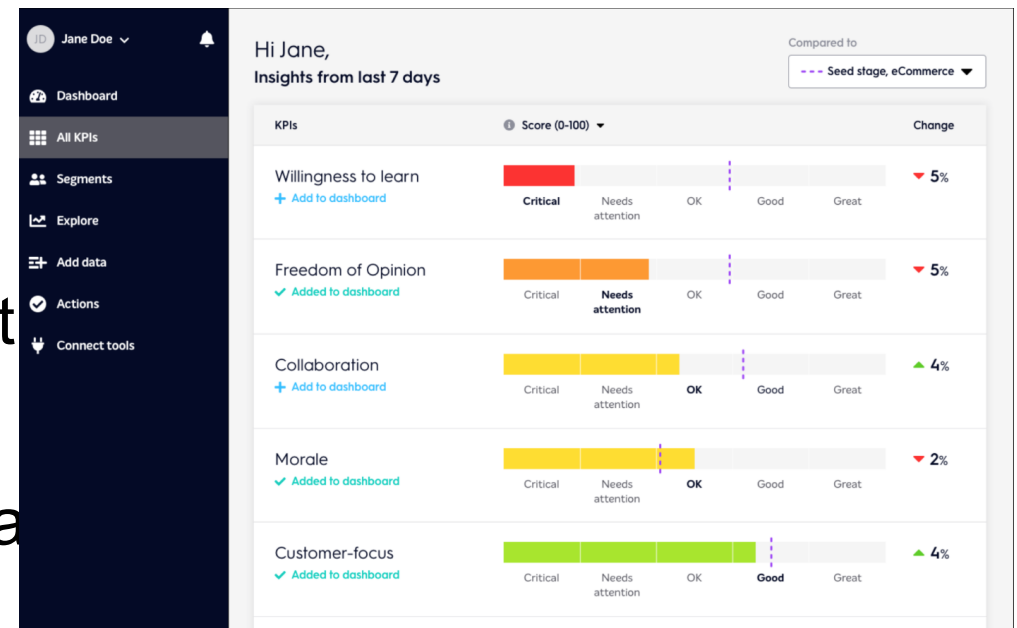
Bunch.ai app - real-time culture and employee engagement insights

AI in HR

6. KNOWLEDGE SHARING

❑ Use of new technologies—semantic search, natural language processing, and machine learning—to make it easier for employees to find the knowledge they're looking for quickly and easily.

❑ **AI-powered tools help you connect and combine knowledge across multiple systems**, giving all employees access to knowledge regardless of where it lives.

AI in HR
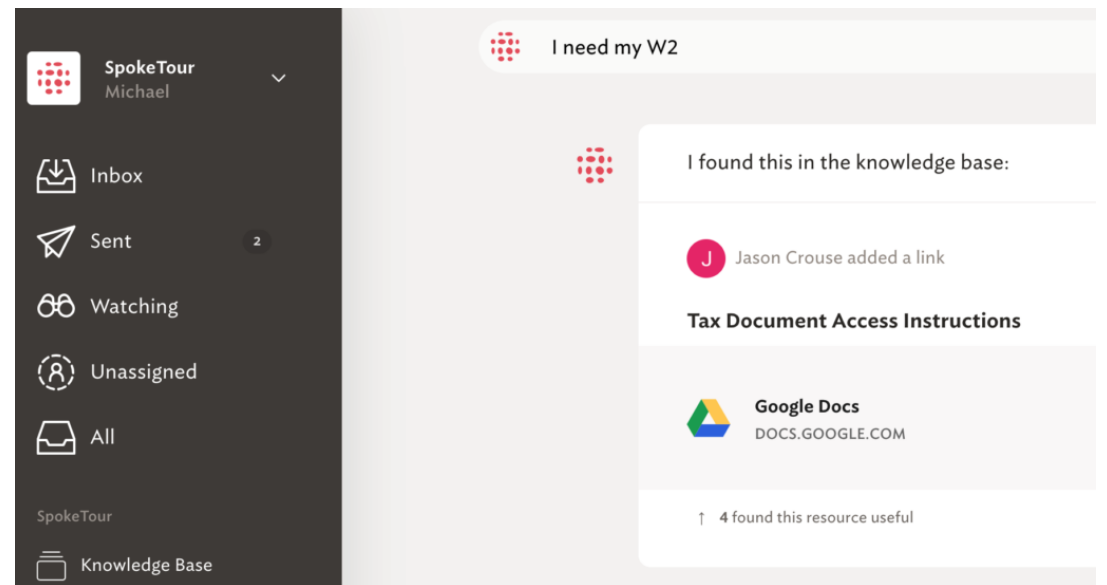
POPULAR AI APPLICATIONS FOR HR

❑ **TextRecruit** – recruiting automation

❑ **GoHire** – recruiting automation

❑ **Workday** – focuses on leveraging employees potential (retention and training).

❑ **Ascendify** - focuses on leveraging employees potential (retention and training).

❑ **Everwise** - focuses on leveraging employees potential (retention and training).

❑ **Spoke** – allows knowledge sharing across functions; helps HR keep employees' knowledge up to date.

AI in HR

TO AI OR NOT TO AI?

❑ **Advantage:** AI improves HR processes; thus, increases productivity.

❑ **Challenges:**

❖ lots of data has to be properly stored and managed

❖ additional talent required to operate and maintain AI software

❖ the dilemma of how to balance between human-centric management on one hand, and automated scalability on the other.

AI in HR

DISCUSSION

Chris Taylor (Chie... ...uy Canada) says AI helps Hum... ...come more human because it ... "critical thinking, creativity ... ...e rest of the tedious and time c... Because HR is ev... ...mans, do you think having AI sof... ...d decisions will turn us eventually ... ...creases company's produc... ...ses operational costs!

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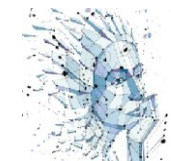https://www.monterail.com/blog/digital-transformation-with-hr-tech

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Thank You

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