




CONCEPT GENERATION (CREATIVITY) METHODS

WHAT? WHY? AND HOW?

19.09.2023

Learning Outcomes

At the end of the session, you will be,

- Aware of the purpose of concept generation
 - Able to apply a few concept-generation methods
 - Aware of outcomes of concept generation task
- 



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“Concept generation also known as ideation. It is a way of demonstrating Creativity”

Art or Science ?



In & Out

Utility and Customized design — outer shell combine changeable inner parts with different color material



Backpack



Miscellaneous objects



Laptop storage



Mouse storage

Adapter storage



the future: VISION AVTR



Laptop case





SONY
WALKMAN



FedEx
Corporation

amazon.com



adidas

How to generate concepts,
ideas, or solutions?

Ideation Methods

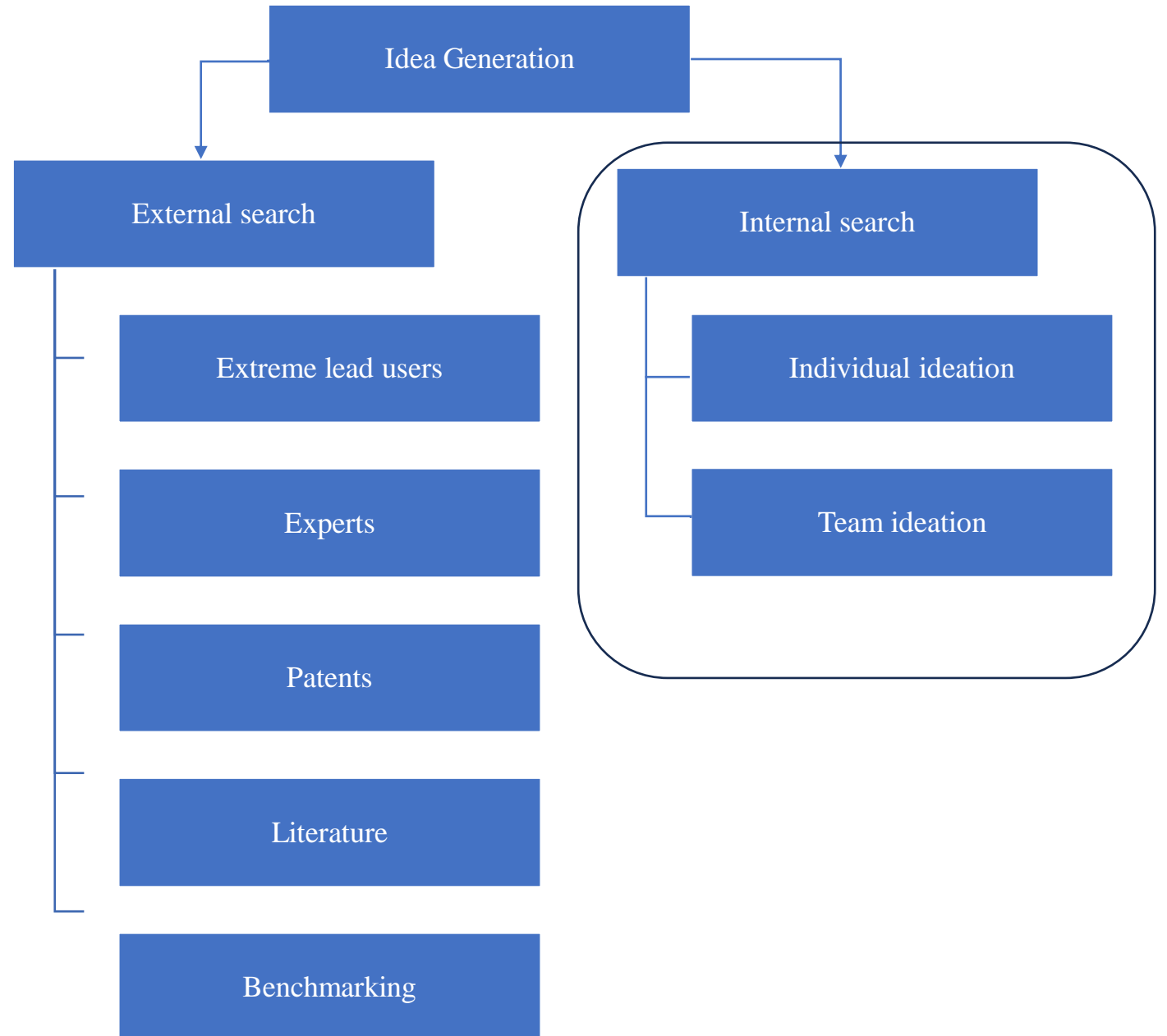
Ideation is simply producing as many concepts or ideas as possible.

Remember the first time you purchased any furniture for your home?

Did you explore multiple options and alternate arrangements?



Approaches



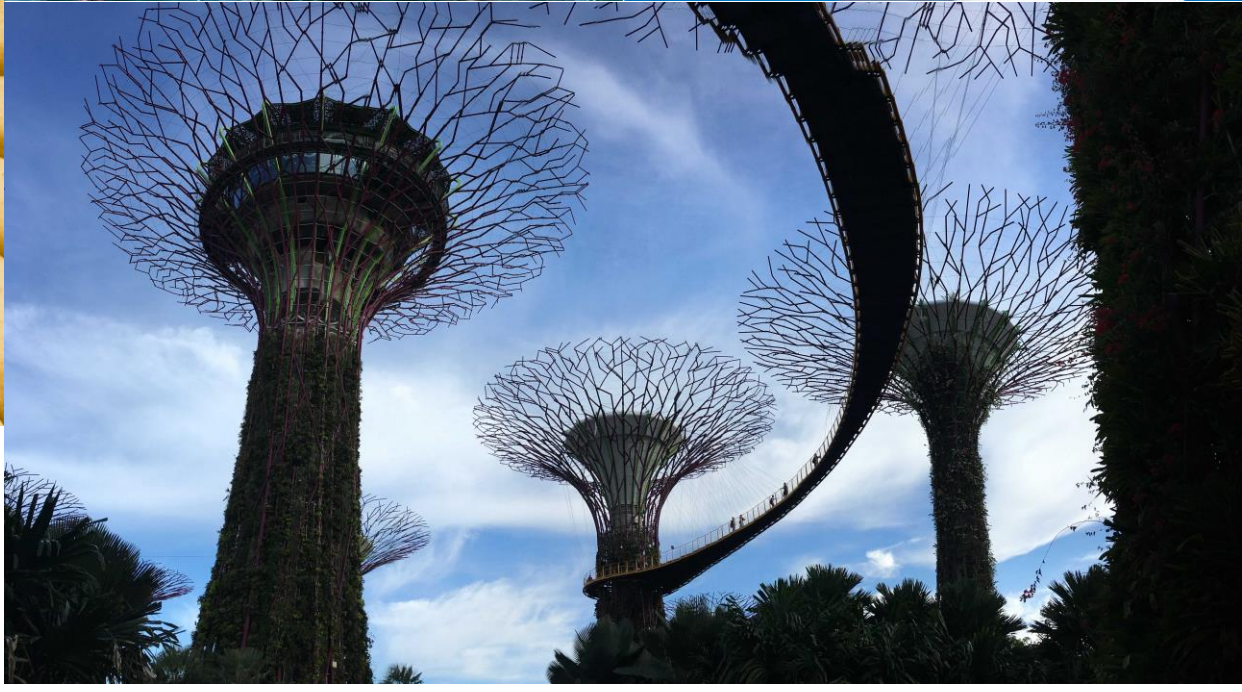
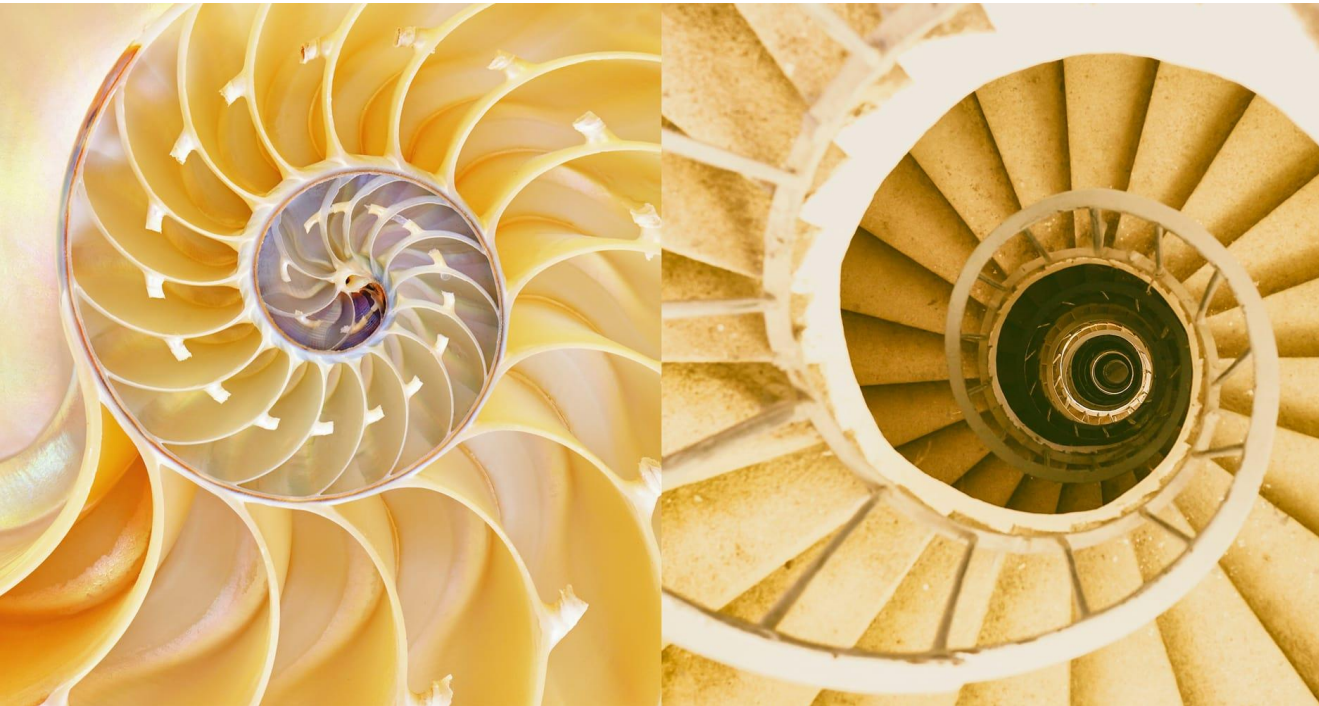
A few concept generation methods

Brainstorming	Attribute listing	Greetings cards	Passive searching	Round-robin brainstorming
Rolestorming	Morphological analysis	Unfolding	Storyboarding	Reverse Brainstorming
Role-play	Matrix analysis	Value Engineering	Braindrawing	Starbursting
Electronic Brainstorming	Six thinking hats	Wishing	Brain sketching	The Charette Procedure
Brainwriting	Po (Provocation)	Concept metaphors and analogies	Nominal Group Technique	Crawford slip writing method
6_3_5	Talking pictures		Bodystorming	
Pool method	The list of 100	Ideation game	Assumption Busting	Chunking
Idea card (pin card) method	Listing	Word tree design by analogy	Brainmapping	Mind-mapping
Post-Up	Heuristic ideation technique (HIT)	Forward steps	Challenge	PSI
Constrained brainwriting		Backward steps	Essence	Random Words
Electronic Brainwriting	Design Heuristics	Mash-up	Forced Conflict	Sensorial
The spreadsheet technique	TRIZ	Bio-inspired ideation	How-How Diagram	AOKI
Interactive brainwriting	C-Sketch	Designlibs	How to	Vip design
Brainwriting game	Concept generating matrix	Cheatstorming	The Kipling method	EED
Metaphorical thinking	Ideation session	6-3-5 Extended	Lotus Blossom	SIT
Reversal	SDI	Extreme Characters	Remembrance	Concrete stimuli
SCAMPER	Laddering	Fictional Inquiry	Rubber-ducking	Forced analogy
Delphi Method	Synectics	Future Workshop	Take a break	Gallery
			Pause	

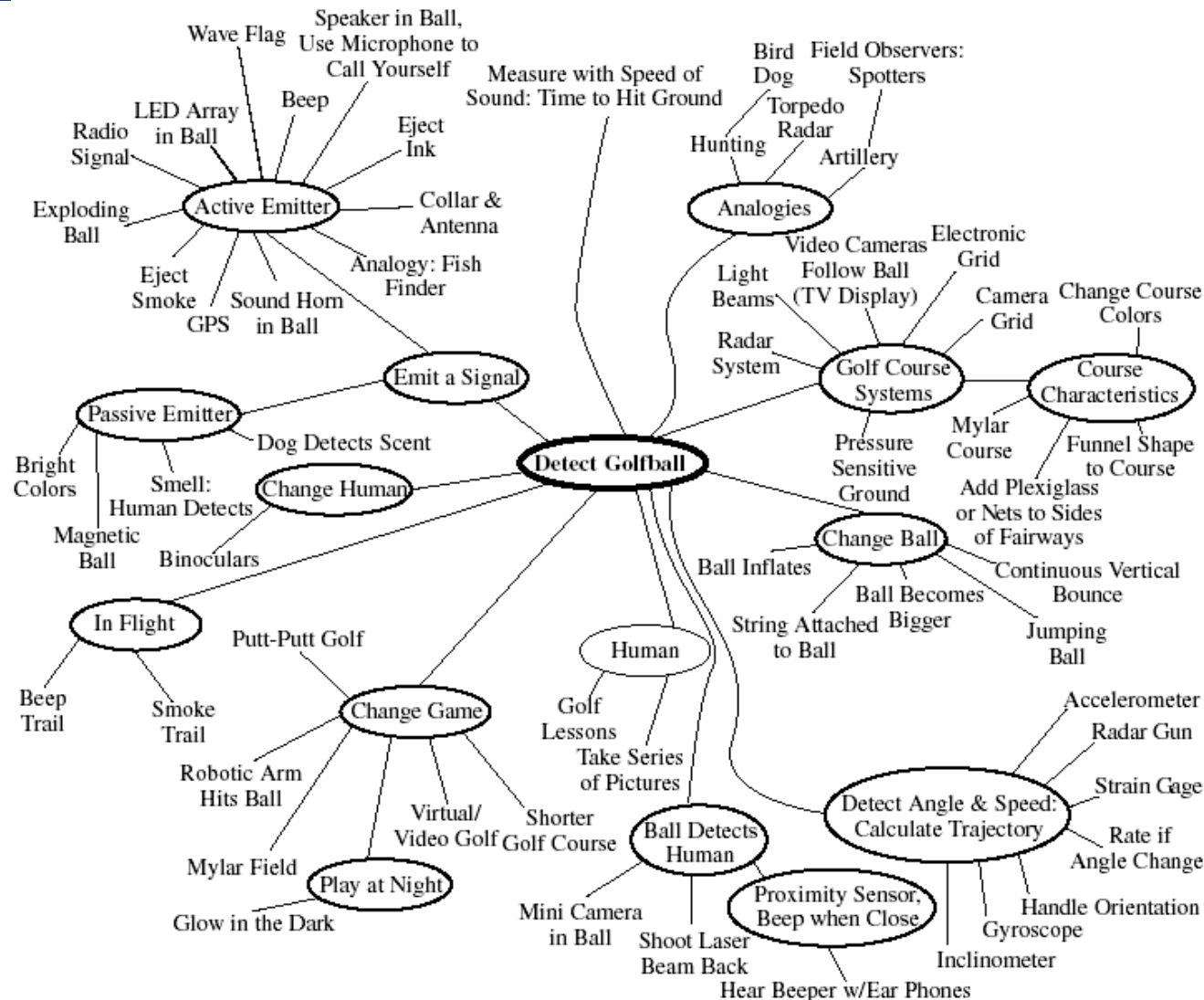
Use of Analogy



Use of Biomimicry

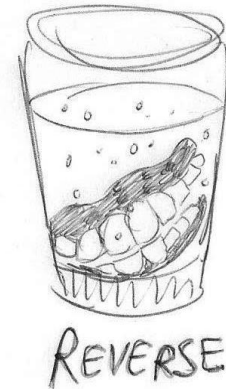
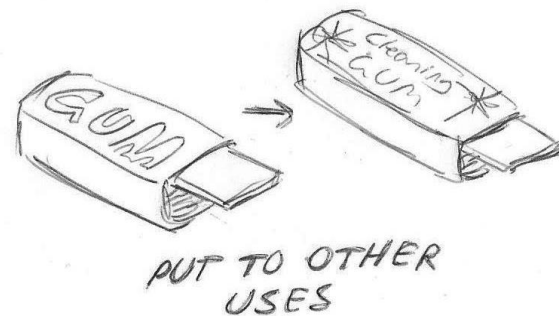
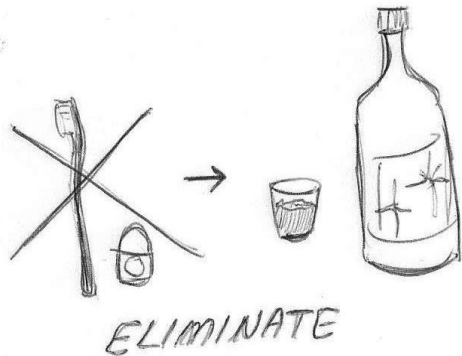
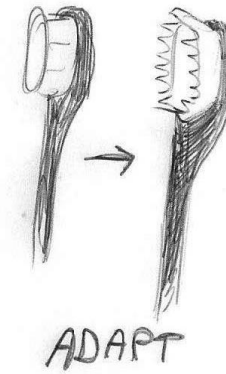
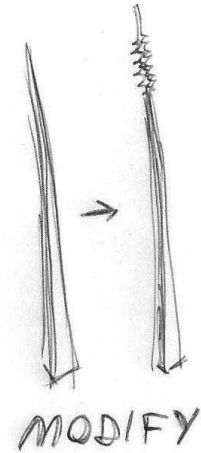
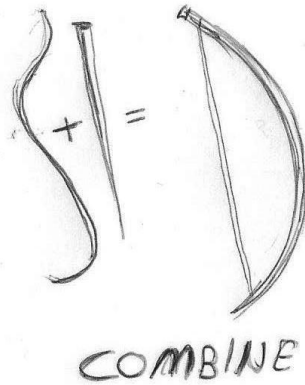
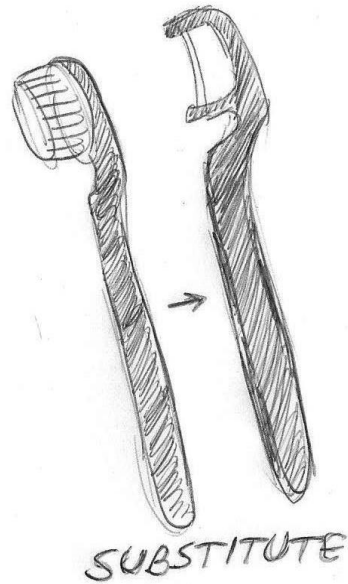


Brainstorm using a Mind Map



S.C.A.M.P.E.R.

- S** Substitute
- C** Combine
- A** Adapt
- M** Modify
- P** Put to other uses
- E** Eliminate
- R** Reverse



What is the best concept generation (ideation) method?

“It doesn’t exist”

Purpose of Ideation:

- Problem-solving: For well-defined problems that need specific solutions.
- Exploration: For open-ended problems where you're seeking diverse possibilities.

Nature of the Task:

- Creative tasks: Might benefit from freeform methods like brainstorming.
- Analytical tasks: May benefit from systematic methods like SWOT analysis.

Size and Composition of the Group:

- Individual vs. team: Some techniques are best suited for individuals, while others are designed for teams.
- Diversity of the group: Methods like brainstorming can benefit from a diverse group, drawing from various backgrounds and perspectives.

Time Constraints:

- Quick sessions: Methods like "6-3-5 Brainwriting" can be time-efficient.
- Extended sessions: Techniques like "Design Thinking" can be spread over days or even weeks.

Resources Available:

- Tools and technology: Techniques like mind mapping might require software or digital platforms.
- Physical space: Some methods might need open spaces or breakout rooms for smaller group discussions.

Desired Output:

- Quantity: Methods like "Brain dumping" focus on generating a large number of ideas quickly.
- Quality: Methods like the "Disney Creativity Strategy" allow for a more in-depth exploration of fewer ideas.

Level of Structure:

- Structured methods: Techniques like the "KJ Method" or "Affinity Diagramming" have specific steps to follow.
- Unstructured methods: Approaches like free brainstorming allow more freedom.

Familiarity with the Technique:

- Familiar methods: Techniques the group is familiar with may be quicker to start.
- New methods: Introducing a new technique can spur new kinds of thinking but may require more time for explanation.

Stakeholder Involvement:

- Inclusive methods: If it's essential to involve various stakeholders, use techniques like "World Café" that facilitate larger group discussions.
- Exclusive methods: For expert panels or specialized groups.

Nature of Feedback Needed:

- Iterative feedback: Techniques like "Rapid Prototyping" allow for continuous feedback and refinement.
- Delayed feedback: Some methods focus first on generating ideas and then reviewing them at a later stage.

Complexity of the Issue:

- Complex problems: May benefit from methods like "Systems Thinking" that analyze interrelated parts.
- Simple problems: Might be addressed with straightforward ideation techniques.

Risk and Sensitivity of the Topic:

- Controversial topics: Might need methods that allow for anonymous idea submission.
- Non-controversial topics: Can be discussed openly in group settings.



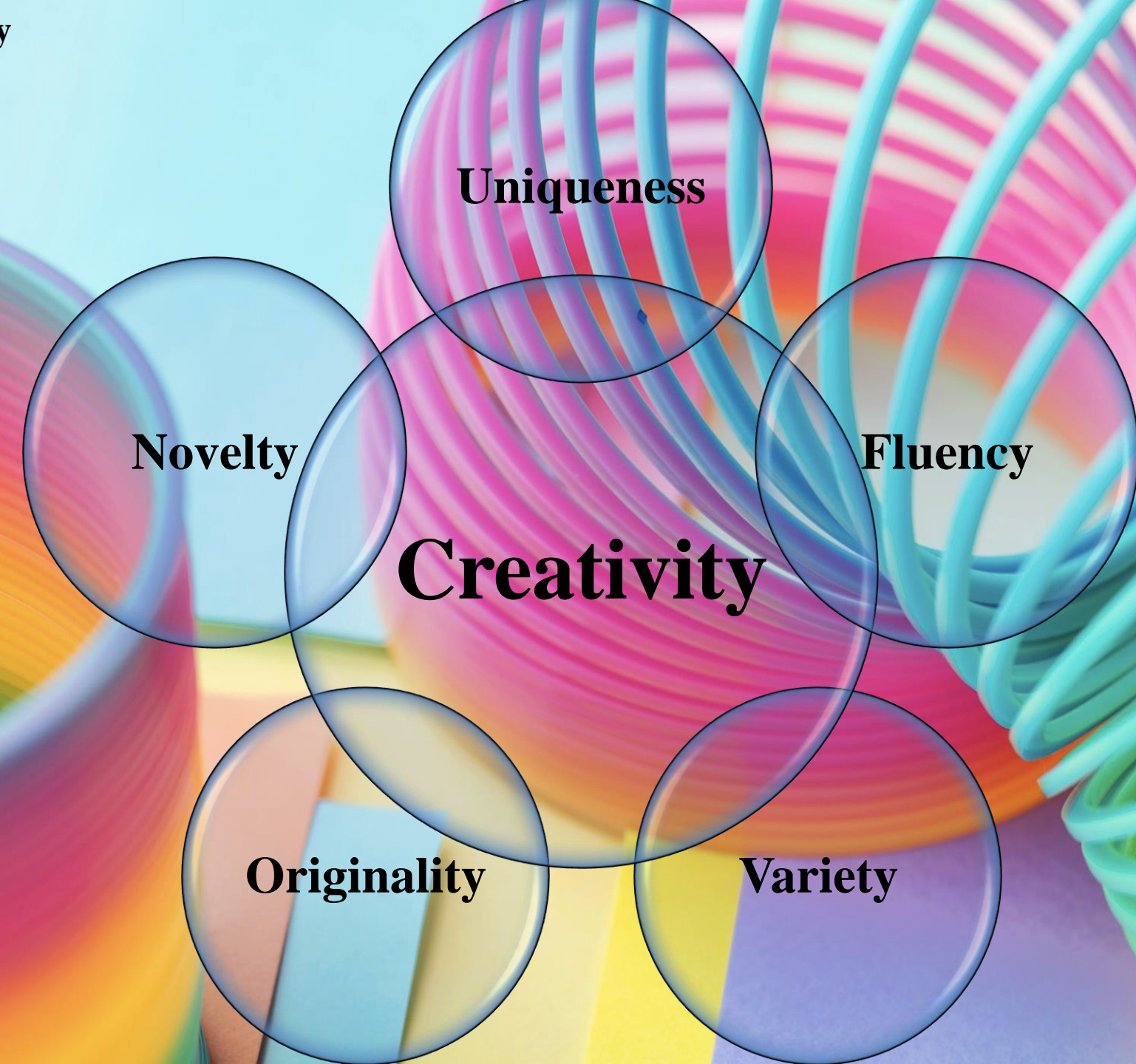
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**Can we learn to be creative,
or is it an inborn skill?**

How many
different uses
of a paper clip
can you think
of?



Dimensions of Creativity



Uniqueness

Novelty

Fluency

Creativity

Originality

Variety

Novelty

Every feature you add to any product or service increases its novelty



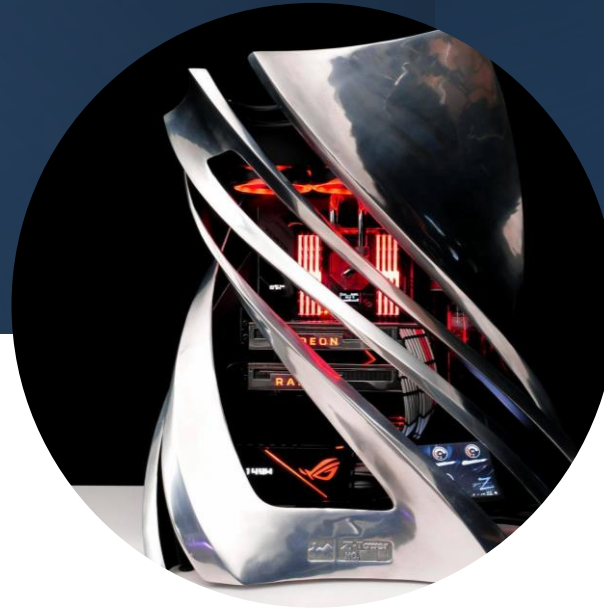


Originality

“There is no other product or service available in the market that comes close to being similar”

Variety

Significant variation in the solutions



Uniqueness

Different from the rest
of the lot in a few
features





Fluency

A sheer number of solutions or ideas one can generate

Summary

- There could be as many methods of idea generation as there are creative people around the world
- Selection of method depends on what you want to achieve at the end of ideation
- **Any method is better than no method at all!**

TERIMA KASIH
GRACIAS

MERCI

TAKK SALAMAT
OBRIGADO

GRAZIE

謝謝

KIITOS

THANK YOU

БЛАГОДАРЯ

DZIĘKUJĘ

감사합니다

DANK U

DANKIE
TƏŞƏKKÜR

DĚKUJI

СПАСИБО

DANKE

FALEMNDERIT

ありがとう

PAKKA PÉR

MULȚUMESC TACK