THINK! DESIGN

D'source Project

Open Design School

MoE's Innovation Cell

Primary Research Part 1

Design Thinking & Innovation Process

Section: A5, Week 5

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Design Thinking & Innovation (DT&I)

Section: A5
Week 5

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Design Thinking & Innovation (DT&I)

Prof. Ravi Poovaiah
IDC School of Design, IIT Bombay

"I get **inspiration** from a lot of things around me - **nature, hills, people, and even insects**"
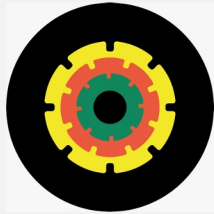
Ruskin Bond, Author
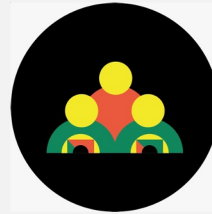
DT&I Course – Week 5:

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DT&I Process
(20%)

> Primary Research Part 1
> Interacting with Users

DT&I Tools
(20%)

> Contextual Inquiry

DT&I Project
(50%)

> Primary Research
> Contextual Inquiry

DT&I Case Study
(10%)

> Case Study Project 'IxD Project'

DT&I Process

A5   **Primary Research** – Part 1

Module A5:

Primary Research – Part 1:

Content

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A5.1
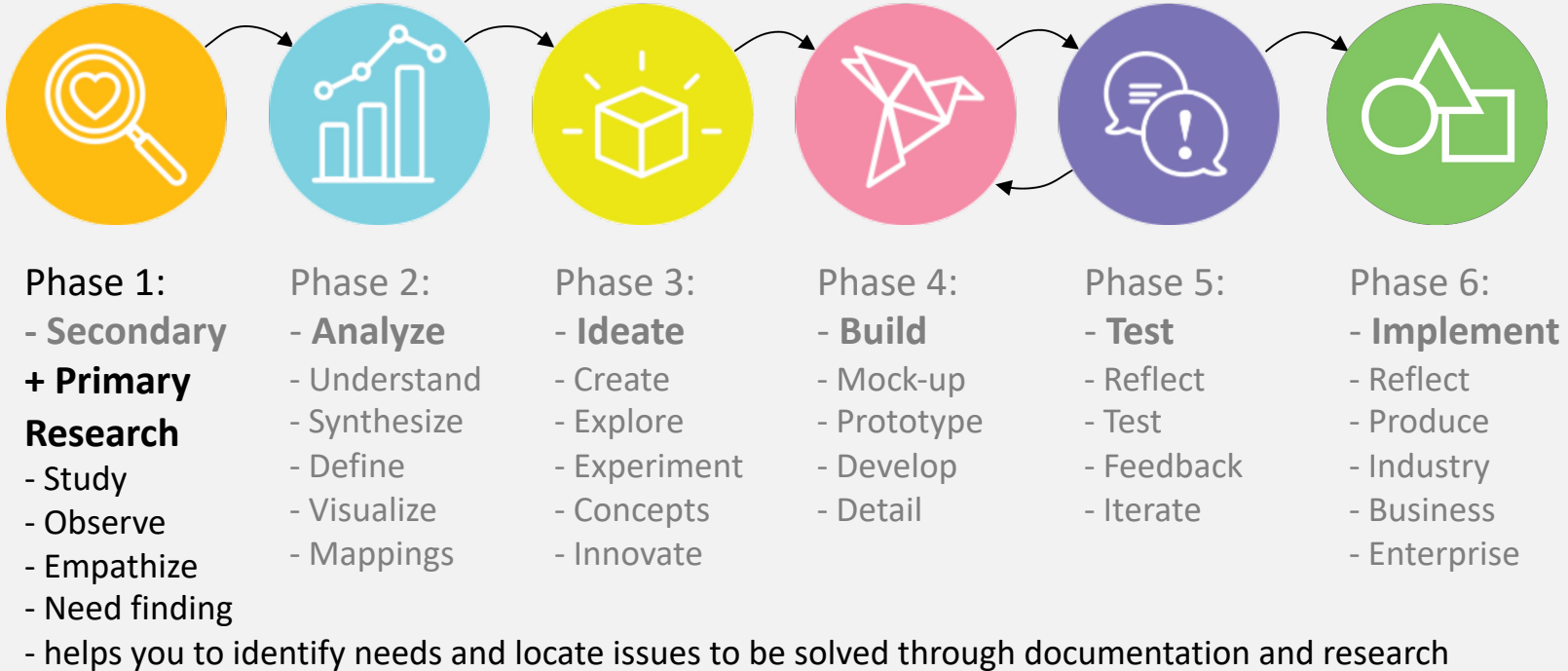
DT&I Process and Primary Research

DT&I Process and Primary Research

Primary Research is the first phase of the DT&I process.

Phase 1:
- **Secondary**

+ Primary

Research
- Study
- Observe
- Empathize
- Need finding

Phase 2:
- **Analyze**
- Understand
- Synthesize
- Define
- Visualize
- Mappings

Phase 3:
- **Ideate**
- Create
- Explore
- Experiment
- Concepts
- Innovate

Phase 4:
- **Build**
- Mock-up
- Prototype
- Develop
- Detail

Phase 5:
- **Test**
- Reflect
- Test
- Feedback
- Iterate

Phase 6:
- **Implement**
- Reflect
- Produce
- Industry
- Business
- Enterprise

- helps you to identify needs and locate issues to be solved through documentation and research
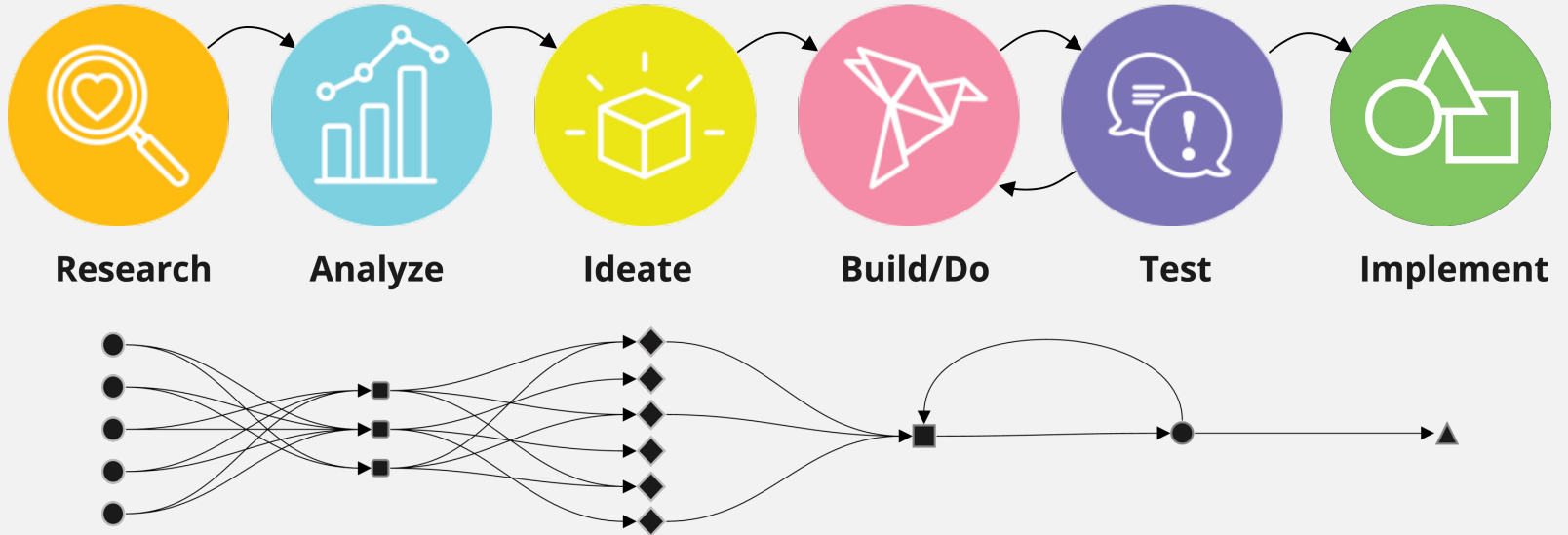
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A5.2

What is 'Primary Research'?

What is 'Primary Research'?

Primary Research is based on **first hand information or data** that (as a designer) you'll **collect directly from the source or the user**. Primary Research is like going on a **Treasure Hunt** finding, discovering hidden issues and needs.

In Social Sciences, this is referred to as **Field Research** that allows you to **do original research** with users in their real-life environment.

- **Visit** the place of the user and observe the user doing the activity
- **Converse** with the users to understand their issues
- **Document** these observations and findings for further analysis

Why is 'Primary Research' important?

Primary Research based on first hand information/data becomes useful and necessary **to fill-in the gaps** that secondary research did not reveal. It could be that this information/data has not ben collected before or is not accessible.

As a designer, when you go to the environment where the issues are, **you experience the problem space** and this is an invaluable asset to the understanding of the problem.

Primary Research is about **finding minor details and specific information** that can make a major difference to your understanding of the problem space.

A5.3

What are the types of Primary Research

Types of Primary Research Methods:

The following are useful Primary Research Methods for designers:

1.   **Observation and Documentation**

2.   **Conversations, Queries and User Narratives**

3.   **Contextual Inquiry**

4.   **Questionnaires and Surveys**

5.   **Talking to Experts**

6.   **Focus Group Discussions**

Types of Primary Research Methods:

1. Observation and Documentation:
- Observation and Documentation involves **observing the User** at their **natural location** while using the product or the service. These observations are **documented through text, images and video** using a sketchbook/notebook and a mobile camera.

2. Conversations, Queries and User Narratives
- It's best to converse with the User while he/she is doing the activity. This is to get the **user's thoughts, opinion, feedback, challenges** while using the product or service. Requesting them to narrate their experiences could provide useful information.

3. Contextual Inquiry (combination of the above two methods)
Contextual Inquiry is a method to **understand the needs of the user** through **observations and conversations** at the **user's own location or environment** while the **person is doing/performing the activity**.

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Types of Primary Research Methods . . .

4. Questionnaires and Surveys

Questionnaires and Surveys involve answering a set of questions by the user. These can be **done either offline or online**. Care should be taken to set the questions properly so that there is no confusion and the **question can be answered clearly**. The questions could be **open-ended or close-ended** with predefined answers / using a rating scale.

5. Talking to Experts

Talking to **experts who have in-depth knowledge** of the topic could be very useful.

6. Focus Group Discussions

Focus group is a **discussion among users** related to the Problem Area or Topic with a **moderator to lead the conversations**. The discussions could **reveal their thoughts and opinions** along with comments and suggestions. These are documented for further analysis.

A5.4

How do we Document Primary Research?

Documenting Primary Research:

Documentation could involve any of these methods of capturing information:

- Notes
- Sketches
- Photographs
- Audio recordings
- Video recordings

Documentation could involve capturing information about the following:

- People/Life and Activities
- Place and Environment
- Objects and Artifacts (Arts and Crafts)
- Motifs and Paintings
- Activities and Performances
- Events and Festivals

Documentation could involve gathering information through any of these activities:

- Observations
- Conversations
- Interviews
- Study and Analysis
- Feedback

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A5.4-017

Seeking Permission:

Seeking Permission:

- Its is very important not to assume that you can go and document something that belongs to someone else.
- **seek permission before you start documenting – its ethical.**

. It could be quite **intrusive to take photographs** of people without their knowledge.
- **seek permission** before you start photographing people, activities or their environments.
- It's **essential to protect the users identity** and **be respectful of their privacy**, more so if it involves children, the elderly or persons with disability.
- be **sensitive to their concerns**, be **respectful of their culture, and traditions**.

- Do **get the clearance for your study** from your institute/organization's **Ethics Committee** - especially if it involves the above mentioned user groups

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A5.5

How to do Primary Research?

How to do Primary Research?

These are the steps involved in Primary Research:

1   Identify sources of primary research relevant to your topic

2   Note down as points a list of key issues that you intend to discuss

3   You'll need visit the place of your users and observe them in action

4   Converse with them to collect relevant information/data (focus on listening)

5   Document the information/data through images, text, audio and video

6   Use Contextual Inquiry/ Focus Groups/Questionnaire/Survey to get quantitative or qualitative information from a set of users

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A5.5

Further Study and References

Further Study and References:

- www.dsource.in
DT&I, Case Studies, Courses, Tools, and Resources
https://dsource.in/dti
https://dsource.in/case-study
https://dsource.in/course
https://dsource.in/tools
https://dsource.in/resource

- Contextual Design: Defining Customer-Centered Systems
by Karen Holtzblatt, Hugh Beyer, academic Press, 1998

- The Humane Interface: New Directions for Designing Interactive Systems
by Jef Raskin, Addison Wesley, 2000

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Design Quote:

"People ignore design that ignores people"

Frank Chimero,
Designer and Writer

Thanks for Listening
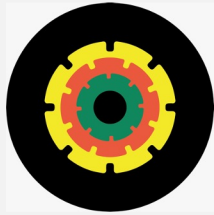
DT&I Project
Section: A5
Week 5

A5.5-024

DT&I Course – Week 5:

DT&I Process (20%)
> Primary Research Part 1
> Interacting with Users

DT&I Tools (20%)
> Contextual Inquiry

DT&I Project (50%)
> Primary Research
> Contextual Inquiry

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Supporting Organizations:

D'source

D'source Project
IDC, IIT Bombay

Open Design School
IDC, IIT Bombay

MoE's Innovation Cell
AICTE, New Delhi

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Credits:

Produced by:
IDC School of Design
IIT Bombay

D'source Project

Open Design School

MoE's Innovation Cell