Handbook on Creativity in Government

CENTRE FOR GOOD GOVERNANCE
Knowledge • Technology • People

	TABLE OF CONTENTS	Page No

Creating Creative Organization

There is an increasing realization on the part of the private as well as public organizations that creativity and individuality are major assets and critical inputs for developing positive working environments and increasing productivity, effectiveness, and innovations. Doing things differently is becoming the watchword of several public and private organizations. Naisbitt and Aburdene ("*Re-inventing the Corporation"*) observe that "corporations are experimenting with a wide variety of ways to stimulate creativity. They are hiring creativity consultants, teaching employees to meditate; even encouraging people to listen to relaxing music, an acknowledgment of the growing importance of creativity."

Consequently, there is a significant shift from a paradigm of thinking that places the responsibility of problem solving on management to a paradigm of thinking that places the same responsibility on members of the organization. Obviously, it does necessitate organizations to draw creative or innovative individuals for their intuitive abilities, flexibility, and adaptability.

But, what is this magical and mysterious realm known as creativity? This manual seeks to examine and explain creativity and creative process as a means of assisting public sector organizations with coping, adjusting, and implementing proactive change within their organizations. It seeks to examine and elucidate the ways and means of fostering creative teams and creative environment in the workplace to improve on overall efficiency and effectiveness.

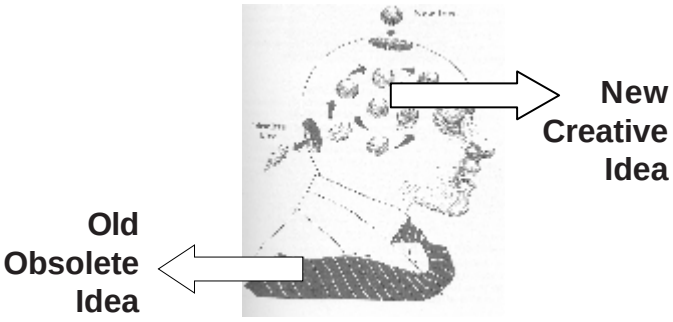
1 Creativity and Innovation

Let us first gain some basic understanding of the terms. Do the two words “Creativity” and “Innovation” mean the same thing? People tend to use the terms innovation and creativity interchangeably. Theorists point out while the two terms broadly deal with the same theme; there are important differences between them. The subtle difference between the two is clearly defined by Theodore Levitt – a renowned marketing expert and editor of Harvard Business Review. According to him while ‘creativity’ is “thinking up new things”, ‘innovation’ is “doing new things”. In other worlds, while ‘creativity’ signifies ‘idea’, ‘innovation’ signifies ‘action’. Viewed as a process, ‘creativity’ implies ‘origination of an idea’ and ‘innovation’ implies ‘implementation of an idea’.

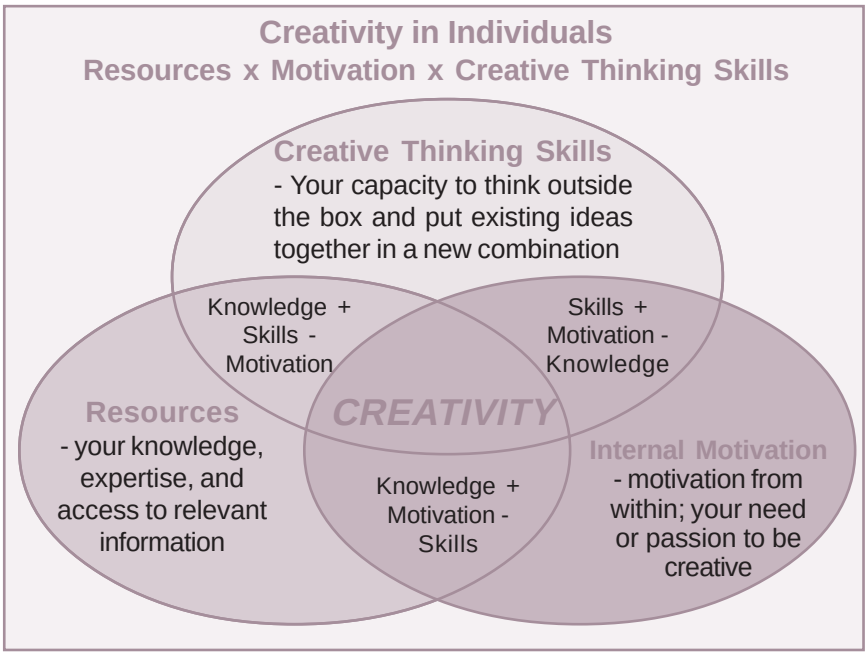
Explaining the key difference between the two concepts, Theodore Levitt says: “A powerful new idea can kick around unused in a company for years, not because its merits are not recognized, but because nobody has assumed the responsibility for converting it from words into action. Ideas are useless unless used. The proof of their value is only in their implementation.”

> *“Anyone can make the simple complicated. Creativity is making the complicated simple.”*
>
> **- Charles Mingus**

For instance, Daniel B. Fox at GE’s ‘bootlegging’ (a term GE uses to refer to R&D freedom given to its employees) developed a hard plastic which is today known as Lexan, one of GE’s greatest products. There was not enough interest in the company to develop this kind of a plastic, but the bootlegger, Fox, worked on it off-line and today lexan polycarbonated plastic is one of the products GE sells successfully.



"Some people have ideas. A few carry them into the world of action and make them happen. These are the innovators," says Andrew Mercer, an innovator. Nothing is greater than an idea whose time has come. Time is important in converting an idea into action. Some excellent creative ideas die in mother's womb because they are brought forth prematurely in terms of time. Time factor is important in conversion of creativity into innovation.



Characteristics of Creative People

What does it take to be creative? Which personality traits make for success? Creativity researchers like Howard Gardner and Mihaly Csikszentmihalyi have observed 'fluency of ideas' and other similar traits as characteristic of creative individuals, especially in the context of being able to train people to enhance these characteristics.

A significant contribution concerning the 'Traits of Creativity" is a study by J P Guilford, in which subjects were put through tests measuring various aptitudes or skills and rated for creativity. If the score for an aptitude or skill correlates well with creativity ratings, then that aptitude or skill is held to be an important characteristic of creative people. The results of the study are summarized below:

Category	Example(s)
Ability to see or sensitivity to problems	Can state difficulties or deficiencies in common products or in social institutions, make judgment that desired goals in a described situation have not been achieved
Fluency of thinking	Able to think well and effortlessly
• Word fluency	Can easily state words containing a given letter or combination of letters
• Associational fluency	Can easily state synonyms for a given word
• Expressional fluency	Can easily write well-formed sentences with a specified content.
• Ideational fluency	Can easily produce ideas to fulfill certain requirements, for example to name objects that hare hard, white and edible, or to write an appropriate title for a given story.
Flexibility of thinking	Can easily abandon old ways of thinking and adopt new ones.
• Spontaneous flexibility	Can produce a great variety of ideas. For example in suggesting uses for a brick, subject can jump among categories, from building material to weight to missile to source of red powder.
• Adaptive flexibility	Can generalize requirements of a problem to find a solution. For example, in a problem of forming squares using a minimum number of lines, can abandon the usual idea that all squares have to be the same size.

Originality Remote associations Responses are judged to be clever	Comes up with ideas that are statistically unusual Forms associations between elements that are remote from each other in time, or remote from each other logically
Redefinition – gives up old interpretations of familiar objects and uses them in new ways	Which of the following objects could best be used to make a needle: pencil, radish, shoe, fish, carnation? (fish - use bone)
Elaboration – can fill in details given a general scheme	Given a general task, fill in the detailed steps. Given two simple lines, draw a more complex object
Tolerance of ambiguity	Willingness to accept some uncertainty in conclusions, not using rigid categories
Interest in convergent thinking	Thinking towards one right answer, as in solving a mathematical problem stated in a textbook
Interest in divergent thinking	Open-ended thinking, where there is not a single right answer

Source: J.P. Guilford, 'Traits of creativity' in H.H. Anderson (ed.), *Creativity and its Cultivation*, Harper, 1959, pp 142-61, reprinted in P.E. Vernon (ed.), *Creativity*, Penguin Books, 1970

How to transform Creativity into Innovation?

When creative motto gets going, it can blow up into innovation. Through innovation, a stream of new and improved, value-added products and services that increase the probability of better results can be achieved.

There are various ways of extracting the innovative ideas, such as:

- Ideas Screening
- Portfolio Management Matrix
- Screening Matrix for Ideas

Dissection of Ideas

There are two phases in creative thinking: Imaginative phase and Practical phase. The imaginative phase involves generating new ideas using 'divergent', 'lateral' or 'intuitive' thinking. These skills pertain to getting many ideas and are discussed in greater detail in the subsequent section. After collection of a large number of ideas, the practical phase begins to assess the idea to finds its suitability for practical application.

For innovative ideas to be generated during the imaginative phase, soft thinking can be useful. What is soft thinking?

SOFT THINKING: Soft thinking comes from the right side of the brain. It involves generating diverse and variety of ideas that could result because of the following:

– METAPHOR
– DREAM
– PLAY
– FANTASY
– HUNCH
– HUMOUR
– DIFFUSE
– AMBIGUITY

Soft and hard thinking are the two important sides of a coin. Because, soft thinking gets us lots of ideas. All these ideas that we have gathered are a result of allowing our brain to play and think freely of as many ideas as possible. In the imaginative phase, the focus is there on 'thinking something different'. These ideas may be practicable or not. To find out its applicability, we use our judgment in the second phase although we did not allow our judgment to interfere previously.

Now, it is time to enter the second phase, the practical phase. Now we have to apply the hard thinking that enables us to decide on what is the most suitable idea. During the practical phase, we follow 'hard thinking'. What is hard thinking?

HARD THINKING: Hard thinking comes from the left side of the brain. Hard thinking is a result of:

– LOGIC
– REASON
– WORK
– REALITY
– ANALYSIS
– PRECISION
– FOCUS
– CONSISTENCY

The practical phase begins after idea generations by using the divergent, lateral, intuitive and angel's advocate skills. After generation of ideas, most crucial aspect that we need to confront is which idea or ideas are worth picking and which one worth dropping. It seems to be simple but difficult to practice.

Hence, the next step is to think on 'How to make the choices?' And 'How to convert Creativity into Innovation' - mostly deals with the practical phase, which involves two phases.

- Idea Screening
- Implementation Plan

Once several ideas are generated, one needs to know what to pick up and what ideas to discard. Unless there are some tested techniques and defined guidelines, 'idea screening'

cannot be carried out successfully. Most of the ideas and suggestions are creative. But, 'creativity' alone cannot be the sole criterion for assessment of a good idea for application. In order to assess the suitability and aptness of the creative idea, we are required to assess each idea on two major parameters:

- Whether the idea is creative?
    - Low; medium; high
- Whether the idea has compatibility with the organization's objectives and needs?
    - Low; medium; high

In order to measure and analyze which idea is more suitable and which idea is more compatible with the situation, there are various techniques that can be used. Among those, the following two matrixes are most powerful and useful:

- Portfolio Management Matrix
- Screening Matrix for Ideas

Trying out these techniques would enable us in analyzing the significance of ideas to our organization. Both these matrices keep focus on quality of creativity (attractiveness of idea) and quality of compatibility. We describe below the criteria of attractiveness and the criteria of compatibility:

1. Criteria of Attractiveness

    Originality, Simplicity, User friendly, Easy to implement, Elegant, Difficult to copy

2. Criteria of Compatibility

    Compatible with Company objectivity, Available financial resources, Available human resources, Corporate image, Ability to protect (e.g. patent), Needs to solve problem

Choose the one which is most creative and most compatible…

A SHORT QUIZ

Let us take a short quiz to explore certain basic notions of creativity and innovation. Please take some time to respond to the following questions. We will share with you what researchers have to say on these issues in the following page.

1. Not every smart person is creative	YES [ ]	NO [ ]
2. The older people are less creative than the younger people	YES [ ]	NO [ ]
3. Creativity is not one ability but whole cluster of abilities	YES [ ]	NO [ ]
4. The creative act is essentially solitary	YES [ ]	NO [ ]
5. You can't manage creativity.	YES [ ]	NO [ ]

Answers :

What Creativity Research has to Say on the Quiz Questions

1. YES

Intelligence and creativity go hand in hand only to an extent. An individual must have enough intelligence to do the job. But beyond that (say a modest threshold of IQ of about 120), intelligence and creativity are not linked.

2. NO

Age and creativity have no relation i.e.; age is never a constraint to creativity. Creativity may exist within any age group. With age individuals gain valuable experience and expertise that enable them to perceive patterns that may not be readily apparent to the younger and less experienced. But expertise can also limit individuals' thinking when they feel that "they know it all".

3. YES

Creativity includes a number of abilities. First is fluency, that measures the person's ability to come out with a number of solutions to the given problem. Second ability can be variety. Third creative ability is originality. And there are few other abilities like, ability to sense problems, ability to understand from the roots, ability of having an insight.

4. NO

There is no doubt that there have been very highly creative individuals. But most of the time the inventions are not the output of just one person's work. Only when a group of individuals come together with complementary skills, there is synergy and therefore some excellent inventions.

5. NO

As a manager and administrator, you can create conditions for creativity to occur. That's why while some managers complain about the absence of skills in their groups, other managers are able to obtain creative outputs from the same group of individuals. They do this by putting in place tools and techniques for idea generation and translation of ideas into innovations.

2 Mental Lock

Discovery consists of looking at the same thing as everyone else and thinking something different. Why don't we 'think something different' more often?' There are several reasons, but the first and foremost reason is, 'we are mostly caught in the mental lock'.

"The brain is brilliantly uncreative in the sense that it will use the same pattern again and again under all circumstances," believes Edward de Bono ("Creativity and Innovation". We must know how to unlock the 'mental lock' first.

We are creatures of habit when it comes to the business of living – everything from doing paperwork to tying our shoelaces. These routines are indispensable. Staying on routine thought paths enables us to do the many things we need to do without application of thought.

There are three valid reasons why we choose not be creative:

- We don't need to be creative for most of what we do
- We are not taught to be creative
- Our own belief system prevents us from being creative

We don't 'think something different', because we are taught to be 'logical' with 'sound reasoning' and 'precision' to our approach.

We are taught and we trust the words:

- Find the 'right answer'
- Follow the rules
- Be practical
- Don't be foolish
- Avoid ambiguity
- Erring is wrong
- That is not my area

Thus, 'status-quo' is followed by most of us, most of the time. When it comes to government sector, 'status quo' has become a compulsion rather than an exception. The bureaucratic rules provide less space for creativity. But this 'less space' is sufficient for those who believe in creativity. It is not 'lack of space', but 'lack of will' that does not allow the flow of creativity.

Lack of will and self-presumed inhibitions, added with complacency, are the real cause. Let us look at some examples that help us understand how to unlock the mental block.

Emptying the mind of any preconceived ideas or notions is essential for creativity to happen and flourish.

ZEN MASTER'S WISDOM

"Once we rid ourselves of traditional thinking, we can get on with creating the future." **— James Bertrand**

An American business consultant visited a Zen Master in Japan, traveling all along from San Francisco. He wanted to learn 'Zen' to make money. They talked for a bit, and then came time for tea. The Zen Master poured some into American's cup. Even after the cup was full, he continued to pour. The cup overflowed and tea spilled out onto the floor.

The American consultant said in anxiety, "Master, you must stop pouring; the tea is overflowing – it's not going into the cup."

The Zen Master replied, "That's very observant. The same is true with you. If you are to receive any of my teachings, you must first empty out what you have in your mental cup – lots of thoughts of American business practices!

You can't fill hot and fresh tea in the cup filled with cold and stale tea!

We need the ability to unlearn what we know – first create vacancy in your mind then fill it!

Success depends on doing things differently. This requires creativity and innovative mettle even in doing small things.

GORDIAN KNOT

***"There's a way to do it better—find it."*— Thomas Edison**

Can you figure out this figure? Make some wild guesses…

In the winter of 333 BC, the Macedonian general Alexander and his army arrive in the Asian city of Gordium, to take up winter quarters. While there, Alexander hears about the legend surrounding the town's famous knot, the 'Gordian Knot'. A prophecy states that whoever is able to untie this strangely complicated knot will become the King of Asia. This story intrigues Alexander, and he asks to be taken to the knot, so that he can attempt to untie it. He studies it for a bit, but after fruitless attempts to find the rope ends, he is stymied. "How can I unfasten the knot?" he asks himself. He gets an idea: "I'll make up my own knot-emptying rules." He pulls out his sword and slices the knot in half. Rest is history.

Asia is fated to him!

Children repeat what the teacher says.

"Two ones are two; Two twos are four…

Teacher tell me the truth, you know it for sure?

Or your teacher said so?"

Dare challenge the assumptions – even the basic ones! So, thinking differently is the key to being creative.

Some Common Mental Blocks

Creativity is the ability to look at the same things everyone else does, but see things differently and find hidden connections to create something new. Obviously, creativity is immensely important, but we often place mental blocks that inhibit our creativity. Gary Davis ("Blocks and Barriers: Are They Squelching Your Creativity?") lists out the following potential creativity-squelchers, and counter-measures to them.

Habit: The first and most obvious barrier is *habit*—our acquired patterns. Once learned, these habits are tough to break, but that is just what we must do to see clearly and create new possibilities.

Recognize these habit-related squelchers?

> "We've never done it before."
>
> "We did all right without it."
>
> "It's been done that way for 20 years, so it must be good."

The ability to form habits and expectations is necessary for survival, but when it comes to creativity, habit can be a curse.

When tackling a problem, take a few seconds to ask yourself, "Am I responding out of habit? Can I find a better, more innovative solution?"

Perceptual Blocks: Perceptual blocks also originate in learning and habit. Our accustomed way of perceiving things interferes with the ability to see new meaning, relationships, methods or applications. Psychologists use the terms "functional fixity" or "mental set" to describe this predisposition to perceive things in certain ways. For example, based on symptoms that seem familiar, a physician, scientist or executive may persistently misclassify a problem and treat it incorrectly.

Have you heard these examples?

"It's too early (or late)."

"We're too small (or big or new) for that"

"No one uses this method for our type of project."

Once you get over a perceptual barrier and come up with a creative solution, you may kick yourself for not having seen it earlier.

Consider these puzzles:

1. The police entered a gym containing five wrestlers just as the dying man looked at the ceiling and mumbled, "He did it." They immediately arrested one of the wrestlers. How did they know who was guilty?

2. Remove six letters from ASIPXPLETLTERES. What word is left?

(Answers at end of this chapter)

Perceptual blocks are difficult to overcome, but it helps to stay flexible, keep an open mind and continually try to see a problem from different angles.

Rules and Traditions: From the family to the laboratory to the international corporation, all social groups must have rules, regulations, policies and traditions to guide personal and group behavior. Unfortunately, too often "guide" actually means "restrict" or "inhibit."

One tradition-based barrier stems from the *status hierarchy*. Lower-status people are reluctant to suggest ideas to people in higher positions, due to insecurity and fear of evaluation. Likewise, higher-level people frequently resist ideas that threaten the hierarchy ("Hey, let's make *everybody* a vice-president!").

A second tradition-based obstacle is the *formalization* barrier—the degree to which rules and procedures are enforced. If group members must comply strictly with procedures, creativity will suffer.

Procedural barriers are policies and regulations—written or unwritten—that inhibit

innovation. For example, are research administrators promoted for their analytical skills, or their ability to foster a creative atmosphere? Does planning tend to be short-term or farsighted? Do decision-makers avoid expenditures that don't produce an immediate payback? Do they micro-manage the development of an innovation?

Consider these squelchers:

> "We can't do it under the regulations."
>
> "That's not our job (role, responsibility or department)."
>
> "It's not in the plan."
>
> "Let's form a committee!"

If a rule, policy or procedure restricts innovation, I'd suggest becoming a revolutionary. Challenge the rule. Roger von Oech, author of *A Whack on the Side of the Head*, recommends holding "rule-inspecting" and "rule-discarding" sessions in your organization.

Cultural Blocks: Cultural blocks can be summarized in two words: conformity pressures. It simply is uncomfortable to be different, to challenge accepted ways of thinking and behaving. We learn that it's good to be correct, logical and practical; to follow rules and avoid mistakes; and that "play is for kids." Creativity requires violating all of these norms.

Some typical squelchers:

> "Don't play around."
>
> "Don't rock the boat."
>
> "Don't step on any toes."
>
> "It will offend."

Creative thinkers, by definition, are not strong conformers in their problem solving.

Emotional Blocks: Familiar emotions that can "freeze" our thinking include anger, fear,

anxiety, hate and even love. Some are temporary states, possibly caused by problems with co-workers, bosses, financial strains or difficulties with spouses or children. Other emotional blocks are chronic states of insecurity, anxiety and fear of failure and criticism.

A squelcher related to emotions:

> "No newcomer is going to tell me how to run this laboratory!

If you are upset, come back to the problem when you can concentrate. Remember that innovative thinking requires risk-taking and making waves; you must be sufficiently confident to risk criticism and even failure.

Resource Barriers: Resource barriers, including a shortage of people, money, time, supplies or information, seem an unnecessary block to creativity. Innovation requires such resources to a greater extent than routine organizational procedures. If you are hearing, "It's not in the budget" or "We need more lead time," perhaps minor revisions to budgets, scheduling or priorities would permit more effective work on innovative projects.

Many of these blocks are subtle but effective squelchers of imagination and innovation. Again, the best defense is to be aware of these forces and not let them flatten your innovative thinking. To help yourself see past the barriers, cultivate an attitude of "creative discontent"—a belief that anything can be improved.

One final thought about self-squelching: If you believe you are not creative, you will be right.

Unlocking the Mental Lock

There are many ways. First one must believe that our mind is brilliantly 'uncreative'. Unless we know how to shift the mode we cannot get into the creative mode. It is like shifting the TV channels. The remote has so many push-buttons.

A whack or shock can make you think different. 'Think differently' is the secret! As mentioned earlier, discovery consists of looking at the same thing as everyone else and thinking something different. Remember, so long you think in terms of 'incrementalism' your mind remains in captivity. Incremental goals do not challenge or stimulate your creativity. If asked to reach books on bookshelves at your shoulder height, then there is not brainpower or creativity used to reach it. If asked to get a book that is just above your head, then you need to stretch a little to reach it. We just have to try a little harder. If asked to reach a book that is, say a meter out of your reach, then you come up with all kinds of creative ways to reach the target: use a chair or a ladder, jump up, get on someone's shoulders, abseil from the ceiling, push the bookshelf down!

'Stretching' is the key to creativity

You stretch only when you can not reach routinely. This gives a shock. Let us call this shock as whack. "Whacks come in all shapes, sizes, and colours," writes Roger von Oech in his book 'A Whack on the Side of the Head'. Whacks have one thing in common, however. They force you – at least for the moment – 'to think something different'. Sometimes a problem or a failure will whack you! Sometimes it will be the result of a joke or a paradox. And sometimes it will be a surprise or an unexpected situation that whacks you. Like strokes, 'whacks' can also be positive and negative. Here are some situations that can trigger your creativity by unlocking the mental lock:

- Your boss tells you that he thinks that you have a special competency in an area you'd never thought much about and assigns you a project – due next week – to help you develop it
- Someone pushes you in the water and you discover that you can swim
- You get fired from a job, and all of sudden you discover the hidden entrepreneurial abilities

- You discover a connection between two things remotely related – fusion is the soul of creativity
- When you observe the second hand of your watch in a mirror (Try it!)
- When you travel to the Paris and you are forced to drive on the right side of the road
- You break your leg and you realize how much you took your ambulatory habits for granted
- It could be a question you never thought about:
    - If camels are the ‘ships of the desert’ why aren’t tugboats the ‘camels of the sea’?
    - If there were fewer sponges would the ocean still be deeper?
    - Which way is ‘clockwise’ on a digital watch?
    - If we call oranges as ‘oranges’ (by colour), why don’t we call banana ‘yellow’ or apples ‘red’?

Incremental and Transformational Thinking

Incremental thinking is appropriate when one feels essentially satisfied with the status quo and simply wants modest improvements. In an organizational context, incremental thinking is the core of continuous improvement programmes. Incremental change is step-by-step movement along the path by which you intend to reach your goals and realize your values. Each step within the current system aims at an improvement in degree. Most people are able to think incrementally as they plan to do more of the same and do it better. Incremental thinking works for dealing with “maze problems, which step-by-step movement along a path will get you to your goal. It is when incremental changes fail to adequately advance your goals that a shift to transformational thinking is in order. Then it is time to “knock down maze walls” and rebuild.

Rather than merely taking incremental steps toward change, transformational thinking involves forming a new concept of the current system. This results in a break in thinking. Transformational thinking is radical in that it changes established procedures. It challenges the assumptions underlying such statements as, “We’ve always done it this way.” Transformational change is based on a new paradigm, a different way of thinking. It replaces an established framework and aims at renewal rather than refinement. Transformation is a change, not in degree (as in incremental thinking), but in kind. Transformational thinking requires a cognitive leap and the emotional will to risk not knowing what’s next. You land in unfamiliar territory. Transformational thinking “breaks the mold.”

Incremental vs. Transformational Thinking

Incremental	Transformational
• Works within the current system	• Replaces established framework
• Step-by-step improvements	• A different way of thinking
• Changes in degrees	• Changes in kind
• More of the same, only better	• Challenges assumptions
• Like working through a maze	• Like knocking down walls and rebuilding
• Lower risk	• Higher risk

Source: Herb Kindler, “Clear and Creative Thinking: Your Key to Working Smarter”, A Fifty Minute Series Book

Kaizen and Innovation

Japanese word “Kaizen” means improvement. And this is a popular word in the industries worldwide which is used with innovative methods. The Kaizen method signifies continuous incremental improvements. The basic assumption is that every aspect of our life deserves to be constantly improved and this can be done by investing time, energy and effort in gradual incremental change. It must be remembered that change and desired results cannot be achieved overnight. Constant and consistent efforts are building blocks for

attaining efficiency and effectiveness. By doing so, we would also meet the expectations of the citizens/customers in a superior manner.

Kaizen and Innovation are both the outcomes of creativity. But researchers point out that they are distinctly different. Kaizen stands for an incremental change while innovation for a quantum change. Innovation refers to a breakthrough development. Obviously such a big step can happen only once in a while – involving an individual or a team.

Let us understand *Kaizen* in some detail,

Kaizen refers to small ongoing steps, mostly involving everyone for making continuous improvements. An accumulation of small steps brings about an incremental change.

Kaizen is reflection of a positive attitude; one may call it a 'Kaizen Mind'. It is premised on certain assumptions:

- The existing operation always has a lot of room for improvement
- The existing facilities and methods can always be improved by expending some efforts
- The accumulation of small improvements makes a big difference - an ocean is ultimately made up of several drops of water

Innovation cannot be practiced everyday. But Kaizen can be practiced everyday as an ongoing practice. And everyone can initiate kaizen. For this reason, the Japanese pursue both Kaizen and Innovation with equal zeal, which has been the secret of their success.

Kaizen has five basic elements:

1. Team work
2. Self discipline
3. Morale improvement
4. Quality circles
5. Feedback for improvement

The need for 'change' creates a void that 'creativity' fills. In absence of creativity, 'change' doesn't take place in real sense – status quo is no change. It is only when things change and creative ideas come into existence, it will no longer be possible to solve current problems with yesterday's solutions. Over and over, people are finding out that what worked two years ago will not work today.

What was applicable yesterday is not applicable today
and for sure will not be relevant tomorrow.

In the early 1980s, a citrus grower lost 85% of his stock due to severe freezes two consecutives years. This loss forced him to re-think his whole citrus-growing concept. He realized that the trees planted by his grandfather in the 1930s and 1940s had been placed fairly far apart because land at that time was cheap. Land values have skyrocketed since then, and he realized that if he wanted to stay in the citrus business he had better re-think his concept. He decided to use new hybrids and irrigation techniques in order to plant the trees close together. As a result, not only has his yield increased significantly, but also the closeness of the trees has helped to inhibit freezing. The whack (the loss due to freezes) was painful at the time, but it provided him with the impetus to 'think something different'.

Let us get rolling!




Answers to puzzles:

1. The other four wrestlers were women.
2. Try removing S-I-X L-E-T-T-E-R-S.

3 Utilizing your Brain Power

Creativity does not crop up only in unorganized and unusual situations. An effective step to stimulate creativity is to foster creativity in organized situations, by application of certain skills and processes so that creativity can be tailor-made to fit into the situations.

Brain Power

If one has to be creative, one has to put in efforts to understand how the Brain can ignite creative thoughts. This makes all the difference!! The employees should understand the importance of nurturing the skills and processes that maximize their creative potential.

Brain, in normal course, follows the old pattern. It takes you again and again to the old pattern, unless you know how to shift from one channel to the other. For this, one must fully know the composition of our brain and its working mechanism. One can use the brainpower better by understanding its composition, and capabilities. Here is the 'Brainpower Manual'. There are two hemispheres of the brain – left brain and right brain.

Left

- Logic
- Reasoning
- Rationale
- Evaluation
- Analysis
- Calculations
- Systematic
- Precision
- Linear
- Realism

Right

- Intuition
- Images
- Colors
- Dreams
- Delusions
- Emotions
- Haphazard
- Holism
- Zigzag
- Fantasy

Most often we use the left side of our brain, leaving the right side rusting. We believe in 'realism'. We want to be logical, and justify our viewpoint through reasoning. We want to maintain rationality in our approach. We analyze things and prefer a mathematical approach seeking precision, little realizing that all this takes us away from creative process.

In sharp contrast, our intuition, images, colours, emotions and passions come from the right side of the brain. Anything that can fantasize, including creativity and ingenuity, comes from the right side of the brain. Our dreams, imaginations and fantasies dwell in the right hemisphere of our brain. Though it is much easy to live in illusionary and colourful dreamy life, we prefer realism to fantasy when it comes to making a choice. The first and the foremost reason for our being what we are, is our childhood education.

Children enter school as 'question marks' and come out as 'periods'.

Where do we learn how to set our mental channels? One important source is our prescribed education. There, we learn what is right and what is not. We learn many of the questions we use to look into our surroundings. We learn where to search for information, which ideas to pay attention to, and how to think about these ideas. Our educational training gives us many of the concepts we use to understand the world.

This way we prefer to be precisely wrong than vaguely correct.

Little efforts are made to help the child to make his own discovery. Most of the forced inputs strangle originality and kill the inborn intuitive instincts. First as children and later as managers, we get the message from teachers and bosses, 'Do as I do!' We begin to learn that 'passion', 'imagination', and 'emotion' have no place in our real world. We are told, not once but repeatedly, 'Don't live in a dreamy world', 'Don't make castles in the air', 'Don't count the chicks before they hatch'.

But, creativity is all about daydreaming, building castles in the air and counting the chicks, which are not hatched. Appears odd? But, that is the way creativity breeds. Creativity is the product of 'Soft thinking' that comes from right side of the brain.

Soft Thinking	Hard Thinking
Metaphor, Dream, Humour, Ambiguity, Play, Fantasies, Approximation, Paradox, Diffuse, Hunch, Delusion…	Logic, Reasoning, Precision, Consistency, Work, Exact, Reality, Focused, Analysis, Specific…

As we can see, things on the hard side have a definite right and wrong answer. On the soft side, there may be many right answers. By and large, the soft thinking is a little more difficult to grab onto – like a handful of water!

Soft thinking has many of the characteristics on the 'Soft' list: It is metaphorical, approximate, humorous, playful, and capable of dealing with contradictions. Hard thinking, on the other hand, tends to be more logical, precise, exact, specific, and consistent. Interestingly, soft thinking tries to find similarities and connections among things, while hard thinking focuses on their differences. For example, a soft thinker might say that a cat and refrigerator have a lot in common, and then proceed to point out their similarities – they both have a place to put fish, they both have tails, they both come in a variety of colours, they both have a lifetime of about fifteen years or so, etc.

The hard thinker would say cat is an animal and refrigerator is equipment, and establish the cat and refrigerator as two different things.

Combining Reasoning & Emotion

Experts in the field of emotions concede to the emotional and rational dichotomy and yet their findings lead to the conclusion that feelings are indispensable for making rational decisions. There is increasing neurological evidence to support this idea that emotions and rationality can co-exist.

In his book "*Emotional Intelligence: Why It Can Matter More Than IQ*", Daniel Goleman writes that we have "two brains, two minds – and two different kinds of intelligence: rational and emotional." "The old paradigm held an ideal of reason freed of the pull of emotion. The

new paradigm urges us to harmonize head and heart. To do that well in our lives means we must first understand more exactly what it means to use emotion intelligently." "Through emotional education, crucial qualities such as impulse control, empathy, self-awareness, and sensitivity to one's own feelings, as well as the feelings of others, can be encouraged and supported."

Neuroscientist Antonio Damasio's contributions also provide powerful evidence that it is artificial to separate thinking and feeling. In his book, *Descartes' Error* , he reveals that if the parts of the brain that deal with emotion are [physiologically] damaged, one ends up not being able to make good rational decisions. The two areas are interlinked. *Descartes' Error* makes the case neurologically why the separation between rationality and emotion makes no sense.

So, what does it mean? It means creativity derives from balancing intellectual knowing, physical knowing, and emotional knowing. Each of these begins with an awareness, a self-knowing. When these three elements of wisdom communicate, one is able to make conscious choices – instead of doing the knee-jerk, unconscious thing. Scientific research is already showing that learning does not take place without an emotional component.

It is important to remember…

"Creativity doesn't come from the human mind. The human mind may give it form, but the deep inspiration for it – the essence of it – always comes out of that state of alert presence: not the mind, nor thought."

Sparking Your Creative Imagination

According to Debbie Ellision ("Flowing Creativity"), there are certain steps involved in the creative process. Like a plant, it must be treated with tender loving care, nourished, and fertilized.

The first step is to plant the seeds by acknowledging your creative potential. Affirmations and visualizations are very important in this process and for personal growth. Every thought

you think creates your future. An affirmation is a way of programming your mind to act in a particular way. To affirm is to make firm. An affirmation is a positive statement used to attain what you desire. It is always stated in the present tense, as if you already have it. It is more powerful if written and repeated every morning and every night, preferably at bedtime, or throughout the day. Some affirmations to get you started:

I deserve and now have a successful faux finishing business.

I am willing to experience my creative energy.

I treat each new problem I encounter as a new door to be opened, and an opportunity to be creative.

Creative visualization is another technique to help achieve your goals and dreams. It is a way of using the power of your imagination to create what you want in your life, sort of a mental rehearsal. The mind cannot distinguish between imagined or real events. If you imagine the way you want your life to be, your mind believes that is the way it is.

Begin by relaxing your mind and body. Sit or lie down comfortably. Close your eyes and take deep breaths, concentrating on the in-breath and then the out-breath. Next, use progressive relaxation to relax your body. Starting with your toes and moving to the top of your head, relax each part of your body until you are fully relaxed. Now, state your goal or desire to yourself in as much detail as possible, always in the present tense, using only positive words. Picture yourself doing or having whatever it is that you want. As you visualize, see, hear, and feel your surroundings. Spend about ten or fifteen minutes “being there.” Then relax and focus again on your breathing, returning slowly to your physical surroundings. Practice this in the morning and evening.

The second step in the creative process is fertilizing the soil. Lay the groundwork by preparing yourself with the tools you need to be successful. Stay abreast of the trends and latest techniques in decorative painting and faux finishing. Keep a notebook with you at all times to record ideas, questions, things to do, and inspirations. Take classes and workshops, whatever is available to stay on top of things. Keep notebooks of articles,

ideas, pictures cut out of magazines, newspapers, etc. Visit show houses, look through magazines for ideas, study other faux finishers' work, and read books on faux finishing and related subjects.

The third step is to work diligently in the garden, absorbing yourself in your work. Work with concentration and focus, being always open to new ideas and ways of doing things. Brainstorm with yourself and try to think in your most child-like, imaginative way.

Germination is the fourth step. Come up for air. Stop working on the project at some point to give yourself some objectivity and distance. Let the energy incubate and grow. Sometimes when you stop concentrating on something and engage in other activities, you allow it to assimilate in your subconscious mind, and suddenly things begin to sprout.

The breakthrough is the final step. Eureka! Aha! The solution becomes suddenly, immediately apparent, like a light going off in the darkness. The plant breaks through the ground in a glorious burst of life. In The Courage to Create, Rollo May describes it this way, "If only for that moment, we participate in the myth of creation. Order comes out of disorder, form out of chaos, as it did in the creation of the universe. The sense of joy comes from the participation, no matter how slight, in being as such."

Some ways to stimulate creativity

- Choose to be creative. It is a choice! Acknowledge that your potential is limitless, your imagination boundless.
- Think like a child. Think back to your childhood. Adopt a playful, childlike attitude. Be that curious, fearless child, open to all life has to offer and soaking up the environment and wisdom around you.
- Be willing to seek out a new path and open to new ways of doing things.
- Be open to others' viewpoints. Someone else may have an idea or way of looking at a situation that you never thought of or it may trigger an idea in your mind.

- Don’t be afraid to experiment. Do things in different ways. Use different media and tools than you’re used to working with. Experiment with colors and textures. Do something crazy.
- Don’t be afraid to make a mistake. Some of the greatest discoveries were actually mistakes that had extraordinary results.
- Don’t listen to other people. Follow your heart. People will tell you that you’re wrong, you’re crazy, it will never work (they told the Wright brothers it would never fly!). You may meet a lot of negative energy. Stay positive and resolute in your intentions.
- Don’t conform. A conformist forms him or herself “with” (con). A creative person is a non-conformist, a rebel, an instigator of change. Nothing was ever created by a conformist.
- Don’t focus on the outcome. Experience the joy of creating without worrying about the outcome.
- Be positive and optimistic. Eliminate self-criticism that little negative voice inside that tells you you’re doing it wrong. Catch that little negative voice and turn it into a positive.
- Be willing to take small and large risks, and challenge your understanding of your situation. Do not judge the results of taking a risk.
- Establish a creative work environment. Your workplace should be as uncluttered as possible; have good lighting, preferably from windows and natural, not fluorescent bulbs; and maintain proper ventilation and balanced air temperature. Install a good quality stereo system and play jazz, new age, or classical music; classical music has been shown by researchers to heighten creativity and IQ levels. Little extras to stimulate creativity are having fresh flowers in the room; hanging inspirational artwork, sayings, prayers, or motivational quotes; strategic placement of comfortable chairs, overstuffed cushions, even a hammock; and the use of aromas, such as scented candles, incense, potpourri, and/or essential oils.

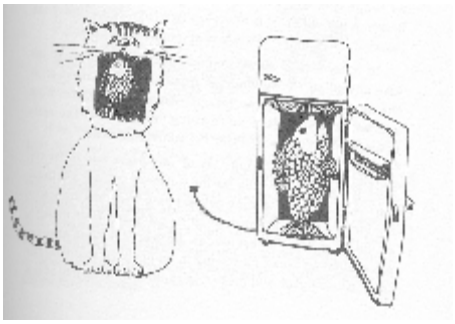
Leonardo Da Vinci, one of the most creative, brilliant, fully developed human beings ever to live, emphasized using all the senses to stimulate creativity. To master creativity, one need only study his life and learn from his example. Freud said of Da Vinci, “Indeed, the great Leonardo remained like a child for the whole of his life…Even as an adult he continued to play and that was another reason he often appeared uncanny and incomprehensible to his contemporaries.”

4 Divergent and Convergent Thinking

For maximizing the benefits in organizations where the resources are limited, creative acts are essential. This necessitates instilling of creative skills in the team members.

There are two skills of creativity:

- **Divergent Thinking**
- **Convergent Thinking**



1. Divergent Thinking

Divergent Thinking is just opposite to Convergent Thinking, which in simple understanding means 'too focused'. Obviously, divergent thinking stands for 'blurredness' or 'haziness'. It requires one to move from central to blur. When you are too focused the object appears sharp. But you see too little when you are too focused. When you make wider the range you see more but things get blurred. Convergent thinking gets you sharpness. It is good for making analysis. Divergent thinking is good for getting a wider range – a variety of ideas! Though things are not sharp, yet you see wider and farthest. You see many things, blurred though. The best way to get good ideas is to get a lot of ideas. Divergent thinking makes this possible.

'What if?' technique is the most powerful phrase that leads to many possibilities. This questioning technique gets your imagination going. There are two simple steps involved:

Step # 1: Simply ask 'what if?' and then finish the question with some contrary-to-fact condition, idea or situation.

Step # 2: Answer the 'what if' question.

The 'what if' question can be whatever you wish. The nice thing about 'whatiffing' is that it allows you to suspend a few assumptions, and get into an imaginative frame of

mind. In imaginary frame of mind you dare dream high without bothering for practicality.

Remember a simple fact. Two persons – your Child and your Judge, carry out your thought process. Your Child takes you to a dreamy world of fantasy where you see every thing, which is otherwise illusive to logical mind. Child doesn't bother for practicality but loves fantasies.

The other player in your thought process is your Judge. A judge is judgmental. A judge knows what is right and what is wrong; what is practicable and what is not! Most of the time our creative process through 'divergent thinking' is disturbed by this judge as it goes on cautioning us not to build castles in air and be practical and logical, following reasoning. If you start listening to him, your judge will never allow your child to fantasize fantasies.

So, the trick is, 'keep your judge away' during the imaginative phase of divergent thinking. It is only after a number of 'what if?' questions to your child you must allow your judge to step in, not before.

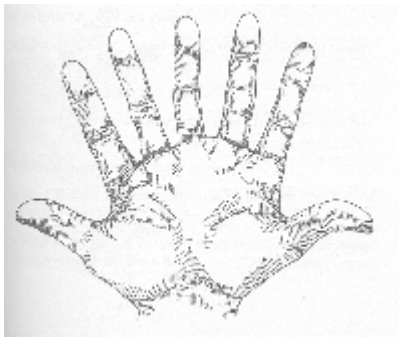
Following are the 'what if?' sample questions to your child:

- What if people exuded a terrible smell from all their pores whenever they behaved unethically?
- What if men also deliver babies?
- What if we elected our leaders by lottery?
- What if we live 200 years?
- What if factories floated on water?
- What if animals fly in the air like birds?
- What if there were five sexes?

- What if people didn't need to sleep?
- What if trees developed the ability to move themselves like animals?
- What if…

The most popular Hollywood film, 'Bruce Almighty', was the product of 'What if?' technique. It appears the scriptwriter was toiling with the idea, 'What if God appears and gives us powers?'

Now let us ask and answer one 'what if?' question.



What if we had seven fingers on each hand?

Allow the child to think… Would we have two fingers-opposing thumbs on each hand? Could we name the seven fingers after the days of the week, as Monday, Tuesday… instead of calling them as thumb, pointing finger!

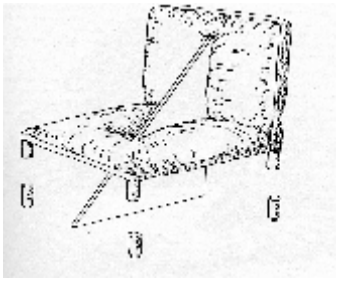
How would seven fingers on each hand affect sports? How would we catch balls? Would we become more sure-handed? Would the seven-finger-hand look too funny? Would seven fingers be advantageous or disadvantageous? These questions now can be addressed to your judge, who will give a rational answer. First allow your child to play in the imaginary phase, then in the second phase – the practical phase – allow the judge to interfere and guide. Not the other way round!

A good way to stretch your imagination is to ask 'what if?' questions to your people in the meetings and encourage them to allow their child to play around and collect many possibilities. Don't allow the judge to interfere when the child is working in the imaginary phase. Wait and watch the wonders! What new assumptions would they bring in? What constraints would they ignore? What basic tenets would they discard? What special twists would they give to it? What special expertise would they add? What innovative changes would they make?

For example, let's suppose that you are the principal of a high school. What if someone with a mindset like Walt Disney was appointed as your adviser? How would he approach in bringing about changes in the conventional way of teaching? What things would change? For one thing, there might be more emphasis on graphics and visual learning. Students would learn through experience, e.g., they might study the Civil War by making scenes of different battles. They would learn history by pretending they were the characters they were studying. The motto would be 'If you don't take risks, you won't achieve what you want.' If you want to bring about drastic changes in the ways of working, allow your people to think like Walt Disney.

Allow your people to recognize their hidden musician, poet, writer, artisan, painter, sculptor etc. We, as boss don't allow our people to be creative and in course of the time they kill their inner artist. If our people are not creative, we are responsible for their being what they are!

- Let us design a new chair. People probably respond like…



- 'It looks uncomfortable.'
- It's impractical. It would fall over as soon as someone tried to sit on it'.
- 'It's ugly.'

Notice that all of the comments are negative. Many people don't ask where the chair is going to be used or what the purpose is? What if it were to be used on the moon or underwater? Would that change your assessment? Instead of finding out 'what's wrong' with a new idea', it's important to focus in on 'what's worth building on?' Sometimes a drawback can serve as a stepping-stone to a practical, creative idea. For example:

- Perhaps the blade is retractable; when you want to keep your shedding dog or cat off the chair, have the blade up. When you want to sit down, retract it.
- Meetings would be shorter and to the point.
- Can be used for punishing the defaulters.
- It's a good chair for three o'clock in the afternoon when everyone feels sleepy in the post lunch sessions.

Here is a golden tip: When you judge new ideas, focus initially on their positive, interesting, and potentially useful features.

This golden approach will not only counteract a natural negative bias, it will also enable you to develop more ideas. But, mostly we keep focus on negative side and kill the bright idea in the womb itself.

The other reason we don't use these tools is that we haven't been taught to. We are encouraged to follow and practice 'status quo'. As people grow older, they get used to the 'What is?' of reality. Once they get used to reality, they dare not enter the imaginary phase, asking 'What if?'

Ability	Nature	Ability-Enhancing Suggestions
1.Sensitivity	Ability to sense problems, Feelings, issues, shapes, sounds etc. in which these are not too obvious	Cultivate curiosity and good taste by giving yourself a broad exposure
2.Guessing ability	Ability to guess, despite, limited information, the causes of a situation, and the consequences of the situation.	Identify the key focus operating upon a situation and project their outcomes.

Ability	Nature	Ability-Enhancing Suggestions
3. Redefinition ability	Ability to restate problems or situations in fresh ways.	Examine the problem as people trained very differently Would. Get people to ask proactive questions.
4. Fluency	Ability to generate any ideas, solutions, alternatives, designs, methods words etc.	Practice listing while making even the ordinary decisions of life.
5. Flexibility	Ability to generate a variety of ideas, solutions, alternatives, designs, methods etc.	Try deliberately to look for different facets of even ordinary situations, different implications of very ordinary choices.
6. Originality	Ability to generate unique or offbeat but appropriate ideas, solution, alternatives, designs etc.	Strengthen fluency. Practice associative thinking.
7. Elaboration	Ability to develop fully the potential of an idea or an insight, developmental and planning ability.	Practice seeing an idea's associative ramifications and their logical linkages.

Divergent Thinking Techniques

Innovative ideas and products result from the application of divergent thinking. Especially if your group is charged with tasks that are not routine, it will need to be able to think outside the box.

The goal of divergent thinking is to generate—and to generate quickly—a wide variety of options. A particularly useful tool for stimulating divergent thought is brainstorming. Brain-storming builds

- Fluency, your ability to produce many original ideas easily
- Flexibility, your ability to come up with many different kinds of ideas.

For a brainstorming exercise to succeed, it's crucial to observe four key principles:

- Focus the brainstorming on an actual problem that your group is trying to solve. In other words, your brainstorming should be bounded by real-world constraints.
- Judgment should be suspended while ideas are being generated. Even the wildest ideas are to be encouraged because the quantity of ideas affects the quality of the final decision.
- Limit the discussion to one conversation at a time and keep it focused on the topic.
- Try to build on the ideas of others wherever possible.

Brainstorming techniques fall into four broad categories: visioning, exploring, modifying, and experimenting.

- **Visioning:** This approach asks you to imagine, in detail, a long-term, ideal solution as well the means of achieving that solution. The idea is to break free of the ingrained practicality that inhibits truly innovative thought.
- **Exploring:** These strategies often use guided imagery—symbols, analogies, and metaphors to describe an ideal scenario as well as to challenge assumptions.
- **Modifying:** Whereas visioning techniques begin by assuming that there are no constraints, modifying techniques begin with the status quo—with current technology or conditions—and seek to make adaptations.
- **Experimenting:** These methodologies help you systematically combine elements in various ways and then test the combinations.

2. Convergent Thinking

The term convergent thinking was coined J. P. Guilford, a psychologist well-known for his research on creativity. Convergent thinking involves the pursuit of a predetermined goal, usually in a linear progression and using a highly focused problem-solving technique. Convergent thinking questions are those which represent the analysis and integration of given or remembered information. They lead you to an expected end result or answer. Thought processes involved while asking and answering these questions are explaining, stating relationships, and comparing & contrasting.

Convergent thinking questions usually begin with these words or phrases:

- Why...
- How...
- In what ways...

Here are the basic steps in a convergent thinking process.

1. Define the problem
2. Do research
3. Determine your objective
4. Devise a strategy (thumbnail sketches help)
5. Execute the strategy
6. Evaluate the results

In convergent thinking, the end determines the means. You know what you are seeking before you begin. For this reason, clear definition of the problem is essential: the most brilliant idea is useless if it does not solve the problem.

Convergent thinking is familiar to most of us through the scientific method, which follows the same basic procedure. It is orderly, logical, and empirical; there are clear boundaries

and specific guidelines. Clearly focused on the final result, convergent thinking is a good way to achieve a goal and meet a deadline.

Convergent thinking is necessary because it (a) provides the knowledge-base upon which divergent thinking operates, and (b) makes it possible to "explore" variability and identify its effective aspects. In the enthusiasm for divergent thinking it is thus important not to forget the contribution of convergent thinking, although it is also important not to overemphasize it. The following table gives examples of vital convergent thinking processes in both the generating and exploring phases.

Examples of the contribution of convergent thinking to creativity

Phase of creative process	**Convergent thinking** (Necessary but not sufficient prerequisites for generation of effective variability)
Generating variability	Accumulating factual knowledge Observing closely Remembering accurately Drawing "correct" conclusions Thinking logically Processing information rapidly
Exploring variability	Recognizing promising lines of attack Zeroing in on potential solutions Seeing limits Being aware of weaknesses Weighing up feasibility Recognizing a solution

Mechanisms For Aiding Convergent Thinking

CLARIFICATORY MECHANISMS

- List the components of the problem.
- Use charts and diagrams

DIAGNOSTIC MECHANISMS

- Factor the problem into sub-problems
- Seek relationship among components of the problem
- List the steps by which one can go from the current situation to a possible solution
- Select out of alternatives by evaluating alternatives
- Work backwards step-by-step from an ideal solution to current reality.

SYNTHESIS-AIDING MECHANISMS

- Put in one place the various strands of thought concerning a problem
- Highlight contradictory elements in the problem situation, or take extreme situations and try to explain them.
- Use a broad conceptual model to organize the information.

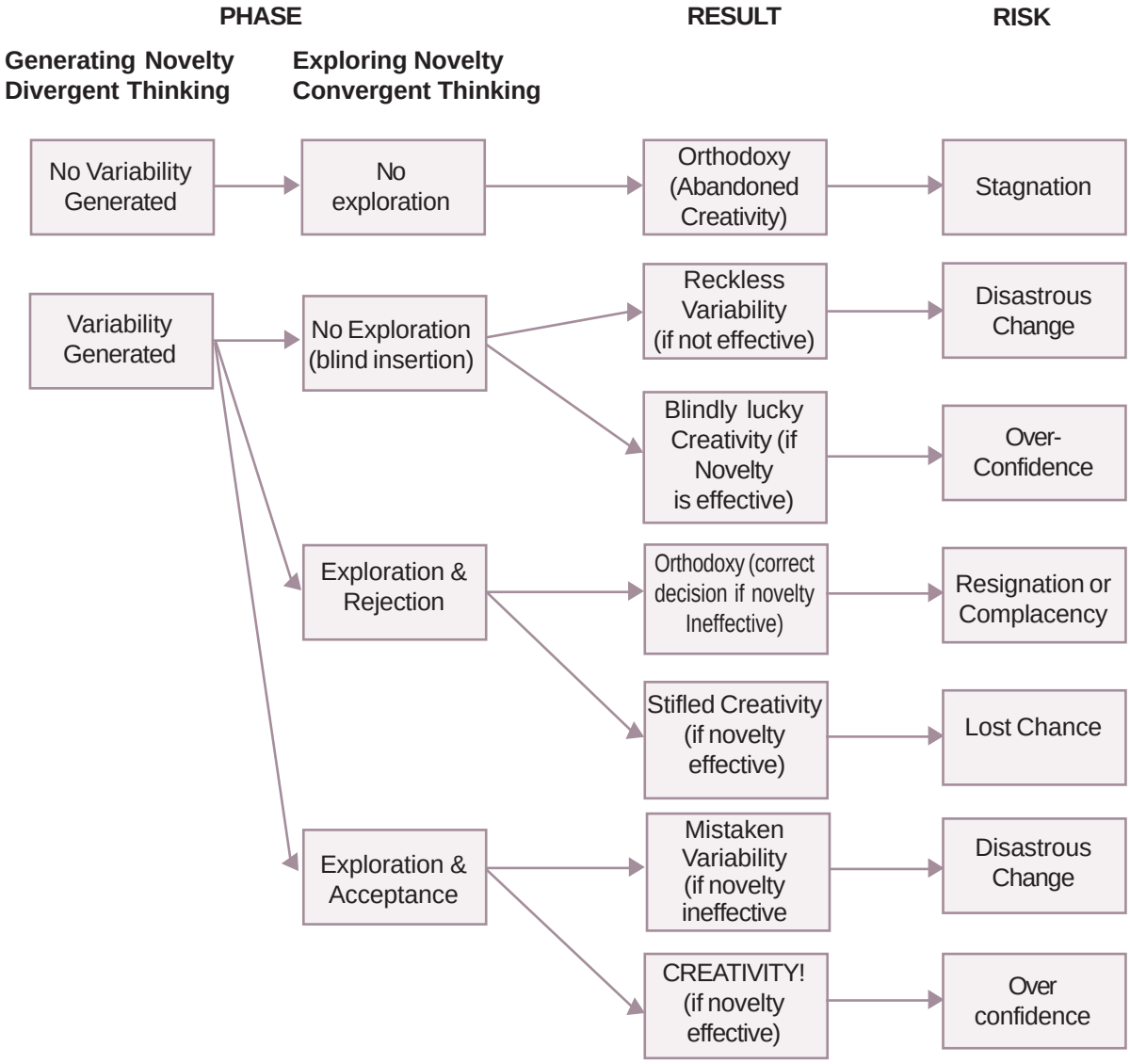
OPTIMIZING MECHANISMS

- Refine the solution
- Add useful components to the solution

How do divergent and convergent thinking work together to generate creativity?

Both divergent and convergent thinking are necessary for the production of effective creativity, and that achievement of such creativity without appropriate convergent thinking brings risks such as over-confidence. How do the two work together? Prof. Arthur Kropley of University of Hamburg, an ardent votary of convergent thinking ("In Praise of Convergent Thinking") explains the consequences of differing combinations of divergent and convergent thinking, through the following figure:

Consequences of differing combinations of divergent and convergent thinking



If no variability is generated (no divergent thinking), nothing changes and orthodoxy rules, bringing, however, the risk of stagnation and similar problems. This is the situation depicted in the first row of the figure. It is, of course, the safest pathway in settings where errors are punished but doing nothing is tolerated without sanctions, but absence of creativity is of no interest to us here.

A new set of possibilities opens up when variability is generated. It is possible for this to be accepted without exploration (i.e., divergent thinking without convergent thinking). If such creativity proves to be ineffective we can speak of “recklessness”, which raises the danger of disastrous change. If, despite the lack of exploration, the creativity proves to be effective, this is more a matter of luck than judgment and we can speak of “blind creativity”, with the danger of over-confidence in the future. Thus, not only does lack of knowledge reduce the possibility of generation of variability in the first place, but even where variability is generated, lack of exploration (convergent thinking) raises the possibility of reckless variability, and exposes the system in question to the risk of disastrous change or over-confidence.

The figure also depicts the various possibilities if exploration does take place (i.e., divergent thinking accompanied by convergent thinking). Where convergent thinking following on divergent thinking leads to a “correct” decision—in the case of convergent thinking we can speak of “correct” and “incorrect”—to implement change, creativity occurs. This is the ideal result. Where convergent thinking correctly leads to rejection of the variability generated through divergent thinking, the possibility of disastrous change is avoided, but at the risk of resignation or complacency. Of course, the convergent thinking is not always correct, and errors of exploration (mistakes in convergent thinking) can lead to “stifled” creativity (false negatives) or “mistaken” variability (false positives), and raise the danger of a lost chance or, again, disastrous change.

In the creative process, in some phases divergent thinking is needed, in others however, convergent thinking, while in yet others both are needed. The crucial idea is that both

are necessary for generation of creative ideas, although not necessarily at the same moment in the process, and that the creative person may alternate from one kind of thinking to the other. The following table illustrates in what phase what kind of thinking would be appropriate.

Processes, traits and motives in the phases of generation of creativity

Phase	Action	Result	Necessary Process
Preparation	- Identifying problem - setting goals	- initial activity - general knowledge - special knowledge	convergent thinking
Information	- Perceiving - learning - remembering	- focused special knowledge - rich supply of cognitive elements	convergent thinking
Incubation	- making associations - bisociating - building networks	- combinations of cognitive elements	divergent thinking
Illumination	- making promising new configuration	- novel configuration	divergent thinking
Verification	- checking relevance and effectiveness of the novel configuraiton	- appropriate solution displaying relevance and effectiveness	convergent thinking plus divergent thinking
Communi-cation	- acting on feedback - achieving closure	- effective presentation to others	convergent thinking plus divergent thinking
Validation	- judging relevance and effectiveness	- product acclaimed by relevant judge(s)	convergent thinking

5 Fostering Creative Teams & Creative Interactions

> *"The person who figures out how to harness the collective genius of the people in his or her organization is going to blow the competition away."*
>
> *- Walter Wriston, former CEO of Citibank*

Administrators can play a significant role in fostering creativity of their teams. Indeed, building effective teams and stimulating creativity are closely related. Most creative ideas do not occur to lonely geniuses stuck in attics. Instead, they are the result of the interplay of thinking between people. Hence, creative teams are to be planned for, nurtured, and enhanced.

Let us take a clear look at the characteristics of creative teams.

Characteristics of Creative Teams

Today's managers realize that long term success is only achievable by a comprehensive, no-nonsense, deliberate approach to performance. Entelechy – a consulting and training firm - calls this approach "Unlocking Potential." Entelechy reviewed over 50 studies on high performance teams and compiled a list of high performance creative team characteristics. These characteristics can be grouped into the following categories:

1. Participative Leadership
2. Aligned on Purpose
3. Task Focused
4. Shared Responsibility
5. Problem Solving
6. Communicative
7. Responsive

See if your team shares characteristics of High Performance Teams. Circle the characteristics that describe your team; cross off those that do not describe your team.

Participative Leadership

- Envisioning leadership and organizing leadership
- Clear leadership role that is shared
- Enables people to make choices
- Shared norms shared values
- Members drawn to the team
- Team identity
- Belonging / membership
- Synergism
- Future focused

Aligned on Purpose and Vision

- Common shared purpose
- Clear shared vision
- Self directing
- High morale
- Team goals align with personal goals and organization goals
- Problem solving, not laying blame
- Clear, shared understanding of team members' roles

Task Focused

- Challenging tasks
- Individual accountability / ownership
- Equality in workload
- Quality focus
- Clear tasks and milestones
- Mutual respect for ability
- Commitment

Shared Responsibility

- Shared decision making
- Rewards linked to team performance
- Recognize expertise / value added in individuals
- Cooperation
- Clear standards of acceptable performance
- Celebrates success
- Clear authority and responsibility
- Contribution Members responsible for team success

Problem Solving

- Upfront and direct; confronts issues not people
- Trust Clear decision-making process
- Conflicts managed well
- Freedom to express ideas
- Freedom to share opinions

Communicative

- Superb communication
- Open communication
- Openness
- Clear communication channels
- Share common language and terminology
- External communications
- Time managed well
- Purposeful meetings

Responsive

- Unite / partner with other teams
- Flexible
- Outward focused
- Focus on the customer
- Allows risks and mistakes
- Promotes group learning
- Self monitoring
- Self correcting; evaluates its own performance
- Individuals pleased with work results
- Assigns opposing views.

Managing Creative Process

Creative teams can be internally bound or can be developed with outside support. Nurturing creativity can be done through identifying and fostering creative skills right from the beginning. Developing creativity from scratch should be treated as an opportunity that fills the gaps between vital skills needed and the skills that are present.

If right creative thinking is not available within the organization, it is quite advisable to import it from outside environment. Importing of ideas from other organizations can also fetch solutions to the problems.

The administrator should take full opportunity of building creative group internally, by hiring people with required skills

- Hire those people whose intellectual perspectives complement (but do not duplicate) organization's preferred styles and skills.
- Hire those people who are able and willing to work across functional boundaries.

Leonard and Swap ("When Sparks Fly: Igniting Creativity in Groups") present the process for creativity as five linear steps for discussion, while acknowledging that in practice it would look more like a "plate of spaghetti." The five steps are (1) preparation, (2) innovation opportunity, (3) divergence: generating options, (4) incubation and (5) convergence: selecting options.

1. **Preparation** – how prepared is your group to work creatively; is both the physical and emotional environment conducive to idea sharing?
2. **Innovation opportunity** – do you, or does your group, view each project or event as a time to do something new and different.
3. **Divergence: generating options** – in order to select an excellent option, many options should be available. There are several other tools that assist with creating new options. The various techniques available for creative idea generation are discussed in the following chapter.

4. **Incubation** – time should be set aside to think about the options, and gather more information.

5. **Convergence / Selecting Options** – finally, a decision is made based upon those constraints placed on you. Only at this time should constraints be considered in a creative process.

Tools for Creative Interaction

After understanding the characteristics of the groups, let us move ahead with some of the tools for the creative interaction. There are several ways to increase the likelihood of creativity.

1. **Effective listening:** Lending one's ear wholly to the others is an important step.

2. **Empathy:** Empathize with the speaker's situation, put yourself in his shoes.

3. **Clarificatory questions:** In the interpersonal problem solving situations, often the problem being discussed in not very clear. So ask questions and know the problem better.

4. **Feedback:** Take the feedback in a non-evaluation manner.

5. **Evocative questions:** Questions should not be hostile but should evoke ideas and various solutions leading to creativity.

6. **Analogies:** A person can see a problem from a fresh perspective with the help of analogies.

Not everywhere, the implementation of these tools would give good returns on investment. Environmental stimulation to a large extent helps us to gain good returns.

Fostering Creative Environment

Several dimensions of the environment stimulate creativity. Let us take a quick look at each.

1. **Stimulation:** A stimulating environment arouses creativity. This is the environment in which there is always something new to do, experience, or know.

2. **Nurturance:** An environment that encourages and rewards creativity, innovation and experimentation stimulates creativity.

3. **Relaxation:** A relaxing environment, which does not impose strict rules, encourages creativity.

4. **Constructive feedback:** An environment in which there are opportunities for feedback encourages creativity.

5. **Learning Opportunities:** An environment that provides opportunities for rigorous learning, preferably at the hands of creative tutors stimulates creativity.

6. **Diversity of viewpoints:** An environment rich in diversity of views and intellectual ferment encourages creativity.

7. **Freedom for accountability for excellence:** An environment that provides freedom of thought and action but equally, demands responsibility, and effective performance, encourages creativity.

8. **Creators as role models:** An environment in which pioneers .innovators and creators reside, stimulates creativity.

9. **Facilities for experimentation:** An environment that provides reasonable physical or social facilities for experimentation, practice, trying out innovative ideas, etc. encourages creativity.

Top Ten Qualities of an Outstanding Team Player

1. Enthusiasm & Commitment: An exemplary team member has enthusiasm for the organization and commitment for its cause. An outstanding team member stands behind the organization's ideals, vision and mission. A team player knows when to put aside the differences for the common good.

2. Integrity: Integrity is foundational and sets the parameters for the organization's success. The higher one's integrity, the higher one's success potential. An organization or a person can't be truly successful without integrity. Align your actions with your values for a high level of fulfillment and integrity an ideal team member's actions reflect their commitment to the organization and community.

3. Competency: When we work with competent people, we're confident and trusting, knowing they'll deliver quality. Because one person's performance effects the functioning of the whole team, competency takes on great significance. Competency begets excellence; who can argue with that? Competency builds a strong team. Competency erases any cause for needless anxiety and is good for our mental health, as well as the health of the team.

4. Creativity: Creativity and "outside the box" thinking is key for organizational transformation and problem solving. Having creative thinkers on the team moves the organization forward in ways that can't be anticipated. Nurture your creative instincts and don't be afraid to share what you think might be unconventional ideas. Change would never occur if we didn't have bold "outside the box" thinkers!

5. Sense of Humor: Lightness holds the team together as much as shared values and vision. Dedication and commitment to shared values doesn't preclude team members from having fun! Lightness adds perspective and helps to keep team members balanced. Keep your life sane so you maintain your sense of humor; laughter is healing, healthy and fun!

6. Perseverance: Perseverance comes easily to those who are committed. When one is committed, one is steadfast in their belief of possibility. Nothing gets in the way of the vision. Obstacles are stepping-stones en route to fulfillment of the vision. Never take your eyes off the vision, work towards the goal so that nothing stands between your team and the goal/ vision.

7. Language: Language is the conduit for growth and self-expression. While progress can happen without words, it's language that brings forward our learning and experience. Language is the context for commitment. Language connects us and is a primary conduit for self-expression.

8. The Power of Questions: Questions open communication; statements don't. Outstanding team members are inquisitive by nature and are open to hearing other points of view. Team members who appreciate the power of questions demonstrate strong teamwork skills. Questions move the team (and organization) forward in both linear and non-linear ways.

9. Reliability & Follow-Through: When we give our word, we create an expectation for others. When we deliver, others consider us reliable, our word carries weight and means something. An ideal team member understands the power of the word and how strongly our integrity is based upon our word. Reliability is keeping your word, time and time again.

10. Collaboration: Collaboration is at its essence, contribution. It's what happens when we "step outside of ourselves" and honor the space we share more than where we each individually come from. Collaboration is what we create when we come together. Strong team members value the power and synergy of collaboration.

Team Climate Survey

Take the following team climate survey, to see where your department stands as a team.

Purpose	**Do members of your department share a sense of why the team exists and are interested in accomplishing the mission?** In a successful team: Members proudly share a sense of why the team exists and are interested in accomplishing its mission and goals.
Priorities	**Do members know what needs to be done next, by whom, and by when to achieve team goals?** In a successful team: Members know what needs to be done next, by whom, and by when to achieve team goals.
Roles	**Do members know their roles in getting tasks done and when to allow a more skillful member to do a certain task?** Members know their roles in getting tasks done and when to allow more skillful members to do a certain task.
Decisions	**Are authority and decision-making lines clearly understood?** In a successful team: Authority and decision-making lines are clearly understood.
Conflict	**Is conflict dealt with openly and considered important to decision-making and personal growth?** In a successful team: Conflict is dealt with openly and is considered important to decision-making and personal growth.
Personal Triats	**Do department members feel their unique personalities are appreciated and well utilized?** In a successful team: Members feel their unique personalities are appreciated and well utilized.

Norms	**Are group norms set for working together and are they seen as standards for everyone in the group?** In a successful team: Group norms for working together are set and seen as standards for every one in the groups.
Effectiveness	**Do members find team meetings efficient and productive and look forward to this time together?** In a successful team: Members find team meetings efficient and productive and look forward to this time together.
Success	**Do department members clearly know when the team has met with success and share in this equally and proudly?** In a successful team: Members know clearly when the team has met with success and share in this equally and proudly.
Training	**Are opportunities for feedback and updating skills provided and taken advantage of by team members?** In a successful team: Opportunities for feedback and updating skills are provided and taken advantage of by team members.

6 Techniques of Creative Idea Generation

"The best way to have a good idea is to have a lot of ideas." - Dr. Linus Pauling

The divergent thinking skill stands for many ideas – not quality but quantity is the requirement. The creative ideas are deceptive. Mostly they hide in garbage. When you generate many ideas, some of them are very creative. As per studies, on an average, out of every 60 ideas, one would be a winner. When you dig for gold you get tons and tons of dirt. When you strain the dirt, you get the gold. So is with golden ideas. You get more ideas, if you make 'idea generation' phase a fun. The creative juices work better when one is not ridden by anxiety. There are many techniques for creative idea generation.

The following are some of the techniques:

- Brain Storming
- Brain Mapping
- Brain Stilling
- Metaphorical Analogy
- Trigger Sessions
- 'Wild Ideas' Sessions
- Suggestion Schemes
- Quality Circles (QCs) or Ringies
- Angel's Advocate

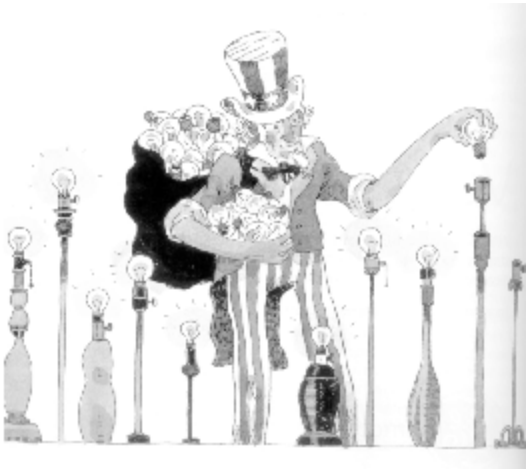
These techniques are widely used by commercial organizations including 'Research & Development' organizations. These techniques can appropriately be used for generation of creative ideas in day-to-day government work.

(i) Brain storming: One of the earliest and most frequently used methods is 'Brain Storming', which was first popularized by Alex F Osborn of BBDO Inc – Batten, Barton, Durstine & Osborn Inc. His book 'Applied Imagination' contributed to the understanding of creativity in the forties and fifties. Later, Edward de Bono has contributed to the understanding of creative thinking in the seventies and eighties.

'Brain Storming' session must be conducted by a leader who possesses a very positive and tolerant 'Attitude Spectrum'. Those who do not know the process and the technique fully must not try out this technique.

The main task of the leader should be to ensure that the proceedings run smoothly and that every idea, however bizarre or stupid it appears on its surface, is allowed to be voiced and discussed. He should ensure that each bulb is lighted.

When to use it



Alex Osborn calls this as a most effective 'conference technique' by which, a group can attempt to find a solution for a specific problem, by amassing all the ideas spontaneously contributed by its members. The most important point that one should remember is that the main purpose of brainstorming is *to generate ideas not to evaluate them*. The evaluation of ideas must be carried out as a subsequent step. Some people who are not aware of brainstorming technique go on evaluating each idea before moving to the next and make this creative process most ineffective. Typically, a brainstorming takes around 30 minutes to an hour. It can be shorter or longer, depending on the difficulty of the problem and the motivation of the group.

How to use it

Prepare the group: The group size is important. A too large group (in excess of 12) is difficult to manage. Likewise, a too small group (fewer than six) may prove less productive. Ten participants including the leader make a good size.

- **Define the problem:** Describe the problem for which ideas are wanted and ensure everyone understands it. It is very easy for people to head off in the wrong direction. A good way of doing this is to write it down on a flipchart page and tape it to the wall.

- **Generate ideas:** Gather many ideas. Then, evaluation should take place in the next step. Both, generation of ideas and evaluation can not and must not go concurrently. While carrying out this exercise in government organizations, the following tips can be kept in view:
    - Welcome 'freewheeling' first. The wilder the idea, the better. The purpose of this step is 'Let the child be playful and create mess as much as possible'.
    - Judgment must be suspended. When the child is making the mess, please do not allow your judgment to interfere. The role of judgment starts at the time of evaluation of many ideas and not when ideas are being generated. During brainstorming sessions, participants must desist from criticism or analysis of the idea. They must not pass any adverse comments, lest the member gets discouraged and withdraws. Ideally, they should even suspend judgmental thinking. Everything that is said by others should be accepted first without making any judgment. This is a very difficult approach that prevents the leader as well as other members from making critical comments or criticism.
    - Mind for 'quantity' not the 'quality'. 'Quantity is wanted' is the watchword. The greater the number of ideas, the greater the probability of good ideas being included in the list.
    - Cheer up. Cheer up those who contribute new ideas.
- **Reduce ideas:** Sometimes this is best done another time, another day or even by another group. Usually, however, it is done immediately after the idea-creation session. There are a number of ways of reducing ideas, such as everyone voting for favorites or just discussing and seeing what comes to the surface.

To make the brainstorming sessions effective, it is always better to explain the rules to the participants in simple and informal way. The leader must ensure that the rules are adhered to. Those, who have a habit of gaining an edge over others and play the game of 'one-

upmanship', should be kept under check; of course, with good humour. Never allow the people to play 'too smart'. Discourage people to have the last say. These negative tendencies harm the process and you can not expect any positive outcome from such brainstorming sessions.

The only formal feature of such proceedings is recording of all the ideas. A scribe normally does this. It is better if the ideas are paraphrased.

How it works

Brainstorming works when people use each other's ideas to trigger their own thinking. Our minds are highly associative, and one thought easily triggers another. If we use the thoughts of others, then these will stop us getting trapped by our own thinking structures.

(ii) Brain-Mapping: Often people's work on different functions should be integrated, to provide solutions to certain problems. This needs brain-mapping.

When to use it

- Use it when individuals in a group have different problems.
- Use it to solve multiple problems at the same time.
- You can also use it to solve individual problems.
- Use it when the people prefer to work quietly rather than in a verbal, 'shouting it out' session.
- Another use is as an ice-breaker with a mid-sized audience.

How to use it

- **Form the team:** Get together a group of people who all have creative problems that they want solving. These may be people working on different parts of the same

project or maybe a group of people on a creative workshop.

Get the people seated in a circle. It can be around a table, although a more creative approach is a circle of chairs. In any case, ensure they can write on a piece of paper (thus they have paper and something on which to rest it).

- **Write down the problem:** Each person writes down the problem in the centre of the page. The usual approach is to write the problem as a single clear statement, such as “What are the customer’s expectations?”
- **Add a stimulus:** Each person now passes the paper to the person to his/her left or right. When everyone has received the paper from the person next to him/her, each person draws one branch leading off from the original problem and adds a single stimulus that will be used later to trigger further thoughts. This may be single word or a short phrase.
- **Complete the stimuli:** This process is now repeated, with each person handing on the paper and receiving another. Do not, at this time, add sub-elements to the stimulus, but rather add main stimuli that branch off around the central problem. Eventually, each paper should arrive back at the problem owner, with a set of stimuli branching off around it.
- **Develop the ideas:** Now the process continues, with the papers being repeatedly written on (one idea at a time) and passed on. Each person now looks at a stimulus and adds either a sub-stimulus or a more complete thought. This process repeats, with people adding an idea and passing it on until either you run out of time or the ideas slow down. The completed brain mapping diagram is then given to its grateful originator.

How it works

Brain-mapping is a combination of brain-writing and mind-mapping. The brain-writing method circulates ideas to keep on re-triggering more and different ideas. Mind-mapping

provides a simple hierarchical and visual structure through which ideas can be linked and developed.

Another idea is to do it pictorially. Thus ideas can be expressed simply as doodled pictures. This is better for people who like and can interpret drawings. You are likely to get greater ambiguity this way, which of course can lead to more creative ideas.

(iii) Brain-Stilling: When the employees are in a situation of serenity, there are quite good chances of them analyzing things in a better manner. This has to be explained to the employees by the manager.

Brain-storming is not in consonance with Indian way of thinking. We believe in tranquility. When we storm the brain, it stops functioning as it happens at the moments of grave shock. Again, brainstorming may train the brain to work only in stress. In fact, in brainstorming sessions we never 'storm' the brain. We rather bring tranquility and peace. For this reason, some of the management practitioners refused to accept the connotation of 'brainstorming' and coined the word 'Brain-Stilling'.

'Spiritual Management' is slowly and steadily creeping into the commercial organizations and government sectors fast. The process of 'Brain-Stilling' is the process of meditation, or call it 'Dhyana' or Zen.

People of Buddhist sect of Japan and China, based on the practice of meditation rather than on adherence to a particular scriptural doctrine, meditate to get enlightenment. This practice is known as Zen. Its founder in China was the legendary Bodhidharma (5th century AD), who taught 'wall-gazing' and 'brain-stilling'. This sect strongly believes in the power of 'consciousness' – the universe within! They held that consciousness as real. They believed that 'matter is the reflection of consciousness'. The characteristic Zen meditation of sudden enlightenment goes back to BC era of Buddha's times (6th century BC).

Some of the organizations and government offices have started following the practice of 'Brain-Stilling'. Following is one such Brain-Stilling Credo:

Brain Stilling Credo

- Observe a minute's silence, calm the mind
- Say, 'There is no rank in this room'; let one lead
- Be open; speak your mind
- Be smart; don't outsmart
- Let everyone participate; every view is important
- Generate many ideas; each idea is rich
- Shrink the differences; shed the ego
- Be an active listener
- Humour, in the right place, is a bonus

The group first meditates for a couple of minutes by observing silence. This brings about tranquility to the mind and, in turn, makes the ambience sober and peaceful. Once the brain becomes still, people tend to forget their respective problems and concentrate more on the issues to be addressed in the meeting. Once the mind is at peace, it becomes more potent. The peaceful mind generates better ideas. Not 'stress' but 'harmony' is the opportune time to generate creative ideas.

The second important condition is 'no hierarchy'! Let anyone lead the 'Brain-Stilling' session. Since each member is trained, rank does not matter. Members are guided and encouraged to come out openly with their ideas without any hesitation or shyness. Members are discouraged to gaining an edge over others. 'Smart ideas' and not 'outsmarting' is the norm.

No heat but only light is generated in 'brain-stilling' meetings. If a member loses his or her cool while pressing the idea forcefully, the leader indicates the sign of 'time-out' and makes the group meditate once again to calm down the brain. 'Solutions' not 'problems' find focus. 'Humour' is used as 'freshener'.

(iv) Metaphorical Analogy:

In this process, a number of proprietary programmes are conducted, aimed at developing creative solutions to the issues. This technique follows the method of lateral thinking – joining together of differently and apparently irrelevant elements'. The central tenet is…

"Create a forced relationship between remote objects"

Metaphorical analogy methodology is a unique way of finding solutions by picking them up from the unrelated areas. The idea is to attempt to draw an analogy between a problem for which at the moment one does not have a solution, and a comparable problem from a totally different sphere of activity for which an answer does exist. In simplest form, one tries to draw an analogy between a problem identified in one type of business and a proven solution in another business. 'When it works there, why can't here?' is the basis of this technique. At a higher level of sophistication, one can compare a problem in industry or commerce with a well-known solution in remote spheres like nature at work.

Today, knowingly or unknowingly, a lot of analogies are picked up from different spheres for improving the business. The government sector can adopt or adapt a lot of good practices from the commercial sector.

If it works there, why can't with us? Draw an analogy and see!

(v) Trigger Sessions: In government organizations, when the group brain-storming sessions are not possible, the employees can be asked to think about problems on their own first and then later discuss with co-employees. This enables the manager to understand the similarity in the employees thinking.

‘Trigger sessions’ are similar to brainstorming sessions with a distinct difference. Unlike brainstorming, a trigger session commences with every member of the group being asked to generate a number of ideas ‘independently of each other’. Each member is given a slip of paper on which he or she is asked to write ideas as to how the stated problem could be solved? As we have seen, in the case of brainstorming, it is the ‘freewheeling interplay’ amongst the participants that helps ideas to cascade. In the case of ‘Trigger’ sessions, one does not get the benefit of this stimulation. To some extent, it means that participants have to produce ideas in a competitive atmosphere in as much as each member of the team is under some emotional pressure to generate ‘good ideas’. In some situations, this kind of pressure can be instrumental to a fruitful output!

There are some advantages and disadvantage of ‘Trigger Sessions’. Whereas you get many fresh ideas from each brain that works like a fountainhead, you fail to get the benefit of freewheeling interplay amongst the participants that helps ideas cascade.

A well-led trigger session should be able to generate around ten to twelve ideas in five to ten minutes. Well-trained and creative people can generate twenty to thirty ideas during the same time. At the end of the session, each member reads his or her ideas aloud. They are noted down and listed, deleting the repeated ones. Sometime the members are asked to debate on a few specific ideas to find some linkage, joining a few of them as one idea.

This methodology provides a variety of ideas. Though results are comparable to what happens in brainstorming, yet by using this two-pronged approach, a large and diverse quantity of ideas can emerge.

(vi) 'Wild Ideas' Session

Creativity is boundless. The most creative ideas can crop up from the most unusual settings. This technique is premised on the notion:

'Outrageous ideas can lead to some constructive solutions!'

A system attempt is made during the brainstorming session at generating some 'outrageous ideas' and then the group makes efforts to bring them 'down-to-earth' and closer to the realities of the problem under discussion. It is an excellent way to lubricate people's brain cells and encourage them to think wild to reach to some 'intermediate impossibles'. Then, some members work on these 'intermediate impossible' and get some workable solutions.

Let us now see how this technique of 'Wild Ideas Sessions' can work in a government department. Let us assume that the problem statement is: 'How can we reduce the cost of photocopying, which has gone up?' This is a fairly common problem in most of the government offices. Now, let us see how the 'wild idea' technique helps arrive at some solutions. Do not get upset with the wildness of these ideas. Have some patience and you will discover some workable solutions from the 'wild ideas'.

- Electrify the button of the photocopier so that every person who attempts to use the machine gets electrocuted;
- Only people who want to make 1,000 copies at a time can use the machine.
- As one uses the machine, a photograph of the user is taken and the number of copies made shown on his forehead
- As one uses the machine, the number of copies made is tattooed on the person's forehead.

Now choose the wildest idea of the lot and try to save the cost. Initially, it may prove difficult, but with some experience the group will learn how to convert the wild idea into practicable solution by discovering some positive angle which makes an 'intermediate

impossible' possible. One may conclude: Take strict measures, which may be as hurting as electrocution!

(vii) Suggestion Schemes

When employees do not open up to the idea of revealing in the sessions, suggestion schemes can be facilitated in order to provoke newer approaches.

Suggestion Scheme is another powerful methodology to collect a variety of ideas. But its effectiveness depends on the seriousness of its implementation and working. It should be constantly monitored. Most of the government organizations initiate these schemes more as 'frills and fun'. Obviously, the schemes do not succeed. But, the commercial organizations take suggestion schemes as one of the methodologies to collect creative ideas. They work on it seriously and they yield the best results. Corporate Japan has taken the maximum advantage of these schemes.

Suggestion schemes have become quite popular in many organizations. They provide a channel of communication through which every member of the organization can transmit his or her ideas hoping that they will be screened and evaluated and, possibly, implemented. When administration does not take the necessary steps for its effective implementation, employees also do not take the 'suggestion boxes' seriously.

Suggestion Schemes work on two patterns:

- Unlimited suggestions on any issue
- Suggestions are invited on certain specific issue

Mostly suggestion schemes are used for unlimited suggestions on any issue. But sometimes, some companies use suggestion schemes for obtaining a company-wide participation in generating ideas in response to certain specific and well-defined problem. The problem statement is circulated in the company with an invitation for ideas as to how it can be solved. Awards are offered for the idea, which is found to be the most effective one for its implementation.

Government organizations can follow both the methodologies. Through the first one, they can get variety of ideas, which can be screened, evaluated and the good ones implemented. In the second methodology, the government departments can circulate their specific issue and seek suggestions from the employees.

The benefits are two-fold. Firstly, the important issues will come to the knowledge of all the employees. Secondly, the employees will feel involved and make their best efforts to find the solutions. This way, the leader ensures that the whole organization participates in thinking about the problem and people generate ideas in response thereon.

But remember, the nature of the problem must be such that its open discussion should not be harmful to the need of confidentiality. There are many problems, which cannot be shared openly among the whole mass of employees because of its nature that warrant secrecy. On the other hand, there are certain issues, which can benefit from the injection of ideas from the wide catchments of the whole organization.

Below is a sample exercise for obtaining the organization-wide suggestions.

> Issue: Passengers are only allowed one small bag on the aircraft. Many passengers ignore this rule and carry with them more than one bag. They dislike being told to leave excess hand-luggage behind to be sent to the hold. This is often a source of conflict with the staff.
>
> Therefore, the problem can be defined as follows: ‘How can we tell passengers to desist from taking with them more than one bag without causing them an affront or irritation?’
>
> Send us your ideas. Winning ideas will earn one week’s holiday in -Runner-up will get three days’ holiday in a star hotel.

Yet, another example in a different situation!

Let us assume that one government organization decides to undergo a process of a massive change in organizational structure, systems and processes etc. Obviously, there would be quite a resistance not only from the employees but also from different agencies who

apprehend some adverse affect. In such condition, if the organization issues a circular inviting the employees to suggest some good name for the 'change-mission', not only will their focus be averted but also their involvement in the process change ensured winning their hearts. After getting several ideas, let us say the screening and evaluation committee selects 'Parivartan' as the name for the mission, gives wide publicity and awards the winner publicly. This will not only provide participation, but also total employee's involvement. The employees will feel fully involved in the change process and give a wholehearted support.

Personal Action Plan for Introducing and Managing an Innovation at Work

1. What are some possible innovations that can be made in your work situation?

2. Describe in detail one innovation that you would like to take up. Indicate why you prefer it and its importance and implications.

3.For implementing any innovation successfully, you need to take concrete steps, you need to concretize the proposal, try it out as a pilot study to generate information, build support for it," package" it properly, get it approved, get it resources for it, implement the innovation anticipatively ,asses it etc. what concrete steps do you have to take?-

- within a week
- within a month
- within three months
- within six months

4. As a change agent, which of your sills need strengthening? How do you propose to strengthen them?

5. What steps will you be taking to make the culture of your part of the organization or system more innovative? Think of tasks and goals, changes in policies, changes in administration and problem solving methods, changes in work culture, etc.

Suggestion Scheme is the well-tested and most potential methodology that grossly failed due to its poor implementation.

(viii) Quality Circles

Quality Circles have to be formed in order to encourage better work environment. They are commonly known as 'QCs'. QCs are grass-root level voluntary groups of employees, which work on similar tasks or share an area of responsibility. They agree to meet on a regular basis to discuss and solve issues related work. They operate on the principle that employee-participation in generating new ideas as also in decision-making improve the quality of work.

The Quality Circles have some specific characteristics:

- Voluntary in nature
- Follow certain rules and priorities
- Mostly decision is made by consensus
- Use an organized approach to 'problem-solving'
- Members are given required training
- They are empowered to take decisions or suggest new ideas
- QCs work with the whole-hearted support of top management

Quality Circles are premised on a simple participative philosophy:

'People whose lives are affected by a decision must be part of the process of decision making'. Secondly, only those who face the problem know the solutions better!

Against this backdrop, Quality Circles work to serve the following three objectives:

- Increase productivity
- Improve quality
- Boost employees morale

Dr. Kaoru Ishikawa of Japan - who is known for his 'fishbone diagram', which was later assigned to his name, as 'Ishikawa diagram' is responsible for introducing QCs first time in Japan. From Japan, QCs moved on to the US and other countries including India – they flourished in the US in 1960s, and in India in 1970s. Somehow, 1980s brought a downturn

to QCs in the US and in 1990s onwards in India. But, the fact remains beyond doubt that QCs are a very powerful mechanism for generating variety of bright ideas and discovering the solutions at the grass-root levels.

Although QCs have not found place in government organizations, it is time to give a fair trial to them to obtain a good yield of new ideas and appropriate solutions of the issues that can only sprout at the grass-root levels.

(ix) Angel's Advocate

Many times, we use the phrase 'Devil's Advocate'. But, for getting creativity one needs to work as an 'Angel's Advocate'. This means, first we must focus on the positive side of every idea. Do not jump to ridicule. Remember, all groundbreaking ideas were ridiculous when they first surfaced. It is the technique of 'Angel's Advocate' that helps find meaning and sense in such ideas, which apparently appear to be ridiculous.

'Angel's Advocate' technique is based on the following four principles:

- Locate 'positive' and be 'optimistic'
- Find value in ridiculous
- Every problem comes with a gift
- All bad ideas are not useless

On the other hand, the 'Devil's Advocate' technique is based on the following four principles:

- Locate 'negative' and be 'pessimistic'
- Find faults in sensible
- Every gift comes with problem
- All good ideas are not useful

It is worthwhile to operate first from 'Angel's Advocate' plane to find out the worth of ideas and polish them with a positive thinking and positive approach. Then, one must operate from 'Devil's Advocate' plane to discover the faults and to know the potent causes of failures. It should never be done the other way round. But, mostly we are tempted to become

the devil's advocate, rather than an angel's advocate. Sometimes, we can do what is known as the technique of Reverse Brainstorming. But, it should be carried out only after working as an angel's advocate for sometime.

One can practice and develop what is known as 'angel's advocate mindset'. But it needs a regressive practice because most of the time 'devil' appears to be more attractive than an angel. The reason could be our practical experience – we encounter more devils than angels.

Remember the second Murphy Law: When something has to go wrong, it shall go wrong.

Closing Comments

"The things we fear most in organizations—fluctuations, disturbances, imbalances - are the primary sources of creativity." - Margaret J. Wheatley

As pointed earlier, "the brain is brilliantly uncreative in the sense that it will use the same pattern again and again under all circumstances." Creativity comes only when you switch your mind to the creative mode — the right side of the brain. This is your imaginative phase – soft clay in hand goes on making the shapes following your imagination. Allow your child to play with the soft clay. Only after you have created lots of shapes, then alone decide which one would you finally want to have?

First 'shape' the idea softly, then 'bake' it!

Remember, once you bake the pot, you can not reshape it. So, the practical phase is like baking the idea, after giving a product the final shape. But to achieve this, one needs to determine what is involved in creativity:

- Carefully determining the composition of the group;
- Enriching the workplace environment—the psychological and the physical environment;
- Providing tools and techniques that enhance idea generation; and
- Managing the process of innovation so that the best insights and ideas are translated into innovative products, services, and ideas.