

Stages of Design Thinking in AI



LESSON 1

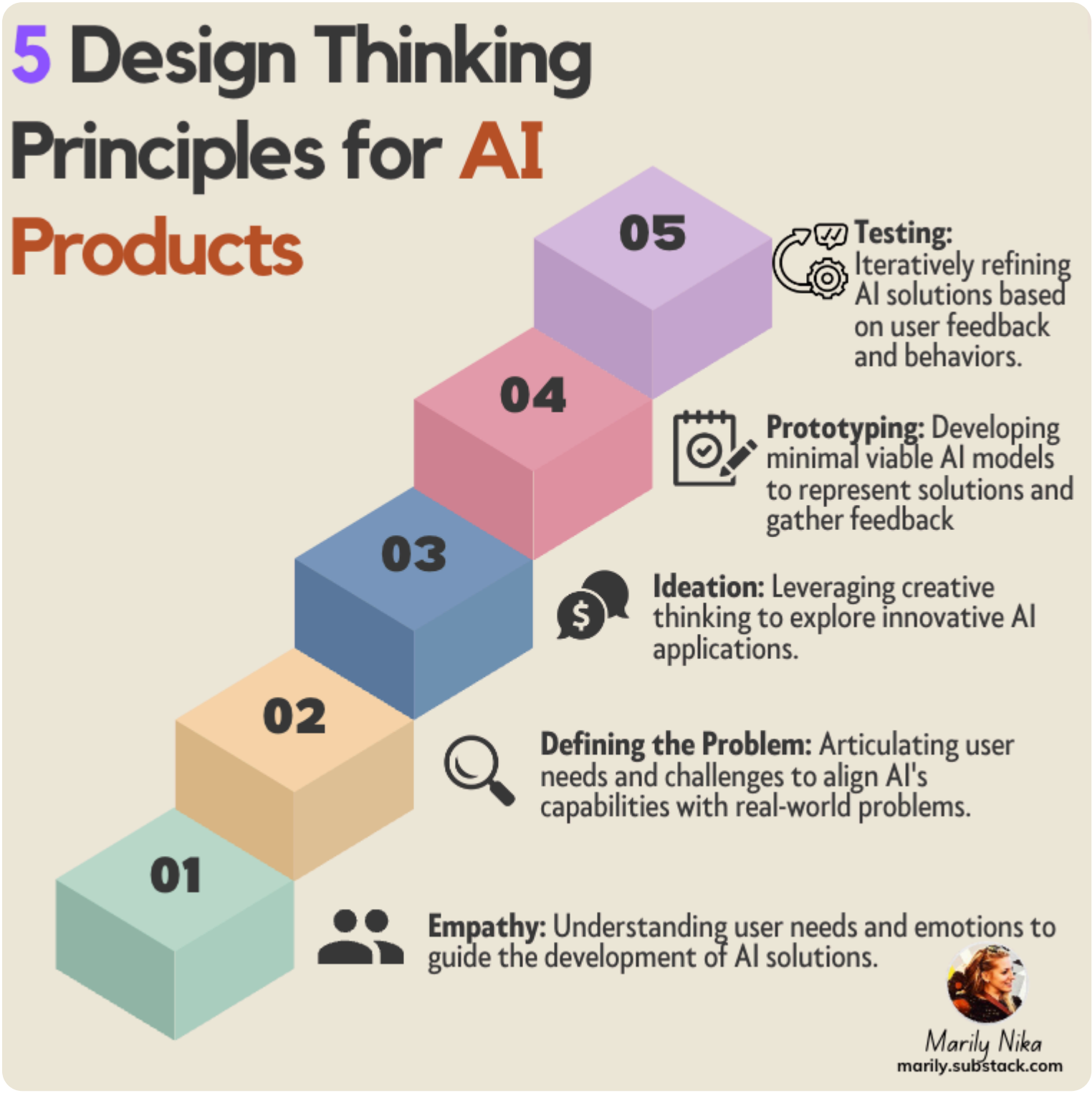


AI is transforming our industries. As AI becomes more ubiquitous, there is a growing need to intentionally design AI systems that are human-centric, transparent, and inclusive. As part of this module I'd like to explore how design thinking—a human-centered, iterative approach to problem-solving—can be applied when developing AI applications, ensuring they align with ethical principles and societal values.

I keep saying that AI is not a product. This is exactly why AI / ML Scientists should embrace design thinking's human-centered ethos early when conceptualizing systems. Design thinking provides a framework to continually re-examine AI applications regarding **inclusivity**, **accountability**, and **respect** for human dignity.

Principles of Design Thinking in AI

Design thinking prioritizes deeper understanding of users and their needs when creating solutions. It involves five key phases:



- **Empathy:** Understanding user needs and emotions to guide the development of AI solutions.
- **Defining the Problem:** Articulating user needs and challenges to align AI's capabilities with real-world problems.
- **Ideation:** Leveraging creative thinking to explore innovative AI applications.
- **Prototyping:** Developing minimal viable AI models to represent solutions and gather feedback.
- **Testing:** Iteratively refining AI solutions based on user feedback and behaviors.

