

AI, our assistant and friend

Human-AI interaction

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AI Monday, 24.02.2020

As AI becomes omnipresent, we interact with AI more and more on a daily basis



Autonomous Driving – Brake Assistant ¹⁾



Allure Security – Protection against Phishing Attacks ²⁾



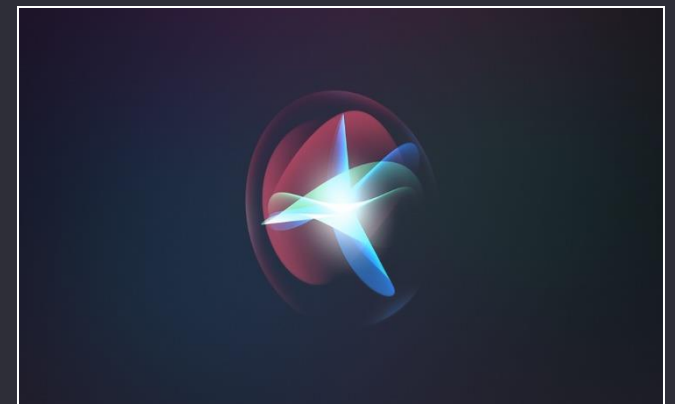
GlasGo – Quality Management ³⁾



Vara – Breast Cancer Screening Platform ⁴⁾



Henn na Hotel – Japanese Full Robot Hotel ⁵⁾



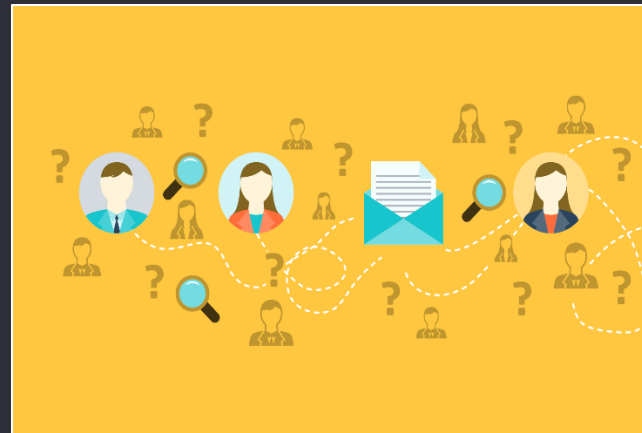
Intelligent Assistants like Siri ⁶⁾

1) <https://paultan.org/> 2) <https://www.alluresecurity.com/> 3) <https://www.telekom.com/de/> 4) <https://www.varahealthcare.com/> 5) [booking.com](https://www.booking.com/) 6) <https://www.apple.com/de/siri/>

Even though AI continuously improves, there are still cases where AI fails



*Microsoft' Tay Chabot ¹⁾ –
Becoming Hitler-loving*



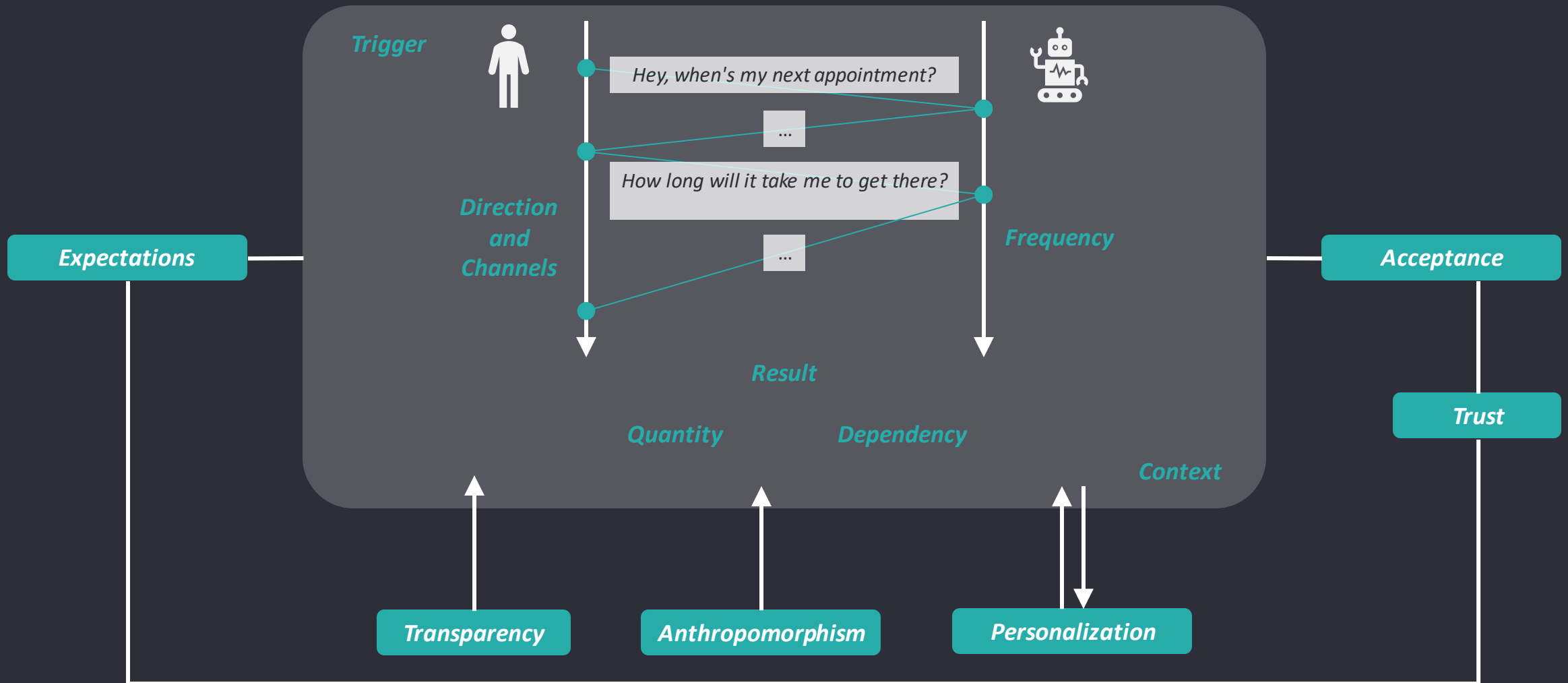
*Amazon Recruiting Systems ²⁾ –
Becoming Gender-Biased*



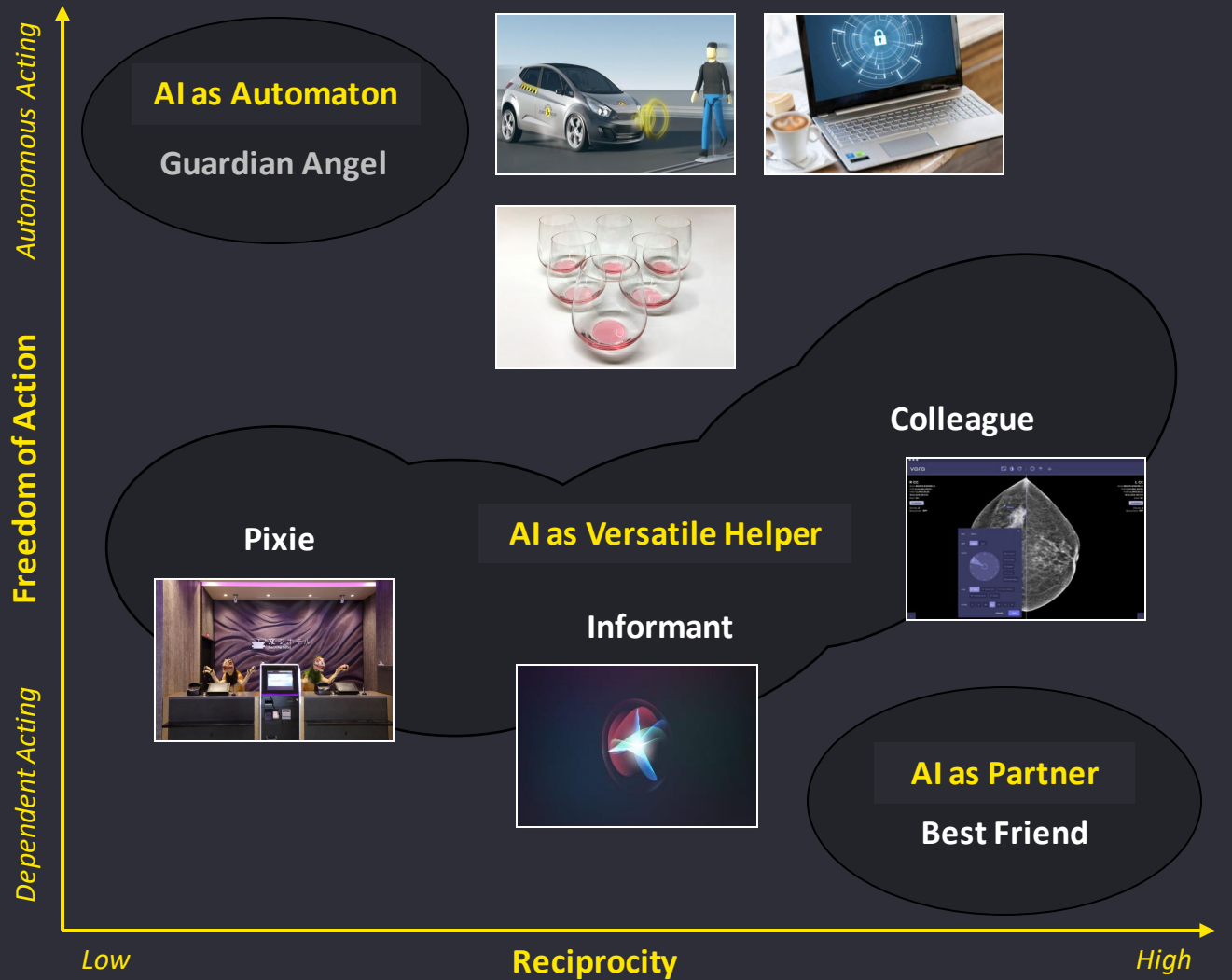
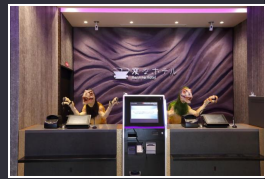
*Uber Self-Driving Car ³⁾ –
Killing pedestrian*

1) <https://techseen.com/> 2) <https://medium.com> 3) <https://www.bloomberg.com/news/>

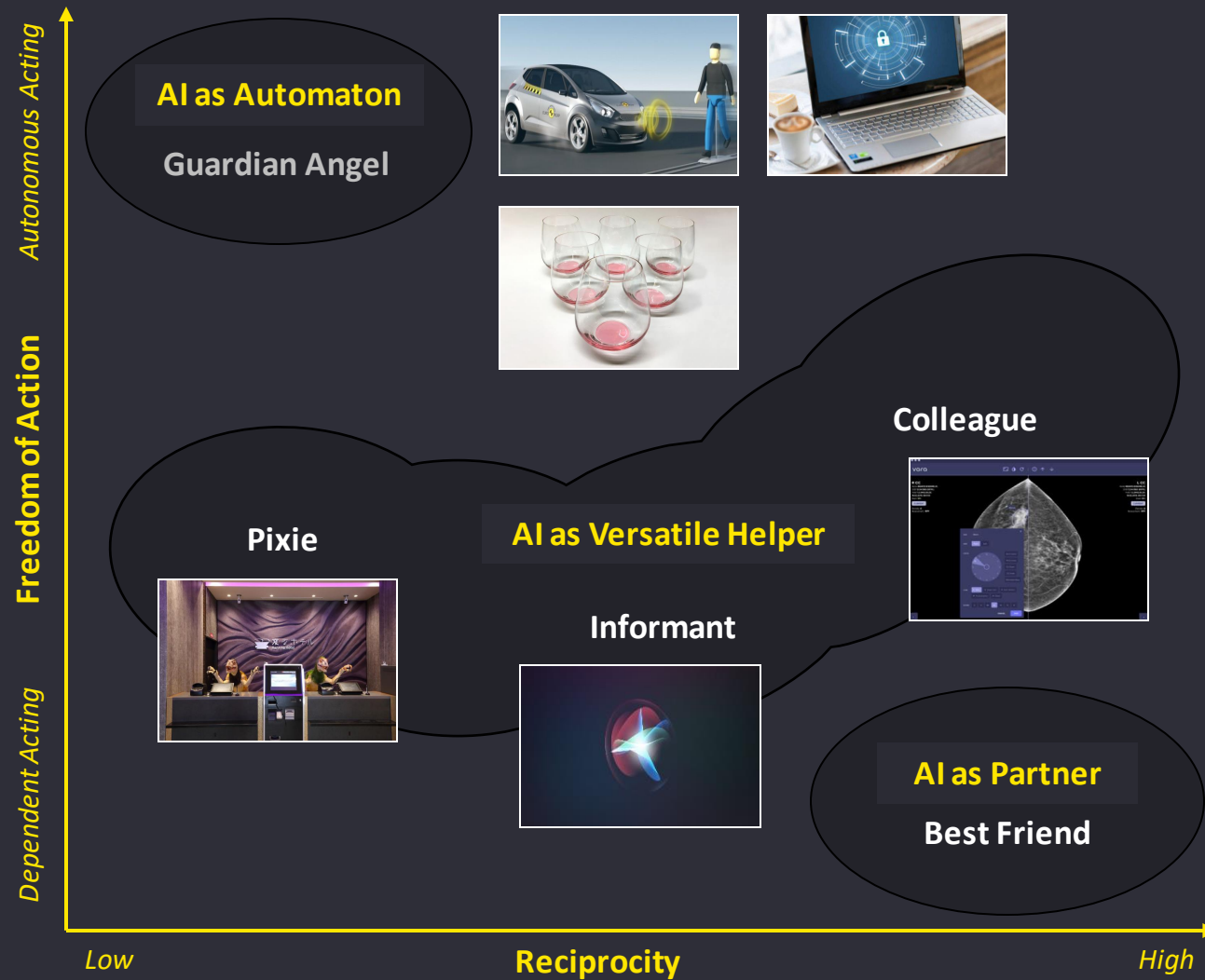
Successful human-AI interactions require a purposeful and considered design



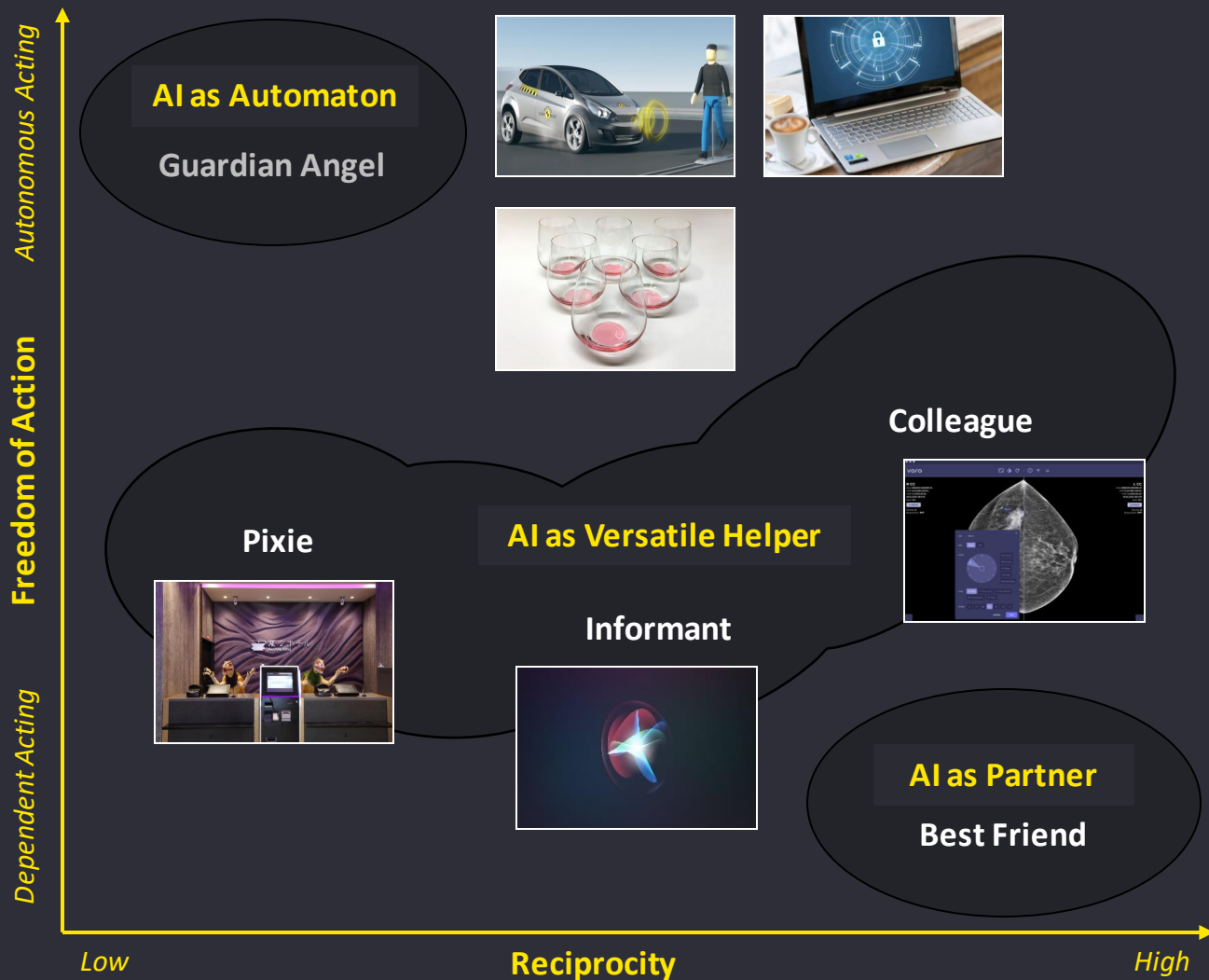
We distinguish five AI interaction types based on freedom of action and reciprocity





We distinguish five AI interaction types based on freedom of action and reciprocity





We distinguish five AI interaction types based on freedom of action and reciprocity



▶ What distinguishes good from bad human-AI interactions 

▶ What are the relevant dimensions for companies to design successful AI use cases 

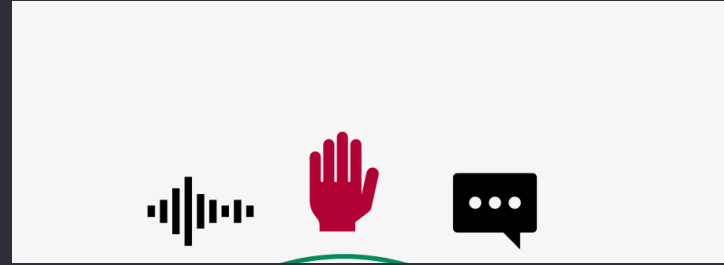
▶ How will technological advances influence our interactions with AI solutions in the future 

▶ What are the differences between (technical) feasible and (socially) desirable AI use cases 

Personalization, social elements, task diversity and context understanding are increasing



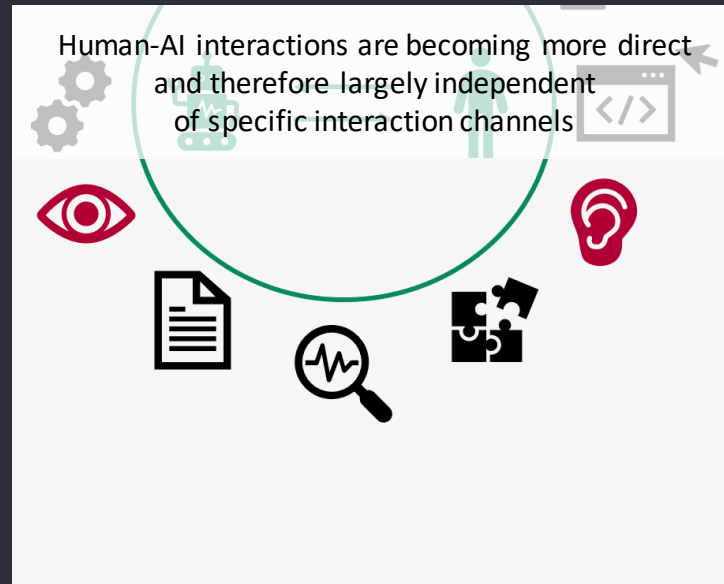
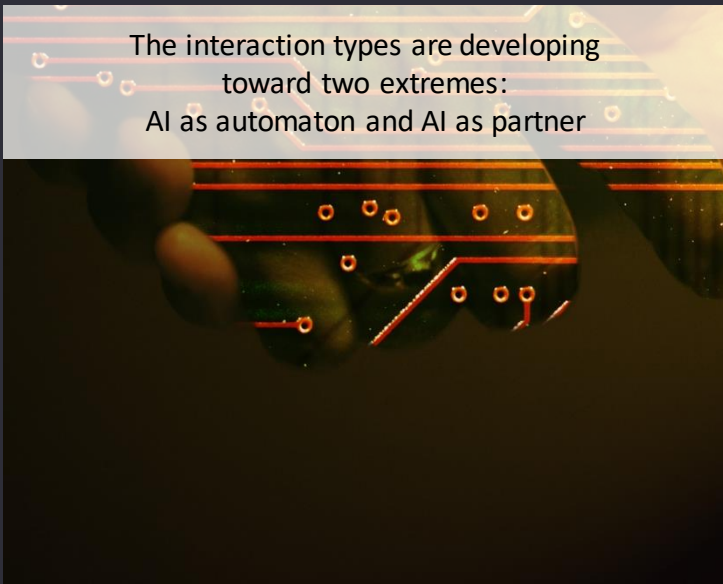
Interaction Types



Interaction Channels



Anthropomorphism



If you are interested in our study's results, please contact us

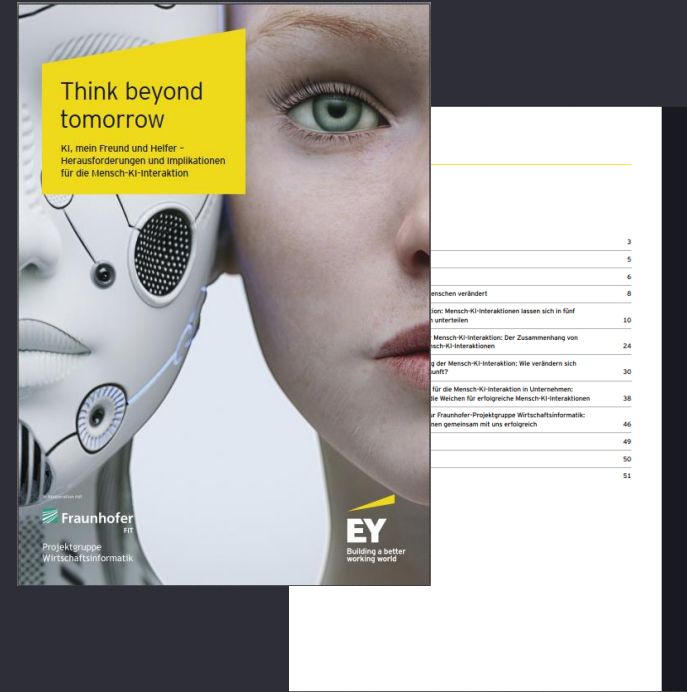
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