Design Thinking for Librarians: Making Value to Approach Problem-Solving

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Philippine Normal University

August 30, 2022

I am Joemar

A Librarian, Teacher, Technology Consumer, Father and Husband to my wife,
Trying to be responsible and committed both in my personal and professional life,
My priority is my Integrity.

Steven Bartlett
@SteveBartlettSC

Stop telling yourself you're not qualified, not worthy or not experienced enough.

Growth happens when you start doing things you're not qualified to do.

Objectives

Recognize how design thinking works as a strategy of innovation;

Explore and explicate the Design Thinking Framework in relation to Librarianship

Gain valuable knowledge of the design thinking process

Learn how to improve libraries based on the standards through a creative problem-solving approach

Training Outline

Session 1

I. Fundamentals of Design Thinking
   - A. Definition
   - B. Key Components
   - C. Purpose

II. The Design Process
   - A. Visualizing Design thinking
   - B. Design Thinking Framework

Session 2

III. Human Centered Design Approach
IV. The Design Challenge
V. Inspiration

Session 4

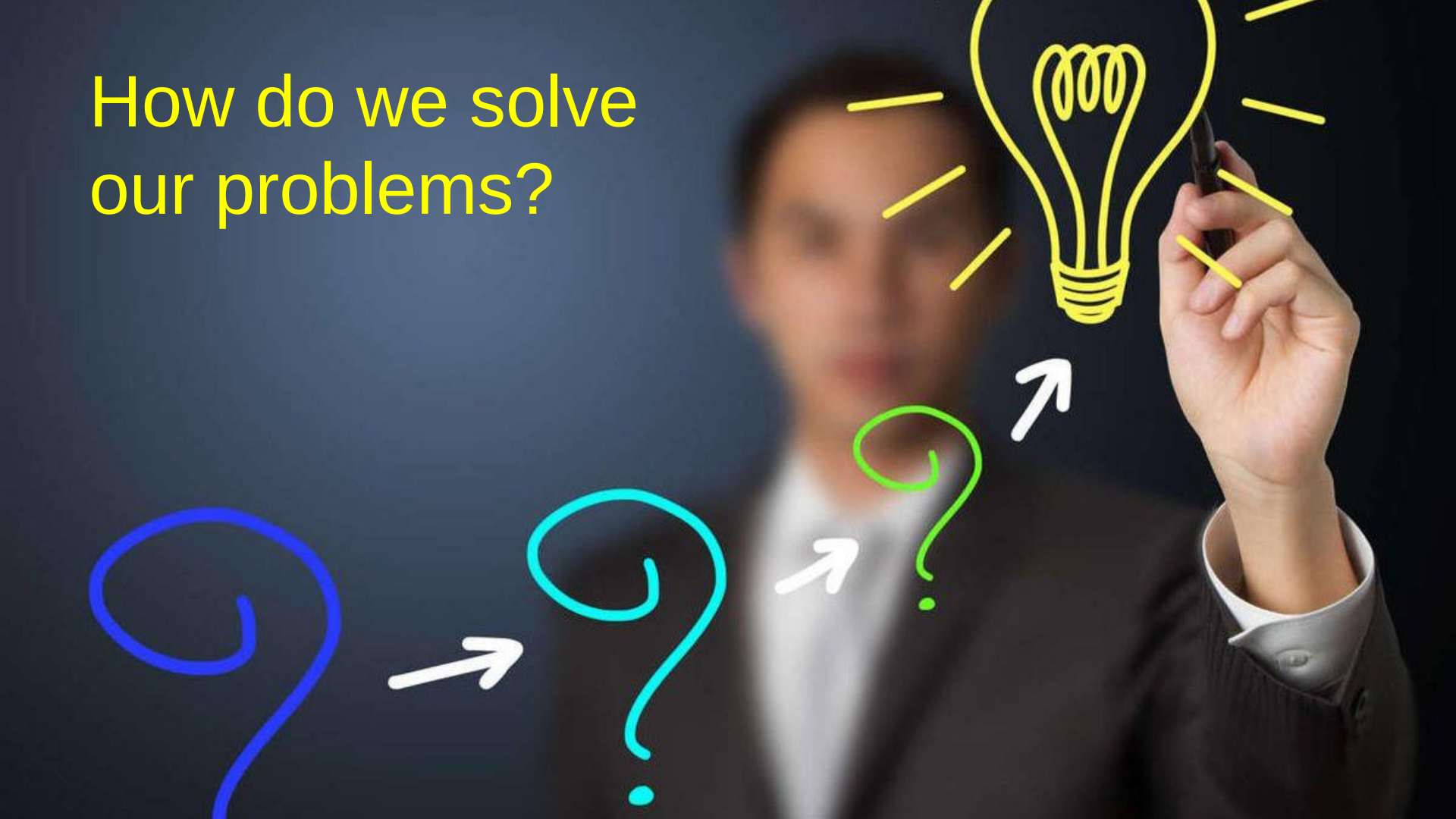
Synthesis

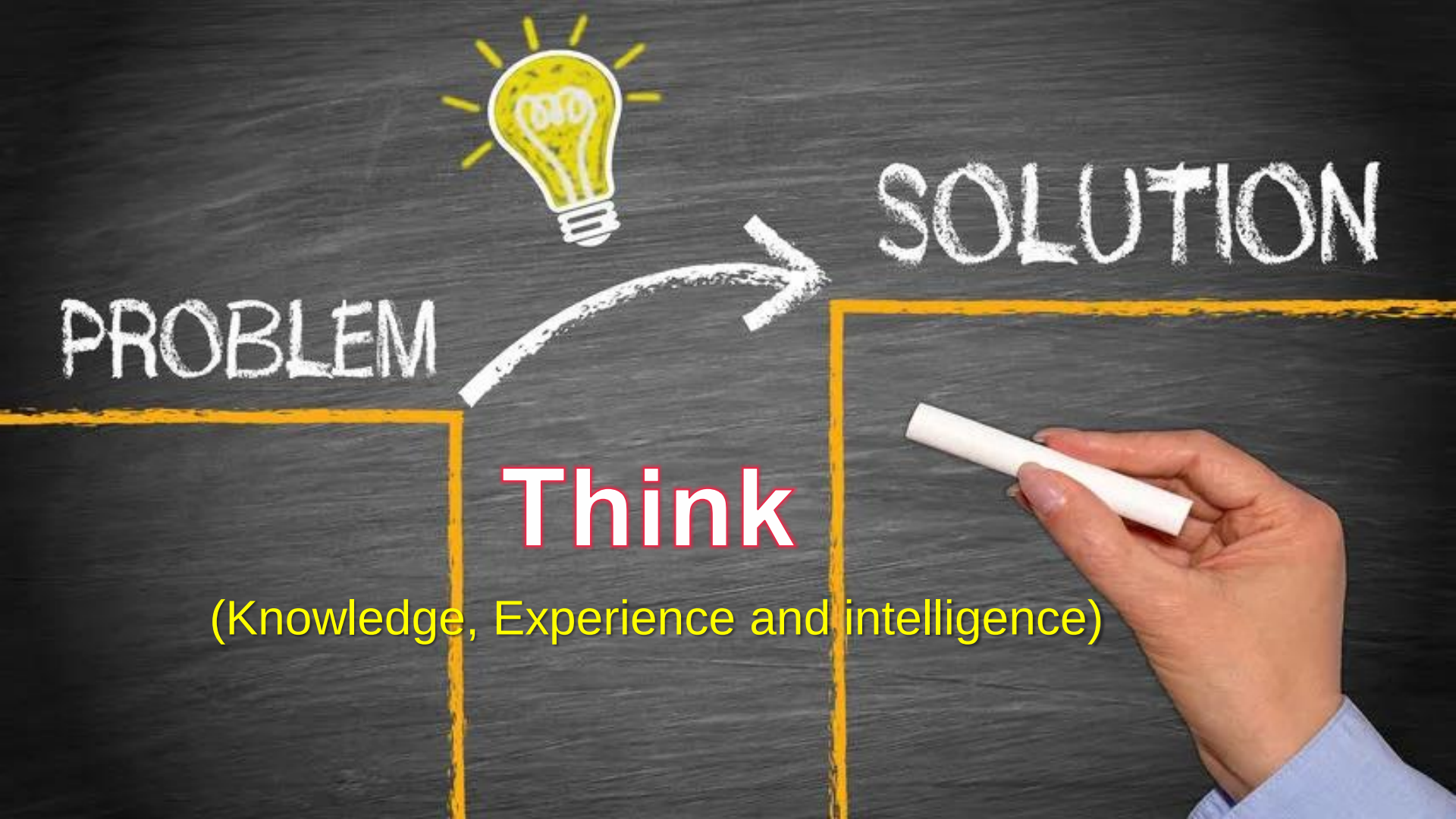
Session 3

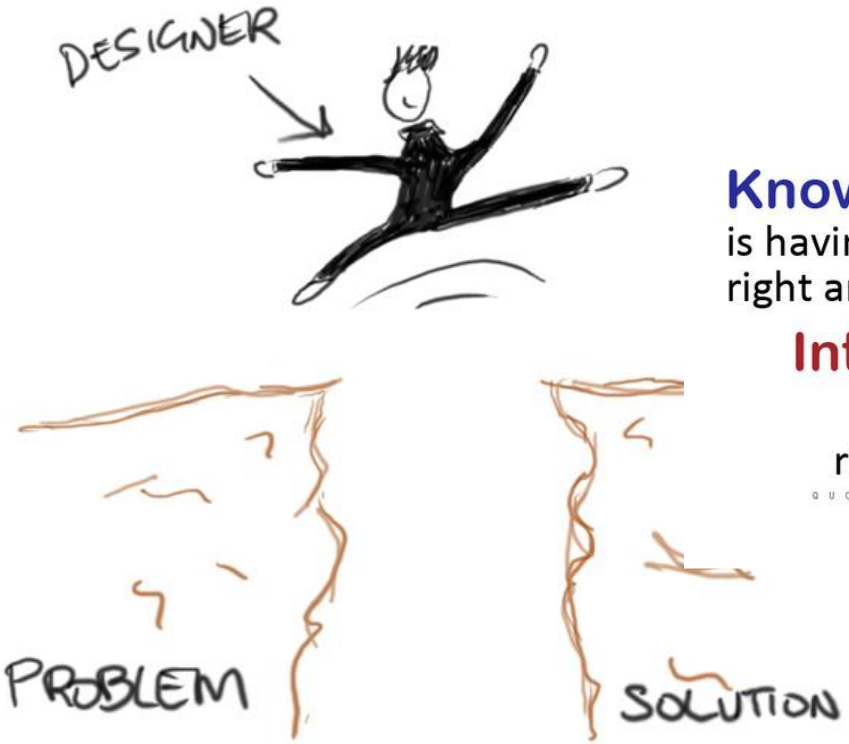
VI. Ideation
VII. Iteration

Fundamentals of Design Thinking

How do we solve our problems?



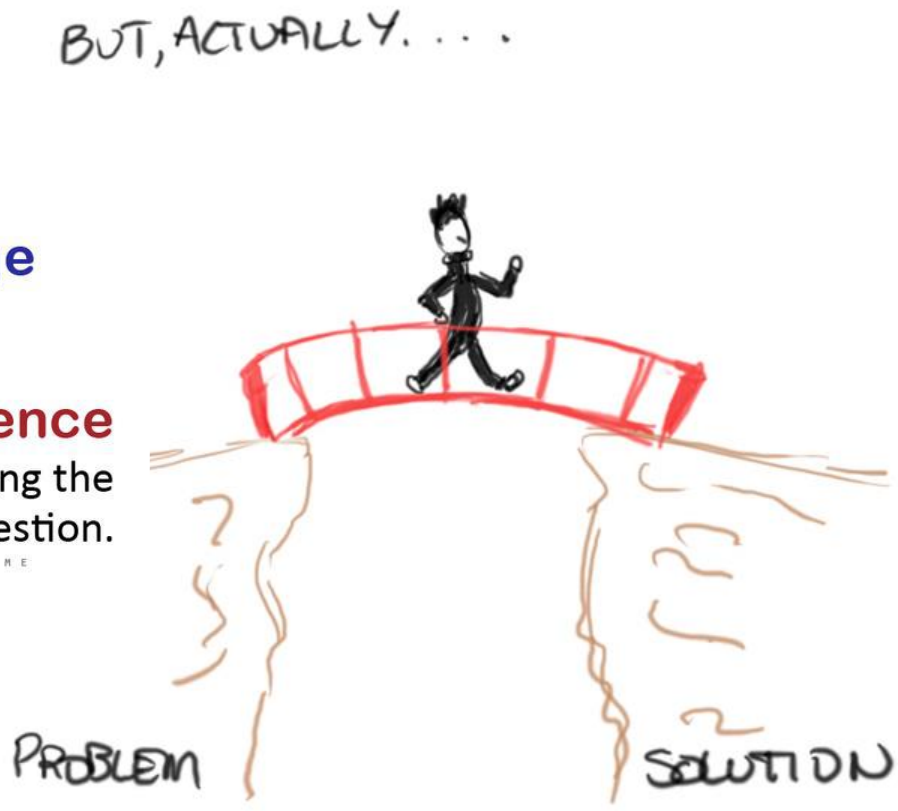

PROBLEM
SOLUTION
Think
(Knowledge, Experience and intelligence)



Knowledge
is having the
right answer.

Intelligence
is asking the
right question.

QUOTEDIARY.ME



DESIGN THINKING

an approach to solving design problems by understanding users' needs and developing insights to solve those needs.

(Tim Brown, President and CEO, 2015)

esign thinking

noun [dəˈzīn-ŦHiNGkiNG]

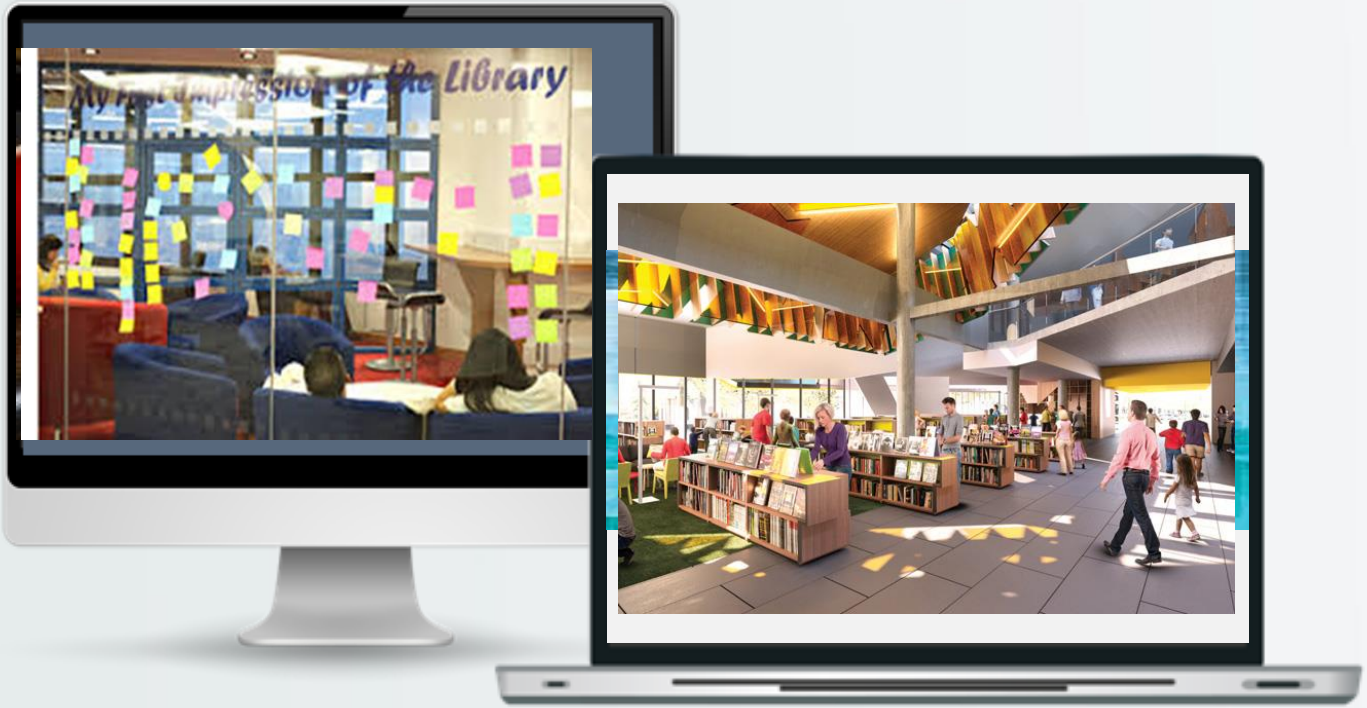
A method of problem-solving strategy wherein the data collected is expressed visually in order to create new strategies, ways and methods to solve problems, create opportunities or strengthen weaknesses.

Cameron, Matt. (2019). “**What Is Design Thinking?”. URL: https://www.checkmate.digital/blog/what-is-design-thinking**

Define

"Identifying the actual problem is the key to the right design solution"

Design
Thinking



Design Thinking is all about approaching problems with a fresh perspective..

and that mindset ?

Only through contact, observation & empathy with end-users can you hope to design solutions that fit into their environment.

As opposed to?

“We have this problem, let's jump in and get in a room and brainstorm solutions

“We have this technology, what can we use it for?

“Our competitors just launched X; how can we do X quickly

INSPIRATION

is about framing a design challenge and discovering new perspectives on the opportunity.

I have a challenge.

How do I approach it?

IDEATION

is about generating ideas and making them tangible.

I've learned something

How do I interpret it and express my ideas?

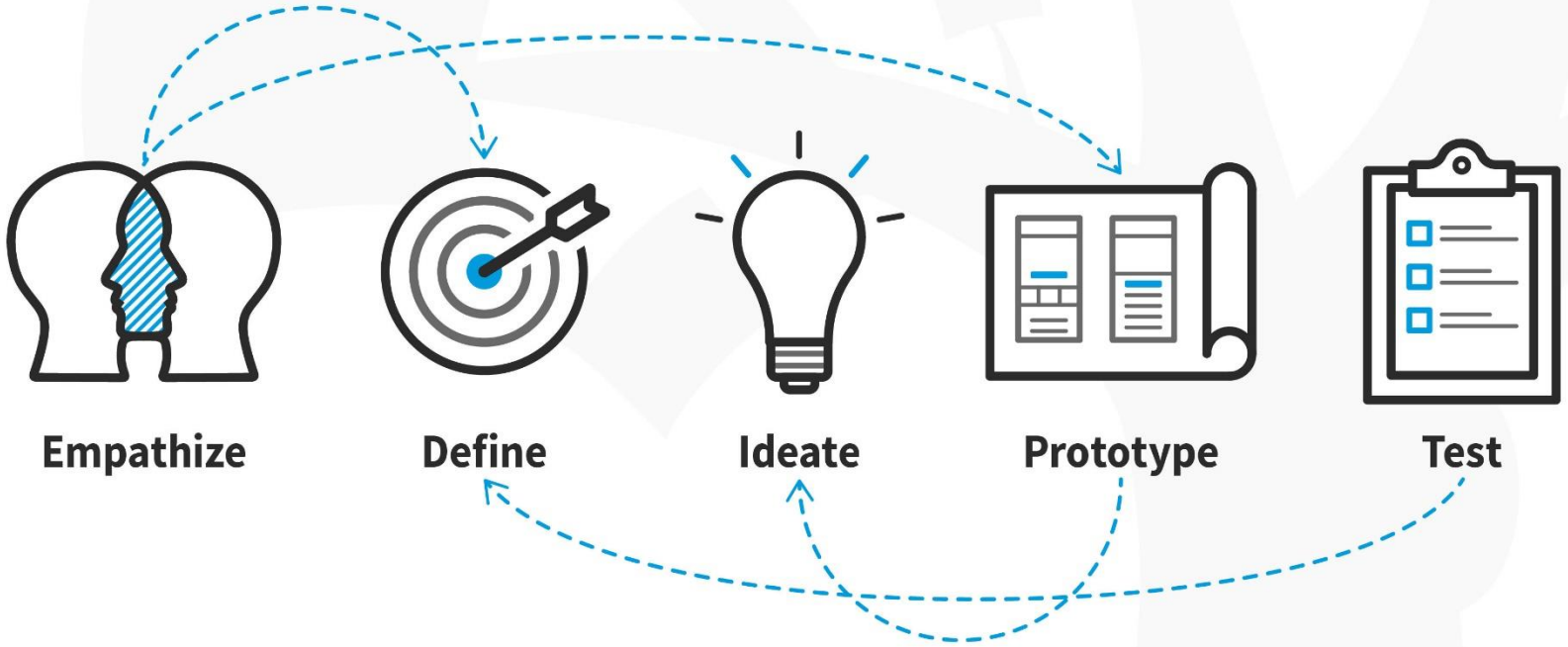
ITERATION

is about continual experimentation based on user feedback.

I have a prototype.

How do I Test it with users and refine it?

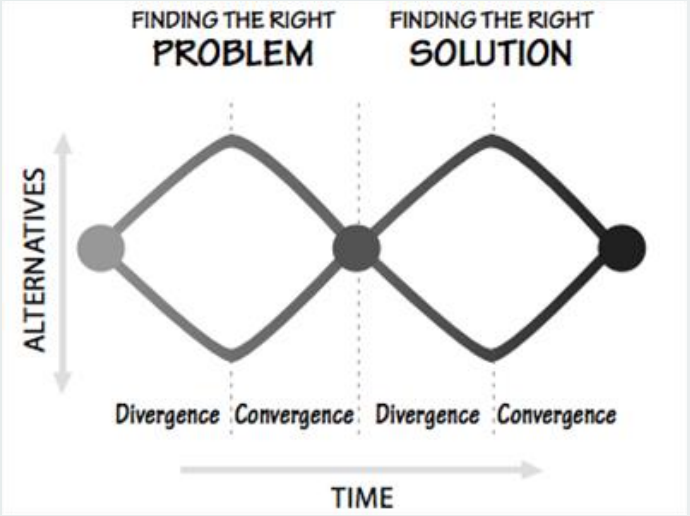
Design Thinking: A 5-Stage Process

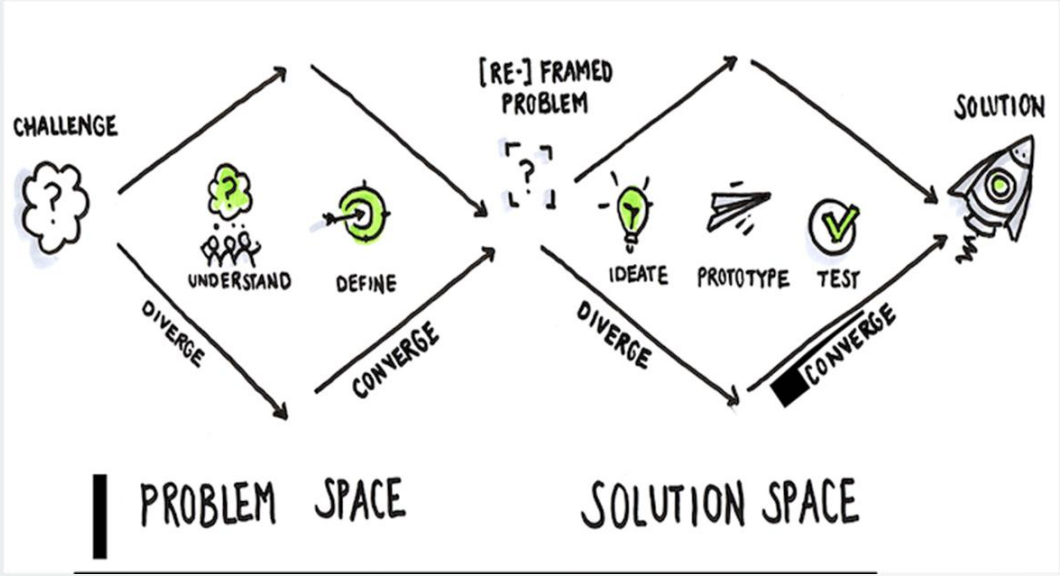


Interaction Design Foundation
interaction-design.org

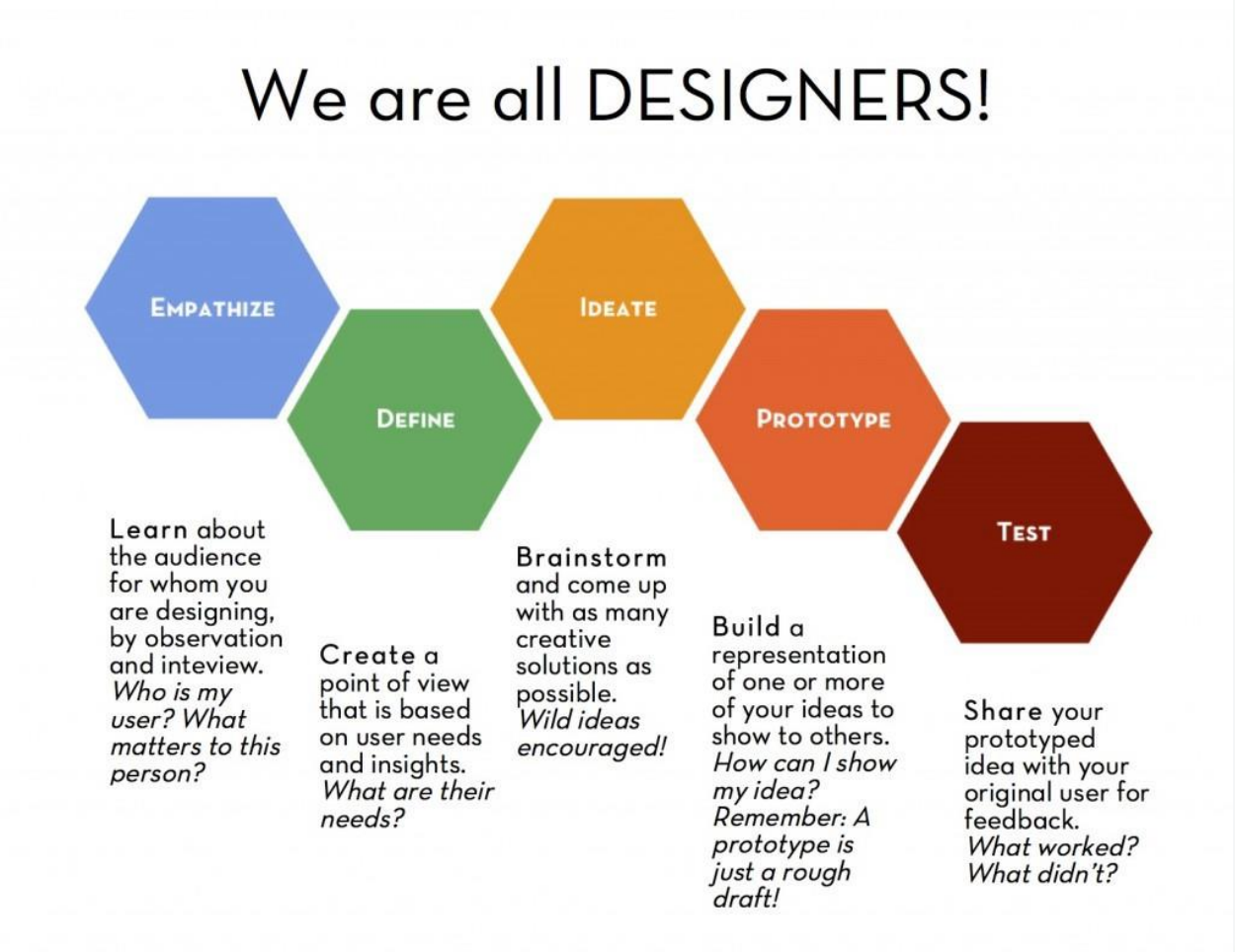
The Design Process

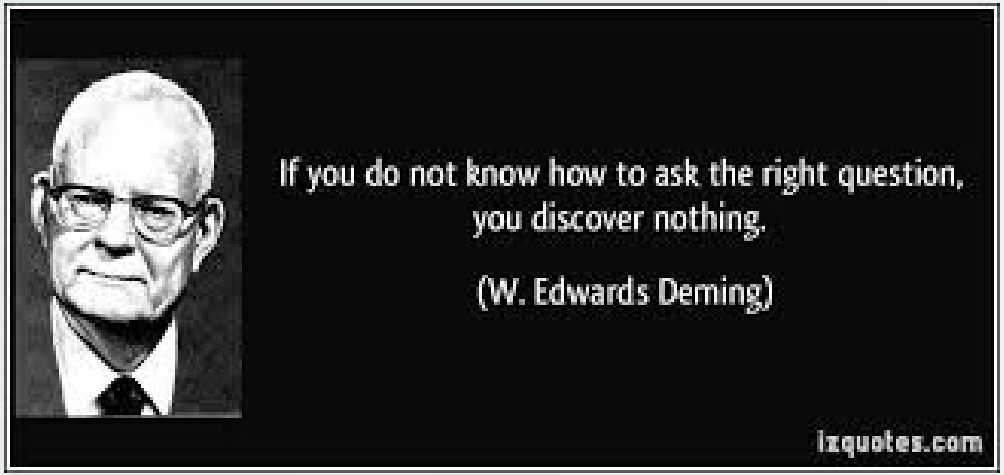
Visualizing Design Thinking

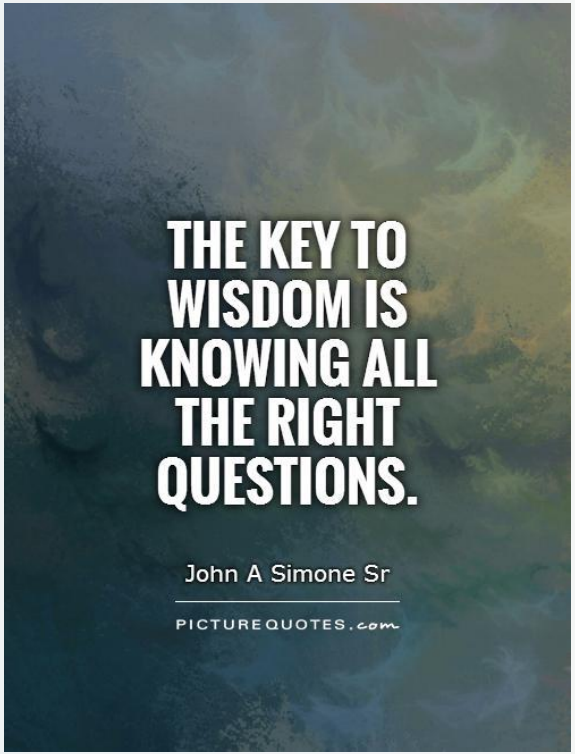




Visualizing Design Thinking



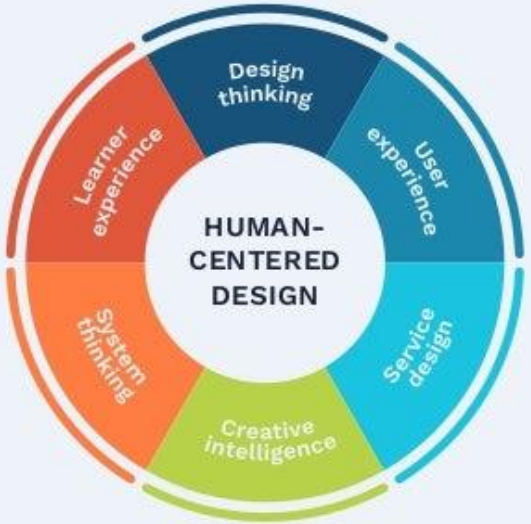

If you do not know how to ask the right question, you discover nothing.
(W. Edwards Deming)
izquotes.com


THE KEY TO WISDOM IS KNOWING ALL THE RIGHT QUESTIONS.
John A Simone Sr
PICTUREQUOTES.com

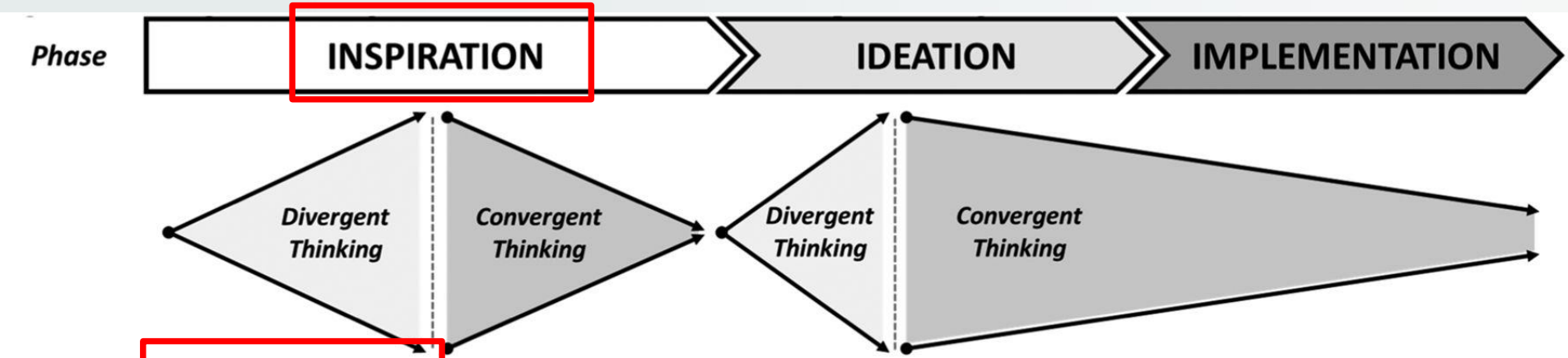
Human Centered Design Approach

What is **human-centered design?**

It is an approach of problem solving mostly used in design and management sectors by involving **human perspectives** in all steps of the problem-solving process.



- Believing that the people who face those problems everyday are the ones who hold the key to their answer.



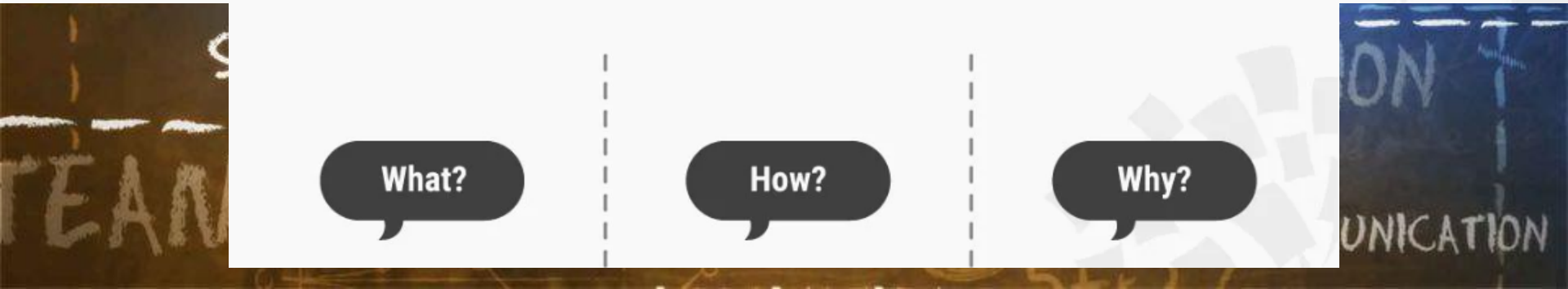
Stage	EMPATHIZE	DEFINE	IDEATE	PROTOTYPE	TEST
Definition	Get to know the user and their needs; understand their perspective	Create a problem statement that frames the user and their need	Explore ideas and options to address the problem and begin to narrow in	Experiment by making ideas tangible or act out processes	Evaluate the proposed solutions with the user, see if it works, then iterate
Example Strategies	• Empathy maps • Observations • Interviews	• "How might we..." • Tell a story • Confirm with users	• Brainstorm • Journey map • Forced analogy	• Paper prototype • Storyboard • Role play	• Plan a roadmap • Create a pitch • Get feedback

We record the details (not assumptions) of what has happened

We analyze how the person is doing, what he/she is doing

We make educated guesses regarding the person's motivations and emotions

Ask What? How? Why?



Activity 1

Define your Challenge

Goal: Write our DESIGN CHALLENGE

Getting Started

- What is something you have been wanting to change in your library that would help you adapt with the new CMO No. 22. S.2021?

Choose one (1) section :

1. VMGO
2. Administration
3. Human Resources
4. Collection Management
5. Services and Utilization
6. Physical Facilities
7. IT Infrastructure and Services
8. Financial Resources
9. Linkages and Networking

CMO No.22 S.2021

Section 1: VMGO – Problem: Awareness of the Library VMGO.

Section 2: Administration – Problem: Library Feedback mechanism

Section 3: Human Resources – Problem: Knowledge succession among librarians

Section 4: Collection Management– Problem: Digitization of Print Materials

Section 5: Service and utilization – Problem: Support to online teaching and flexible learning modalities

CMO No.22 S.2021

Section 6: Physical Facilities – Problem: Facilities for PWD .

Section 7: ICT – Problem: ICT Infrastructure

Section 8: Financial Resources – Problem: Augmentation of financial resources

Section 9: Linkages and Networking– Problem: Library community service learning

DEFINE THE DESIGN CHALLENGE

- *Brainstorm and answer the questions:*

1. Who is your target user group?
2. What problems they struggle with that you could solve? (maximum 3 answers)
3. Is there the potential to explore multiple solutions, what are those (Maximum 2 answers)

- *Write a design question to help you contain the scope. Write two How Might We questions:*

How might we….

DEFINE THE DESIGN CHALLENGE

- Framing the design challenge:

Sample Design Challenge:

How might we improve the application of BC in the library in the new normal?

Your design challenge:

How might we….

What activities & emotions comprises this experience? Give at least 3 answers

Activity 1: Output Presentation

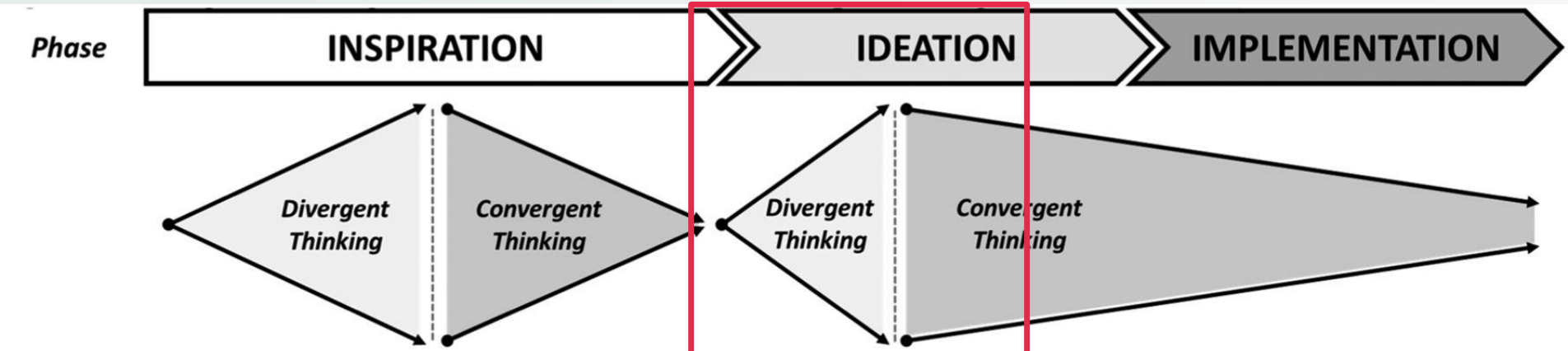
Define your Challenge

Goal: Write our DESIGN CHALLENGE

Ideation

Challenge Assumptions and Create Ideas

Ideation is when you generate a lot of new ideas in order to create a design solution.



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GOAL

To **generate** a large quantity of **ideas** that the team can then filter and cut down into the best, **most practical** or most **innovative** ones in order to inspire new and better design **solutions and products**.

Connecting: Be able to connect seemingly unrelated concepts, attributes or themes in order to create new possibilities.

Disrupting: Be able to overturn commonly held beliefs, assumptions or norms in order to re-think conventional approaches.

Flipping: Turn dead-ends or deadlocks into opportunities by flipping them over or rapidly changing direction towards greater viability.

Dreaming and Imagining: Be able to visualize a new picture of reality by turning abstract needs into tangible pictures or stories, thereby allowing the space required for inventing bridges to that reality.

Experimental: Be open and curious enough to explore possibilities and take risks; be willing and eager to test out ideas and eager to venture into the unknown.

Adapting: Be able to switch how you see, understand, and extend thinking as new input gets generated.

Recognise Patterns: Seek to spot common threads of meaning, and ways of seeing, doing and behaving; be able to recognise attributes or shared values across a spectrum of influence and input; and finally be able to utilize these commonalities to build solutions.

Curiosity: Be willing to ask uncomfortable, silly or even crazy questions. Be willing to explore and experience, in order to understand and learn something new and different.

Breaking the challenge up into smaller actionable pieces. Look for aspects of the statement to complete the sentence, “How might we…?”

This will spark your imagination and aligns well with the core insights and user needs that you’ve uncovered.

Sample Design Challenge:

How might we improve the application of **BC** in the library in the new normal?

convenience, seamless and availability

processes, services and product

Possible solutions and answering them in variety of ways.

Beware!

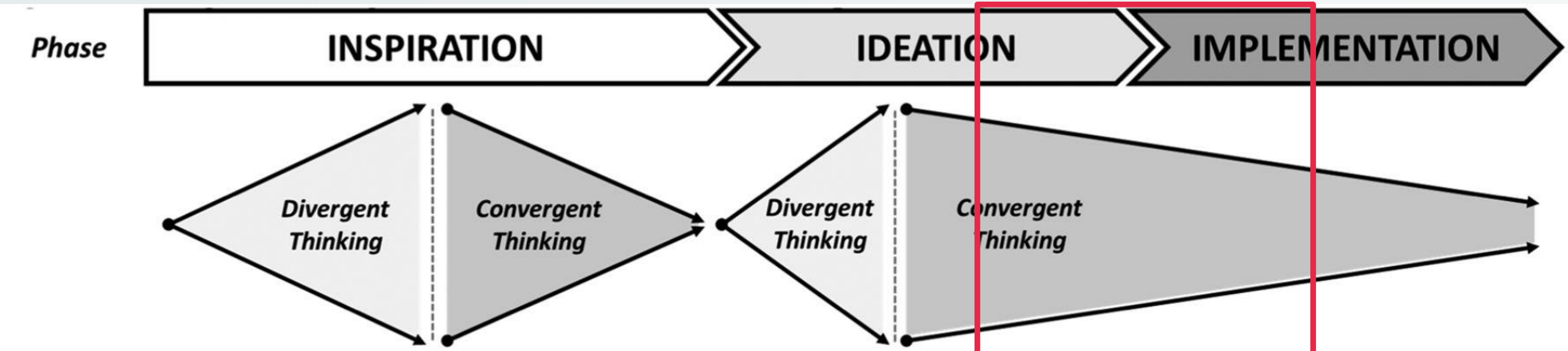
We all fall into the trap of sticking to patterns and familiar ground, and tend to use the same recipes for solving problems, as this reduces the cognitive load required. (Interaction Design Foundation, 2022.)

Experts and novices alike need to be constantly self-aware and purposely in tend to adopt some of the following characteristics, which create an open mind and fertile ground for sparking unconventional ideas.

Prototyping

Create a tangible visual representation of the solutions discussed throughout the design process.

https://www.workshopper.com/post/design-thinking-phase-4-everything-you-need-to-know-about-prototyping



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Bringing your ideas to reality:

Model

Digital Mock-up

Role-playing

Bringing your ideas to reality:

Advertisement

New Spaces

“

It’s not about coming up with the ‘right’ idea, it’s about generating the broadest range of possibilities .

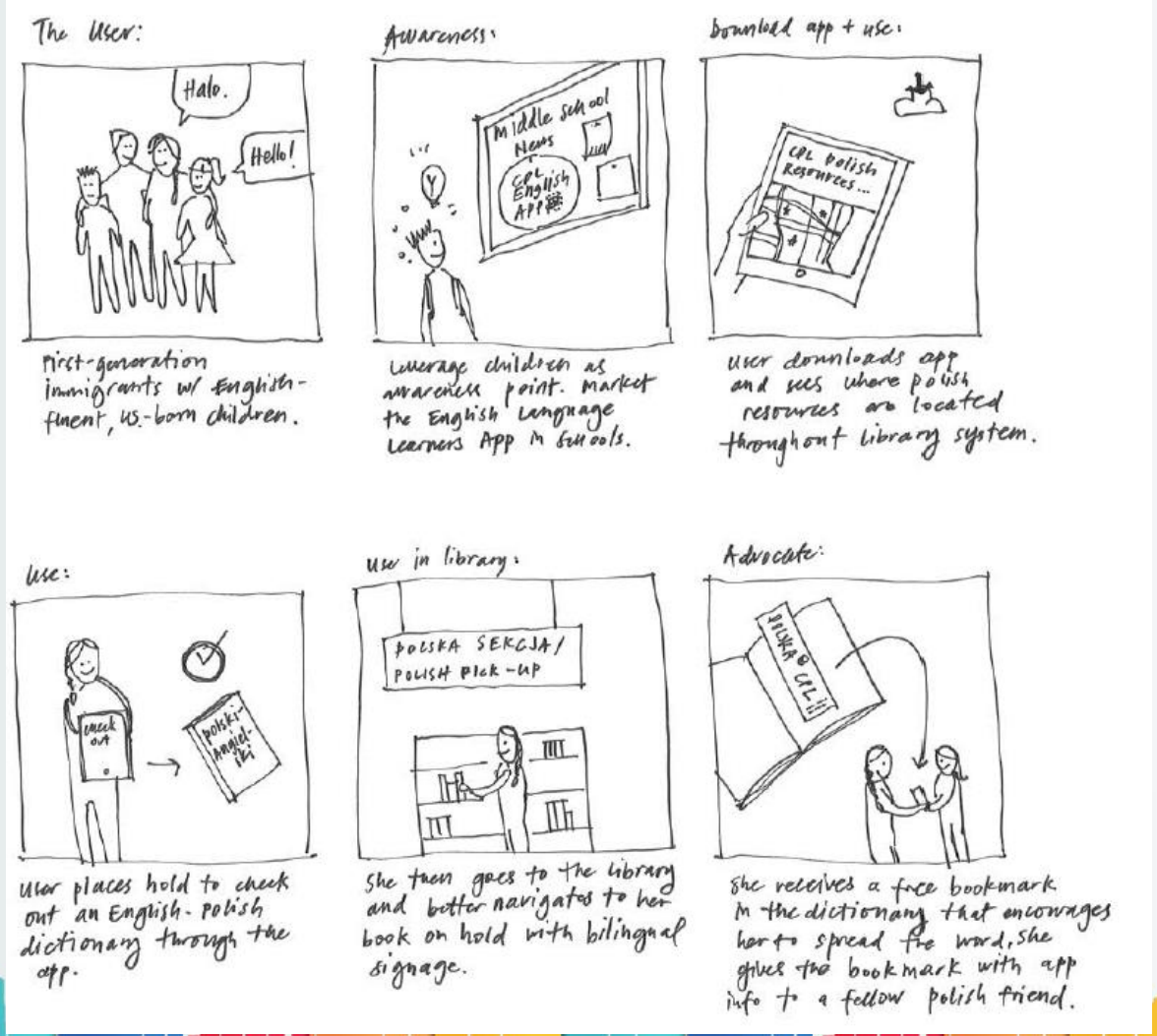
– d.school, An Introduction to Design Thinking PROCESS GUIDE

Activity 2

Proto-typing

Goal: Create your own Concept Map that illustrate your prototype

Example:

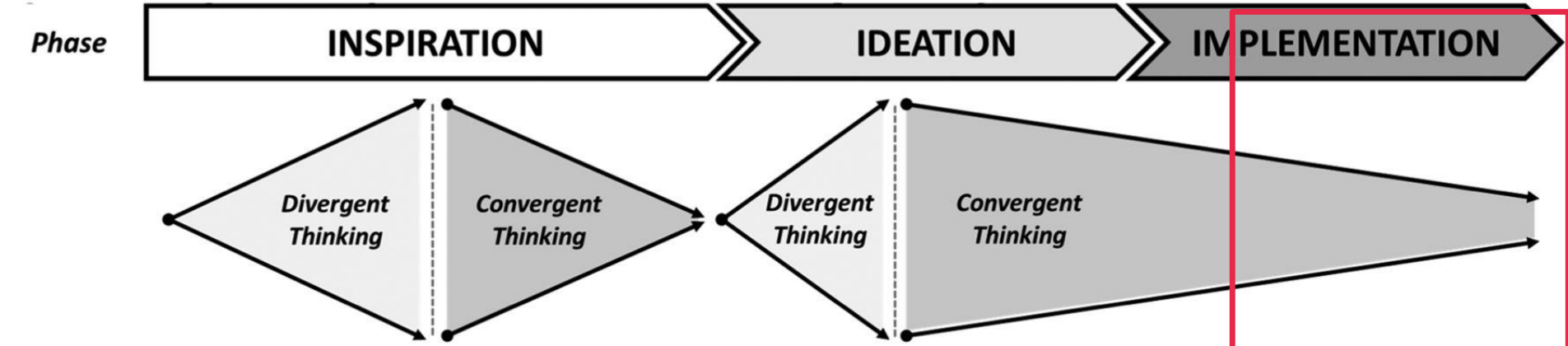

The User:
Halo.
Hello!
First-generation immigrants w/ English-fluent, US-born children.
Awareness:
Middle School News
CPL English App
Leverage children as awareness point. Market the English Language Learners App in schools.
Download app + use:
CPL Polish Resources...
User downloads app and sees where polish resources are located throughout library system.
Use:
check out
polski-angiel-ski
User places hold to check out an English-Polish dictionary through the app.
Use in library:
POLSKA SEKCJA / POLISH PICK-UP
She then goes to the library and better navigates to her book on hold with bilingual signage.
Advocate:
POLSKA @ CPL!!!
She receives a free bookmark in the dictionary that encourages her to spread the word, she gives the bookmark with app info to a fellow polish friend.

Activity 2: Output Presentation

Iteration

Design thinking is result-oriented and is therefore based on continuous improvement.

https://bootcamp.uxdesign.cc/the-power-of-design-iteration-73a01063c5de



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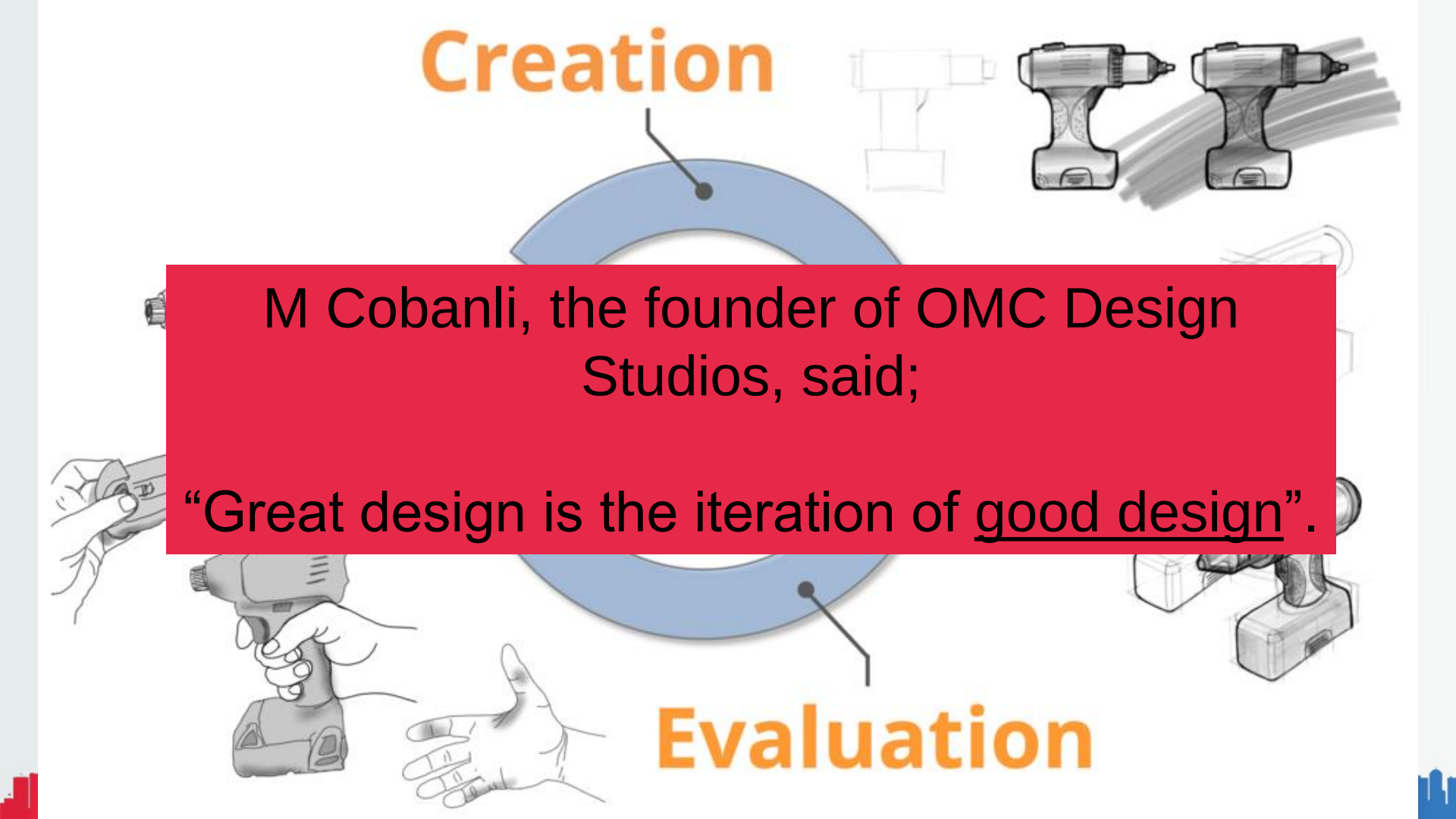
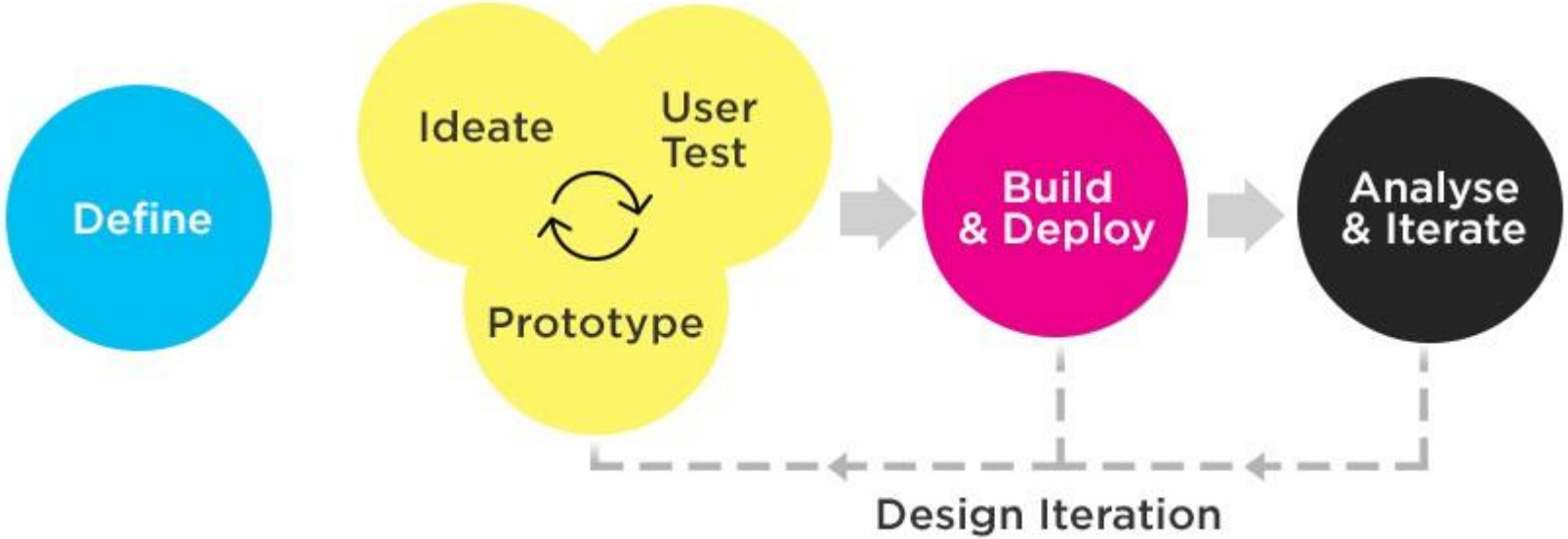


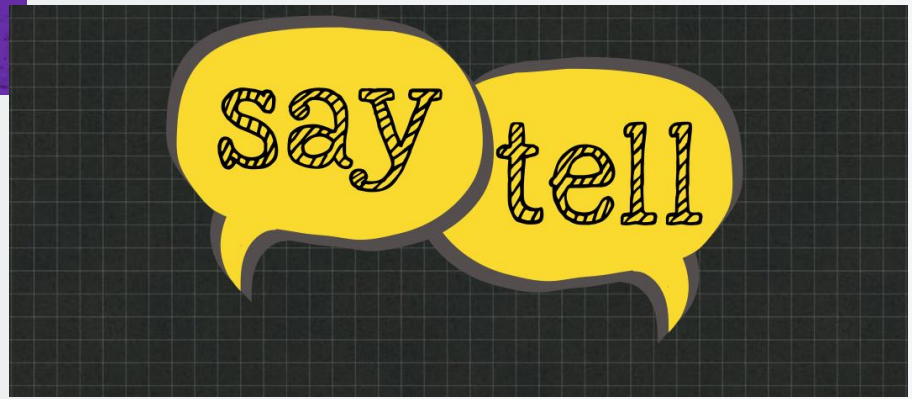
M Cobanli, the founder of OMC Design Studios, said;

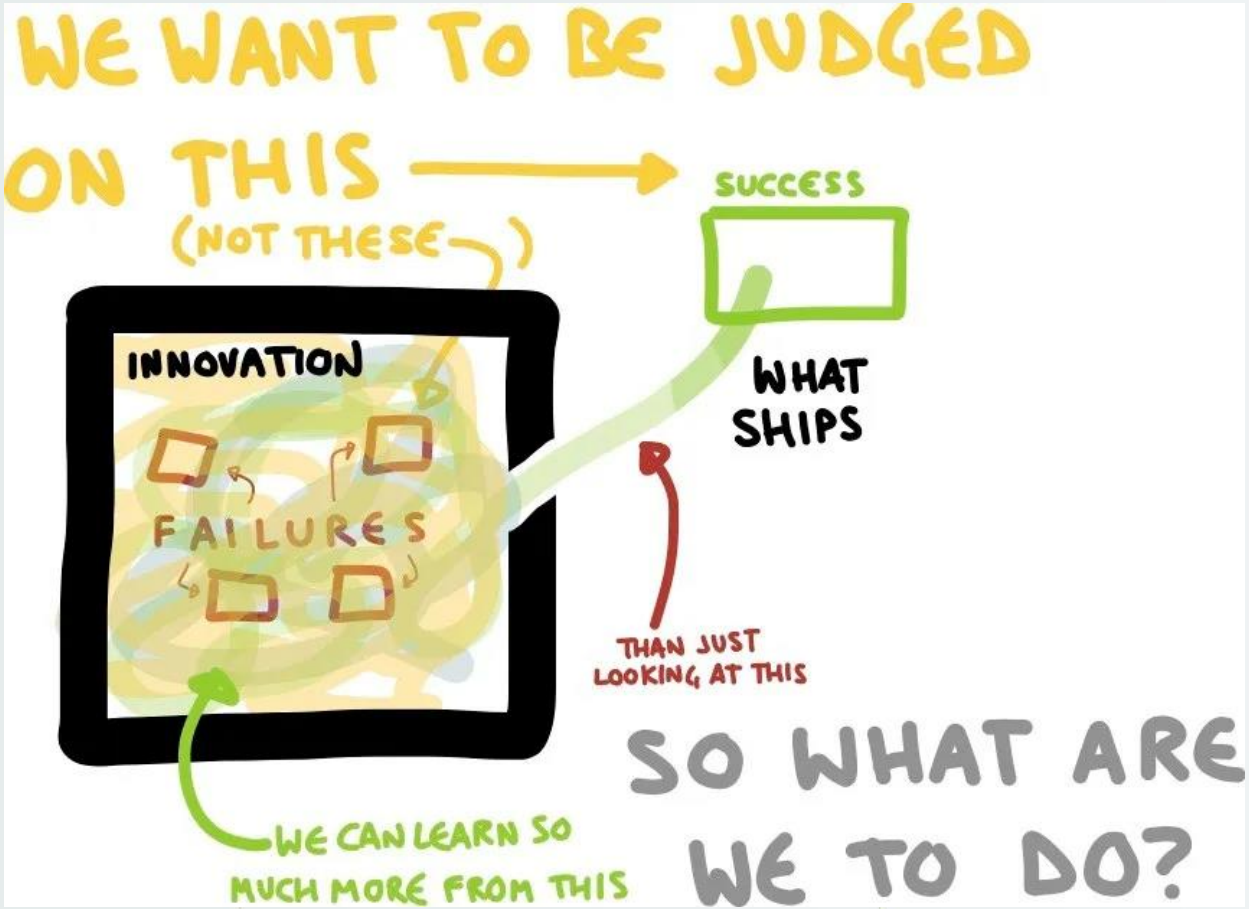
“Great design is the iteration of good design”.

the Design process that delivers



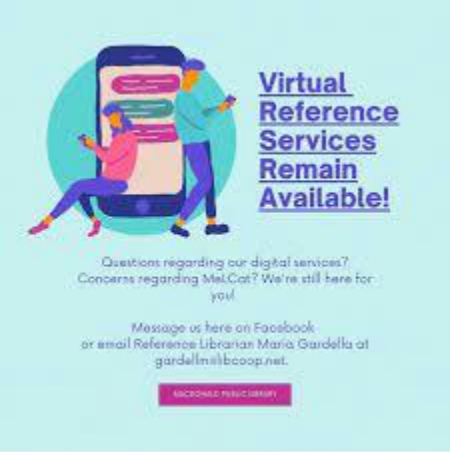
Why does iterative design exist?





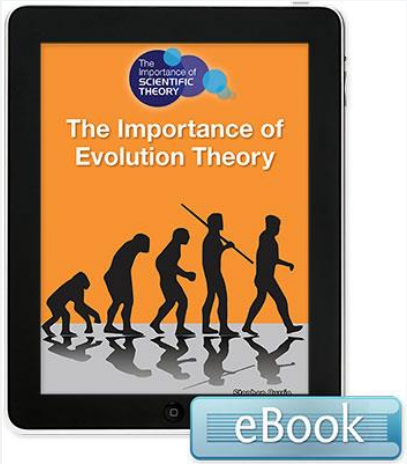
Design iteration means learning from failure before putting a product in front of users – so that you are judged on success.

Samples of Iterative Design:



Reference Service

Library Services



eBook


We all need people
who will give us
Feedback
that's how we improve.
— Bill Gates

Synthesis

Design thinking is result-oriented and is therefore based on continuous improvement.

https://bootcamp.uxdesign.cc/the-power-of-design-iteration-73a01063c5de

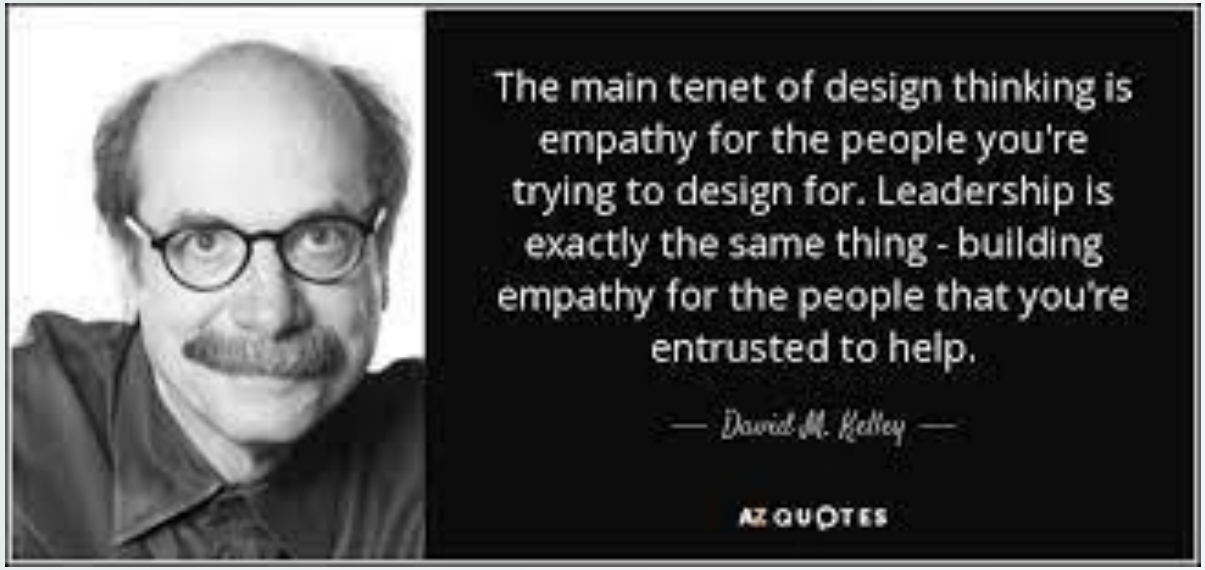
Principles of Design

Christoph Meinel and Larry Leifer of the HPI-Stanford Design Thinking Program

Implementing New Ideas = VALUE

Innovate Or Die: The Cost Of Not Doing Anything

Innovation Drivers


The main tenet of design thinking is empathy for the people you're trying to design for. Leadership is exactly the same thing - building empathy for the people that you're entrusted to help.
— David M. Kelley —
AZ QUOTES

Thank You For Your Time Today

ANY QUESTIONS?

jdsajona@gmail.com