

Cracking Creativity & Design Thinking



MMS Sem II 2022-23

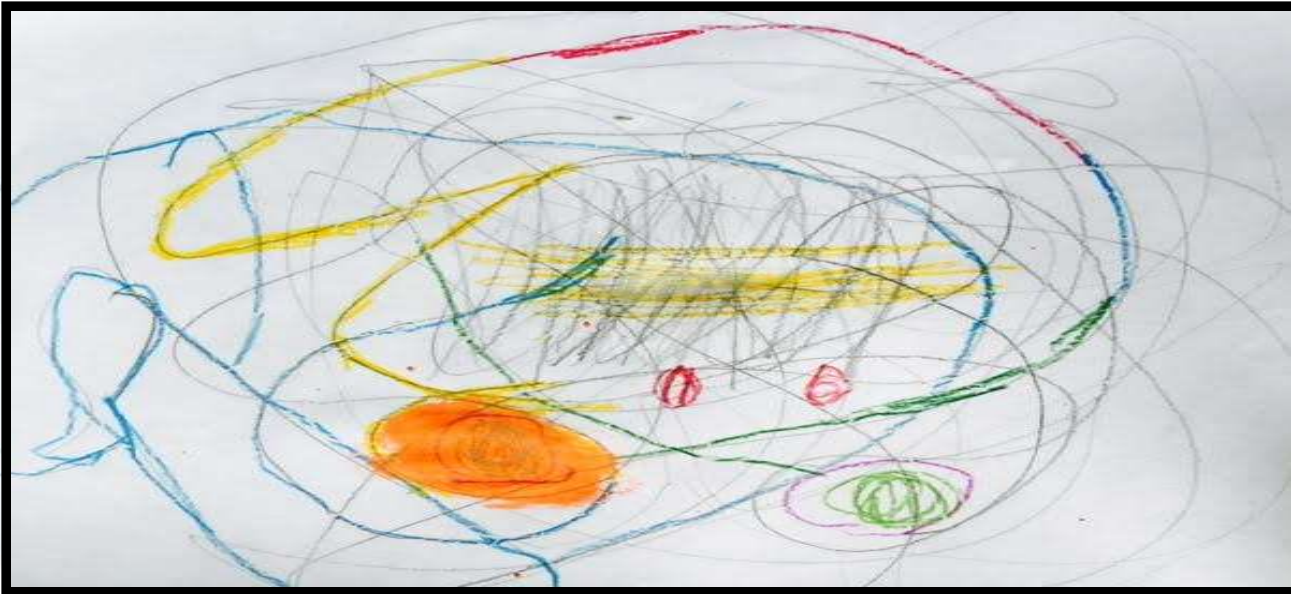
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OUR SOCIETY IS PARTICIPATING IN THE WIDESPREAD SUPPRESSION OF *Creative* **GENIUS**

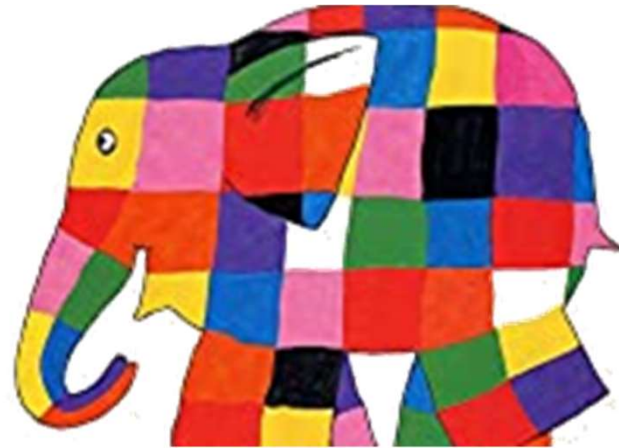
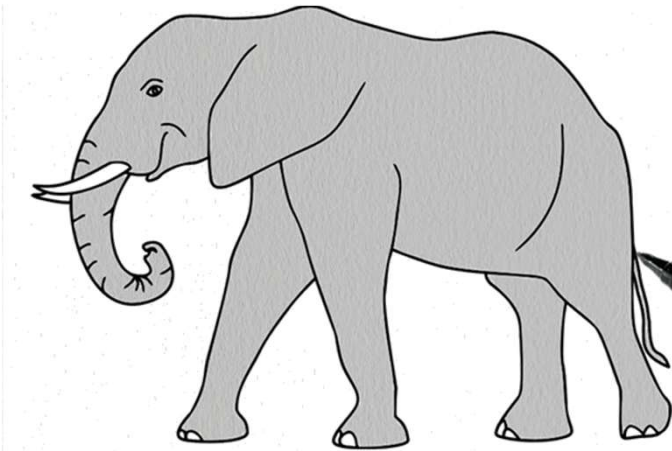
We have a fundamental misunderstanding of creativity we need to start by rejecting the notion that creativity belongs to a select few that it's owned by the creative right brain thinkers the painters the playwrights the poets and that it's unavailable to the more logical left brain thinkers the mathematicians computer scientists engineers.

We all have the capacity for creative thinking in fact creativity is a birthright available to all but used by few.



Painter means a person having ability to draw and color. Does each of you have these abilities or not? We get confused by the quality of the end-results i.e. painting or sketch and due to the fear of how people will perceive or judge it, we play safe and refuse to accept that we have this skill. This fixed mindset prevents us to develop these basic skills.

If beauty is in the eye of the beholder, then the person who is observing gets to decide what is beautiful. A common saying is "Beauty is in the eye of the beholder," which means beauty doesn't exist on its own but is created by observers.



What we teach to our kids – Color should remain within the shape, Use only the specified color, Coloring should be uniform & neat. Don't you think we are cultivating the creativity or restricting the creativity of the kid. Creativity is called “Out of Box thinking” but we are telling to remain inside the box – Compliance kills Creativity



ALL CHILDREN ARE
ARTISTS.

THE PROBLEM IS
HOW TO REMAIN
ARTIST ONCE HE
GROWS UP.

PABLO
PICASSO




$$5 + 5 = ?$$


$$? + ? = 10$$

Let's clarify that:

Creativity is not a talent you were born with or without, it is a way of operating. You are not more or less creative than others. Some people have just intuitively figured out the process behind it, the rules they need to follow and the way to apply them.

Creativity is a science – and like any science it can be explained, learned and applied.

What people think creativity is. The usual answers I hear are “having new ideas” and “thinking out of the box”. That's not creativity though, those are outcomes of creativity.

If you are creative you can have interesting and innovative ideas and think out of the box. What we should be interested in is what lies behind those outcomes, the process that allows you to think out of the box and gets you to have great ideas.

The creative process: First step

This process is fairly simple and it consists of only two steps.

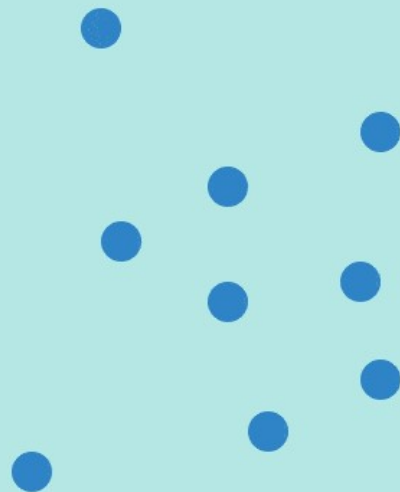
In the first step, also called divergent thinking phase, you come up with options, specifically as many options or possible solutions to your problem as you can.

Your goal in this phase is quantity, not quality.

You shouldn't worry about how feasible or far-fetched anything is, whatever comes to mind that bears and sort of connection to your context, you should put down, impossible or not.

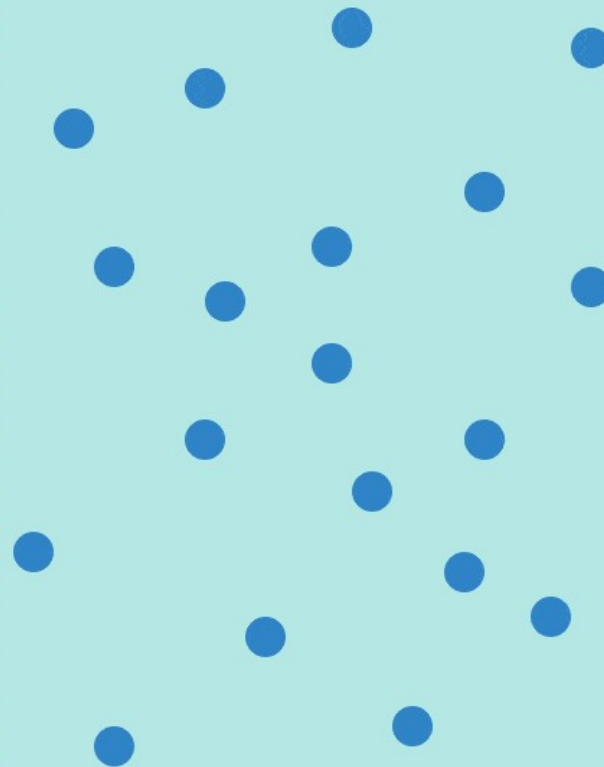
STEP 1 OF THE CREATIVE PROCESS: Generate as many ideas as you can

LOW QUANTITY



***LESS
material to work with***

HIGH QUANTITY



***MORE
material to work with***

The creative process: Second step

In the second step, also called convergent thinking, you then try to make sense of all those ideas you have generated.

You will drop some, refine some and most importantly look for new and unusual way to link them.

Those connections, those new and unusual links are what you are looking for, especially the ones that manage to connect far away concepts.

If you are able to take two ideas that had not been put together before and find that new connection, you are very likely to get to a breakthrough.

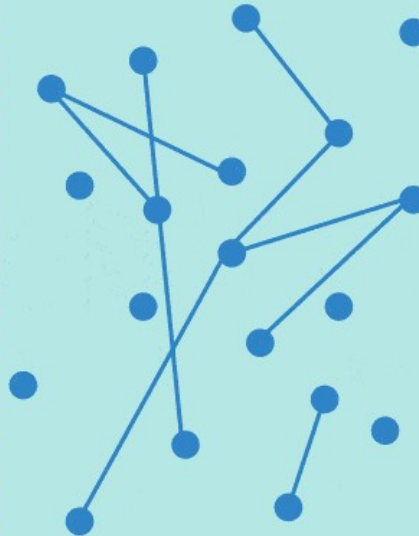
STEP 2 OF THE CREATIVE PROCESS: Connect concepts in new ways to generate meaning

***Few ideas to
connect***



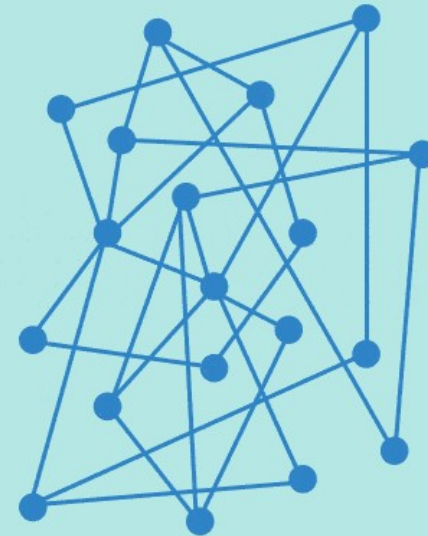
***LOW
chances of a
breakthrough***

***Several ideas
and few
connections***



***LOW
chances of a
breakthrough***

***Several ideas
and several
connections***



***HIGHER
chances of a
breakthrough***

The creative process - Example

George de Mestral

One day George de Mestral went for a walk in a forest in Switzerland. When he returned home, he found out that he had lots of little green seeds stuck onto his coat.

He had to spend hours removing them as they had these little spikes that made them stick more to wool.

That may have meant nothing per se, and that man may have just brushed the whole thing off.

Instead he made an unusual connection between the textures of those seeds and the one of his coat.

And that's how he got the idea for the company he founded: Velcro.

The creative process – Why two stages?

Can't I just come up with a few ideas, see if I find a connection, and if I don't just repeat the whole thing? Well, no, absolutely not.

Your goal is to link two far away concepts in an unusual or new way.

To do that you need:

- a lot of very different options that you can then connect, and
- a few interest ways to connect them.

And it's clear that the more ideas you come up with in the beginning, the higher the chances they'll be unrelated. That's why it's worth just focusing on quantity in the beginning because that will give you more material to play with afterwards.

Also, it's not easy to find that new connection, it requires time and focus.

So if you keep investing your mental energy to go back and forth between generating ideas and connecting them, you won't be more efficient.

Creative leadership

What is creative leadership?

Creative leadership is the ability to enable teams to confidently generate ideas with strategic and innovative value.

How do you develop creative leadership skills?

First by knowing how and why the creative process works, second by practicing its application, and third by passing it on to your team.

“The role of a creative leader is not to have all the ideas; it’s to create a culture where everyone can have ideas and feel that they’re valued.”

Traditional vs. Creative leadership

TRADITIONAL LEADERSHIP

One-way

Concerned with being right

Follows the manual

Loves to avoid mistakes

Reliability

Orchestra model

Community in harmony

Wants to be right

Open to limited feedback

Sustaining order

Closed system

CREATIVE LEADERSHIP

Interactive

Concerned with being real

Improvises when appropriate

Loves to learn from mistakes

Validity

Jazz ensemble

Community in conversation

Hopes to be right

Open to unlimited critique

Taking risks

Open system

Creative leadership and group ideation

The first connection most of us have with creativity and ideation at work is brainstorming.

Brainstorming is a basic, often misunderstood but still very common tool. Two heads are better than one, so if you need a good idea quickly it makes sense to bring your team on board.

You've already used brainstorming one way or another, and you know how often you invest time, effort and brainpower just to find yourself with pretty much nothing new.

It's slow, it's frustrating and upsetting, and if that sounds familiar to you, the good news is: you're not alone. And the better news is, you're going to love this part.

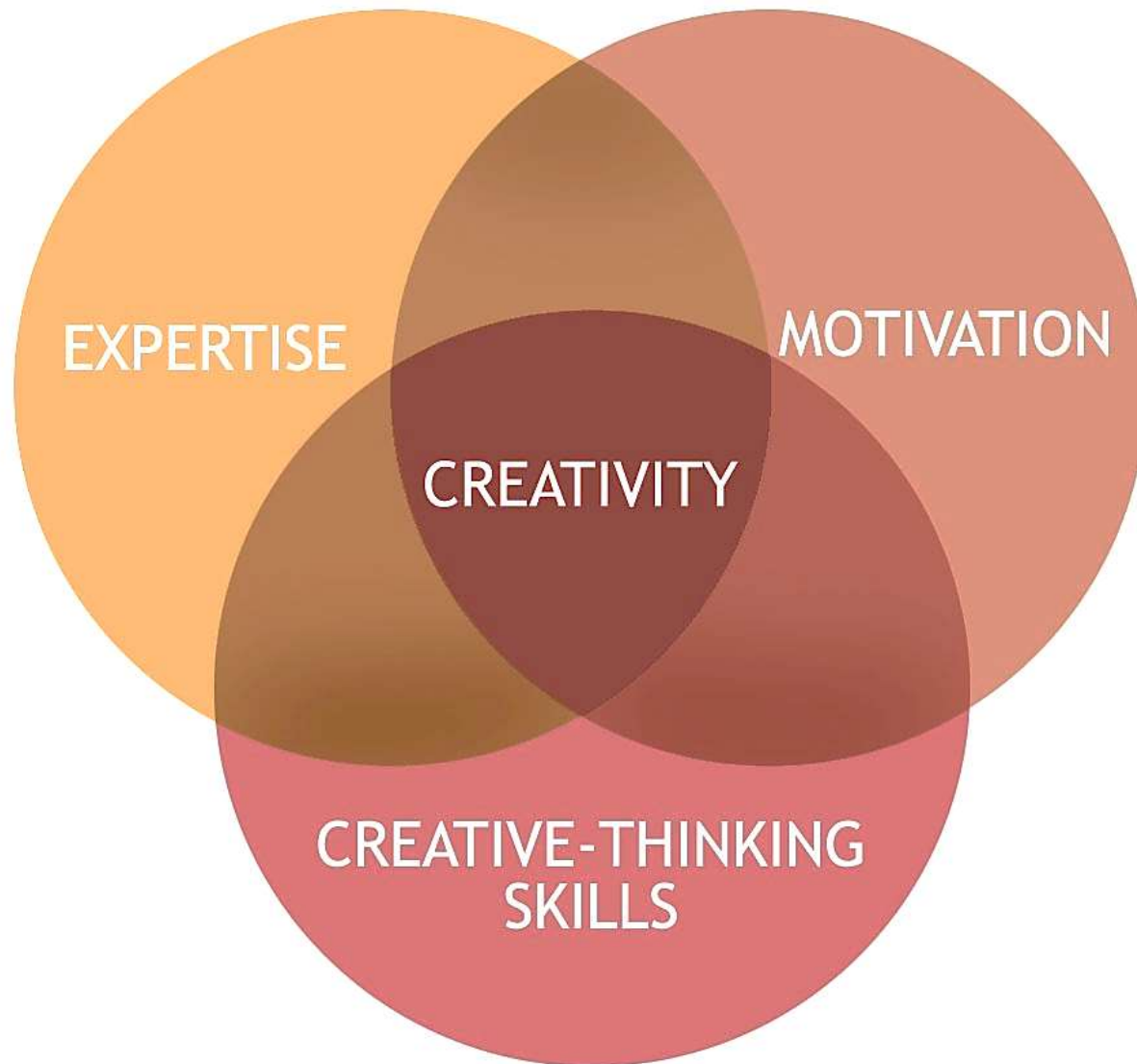
But first, we need to take a step back and look at what happens when any group engages in any sort of group ideation or brainstorming session.

Your job as the Creative leader

- We know that group ideation or brainstorming has potential, but it needs to be done right, following the two step process we mentioned in the beginning
- We know that social pressures in a group make people shy, and make them censor themselves, filtering out any ideas that are too out of line
- We know that the more ideas people voice out, the higher the creative quality of those ideas.

If all of that is true, then your job as the leader is to do whatever you can to make sure you obtain the highest possible number of ideas from each team member.

Three Components of Creativity



Three Components of Creativity

1. **Motivation:** a set of motivational attributes as childlike curiosity, intrinsic interest, perseverance bordering on obsession.
2. **Knowledge and expertise:**
 - In-depth experience
 - Long-term focus in one specific area allows people too build the technical expertise
3. **Creative thinking:**
 - Comfort in disagreeing with others and trying solutions that depart from the status quo
 - Combining knowledge from previously disparate fields
 - Ability to persevere through difficult problems and dry spells
 - Ability to step away from an effort and return later with a fresh perspective

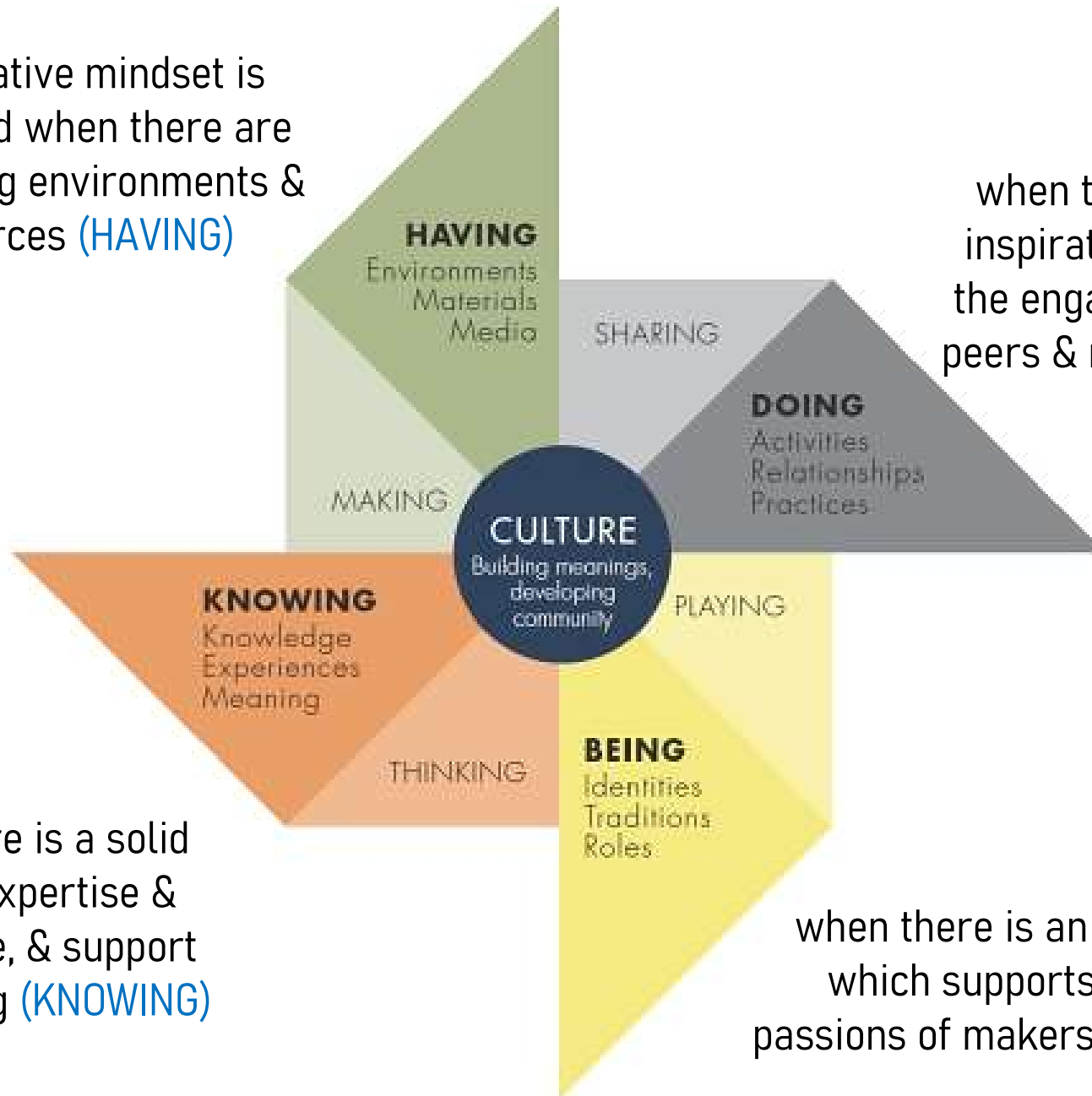
Developing Creative Culture

The creative mindset is
Supported when there are
stimulating environments &
resources **(HAVING)**

when there is a lot of
inspirational activity &
the engaging support of
peers & mentors **(DOING)**

when there is a solid
body of expertise &
knowledge, & support
for learning **(KNOWING)**

when there is an ethos
which supports the
passions of makers **(BEING)**



Environmental Elements affecting Creativity

1. **Encouragement:** a risk taking mentality, goal clarity, and diversity in team member background, and appreciate new ideas.
2. **Autonomy:** the freedom to organize the work and responsibility to make decisions.
3. **Resources:** Extreme resource restrictions impede creativity, because they give the impression that the project is less valuable.
4. **Pressure:** to a certain degree it is perceived as challenging; i.e. this kind of pressure has a positive effect on creativity. It turns out to be negative when it is perceived as excessive work load pressure.
5. **Organizational Barriers:** Conservative thinking and rigid management structures impede creativity.

Top 10 Creative Leadership Traits

1. Great at generating many ideas – innovative, game changing and even commonplace.
2. Always looking to experiment with good ideas. Sometimes, trying out a few times.
3. Unwavering belief in their creativity and innovation, coupled with originality in thinking.
4. Smart and bright with a positive self-image. More often, they are not born geniuses.
5. Passionate, expressive & sensitive to their teams, colleagues & surroundings.
6. Demonstrate superior judgment, and do not make quick decisions.
7. Non-conformists and independent, requiring less social approval than most people.
8. Innate ability to understand & solve the problem, & manage the consequences.
9. Born dreamers with strong imagination; however, manage to keep things in perspective.
10. Create and launch game changing products meeting a high level of quality and design.

SUCCESSFUL CREATIVE LEADERS*

- ✓ Foster trust and openness
- ✓ Give employees freedom
- ✓ Offer challenge and involvement
- ✓ Allow for playfulness and humour
- ✓ Devote idea time
- ✓ Encourage debate
- ✓ Manage conflict
- ✓ Support risk-taking / tolerate ambiguity even for a short while
- ✓ Support ideas

CREATIVE People
do not see things
MERELY FOR WHAT THEY are;
they SEE THEM FOR WHAT
they can be.

- JULIE ISRAEL

The first thing needed by anyone desiring to participate in the creative process is that they acknowledge that alternatives are possible—that there may be a different way to approach a problem. This means allowing ourselves to admit, if only just briefly, that our current point of view may not be the only point of view.

By accessing different perspectives, by allowing ourselves to see the world through a different lens, we open up the field of possibilities.

Scamper Thinking Technique

S

Substitute

Replace a part of your product, service or process with another

C

Combine

Combine ideas, processes or products into one more efficient

A

Adapt

Adapt an existing idea that might not have worked before

M

Modify, Magnify, Minify

Modify an aspect of your situation or problem. Make it larger, stronger, or smaller, lighter

P

Put to another use

Put current processes or products that were intended for a specific purpose to another use (when, where, how to use it)

E

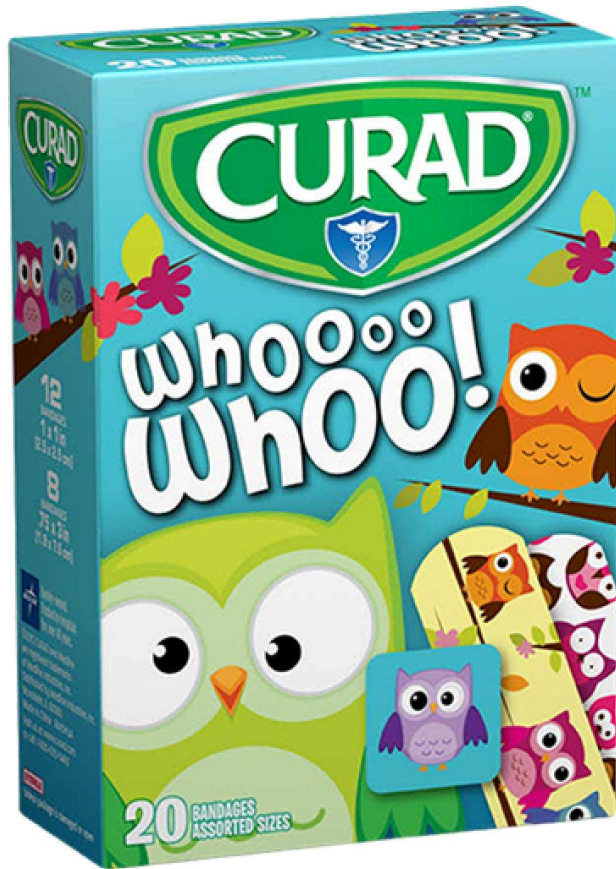
Eliminate

Identify the most important parts. Eliminate or simplify others.

R

Reverse, Rearrange

Reverse the orientation or direction of a process or product, do things the other way around, against its original intention.



"Creativity is inventing, experimenting, growing, taking risks, breaking rules, making mistakes, and having fun."

“**CREATIVITY**

is more

than just being

different ...

Making the **S I M P L E** ,

awesomely **simple** ,

that's **CREATIVITY.**”

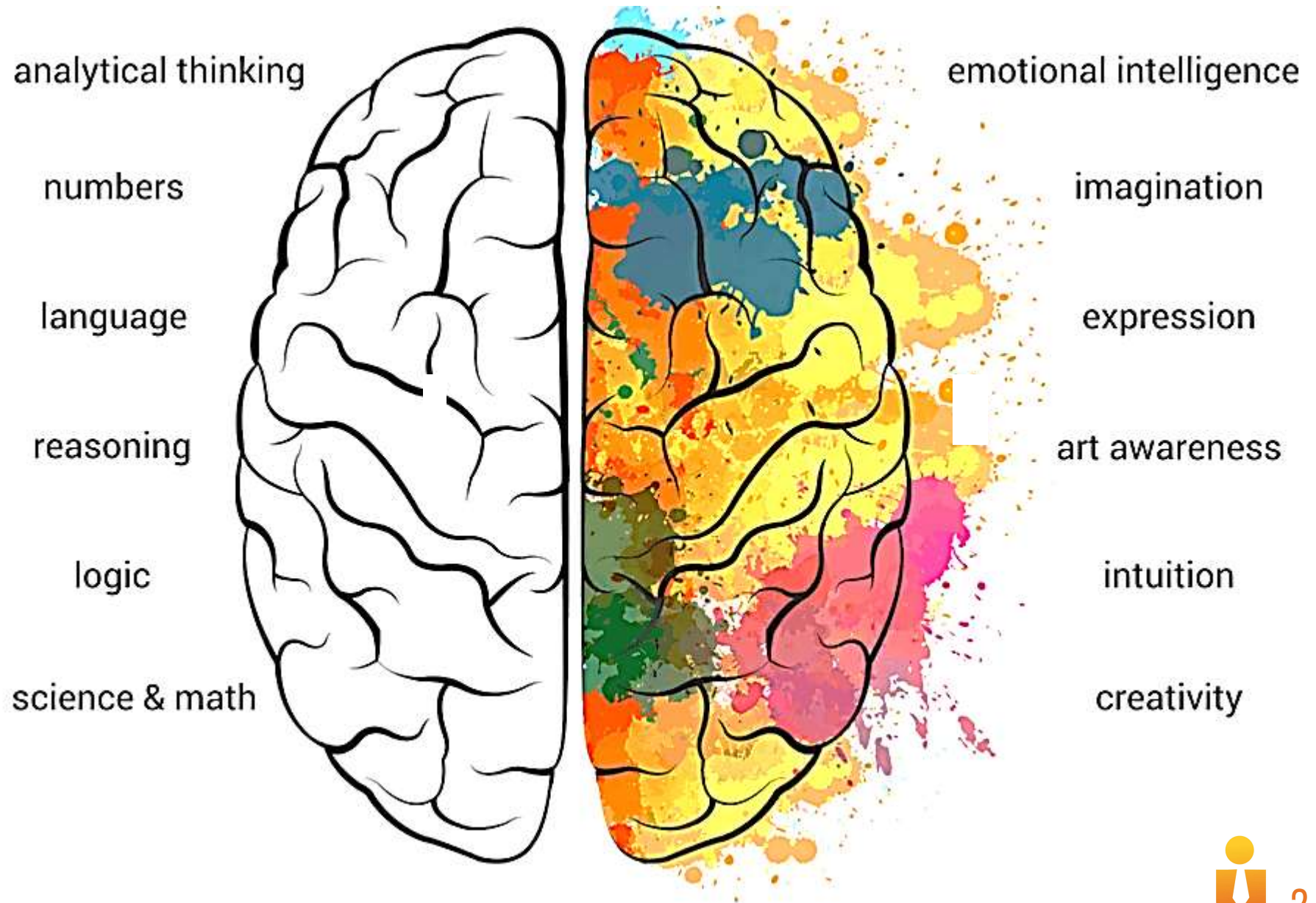


**IMAGINATION IS THE
SPARK THAT IGNITES
THE FIRE OF CREATIVITY**

“Just imagine!” - First there is visual imagery, the power to see things in the “mind’s eye.” There are three forms of visual imagery. **Speculative imagery** allows us to “see” something we have never actually seen. **Reproductive imagination** enables us deliberately to bring pictures back into our minds. The third form of visual imagination, called **structural visualization**, is an ability to construct three-dimensional forms in the mind’s eye from a flat blueprint.



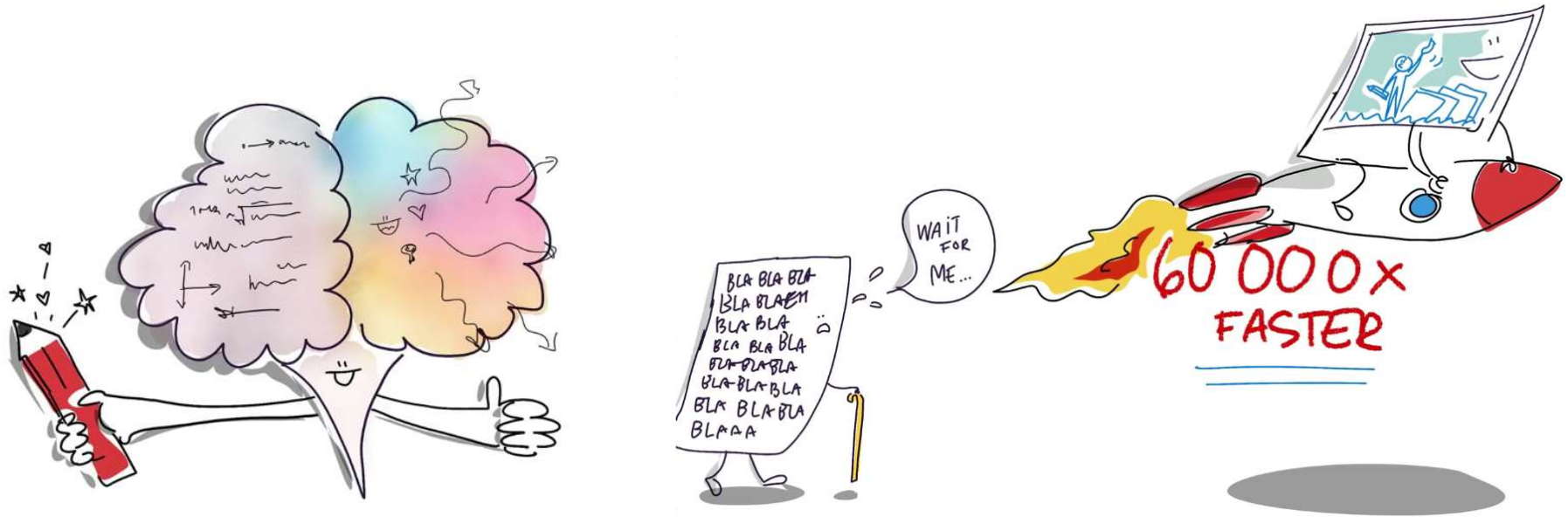
Left vs. Right Brain



A man was born in 1980 and died in 2000.
However, in 2000, he died at the age of 27.

How Do We Usually Think? - Instead of pure rationality, thinking is predominately governed by **pattern recognition**. We process new information by imposing meaning based on an assumed context and meaning. These assumed contexts are so dominant that it becomes difficult to find an alternative understanding of these words.

Moreover, we make **snap judgments**. Our judgments and decisions are often based on automatic **rule of thumb responses** rather than on thorough, **logical analysis**. We often do not go through and carefully **investigate** all **possible** meanings. We are **creatures of habit**, and too often, we lack the necessary awareness and desire to break out of our thinking habits.



Our brain loves drawings. In our daily life, we use our left side of the brain (Controls right side of our body, Speech-language, analytical, logical, numerical) a lot, but drawing activates the more creative right side of our brain (Controls left side of our body, Emotions-Heart, Creative, Visualize)

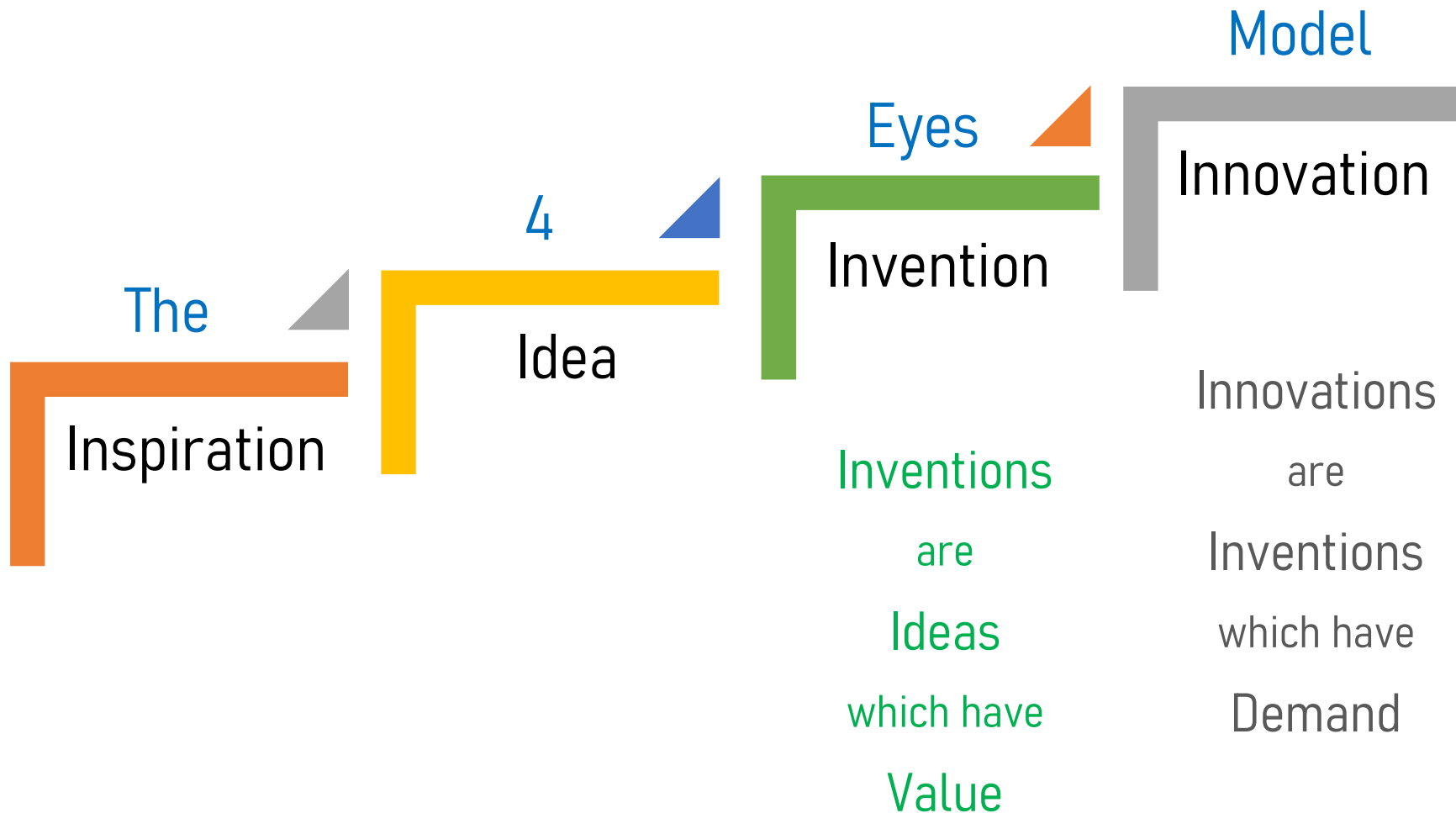
Our brain digest visual information 60,000 times faster than written things or text. Illustrated drawings or pictures help us to remember faster.

The creative process is driven by person's **curiosity**. If a person is not curious about a topic, he/she may be unable to define problems. Another drive in the creative process is person's **confidence**. Person need to be able to express a different idea and proceed quickly through each step of the process. **Creative thinking** also requires **suspended judgment**; this is particularly necessary in the **brainstorming** process.



An average preschooler ask 100 questions a day.

What is Innovation?



The Innovator's DNA that Generates New Ideas

Courage to Innovate



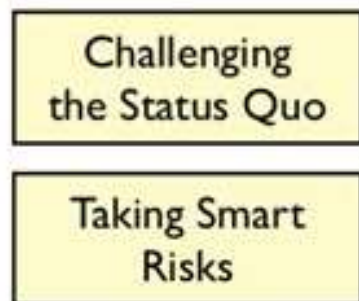
Behavioral Skills



Cognitive Skill to Synthesize Novel Inputs



Innovative Ideas



Questioning

Observing

Networking

Experimenting

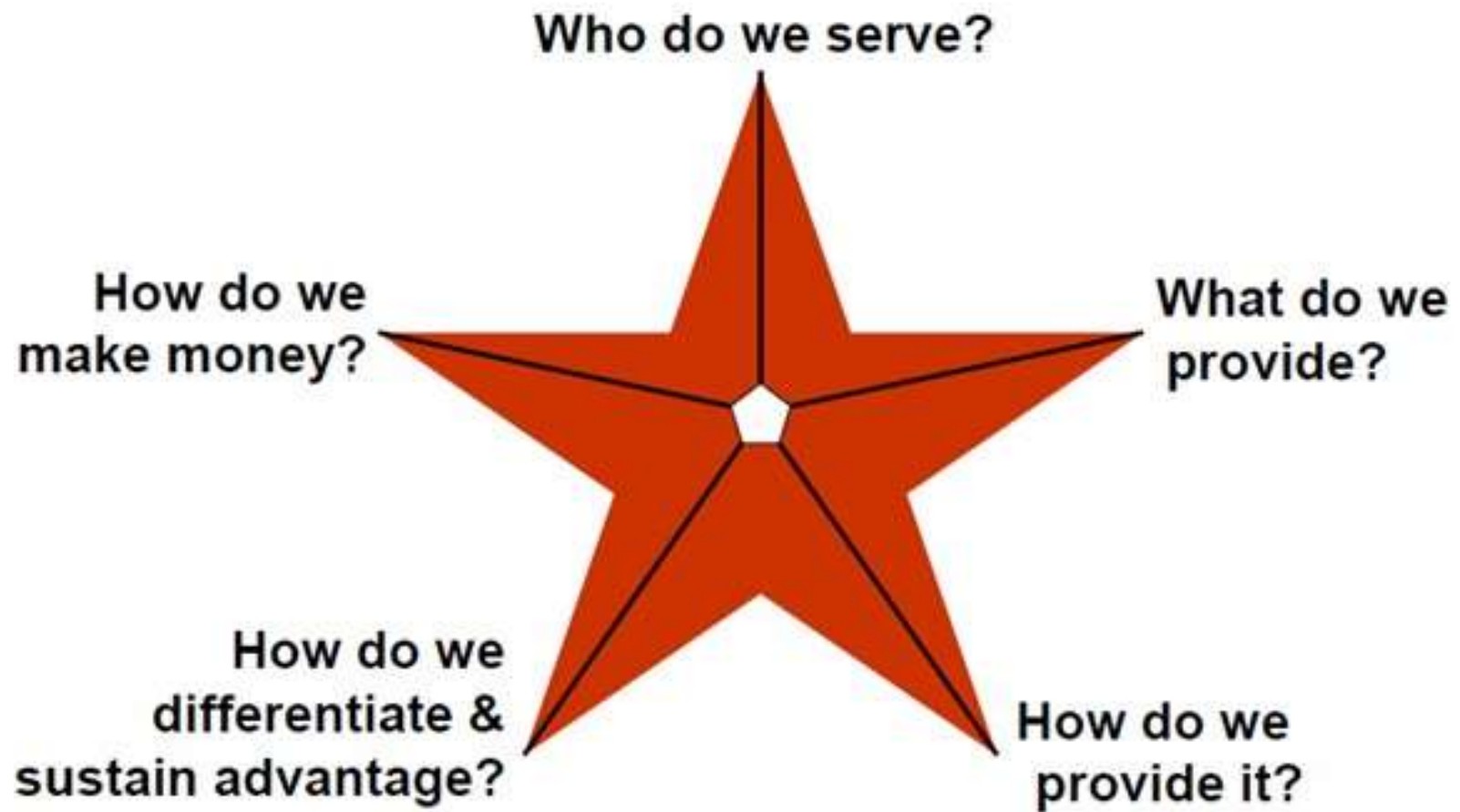


Associational Thinking

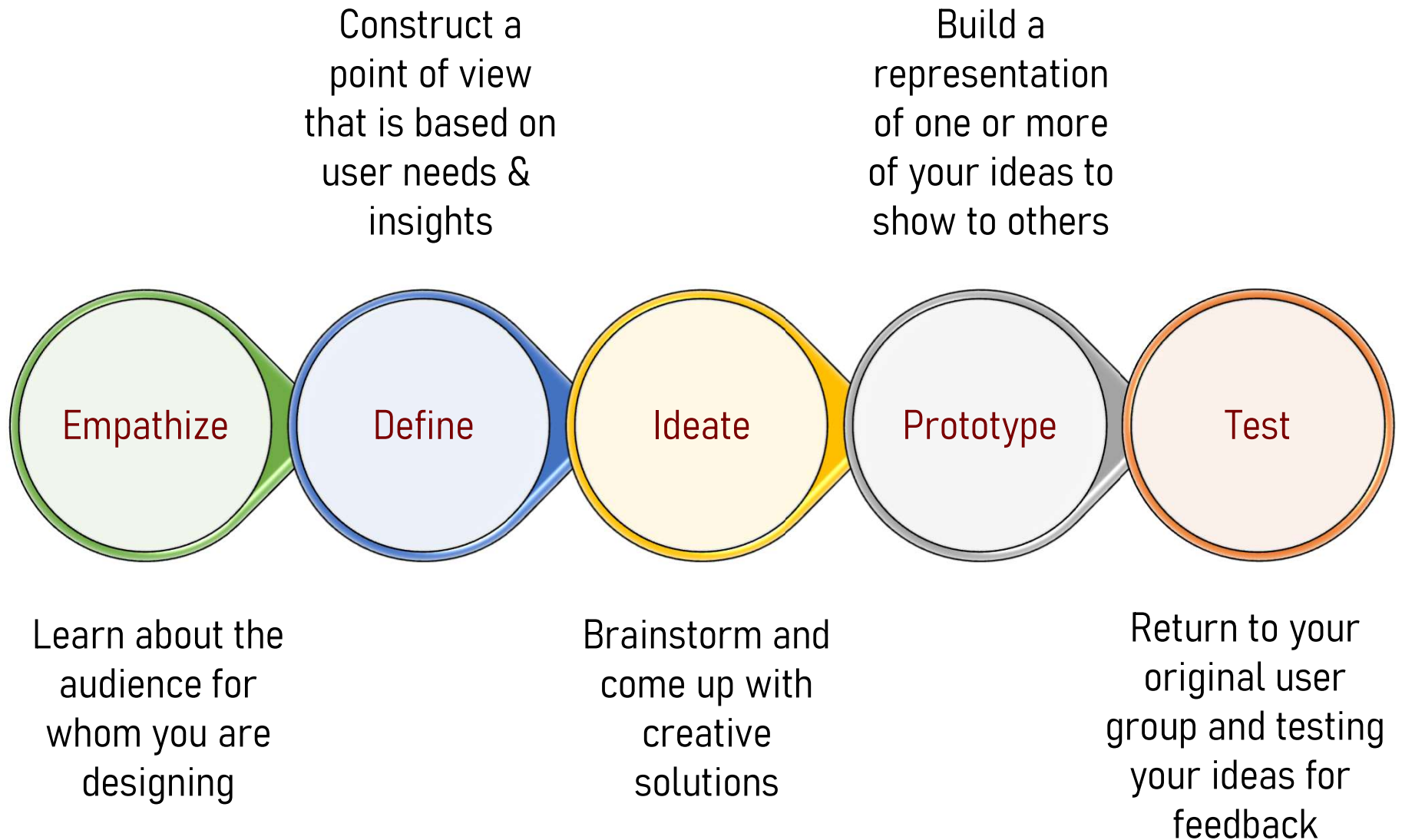


Innovative Ideas

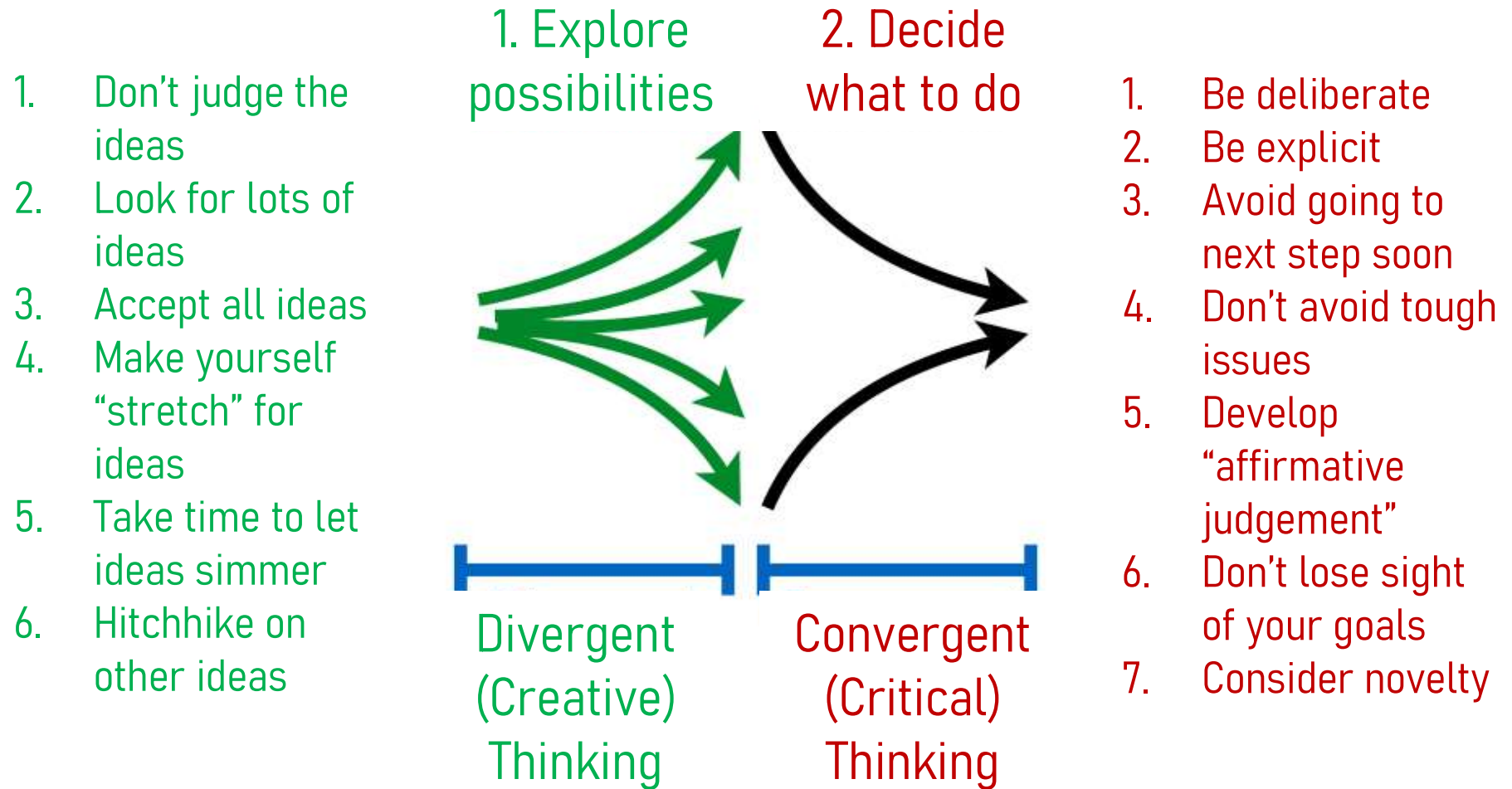
Business Model Innovation



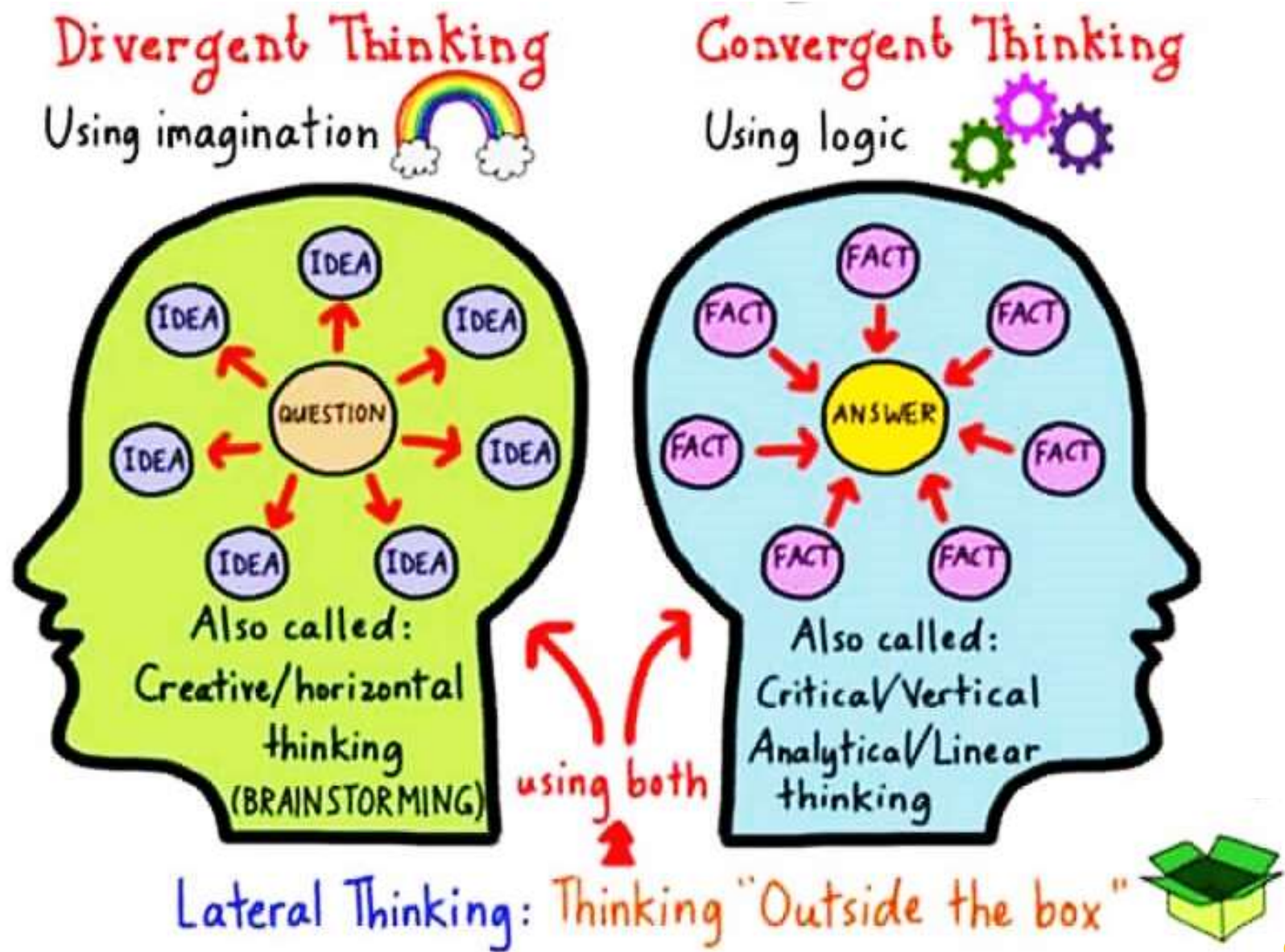
Design Thinking Process



Design Thinking: Divergent vs. Convergent



Modes of Thinking



Design Thinking Cycle

