Analysis
Part 1

Design Thinking & Innovation Process

Section: A7, Week 7

D'source Project

Open Design School

MoE's Innovation Cell

Design Thinking & Innovation (DT&I)

Section: A7

Week 7

Design Thinking & Innovation (DT&I)

Prof. Ravi Poovaiah
IDC School of Design, IIT Bombay

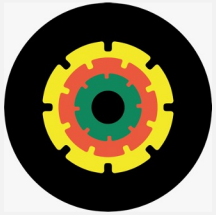
“**Learning to listen** is the **essence of intelligent living**”

Sadhguru

DT&I Course – Week 7:

DT&I Process
(20%)

> Analysis Part 1
> Information/Data Analysis



DT&I Tools
(20%)

> Artifact, Activity, and Spatial Mappings

DT&I Project
(50%)

> Analysis
> Use of Artifact / Activity / Spatial Mappings

DT&I Cast Study
(10%)

> Case Study Project: Sustainable Housing Society + Coffee, Tea and Spice Stories

DT&I Process

A7 **Analysis** – Part 1

Module A7:

Analysis – Part 1:

Content

A7.1: Which phase of DT&I process is Analysis?

A7.2: What is information/data analysis?

A7.3: What does Analysis involve?

A7.4: Why is Analysis important?

A7.5: Further Study and References

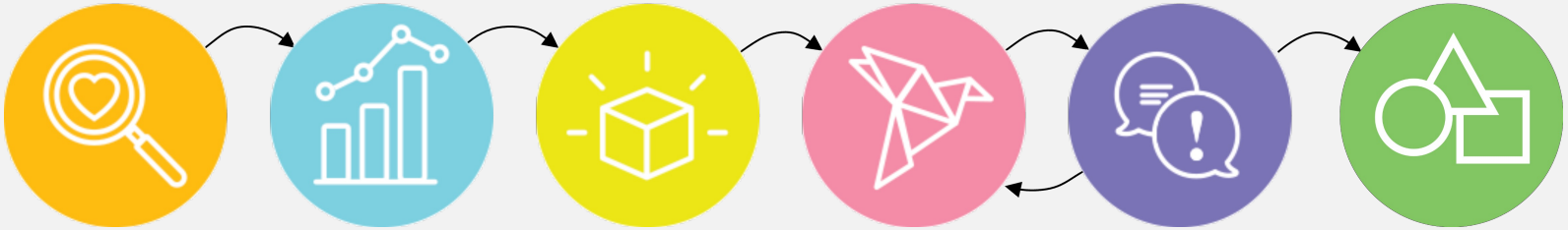
THINK!
DESIGN

A7.1

DT&I Process and Analysis

DT&I Process and Analysis

Analysis is the second phase of the DT&I process.



Phase 1:
- **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

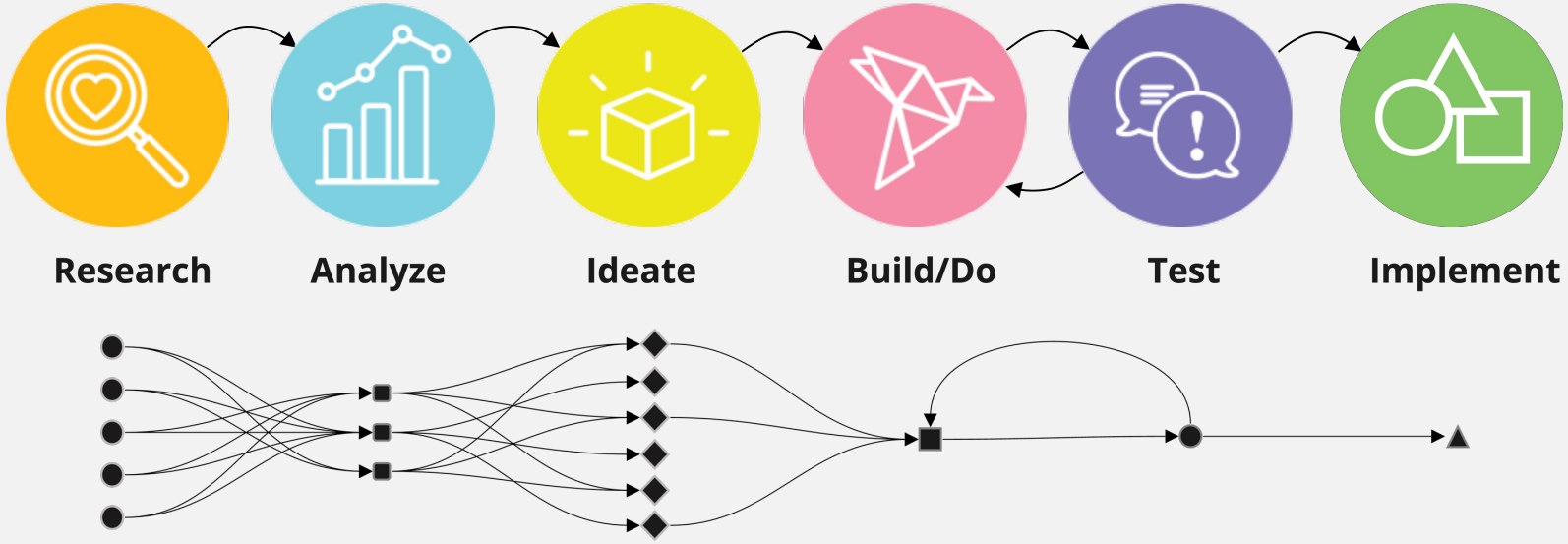
Phase 5:
- **Test**
- Reflect
- Test
- Feedback
- Iterate

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

- helps you to Analiyze the information/data that you collected through Research

What is the Design Thinking Process?

Let’s summarize:



THINK!
DESIGN

A7.2

What is Data/ Information Analysis?

What is ‘Data/Information Analysis’?

Analysis involves critically examining the data/information that you have collated from Primary and Secondary Research to **make sense** of it and **identifying issues/needs** connected with your chosen **topic.**

Analysis helps convert data/information from **Observations/Studies** to making **Inferences** to finding **Opportunities** which leads to outlining the **Recommendations for Design**.

THINK!
DESIGN

A7.3

What does Analysis involve?

What does ‘Data/Information Analysis’ Involve?

Analysis involves Selection, Sorting, Cross-relating, Prioritizing, and visualizing the data/information that has been gathered by primary (user study) and secondary research (literature study).

Analysis involves:

1. **Selection:** Select and Choose
2. **Sorting:** Classification, Grouping of similar factors, Chunking, etc.
3. **Cross-relating:** Comparing, Differentiating factors, Inter-connectedness, Affinities, etc.
4. **Prioritizing:** Assigning hierarchy, Ordering factors, Sequencing, etc.
5. **Identifying Uniqueness:** identifying Unique Features, Differentiator, etc.
6. **Visualizing:** Making Diagrams, Charts, Mappings, etc.

Data/Information Analysis . . .

(Steps 1, 2, and 3 have been used as part of Secondary and Primary Research)

1. Select and Choose:

. You'll need to **sieve through the data/information** you have collected from Secondary and Primary Research to **select and choose the ones that are relevant to your topic**.

2. Sorting:

. The selected information is **sorted into categories** by **grouping similar ones with affinities together.**

. We can **make use of keywords or short phrases** on sticky notes and then **card sorting to classify and sort data/information**.

3. Cross-relating:

. The sorted information is **Compared**, seen **for Inter-connectedness**, and **connected through Affinity links.**

Data/Information Analysis . . .

4. Prioritizing:

. The sorted data/information is assigned hierarchy and reordered and re-sequenced such that the they **denote levels of importance**

5. Identifying Uniqueness:

. Identify Data/information that have **unique features or are different from the rest.**

. Special focus might need to be given to these factors

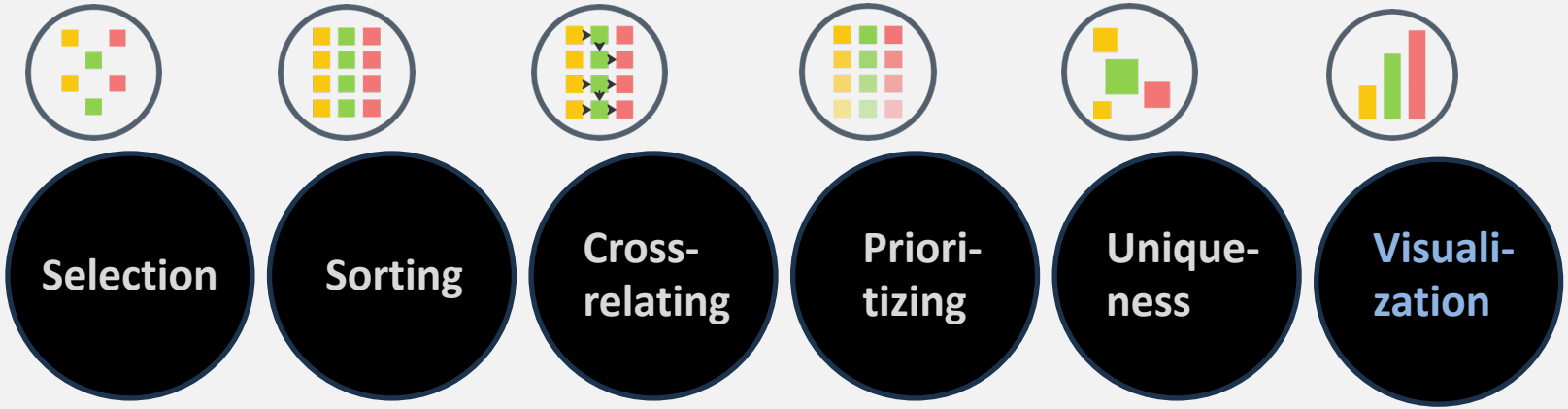
6. Visualizing data/Information in form of Charts, Diagram and Mappings:

. The Data/information can be **visualized as mappings** in terms of the following:

(a) **Artifacts** (objects/media/services),
(b) **Activities** (Temporal) and
(c) **Environments** (Spatial)

Data/Information Analysis . . .

(The first 3 have been used as part of Secondary and Primary Research)



Visualization of Data/Information:

Artifact Mapping:
. The various objects/medias/ services connected to the topic are shown in relation to each other

Activity/Temporal Mapping:
. The various activities connected with the topic are shown across the time dimension.
(a) One day in the life of . .
(b) User Journey mapping
(c) Life-cycle mapping
(d) Causal Mappings/Diagrams

Environment/Spatial Mappings:
. The various spaces or environments that are connected with the topic are shown in relation to each other
(a) Physical Spatial Mapping
(b) Spatial Connectivity Mapping

A7.4

Why is Analysis Important?

Why is ‘Analysis’ important?

- Analysis **involves critically examining** the gather data/information that has been collated

- Analysis involves **making sense of the data/information in a systematic organized manner** such that it is useful in **identifying the needs** for solving issues connected with your topic.

- the **recommendations** from the analysis will **help in redefining the problem statement.**

THINK!
DESIGN

A7.5

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

- Design Methods
  by Christopher Jones, John Wiley & Sons Inc, 1992

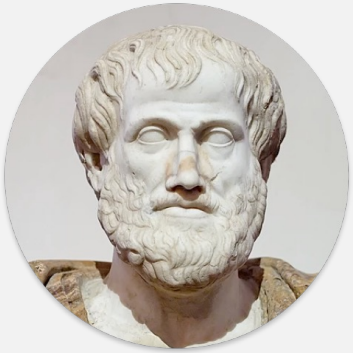
- The Pocket Universal Principles of Design
  by William Lidwell, Rockport Publishers, 2018

THINK!
DESIGN

Design Quote:

"The more you know, the more you know you don't know "

Aristotle



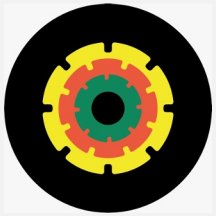
Thanks for Listening

DT&I Process
Section: A7
Week 7

DT&I Course – Week 7:

DT&I Process
(20%)

> Analysis Part 1
> Information/Data Analysis



DT&I Tools
(20%)

> Artifact, Activity, and Spatial Mappings

DT&I Project
(50%)

> Analysis
> Use of Artifact / Activity / Spatial Mappings

DT&I Cast Study
(10%)

> Case Study Project: Sustainable Housing Society + Coffee, Tea and Spice Stories

THINK!
DESIGN

Supporting Organizations:

D’source

D’source Project

Open Design School

MoE’s Innovation Cell

Credits:

Presented by:

Prof. Ravi Poovaiah

D'source Project

Open Design School

MoE's Innovation Cell

THINK!
DESIGN

D'source Project

Open Design School

MoE's Innovation Cell

Credits:

Camera & Editing:
Santosh Sonawane

Credits:

Think Design Animation:
Rajiv Sarkar

D'source Project

Open Design School

MoE's Innovation Cell

Credits:

Graphic Icons:
Shweta Pathare

D'source Project

Open Design School

MoE's Innovation Cell

Credits:

End Title Music:
C P Narayan

D'source Project

Open Design School

MoE's Innovation Cell

Credits:

Produced by:

IDC School of Design

IIT Bombay

D'source Project

Open Design School

MoE's Innovation Cell

Credits:

Think Design Animation:
Rajiv Sarkar

D'source Project

Open Design School

MoE's Innovation Cell

Credits:

Graphic Icons:
Shweta Pathare

D'source Project

Open Design School

MoE's Innovation Cell

Credits:

End Title Music:
C P Narayan

D'source Project

Open Design School

MoE's Innovation Cell

Credits:

Produced by:

IDC School of Design

IIT Bombay

D'source Project

Open Design School

MoE's Innovation Cell