



**Shortcuts to help you to crush your challenges
and live a kick-ass life!**

Introduction

In this age of global discontinuities, personal innovation is more important than ever. The time to be a creative problem solver is now. Organizations are desperate for creative people who see things differently, who can quickly size up a problem and develop creative solutions to it.

**The time to be
a creative
problem solver
is now!**

You can make a difference in your work and life, now more than ever.

I have spent the last 20+ years reading about creativity, trying different tools and techniques, keeping those that have had the greatest impact and discarding the rest. Creative problem-solving and personal innovation have become a part of who I am, part of the “aura” that has set me apart from my coworkers and has helped me to do some amazing things over the years.

Creativity Hacks contains the best enduring ideas and proven tips and strategies about creative problem solving and ideation, assembled into a convenient, time-saving collection. My goal in publishing it is to energize you to use your latent creative energies to solve the challenges in your life – and to have a lot of fun in the process. Simply put, it’s more fun to look at life through a creative lens – you’ll smile more, you’ll laugh more, and, armed with a creative outlook, you’ll see more possibilities and opportunities all around you. So without further ado, let’s go – it’s time to rock your world!

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Section 1

Cultivating the Creative Life

Introduction

One of the common misconceptions about creativity is that you're either born with it or you're not. We tend to associate it with artists and performers, people who can write a compelling story or someone who is a bit wacky and "out there."

Perhaps we were very creative as a child; but now that we're faced with the "reality" of being an adult, we don't feel creative any more. We do our jobs every day and live our lives in a sort of emotional and mental neutral gear – seldom giving any thought to the deep wellsprings of potential that lie dormant within our marvelous creative brains.

There is another way to live, however – to make creativity a way of life, a way of thinking that transforms the drab gray of the average adult life into a colorful, fulfilling adventure. What's really cool is that you don't need some "special talent" to live the creative life. It's accessible to just about anyone. The fact is, creativity is a skill that can be nurtured and strengthened, just like your physical muscles.

In this first section of Creativity Hacks, you'll learn about how your brain works, and how to leverage it to live a more creative, productive and kick-ass life. Your understanding of what's possible will be expanded. And that will lay the foundation for some really cool tips, strategies and techniques in section 2 that will really knock your socks off!



Attitudes of creative people: A descriptive sketch of the creative person

Way back at the beginning of my career, I didn't give a second thought to the need to be creative. Recently married with one child, I was looking for ways to increase my value to my employer – and hopefully my pay – when I stumbled across a catalog of Nightingale Conant self-help audiotapes. They had a generous policy at the time that allowed you to listen to a set of audiotapes and return them if you didn't find them of value. So I listened to a number of different authors and found several that I liked.



But the one that really blew me away was the late Earl Nightingale, who was known as “the dean of personal development.” His claim to fame was that his audio recording entitled *The Strangest Secret* was the best-selling self-help audio recording of all time. I was impressed with his hearty voice, his practical wisdom and his way of distilling life and success down to its basic, timeless principles – which included a strong exhortation to live a creative life.

Earl devoted his life to exploring why, in a world where success was available to everyone, were so few people successful? One of the main reasons, he discovered, is that the majority of people lived life in an emotional and mental “neutral gear.” What's more, they were all endowed with an amazingly

powerful tool between their ears – a human brain – that they habitually failed to use to solve their myriad of problems, never dreaming of the world of opportunities that lay just beyond their reach.

Earl's recordings were instrumental in the growth of my creative spirit, and helped transform me into a "sponge" for books and tools about creativity and creative problem solving. That's why I have assembled this descriptive sketch of the creative person, which represents a collection of Earl's thoughts from his many audiotapes, as well as quotes from other famous thinkers that he was fond of.

I hope they inspire you the way they did me. His lessons, like most principles, are timeless – which means that you, too, can benefit from them.

The creative person

The average creative person tends not to be the wild dressing, far-out stereotype, but is in fact a lot like you and me. What sets the truly creative person apart is not a gifted birth or special inborn talent; it's more a matter of mindset, attitude and habit. With the proper discipline, these qualities can be developed by virtually anyone.

The creative person realizes that the mind is an inexhaustible storehouse, but he or she must constantly augment its storehouse of ideas, thoughts and wisdom with new material from which to forge new ideas and "connections."

**You already
possess the
greatest
creativity tool
imaginable –
your marvelous
human brain –
why not use it to
become more
successful?**

The creative person has a carefully and clearly defined set of goals.

He knows that the brain thrives on exercise. He thinks imaginatively on a daily basis about three things: himself, his worth and his fellow man. "By asking himself questions in these three areas, he's prospecting in the richest gold mine ever known."

She reaches out for ideas, respects the minds of others, and gives credit to others. Many people have ideas; they're free, and many of them are excellent.

"Ideas are like slippery fish; they have a peculiar knack for getting away from us unless we gaffe them on the point of a pencil." For this reason, the creative person captures ideas immediately. In one example that Nightingale cites, a book writer created a set of topical folders, then dropped ideas into the appropriate folder as he thought of them. In a surprisingly short time, he had enough material to write a truly excellent book.

The creative person is intensely observant, paying careful attention to everything she thinks and hears.

She is always looking for better ways to do his work and live her life.

**Have a system
for recording
your ideas when
they occur to you
– or they'll slip
away as quickly
and as
mysteriously as
they appeared.**

"The creative person anticipates achievement. He expects to win. The above-average production engendered by this attitude affects those around him in a positive way. He's a plus-factor for all who know him."

"Problems are challenges to creative minds. Without problems, there would be little reason to think at all. Welcoming them as normal, predictable parts of living singles him out as an above-average person. He knows it's a waste of time merely to worry about problems, so he wisely invests the same time and energy in solving problems."

"The creative person utilizes an organized approach to problem-solving, or avoids problems altogether by anticipating them and taking creative action before things turn sour."

The creative person knows the value of giving herself and her ideas away. She's a giver as well as a go-getter. The hand that gives, always gathers.

When a creative person gets a new idea, she puts it through a series of steps designed to improve it. She builds big ideas from little ones, new ideas from old ones.

"Questions are the creative acts of the intelligence, and he uses them to his advantage."

Some of Earl Nightingale's favorite quotes about the nature of creativity:

"Ceasing to think creatively is but little different than ceasing to live." ~ Ben Franklin

"It's possible to lift ourselves over life's obstacles through the use of our applied imagination."

"The imaginations of most of us are like the wings of an ostrich. They enable us to run, though not to soar. But many of us don't even walk." ~ Lord MacCauley

"Talent is our affair. We can shrivel it through disuse or build it up by practicing creativity, by solving problems, by using our leisure in ways that will exercise our imagination until we become happy, vital, intelligent people." ~ Gustav Flaubert

Finally, the creative person uses her spare time wisely. She realizes that many of the world's greatest ideas were conceived in the creator's spare time.

A daily regimen of **creative thinking**

Like an exercise program designed to condition the body's muscles, the mind works best if it is challenged with a daily regimen of creative thinking. But how do you go about developing a daily exercise program to strengthen the creative faculties of your mind?

Here is a simple method described by Earl Nightingale, who we met in the last article. It only requires three things: a pad of paper, a pencil and an open mind.



First, give your subconscious a pressing problem to gnaw on just before you go to sleep. Spend 30 minutes or so thinking about a current problem, challenge or opportunity you face, just before you go to sleep. When you lay down, forget about it. While you're sleeping, your subconscious mind, the seat of most breakthrough ideas, will be mulling it over and working on it.

The next morning, wake up one hour before anyone else. Sit down in a comfortable chair with a cup of coffee, a pad of paper and a pencil

Relax and let the ideas begin to flow. Write everything down that occurs to you, not matter how far out or unusual these thoughts may seem. You can evaluate them later. Right now, your job is to let your brain do a "mental dump" onto paper -- into a physical form in which you can do something with these ideas.



While this brainstorming method appears to be almost too simple, Nightingale said it worked like a charm for him. He used this technique on a regular basis, with outstanding results. The key, he said, was the subconscious mind, which is like a giant storehouse of thoughts and ideas, floating around just below our conscious awareness. Hunches or insights are simply ideas that have bubbled up from the vast resources of our subconscious minds.

What you're doing by feeding your mind a problem or opportunity just before you go to sleep is "stuffing" your subconscious mind -- feeding your powerful brain fresh material with which to work.

From my personal experience, the first hours of the morning seem to be a golden time for ideas and insights. Many times, inspirations have come to me while I'm in the shower. And it has been so for many of history's greatest thinkers. In the early morning hours, our minds are largely uncluttered, free

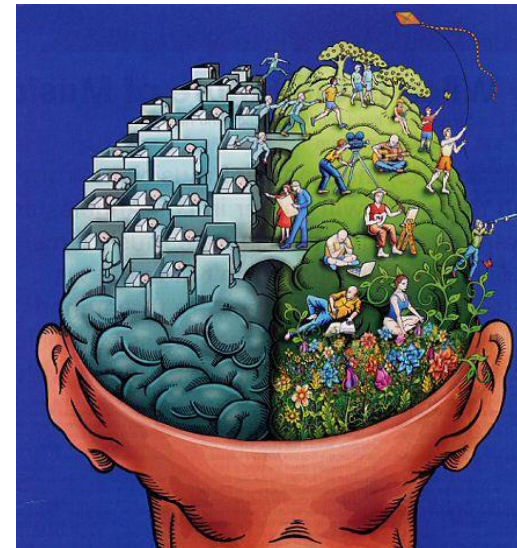
of many problems and concerns -- making our conscious minds especially receptive to hunches, insights and ideas that percolate up from the subconscious. Capture those ideas on paper, and you may find that some of them could be quite valuable to you.

Why not try this simple but effective brainstorming technique and see what results you can obtain with it?

Understanding how your “Brain Operating System” works

In order to be most creative, it is essential that you understand how your brain works – what creativity guru Doug Hall calls our “Brain Operating System.” Your mind has an amazing talent of associating ideas and concepts, and using them to generate entirely new ideas. It works using a stimulus-response model, in much the same way that adding a catalyst to several ingredients can cause a chemical reaction to occur.

“Stimuli act like fertilizer for your brain,” Hall explains in his book, *Jump Start Your Brain*. “When stimuli enter your senses, they set off a chain reaction so that one thought provokes new thoughts, ideas and inspirations. You experience a rush of new combinations of thoughts and ideas,” he adds.



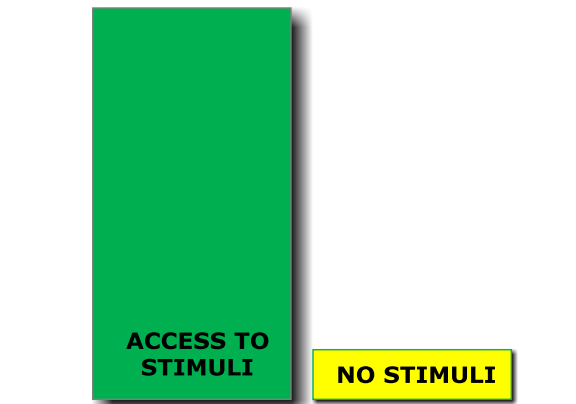
What does this mean? The key to getting the best ideas out of your Brain Operating System is to feed it more and better stimuli. The more varied the stimuli, the better your associative mind likes it. Stimuli could include:

- Skimming through a pile of magazines,
- Talking to your neighbor,
- Grabbing a word at random from a dictionary or newspaper, or
- Putting yourself in a different environment for a few hours.

Contrast this to the typical way of generating ideas in a corporate setting, which Hall calls "braindraining," in which you simply list the ideas you have floating around in your head. Initially, you have a good flow of associations, but too soon it dries up without any stimulation.

Hall tells the story of working with the late Arthur van Gundy on a research study, where two teams of college students tried to generate ideas for snack products in 45 minutes.

One team had access to a rich variety of stimuli in a fun environment, while the other group was simply asked to come up with new product ideas - with no stimulus provided.



The group that had access to stimuli generated over ten times as many ideas, and they rated their level of satisfaction with the process much higher.

So the next time you're faced with a creative challenge, don't forget to stimulate your brain!

How to cultivate an “insight outlook”

One powerful way to live a more creative life is to cultivate an “insight outlook” — the art of looking more deeply at everything we experience with an open, inquisitive spirit.

Creative people are intensely observant, paying careful attention to everything they think and hear. They realize that their environments – the people they talk to, the places they go, the things they read or hear on the radio or TV – can lead their thinking in fresh, exciting directions, which can lead to new ideas and opportunities.



To develop an insight outlook, I recommend that you get in the habit of asking open-ended questions that help you to look more deeply at your daily encounters and experiences:

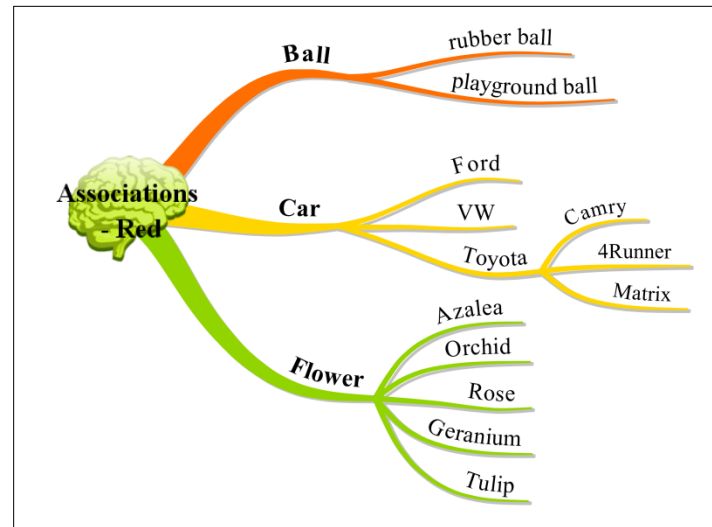
- How can I use this?
- What lessons or insights can I learn from this experience?
- What does this mean in the context of my current creative challenge or the projects I’m working on?

Creative people realize that most ideas aren’t totally new, but are adaptations of what has worked in another market, industry or field of study. History is full of examples, from Alexander Graham Bell modeling the telephone after the way the human ear operated to George de Mestral, who used the

concept of plant burrs sticking to his dog's fur to envision Velcro fasteners. Taking ideas from other environments and adapting them for use in your situation is one of the best ways of developing novel solutions.

Your brain is equipped with the awesome capability of making associations (see an example at right) between seemingly disparate pieces of information. It's part of what makes us human beings so incessantly creative.

To help ensure that your brain has a rich pile of creative "raw material" from which to draw, try to seek out unique inputs, knowledge and experiences:



- **Read a book or magazine** that you don't normally read. Reading broadly, from a variety of sources, brings your brain into contact with new ideas and concepts, and can be a trigger to your imagination.
- **Discuss your problem with people from entirely different backgrounds.** You may be amazed at the ideas and insights these discussions will provoke.
- **Take a trip abroad and immerse yourself in another culture.** International travel is one of the most mind-expanding experiences that I know of. Your senses are heightened as you experience new practices, customs and beliefs – creating a fertile field in your mind for new ideas to grow.

- **Spend some time surfing the web, following links and connections to see where they lead.** Inevitably, you will find some fascinating nuggets of information that you may be able to apply to one of your projects or challenges.
- **Be on the lookout for analogous situations in other industries or fields.** How did someone else solve a similar problem? What elements of their solution can you adapt to your situation?

In short, cultivating an insight outlook is one of the most practical ways in which you can become more creative in your daily life.

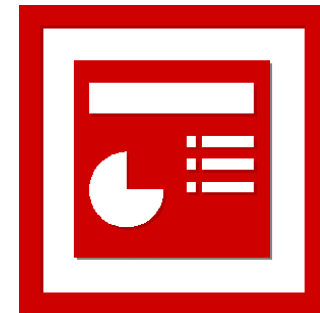
A case in point

Here's an awesome example of how this mindset made a difference for me:

I was working for an ad agency, and had traveled to Read Corporation, located in a small town outside of Boston, to meet with the company's marketing communications manager to gather information for a new business pitch that my agency was going to make to the company.

In the late 1980s, Read Corporation was a perennial favorite of the Inc. 500, and was widely regarded as the quintessential entrepreneurial company.

During my fact-finding meeting, the marketing communication manager indicated that one of his dreams was to be able to distribute new product presentations electronically to all of the company's regional sales managers.



At the time, the web and ubiquitous e-mail were still a few years away, but services like Compuserve and AOL had already established captive e-mail systems within their walled communities of members. I happened to notice a Compuserve icon on the screen of his PC during our meeting.

A few days later, as I was reading through my notes, I suddenly realized that this man had everything he needed to send his new product PowerPoints to his sales managers. So I crafted a brief PowerPoint that explained how it could be done and sent it to him via my Compuserve account. In this case, the medium WAS the message.

The fact that I had just sent him a PowerPoint file, attached to a Compuserve e-mail message, proved it could be done. The marketing manager was thrilled, and the agency I worked for ultimately won the account – all because I was observant and made a mental connection between what this manager told me and what I saw in his office.

“Creativity is 99% perspiration and 1% inspiration.” What does that mean?

The lore of business, science, industry and entrepreneurship are filled with references to the "a-ha!" experience of creative inspiration.

In reality, however, these legendary "bolts from the blue" usually come only after many hours of research and study into a particular topic, and sometimes from lessons learned after past failures (Thomas Edison's 10,000 attempts to perfect the light bulb is one famous example).



By conducting thorough and well-rounded research – and learning from our mistakes – we’re filling our minds with the raw material of the creative process. This is the "perspiration" part of the creative process. Our subconscious mind churns through all of this material and forges new connections between seemingly unrelated pieces of information. This is the "incubation" stage of the creative process. The subconscious then sends serves ideas to the conscious mind, usually as vague feelings or intuitions.

While the average person may ignore or overlook these hunches, the creative person knows that he or she must record all ideas, no matter how wild or impractical - and evaluate them later.

Be open to all ideas - big and small

There's a hidden danger in waiting for brilliant flashes of insight or for a so-called "big idea" - a completely novel idea for project, product or service. By focusing too much on big ideas, we can easily become blinded from seeing other merely "good" but still valuable solutions. While not as flashy or elegant as "big ideas," these less awe-inspiring insights often represent very workable options or solutions, or could be used as stepping stones to other great ideas.



"Perspiration" activities

So what kind of research and mental preparation - or "perspiration activities" - can you do to fertilize your mind for more fruitful brainstorming? Here are some ideas:

- Read books and magazine articles on the topic or issue you're working on
- Visit authoritative Web sites and use search engines to conduct online research
- Ask carefully-crafted questions of experts, who can often provide you with amazing insights into your problem or opportunity.
- Map out information you need, potential sources where it may be found and open-ended questions that will elicit the most useful information.

The "New 3 R's"

Most innovations today are not totally new, but often represent new combinations or modifications of existing products, services and technologies. One creativity expert I know, Gerald Haman, encourages executives to become proficient in what he calls "the new 3 R's:"

- Research, retrieve and record information
- Review the information you've gathered.
- Recombine ideas – make new associations between the pieces of information you've gathered.

Fortunately, word processing software and visual outlining and diagramming programs make it easy to gather, analyze and manipulate pieces of information into new combinations, further seeding the idea generation process.

Coming up with valuable ideas isn't rocket science, something only an Einstein is capable of. With the right kind of preparation, anyone can experience the wonder and exhilaration of the "a-ha" moment of creative discovery. Here are a few more tips to help you increase your odds of success:

- **Know where to look for information.** Become a sponge for information on the topic or issue you're faced with.
- **Develop the ability to ask incisive, well thought-out, open-ended questions** - in other words, questions that cannot be answered with "yes" or "no." Open-ended questions can yield a treasure trove of valuable information and insights.

The New "3 Rs"

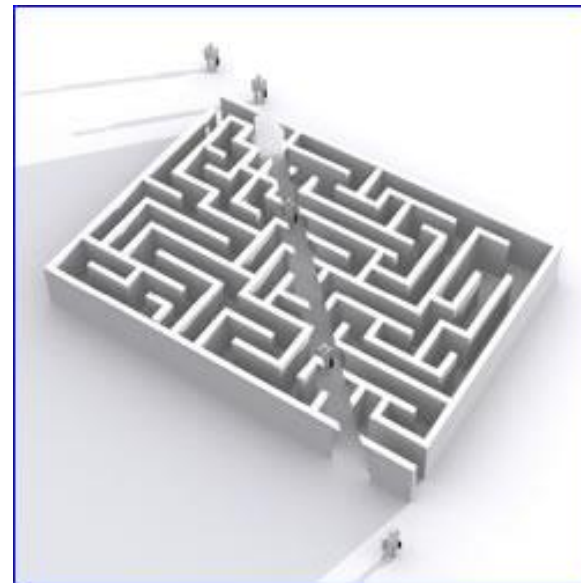
- Research/
retrieve/
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ideas

- **Try using mind mapping** or other right-brain oriented tools to map out your assumptions, questions and needs for further information.
- **Be a sponge for information**, starting with your profession and moving outward into business, social and other areas.
- **Cultivate an "insight outlook"** – consider information, trends and other data from multiple perspectives, and try to identify the inferences, underlying trends or connections they may contain.

How to overcome obstacles to **personal innovation**

There are a number of things that you may be doing that cause you to unwittingly diminish your potential for personal innovation. These unseen barriers may be the reason that you feel stuck in a rut, which one wise person once described as “a grave with both ends kicked out.”

Here are some tips to help you free up your creative energies and realize your potential for personal innovation in your work and life:



Eliminate limiting self-talk: Everyone has a steady, internal stream of “self-talk” – those beliefs and messages you tell to yourself. Examples of limiting self-talk include “I’m not creative” and “That idea will never work.” To free up your creative potential, you need to realize that you were born with the most important creative tool ever devised by the Creator – your marvelous brain, which is more powerful than any computer ever created.

Your brain can make intuitive leaps, associations and combinations that are truly stunning. Stop reading for a moment and take in your surroundings. Realize that everything you see that is man-made started out as an idea in someone’s mind.

To begin realizing your full creative potential, adopt more positive, creative self-talk. Examples include “I AM creative!” and “My brain and its ideas are the source of my future success!”

Realize that everything around you that is man-made started out as an idea in someone’s mind.

Lack of time for creative thinking: It’s one of the unseen perils of the Modern Age: We fill up nearly every waking moment with activity. When we’re driving, we have the radio on or we’re cranking tunes on our iPods. When we’re walking, we’re talking on cell phones or listening to music. When we’re eating breakfast or lunch, we’re reading a newspaper, book or magazine.

All of this ceaseless activity doesn’t give your mind much time to incubate ideas – one of the things that it does best.

Think about the times during which your best ideas come to you. Chances are that they are the times when your mind is disengaged, and able to drift freely from one thought to the next. For many people,

these times include taking a shower, mowing the grass, walking or when you're trying to fall asleep at night. To be more creative, you need to take longer showers! (Just kidding!)

Actually, you need to take time for think time. Go to a quiet spot. Turn off the radio when driving. Turn off the iPod when walking. Let your ideas begin to bubble up and enjoy the fruits of your creative brain!

A lack of understanding about your brain's operating system works: Your subconscious mind is like the giant, submerged part of an iceberg – the unseen and little understood part of your brain where most creative thinking takes place. You don't need to know a lot of brain science to benefit from the awesome power of your subconscious mind, any more than you need to know the principles of electricity to turn on a light in a room.

What's important to know is that your subconscious takes in everything you read, hear, see and experience and stores it. That means one of the ways you can become more creative is to feed the "raw material" pile of your mind with high quality ideas and insights from other professions or industries.

Your subconscious mind relentlessly smashes together different ideas and concepts, and serves up those that are most intriguing as hunches or flashes of insight – the legendary "A-ha!" moment. Many people tend to ignore these hunches, but the creative person develops a great respect for them and seeks to capture them quickly – before they get away.

That's one of the curious things about ideas: they tend to bubble up into our conscious minds when we least expect them, but they fade away just as quickly. And that leads us to the next obstacle to personal innovation...

Lack of tools to record creative ideas: Great ideas tend to get away – unless you quickly record them. Creative people always carry tools with them to record these flashes of insight, such as a small notebook and a pen, or a compact voice recorder. This enables them to go back to those ideas later and consider them further, add to them and DO something profitable with them!

One of my favorite tools is [Jott](#), a voice-to-text service that works with any telephone. When you get a great idea, you simply call a toll-free phone number for Jott. When a pre-recorded voice prompts you, you simply speak your idea clearly into the phone. Jott converts your speech into text (surprisingly accurately, I might add!) and sends the text to you in an e-mail message. I also like to use a small Moleskine notebook to record my ideas and insights – it's very portable and durable, and even has a small, expandable pocket inside the back cover where I keep a folded-up sheet with creativity prompts.

We tend to get stuck in patterns of behavior: We human beings tend to be creatures of habit. We drive to work the same way. We listen to the same music, watch the same TV shows, read the same magazines and hang out with the same people. To be more creative, you need to jolt yourself out of your mindless routines, and expose yourself to fresh stimuli – the “raw materials” of new ideas! Drive to work a different way. Read different magazines and books than you normally do. Travel somewhere that you've never visited before. Have lunch with one or two new people per month to share ideas. Inspire your mind with some fresh, different input – your brain will thank you for it!

Section 2:
Creative Problem Solving
Techniques

Introduction

In section one of Creative Hacks, you learned how to cultivate the habits and patterns of thought that are needed to support personal creativity.

Fundamentally, it requires a level of openness – to new ideas, knowledge, people and experiences – that you may not be comfortable with at first. But once you realize that many of these things are simply stimuli, and that they can serve as catalysts in your quest to become more creative, you will welcome them – and actually start to seek them out!



In section two of Creative Hacks, we'll turn our attention to practical and proven tools and techniques that you can use to “seed” your mind to help generate a steady flow of ideas. From questions to keyword prompts, from books to hand-held ideation tools, you'll learn how to further develop and use your creative mindset. Who knows: One of these techniques could lead you to a million-dollar idea!

How to clear your mind of distractions and **free it up for creative thinking**

Do you ever find that distractions get in the way of your creative thinking time? Is your mind buzzing, heading off in many different directions and sapping your energy for brainstorming?

Tom Wujec, author of *Five Star Mind: Games & Puzzles to Stimulate Your Creativity & Imagination*, offers a clever solution to this common problem – do a "mental dump." Here's how:



1. Take a piece of paper and, as quickly as you can, write down any issues that come to mind. Keep writing until you have nothing more to write.
2. Next, take a look at your list and acknowledge that you will deal with these concerns at an appropriate time.
3. Now you can devote yourself fully to the creative task that you originally wanted to focus on.

I've known about the technique of doing a "mental dump" for many years, but only as a brainstorming

strategy – a way to quickly record all of the ideas that are floating around in your head, without self-censoring them. Until I saw this technique described in *Five Star Mind*, I had never considered it in this context – as a tool to help get all of your mental flotsam and jetsam out of the way so that your really creative thoughts can emerge. Very clever, indeed!

The power of questions for **creative problem solving**

"If you want to come up with great ideas, then you need to ask great questions."
- Gerald Haman

A common characteristic of highly innovative people is that they are skilled at asking or answering thought-provoking questions that inspire creative and innovative thinking. Questions put you into a creative state of mind by stimulating curiosity, and act something like a magnet to pull forth creative ideas from your mind.

Asking provocative questions has a number of compelling benefits, including:

- They help us to arrive at a better, more complete definition of the problem or challenge we face.



- They lead our thinking in fresh new directions, and often help us to take creative leaps that are stepping stones to great ideas.
- They help us to envision what the ideal future state should look like – which enables us to then work backward from the future to determine what we need to start doing today to bring it about.
- They lead you to analyze your assumptions, which may hamper your ability to generate great ideas.

Why are questions so powerful?

Your mind naturally attempts to answer questions. A question is like a "hook" for ideas, according to author Tim Wujec, in his excellent book, *Five Star Mind*. Even the question mark looks like an upside-down hook, he points out.

"The word question comes from the Latin root, quaestio, which means 'to seek.' Inside the word 'question' is the word 'quest,' suggesting that within every question is an adventure, a pursuit which can lead us to hidden treasure," he adds

**Creative minds
ask better, more
creative
questions!**

The course of our thinking is determined by the questions we ask. Asking ourselves mediocre questions will tend to lead us down well-worn, rutted paths of thinking. Creative minds, on the other hand, continually ask excellent questions, which enable them to continually formulate and refine ideas.

Opening questions

Opening questions are the most important type of question we can ask, according to Wujec, because they frame our thinking about the problem or creative challenge at hand. Opening questions give your mind a frame of reference as well as a specific target or focal point for producing ideas. Opening questions should be open-ended and plural in nature – for example, "*In what ways can I...*"

Asking "why?" repeatedly is an effective way to refine your opening question so it will be as precise as possible. This type of question also opens up your mind to a new level of abstraction, a new perspective from which you can re-examine your ideas and assumptions.

Brainstorming **cost-saving ideas**

I recently paged through Bryan Mattimore's excellent creativity book, *99% Inspiration*. One of the chapters that caught my eye was one on brainstorming to develop cost-cutting ideas – very timely in light of today's moribund economy, and a continuing challenge for most work teams and organizations.

What makes this kind of brainstorming different?

What makes a cost-cutting brainstorming session different than one that is used to develop new product ideas? First, where traditional brainstorming sessions are freewheeling (any idea is fair game, no matter how far out or unique), emphasize generating a large quantity of ideas and suspending

judgment until the end of the session, a cost-cutting ideation session is much more deliberate, Mattimore explains.

First, the negative implications of any cost-cutting ideas must be taken into consideration immediately. The brainstorming team must spend more time delving into the practicality of each cost-cutting idea (can it realistically be implemented?), which means that the team must spend time exploring both the positive and negative ramifications of each idea.



Next, he suggests assigning a dollar value to each cost-cutting idea. This not only gives the brainstorming group a sense of purpose and achievement, but also enables the team to compare one idea's value against other cost-cutting ideas.

In addition, Mattimore recommends having each brainstorming session participant create a mindmap that details his or her day-to-day job responsibilities. He cites one such brainstorming session he ran where this technique was very effective as a catalyst for surfacing cost-cutting ideas:

"It was only after everyone completed his or her job map that we went to work finding and developing cost-cutting ideas. With the details of their jobs fresh in their minds, and now on paper in front of them, it was a relatively simple next step to start generalizing from specific problems and inefficiencies into potentially larger, more widely applicable cost-saving ideas."

Mattimore also points out that a "job map" can help you to see relationships between seemingly unrelated problems, costs and opportunities.

Finally, he cautions that while new product brainstorming sessions may generate hundreds of ideas, cost-cutting sessions typically have a much lower output, due to the factors outlined above. *"In a cost-cutting session, if a group is able to create a half-dozen well-developed and thought-out, implementable ideas, it has done a good days work,"* he says.

A grass-roots approach to cost-saving ideas

Another approach to developing cost-saving ideas takes a much more grass-roots approach. Bunji Tozawa and Norman Bodek, in their book, *The Idea Generator: Quick and Easy Kaizen*, advocate training all employees on how to look for simple, easy-to-implement improvements that they can make in their work area. What's more, they can make these improvements immediately, without seeking management approval.

**Another approach:
Empower
employees to
make simple,
continuous
improvements**

This method of continuous improvement tends to be very effective at unlocking the latent creative potential of every employee on a continuing basis. *"Quick and easy kaizen recognizes that every single employee has creative potential, not just a select few,"* the authors explain.

In contrast, most companies select a small team of "change agents" or a cross-functional brainstorming team that does most of the thinking for the company. The focus of this strategy tends to be coming up

with new ideas on an as-needed basis, and doesn't represent an ongoing commitment to creative problem-solving. In addition, traditional brainstorming doesn't empower individual employees to share and implement their ideas.

With quick and easy kaizen, every employee is expected to contribute an ongoing stream of ideas and improvements. Because they can immediately see the results of their creative efforts, workers are empowered to continue implementing kaizen in their work areas.

Conclusion

When most businesspeople think of creativity, they tend to envision cool new product and service ideas. Few people consider the potential of creative brainstorming as a cost-cutting tool. In fact, too many companies solve this problem by whacking their head count - which, ironically, tends to "dumb down" the organization, because departed employees take their brains with them.

As you can see from these examples, you can use these and other creative cost-saving ideation techniques to enhance your company's efficiency, competitive edge and bottom line. Why not try them today?

Gathering materials for creative problem solving

According to Tom Wujec, writing in his book, *Five Star Mind*, the more information you gather, the greater the pool of resources you have to draw upon for creative ideation.

Here are some tips for seeding your pool of resources and ideas:

Add diversity: *"Look... outside your sphere of influence. Go somewhere new and bring something different back to your mental kitchen... Alternatively, you might choose to make your expedition a mental one, by studying a new subject and gaining an intimate understanding of it, through books, articles and reports."*

Tap your deep memories: *"Look for ideas that are inside you, stored in your memory. Think of events and experiences from your past that might have bearing on the project you're working on now; try to remember the details and apply them to your current situation."*

Look to nature for ideas: *"Our planet is endlessly fascinating, and chances are that nature has already done something which relates to your idea. Search among the animal, vegetable and mineral worlds for concepts that might work for you."*



Assemble an experience kit: *"Gather together a few items which relate to your subject and keep them around you for a while. Sometime, when you least expect it, they may trigger an important discovery."*

Record your ideas: *"...be they notes, sketches or musical passages. Keep them in an organized fashion. Remember – if you don't do anything with your ideas – if you don't shape them into reality – they will have done little to serve you."*

I love Tom's colorful cooking metaphor, especially the image of the "mental kitchen." It speaks to me of the need to add spice to your ideas, and of being open to new opportunities to try different combinations of ideas or "mental ingredients."

I also like the concept of the **"experience kit,"** which can help members of your brainstorming team to become immersed in the elements of the challenge at hand – which, in turn, helps to generate breakthrough ideas!

How I use this technique

In my creative journeys, I use this technique almost religiously. I stuff my head full of everything there is to know about the problem or challenge, and then walk away from it for a day or two – to give my subconscious mind time to incubate. Inevitably, ideas start to bubble forth a short time later, as my mind makes random connections and serves up promising ideas as “hunches.”

I also tend to look at tools and technologies that strike me as interesting in one context or industry, and wonder how they could be applied to my current setting. This has often been an excellent source of ideas for me. In one case, an intriguing model for gathering and summarizing news stories became the

basis for a highly successful service that I launched in my last job with a trade association. This model also became the basis for “Innovation in the News” on my InnovationTools website.

Think horizontally and vertically to solve your next creative challenge

Earl Nightingale, in his audiotape series *“The Essence of Success,”* suggests that when we're faced with a challenge that requires a creative solution, we should pursue both "horizontal" and "vertical" solutions. This creative problem-solving technique combines tried-and-true solutions with truly novel ideas, making a very effective tool in your personal ideation arsenal.



First, think vertically

Vertical solutions are based on existing ideas or knowledge – solutions that others have already had some success with.

To paraphrase Thomas Edison, the world outside of your industry, market or profession is full of existing ideas that people have never fully capitalized upon, which may be adapted to your specific need or challenge.

When you're doing "vertical" research, web search engines can help you to find articles, white papers, case histories and other documents that demonstrate how other people have tackled challenges similar to yours. Likewise, you can use online discussion forums to ask others for advice on how they solved a similar problem.

Thinking vertically is something like drilling deeper in an existing oil well, or mining an existing seam in a gold mine that may already be just about tapped out. Digging deeper into known, familiar territory carries little risk, but is unlikely to result in a breakthrough idea.

**Vertical
thinking =
digging deeper
in your
industry,
market or
profession for
ideas**

Most of us tend to rely on safety and security of tried-and-true solutions – the so-called conventional wisdom so typified by the expression, "That's the way it's always been done..." It takes courage to step out in a fresh, new direction.

Next, horizontal thinking

Next, try thinking about your challenge horizontally – in other words, come up with a variety of ideas by thinking in totally new directions. This is where creative brainstorming techniques can be very useful.

They whack you out of your familiar, rutted paths of thinking behind, and can help you to jump-start your thinking in new, creative directions.

To use our oil drilling metaphor, vertical thinking is like digging exploratory wells in different locations, in hopes of finding new deposits of fresh, untapped ideas. Horizontal thinking tends to be more risky, but is more likely to lead to a breakthrough idea that could yield significant value to you or your company.

In real world problem-solving situations, a combination of both approaches usually produces the best results. This technique ensures that you tap the best existing ideas and information, while also generating novel, untested ideas, increasing the likelihood that you'll uncover the ideal solution to your problem or challenge.

**Horizontal
thinking =
exploring other
industries,
markets and
professions for
ideas**

Got a problem? Take a 'walk' around it

Visualization – the powerful technique used by the world's best athletes to condition their subconscious minds for peak performance – is also a potent problem-solving tool. Here's a simple four-step visualization technique that can help you solve nearly any problem you may face:

1. Decide with absolute conviction that a solution to your problem already exists – your job is to find it.

2. Break the problem down into its component parts. If you prefer, use a separate piece of paper for each segment of your problem or situation, or use your computer's word processor as a "dynamic scratch pad" to jot down everything that comes to mind. Your goal is to define, as completely as possible, everything that you know about each aspect of your current problem.
3. Take a mental "walk" around your problem. Imagine hanging it from a hook in the center of the room and then walking slowly around it, viewing it from all sides. To help you consider your challenge from many different perspectives, try asking yourself open-ended, thought-provoking questions, including:
 - How is this situation similar to others I've faced before?
 - How would someone else solve this problem?
 - What experts could I call upon to help me solve this problem?
 - What are some excellent sources of information on this topic or related areas?
 - If this problem involves another person, how does he or she view this situation?
4. Review your notes and brainstorm possible solutions.

**Try on
different
perspectives
when you're
engaged in
creative
problem
solving!**

A business associate once dramatized this problem-solving technique for me in a very memorable way: First, he stood face-to-face with me; this superficial view yielded little in the way of useful information, he explained. Next, he circled to my right side and declared, "My God, he's missing an arm!" He then moved behind me, where he pretended to find a burn hole in my jacket. Finally, he analyzed me from

my left side, where he discovered a large rip in my sleeve. While this example is ridiculous in its exaggeration, it illustrates the benefits of viewing your problem or situation from many possible angles.

This four-step process will reveal areas where you need more information, as well as potential solutions to all or part of the problem.

As you record your thoughts and insights, patterns will begin to emerge. Follow each of these leads as far as you can; don't censure any ideas at this stage, no matter how ridiculous they may seem at first. The way to come up with one great idea is to generate many of them.

What this unique exercise does, at its most basic level, is get us moving. And when we do so, our perspective changes. Solutions that may have been hidden from us are now suddenly obvious. Obstacles to our progress, seen in a new light, are often much smaller than they appeared to be. And barriers that once seemed insurmountable often evaporate under this rigorous scrutiny.

Finding inspiration on the web

Inspiration and "stepping stones" for new ideas abound on the web, if you know where to look. Stepping stones are ideas that are sometimes offbeat or seemingly unrelated to our challenge at hand, but which may serve as catalysts or "stepping stones" for us to make an intuitive leap to a really good idea.



Our minds are great at making connections or associations between seemingly unrelated pieces of information. Surfing the web can provide you with an almost endless array of idea stimulators, if you adopt an "insight outlook" – the ability to discern how the some of the nuggets of information that pass through your life each day might be adapted to help solve one of your current challenges.

Sources of online inspiration

When you're using the web, you are surrounded by potential sources of inspiration. For example, you may find usable ideas and idea stimulators in the form of news stories, articles, illustrations or images on web pages. Almost any form of web content can stimulate your mind to make new connections and develop fresh ideas.

John Kao, in his excellent book, *Jamming*, has this to say about how the power of computers and the web can supercharge creativity: "*The easy assembly of previously disconnected data, designs, ideas*

and research findings, made possible by mere keystrokes on a computer, increases the chances that someone will see new connections among them and in doing so generate new insights and ideas."

How to use this principle

Remember, a problem well-defined is already half solved. So before you begin brainstorming potential solutions to your challenge, conduct online research to gather a collection of facts, trends and resources that pertain to it. Here are some of the types of web content that you may find helpful during this research process:

Case history articles can give you valuable insights into the strategies that other companies have used to solve problems similar to the ones you face. They can also highlight best practices in a particular area of business operations or strategy.

E-mail newsletters often contain advice, techniques and strategies that you can adapt to your situation. Numerous times, when I've been working on important projects, one of the many e-newsletters I subscribe to has arrived in my inbox, containing a nugget of wisdom that I needed to know at that time.

Discussion forums: Try searching online discussion forums for messages that address a challenge or problem similar to yours. You should also consider posting open-ended questions in forums where your customers tend to congregate, to learn more about their needs, or ask them for feedback on your idea

Try these online sources for inspiration:

- Articles
- E-newsletters
- Discussion forums/listservs
- Twitter/other social media sites

or concept (Example: “If a company was to offer a product that did this... how would that help you to do your job more effectively?”). Another innovative use of discussion areas is to use them to identify “lead users” – forward-thinking professionals in your industry or area of work who would be willing to help you to test the prototype of your new product or service.

Twitter and other social media sites: Twitter is unquestionably an amazing place for the sharing of ideas. I recommend that you [use Twitter’s search tool](#) to do keyword searches based upon the creative challenges you face. Use the search results to identify “thought leaders” on those topics and follow them.

Once you’re comfortable with using Twitter as a research tool and with proper Twitter etiquette, you can graduate from “listening” to asking compelling questions that enable you to access OPB – Other People’s Brains – for creative inspiration. LinkedIn Groups and Answers are two other web 2.0 variations on the traditional discussion forum where you can ask questions and seek insights.

In my opinion, the web is the ultimate medium for creativity, because it does such a great job of connecting people with information, and it enables people to collaborate and share ideas in ways never before possible. As we’ve seen, it can also be a powerful catalyst for brainstorming, because it exposes us to more information and ideas that tend to broaden our thinking and problem-solving processes.

The next time you surf the web, why not adopt an insight outlook, considering everything you see online in terms of what you can learn from it, and which ideas and strategies may have some application to the challenges you now face?

5 powerful techniques to generate ideas on demand

The ability to be creative is growing in importance, especially since the global economic recession has blunted the effectiveness of existing products, services and business models in many industries and professions.

Downturns are unique times in which companies and individuals can challenge existing orthodoxies and explore new ideas with greater freedom. If you're inherently creative, that's great!



But if you're not a creative type, how can you generate killer ideas on demand – any time, anywhere? Here are five techniques that you can use to court your creative muse:

Use the 5W's and H: Utilize questions beginning with the words who, what, when, where, why and how to help you define the problem that you're trying to solve. These open-ended questions encourage your brain to enter its problem-solving mode and help to prime the pump for some creative thinking.

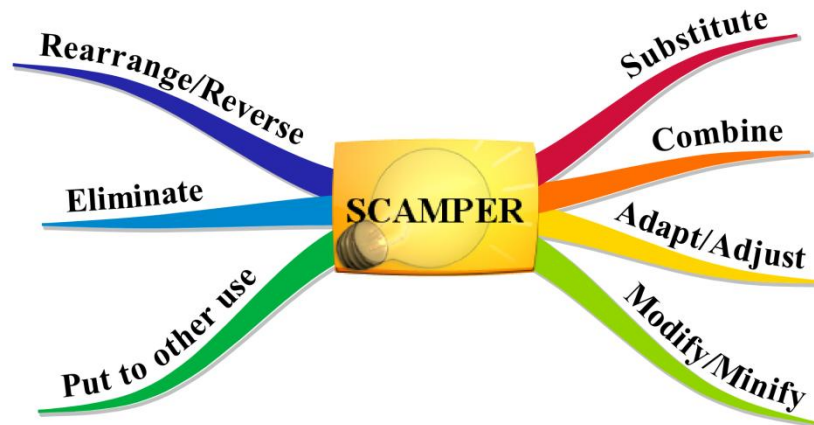
Slice and dice: Mentally divide your creative challenge into its component parts, writing down each of these elements or recording them in a mind map. Then spend some time brainstorming about each part

of the challenge that you have identified. Often, "deconstructing" a problem or challenge in this way reveals insights and ideas that you wouldn't otherwise be able to see.

SCAMPER: In this mnemonic, each letter represents a different manipulation or question that may be applied to an object, product, service or process in order to generate innovative variations.

SCAMPER stands for:

- S = Substitute
- C = Combine,
- A = Adapt or adjust
- M = Modify
- P = Put to other use
- E = Eliminate
- R = Rearrange or reverse



So, for example, to use the M in SCAMPER, you would ask yourself, "How can my product (or service) be modified in different ways to create new variations?"

A different point of view: Consider your problem or challenge from multiple perspectives to gain fresh insights to generate new ideas. How would famous thinkers such as Leonardo da Vinci or Thomas Edison approach your challenge? How would a highly successful business person like Microsoft founder Bill Gates or high-flying serial entrepreneur Richard Branson solve your problem?

Bonus technique: Don't forget to keep your eyes open for solutions from different industries, professions or markets that you might be able to adapt to solve your current challenge or problem. Become a great adapter!

3 pocket-sized tools to help you **generate killer ideas** any time, anywhere

The ability to generate creative, profitable, problem-solving ideas is growing in importance, especially with the global economy stuck in the doldrums. But how can you be creative on demand? Here are three pocket-sized tools that you can take anywhere – to your next team meeting or to a quiet park where you can brainstorm free from distractions – to help you generate your next breakthrough idea:

[KnowBrainer](#): If you are looking for a creativity tool that is powerful, portable, and low tech, then you ought to check out the KnowBrainer. This tool does an excellent job of leveraging the mind's capabilities of association. Developer Gerald Haman has spent years amassing and assessing key words and questions that are the most effective at generating ideas, and he has incorporated them (along with evocative images and quotes) into this colorful, fun-to-use flip card deck. It contains sections that are designed to help you to:

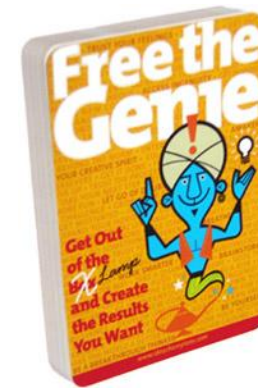
- Clearly define your challenge and investigate your needs,
- Create ideas,



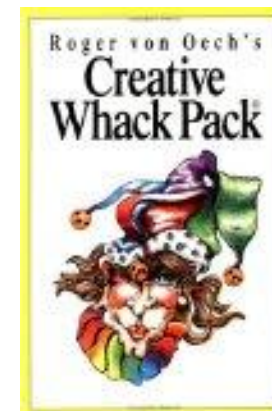
- Evaluate them using a number of criteria, and
- Put them into action

The KnowBrainer is built around Haman's four-phase Accelerated Innovation process. It incorporates keywords, questions and concepts from the world's leading new product design firms, Six Sigma quality tools, new books on marketing and the latest research on innovation process tools.

[Free the Genie](#): Free the Genie is a new deck of 55 creative thinking cards that you can think of as your "personal genie" — a powerful brainstorming assistant that is available to you anytime, anywhere to help you unstick your thinking. This ideation tool is the brainchild of Mitch Ditkoff, founder of the Idea Champions innovation consulting firm. Free the Genie is designed to provide a spark or catalyst to help you to find your great ideas. Each card contains a principle of breakthrough thinking (examples include "take some risks," "suspend logic," and "leverage your strengths") and some questions or challenges related to each principle.



[The Creative Whack Pack](#): An illustrated deck of 64 creative thinking strategies that will whack you out of habitual thought patterns and enable you to look at your life and actions in a fresh way. The cards are divided into four sixteen card suits: Explorer, Artist, Judge, and Warrior. These represent the four roles or types of thinking of the creative process. The creative problem-solving techniques contained in this marvelous tool are based upon the contents of Roger von Oech's excellent books, *A Whack on the Side of the Head* and *A Kick in the Seat of the Pants*, two of the best-selling creativity books of all time.



Why invest in brainstorming tools like these? They serve as catalysts, jump-starting your brain's creative juices. Some brainstorming tools ask you questions, while others rely on a variety of proven associative or lateral thinking techniques.

The bottom line is that these diminutive tools get results, and because of their compact size, you can use them just about anywhere. What's more, their learning curve is quite low; in other words, you can begin generating profitable ideas with them almost immediately.

Free bonus:

Eyewire Creativity Cards: A number of years ago, a creative agency called Eyewire produced a set of creativity cards as a downloadable PDF file. You could print the document out on card stock, and then cut the cards out and use them. So I downloaded it to my PC, and forgot about it for a number of years – until a reader of InnovationTools.com wrote to me one day, to let me know that the website these cards were available on was gone. I Googled it to see if I could find it, but no luck.

Since the Eyewire Creativity cards were free to begin with, I posted them to InnovationTools.com, and [you can download them here.](#)

How to generate killer ideas using **morphological analysis**

One of the most powerful ways to generate killer ideas is to combine existing ideas and concepts in new ways. One of the best ways to do that in a structured yet creative way is a technique called morphological analysis. Here's an example that could be used to develop ideas for a new type of vehicle:

Size	Vehicle Type	Body Style	Mechanism
Full-sized	Sedan	Aerodynamic	Gas engine
Compact	Coupe	Angular	Diesel engine
Sub-compact	Sports car	Geometric	Manually powered
Mini	Convertible top	Luxury	Solar powered
	SUV	Functional	Fuel Cell
	Mini-van	Weird	Hybrid
	Full-sized van		
	Crossover		
	Truck		

Here's how it works:

1. Take a spreadsheet and list the attributes or characteristics of the product or item that you want to brainstorm about, one per column at the top of the spreadsheet. For a physical product, for example, this could include characteristics such as size, material, shape and mechanism.

2. Next, list in the appropriate column the different variations that are possible for that characteristic, one per cell. For example, under material, you would want to list metal, plastic, wood and other materials used to make things. Repeat this process for the remaining characteristics. Try to list as many variations of each attribute as possible. When it comes to morphological analysis, more is definitely better!
3. To use this chart for brainstorming, randomly select one item from each column, and be sure to record any combinations that appear to be promising product ideas. For example, randomly picking one attribute from each column of the morphological box on the previous page could result in a compact SUV with a luxury body style, powered by a hybrid engine.

Repeat this random selection process multiple times for best results. This is a powerful way to explore a large number of possible variations and combinations quickly and easily. Plus, it's fun!

Uncover new perspectives with your own personal “board of directors”

One of the problems we face as human beings is that we can't get out of the way of our own thinking. In other words, we tend to get trapped by our beliefs, experiences and perspectives. That limits our ability to develop creative ideas.

One powerful way to get around this mental block is to behave as if we're someone else, and temporarily adopt their persona, outlook, beliefs and experiences. These could be famous people, alive or deceased, or people who are experts in your industry or profession.



The key is to select people that you know something about, so you can temporarily suspend your usual well-rutted paths of thinking and engage in a bit of “sleight of head” to help your brain to think in new directions – just as your famous or notable person would.

Examples I've used in my own brainstorming efforts have included Albert Einstein, Leonardo da Vinci, Bill Gates (Microsoft) and Steve Jobs (Apple Computer).

To use this creative problem solving technique, simply use your imagination and ask yourself these types of open-ended questions:

- How would (name of person) solve this problem?

- If I was meeting with him or her right now, what would he or she tell me to investigate or learn more about, related to this problem?
- How did he or she solve a similar problem during his or her career or life? What can I learn from what he or she did to solve it?

Record any ideas or insights you get during this process.

So why do we call this the “board of directors” technique? Because you really ought to have a group of people whose experience, outlook and ideas you can channel when brainstorming solutions to tough problems. Think of them as a “virtual brain trust” of the best and brightest minds that you can access whenever you need them.

Nine windows creativity technique offers a practical framework to consider a range of future opportunities

One of the challenges we face in creative problem solving is mentally getting out of our own way. We tend to be so trapped in our unique perspective that it limits our ability to see other possibilities. What's needed is a structured way to look at our challenge or opportunity through different "lenses."

The creative problem-solving technique called "Nine Windows," described in the excellent book, *The Innovator's Toolkit* by David Silverstein, Philip Samuel and Neil de Carlo, does just that, by enabling you to look at innovation opportunities across the dimensions of time (past, present, future) and space (supersystem, system, subsystem). In other words, it gives you a set of tools that you can use to consider your opportunity by breaking it into smaller pieces as well as considering the larger context into which it fits. Here's how it works:

Supersystem			
System		Opportunity or Challenge	
Subsystem			
	Past	Present	Future

Step 1 - Prepare a nine windows grid

On a blank sheet of paper or flipchart, draw nine boxes arranged in a 3 x 3 matrix. Label the bottom row of boxes (from left to right) past, present and future. Label the far left boxes (from top to bottom) supersystem, system, subsystem (see the illustration above right for an example).

Step 2 - Fill in the center box

In the center box, put a brief description or picture related to the innovation opportunity or challenge.

Step 3 - Identify the supersystem and subsystem

In the present dimension, the middle column, fill in the supersystem and subsystem boxes above and below the center box. The supersystem relates to how the system or object interacts with the

surrounding environment. To complete this box, ask, "What larger system encompasses the system or object?" The subsystem breaks the present system or object down into the components and characteristics that constitute it. To complete this box, ask, "What makes up the object in its present form?"

Step 4 - Determine the past and future

Now fill in the past and future boxes to the left and right of the center box. Don't limit yourself to just the immediate past or future. Instead, experiment with defining this temporal dimension in more than one way by asking questions such as these:

- What did the system or object look like before its current incarnation, and what will look like in the future?
- Where was the system or object before its present state, and where will it be in the future? The answer can range from a few seconds to years into the past or future.
- What happened to the system or object from its creation to its present form or function? What will happen after it ceases to function in the present?
- Before the present system or object existed, what was the previous solution for the job to be done, and what future solution could be developed to address the same job to be done?
- How can these system inputs be modified to eliminate, reduce or prevent the harmful function, event or condition from impacting the output? Or, how can the system's output be modified in a corrective or reactive way?

Step 6 - Complete the grid

Last, fill in the four corners - the past and future states of the supersystem and the subsystem. You can complete these boxes in any order. Although you don't have to fill in all the corners, it's worth spending a few minutes trying. If you get stuck, take a short break and return to the problem with fresh eyes. The answers depend on the specifics of the supersystem and subsystem you defined in step 3, as well as the approach you took to be temporal dimension in step 4.

Step 7 – Re-assess the opportunity

After filling in the nine windows grid, re-assess the innovation opportunity to determine if you should focus your efforts at the system, subsystem or supersystem level, and in which temporal dimension.

This technique is excerpted from The Innovator's Toolkit by David Silverstein, Philip Samuel and Neil de Carlo with the permission of Breakthrough Management Group International.

Section 3:

Capturing & Working With Your Ideas

Introduction

If you have used the tools and techniques described in section two of Creativity Hacks, you're now faced with a computer screen or legal pad full of ideas. What do you do with them? How can you store them in a form where they will be easily accessible later? How can you evaluate them and determine which ones you should implement now?

All of those questions and more will be answered in section three, Capturing & Working With Your Ideas.



Ten power tools for **recording your best ideas**

Do you have a method or strategy for recording ideas when they occur to you? If not, you should. Ideas tend to be fleeting creatures, bubbling up from your subconscious mind without warning, and then disappearing just as quickly – perhaps never to be recalled again.

"Ideas are all around you, and they can appear (and disappear) very quickly," explains creativity expert Charles Cave, an advocate of recording your ideas any time, anywhere. *"Be receptive to the world around you. There are times when you may hear a snatch of conversation, or see a funny sign. Unless you capture that thought immediately, it will be gone in matter of minutes. Imagine your ideas are butterflies flying out into the open. You need a net to capture the butterflies and not let them get away."*

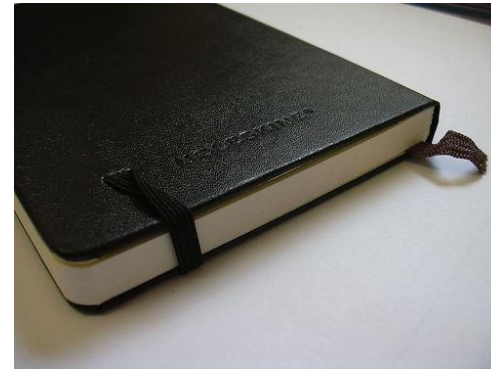


Fortunately, ideas are easy to capture and record, and you have many tools at your disposal that you can use to lasso your insights, hunches and ideas. Here are 10 of the most popular and effective tools and techniques for recording your ideas, along with their advantages and disadvantages:

1. Notebook or journal

Notebooks and journals are a great way to capture ideas, and are probably the most popular tool for doing so. They also have an impressive track record of success throughout history:

Leonardo da Vinci and Thomas Edison were big believers in this method, and filled hundreds of notebooks with their ideas during their lifetimes.



Some people prefer lined journals, especially if they plan to record mainly words. Other creative types prefer unlined pages, so they can record any combination of words, drawings and images. One unique product that accommodates both words and sketches is the [Bienfang NoteSketch](#), a spiral-bound, paperback notebook that contains pages with lined and unlined regions.

My personal favorites are several sizes of Moleskine lined notebooks – one 5 x 8¼ inch (13 x 21 cm) ruled notebook serves as my main repository for my notes from calls and meetings as well as my idea repository, and I use a 3½ x 5½ inch (9X14 cm) pocket-sized Moleskine for capturing ideas and inspirations on the run – it’s small enough to fit in a jacket or pants pocket.

What’s so hot about these notebooks? The paper and binding are of high quality, which makes them very durable. An elastic cord is sewn into the back cover, which can be wrapped around the front cover of the notebook. This holds the Moleskine closed, and prevents pages from being inadvertently ripped out – very convenient. If you want to learn more about these popular notebooks, I recommend that you check out these websites, which contain a variety of strategies and “hacks” for using them productively:

[Moleskinerie](#)

[The Definitive Collection Of Moleskine Hacks, Tips And Resources](#) – Organize IT

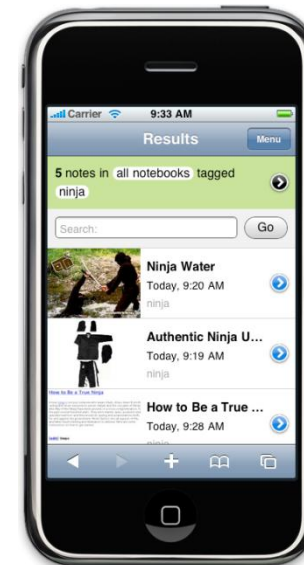
Advantages: Notebooks and journals offer a flexible, portable and fast format for recording ideas. Unlike your computer, which must spend several minutes booting up when you turn it on, a notebook or journal is always immediately ready to capture your ideas.

Disadvantages: If a high degree of portability is important to you, a journal or notebook may not be as useful as some other tools for recording ideas. Also, you can't easily search hand-written notes, which may limit their utility if you have recorded a large number of ideas.

2. Mobile Computing Devices/Personal Digital Assistants (PDAs)

The Personal Digital Assistant, or PDA, is one of my favorite methods for capturing and storing my ideas. I carry an iPod Touch with me wherever I go. Whenever the muse strikes, I use an app called [EverNote](#) to quickly and easily jot down an idea or a few key words. Later, when I'm near a wireless network, I can sync my new notes with my EverNote account on the web, where I can then flesh out my ideas further. Other recently introduced iPhone apps for capturing ideas include [SuiteTouch Thoughts](#) and [IdeaOrganizer from Nanaimo Studio](#).

Advantages: Mobile computing devices like the iPod Touch and Windows-based PDAs are highly portable. Unlike some other methods of recording



ideas, these tools are designed to fit comfortably in your pocket. They are ready to capture ideas as soon as you turn them on – no lengthy boot-up sequence is needed, unlike a PC. One of the biggest benefits of this method is that recording your ideas electronically makes them much easier to search and manipulate than paper-based ideas – a major consideration if you have a lot of ideas!

Disadvantages: Mobile computing devices are well suited for recording words, but are poorly suited for recording ideas as pictures or images. Also, because most of them have very small keyboards or require stylus input, you may find that spotty handwriting recognition may interrupt your creative "flow." Finally, a mobile computing device is one of the more expensive tools for recording ideas – but is still a worthwhile investment in my opinion!

3. Index cards

I have used this method for many years, and it has worked very well for me. Index cards are durable, and it's easy to carry a small supply of them with you, so you can record your ideas just about anywhere. Also, once you have recorded a number of ideas on index cards, you can spread them out on a table, move them around and group related ideas together – or use random combinations of cards to stimulate additional ideas.



Advantages: Index cards are small, highly portable and durable. Also, they are equally well-suited to recording both words and simple illustrations. They are inexpensive and you can buy them just about anywhere.

Disadvantages: To get the most out of this idea-recording system, you really need to transfer your ideas from paper-based index cards into an electronic form – into a word processor, for example. That's because ideas are easier to manipulate in digital form than they are on paper. But once you've accumulated a large stack of index cards containing your ideas, you may find it challenging to find time to transcribe them all. That's what happened to me, and why I moved away from using this method to record my ideas.

4. Digital audio recorder

A portable digital audio recorder is a very efficient tool for recording ideas. Several companies make units that are small enough to fit in your pocket; when inspiration strikes, you can pull out your recorder and dictate your ideas immediately. You can even keep a recorder on your nightstand; if inspiration strikes in the middle of the night or as you're waking up, you can use it to capture those ideas – assuming that you're coherent enough to speak clearly!



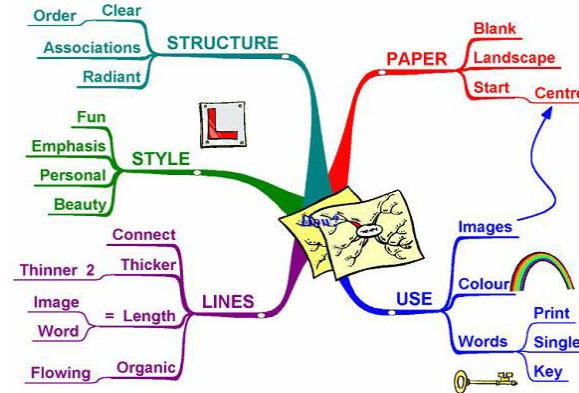
Advantages: A micro cassette recorder is small and highly portable, so you can carry it just about anywhere.

Disadvantages: Using this method, ideas are recorded in audio format. For best results, you should transcribe them into a journal or personal idea database on your computer, which can be time consuming. One possible solution is to buy a digital voice recorder with the capability of transferring

your voice recordings to your PC, where they can be transcribed by a voice recognition software program like Dragon NaturallySpeaking.

5. Mind mapping

Mind maps, whether you create them by hand or using a mind mapping software program, are a great way to capture ideas. That's because mind maps do an excellent job of leveraging your brain's powers of association. Also, because you're only populating your mind map with key words and phrases, it's a fast and efficient way to transfer ideas from your brain into a more tangible form. In addition, they convey not only meaning but context, showing the relationships between your ideas.



Advantages: Mind mapping is easy to learn, and is a fast and easy way to record your ideas in an engaging visual format.

Disadvantages: Mind maps are not quite as portable as some of the other methods reviewed here, like carrying index cards, a PDA or a pocket voice recorder around.

6. Leave yourself a voice mail message

Another simple but very effective way to record your ideas is to leave a voice mail message for yourself. In other words, you dictate your idea into your own voice mail box, as if you were a customer or coworker leaving a message for you. This is an excellent technique to use if you don't have a pen and paper, or other means of recording ideas.



An inexpensive service called [Jott](#) is even better: You call the phone number of this service from your cell phone, speak your idea into the phone, and Jott transcribes it and e-mails you the text of your idea. I use it regularly, and think it's a priceless service!

Advantages: This technique leverages technologies that most businesspeople already have available to them – cell phones and e-mail – and utilizes them in a creative way. You can use this technique just about anywhere you have access to a telephone.

Disadvantages: You may not always have immediate access to a telephone to call your voice mail and dictate your idea.

7. Flip chart/whiteboard

The humble flip chart or whiteboard has become a fixture in corporate conference rooms all over the world. It is frequently used as a tool to record ideas in group brainstorming sessions and other types of meetings. It does this job remarkably well, enabling team members to quickly record ideas for everyone in the meeting to see and consider.



Here's another use you may not have considered: why not keep a flip chart in your office, near your desk, available to capture your ideas as they occur. Its size and prominent location will help to keep your ideas in front of you. It's also great for recording ideas during small meetings with one to two other people in your office.

Advantages: Flip charts are very easy of use, relatively inexpensive, and require a minimum of materials (all you need is a flip chart and some colored markers!). Speed of recording ideas is very good. This technique is a very effective way to encourage group collaboration; participants can build new ideas upon the ones that have already been written on the flip chart.

Disadvantages: The effectiveness of using a flip chart for recording ideas may be highly dependent upon the person you have selected to be the scribe (the person who writes the group's ideas on the flip chart). Sometimes, if a group gets fired up and starts producing lots of ideas, the scribe may not be able to write them down fast enough. Also, a poorly-trained scribe may not write down the idea the way it was presented.

Because of space limitations, a 20-word description of a valuable idea may be capsulized on a flip chart in only 3 to 4 words. Or the scribe may put his or her own "spin" on the idea while writing it down. As a result, some of the nuances of the idea may get lost in the process.

Because of the relatively small size of the average flip chart, it may not be suitable for larger group meetings (it may be hard to read ideas from even 20 feet away) or large quantities of ideas. Unless you rip off each completed sheet and attach it to a conference room wall for all to see, ideas may become hidden as you turn over a filled up sheet to begin recording ideas on the next one.

You can overcome this limitation by using mind mapping software with a laptop and LCD projector; as ideas are contributed, the scribe can immediately record them in the mind map, which is displayed on screen for all to see. All ideas are visible on screen, a big advantage compared to flip chart sheets.

Finally, someone must transcribe all of these written ideas into electronic form, which could be time-consuming if the group has generated a lot of ideas. Also, there's an opportunity (albeit a small one) for the person doing the transcribing to re-interpret or misinterpret ideas during the transcription process.

8. Butcher block paper/idea wall

Butcher block paper is recycled paper that comes on large rolls. It can be pinned up in long, horizontal strips on the walls of your conference room. Unlike the flip chart, which has limited space where you can record ideas, a large strip of butcher block paper – or a wall-sized whiteboard – gives you a much bigger canvas upon which to jot ideas, create mind maps and other visual representations of your ideas.



Some creative companies even create idea walls in selected hallways, and encourage employees passing by to read the problem or challenge statement and jot down their ideas. This is a great strategy to get more employees involved in generating ideas for your company.

Advantages: Idea walls work well for capturing a larger quantity of ideas, because they provide a much bigger "canvas" than a flip chart, as well as keeping all of the previously-recorded ideas visible – so they can trigger additional ideas. When your team is done brainstorming ideas, you can use colored dots to enable workers to vote on the ideas they like the most.

Disadvantages: Idea walls have all of the limitations of paper-based idea recording: To share the ideas generated, someone must transcribe them into digital form (into a word processing document or an e-mail message). Because of their size and bulk, their real strength lies in helping groups to brainstorm and share ideas.

9. Pocket sized notepad and pen

This technique is another favorite of mine. Over the years, I have used a number of different types of pocket-sized notepads and miniature pens. Because they fit comfortably into a pants or jacket pocket, these tools almost beckon you to take them just about everywhere. Here are several systems that I've come across lately:

[The NoteTaker Wallet](#) from the David Allen Company, an executive organizational consulting firm. The NoteTaker Wallet includes an expandable Rotring Esprit pen.



[The Moleskine Pocket Notebook](#) is useful for recording simple sketches or notes, wherever you are. You can use it to keep a to-do list, maintain a pocket diary, jot down addresses and phone numbers and much more. This pocket notepad keeps its contents secure with a black elastic band. This line of notebooks also includes styles that are unruled (for sketches and drawings), pages with rounded rectangles for storyboarding and even a version that can be used to jot down your musical compositions. I currently use a 3½ x 5½ inch (9 x 14 cm) pocket-sized Moleskine ruled notebook, which I carry just about everywhere with me.

Hipster PDA: Another possibility is the Hipster PDA – a simple, home-made, pocket-sized collection of index cards that you use for capturing and managing your ideas and to-dos. This idea was first developed by Merlin Mann, author of the popular 43 Folders productivity blog, and it has caught on like wildfire. The picture at right shows one made with colored cards and single-hole punched with a ring to hold it together, but you can just as easily create one out of plain white index cards and use a small binder clip to hold it all together.



Advantages: The pocket-sized notebook and pen comes closest to the ideal characteristics of a toolset for recording ideas: It's eminently portable and easy to stow in a pocket or purse, which means you're more likely to carry it with you everywhere. Pocket notepads are also very versatile: They can be used to record a variety of notes, sketches and more.

Disadvantages: Like any other paper-based solution, you will probably want to transfer your hand-written notes and ideas into a digital format, which requires an extra step and an investment of time. Also, depending on the style of the pocket-sized notebook you decide to use, pages may become damaged or torn. Worse yet, loose pages can become lost, causing you to lose track of some potentially important notes or ideas.

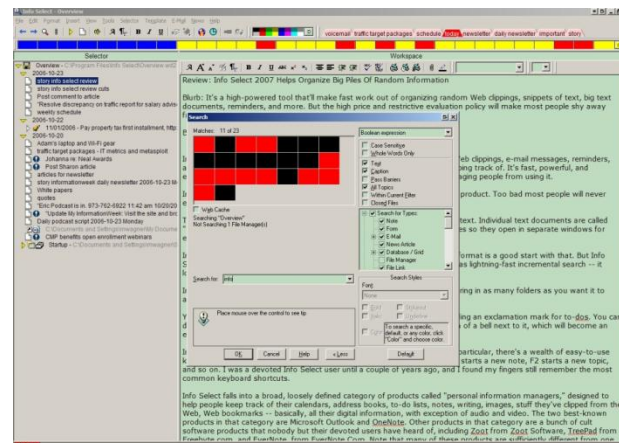
10. Idea file/database

This idea recording device encompasses any tool you can use to save your ideas in a safe place - anything from a storage box for 3x5 index cards to a software program like Microsoft Access, Ashley Software's [Writer's Blocks](#), Microsoft's OneNote or MicroLogic's [InfoSelect](#) (pictured at right).

Any of these programs can be used to store thousands of ideas in a centralized electronic repository, and perform keyword searches on them. This technique keeps all of your ideas in one place, for easy retrieval at a future date. Even index cards can be divided by general subject area or type of idea, and placed behind tabbed dividers.

An idea databases enable you to do speedy full-text searches of all of your ideas, a big advantage if you have recorded hundreds or thousands of ideas and observations over the years. I recorded creativity and innovation book and article ideas for years using InfoSelect, never knowing if or when I would ever use them. After I started to develop InnovationTools in 2001, I realized that I had this treasure trove of article ideas, and I utilized it to generate some of the early articles added to my the website.

Advantages: To get the most out of your ideas, it's best to keep them organized and easy to find, because you never know when an idea you jotted down 6 months ago might come in handy next week. An idea file or database saves you time by making it easy to search for and locate that one killer idea –



the proverbial needle in a haystack. Software tools like InfoSelect or Microsoft's new [OneNote](#) are even more powerful allies, because they enable you to store all of your ideas electronically in a free-form text format, and then perform keyword searches on them.

Disadvantages: For maximum benefit, you must be really disciplined, recording, storing and organizing your ideas on an ongoing basis.

Conclusion

As you can see, there are many tools and techniques that you can use to record your ideas. Some are best suited to individual ideation, while others are aimed at capturing the creative output of teams. Some require only a minimum of materials and investment, while others are more sophisticated. But they all share one common goal: To help you to capture your fleeting ideas now, so you can profit from them later.

My suggestion is to try as many of these techniques as you can, determine which ones are the best fit with your work style, and retain them as part of your creative repertoire. Have fun!

Questions for **evaluating ideas**

When brainstorming, it's not enough to generate a large quantity of ideas. You must have an organized way to evaluate the ideas you have generated. Charles "Chic" Thompson, in his excellent book, *What a Great Idea! Key Steps Creative People Take*, suggests this valuable list of idea evaluation questions:

1. Ask about failure

- If you failed completely or partially, what would happen?
- Are the risks and possible losses acceptable? Can they be avoided or reduced?
- If you fail, what can you salvage?
- What are the advantages and disadvantages of starting over?

2. Ask about success

- What criteria will you use to determine success?
- Who is essential to the outcome?
- What place, location or thing is necessary?
- What action, process, activity or event must occur?
- What can you do to make your idea even better?



3. Ask about the future

- Will your idea become obsolete because of evolving technologies? When may this occur?

- If your idea is a product or service, what effect will it have on people's quality of life? Physical or mental health? Safety? Standards of living?
- If the idea catches on suddenly, can you keep up with demand?
- How might changes in these circumstances affect your idea: overseas competition, change of management, cost of materials, availability of materials?

4. Ask personal questions

- If it were your money, what would you do?
- How strong is your commitment to the project?
- Should you challenge any of your assumptions?
- What do you assume are the givens?
- What facts should you question?
- What are you taking for granted?

5. Ask about your mission

- Do you know exactly where this idea fits into the big picture?
- Does it promote your mission?
- Have you been looking at this idea from all points of view or just your own?

6. Ask about timing

- Is the idea timely?

- Is it too early, too much ahead of its time?

Questions like these can help you to think about your ideas and possible solutions at a much deeper level, and may suggest new ideas or improvements to the most promising solutions, or perhaps a totally new direction. Why not try using these questions to evaluate your next set of new ideas? I think you'll find that they will generate new insights and perspectives on the challenge at hand, and the ideas that will best solve it!

How to strengthen ideas

The Innovator's Toolkit: 50+ Techniques for Predictable and Sustainable Organic Growth by David Silverstein, Philip Samuel and Neil DeCarlo contains a wealth of techniques for generating valuable ideas that are tailored to the needs of businesses. What caught my attention during a recent perusal of the book, however, is a process for shaping and strengthening unpromising ideas into valuable ones:

- 1. List the constraints:** Choose an idea that has limited value due to its inherent constraints. In one column of a spreadsheet, list these constraints or limitations.
- 2. Shape the idea:** Brainstorm ways in which you could overcome each constraint, and record them in a separate column next to each constraint.
- 3. Strengthen the idea:** Take this same impractical idea and consider it from the points of view of its various stakeholders. In the first column, list the stakeholders. In the second column, list their wants, needs, concerns and potential objections. Then in the third column, generate ways to improve the idea so that it meets the needs - or at least addresses the objections of each stakeholder group.

I like this technique because it takes a lot of information that usually lurks beneath the surface - such as constraints and stakeholder concerns that could potentially derail the idea - and makes them explicit, so you can think about them and brainstorm solutions to them!

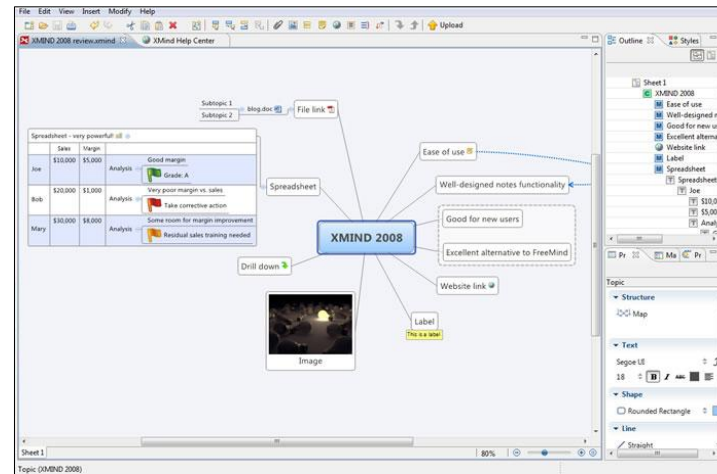
Section 4

Harnessing the Power of Visual Thinking

Introduction

One of the most powerful but underappreciated ways to enhance your capacity for creating thinking and problem solving is to think visually. Your mind does it – it thinks in pictures and images and it relentlessly associates ideas and concepts together. Why not leverage the way your brain is wired?

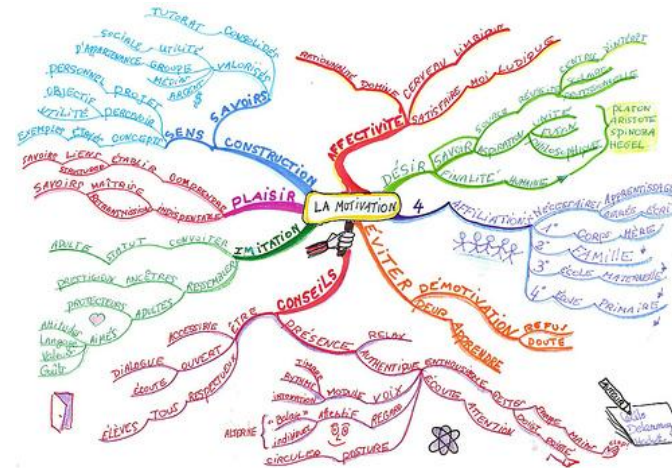
As the problems we face in business and life become more complex, we need better tools to help us to clearly and accurately describe the problem or challenge, envision the ideas and opportunities that may solve them, and to formulate the action plans that can help to bring them to fruition. Visual thinking can help in all three areas, as you'll learn in this section of Creativity Hacks.



Visual thinking: Executive power tool of the 21st century

In this age of massive discontinuities and accelerating change, savvy executives need new ways of thinking about "seeing" challenges and opportunities – so that they can develop a steady stream of new ideas and innovations.

Visual thinking meets these needs by offering a collection of simple, elegant and vivid ways to represent problems and solutions.



What is visual thinking?

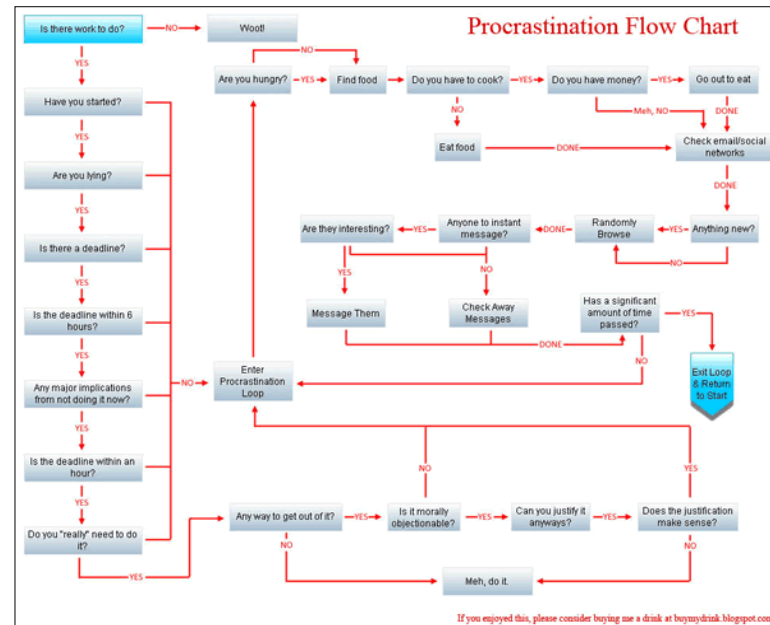
Visual thinking encompasses a variety of techniques for representing ideas using words and symbols. These diagrams appeal to both the right and left sides of the brain, allowing them to convey both meaning and context, in a gestalt fashion. As a result, they can be used to communicate information faster and with greater impact to today's post-literate audiences.

For example, the shape and color of a highway stop sign carry so much cultural meaning that even if the sign wasn't emblazoned with the word "STOP," most people could still tell you what the red, octagonal shape means.

Another example: many executives have participated in planning meetings where everyone tries to reason through a complex marketing situation logically.

After several hours of frustration, when someone finally draws a flow chart on a white board, the problem (and a workable solution) suddenly become clear to the group.

As the pace of change renders many traditional solutions obsolete and business challenges become more multi-faceted and complex, many executives find it hard to clearly visualize this maelstrom of elements, factors and influences in their minds. Also, words are often imprecise and open to interpretation by team members, further clouding the problem definition and solution-finding processes.



Transferring this information to paper in a more symbolic form helps to make these pieces - and the relationships between them - more understandable. As a result, teams can often develop better and faster solutions using visual thinking techniques.

By drawing upon both the visual and logical/linear capabilities of the brain, executives can think faster and more clearly, develop more creative solutions, present their ideas more persuasively, and achieve better results from teams.

Mindmapping: the roots of visual thinking

The technique of visually mapping ideas was originally developed in the 1960s by business creativity guru Tony Buzan, who was seeking a more visual and faster way of outlining ideas on paper. His pioneering technique, called "mind mapping," begins with a symbol or graphic of the problem to be brainstormed in the center of the page. Key words are used to represent ideas, and are connected to the central focus with lines. In addition, words can be placed within symbols (ovals, squares and other shapes) to highlight certain ideas and to further stimulate the mind to make other connections and associations.



Mind mapping not only stimulates creativity by drawing upon the visually-oriented right side of the brain, it's also a very efficient way to do a "mental core dump" of your thoughts and ideas onto paper in a matter of minutes.

Since the 1960s, interest in visually mapping ideas has grown steadily and has evolved into other brainstorming and process-mapping tools. During the last decade, countless thousands of workers have been trained in process flow charting and other visualization exercises as part of the Total Quality movement.

More recently, the popularity of visual thinking has enjoyed another resurgence as forward-thinking executives increasingly realize that creativity and innovation are quickly becoming mission-critical business skills for coping with a world of accelerating change.

Further, everyone from the creative minds of Madison Avenue to software designers have recognized in recent years that symbols are powerful communication tools. *"Look around you – symbols are everywhere. From signs in airports to icons on computer screens – we increasingly communicate not only in words, but with images,"* explains Nancy Margulies, co-author of the book *Transformation Thinking*. *"Mind mapping helps us to stretch our thinking beyond our usual paradigms. (It) can help you to see the big picture, capture complex ideas quickly and easily and identify relationships between ideas and processes,"* she adds.

**We
increasingly
communicate
not only in
words, but
with images.**

Other visual thinking techniques

Other powerful visual thinking techniques include:

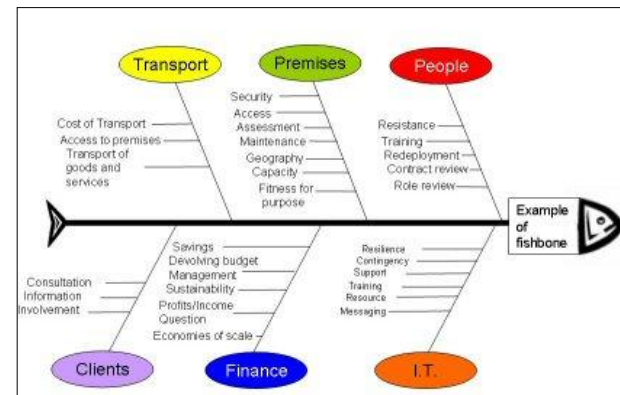
Mindscapes: A visual "storyboard" of a problem-solving process. For example, a team could use a drawing of a trek up a mountain to depict their development of a departmental mission statement. A road could symbolize the path to the group's objective, and rocks could represent potential obstacles along the way to the goal, for example.



Mess Mapping: A mind mapping variant that outlines the current forces, trends and influences surrounding a situation or opportunity

Fishboning: A Total Quality technique that places the problem statement on a horizontal line, with key words on lines drawn at a 45 degree angle to the right, above and below it (so it resembles the backbone and ribs of a fish).

Total Quality Flow Charting: Elements in a business process are laid out in a linear fashion (left to right) using key words and symbols, with process flows mapped out using lines and arrows. This powerful visual diagramming method has been used widely to simplify business processes, by eliminating steps that don't add value.



Business applications

Business applications for visual thinking are as varied as the human imagination. They include:

Leadership & Management

- Developing a corporate vision or mission statement
- Defining new organizational structures
- Problem solving
- Decision making

- Employee training (helping them visualize processes or procedures)
- Process mapping and optimization
- Brainstorming - as part of a team, or individually
- Project organization
- Meeting management

Marketing & Sales

- Identifying new market niches or customer needs
- Developing ideas for new products or services
- Positioning a new product or service (or re-positioning an existing one) vis-à-vis competitors

Strategic Planning

- Outlining the strategic plan
- Developing future planning scenarios
- Mapping the forces or influences affecting a situation

Personal & Professional Development

- Mapping your existing knowledge of a particular area
- Visualizing your network of professional contacts and their relationships
- Defining personal or team goals
- Presentations
- To-do lists
- Writing
- Note taking

Visual thinking resources

Here are a number of sources where you can learn more about visual thinking techniques:

Books

[*The Mind Mapping Book*](#) by Tony and Barry Buzan – This excellent book clearly explains the theory behind the visual thinking technique of mind mapping in a very engaging way, and makes the case why it's so important to develop your brain's ability to "think about its thinking" using this technique.

[*Idea Mapping: How to Access Your Hidden Brain Power, Learn Faster, Remember More, and Achieve Success in Business*](#) by Jamie Nast – The author has trained thousands of people at dozens of high-profile organizations on using idea maps. In Idea Mapping, she explains how you can apply the power of idea maps to your professional life – helping you and your teams plan better, increase productivity, organize complex information, save time, and develop new ideas and solutions. It includes 21 real-life business examples, to help you understand how to apply idea mapping to your work.

[*Thinkertoys: A Handbook of Creative-Thinking Techniques*](#) by Michael Michalko – One of the most enjoyable and yet information-packed books on business creativity techniques ever written (in this author's opinion), Thinkertoys covers fishboning and dozens of other visual and non-visual idea-generation techniques. Don't let the title fool you: this book is rocket fuel for the entrepreneurial mind!

Blogs

[Mind Mapping Software Blog](#) - Chuck Frey's blog is the definitive source for news, trends and best practices in the field of mind mapping.

[Idea Mapping Blog](#) – Jamie Nast's excellent blog is a companion to her book of the same name. Jamie is a very talented mind mapping trainer. Her blog contains many examples of this visual mapping practice that will teach and inspire you.

[Michael on Mind Mapping](#) – Michael Tipper's blog, which also contains a link to his excellent e-course. If you've been curious about using software for mind mapping but don't know where to start, I highly recommend Michael's course!

[Visual Mapping](#) – Philippe Boukobza writes about mind mapping, design and social media. His blog always contains some interesting insights!

[Mind Mapping Blog](#) – Vic Gee tirelessly catalogs all of the visual thinking software and tools available today, from those that are offered commercially to those that are still in alpha and beta stages of development. Truly impressive! Vic is also the creator of [Mind Map Search](#), a specialized web search engine that only catalogs and searches the contents of mind mapping-related websites.

[Visual Mapper](#) – Wallace Tait has emerged as one of the “deep thinkers” in the mind mapping space, particularly its applications in business.

Ideas: The currency of the 21st century

In closing, ideas are fast becoming the currency of the 21st century. Whether you're trying to clarify your own thinking or seeking more impactful ways to persuade others, these visual thinking techniques represent a powerful new set of tools you can add to your executive arsenal. Indeed, a picture - or a symbol - truly is worth a thousand words!

Mind mapping software: a prism for problem solving

Many of the problems we face in business today are quite complex. Solving them is seldom easy, because there are so many factors involved that it's hard to understand even what the real problem is. Without a good, solid problem definition, we may find that we're solving a tangential issue, while the core problem remains unsolved – and in many cases, unseen.



That's where mind mapping software can help, because it acts like a prism, separating a major task or challenge into its component parts and enabling you to see the relationships between them, so you can more effectively develop creative solutions to address it.

A prism is a highly polished block of glass that splits light into all of the visible colors of the spectrum. In doing so, it reveals that visible light, which our eyes perceive as white, is actually made up of many colors. But these colors are usually invisible to the naked eye.

In much the same way, a mind map helps us to unravel the hidden complexity of our problems and challenges. It leads us to a concise, visual problem definition that puts us in an excellent position to begin brainstorming solutions to it.

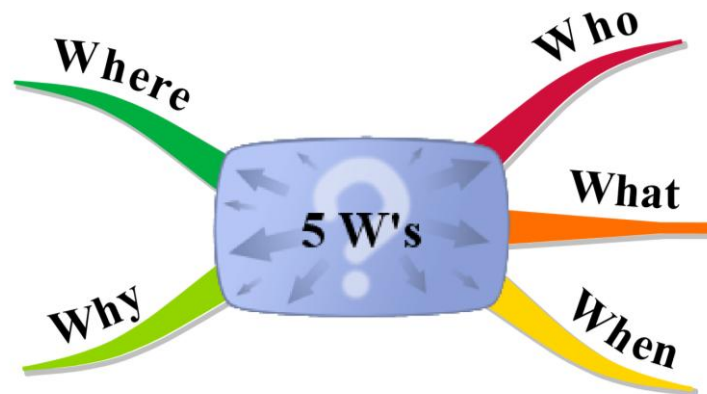
As Malcolm Craig explains in his excellent book, *Thinking Visually: Business Applications of 14 Core Diagrams*, deconstructing your current task or challenge in this way can be quite revealing:

“(A) mind map can be used at the beginning of many tasks to help illustrate the level of complexity in the situation... and raises questions about possible causes, leading eventually to explanations. At this point the complex issue is being broken down into smaller manageable parts, and boundaries can be drawn around discrete events or problems...”

Sometimes when a key problem has been identified it is discovered from examination of the (mind map) diagrams that it does not stand alone: there are sub-problems that need to be addressed in order to solve the key problem... (In a map), the problems can be prioritized and various options identified for tackling each one... Diagrams help us escape from a fixed idea about the problem itself.”

Craig also points out that a mind map can be used to record ideas and potential solutions, and to prioritize them and identify those that will do the best job of solving the problem. He views diagrams like mind maps to be important catalysts in the creative problem-solving process, because they often reveal new insights and solutions.

To subdivide the components of your task or challenge, ask yourself questions that begin with the famous “5 W’s”: who, what, when, where and why. Here are some sample questions to get you started (courtesy of Arthur van Gundy):



- Who is affected by the problem?
- What do you know about the problem? What is the principle underlying the problem? What problem elements are related to one another?
- When does the problem occur?
- Where else does the problem exist? Where is the best place to begin looking for solutions? Where does the problem fit into the larger scheme of things? Where can you find the best people to solve the problem?
- Why do you want to solve this problem? Why is the problem hard to solve?

These and other open-ended questions will help you to “split” your problem into its elements so that accurate problem definition and effective problem solving can begin.

The next time you are mapping out a business challenge in a mind map, keep in mind the metaphor of the prism. You may want to even create one main branch in your map for each of the W’s, with sub-branches for each of the related problem-solving questions.

5 powerful ways that mind mapping software increases your creativity

Want to become a better creative problem solver? One of the most productive tools you can use to solve problems and generate great ideas is mind mapping software.

Simply put, this type of software enables you to capture your ideas in a unique, highly visual way: Your current project or challenge is located at the center of your map. Attached to it are primary topics that radiate out in all directions. These main branches can have sub-branches, each containing a key word, phase or concept.



Tony Buzan, the renowned developer of the concept of mind mapping, calls it “a Swiss Army Knife for the brain.” That’s because it works the way your brain does – by association – and it can help you to leverage more of your latent creativity. Here’s how:

Whole brain creativity: The practice of mind mapping makes excellent use of both the left (logical, orderly) and right (creative, visual, random) sides of your brain, enabling you to access more of your brain’s creative capabilities. It’s a powerful form of **whole brain thinking**.

Refactoring creates new insights: Topics can be moved from one place to another within your map with complete freedom, which helps you to make creative connections between them. This process of moving a topic to a new location and then rethinking its meaning in the context of its new parent topic is

called “refactoring,” and it can be a powerful creative catalyst. No other type of software allows you to move ideas around and play “what if” with your thoughts the way that mind mapping software does.

Improved problem definition: Sometimes when we’re faced with a complex problem in business, we have a tendency to grab at the most apparent problem and solve that – only to discover that it was only a peripheral issue. We solved the wrong problem.

Mind mapping software is a great tool for achieving more accurate problem definition, because you can use it to “deconstruct” a problem or challenge and see relationships between its elements that weren’t visible before. And it increases the odds that you will correctly identify the underlying problem, rather than picking away unproductively at peripheral symptoms.

Creativity in the white space: Mind mapping software enables you to imagine “white space” opportunities and ideas that may exist between the branches of your map. How does this work? Your subconscious mind doesn’t like to view incomplete concepts or images. When it sees them, it tries to “fill in the blanks” – the information or ideas that appear to be missing.

When I’m using mind mapping software to capture my thoughts, I find that my thoughts just “flow” naturally from my brain, through my fingertips and onto the screen. When I create a new topic, my brain immediately starts thinking about concepts and ideas that are related to that. Some mind mapping

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software programs enable you to capture them quickly in a “brainstorming mode,” using only the keyboard, helping you to keep the flow of ideas coming.

Organizing and prioritizing your ideas: Mind mapping software isn’t just for generating ideas. It’s also a powerful tool for organizing and prioritizing them, especially in a group brainstorming session. For example, you can group promising ideas on one branch, and those for future consideration on another branch of your map. You can also assign numerical or A/B/C values to each idea or use icons or symbols to prioritize them.

In addition, some programs even enable you to filter the contents of your maps based on those symbols – hiding everything else and showing only those topics that have a certain symbol attached to them. This is an easy way to reduce the amount of information in a large map down to a manageable level, so you can quickly focus upon your best ideas.

17 ways that mind mapping software can help you to **think about your business differently**

Mind mapping software is an excellent tool to help you to think about your business differently – an essential exercise during the global recession. It's at times like these that new business models, products and services will emerge, seemingly out of nowhere. Constraints force people to be creative. That's why downturns tend to be hotbeds of innovation.



Here are 17 ways in which you can utilize mind mapping software to rethink your business, leap ahead of your competitors and delight your customers:

1. **Product extensions:** Map out ideas to improve or extend your existing products and services.
2. **Map your customer segments**, including the development of personas to zero in on how their needs have changed in light of the current recession; identify the most promising ones for targeted sales campaigns and look for those that may be under-served by your competitors.

3. **Map your current market segments**, and identify adjacent ones with similar needs into which you can expand your marketing and sales.
4. **Do a competitive analysis**, and use your mind map to identify gaps you can fill in areas that matter to your most attractive prospective customers.
5. **Use it to perform a SWOT analysis** (strengths/weaknesses/opportunities/threats), with a particular emphasis on potential disruptive threats. Which emerging firms are you not taking seriously today? What if they suddenly got much better? Mind maps are great for outlining future scenarios like these.
6. **Look for opportunities to reduce waste and streamline business processes.** The savings you uncover will go right to your company's bottom line!
7. **Analyze and improve your business model.** How are companies in other industries or markets creating sustainable value? What lessons can you adapt or learn from what they have accomplished?
8. **Conduct research into emerging industry trends** and "weak signals," and use a mind map to capture, organize and analyze your findings for new insights and opportunities.
9. **Brainstorm potential partnering opportunities** – the more unusual, the better. Don't forget your local universities, who can help you with market research and business planning!

10. **Ask thought-provoking questions** that to generate new insights into your business, its challenges and opportunities. Record both the questions and your answers in a mind map.
11. **Map out your employees, their positions and their responsibilities** – sort of like an organization chart on steroids. Visualizing this information will make it easier for you to see who is overloaded, who may not have enough work and where you may be able to streamline departments and job functions.
12. **Prune your innovation portfolio:** Map out the projects in your company's new product development (NPD) portfolio and use your mind mapping software to classify them as short/medium/long term and low/medium/high risk. Use your mind map to subject your innovation portfolio to a different set of rigorous tests that can bundle, re-combine, re-prioritize the concepts in the works. Then zero in on those projects that are relatively low risk and can be accomplished in a fairly short time horizon. These will enable you to focus your resources on fewer, more promising projects, and to get a quicker payoff on the core projects that survive this process.
13. **Map out the existing services that “surround” your company's products.** Brainstorm new services that you can use to complement existing products and provide more valuable customer experiences – which will help you to increase customer loyalty. Seek to align your products and services with the needs of key customers, which have changed as a result of the downturn. Your customers, like you, are trying to cut costs, increase revenue and streamline their operations. Try brainstorming with these recession-beating questions developed by innovation expert Paul Sloane:

- In what other ways could we provide this value to our clients?
- In what new ways can we help customers with the problems that they are having?
- What major element of cost can we completely eliminate?
- How can we use the internet in a new and better way to reach and help clients?
- How can we gain competitive advantage by trying something radically different?

Mind mapping software is an ideal way to visualize these latent opportunities!

14. **Take a fresh look at your key customers** from the standpoint of their “jobs to be done” – a core concept from Clayton Christensen’s landmark book, *The Innovator’s Solution*. In other words:

- What are they trying to accomplish?
- What is the end result they seek?
- How can you enable it?

Map out these jobs, and list the needs and implications that each implies in separate branches of your map. Remember: Even during a recession, real customers continue to face real problems. Innovators who figure out different ways to solve those problems – and make money doing so – will have opportunities to create new growth businesses.

15. **Do scenario planning.** Create several future scenarios, each on a separate main branch of your map – one assuming the status quo, another that assumes there are incremental changes in your customers and marketplace (increased government regulation, for example) and a third that assumes that your market or industry is affected by a radical innovation (a new technology that matures and reaches critical mass quickly, for example).

Forecast two to three years out and evaluate the likely changes and outcomes from the financial crisis. This will help you to identify new ideas and opportunities.

16. **Identify areas of waste and inefficiency:** Map out your business processes, teams and operations using your mind mapping software. Look for steps that don't add any value, or that offer insufficient value. Look for new ways to extract more horsepower from your intelligence, people, knowledge and clients and put that to new innovative use. Don't just focus on cost cutting, but on opportunities to reconfigure and reconstruct your business in new, creative ways. Look for value in new places.

Another key thought to keep in mind: speed to market is a key competitive advantage. If you can eliminate waste and streamline your business processes, you may be able to significantly improve the agility of your company – a key asset when the economic upturn arrives!

17. **Do business continuity planning:** What if a catastrophe was to strike your business? What would happen? How soon would you be able to get up and running again? A mind map is the perfect tool to visually think about the natural disasters you ought to prepare for (flooding, fire, tornado, earthquake, etc.) and flesh out plans to get back up and running with the minimum of disruption of services to your customers and clients. Now, when business is slow, is a perfect time to do this!

Photography: **The art of 'seeing'**

Over the years, I've noticed that the skills I've developed as a photographer have also helped me to "see" more creatively in other areas of my life, too. I've discovered that there are some strong parallels between the art of seeing creatively through a camera lens and the art of creative problem solving.

Creative elements of photography

There are a number of elements that contribute to creative photography, and which have metaphorical equivalents in the world of creative problem solving.

First, 35mm cameras have interchangeable lenses, which enable you to frame your subject in a number of interesting and creative ways:

- A normal focal length lens shoots pictures from a perspective that is very similar to how your eyes see them.
- A telephoto lens makes distant objects appear to be closer, but also tends to focus in on one part of a scene –a much smaller field of view than a normal lens.
- A wide-angle lens take in more of the scene than a normal focal length lens does, and tends to emphasize the distances between objects.



In addition to lens selection, the photographer can manipulate elements like lighting, image exposure and the angle from which he or she shoots the subject, which can also be used to compose some highly creative photographs.

Finally, every professional photographer knows that shooting pictures is a numbers game. In other words, the best way to come up with one great image is to shoot many photographs. During the shooting process, it's often hard to envision which combination of factors (lens, lighting, exposure and the camera's point of view) will yield the best images. That's why professional photographers usually shoot a large quantity of shots, realizing that the law of averages tends to prevail.

Applying the photographic metaphor to creativity

What does all of this have to do with creativity and problem solving? More than you might think, because creativity, like photography, is all about the art of "seeing." In other words, looking at the same situation as everyone else, but seeing something different.

When we analyze a problem or opportunity, we may focus in on a single aspect of it, like a telephoto lens does. Other times, we may broaden our mental perspective to take in the "bigger picture," like a wide-angle lens does.

Like a photographer, you can take a mental "walk" around your problem or opportunity to view it from multiple perspectives. This process often yields important insights and fresh ideas.

**Photography
and creativity
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Likewise, both the photographer and the innovator recognize the importance of quantity in their respective professions: The best way to come up with a truly great idea is to come up with many ideas.

Conclusion

If you're looking for ways to increase your creative output, why not adopt some of the techniques of professional photographers?

Don't be satisfied with looking at your current challenge from your usual, habitual point of view. That's like digging for gold in a tapped-out vein of rock. Instead, dig deeper. Take a mental walk around your challenge. Get focus in and examine each aspect of it. Then broaden your mental focus and consider your challenge in the context of other trends or forces, as well as similar situations others may have faced. Like the photographer, examine all of the possible variables or factors that may lead to a winning solution.

**Escape from
your habitual
point of view:
take a mental
walk around
your problem
or challenge**

And remember that creativity, like photography, is all about "seeing" things differently -- about thinking and discerning more fluently, so you can see the unique elements and factors that others may have overlooked in their habitual way of looking at the world.

"Scrapbook" your next creative challenge

Sometimes when you're faced with a creative challenge, it helps to gather stimuli that is related to it yet extends your thinking in some powerful new directions. That's where the creative problem solving technique called scrapbooking can be a big help. Here's how it works:

First, take a pile of old magazines and look for pictures that represent or are somehow related to your problem or challenge. Cut them out and place them on a pile for now.



Next, arrange them into a collage using poster board and a glue stick. The order and arrangement of them isn't critical. The idea is to make them visible to your eyes – and your creative mind – all at the same time.

Finally, use your magazine collage as a source of visual stimulation. What words or phrases do the pictures suggest? Write them down as they occur to you, and keep free associating and writing them down until you run out of ideas.

If you don't have a stack of old magazines handy, you can easily do the same thing with a web image search – using Google Images, for example. Simply conduct searches on keywords and concepts that are related to your challenge. You'll be amazed at the diversity of images that will appear in your

browser window; each one is a potential stimulus for new ideas. Try to extract the meaning of each image in a few words or phrases, and then try to tie these concepts back to your creative challenge.

Ask yourself, "How could I use this?"

What makes this technique work is its visual element: your brain likes to work with images, and pictures stimulate a different part of your brain than when you are working with words alone.

About the author

Chuck Frey is the founder and publisher of InnovationTools.com, the world's leading website for information about business innovation, creativity and brainstorming. He is also the author of the popular Innovation Weblog and the Mind Mapping Software Blog. He has also written two e-books about mind mapping software.

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A note about links: The links to external resources contained in this e-book were working at the time of its publication. If you discover any that are no longer functioning, please send an e-mail to chuck@innovationtools.com, so they can be corrected in subsequent versions. Thank you!

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