InnovAIting Responsibly

Discovering the Opportunities and Risks of Foundation Models

How can designers help startups find innovative solutions that leverage Foundation Models ?
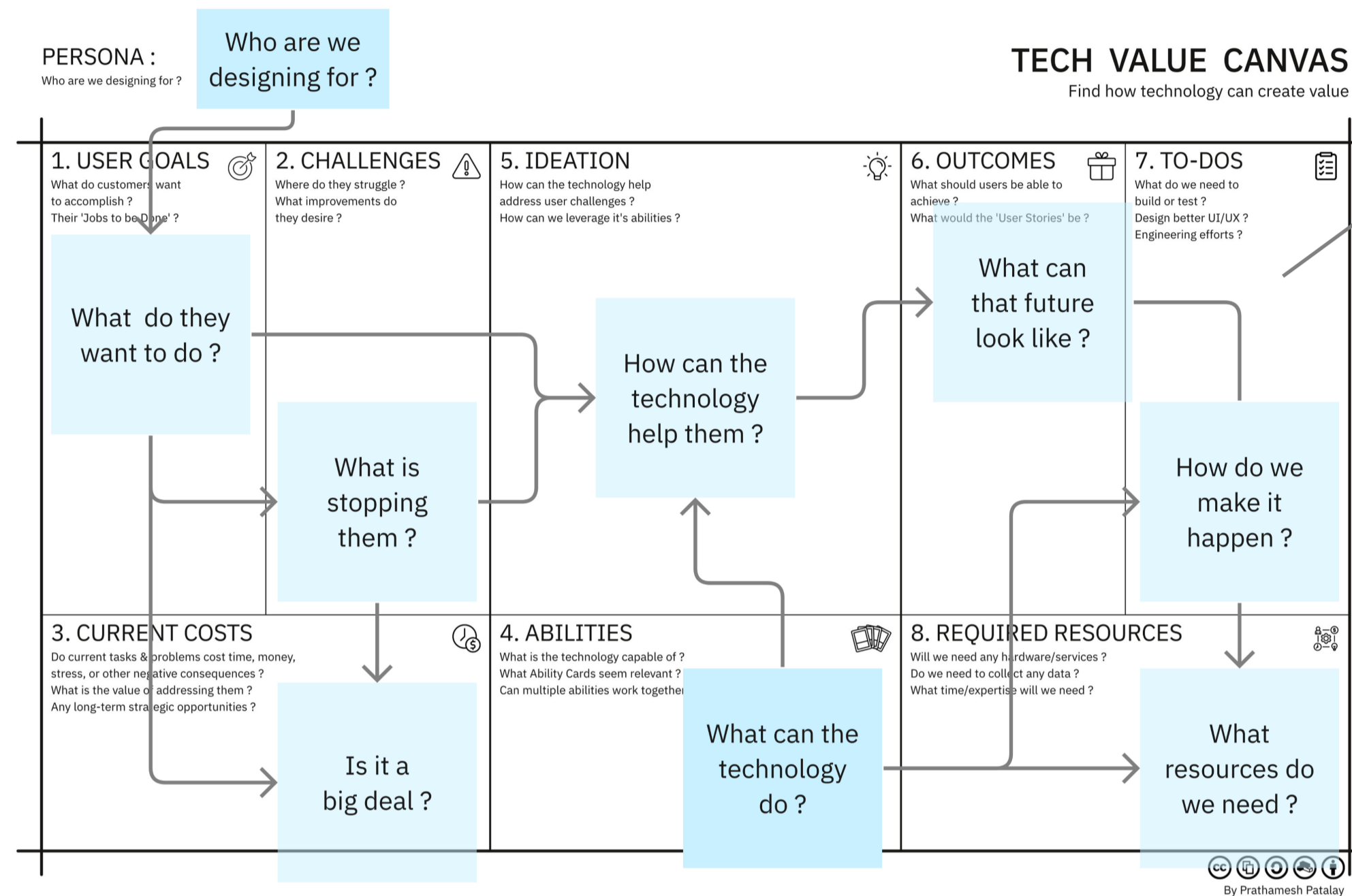
How can designers help startups mitigate the negative consequences of using Foundation Models ?

Designers struggle to design for ML

Despite the rising prevalence of machine learning (ML) in products, designers face challenges in creating solutions that make the best use of the new possibilities created by Foundation Models.

Responsible AI faces challenges

AI Ethics and responsible innovation continues to be an afterthought. Product designers are seldom involved in mitigating the potentially negative consequences of their solutions.

Discovering Opportunities

Foundation Models enable startups to easily build products that use large pre-trained ML models. Designers can make the best use these possibilities by collaborating with engineers, understanding the capabilities of the technology and finding out how user needs identified from design research can be addressed by this enabling technology. The Tech Value Canvas & Ability Cards help in this process.

Discovering Risks

Increasing use of Foundation Models also increases the risks of harm. Designers can can start exploring potential risks even before they start developing solutions. By understanding potential risks, analysing impacted stakeholders, and collaborating with engineers to explore mitigation measures, designers can integrate Risk Discovery into the fuzzy front end of their design process. The Risk Discovery Canvas and Risk Cards help in this process.

TECH VALUE CANVAS — Find how technology can create value

RISK DISCOVERY CANVAS — Identify & anticipate potential risks of AI systems

Salient Features of the Canvases

- The Tech Value Canvas supports designers in discovering opportunities to use Foundation Models to address user needs. The process is user driven, staring from insights about customers and helps in aligning market pull research with technology push approaches to innovation.
- The Risk Discovery Canvas supports designers in anticipating potential risks of the products they design. It explores the socio-technical aspects of risks and helps plan mitigation steps.
- Both canvases enable interdisciplinary collaboration between designers, engineers and other teams
- Both canvases lead to actionable outcomes that can directly integrated into product development plans
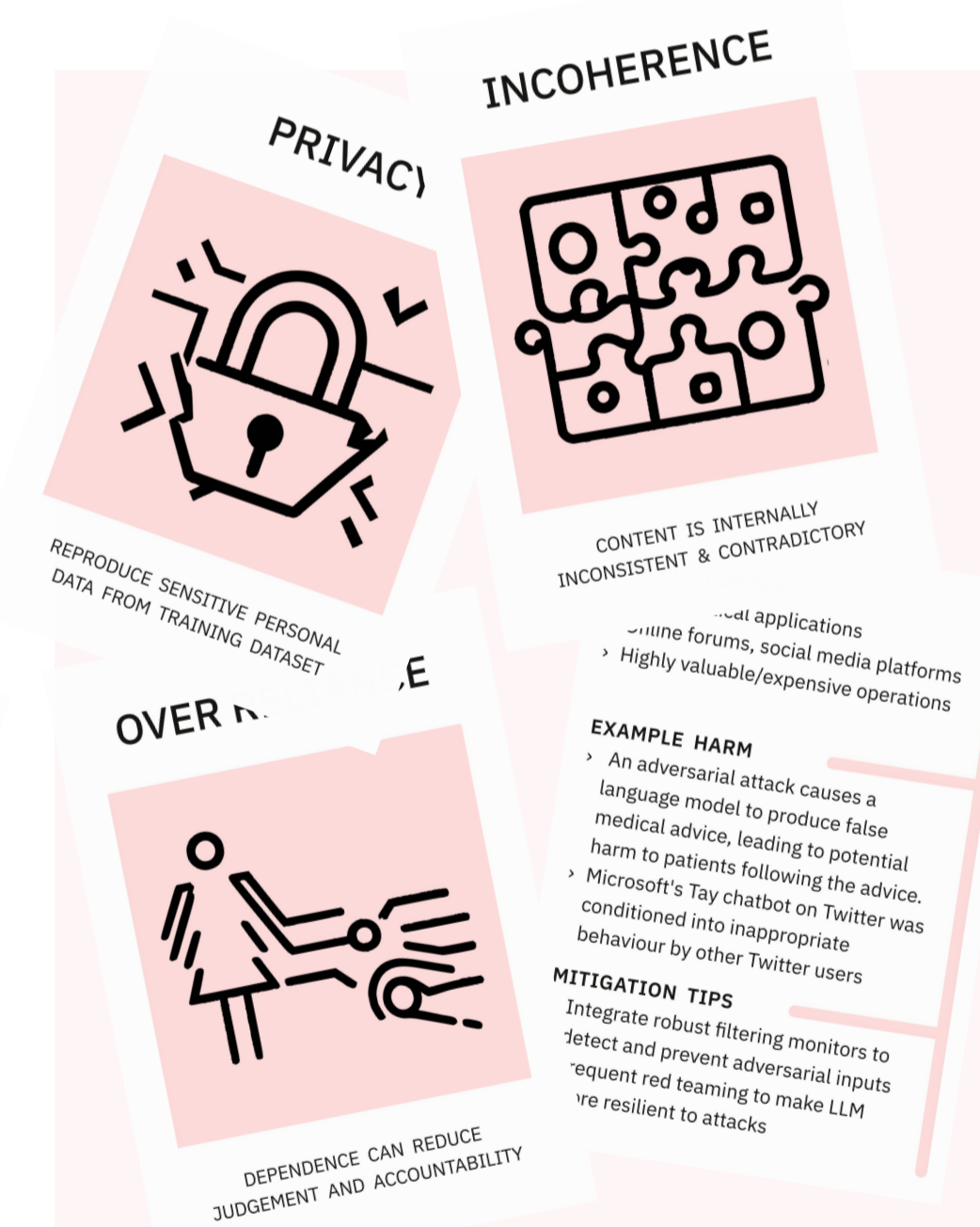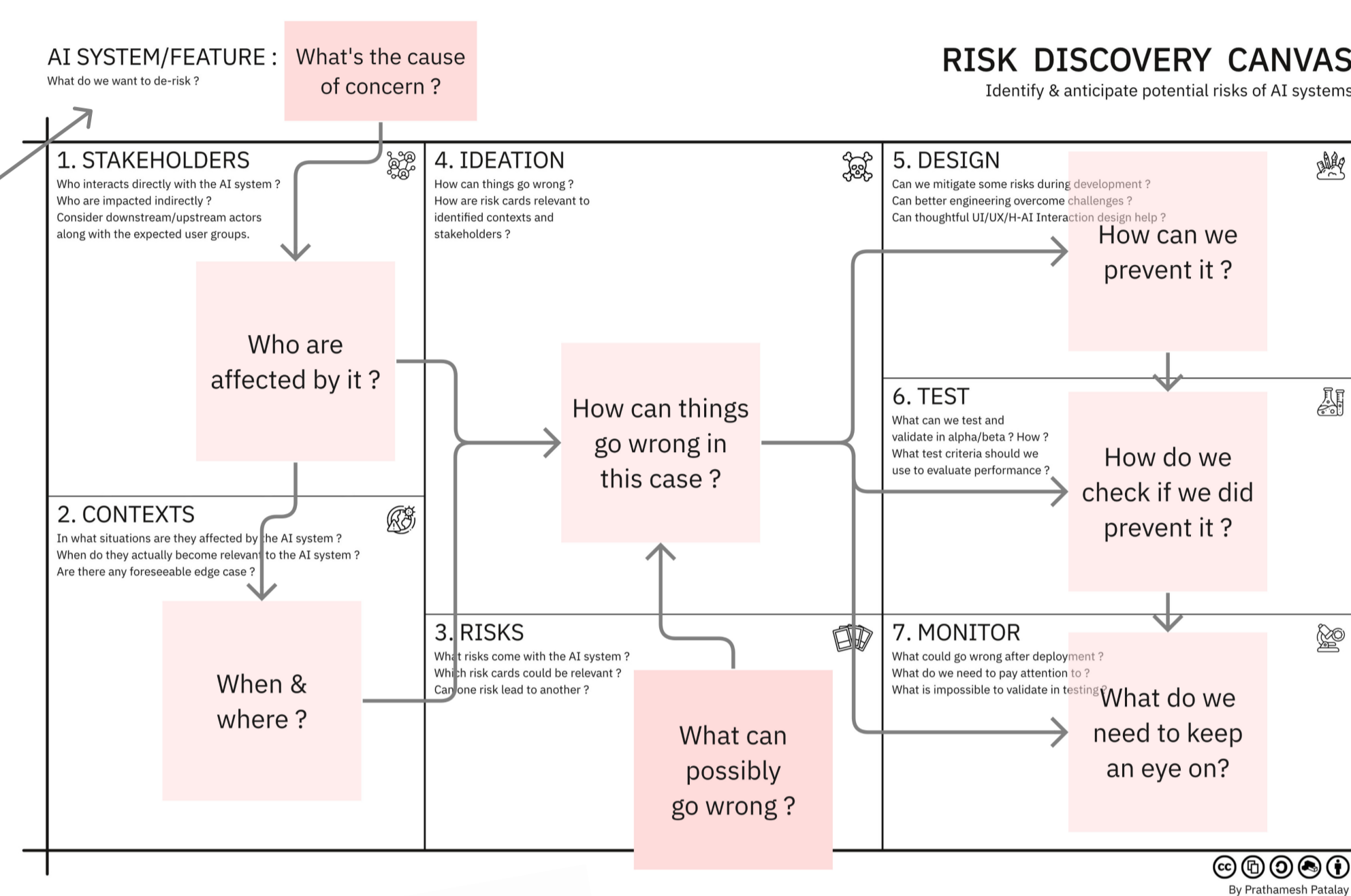
Salient features of the Card decks

- Both card decks support designers to navigate through the canvases. Different contents of a card carry information for different parts of the canvases.
- Ability cards denote different capabilities that Foundation Models have. Risk cards embody their different risks.
- The cards serve as an aid to help designers understand the capabilities and risks of Foundation Models. They also act like boundary objects, enabling collaboration and easy of communication across teams.
- Both card decks can be expanded using card templates shared online. Get them here : https://github.com/P2squared/InnovaitingResponsibly

Prathamesh Patalay
Innovaiting Responsibly, Discovering the Opportunities and Risks of Foundation Models
29 August 2023
Strategic Product Design

Committee
Prof. Dr. Gerd Kortuem
MSc. Jeroen Coelen
Jon Ezeiza

Company
Scitodate

Faculty of Industrial Design Engineering

Delft University of Technology