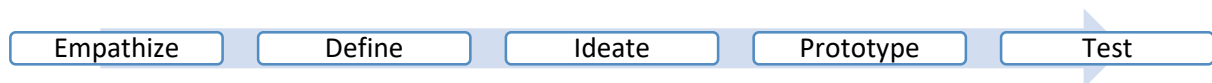**Design Thinking**

Innovation is defined as a product, process, service, or business model featuring two critical characteristics: novel and useful. Yet, there's no use in creating something new and novel if people won't use it. Design thinking offers innovation the upgrade it needs to inspire meaningful and impactful solutions. It is a mind-set and approach to problem-solving and innovation anchored around human centred design. It is solution-based and user-centric rather than problem-based.

Design thinking process-

- **Clarify-** Define problem and previous solutions
  Observation and fact information

- **Ideate-** Observe, discuss, alternative views available,

- **Develop-** Analyze possible solution after testing, experiment and prototyping

- **Implement-** Implement after testing, reflecting on results, reiterating, and testing
  again

| Empathize | Define | Ideate | Prototype | Test |

Design Thinking Leader Skills

Active Listening	Design Process	Outcomes Research	Interviewing	Empathy	
Survey Analysis	Mapping Customer Journey	Design Patterns	Project Management	User Testing	Voice of Customer

Design thinking importance for innovation
- Connects business, logic and society
- Creative and rational
- Identify economic needs
- Develop creativity questioning, experimentation

Innovation	Creativity
• Introduction of new or improved products, services and processes • Related to implementation • Can be measured • Related to observation • Risk of failure • Cost of implementation • Organizational process • Imagination of ideas to create something	• Related to imagination • Cannot be measured • Related to experience • No direct risk factors • Cost of employee tome • Personal quality

Banks' costs of onboarding customers in India decreased from $23 to $0.1 with the use of DPI. As of March 2023, India did total savings of $33 billion, equivalent to nearly 1.14% of GDP, due to Direct Benefit Transfer (DBT). Without the Digital Payment Infrastructure (DPI) such as Jan Dhan Bank accounts , Aadhaar, and Mobile phones (the JAM trinity), India may have taken 47 years to achieve financial inclusion rate of 80%.
Unified Payments Interface (UPI) crossed a staggering milestone, recording over 10 billion transactions in the month of August 2023.

Creative Thinking	Design thinking
Creative thinking is the ability to think without constraints and see the world through a different lens.	Design thinking is a problem-solving approach
This way of thinking allows the possibility of seeing reality in a new light and helps generate a wider and more diverse range of ideas. This way of thinking is based on a dynamic balance between generating ideas (divergent thinking) and selecting ideas (convergent thinking); deferring judgement between these tasks is the essential component to achieve that balance.	Design thinking was initially conceived to tackle engineering problems, but in the last decade, its application has broaden to help address problems and create solutions from an array of disciplines. In all cases, to work with design thinking, it is imperative to have both 1) a situation to fix or improve, or a problem to solve, and 2) an intended audience.
Generate unique, novel and different ideas in any domain	Generate solutions for an intended audience that address specific needs

- When creative thinking is used in a systematic way to solve problems, it is referred to as Creative Problem Solving (CPS) process. CPS was originated by Alex Osborn (1940s) and then developed further by Sidney Parnes (1950s).
- In contrast to design thinking, CPS does not specify the use of ethnographic tools to gather human-centered data or the need to empathize with an audience. Furthermore, while some steps between these two processes are similar, CPS does not include a prototyping step and most of what is generated from this process are concept ideas, rather than physical models or design outputs.

Source- https://sheilapontis.com/2018/11/22/maybe-you-dont-need-design-thinking/