



D'source Project









Secondary Research Part 2

Design Thinking & Innovation Process

Section: A4, Week 4



Design Thinking & Innovation (DT&I)

Section: A4

Week 4



Design Thinking & Innovation (DT&I)

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"It is very simple to be happy, but it is very difficult to be simple"

Rabindranath Tagore

A4.0-002



DT&I Course – Week 4:



DT&I Process

(20%)

- > Secondary Research Part 2
- > Understanding Users



DT&I Tools (20%)

> User Participant Mapping



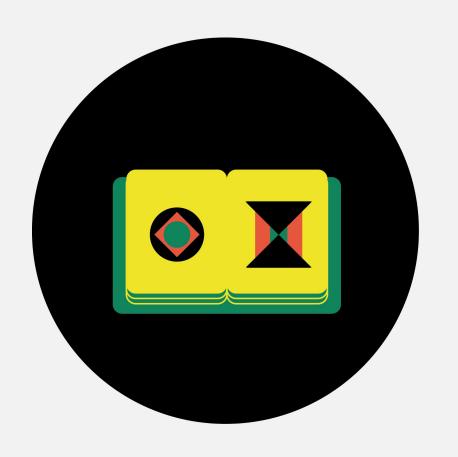
DT&I Project (50%)

- > Secondary Research
- > User Mappings



DT&I Case Study

> Case Study
Project 'PD
Project'



DT&I Process

A4 Secondary Research – Part 2

Module A4:



Secondary Research – Part 2:



Content

A4.1: Which phase of DT&I process is Secondary Research – part 2?

A4.2: How do we understand Users?

A4.3: How do we understand the environment?

A4.4: Further Study and References





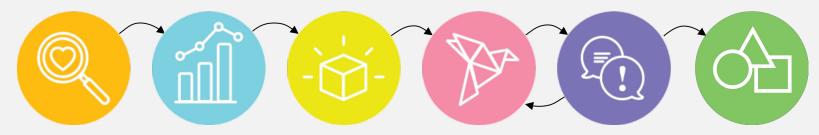
A4.1 **DT&I Process** and Secondary Research



DT&I Process and Secondary Research



Secondary 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

- Build

Phase 4:

- Mock-up
- Prototype
- Develop
- Detail

Phase 5:

- Test
- Reflect
- Test
- Feedback
- Iterate

Phase 6:

- Implement
- Reflect
- Produce
- Industry
- Business
- Enterprise

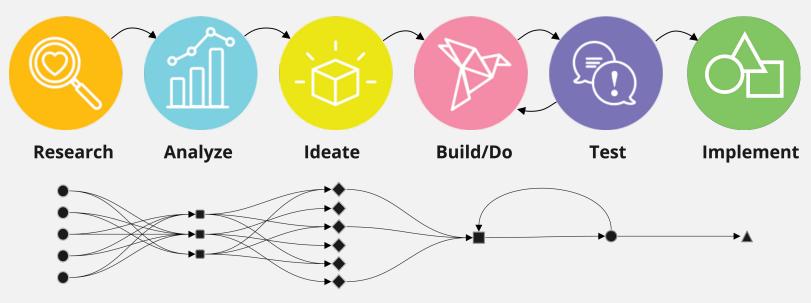
- helps you to identify needs and locate issues to be solved through documentation and research



What is the Design Thinking Process?



Let's summarise:







A4.2 How do we understand Users?



How do we understand Users?



User Centered Design For your chosen topic, identify and understand your user/s based on the following:

- their backgrounds
- their level of Participation or Involvement
- their **expertise**
- their interests and activities



How do we identify Users based on their backgrounds?

Identify the different users depending on what is relevant to your topic:

- Age
- Gender
- Language
- Income level
- Location
- Interests
- Educational background
- Skill Level
- Profession
- etc.



How do we identify Users based on their level of participation?

Identify the World of Users based on their levels of participation/involvement as:

- Primary Users
- Secondary Users
- Tertiary Users
- Quaternary Users

For example, the Users for 'Hospital Services' are classified according to their levels of participation:

- 1. Primary Users
- 2. Secondary Users
- 3. Tertiary Users
- 4. Quaternary Users

- > Patient, Doctor, Nurse
- > Visitors, Hospitality Staff, Ambulance Staff, Technical Staff
- > Security, Maintenance Staff, Catering Staff
- > Medicine Suppliers/Vendors, Taxi/Auto services





How do we identify Users based on their expertise?

Identify the different users depending on how expert they are in interactions. This could be with a product, service, facility, etc.:

Expertise:

- Novice User
- Intermittent User
- Expert Users
- Super Expert users

Frequency:

- Casual User
- Occasional User
- Core Users
- Power User

Learning Ability:

- Unwilling to learn
- In-betweeners (adopter)
- Conformist
- Willing to learn (learner)





How do we identify Users based on their interest and activities?

Identify users interest and activities as related to your Topic:

Interest/Activities:

- Arts

- Sports

- Science

- Spirituality

- Theatre

- Games

- Business

- Social work

- Dance

- Events

- Design

- Animal Care

- Music

- Adventure

- Farming

- Socialising

- etc.

- Entertainment

- Travel

- etc.

- etc.

- Media

- etc.





A4.3 How do we understand **Environments?**





How do we identify User needs based on their environments?

Identify User needs depending on their environments

- Spatial Environment

- Personal Space*
- Social Space
- Work Space
- Public Space

- Private Space
- Home Space
- Office Space

- Communications Environment

- Rural

- Urban

- Icons/images to communicate
- Language to communicate
- Gestures to communicate
- Media to communicate

Product/Artifact Environment

- Personal Artifacts
- Sharable Artifacts
- Public Artifacts



○ X

How do we identify Users needs based on their environments . . .

Identify User needs depending on their environments . . .

Cognitive Environment

- Learn
- Organize
- Remember
- Analyse

- Social Environment

- Share
- Family
- Society
- Public

- Sensory Environment

- Sensory
- Experience
- Stimulate









How to identify Users?



These are the steps involved in Secondary Research:

- 1 List all users connected to your Problem Area/Topic
- Re-group the users according to their level of participation creating a User Participant Map will help
- Try to understand their backgrounds, expertise, interest and activities in relation to your Topic
- 4 Now you are ready to go ahead with Primary Research





A4.5 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

- Research Design: Qualitative, Quantitative, and Mixed Methods Approaches by John W. Creswell and J. David Creswell, Sage Publications, edition 2022
- Design Research: Methods and Perspectives (The MIT Press)
 by Brenda Laurel and Peter Lunenfeld, MIT Press, 2003





Design Quote:

"Recognizing the Need is the Primary condition for Design" Charles Eames, Designer, Architect, Film-maker





DT&I Project

Section: A4

Week 4



DT&I Process – Week 1-4:





DT&I Course – Week 4:



DT&I Process (20%)

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DT&I Tools (20%)

> User Participant Mapping



DT&I Project (50%)

- > Secondary Research
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DT&I Case Study

> Case Study
Project 'PD
Project'



Supporting Organizations:

D'source

D'source Project



Open Design School



MoE's Innovation Cell



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End Title Music:

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