

Leadership and Design

Unit 10

Working draft

Nepal Data Literacy Program, 2019

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Course Contents

Module 1: Design Thinking

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Module 1

Design thinking

Objective of module 1: Design thinking

- Learn design thinking through a hands-on activity
- Understand the use of design thinking in different areas
- Learn the 5-part framework for design thinking
- Helpful resources for reference

Exercise 1:
Let's jump straight into a design thinking
exercise and learn by doing

Design thinking in action:

Setting up

- Find someone from your team to work with
- We will use the **9 steps** in the worksheet provided to guide us through this experience
- Exercise lasts for ~1 hour and we will be very strict with time
- This will be a very quick exercise and might feel chaotic, but please hang in with us!
- We will reconvene in the end to reflect on our learning

Design thinking in action:

Mission: **Designing** an IDEAL wallet/purse for your partner

Step 0: Draw (3 mins)

In the blank sheet of paper in your packet, please draw the ideal wallet/purse for your partner.

1

Empathize

“To create meaningful innovations, you need to know your users and care about their lives.”



1. Interview (3 minutes X 2 sessions)

Partner A will have three minutes to interview Partner B, and then we will tell you when to switch.

As a starting point, ask your partner to walk you through the contents of their wallet/purse.

- When do they carry their wallet/purse?
- Why do they have a particular card/picture?
- What do the things in their wallet/purse tell you about their life?

Design thinking in action:

Start by gaining empathy.

1. Interview

6 minutes (2 sessions X 3 mins each)

Notes from your first interview

Switch roles and repeat interview 1

2. Dig deeper

6 minutes (2 sessions X 3 mins each)

Notes from your second interview

Switch roles and repeat interview 2

2. Dig Deeper (3 minutes X 2 sessions)

- Follow up on things that intrigued you during the first interview
- Try to dig for stories, feelings, and emotion.
- Ask 'WHY?' often
- Forget about the wallet, find out what's important to your partner

“Framing the right problem is the only way to create the right solution.”



3. Capture findings (3 minutes)

- Take 3 minutes to collect your thoughts and reflect on what you've learned about your partner
 - **Needs:** related to your partner's wallet and life.
(E.g., needs a big bag with multiple compartments to stay organized)
 - **Insights:** discoveries that you might be able to leverage when creating solutions
(E.g., Is vegetarian/vegan i.e., no leather or animal products etc.)

Design thinking in action:

Define and Reframe the problem.

3. Capture findings 3 mins

Needs: things they are trying to achieve

Insights: new learnings about your partner's feelings/
worldview to leverage in your design*
Make inferences from what you heard

4. Define problem statement 3 min

.....
Partner name

.....
needs a way to [partner's needs]

because

.....
.....
.....
.....
[Insights]

Switch roles and repeat sharing

4. Define problem statement (3 min)

- Take 3 minutes to select the most compelling need and most interesting insight to articulate a point-of-view

E.g., Sunnie needs a purse that is versatile -- one that she can bring it to work and at social gatherings because she sometimes needs to head to social gatherings straight after work

OR

Ravi needs a bag that is very casual with many compartments so that he can carry all this stuff in an organized way

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



5. Ideate (5 min)


- First please rewrite your problem definition on top of the page
- Then, sketch as many different ideas and designs as you can
- Unusual ideas, strange ideas, all kinds of ideas are welcome
- Be VISUAL—use words just when necessary to call out details

Design thinking in action:

Ideate: Generate alternatives to test.

5. Generate at least 5 radical ways to meet your partner's needs 4 mins

Write your problem statement above

A horizontal row of five identical, empty rounded rectangular boxes, each with a thin grey border, intended for writing down generated ideas.

6. Share your solution and capture feedback 6 mins (2 sessions X 3 mins each)

Notes

Switch roles and repeat sharing

6. Share solutions and capture feedback (3 min X 2)

- Spend the time listening to your partners reactions and questions
- Note the 'likes/dislikes', but also listen for new insights
- This is another opportunity to learn more about your partner's feelings and motivations

“Build to think and test to learn.”



7. Build (10 mins)

- Build a physical prototype/sample of your solution
- Make something that your partner can engage and interact with
- Use whatever materials are available to you (paper, pens, tape etc.)
- Be scrappy and quick—you only have a few minutes!

Design thinking in action:

Build

- 7. Build your solution purse/wallet using different materials (colored paper, pens, tape etc.) provided 10 mins**

Make something your partner can interact with

“Testing is an opportunity to learn about your solution and your user”



8. Test your solution and get feedback (4mins X 2)

- Share your prototype with your partner.
- Each partner will have time to share and collect feedback
- Watch how your partner uses and misuses it
- Jot down in the worksheet:
 - Things your partner liked
 - Things they didn't like
 - Questions that emerged
 - New ideas that came up

Design thinking in action:

Test

8. Share your solution with your partner and get feedback

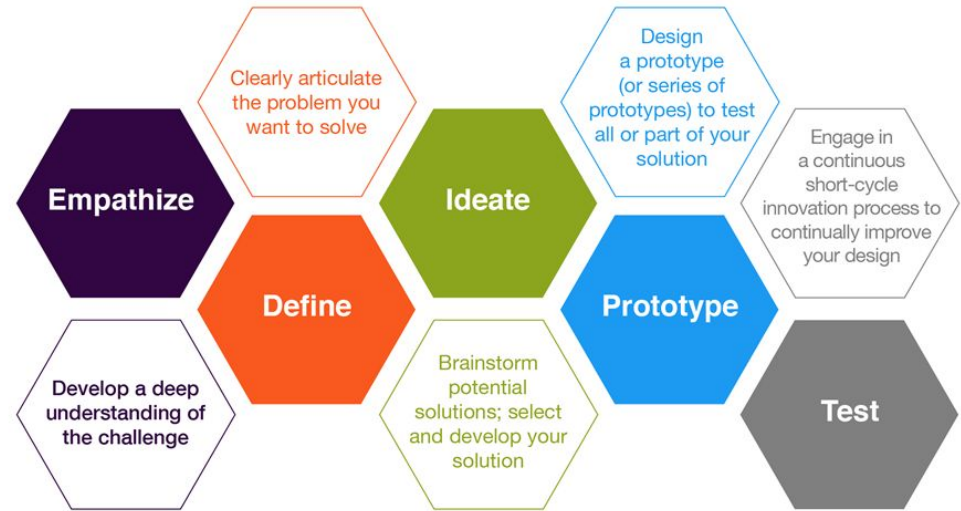
8 mins (2 sessions X 4 mins)

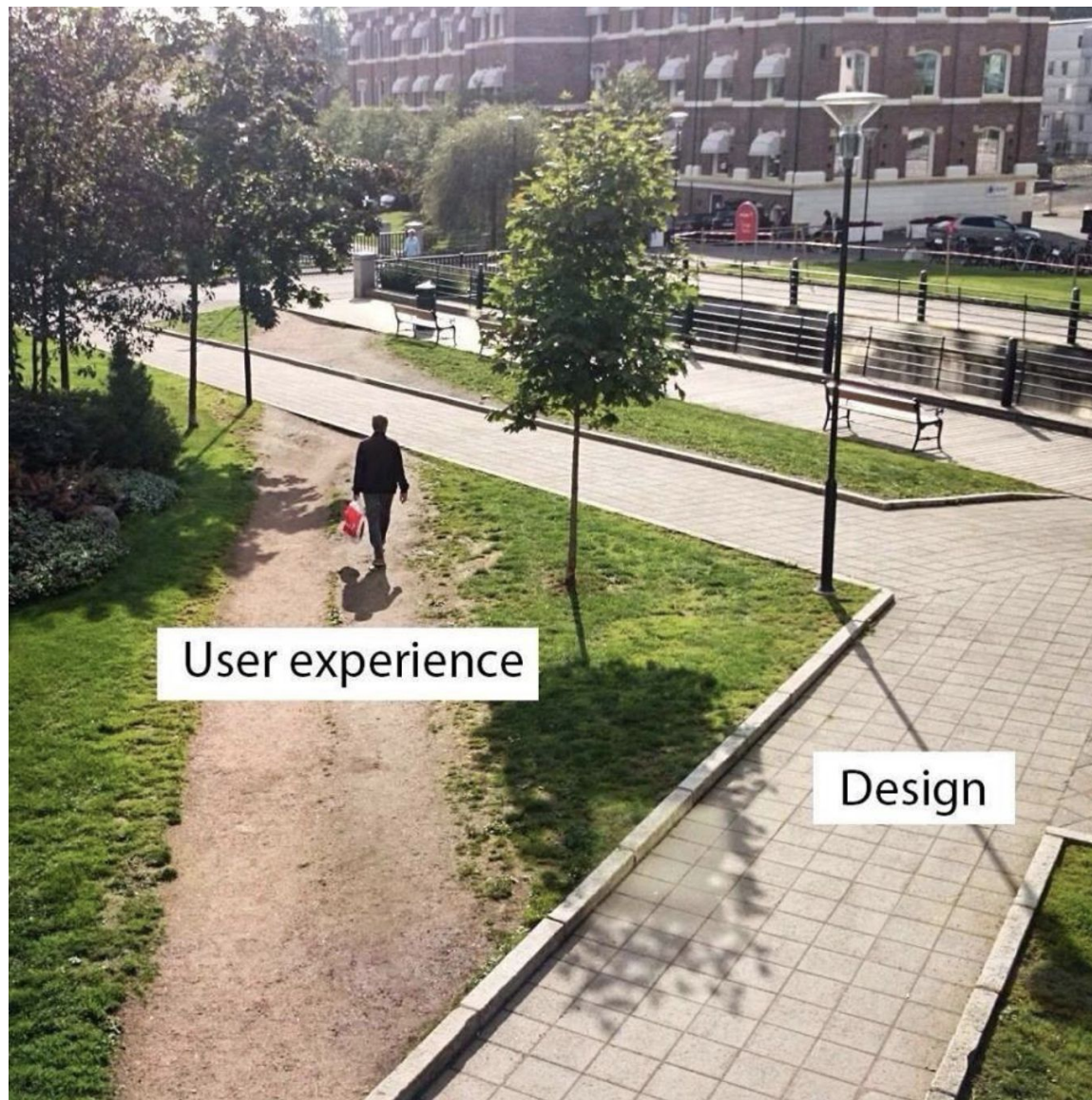
<p>+ What worked...</p>	<p>- What can be improved...</p>
<p>? Questions...</p>	<p>! Ideas...</p>

Let's have 1 pair present their solutions and reflections

Design thinking

- Human-centered design
- Experimentation and prototyping
- Bias towards action
- Power of iteration



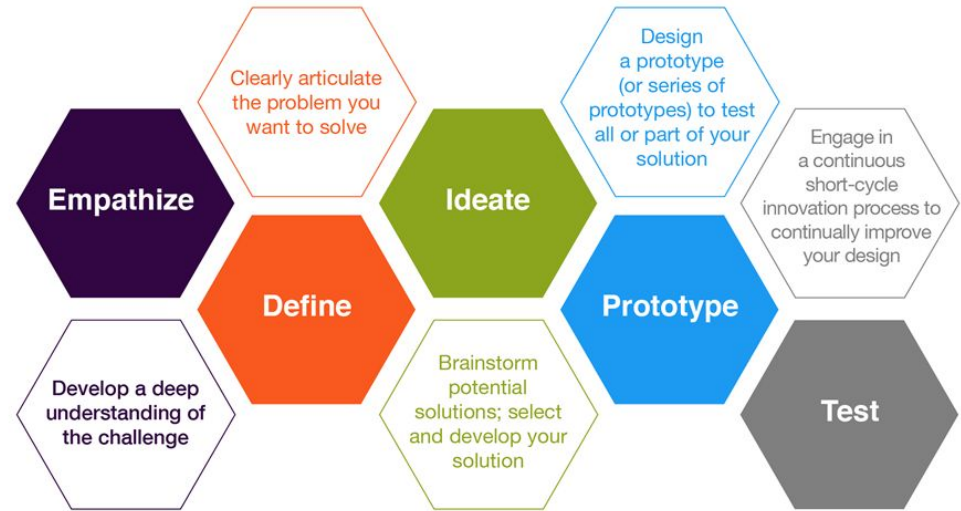


User experience

Design

What is Design thinking

- Human-centered design
- Experimentation and prototyping
- Bias towards action
- Power of iteration

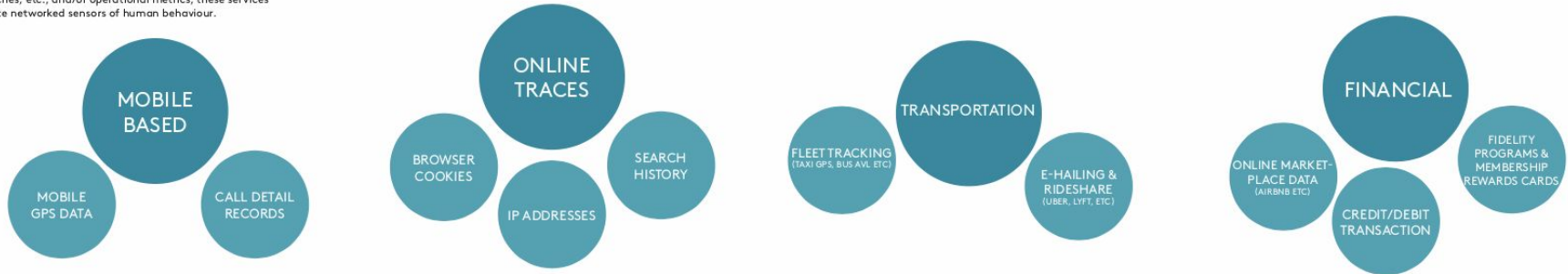


Use of Big data in design thinking

[BIG DATA SOURCES]

EXHAUST DATA

Passively collected transactional data from people's use of digital services like mobile phones, purchases, web searches, etc., and/or operational metrics; these services create networked sensors of human behaviour.



DIGITAL CONTENT

Web content such as news media and social media interactions (e.g. blogs, Twitter), news articles, e-commerce, job postings; this approach considers web usage and content as a sensor of human intent, sentiments, perceptions, and want.

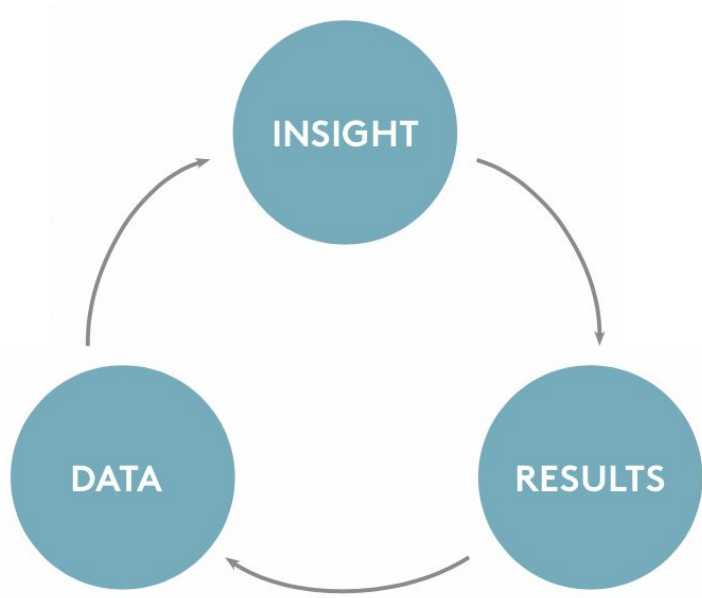


SENSING DATA

Satellite or infrared imagery of changing landscapes, traffic patterns, light emissions, urban development and topographic changes, etc; this approach focuses on remote and direct sensing of changes in human activity.



Big data in action -- theory of change



- Use big data analytics to draw insights and understand users better
- Use this understanding to design products or solutions that are better suited for the users

Design thinking has widespread applications

[Non-exhaustive examples]

Business/IT: Optimizes business processes by developing deep empathy for customers and creating products and solutions that match their needs

Education: By taking feedback from students on their requirements, goals and challenges they are facing in the classroom, the instructors can come up with creative solutions to address their challenges

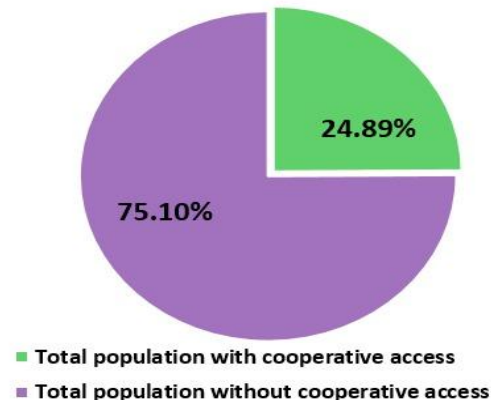
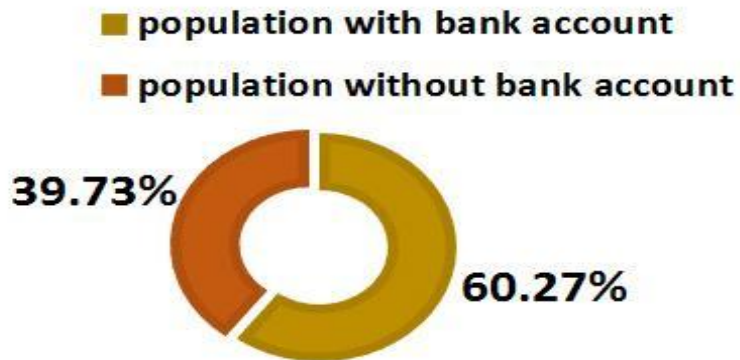
In general, design thinking helps create products and services keeping users at the center of innovation

[Creative Confidence Video clip](#)

Let's see how design thinking might be applicable to our team projects



The PROBLEM we are looking at



Gender disparity is seen in access to bank

Both men and women have equal access to cooperatives



1 in 2 women do not have bank accounts.



1 out of 4 men do not have bank accounts.

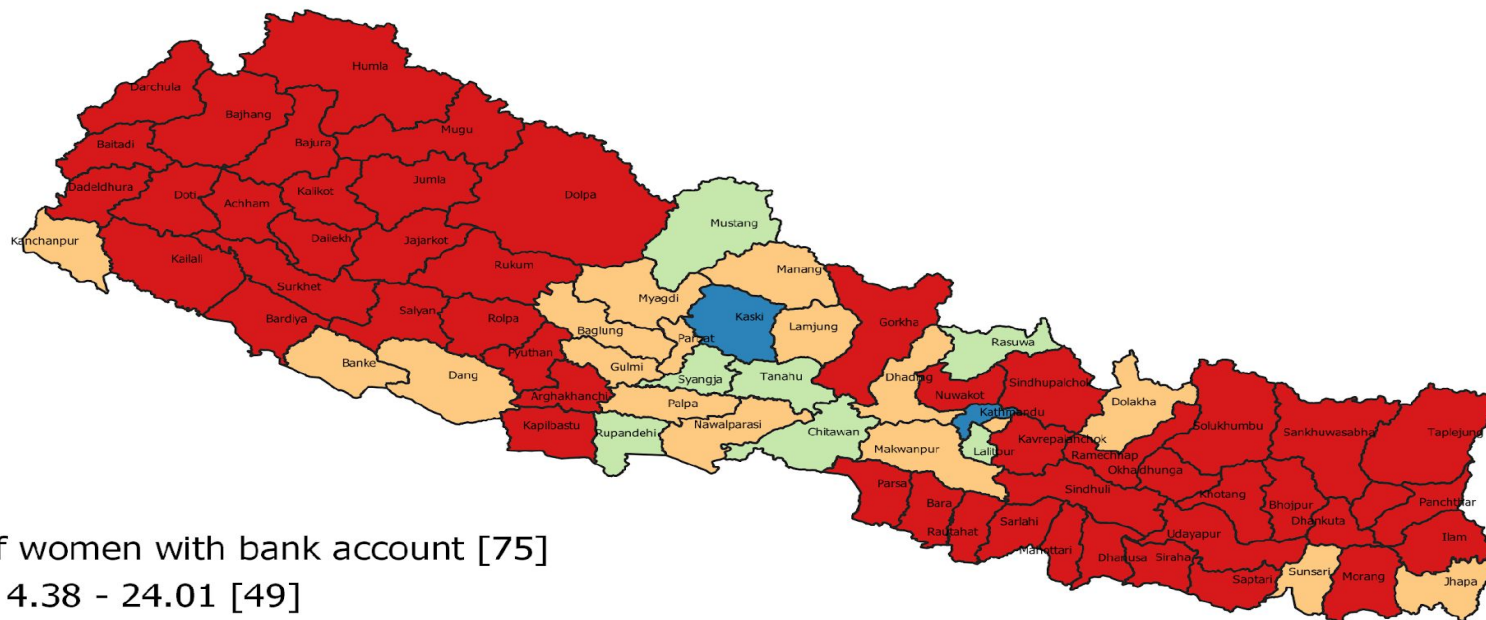
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“ 1 in 4 of both men and women have access to cooperatives.”

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Women's access to finance: Current Situation



% of women with bank account [75]

4.38 - 24.01 [49]

24.01 - 43.63 [17]

43.63 - 63.25 [7]

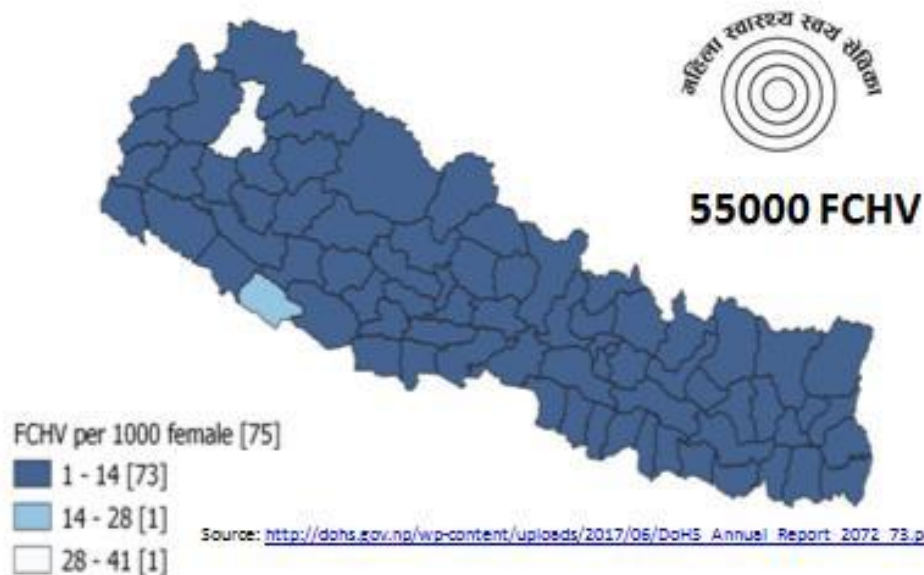
63.25 - 82.87 [2]

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Map src: <https://gadm.org/maps/NPL.html>

STRATEGIES to improve women's access to finance

A. MOBILIZING Female Community Health Volunteers (FCHV) for Improving Access to Finance



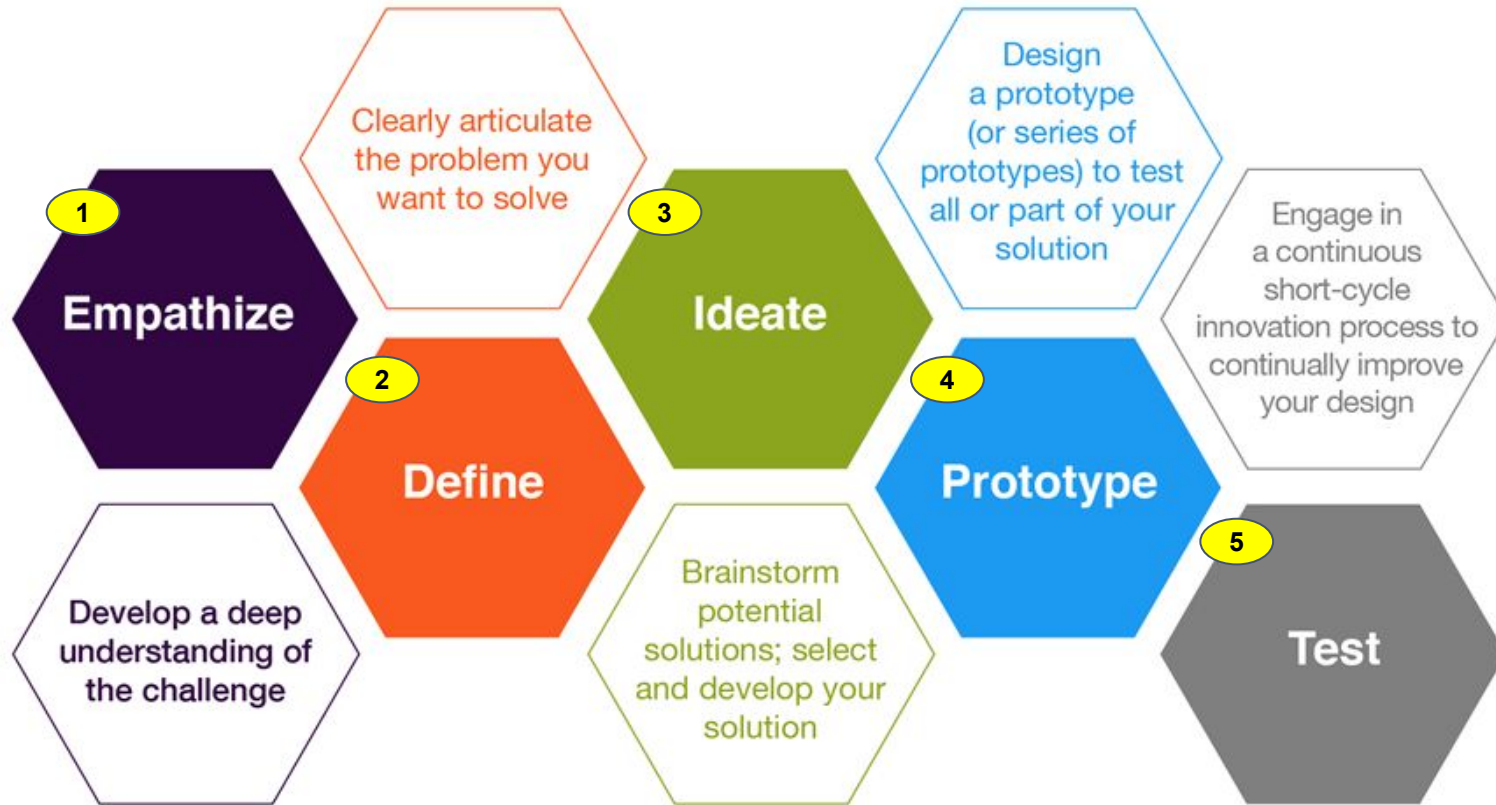
B. Other Strategies

- Financial literacy classes in school
- Support to women owned business
- Financially viable customized policy by BFIs
- Simplify the loan approval process
- Tie up with local self-help groups

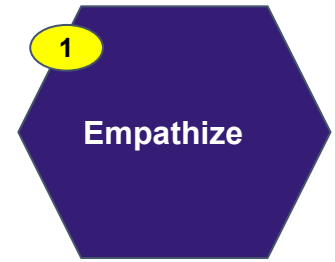
How might design thinking be applicable in this problem?

Learning the theory and framework
behind Design thinking

Design thinking framework has 5 distinct phases



How to empathize?



- **Observe** users and their behavior in the context of their lives in addition to interviews
- **Engage** and elicit stories from the people you talk to, and always ask “Why?” to uncover deeper meaning
- **Combine observation and engagement** - Have your users physically go through the steps, and talk you through why they are doing what they do

How to define?

- Consider what stood out to you/any patterns when talking and observing people
- Develop an understanding of the type of person/your **USER** you are designing for
- Synthesize and select a limited set (or one) of **NEEDS** that you think are important to fulfill
- Work to express **INSIGHTS** you developed through the synthesis of information you have gathered through empathy and research work
- Combine these three elements – user, need, and insight – as an **actionable problem statement** that will drive the rest of your design work

A good problem statement (POV) is one that

2

Define

- Provides focus and frames the problem
- Inspires your team
- Informs criteria for evaluating competing ideas
- Empowers your team to make decisions independently in parallel
- Captures the hearts and minds of people you meet

How to ideate to create solutions for your users?

- Separate the generation of ideas from the evaluation of ideas.
- Let go of constraints and look for solutions in an enlarged solution space
- Use analogies of similar situations to trigger creativity
- Surround yourself with inspiring related materials

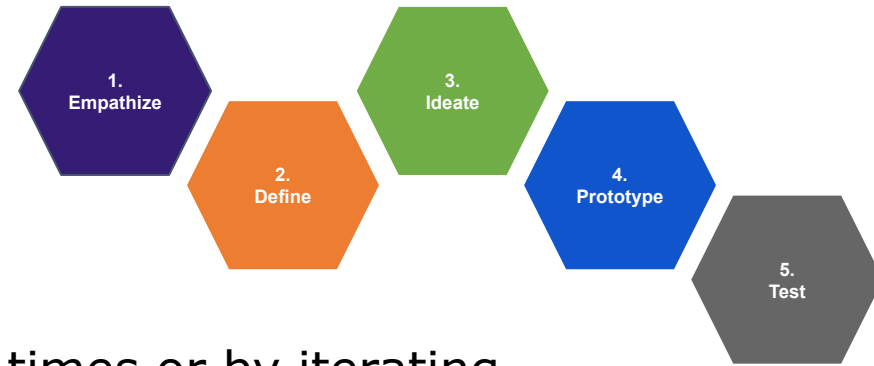
How to prototype?

- **Start building** even if you aren't sure what you're doing, the act of picking up some materials will be enough to get you going.
- **Don't spend too long on one prototype.** Let go before you find yourself getting too emotionally attached to any one prototype.
- **Identify what's being tested** with each prototype. A prototype should answer a particular question when tested.
- **Build with the user in mind.** What do you hope to test with the user? What sorts of behavior do you expect?

How to test your prototype?

- **Show don't tell:** Let your tester interpret the prototype. Watch how they interact with it and listen to their feedback
- **Ask users to compare.** Bringing multiple prototypes to the field to test gives users a basis for comparison, and comparisons often reveal latent needs
- **Test your prototypes** in a way that feels like an experience that your user is reacting to

What is iteration?



- Iterate both within a step multiple times or by iterating within the process. For example:
 - Trying variations of a brainstorming topics with multiple groups
 - Creating multiple prototypes and testing with same/different groups

Generally with each iteration of the design process, your scope narrows and you move from working on the broad concept to the nuanced details

Additional resources for Design thinking

[Human centered design -- TED talk](#)

<https://dschool.stanford.edu/resources>

Module 2

Presentation Skills

Objectives of Module 2

- Learn the importance of communication skills
- Understand the components of a good presentation
 - Body language
 - Voice
 - Content
 - Mindset
- Practice presenting

What Category Best Describes You As A Speaker?

Category	Characteristics
Avoider	You do everything possible to escape from having to get in front of an audience
Resister	You have fear when asked to speak. May not be able to avoid speaking, but you never encourage it. When you do speak, it's with great reluctance and pain
Acceptor	You'll give presentations but don't seek those opportunities. Sometimes you feel good about a presentation you gave
Seeker	Looks for opportunities to speak. Finds the anxiety a stimulant which fuels enthusiasm during a presentation. Self-confident.

Importance of presenting with gravitas

- Presentation skills are crucial to almost every aspect of academic/professional life: from meetings, interviews, conferences, to trade shows/job fairs
- Often times leadership and presentation skills go hand in hand!
- Especially, data by itself is boring unless it's startling. Conveying it through stories, gestures and analogies makes it interesting

Facts or Myths?

- Great speakers are born
- People who speak and look confident are not nervous inside
- If I follow what someone else says and does, I will be as effective as that person
- Before I get up to talk, I feel physiological reactions - my heart beats faster and my breathing gets quicker. Those sensations mean fear

What is the reality?

- Great speakers are born
- Good speakers take more time preparing and practicing than ineffective speakers
- People who speak and look confident are not nervous inside
- Most speakers experience some type of nervous energy
- If I follow what someone else says and does, I will be as effective as that person
- Other people's styles are useful, but you must present in the way that feels most comfortable for you
- Before I get up to talk, I feel physiological reactions - my heart beats faster and my breathing gets quicker. Those sensations mean fear
- These reactions signal that you are energizing yourself (these are typical of Olympic athletes before they compete). They are normal. You can draw on them to energize you, not immobilize you.

Study conducted by researchers at University of Pennsylvania concluded that:

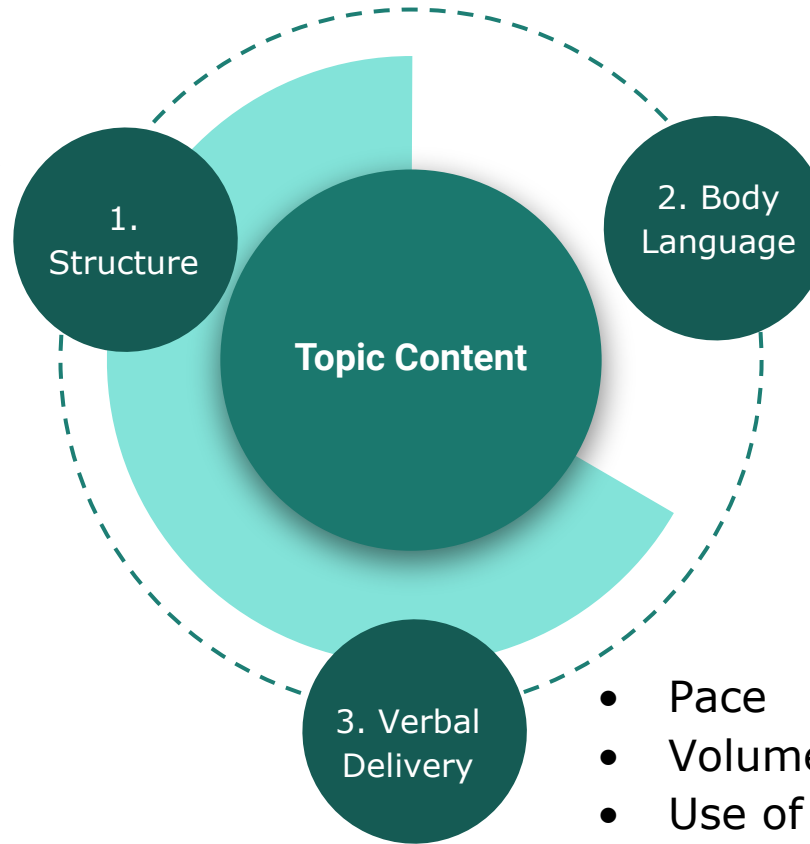
70% of communication is body language

23% is voice tone and inflection

7% is your spoken words!

Good Presentations Consist of Three Key Components

- Clear components
 - Introduction
 - Body
 - Conclusion
- Smooth flow from one topic to next
- Use of visual aids



- Open posture
- Deliberate gestures
- Facial expressions
- Eye Contact
- Space

- Pace
- Volume
- Use of full vocal range

Structure your presentation to maximize delivery (Introduction)

Who am I

Provide your name, role, function

Why I am here

Declare objectives, set expectations

What is in it for you?

Make an explicit benefit statement

How do I plan to deliver?

Lay the outline of the presentation/agenda clear

Structure your presentation to maximize delivery (Body)

Deliver the main idea

Tell audience what you're going to tell them...and tell them again

Transition well

Use phrases such as; "now we will review..." or "if there are no more questions, we will now move onto..." during transitions

Try to avoid tangents

If needed, use examples to emphasize a point, but don't get sidetracked.

Stay on course by using phrases such as "let's get back to..."

Review the main idea

Come back to the main idea delivered in the beginning emphasizing the benefit to the audience

Structure your presentation to maximize delivery (Conclusion)

Review and highlight key point

Summarize main elements of presentation as they relate to the original objective

Next steps

Signal the end is near...“to wrap up” or “to sum up”.
Clearly articulate the next step, action, or practical recommendation

Questions/Closure

Thank the audience; solicit questions...ask open ended questions

Body Language

- Open Body Posture
- Eye Contact
- Facial Expressions
- Gestures
- Posture
- Space



Verbal Delivery

- **Volume:** Loud and Clear
- **Speed:** Speak slowly, but it's okay to change the pace sometimes
- **Variety:** Change pitch or inflexion
- **Fillers:** Get rid of "ums", "Ahs"
- **Emphasis:** Use longer than normal pauses to add emphasis

Visual appearance is very important

- 55% of the message we send is based upon what people see
- People make snap decisions about us based on what we wear and what they see is what you get!
- Always dress UP -- wear well fitted, smart clothes (not too revealing, sparkly, brightly colored etc.), polished shoes, neatly done hair etc.
- The idea is to look sharp and well prepared. Appearance can enhance your presentation, but it cannot replace the actual content and preparation for the presentation

Tips to reduce anxiety

Before the presentation:

- Imagine delivering your presentation with enthusiasm and leaving the room knowing that you did a good job
- Rehearse -- either do it alone, with your team, or video tape yourself and review your performance in advance to increase your confidence
- Power posing for 5 minutes before your event really helps
- Breathe deeply several times to stay loose
- Interact with your audience (speak, shake hands etc.) and break the imaginary barrier between you and your audience before presenting

During the presentation:

- Move to relax, release tension and flex your muscles. Move in a purposeful manner and use upper body gestures to make points
- Build rapport by making it personal and personable. Use words such as “we”, “our”, “us”

Let's practice presenting

Plan for the session:

1. Find your groups (Team 1 and team 2 work together, team 3 and 4 work together etc.)
2. Draw a topic for your team. You will present on the topic you picked
3. Prepare your case in your teams for **20 minutes** (Remember: Use data to make your case)
4. Nominate 1-2 people to speak about your topics for **3 minutes.**
5. Each speaker gets feedback in the end (and a recharge card!!!) :)

Topics for discussion

Make a case for:

1. Implementing ban on single-use plastic bags (Environment)
2. Changing policy for public transport management (Infrastructure)
3. Improving educational outcomes in Secondary level education (Education)
4. Using exports to boost economic growth in Nepal (Finance)
5. Affordable health care in Nepal (Health)
6. Incorporating data science and python in secondary level education curriculum (Education)
7. Building Nijgadh airport in Nepal (Infrastructure)

Module 3

Leadership

Objectives of Module 2

- Leadership overview
 - 5 types of leadership styles
 - Discussion on servant leadership and data literacy training
- Practice essential skills for a Data literacy trainer/champion of Data-driven decision making
 - **Role play 1:** Conflict management
 - **Role play 2:** Influencing skills (*navigating bureaucracy in an organizational setting, how to build a case/create buy-in*)
 - Other skills-- High level thinker; detail orientedness; Problem solver

5 types of leadership styles

- Laissez-Faire Leadership
- Autocratic Leadership
- Participative Leadership
- Transactional Leadership
- Transformational Leadership

Servant leadership

- The term was coined in 1970 by Robert K. Greenleaf in his essay “[The Servant as a leader](#)”
- Servant leadership mostly resembles participative leadership.
- Servant leadership is a classic concept.

Servant leadership

As early as 500 BC, the term servant leadership was used, by a Chinese philosopher:

Lao-Tzu wrote about Servant Leadership in the fifth-century BC: “The highest type of ruler is one of whose existence the people are barely aware.... The Sage is self-effacing and scanty of words. When his task is accomplished and things have been completed, all the people say, ‘We ourselves have achieved it!’”

Servant leadership - a philosophy and practice of leading

- Places the **good of those led** over the self-interest of the leader
- Promotes the valuing and **development of people**, the building of community, and the practice of **authenticity**
- Promotes **shared power**
- Seeks excellence in management through an organizational culture of **civility** and **community building**
- Seeks to tap into **individual strengths** and **collective efficacy**

Characteristics of Servant leaders

1. Listens actively and intently
2. Prioritizes responsibility differentiating important from urgent
3. Accepts others
4. Guesses correctly
5. Foresees the future
6. Possesses awareness
7. Adapts readily
8. Sets a vision
9. Persuades others
10. Empowers others

Exercise

1. Review the ten principles of servant leadership as detailed in the student handbook.
2. Reflect and feel free to jot down notes on:
 - a. How these principles exist in your society - your home, your workplace, and your country?
 - b. What types of cultural or behavioral changes would have to be made to create a climate for adoption of the servant leader philosophy?
 - c. Are there circumstances where this philosophy would not work? Why?
 - d. How might you adopt servant leadership principles in your work as a data literacy trainer?

Empathy is at the heart of effective leadership

- **Be fully present** when you are with people
- **Listen** fully, without judgement paying attention to nonverbal cues
- Use **people's names** when communicating with them (it can have the opposite effect if you overuse peoples' names)
- **Smile** and **encourage** others
- Give **recognition** and praise
- **Allow people their moment** – Don't interrupt people, dismiss their concerns offhand, change the subject
- Take a **personal interest** in people

Leadership roleplays

- Let's work with your teams
- Read through the roleplays and discuss how you would respond to it
- We will reconvene in 10 minutes to discuss

Scenario 1 - Problem solving and conflict management

It is day 6 of the workshop and team 5 is struggling to finalize the topic for their projects. The team wants to work on an education related topic but have very different sets of ideas of what they think their projects should be on. During one of their latest team meetings, they even had a small argument where one of the more senior team members spoke harshly with one of the younger team member due to which the energy in the group has tensed up. How might you, as the workshop coordinator, deal with this situation and help the team get back on track? Think of the principles of servant leadership in trying to come up with the solution.

Scenario 2 - Influence/Persuasion

Gagan is a professor at a national university. He is attending the data literacy workshop with 2 of his colleagues from the university. He would like to bring what he has learned at the workshop to his students at the University and wants to make the learning/teaching sustainable by introducing the data literacy training to the university's curriculum. However, when he went to meet the academic chair of his university last time, the chair seemed resistant to this idea. Gagan needs the academic council's buy-in before he can begin offering the course. The dean of the college, who is also his sponsor for the program, is fully supportive. What skills/tactics might you use to resolve this situation if you were in Gagan's shoes?

Reflection questions

1. What did you notice as you were going through this activity?
2. What were your most instinctive reactions?
3. What characteristics of servant leadership were the most relevant in the given scenario?
4. What is the role of empathy in each scenario?
5. What kind of leadership style has the most leverage?

Reflection sharing

Related articles

1. [What is Servant Leadership?](#)
2. [Why isn't servant leadership more prevalent?](#)
3. [Servant Leaders: More Relevant than Ever](#)

End of presentation

Nepal Data Literacy Program Team



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Please reach out to Liza Maharjan, who led the content compilation for this unit, if you have any feedback. She can be reached at lmaharjan@worldbank.org