

Introduction to Design Thinking

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What is Design Thinking?

- Design Thinking is a process of creatively Designing a product, service, process using innovative tools and techniques. In other words, Design Thinking is a process of creative problem solving. Importantly,
 - ✓ Empathize and understand what user needs
 - ✓ Think out of Box to ideate and arrive at solutions to meet needs
 - ✓ Create, Refine, Recreate, Modify, Recreate,...
 - ✓ Radical Collaboration in diverse teams

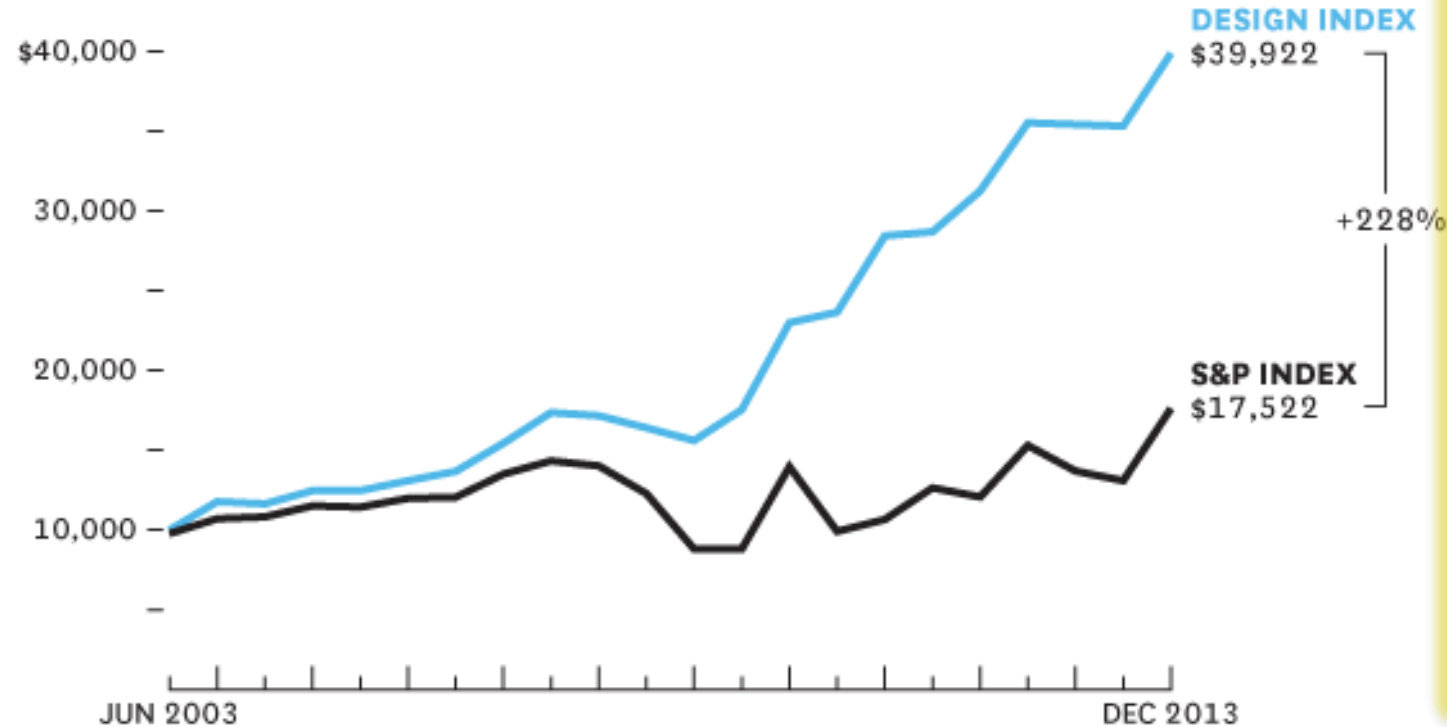
Acknowledgement

- Want to Thank Ms. Jhumkee Iyengar and NPTEL for allowing us to use some of the contents from a NPTEL course on Design Thinking
 - <https://freevideolectures.com/course/4872/nptel-understanding-design-thinking-people-centred-design>

Powerful Design can drive exceptional returns for Shareholders

DESIGN VALUE INDEX

In 10 years, a \$10,000 investment in design-centric companies would have yielded returns 228% greater than the same investment in the S&P.



Apple, Coca-Cola
Ford, Google
Procter & Gamble,
Starbucks
Starwood
Steelcase, Target,
Walt Disney,
Whirlpool, and Nike.

SOURCE DMI, MOTIV STRATEGIES 2014

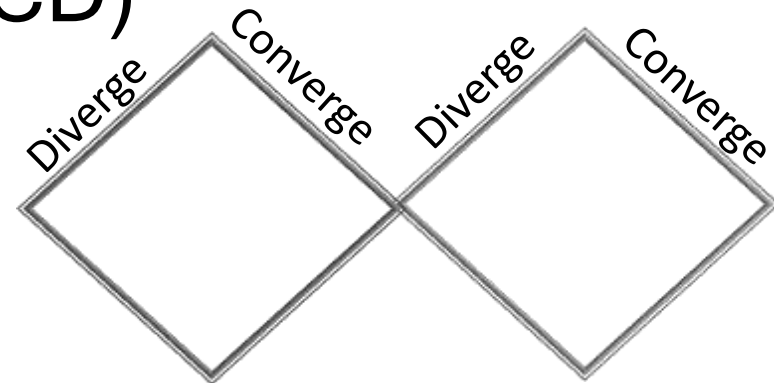
HBR.ORG

Two powerful tools of Design Thinking

I. Human Centered Design (HCD)

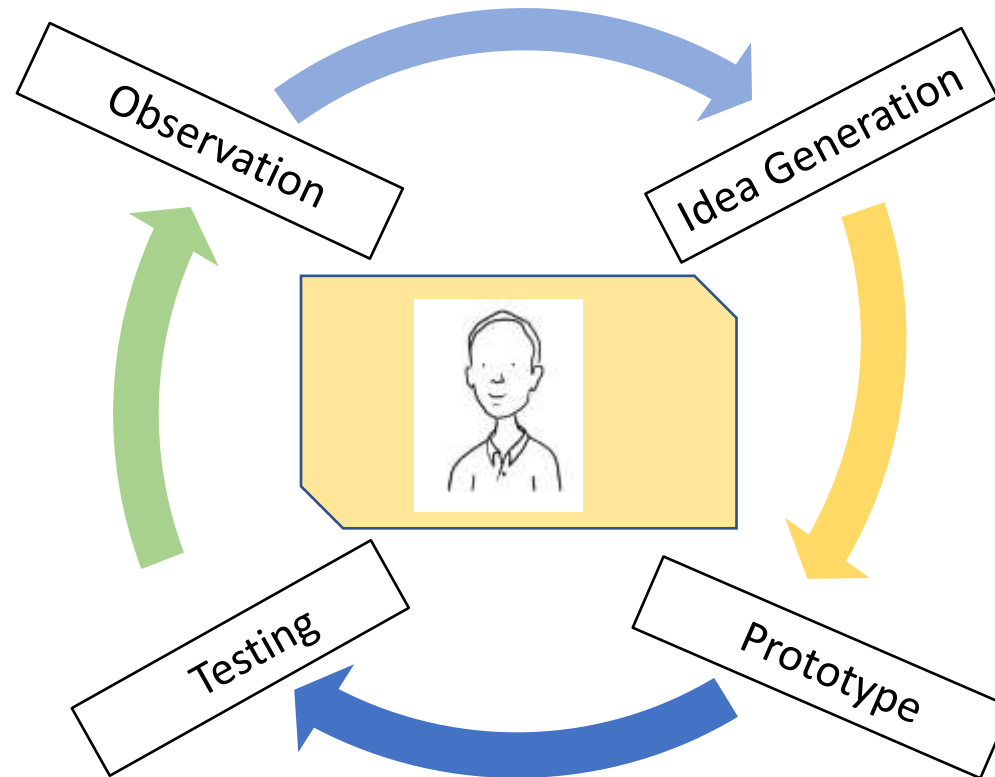
II. Double Diamond Approach

- Diverge-Converge-Diverge-Converge



Human Centered Design Cycle

- Every stage needs to be Human centered



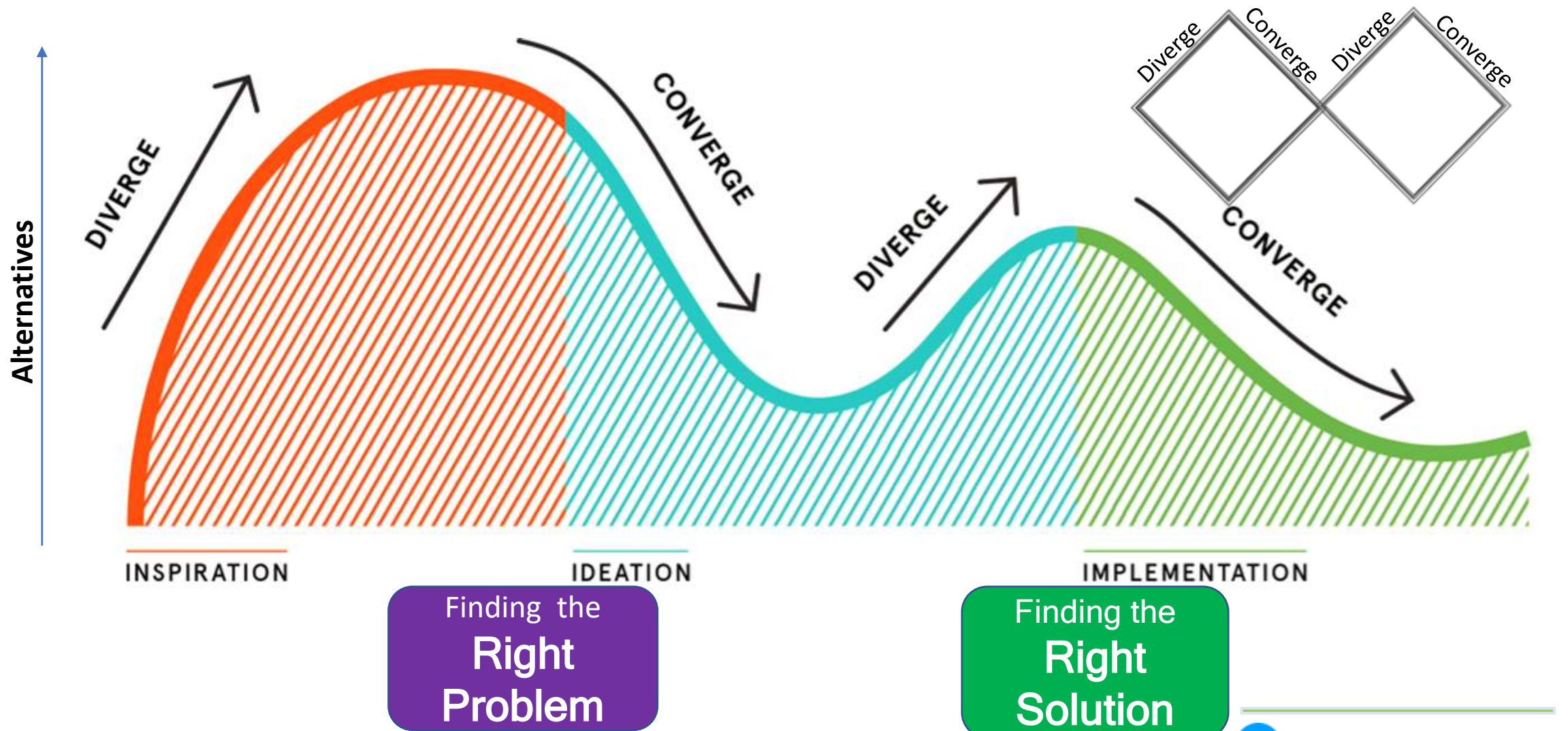
Patricia Moore

When she was 30, to research requirements of elderly people, Moore traveled throughout the United States and Canada (116 cities), prosthetically disguised and restricted as an elderly women, around 85 years of age.

The research helped her to get a first-hand experience of how elders manage their daily lives and what their needs are.



Double Diamond approach



Eight mindsets to motivate you



Throughout the Design Thinking process, always keep these mindsets in the back of your mind...

1. Empathy
2. Optimism
3. Iteration
4. Confidence in creativity
5. Making
6. Embracing ambiguity
7. Fail early and learn from it
8. Patentable innovation

Suitable problems for Design Thinking ?

Suitable Problems	May be / may be not
Products, services and processes - Govt programs, process improvements	Product/services updates, incremental changes
Solving challenging problems - improving customer service	Unable to identify end users clearly
Ux / UI design	

Next Steps ...

1. Select a problem or a new product idea as a Design Challenge
2. Identify a right cross-functional team associated with the above challenge/product
3. Organize a Design Thinking workshop
4. In the workshop create a solution prototype for selected problems
5. Test, refine, test and pitch - the new solution

Design Thinking process

1. Problem Discovery

- Arrive at the right problem to solve

2. Requirement, Research and Analysis

- People and context Research, Design insights and strategy

3. Solution Building

- Conceptualizing designs, Story Boarding and Rapid Prototyping

4. Testing and Refining

- Usability testing, Refine and enhance design

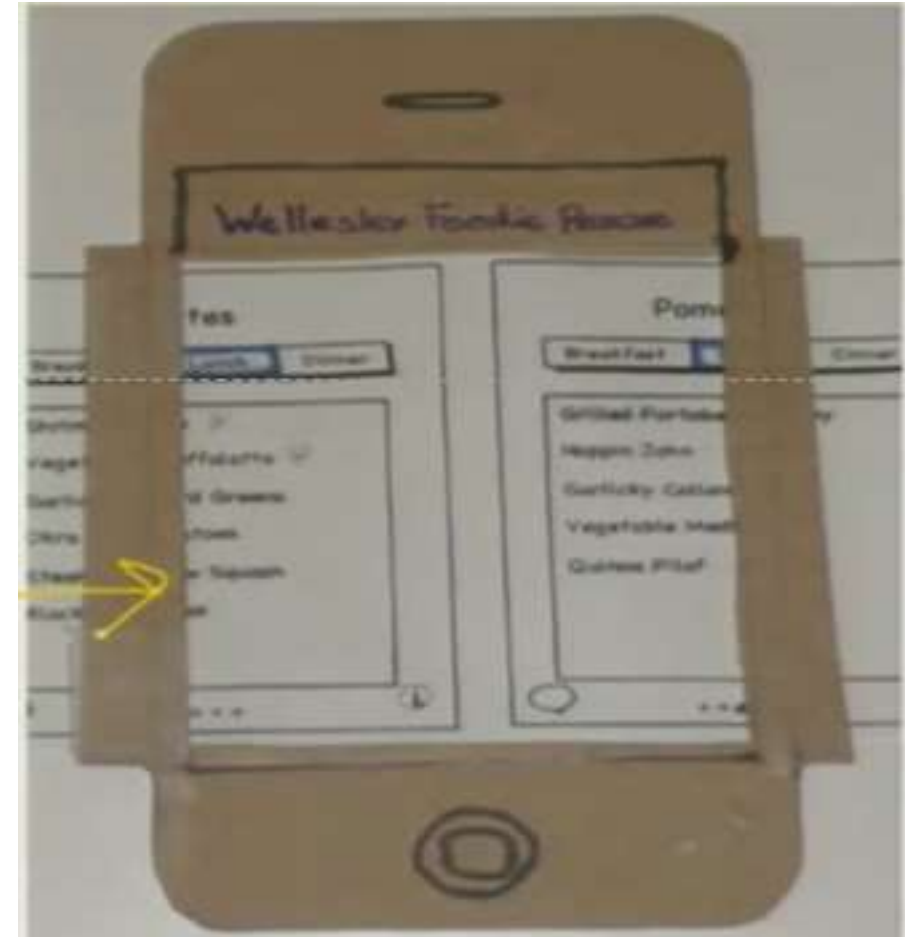
Problem
Discovery

Data gather,
Research,
Analysis

Conceptualize,
story boarding,
Prototyping

Usability testing,
Refine &
Enhance design

Show and Tell - prototype



More mindsets ...



Throughout the Design Thinking process, always keep them in the back of your mind...

- Be visual
- Have fun
- all ideas from everyone
- Listen, listen actively

Additional Information

- Are you interested in a Design Thinking Workshop?
<https://www.dataeverconsulting.com/design-thinking>
- Want more details about Design Thinking Workshop?
[Workshop Description One Pager](#)
- Art & Science of Creativity, Kelley, Stanford IDEO,
https://www.youtube.com/watch?v=zWfj_LfgrfY