

2.2 Ideation for solution.

→ Practice for conducting a successful ideating session

Ideation → is a process in which you concentrate on idea generation

* It represents a process of "going wild" mentally

in terms of concepts and outcomes.

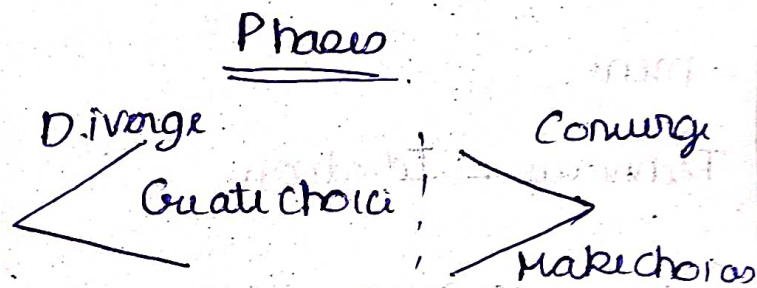
* Breaking larger challenge up into small actionable pieces

Stages in Ideation: (●)

1. Generation
2. Selection
3. Development

Lotus ideation method:

* Building idea around a central theme and then breaking them into deeper sub theme



For successful ideation:

- * Set time limits for each parts of the session
- * Start with your problem statement
- * Create a space where everyone feels equal and can share freely.
- * Encourage participants

Principles of Ideation:

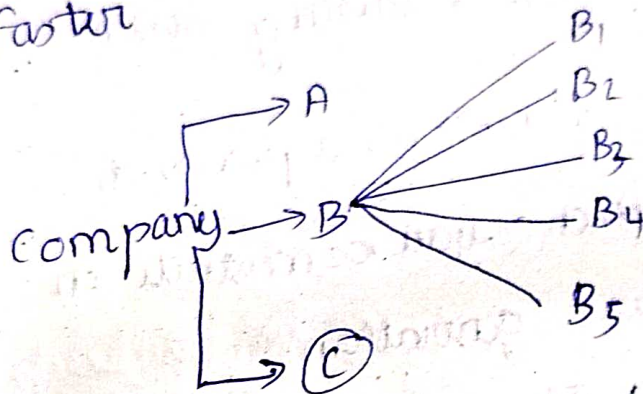
1. Creating a conducive environment
2. Embracing adversity
3. Leveraging brainstorming techniques
4. Focus on problem solving.
5. Iterative idea development - menu

Techniques - Ideation:

1. Brainstorming - You build good ideas from each others wild ideas
 - * Question brainstorming
 - * Hybrid brainstorming
 - * Mind map brainstorming
 - * Starbusting
 - * Reverse brainstorming

2. Mind map

Is a diagram tool to help you record and link together ideas to recall and generate new concepts faster



Common 5 techniques

1. Brainstorming

* Brainclumping (individual session)

* Brainwriting (mix of individual and group session)

* Brainwalking (mix of individual and group session)

② SCAM
Lateral thinking technique
refers to set of action
that can be carried out to
help with the innovation
process.

1. Substitute
2. Combine
3. Adapt
4. Modify / Magnify /
Minify
5. Put to another use
6. Eliminate
7. Reverse

③ Worst possible idea

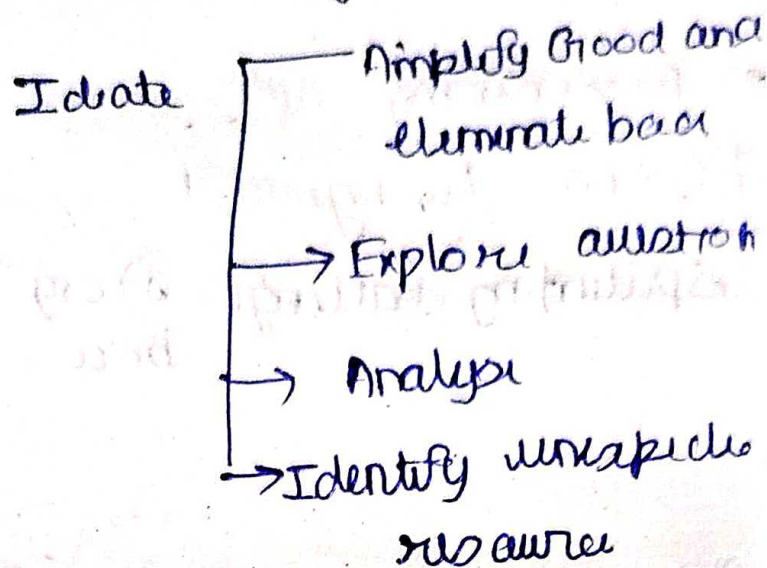
Weird idea → Guatem

idea

Ideation planning checklist

1. Prudication
2. Adding depth and diversifying
idea
3. Generate many ideas
4. Clustering and chunking
ideas

5. Preselecting idea



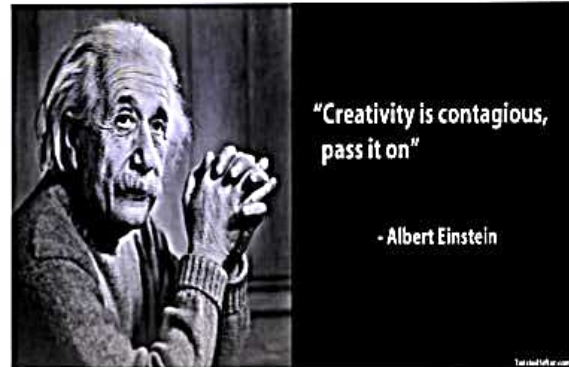
Lab

Planning for ideation

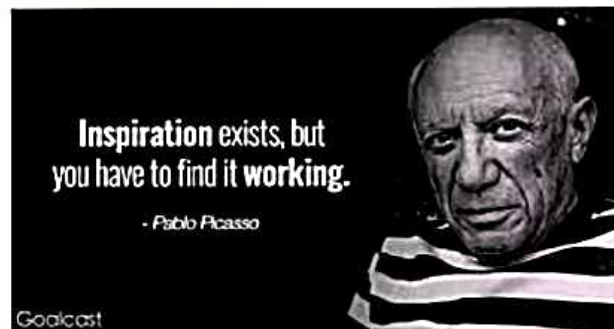
1. Defining a scope
2. Gathering background
3. Splitting the challenge
4. Selecting contributors
5. Choose ideation methods
6. Planning ideation loop
↓
session
7. Setting stopping criteria
8. Returning output

Ideation methods:

"creativity is a journey, not a magic event".

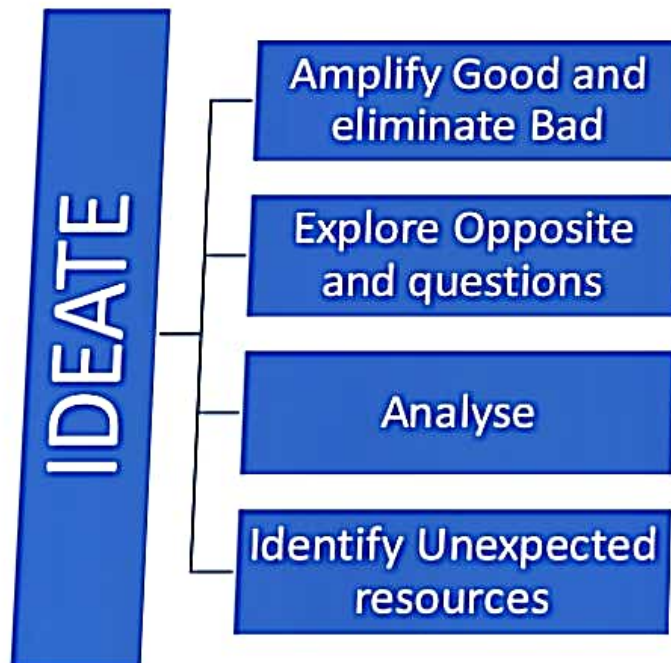


"Inspiration exists, but it has to find us working"



- In the ideate phase of the design thinking process that initial ideas for problem solving are developed.
- Ideally, Different techniques should be combined to get new in pulses for the generation of the ideas.
- Especially in this phase it is important to **generate as many ideas as possible** and to select one idea from them.
- In ideate phase the designer will start generating some rational concepts that seek to solve the problem by using the problem statement.
- Typically, these ideas are rough- those that it results from the brainstorming. The important thing hear is to " **think outside the box**" and generate and generate multiple ideas so that in the next stage draw some options for prototyping.
- The objective of the Idea generation phase is to find creative ideas that will solve the targets and challenges of users. This is the phase in which the design team's creativity and imagination should be at the top level.

- To be a good idea, it needs to be focused on the people, are how the idea fits the **needs, problems, and their goals**. That is why it is important to understand how the ideas gives values and the usefulness to the beautiful or feasible solution.
- This ideate phase of the design thinking processes is the most interesting and perhaps, the most rigorous as well.
- In this phase designer or designers supposed to bring to the table as many ideas as possible.



- The term “ideate” is just a fancy way of saying that designer want to come up with ideas, and there is no shortage of ways to accomplish that.
- When designers talking about the ideate stage, i.e it is the point in the design process where designers come up with a large volume of ideas to find and implement the most creative one.
- The purpose of the ideate stage is to push for the widest range of ideas that can be implemented in later stages.
- The ideate stage is important because it is when a design team moves from understanding and defining consumer/user/client/customer problems to coming up with solutions for those needs.
- Without the ideate stage the problem remains just the problem.
- Ideating allows a design team to consider creative ways to address the needs of the user have highlights in the **empathize stage** and more clearly outlines in the **Define stage**

- In this process, design thinkers also resort to use of boards, sticky notes, sketching, chart papers, mind maps etc.

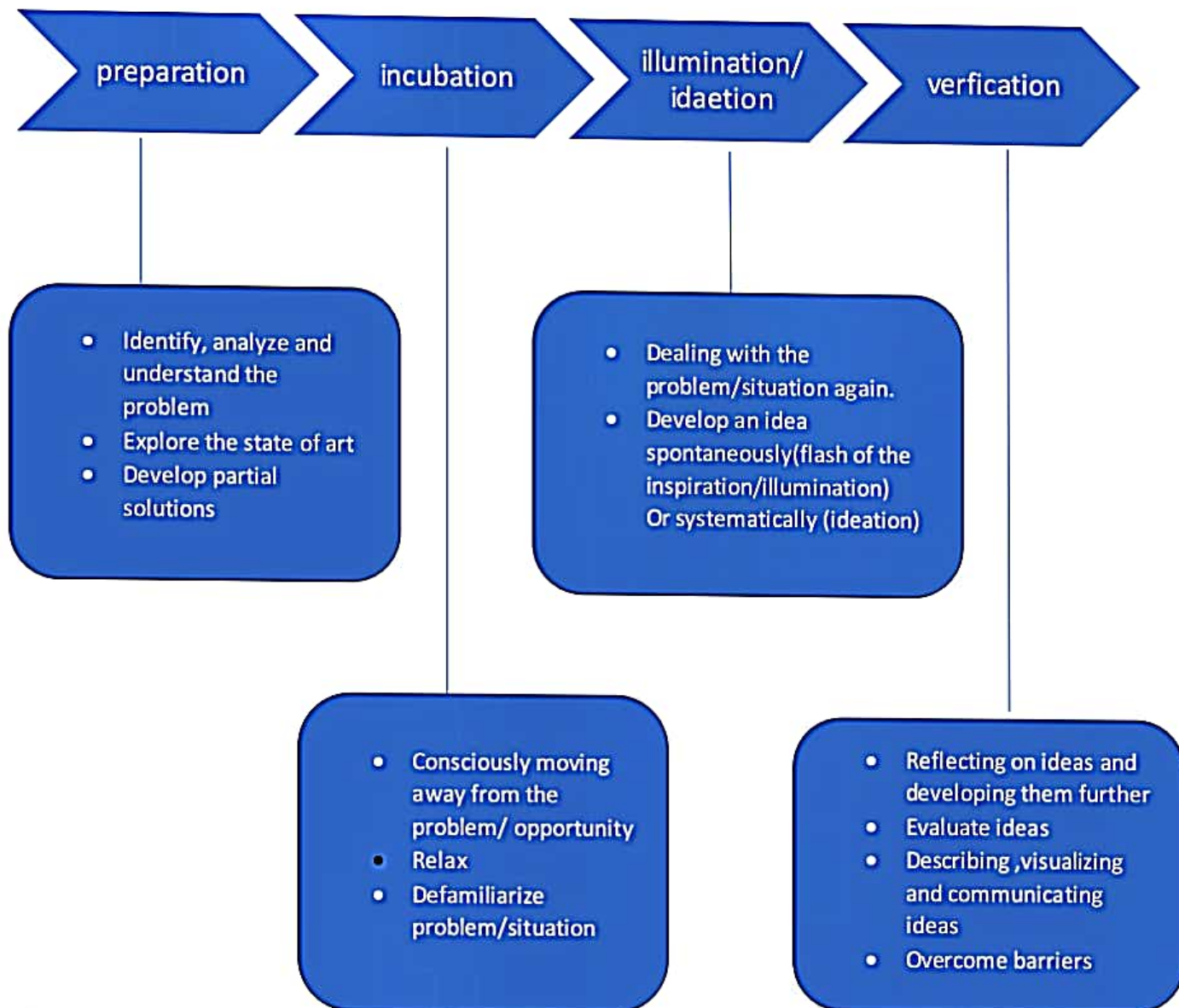
The creative process and creative principles:

- creativity means thinking something new, whereas innovation means implementing something new.
- In this respect creativity is an integral part of every innovation project, regardless of whether it is aimed at a new product, service, process, social/organizational change, or business model.
- Creativity is not an event but can rather be understood as a Process. The design thinking approach takes up this creative process.
- Creativity is the ability to come up with ideas that are new, surprising, and valuable.
- To get such ideas, we need a way of looking at problems or situations from a fresh perspective that suggests unorthodox solutions (which may look unsettling at first) which is called Creative Thinking.

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The creative process source: according to Walla's (1926)



Creative principles:

1. **Principle of decomposition:**

The problem, the task, the process steps, or the product/service to be redesigned is broken down into its components and then these compounds are varied/ combined a new

2. **Principle of association:**

By Association one understands the linking of ideas, information, perceptions, and emotions. In the sense of a free Association, **brainstorming** or brain writing are to be mentioned. The Walt Disney method and 6- thinking hats - technique can be understood as structured associations.

3. Principle of analogy and confrontation:

Technology and confrontation are targeted changes of perspective and are based on the confirmation with the different areas.

4. Principle of abstraction and imagination:

The basic principle of abstraction and imagination, the problem is solved on a higher or illusionary level.

5. Challenge common wisdom and industry conventions:

Nothing is to be accepted as given ask questions why this is so, why this is not so, why this should be so not to be so and why this can also be different.

6. Do mental exercise:

Demand a new number of new ideas from yourself. Under pressure and try to develop new ideas from one or more problems per day

7. Change your habits:

Do something completely different: Changing habits and conventions is a success factor specially for radical innovation.

8. Do experiment:

The trial under the approach is already given rise to countless innovation ideas.

9. Do networking:

Search or promote Exchange with others example people from other disciplines, cultures, business areas, departments are extra partners.

10. Overcome the barriers to creativity:

One of the essential success factors the creative process is overcoming the numerous and where did creative blockades.

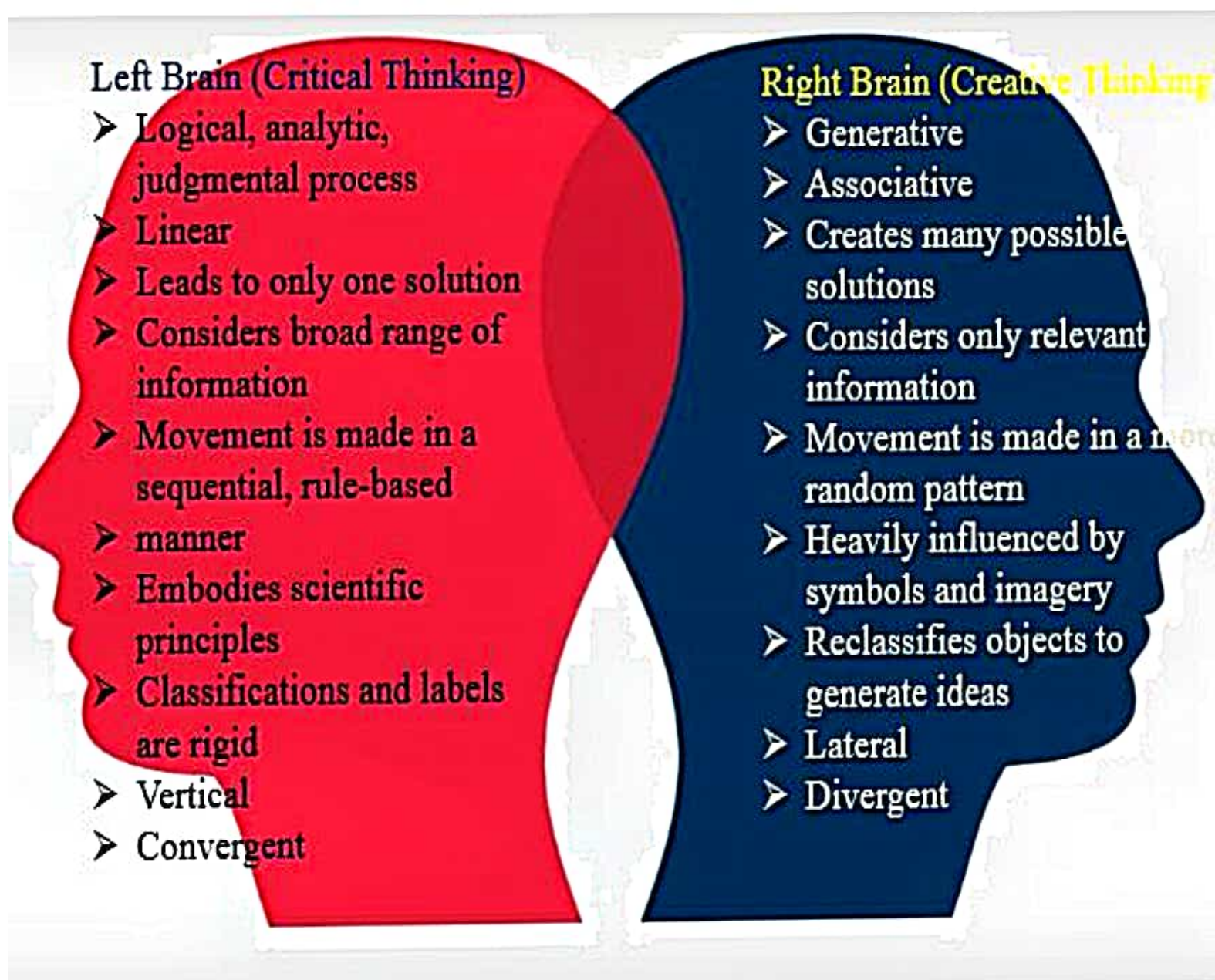
Examples of create to blockades are the following.

- Creativity disturbing environment
- Stress
- Lack of recognition/ no reward for creative work
- Two rigid or strict institutional controls
- Fear of change, risk aversion
- Perfectionism, search for the right things
- Pure logical thinking

- Self-satisfaction with what has been achieved so far.

Brain dominance theory:

- Gives relationship between right brain and left brain.
- Left brain handles information in analytical, rational, logical, sequential way.
- Right brain function by recognize relationships, observing information in intuitive way.
- Best creativity is achieved with good communication between these two.

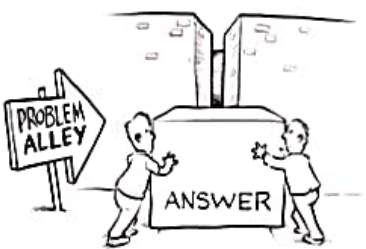






Steps to enhance creative thinking:

- Develop a creative attitude.
- Unlock your imagination.
- Be persistent.
- Develop an open mind.
- Suspend your judgment.
- Set problem boundaries.

Barriers to creative thinking (mental block):

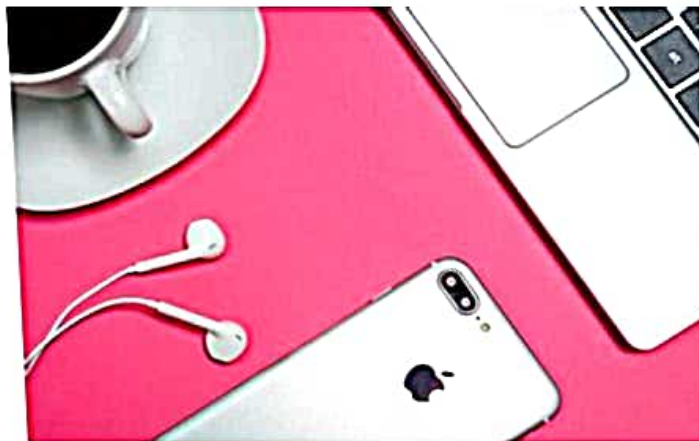
J.L. ADAM's Mental Blocks:

1	Perpetual Block	<ul style="list-style-type: none">• Stereotyping• Information overload• Limiting problem unnecessarily• Fixation• Provision of cues	
2	Emotional Block	<ul style="list-style-type: none">• Fear of risk taking.• Unease with chaos• Unwilling to incubate• motivation	
3	Cultural Block	<ul style="list-style-type: none">• Setting too formal• Often strong resistance to change.• Overlay analytical thinking	
4	Intellectual Block	<ul style="list-style-type: none">• Poor choice of problem-solving language• Memory block• Insufficient knowledge	

5	Environment Block	<ul style="list-style-type: none"> • Physical environment • Criticism 	
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Creativity techniques:

- Creative techniques divided into intuitive creative methods and systematic analytical methods.
- The intuitive- creative techniques try mostly in a group to simulate spontaneous ideas, associations, and analogies to overcome blockades of thought in a rather free design.
- The principles of decomposition and abstraction are increasing the applied to systematic analytical techniques.
- It should be noted that not every creativity technique is a suitable for every question and for every team.
- Creativity is ultimately very individual, everyone has their own idea, experience habits, preferences as well as strengths and weaknesses.
- In this respect one should experiment with his creativity techniques



Ideating at Apple might include a variety of brainstorming methods to think of creative ideas for new headphones.

Creativity Techniques:

Institutive creative techniques	Systematic -analytical techniques
• Brainstorming	• Osborn Checklist (SCAMPER)
• Brain Writing	• Mind Mapping
• Random Word Techniques	• Synectic
• Semantic intuition/ the perfect prefix	• Bionics

• Forced Relationship	• Morphological box/sequential morphology's/Attribute Listing
• Provocation Technique	• HIT
• Walt-Disney Method	• Lotus Blossom
• Six Thinking Hats	• TRIZ
• Delphi Method	• SIT

Brainstorming

Brainstorming is, so to speak, the mother of all creativity techniques (linguistically from: "using the brain to storm the problem"). Ideas about a question a solution to a problem should be Express spontaneously in a group.

- ❖ It is a group activity technique.
- ❖ It is designed to generate lots of ideas for solution of a problem.
- ❖ It is a commonly used tool by academicians, researchers, and business teams.
- ❖ The Value of brainstorming is not the ideas generated; it is the shared value/evaluation context created. The experience of brainstorming creates a group of people with a shared perspective, and an understand of each other's communication styles, who are then capable of providing a useful and powerful critique of future work on the topic.



Rules of brainstorming:

- **No criticism:** Each criticism a rating is postponed to a subsequent face the so-called killer phrases must be strictly prohibited. In this way it should be prevented that the flow of ideas is interpreted, or participants are blocked. Comment also forbidden.
- **No copyright:** The ideas of others can and should be taken up, changed, and further developed.
- **Free expansion of ideas:** The participant should give free rein to their imagination so that new and original ideas can be found. You are the craziest ideas are welcome.
- **Quantity over quality:** As many as possible should be produced in a short back. This rule insurance the spontaneity of the ideas presented. So, these rules should be written on the flip chart and visible to everyone doing the brainstorming session.

Tips for how to brainstorm:

- ❖ Take sufficient time to clarify define the problem or question in advance.
- ❖ The problem should be challenging to motivate.
- ❖ The question should be focus and not too abstract (what not too specific or even imply a solution)
- ❖ it should be customer- oriented question that is actively formulated.
- ❖ The question can also be communicated in advance with the invitation and is asked to already think about possible solution Idea as a kind of homework.
- ❖ The group size should lie between two and almost 12 persons Ideally 5 to 8.
- ❖ In case of heterogeneous group of participants who do not know yet know each other well, so organizer should insert a warmup phase beforehand.
- ❖ Always structure a creativity workshop with Fixed time phases. This means that brainstorming sessions must be limited in time.
- ❖ Use "yes" and instead of "yes, But.... In the introduction
- ❖ Number of Ideas
- ❖ Build on ideas of others and jump from Idea to Idea.
- ❖ Only one speak.
- ❖ always encourage the active participation of all the participants. The person should be informed at a fixed time what has become their idea.

Few tips on how to guarantee you destroy a brainstorming session.

- The boss talks first and sets the goal and the requirements.
- The contributions should be given in a sequence.
- Only experts can submit ideas.
- No silly ideas are allowed.
- Everything is written down.

Trigger-Questions for brainstorming

1. How might we...? Technique:

This is a similar questioning technique to the user story.

How could we (how might we)_____ (product service offer)

For (persona)_____ develop/ offer/ create under the following conditions_____ (problems, legal regulations, environmental conditions changes)

2. Yes and- technique:

It must Not be started to comment with "yes, but".... But it only with "Yes, and.". This should support the ideas put forward by others in the sense of constructive feedback and further develop them.

3. What- if- technique:

With the question " what if we..."(what-if) is to be put into another person/ company) when finding a solution

4. Why- how laddering approach:

The questions why and how are asking alternately. With why questions the reason for the problem should be summarized and recapitulated with the subsequent how question. With how you get detailed answers

Variants of brainstorming

1. Step by step brainstorming:

After a first printing session, the most interesting idea is used as a starting point for another brainstorming session. This allows you to find ideas from a general solution to a special one.

2. Anonymous brainstorming:

The idea written by the participant in block letters on a card called brain cards. A moderator read the anonymous ideas aloud and, on this basis, they are brainstorm further or ideas are clustered and evaluate.

3. Visual brainstorming/ brain painting:

Recorded graphically with paper and pencil (or digitally). Discrete sketch like images in the form of spontaneous scribbles, which do not have to be perfect, these can be abstract later.

4. Blindstorming:

The brainstorming takes place using face mask or in a complete darkness so the participants or not distracted by visual stimuli or gestures /mimics of other participants.

5. brain Walking:

The spontaneous ideas for the participants are written on white board or posters distributed throughout the room.

6. Speed storming:

Participants exchange questions in pairs for a few minutes and then change chairs to talk to another persons.

7. Stop and go brainstorming:

The brainstorming session is deliberately interrupted at a fixed time and filled with the passes are other techniques in the meantime. alternatively, phases of Idea generation can be altered with the phases of valuation.

8. Body storming/ role storming:

During the brainstorming session, the participants to take on a certain role and Associate/ formulate their contributions/ ideas from the point of view. The roles can be specific customers/ user who have been characterized by the persona technique.

9. Brain station:

Groups of participants work on different questions at different stations (rooms without separate work areas) using brainstorming. The participants change stations after fixed period.

10. E-Brainstorming:

Ideas are communicated electronically via chat/ instant messaging systems so that people can participate at different locations.

11.Reverse Brainstorming:

There is also talked of reverse brainstorming and only negative aspects are sought. Here the different aspects of the question and problem can be considered. What is currently bad about the situation? Why can't the problem be solved? What should go wrong?

12. Headstand method:

The question is completely reversible also speaks of the headstand method. How can we make X worse? Make it as complicated as possible? Increase in price? To discourage customers as much as possible? in the next step all ideas can be turned back into positive.

Brainstorming Techniques:

1.Freewriting:

- Write down whatever comes into mind.
- Do not judge the quality of writing.
- Do not worry about style, spelling, grammar, or punctuation.
- When you have finished your writing and have reached your goal, read back over the text, decide the solution.



2. Nominal Group Technique:

- Participants are asked to write their ideas anonymously. Then the moderator collects the ideas and each is voted on by the group.
- The best idea is chosen



3. Group Passing Technique:

- Each person in a circular group writes down one idea, and then passes the piece of paper to the next person in a clockwise direction, who adds some thoughts.
- This continues until everybody gets his or her original piece of paper back. By this time, participants will have examined each idea in detail



4. Individual Brainstorming:

- It typically includes such techniques as free writing, free speaking, word association, and drawing a mind map. Individual brainstorming is useful method in creative writing

5. Question Brainstorming:

- This process involves brainstorming the questions, rather than trying to come up with immediate answers and short term solutions
- Six Key Questions
 - ❖ Who?
 - ❖ What?
 - ❖ When?
 - ❖ Where?
 - ❖ How?
 - ❖ Why?

SCAMPER WORKSHEET

S	Substitute	<i>(What can you substitute? What or who could you use instead?)</i>
C	Combine	<i>(What can you combine or bring together?)</i>
A	Adapt	<i>(What can you adapt for use as a solution?)</i>
M	Modify	<i>(Can you modify or change the item in some ways?)</i>
P	Put to other uses	<i>(What other or new ways could this be used?)</i>
E	Eliminate	<i>(What can you get rid of?)</i>
R	Reverse	<i>(What could you rearrange or change around?)</i>

RECONNECTING WITH OUR PERSONAS

Behaviors	Aspirations	Motivations	Challenges	Pain Points

User Insights

Deep User Needs

Constrains &/or Design Criteria

STORY BOARDING CANVAS

BEGINNING		MIDDLE		END
The Persona	The Setting	The Problems	The Solutions	The Resolutions

STRATEGIC REQUIREMENT TEMPLATE

Strategic Requirements	The Big Idea or the Idea Concept (Main Solution to be delivered)		
Key Solution Components of the Big Idea			
Capabilities Required to Deliver this Solution Component			
Current Organizational Assets & capabilities to be Leveraged			
Development Strategy to develop this capability (if needed)			
Requirements and cost to develop (high/med/low)			
External Sources of Expertise (potential partnership)			

ACTION PLANNING TO ADVANCE THE DESIGN CHALLENGE PROJECT

Idea What idea for implementation	Objectives Why is this idea important? Values and benefits	Responsibility Who will lead this?	Implementation How will this be implemented	Resources What capability and resources are needed?	Completion When will this be completed?

IDENTIFYING QUICK WIN

What is this Quick Win (1) about?	
What are the success indicator(s)? How would it (these) be measured?	
What are the resources/staff trainings needed?	
Who will lead this Quick Win implementation?	
What are the key steps needed to implement this Quick Win? What is the timeline till completion?	
When will be the status or progress update?	
When will this be completed?	
How would the Success be communicated?	

CONCEPT SYNTHESIS

Design Challenge	How Might We...	Solution Concept	
Persona:			Value Propositions to Organizations/Agency:
Deep Needs:		Value Propositions to Target Users:	
Gains:		User Need (Problem) Solvers:	
Pains:		Gain Creators:	
		Pain Relievers:	