



# Ideation Part 1

Design Thinking & Innovation  
Process

Section: A9, Week 9



D'source Project



Open Design School



MoE's Innovation Cell



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DESIGN**

# **Design Thinking & Innovation (DT&I)**


Section: A9  
Week 9



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# **Design Thinking & Innovation (DT&I)**

**Prof. Ravi Poovaiah**  
IDC School of Design, IIT Bombay



**“If you can  
dream it, you  
can make it  
happen .”**

*Dashrath Patel*

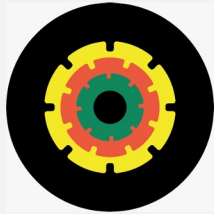
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# DT&I Course – Week 9:



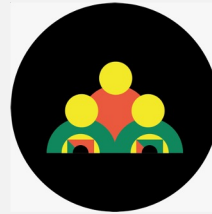
DT&I  
Process  
(20%)

- > Ideation
- > Generating Creative Ideas



DT&I  
Tools  
(20%)

- > Brainstorming
- > Idea Sketching
- > SCAMPER
- > Lateral Thinking



DT&I  
Project  
(50%)

- > Generate Creative Concepts and sketch these



DT&I  
Cast Study  
(10%)

- > Case Study Project:  
**GeoLights**  
- Applied Photovoltaics Explorations



# DT&I Process

## A9 Ideation – Part 1

Module A9:

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A9.1

# DT&I Process: Ideation - Part 1



# Ideation – Part 1:

## Content

- A9.1: What is Ideation?
- A9.2: What is Creative Ideation?
- A9.3: What are the different types of Creativity?
- A9.4: Why is Ideation Important?
- A9.5: Further Study and References

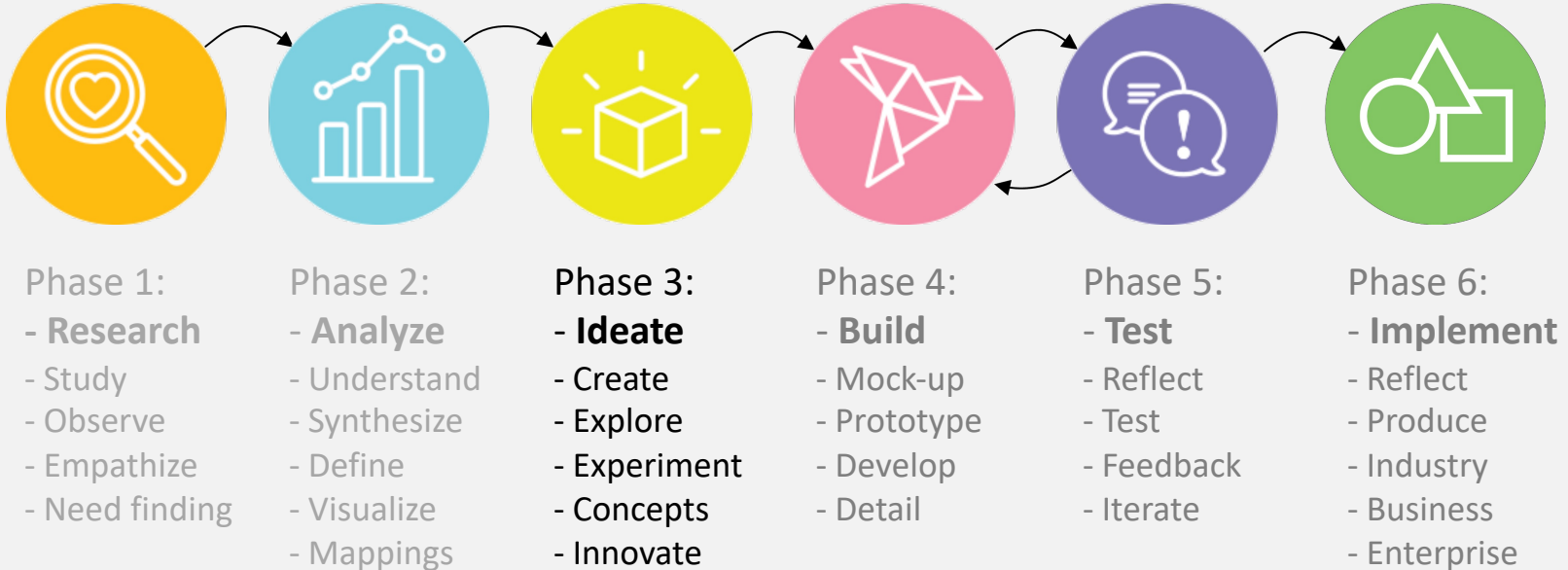


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# DT&I Process and Ideation:

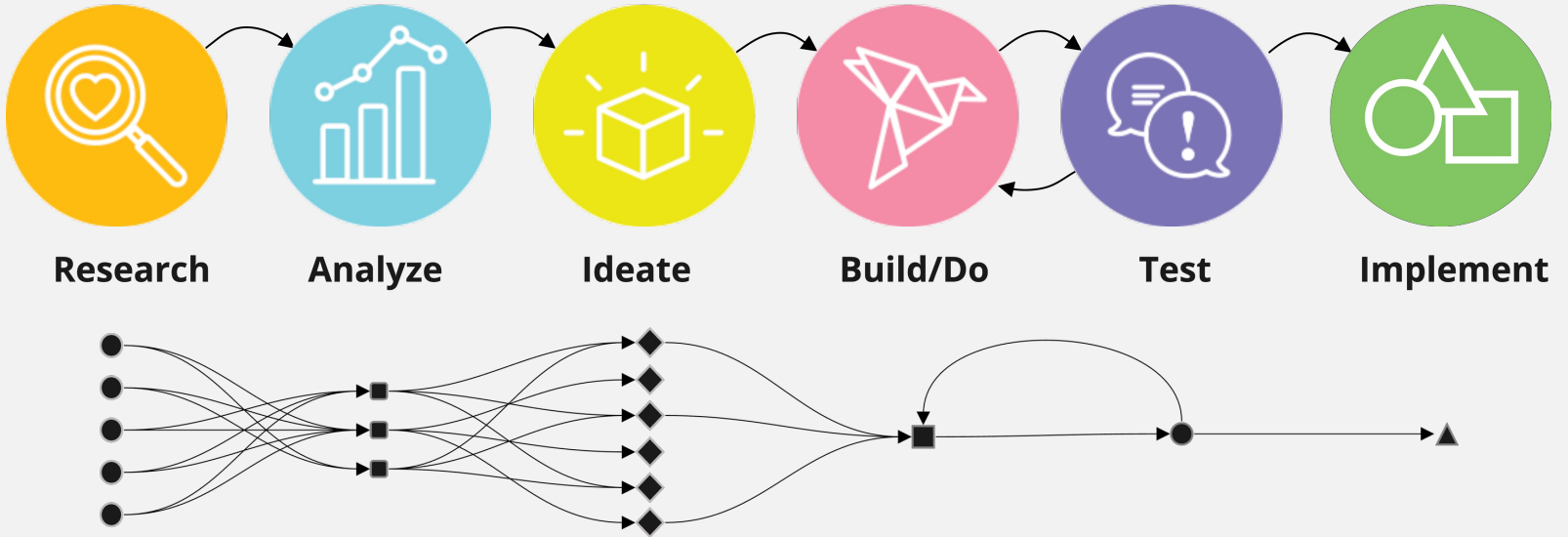
Ideation is the third phase of the DT&I process.





# DT&I Process and Ideation:

Let's summarize:



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A9.2

What is 'Ideation',  
'Creative Ideation'  
and 'Creativity'?



# What is 'Ideation'?

**Ideation** involves finding several alternate ideas to the identified problem statement.

The ideas need to be **new and unique**.

Its also one of the **most exciting phases of the design process** as it involves generating interesting ideas.

Ideation involves making use different **tools like brainstorming, Idea Sketching** and the use of **Creativity Techniques**.



# What is 'Creative Ideation'?



**Creative Ideation** involves finding several alternate **creative** ideas to the identified problem statement.

**Creative Ideation involves Creativity.**

Being creative **involves thinking of unique and new ideas.**



# What is 'Creativity'?



The meaning of the word Creativity as defined by dictionary:

**1: the ability to create**

**2. the quality of being creative**

(Webster, 2024)

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A9.3

# Perspectives on Creativity:

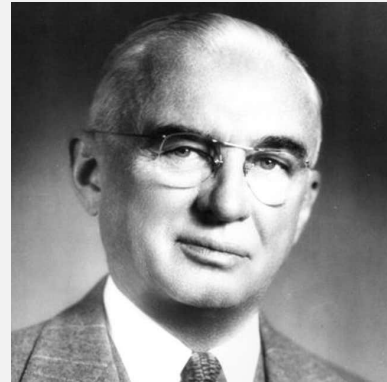


# Brain-Storming:

According to Osborn,  
**“Brainstorming is using the brain to storm a creative problem”**

Osborn suggested these four rules for creative brainstorming:

- 1. No criticism of any Idea**
- 2. Quantity of Ideas**
- 3. Unusual Ideas**
- 4. Combine and Improve Ideas**



Alex. F. Osborn





# Divergent Thinking

Divergent thinking is a non-linear mode of creative thinking that helps you to come up with several unique ideas in solving a problem.

Divergent Thinking is characterised by **flexibility, originality and fluency.**

(Guilford, 1959)



Joy Paul  
Guilford



# SCAMPER

SCAMPER is an acronym for seven creativity techniques suggested by Bob Eberle.

S = Substitute (with something else)

C = Combine (with another)

A = Adopt (for something else)

M = Modify (change something)

P = Put to another use

E = Eliminate (remove something)

R = Reverse (inverse or change direction)



Bob Eberle



# Lateral Thinking

Edward de Bono coined the word 'Lateral Thinking' as a way of creative thinking.

He believed that Creativity Thinking Skills can be learnt and improved over a period of time.

He popularised creative thinking and has written over 80 books with translations in over 40 languages.



Edward de  
Bono

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A9.4

# Why is Ideation Important?



# Why is 'Ideation' important?

- Ideation plays an important part in the process of finding a solution to a problem **by suggesting many possible ways to solve the problem.**
- once there are several ideas, the **ones that are most appropriate can be taken up for further development.**

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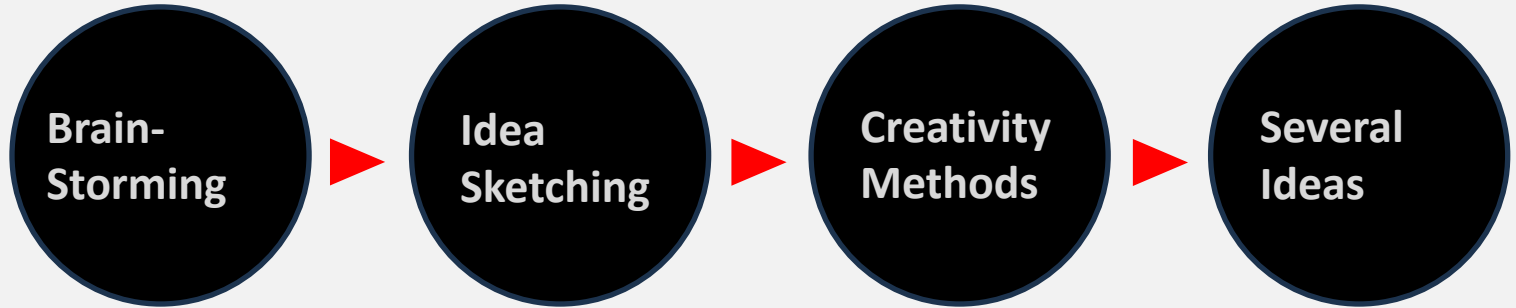
A9.5

What does  
Ideation Part 1  
involve?



# Ideation part 1:

(Brain-Storming > Idea Sketching > Creativity Methods > Several Ideas)



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A9.6

# Further Study and References





# Further Study and References:

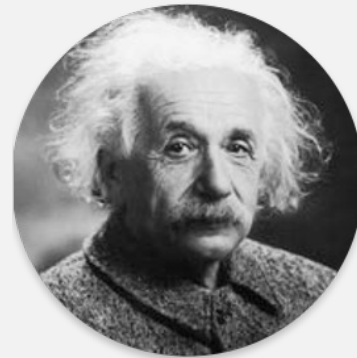
- [www.dsource.in](http://www.dsource.in)  
DT&I, Case Studies, Courses, Tools, and Resources  
<https://dsource.in/dti>  
<https://dsource.in/case-study>  
<https://dsource.in/course>  
<https://dsource.in/tools>  
<https://dsource.in/resource>
- The Act of Creation.  
by Arthur Koestler, Last Century Press, reprint 2021
- Lateral Thinking  
by Edward De Bono, Penguin Publications, 2014
- Creativity: The Psychology of Discovery and Invention  
by Mihaly Csikszentmihalyi, Harper Perennial Publications, reprint 2013

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Design Quote:  
“Creativity is  
Intelligence Having  
Fun.”

*Albert Einstein*





**Thanks for  
Listening**

**DT&I Process**  
Section: A9  
Week 9

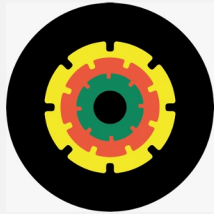
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## Supporting Organizations:



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**Credits:**

**Presented by:**  
Prof. Ravi Poovaiah



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## Credits:

**Camera & Editing:**  
Santosh Sonawane



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