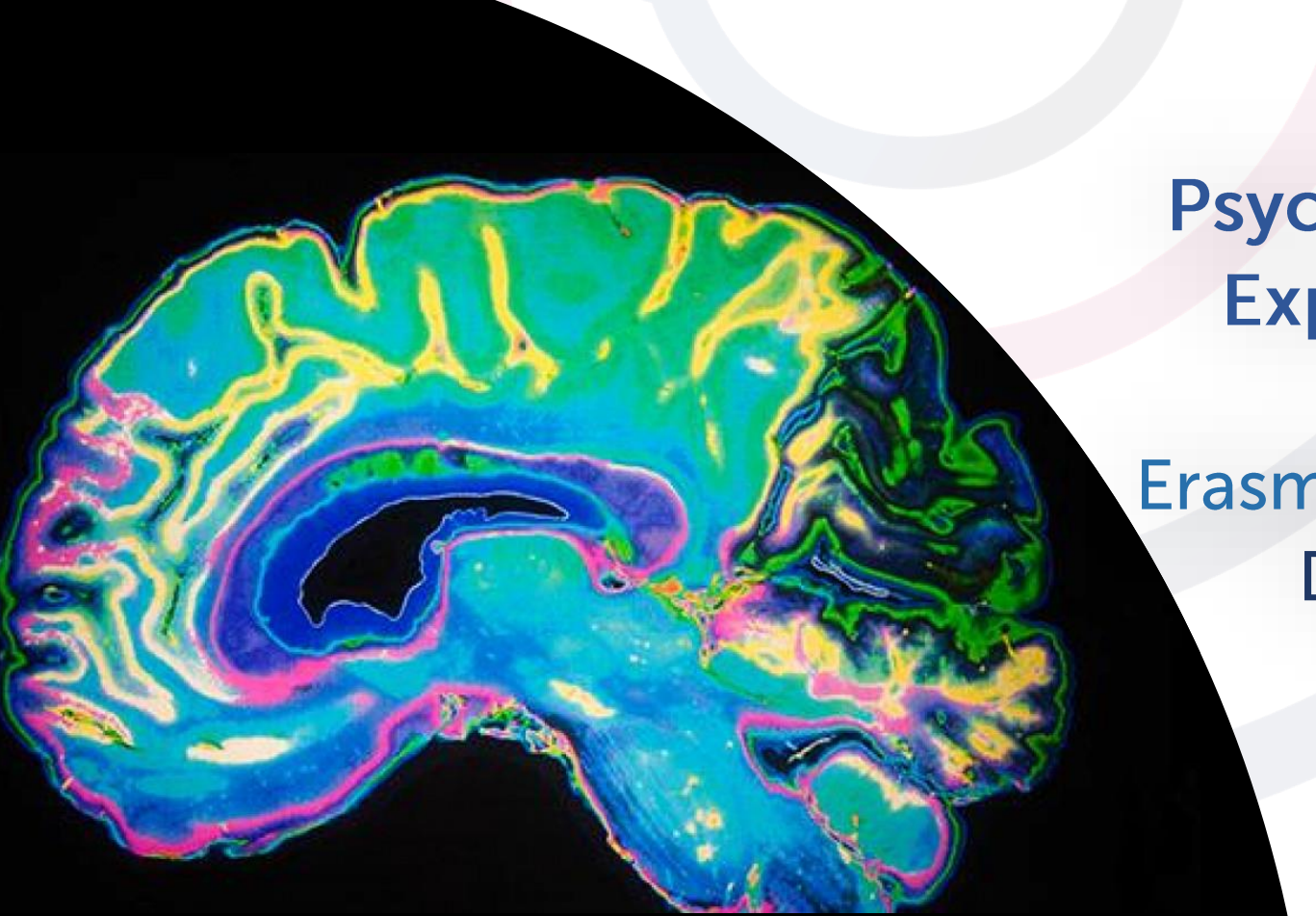

Psychology of AI Expert Practice

Erasmus Centre for Data Analytics

Erasmus Centre for Data Analytics

We may not always realize it, but Artificial Intelligence is omnipresent in our daily lives and augments our behavior in various ways...

The prevalence of AI in daily live

Artificial Intelligence:

- influences product choices (e.g., on Amazon or bol.com)
- determines which movies we watch (e.g., on Netflix)
- tells us whom to date (e.g., Tinder)
- suggests whom to hire, fire, or promote
- offers medical, legal, and investment advice
- helps us schedule appointments
- allows us to interact with smart products
- facilitates interactions with chatbots (e.g. Open GPT)
- enables automating tasks and outsourcing them to AI and robots

The mainstream AI focus

The predominant focus is on the **technical computation** of AI and its **outcomes**.

Questions typically asked are:

1. What does the underlying algorithm look like (e.g., collaborative versus content-based filtering)?

2. How to improve the underlying algorithms?

3. Which output can be achieved? Are the results “better” compared to what humans can achieve?


This is very relevant as a foundation, but not enough to reap value from AI and increase AI adoption....
The Psychology of AI lab is different....

Our focus is on the human side of AI

*We explore the consequences of **human-AI interaction** for:*

- Employers
- Employees
- Consumers
- Policy makers
- AI-Developers

Our focus is on the human side of AI

Questions that we are interested in are:

1. How do employers perceive job candidates selected by AI?
2. How do employees feel about collaborating with robots?

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3. How do consumers respond to advice from AI?
4. How do consumers feel about delegating decisions to AI?
5. What are consumers' subjective perceptions of how AI works and which decision criteria it employs?

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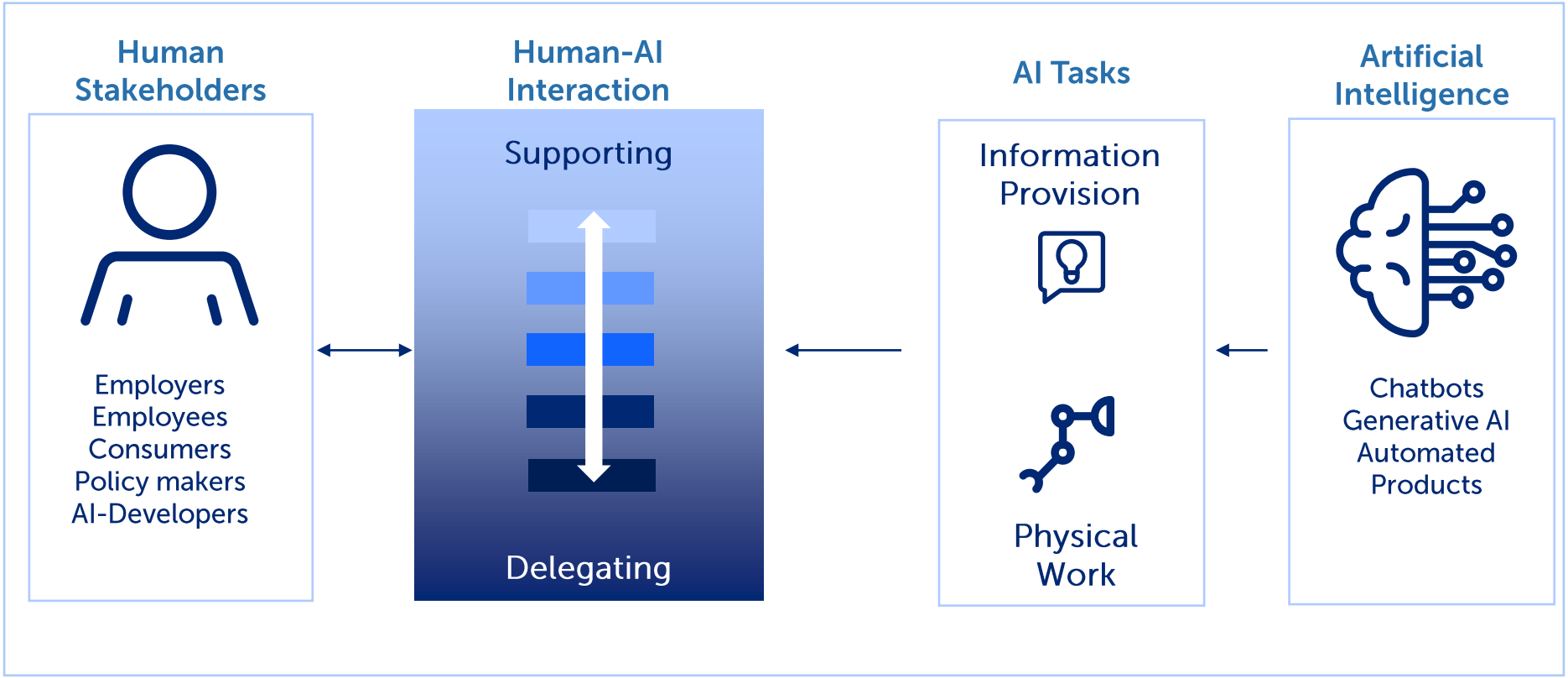
6. How can policy makers nudge adolescents to choose careers and jobs that are unlikely to be automated in the new feature?
7. What knowledge about human-AI interactions do AI-developers need to consider, to develop AI that is workable for people?

Our Human-AI Interaction Framework

Erasmus Centre for Data Analytics



Why is exploring the human side of AI essential?

It helps **companies and AI-developers** understand:

- how to better design consumer AI experiences.
- how to address psychological barriers to AI adoption.
- the impact of AI on consumers and employees.
- the consequences of AI-based decisions in recruiting employees.
- how employees feel about automating tasks to AI and robots?
- how automating tasks to AI impacts employees' performance?

Why is exploring the human side of AI essential?

It helps **policy makers, governments and institutions** understand:

- whether implementing algorithms can create biases on the human (not algorithm) side (e.g., in hiring)?
- how citizens and employees feel about automating tasks to AI and robots?
- how automating tasks to AI impacts employees' performance?
- how we can prepare the next generation for making career choices that are future-proof?

How can we help?

We help organizations understand how AI solutions can bring value to users and how to best address psychological barriers to adoption with actionable interventions.

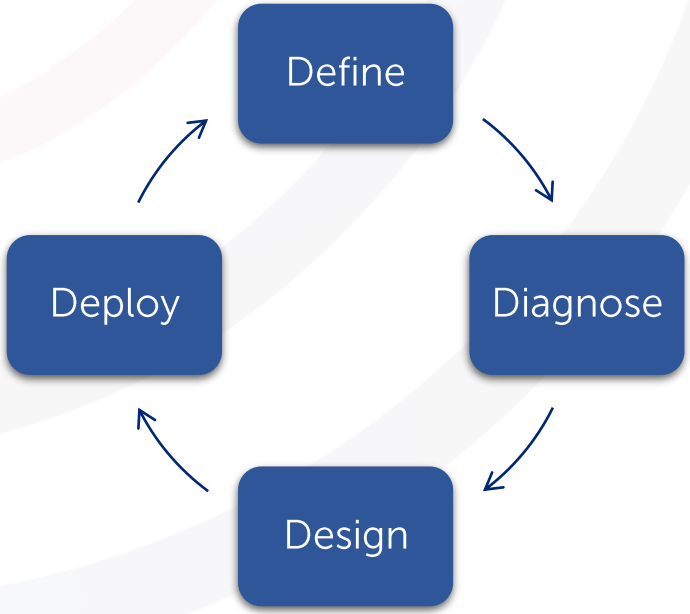
- We help answer and formulate research questions of interest to private and public organizations, broadly related to human-AI interaction through:
  - Small-scale research projects (e.g., contract research/consulting)
  - Large-scale research projects (e.g., collaboration in PhD projects)

- We can share our expertise in training workshops and help address challenges related to the human side of data science and AI.

Consulting opportunities: our process

Our process involves 4 steps:

1. **Define** the problem and the intended outcomes
2. **Diagnose**: identify the psychological barriers to adoption of AI product and services
3. **Designing** interventions and marketing actions addressing the psychological barriers
4. **Deploy**: evaluate interventions with product testing, field experiment, surveys, etc.



Our expert practice

Characteristics of our practice:

Interdisciplinary Expertise	Group of interdisciplinary researchers and experts interested in understanding the human side of AI
Essential domains represented	Specialists from various domains, such as: Psychology, Marketing, Organization and Behavior, Operations and Technology Management
Collaborations across institutions	Representing various renowned international institutions

Our key experts






Our experts in the spotlight

Anne-Kathrin Klesse
Associate Professor in Marketing at Rotterdam School of Business, Erasmus University

Academic Director of the Psychology of AI Expert Practice

Expertise & focus

Stakeholders:
Consumers, Employers, and Employees

Example questions that Anne can help with:

- How can we use communication as a powerful tool to increase **consumers**' acceptance of AI?
- How do **consumers** interact with algorithmic recommender systems? What preferences do they reveal?
- How does the usage of ChatGTP influence **consumer** behavior?
- How does AI in people analytics impact **employers**' perception of selected candidates?
- How do **employees** feel when AI makes decisions (rejection/acceptance/promotion) about them?

Our experts in the spotlight

Mirjam Tuk
Associate Professor in Marketing at Rotterdam School of Business, Erasmus University

Director of "brownbag" seminar series of the Psychology of AI Expert Practice

Expertise & focus

Stakeholders:
Consumers, Policy makers, Employees

Example questions that Mirjam can help with:

- How can we prepare the next generation for making career choices that are future-proof?
- How does usage of ChatGPT influence **consumer** behavior?
- How does mode of manufacturing influence **consumers'** purchase behavior?
- Can AI help reducing loneliness?

Our experts in the spotlight

Jelle de Vries
Associate Professor in Operations Management at Rotterdam School of Business, Erasmus University

Member of the Psychology of AI Expert Practice

Expertise & focus

Stakeholders:
Employers and Employees

Example questions that Jelle can help with:

- Should AI/robots lead or assist **employees** to maximize joint performance?
- What is the impact of **employee** autonomy on performance and job satisfaction in human-robot collaboration?
- For which task types do **employees** benefit the most from AI assistance?
- How can **employers** deploy VR and AI to enhance occupational safety?

Our experts in the spotlight

Johannes Boegershausen

Assistant Professor in Marketing at Rotterdam School of Business, Erasmus University

Member of the Psychology of AI Expert Practice

Expertise & focus

Stakeholders:
Consumers, Employers, and Employees

Example questions that Johannes can help with:

- How can we improve **consumer** reactions to service bots?
- How should firms frame AI-powered solutions to increase **consumer** and **employee** adoption and usage?
- Which **consumer-related** tasks are best suited for automation?
- How does automation influence **employee** motivation and engagement?

Our experts in the spotlight

Antonia Krefeld-Schwalb

Assistant Professor in Marketing at Rotterdam School of Business, Erasmus University

Member of the Psychology of AI Expert Practice

Expertise & focus

Stakeholders:
Consumers and Employees

Example questions that Antonia can help with:

- How do **consumers** experience mistakes by algorithms?
- What kind of investment advice (e.g., personalized versus generic) do **consumers** prefer from algorithms?
- Can personalization of algorithmic advice increase **employees'** likelihood to collaborate with them?

Our experts in the spotlight

Colin Lee
Assistant Professor in Human Resource Management

Member of the Psychology of AI Expert Practice

Expertise & focus

Stakeholders:
Employers, Policy makers, and Developers

Example questions that Colin can help with:

- How can an **employer** use data and AI to improve the selection of applicants?
- How can can **employer** build trust when using AI in a feedback systems?
- How can **developers** ensure interoperability (i.e., potential for integration with other systems) of their job-related platforms or systems?
- How can **policy makers** mitigate the potential for bias and adverse impact in AI-powered recruitment and selection?

Our affiliated PhD researchers

Yue Zhang
ChatGTP, Consumer-AI interactions

Ragna-Britt Taube
AI & Consumer well-being, Personalization, Advertisement

Begum Celiktutan
Human-AI interactions

Jenny Zimmerman
Human-AI relationships, Autonomous products

Almira Abilova
Perceptions of technology and Educational choices

Connecting with our experts informally

Brownbag seminar series

- Monthly seminars to share and learn insights from other experts or practitioners
- Speakers:
  - Academics who want to receive feedback on their ongoing projects
  - Practitioners from profit or non-profit organizations who would like to have input on challenges they face

Would you like to present or attend our monthly seminar?

Please get in touch via: psychologyofai@ecda.eur.nl

Erasmus Centre for Data Analytics

Psychology of AI Expert Practice

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