

What is Design Thinking

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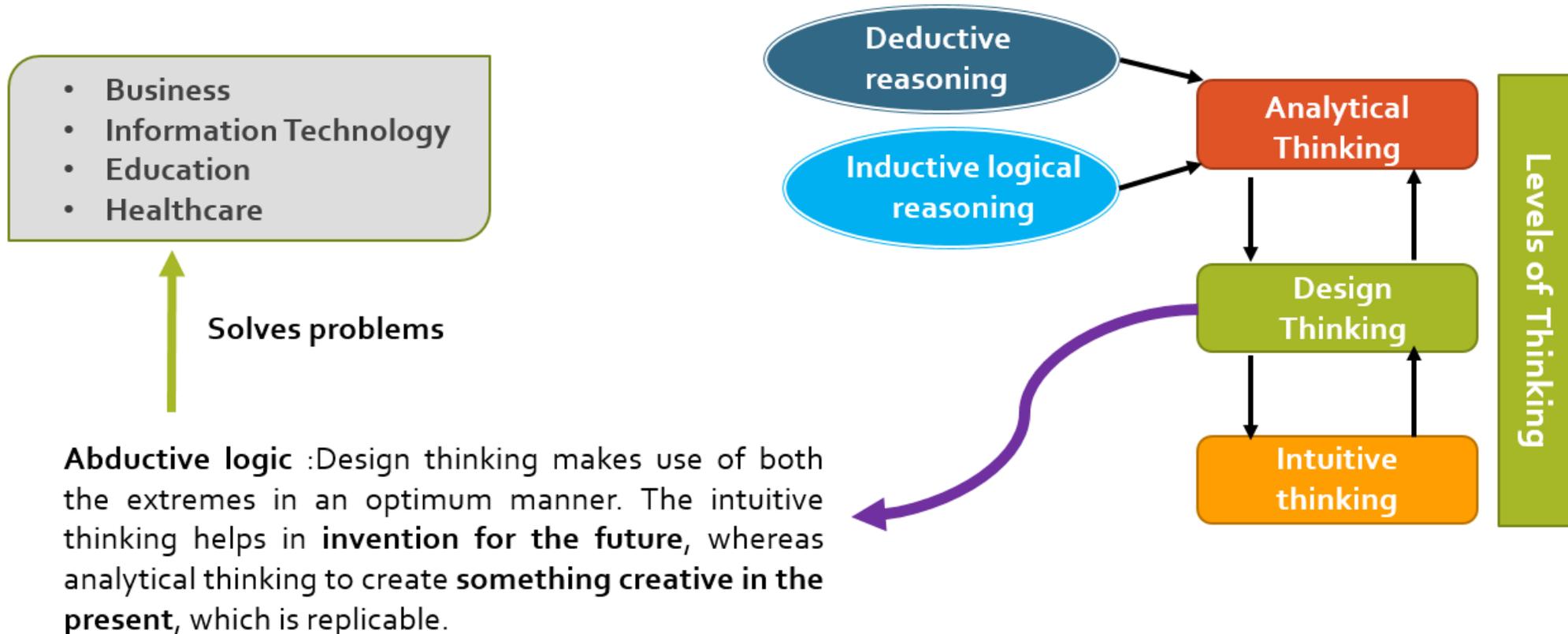
IIT Kanpur, India.

What is Design Thinking?

- Design thinking is a **non-linear, iterative** process which seeks to understand users, **challenge** assumptions, **redefine** problems and **create** innovative solutions to prototype and test.
- This method consists of 5 phases—**Empathize, Define, Ideate, Prototype** and **Test** for **ill-defined** or **unknown problems**.
- The world has become increasingly **interconnected** and **complex** and design thinking offers a means to **hold on** with all this change in a more **human-centric manner**.

What is Design Thinking?

The Design Process



Flow chart explaining how thinking (especially design thinking) helps in solving problems and eventually helps in product design and development

Design Thinking : Why ?

- Searching for simplicity in complexities.
- Making a beautiful and aesthetically appealing product.
- To make the clients' and end user's quality of experience better.
- Creating feasible, innovative, and viable solutions to real world problems.
- The actual requirements of the end users should be addressed.

**Simplicity in
Complexity**

**Product Appeal to
customer**

User Experience

Innovation

User Needs

Design Thinking : How ?

Analysis and Synthesis

- The process of **breaking down** a single big entity into multiple parts is called as **analysis**.
- This breaking down into smaller fragments helps in improving **understanding**.
- The process of **combining the fragmented parts** into a combined entity is called as **synthesis**.
- This activity is done at the end of an **inquiry or need**.
- This process leads to creation of a complete bigger entity, which is something **new and fresh**.

Design Thinking : How ?

Divergent Thinking

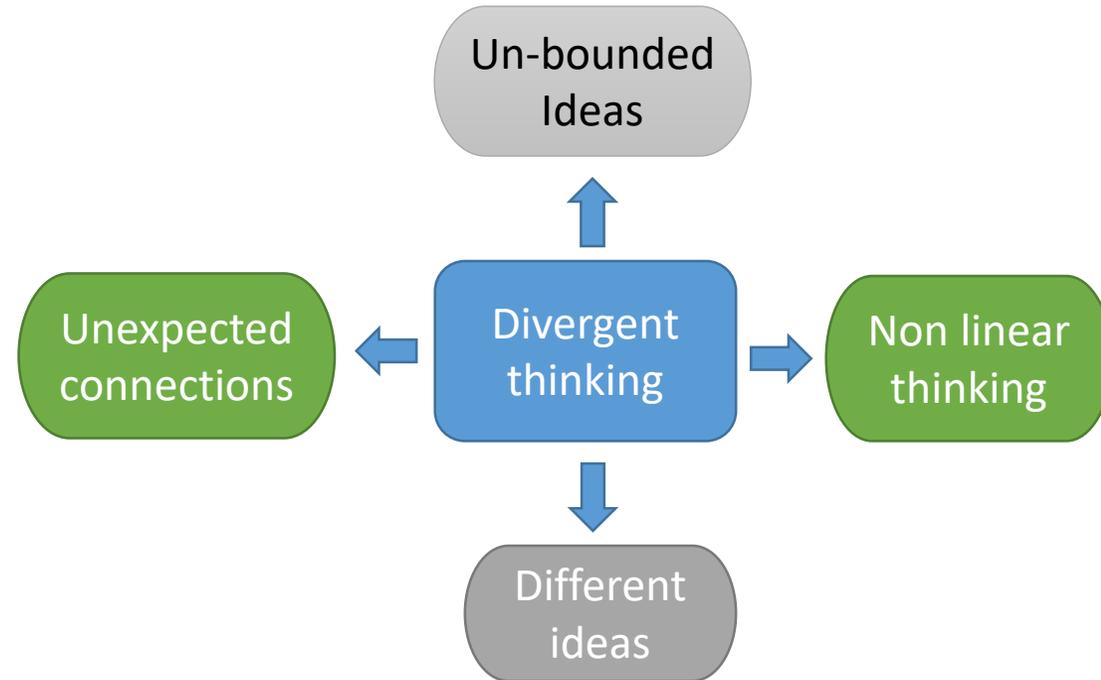
Any thing that comes to your mind
about the problem statement
should be put– Relevant to
Irrelevant



Design Thinking : How ?

Divergent Thinking

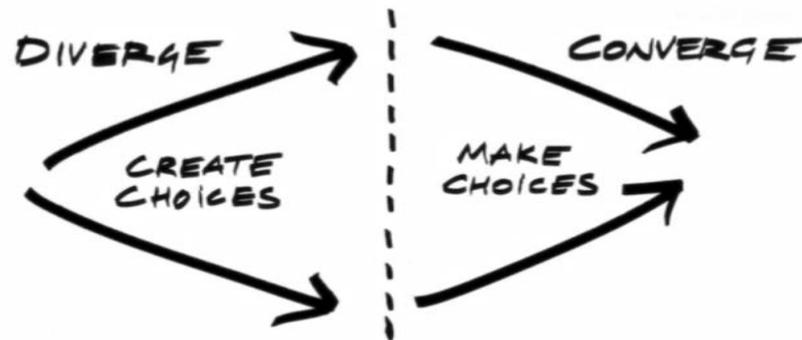
- The process of devising more than one solution for a problem statement is called as divergent thinking.
- It refers to the process of generating various creative solutions.



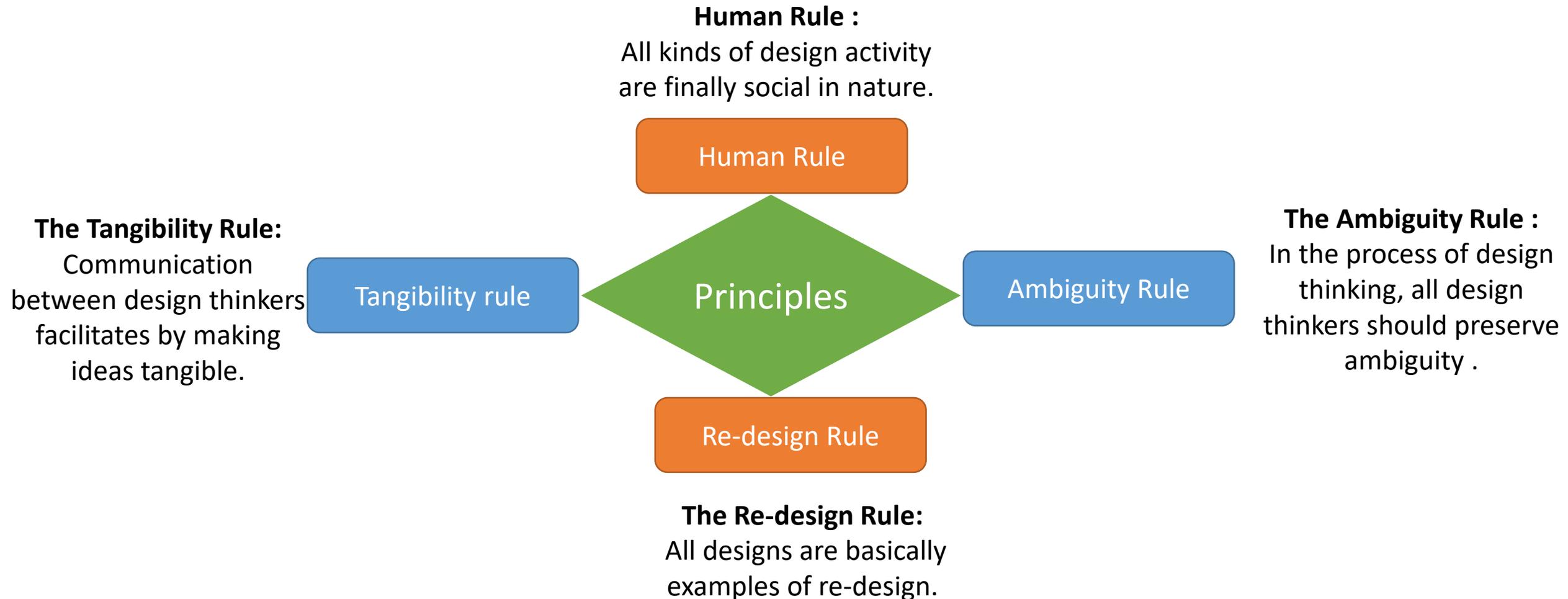
Design Thinking : How ?

Convergent Thinking

- In convergent thinking, the design thinker is required to go through all the possible solutions thought during divergent thinking and come up with a correct solution.
- Convergent thinking requires speed, accuracy, efficiency, logical reasoning, and techniques.
- The important point of convergent thinking is that it should help us arrive at a single best answer without any room for ambiguity.

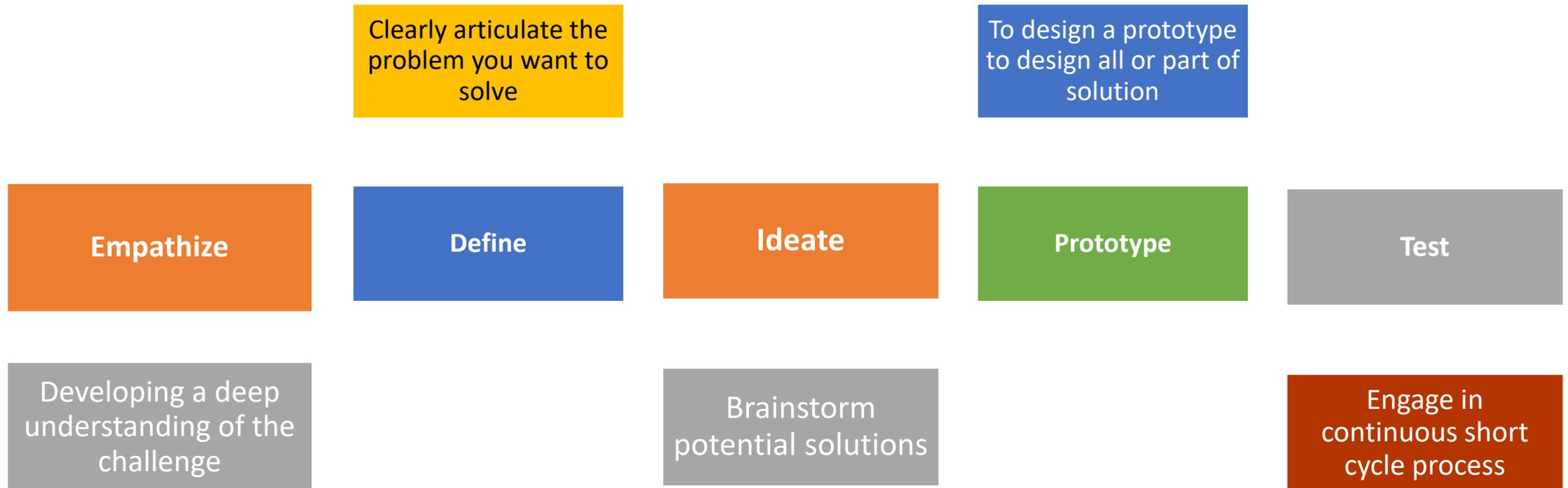


Design Thinking : Principles



What is Design Thinking?

Design Thinking Model



What is Design Thinking?

- Design teams use design thinking to tackle ill-defined or unknown problems (otherwise known as wicked problems) because the process reframes these problems in *human-centric* ways, and allows designers to focus on what's most important for users.
- Design thinking offers us a means to think outside the box and also dig that bit deeper into problem solving.
- It helps designers carry out the right kind of research, create prototypes and test out products and services to uncover new ways to meet users' needs.
- The design thinking process has become increasingly popular over the last few decades because it was key to the success of many high-profile, global organizations

What is Design Thinking?

- Design thinking improves the world around us every day because of its ability to generate ground-breaking solutions in a disruptive and innovative way.
- Design thinking is more than just a process, it opens up an entirely new way to think, and offers a collection of hands-on methods to help you apply this new mindset.
- The ultimate goal throughout is to derive as deep an understanding of the product and its users as possible.

Thank You