

Design Thinking Needs and Outcomes

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Need of the Design thinking?

Design Thinking is becoming part of organizations both big and small who are focusing towards efficient product or service development.

Some of the reasons why we need to use Design Thinking are :

- Design Thinking **solves problems**
- Design Thinking **reinforces innovation**
- Design Thinking **strengthens Leadership**
- Design Thinking is **not** only for designers

Need of the Design thinking?

Design Thinking solves problems

Design Thinkers can create highly efficient solutions by developing products and services in a way **that analytic thinkers cannot do.**



Power Reaper (Rice & wheat Cutting Machine) By HOPE India

Need of the Design thinking?

Design Thinking reinforces innovation

- By **creating** new solutions, **testing** their efficiency, and **iterating** until they are optimized, design thinkers create new opportunities to give their company a competitive advantage on the market.



A small but significant innovation like 'Drum Seeder' would not happen if design thinking won't keep pushing towards innovation



Need of the Design thinking?

Design Thinking strengthens Leadership

- Design thinking assures that solutions to the organization's diverse problems are based on **data generated by clients** and not by un-informed design teams.



A small farmer from Uttar Pradesh has put innovation into farming to create multi-crore agricultural ecosystem and now training thousands of farmers to adopt new techniques in farming

In Picture : Ram Sharan Verma of Barabanki who is awarded Padma shri in 2019 for creating an innovative ecosystem in agriculture

Design thinking outcomes

Problem : Carrying water on Head



WaterWheel is a revolutionary product that has become popular in Rajasthan, India

<https://c.stocksy.com/a/ZSf300/z9/874359.jpg?1551516837>

<https://www.theguardian.com/global-development/poverty-matters/2013/dec/29/waterwheel-burden-women-water-container>

Design thinking outcomes

Problem : Cutting grains with hand takes huge amount of time



Cutting Grains with Hand Sickle



Cutting Grains with Handheld Cutter

<https://previews.123rf.com/images/aifeati/aifeati1607/aifeati160700020/60537140-girl-cuts-a-sickle-rye-sickle-is-a-hand-held-traditional-agricultural-tool-in-farmer-s-hand-preparin.jpg>

<https://sc02.alicdn.com/kf/HTB1WSQIKpXXXXXFXXXq6xXFXX4/CROP-CUTTER.jpg>

Design thinking outcomes

Problem : Harmful effects due to direct handling of fertilizers



Spreading Fertilizers by hand



Spreading Fertilizers by spray

Design thinking outcomes

Problem : Lack of proper drinking water



The LifeStraw is a water filter designed to be used by one person to filter water for drinking.

Design thinking outcomes

Problem : Muddy water in slum areas



A biosand water filter developed at IIT Kanpur to help purify water

Thank You