



Design Thinking

Design Thinking principles



- What is Design Thinking?
- Where does it come from?
- What is it useful to?
- Which are the keys?



DESIGN IS A PROCESS...



- Historically, design has been a downstream step in the development process –designers come along and put a beautiful wrapper around the idea.
 - Making new products aesthetically attractive and therefore **more desirable** to consumers
 - Enhancing brand perception through smart, evocative advertising and communication strategies.
 - Design became an increasingly valuable competitive asset in, for example, the consumer electronics, automotive, and consumer packaged goods industries.
- Now, rather than asking designers to make an already developed idea more attractive to consumers, companies are asking them to **create ideas that better meet consumers' needs** and desires.



What is design?



DESIGN IS NOT
AESTHETIC



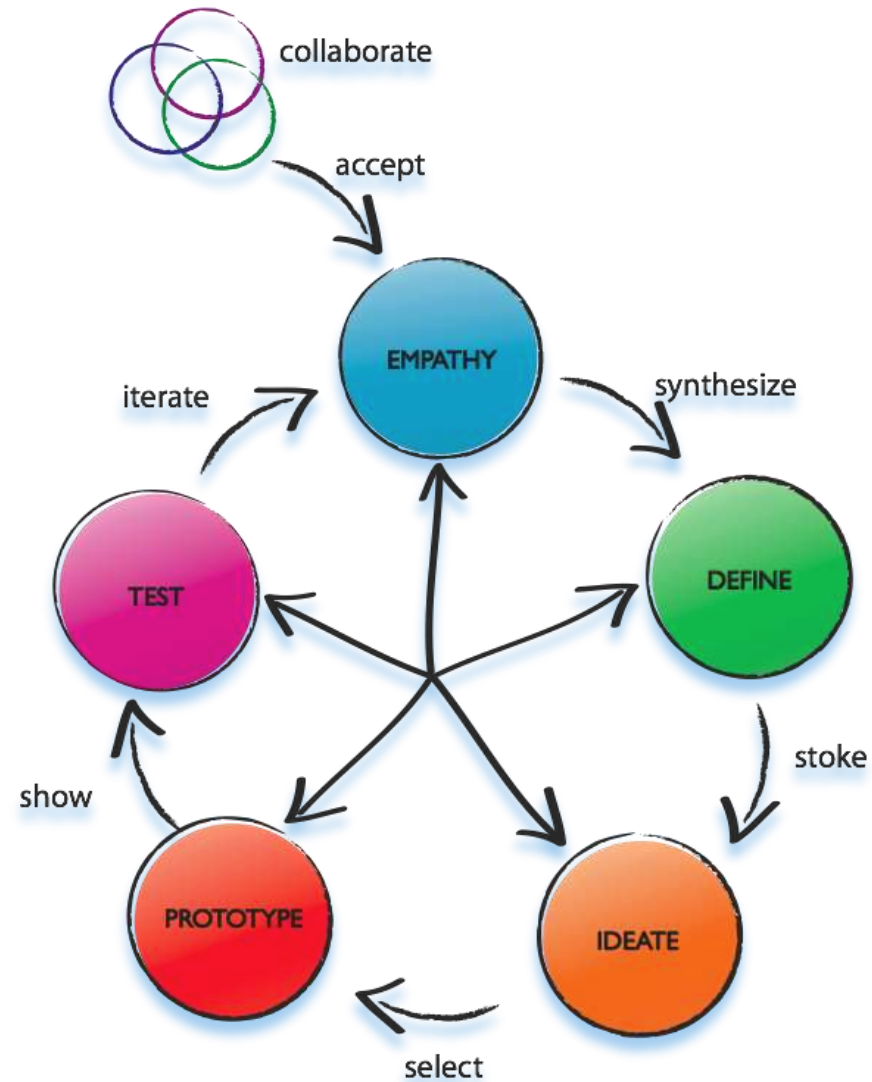
NOT AN
EVENT



DESIGN IS NOT A DESIGN IS NOT
PRODUCT AN EXPERIENCE

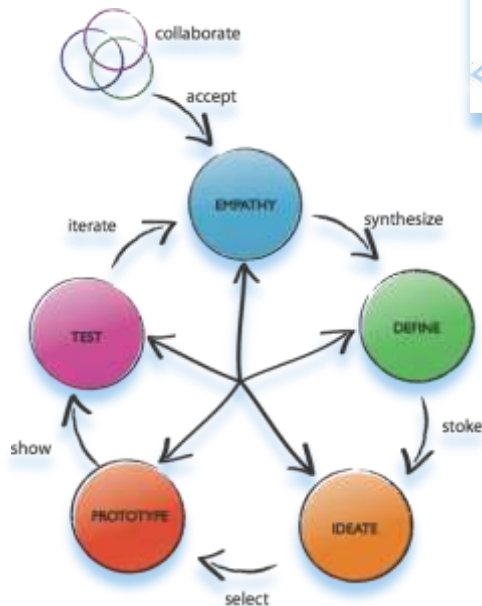
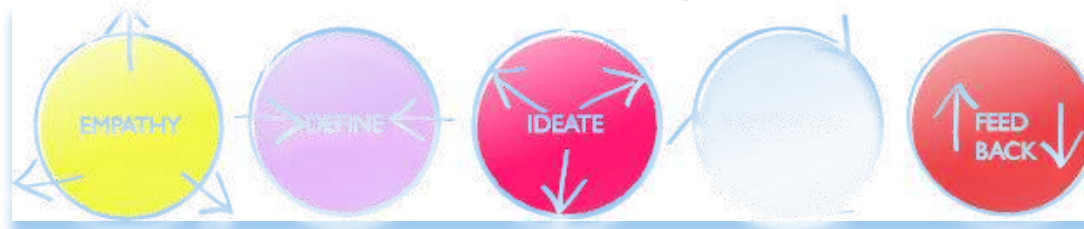
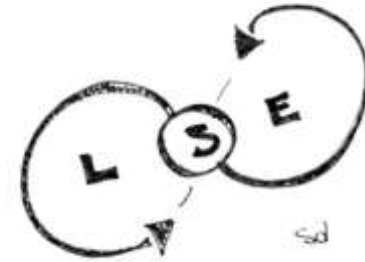
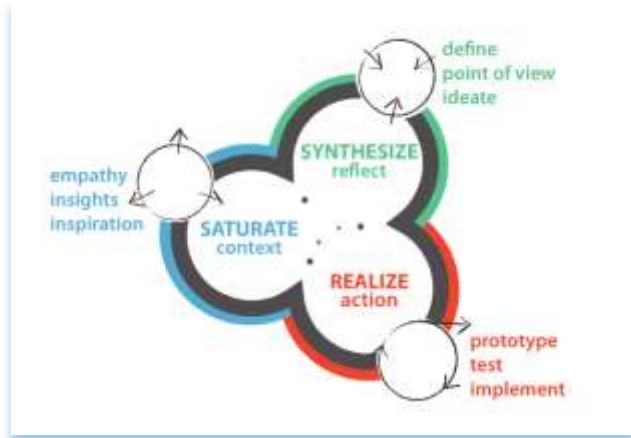


DESIGN IS A PROCESS...

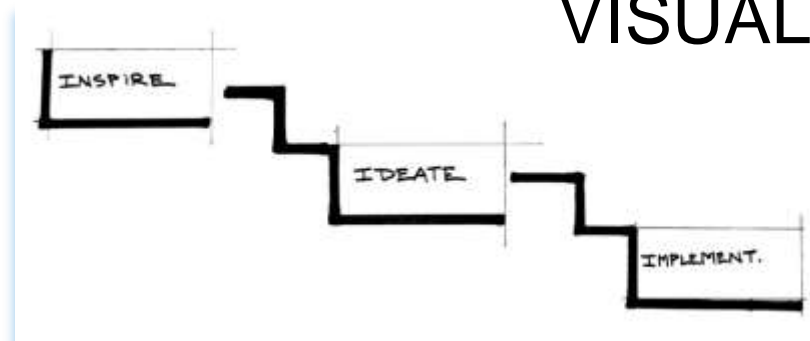




DESIGN IS A PROCESS...



...WITH DIFFERENT
VISUALIZATIONS.



Design



"Everything is
designed."



Design



“Even my car insurance broker uses design.”

2. BESTUURDER (de rijbewijs)
NAAM : BAERT PIETER
Voornaam :
Geboortedatum :
Adres : Karel Pomastraat 8
2610 Wilrijk (Antwerpen)
Land : België
Tel : 0473 667 861
Rijbewijsnummer :
Categorie (A,B,...) :
Geldig tot : PERMANENT

www.erasmusplus.com

Design



IDEO



- Created in Silicon Valley in 1991 (joint venture of 3 small businesses).
 - "the company that designed the first mouse for Apple" (and another for Microsoft)
 - "invented portable defibrillator"
 - the double mechanic of Willy (the whale of "Free Willy")
 - "created a better Pringle for P&G"
 - redesign the supermarket cart in 5 days
- The only consulting company to have ranked among the 25 most creative companies in the world (and working for the other 24) for 22 years.
- IDEO has attracted companies such as Apple, HP, Motorola, Logitech, P&H, Zenith, Samsung, Microsoft, BBVA and Shimano



 TIM BROWN, IDEO

"Design thinking is a human centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success."

IDEO



- Kelley created the **Hasso Plattner Institute of Design** at Stanford University, known as **d.school**. From there popularize among all the disciplines - the "Design Thinking" as a tool for innovation.



From designer ...



What is design thinking



Design thinking is a
user-centered approach
to problem solving



Design thinking is not panacea

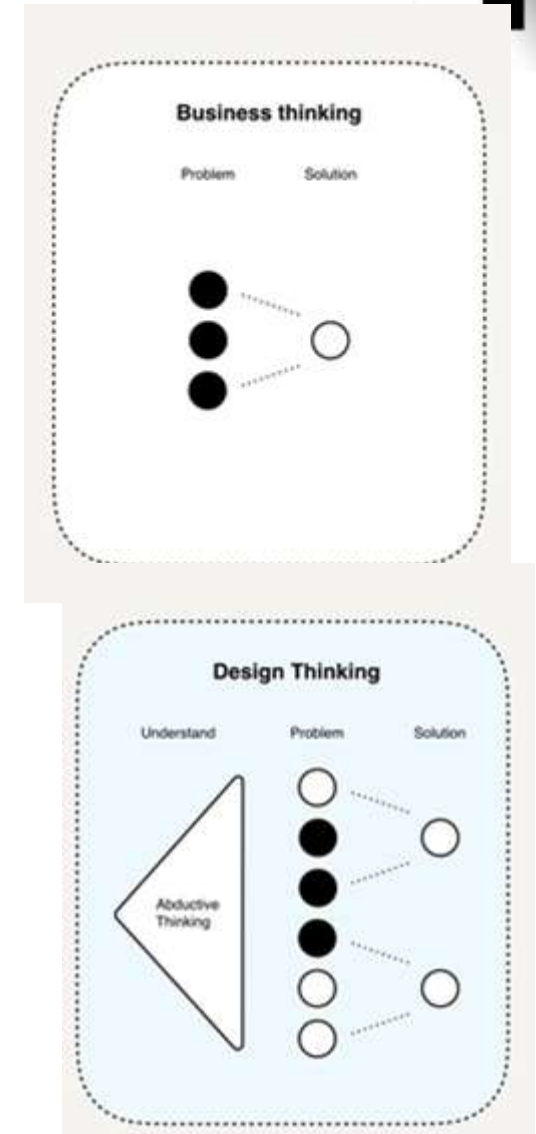


- Jeremy Alexis of the Illinois Institute of Technology, defines that problems can be categorized into two types: **Puzzles** and **Mysteries**.
 - Puzzles are closed problems, where the **question is clear**, the **data is complete**, **information is available**, and **the solution is to fit the pieces optimally** (the problem is solved with the data available, within the framework known in areas of experience and expertise).
 - Mysteries are instead problems in which **the question is often not clear**, **information is insufficient** (or too much) and **the solution is to find and identify relevant information** to find the answer to the problem (the problem is solved with data that I probably do not have, I do not know where they will be in advance and I do not know exactly where to find them because they are most likely to be outside my area of experience and expertise).

Design thinking is not panacea



- Puzzles are optimally solved by engineers and MBAs (Keywords: Rationality, Quantification, Planning, Logic, Abstraction, Reduction, Simplification, Control and Stability).
- Mysteries are most related to innovation and they are optimally solved by methodologies from the Design (Keywords: Observation, Experimentation, Action/Iteration, Intuition, Abstraction/Specificity, Divergence, Complexity, Chaos).



Key elements



1

People-centered



You start from what people, users, customers, consumers, (...) **need or want to do**. Their motivations and the problems they are trying to solve.

Empathy is key. It's not about you. You need the ability to understand and share the feelings of others.



Key elements



2

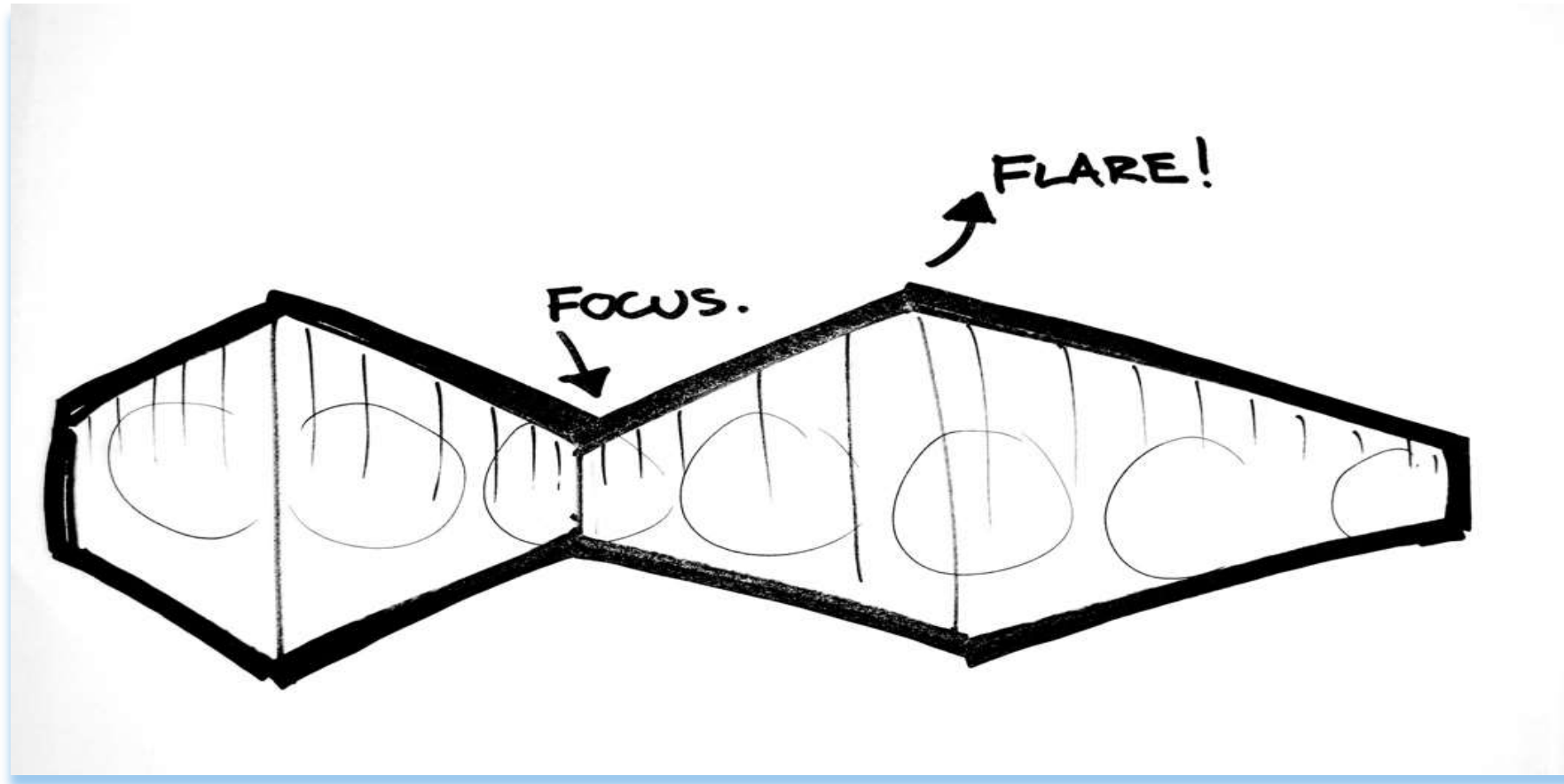
Highly Creative



Design thinking stimulates you to look at situations differently and **come up with new solutions**, that go beyond and improve existing alternatives.

Integrative thinking is key. You need the ability to look at all the different aspects of a problem

Convergence vs divergence



Key elements



3

Hands-on



Stop discussing, start working. Make ideas tangible. Prototyping is thinking with your hands. Test your hypotheses.

Failure is a (necessary) part of the process in order to succeed. Experiments with trial and error are key.



Key elements

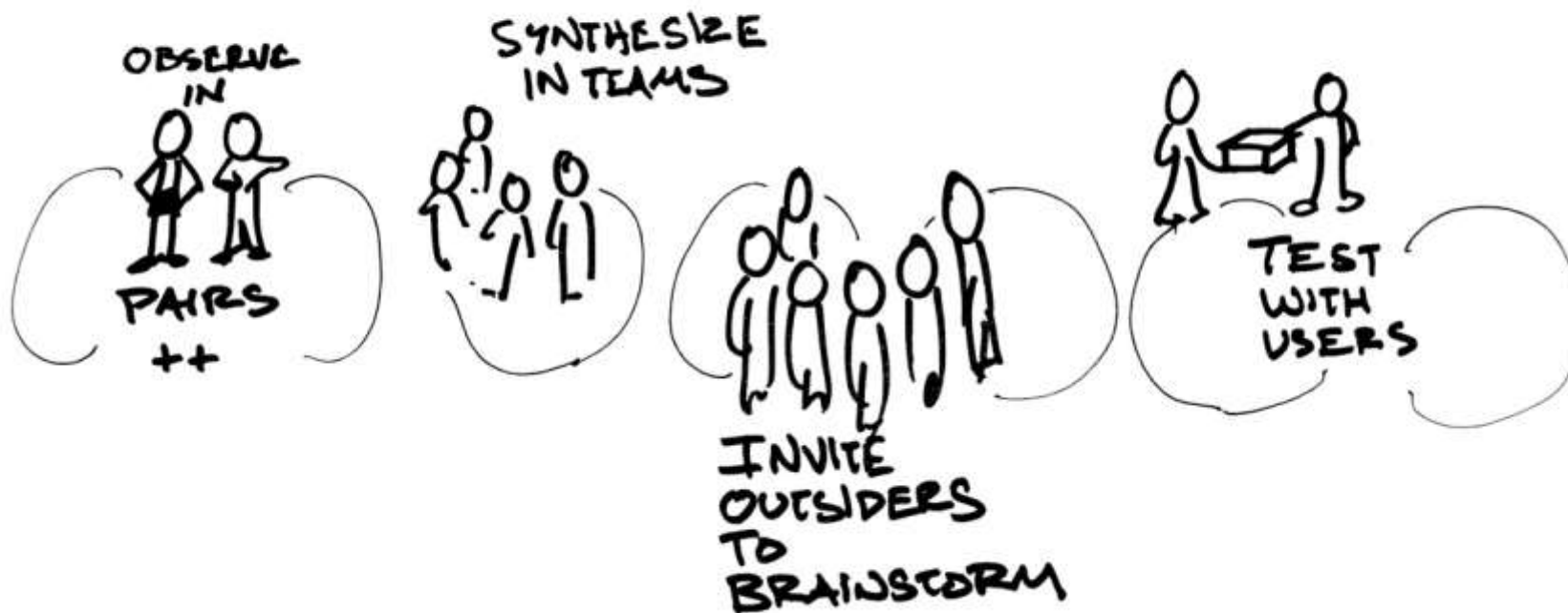


4

Radical Collaboration



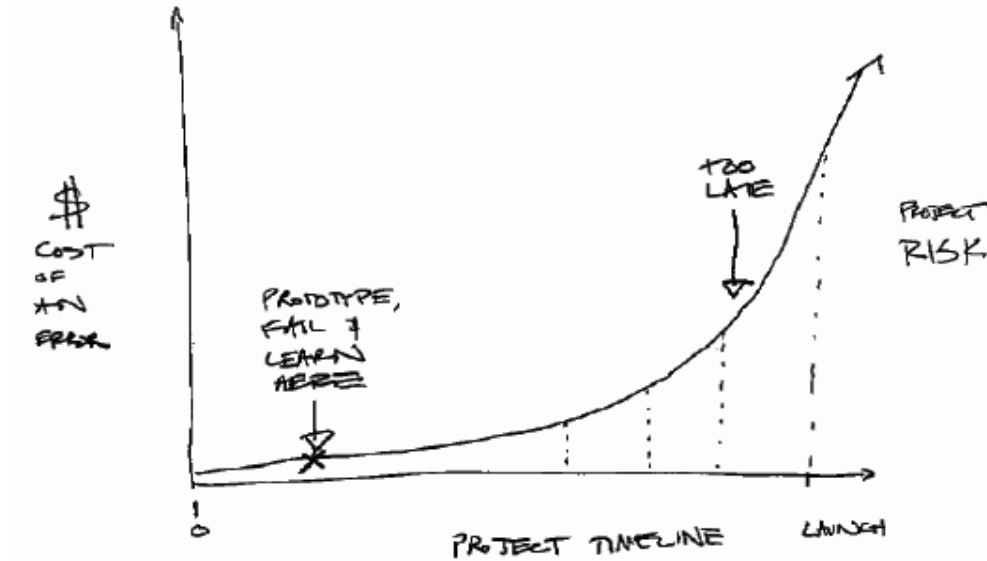
RADICAL
COLLABORATION



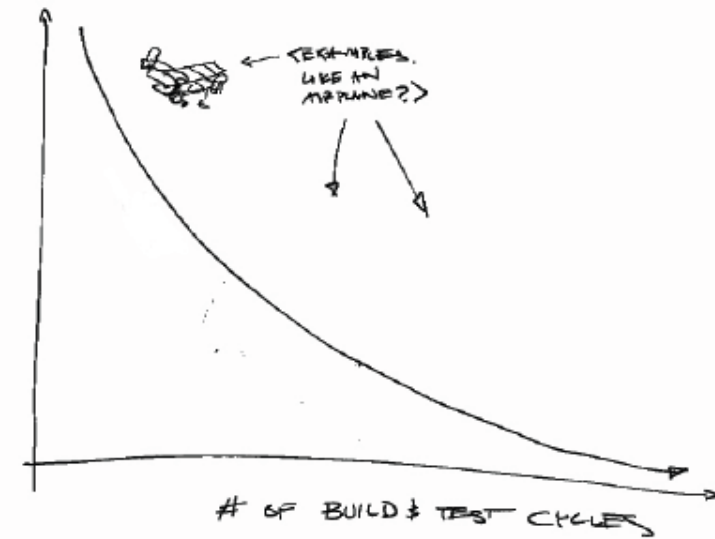
Key elements



PROTOTYPE EARLY



PROTOTYPE OFTEN



BIAS TOWARDS ACTION

Key elements

