Unleashing the Inner Innovator

By: Stephen M. Shapiro

Here's a question for all upwardly mobile employees: Do you want to be a contender in today's workplace? Sure you do! Problem is, you've got lots of competition, all vying for a few scarce jobs and promotions. And the marketplace is in such a state of flux that you don't know from one moment to the next what companies are looking for. How can you set yourself apart from the horde? One effective way is by unleashing your inner innovator. Differentiate yourself from others by finding new ways of adding value to your organization.

If you are a senior executive, naturally you want your company to be a leader in the marketplace. But there are so many followers trying to steal your thunder! Think about it. It's discouragingly easy for competitors to copy your products, rip off your business processes, and go after your customer base. Yes, someone is always nipping at your heels. So what can your company do that's impossible to copy? You guessed it. Create a pervasive culture of innovation that allows your organization to outperform the competition and always stay a few jumps ahead.

So, what can you do? How can you increase the innovative ability of yourself and your organization? One way is to bust open the myth that creativity is a trait a few select people are "born with"... that there are those with "creative personalities" and then there are the rest of us. Actually, we all have the potential to be creative. Perhaps not to the same degree, but we all do have innate creative abilities. As children, we were all more creative than we are today. This premise has been tested out many times over the years. For example, 1,600 five-year-olds were given a creativity test used by NASA to select innovative engineers and scientists, and 98 percent of the children scored in the "highly creative" range. These same children were re-tested five years later and only 30 percent of the 10-year-olds were still rated “highly creative”. By the age of 15, just 12 percent of them were ranked in this category, while a mere 2 percent of 200,000 adults over the age 25 who had taken the same tests were still on this level. Creativity is therefore not learned, but rather unlearned.

Unless you go through a second childhood or hire a bunch of 5-year-olds, what can you do to tap into that innovative potential? First it would be useful to consider what creativity really is. I contend that creativity is about collecting and connecting dots ... dots being ideas, disciplines, ways of looking at problems, and experiences. As Albert Einstein once said, “Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.” In fact, knowledge is, in my opinion, the enemy of innovation. I am always amused when someone, upon finding a lost item, says, “Can you believe it? It was in the last place I looked.” Well of course, who finds something and then continues to look for it? The same thing is true when looking for a solution to a problem. Once your brain finds what it thinks is the best solution, it stops looking. Where do we look for these solutions? We tend to look into our memory banks of what has worked in the past. And for those of you out there who are experts, I'll bet you “find” an answer quite quickly. Unfortunately, your solution might not be new, innovative, or even good. What we need to do is train our brain to keep looking, even when we have found an answer.

The reason children are so creative is that they look at the world with fresh eyes. They are always collecting dots that they eventually string together. Everything is a new experience. And rarely do kids jump to quick solutions. However, once they start going to school and socializing with other children, they are forced to fit it. Peer pressure
drives conformity. Education focuses on the regurgitation of facts rather than on gathering new experiences. At university, you choose a major and then become an expert in that area. As we get older we find things in life that we like, to the exclusion of all else. We read the same sections of the newspaper. We watch the same movies. Eat the same food. Socialize with the same people. Read the same magazines. And we tend to find ways of operating that work for us. We use those modes continually without trying anything new. Our communication style. Our view of the world. Our political thoughts. As we get older, instead of collecting dots, we begin a process of dot elimination. We ride down the same path over and over.

What can be done to reverse the effects of time? The key is to restart the process of collecting and connecting dots. Much has been written on the techniques for sparking creativity and innovation. In fact, there are over 2,500 books with the word “innovation” in the title. A large portion of these are focused on “event-based” techniques for generating new ideas. That is, approaches to be used during brainstorming sessions. These approaches may be a “5-step process”, “7 techniques” or “9 tools”. Although these are useful, I want focus on approaches that change the way you see the world. Approaches that, with practice, help make innovation an every day activity. As Aristotle has written, “We are what we repeatedly do. Excellence then is not an act but a habit”.

Here are, what I call “The Four Thinking Lenses”. Try thinking like a Pack Rat, a Matchmaker, a Kid, and a Contrarian. These lenses will help you collect and connect dots. But more importantly, they will shape your view of the world, which will subconsciously change your actions and behavior. And that will ultimately lead to different (and hopefully better) results.

Thinking Like a … Pack Rat

Children are creative because they are looking through fresh eyes. As adults, we start to filter everything we see, just like a polarized lens that lets in only light that is aligned one way. So to reverse the years of filtered thinking, you need to start collecting new dots. Start gaining new experiences. To paraphrase Steve Jobs, “Creativity is just having enough dots to connect … connect experiences and synthesize new things. The reason creative people are able to do that is that they've had more experiences or have thought more about their experiences than other people.” So, our first lens is to get you thinking like a pack rat\(^1\). Collect and hoard every experience for later use. You never know when some randomly stored experience will be the catalyst for breakthrough thinking. To do this I encourage you to use three techniques. The first two should be used on a daily basis. The third is to help accelerate the process even further during brainstorming sessions.

1. Filters

Because we can only see the world through the filter that we have built up over time, the only way to change perspective is to change the filter. Unfortunately, it is difficult to “see” the filter you are wearing. Therefore, it is easier to replace your existing filter with a new one. So, each morning, when you wake up, make believe you are someone different. Make believe you are a detective, a mechanic, an artist, a gardener ... it really doesn’t matter, so long as it is someone other than you. You will then begin to see things over the course of the day that you have never seen before -- because what you focus on expands. By focusing on something different, you will begin to have new experiences and will gain new dots that you can use when trying to be creative. On other days, make believe that people are a particular way. Assume all people to be kind, agreeable, friendly, or whatever empowers you. You may find that when you talk to that jerk in the corner office, you see that he is not so bad after all. And finally, some days assume the world is a particular
way. Look at the world as art, as music, as simplicity. You will see, hear, smell, and sense things you've never noticed in the past. Changing your filter, whether it be on a daily basis or just during specific conversations, can have a profound impact on your view of the world.

2. Try Something New
As adults we tend to do the same things over and over. Our lives play out and repeat themselves like a broken record. Predictable. No new experiences gained. So try something else new. Read magazines you have never read before. Listen to music you think you don't like. Try new hobbies. Meet new people. Eat different food. The more you do this, the more experiences you will gain and the more ideas you will have to draw from in the future.

3. Rip & Rap
What do you do when you want to accelerate the process of collecting dots? Try this fun technique: Rip & Rap. Buy a number of magazines. A wide variety of magazines. Things you would typically not read. Then, when in a brainstorming session, while trying to solve a problem in a new way, hand out the magazines to other participants. Have them look through the pages and find pictures that call out to them. Some pictures may connect on an intellectual level. But others may connect at a more emotional level. Regardless of why the picture calls to you, cut it out and save it. Make a collage. Try and see how everything fits together. Try to make connections across pictures ... which leads us to our next thinking lens ...

Thinking Like a ... Matchmaker

Now that we have collected lots of new experiences by being a pack rat, we have to do something creative with them. As adults, when we try to solve a problem, we often ask, “What does this mean?” We try to pull the answer from our knowledge bank, just like finding the solution in an encyclopedia. Solve the problem the way it has been solved in the past. This can be useful, but it provides a limited set of possibilities. This is about replication and regurgitation. An alternative (and more insightful) way of looking at problems is to ask, “What is this like?” Be a matchmaker. Make connections. Try and find analogies, metaphors, and associations that fit the problem you are looking to solve. Recombine ideas in new ways. If you are redesigning a business process, borrow a best practice from a different industry. South West Airlines did this when it benchmarked an Indianapolis 500 pit crew. Or when hospitals benchmarked Marriott Hotels for the check-in processes. But take it a step further and look to non-business analogies and metaphors. Look at nature. Model your business after an evolutionary process, an ecosystem, jazz music, or whatever tickles your fancy. If redesigning a product, ask what the product is really like. If redesigning a computer chip, look to racing circuits, rivers, or anything with a flow. When you have many dots collected, you have limitless ways of recombining them to create something new. This is not about invention, which is pulling something out of the thin air. This is about innovation which is about reconstituting old ideas in new ways. Don't always go for the obvious solution. Some of the best ideas come from some of the most unlikely combinations.

Thinking Like a ... Kid

The first two lenses enable you to better collect and connect dots. This gives you a fresh perspective on things, just like a kid. But fresh eyes are not the only thing that differentiates children from adults. Children love to play. To them, everything is a game. And if you watch them play, one of their favorite games is “Yes, and...” This is a game where kids fully use their imagination. The game starts with the first kid concocting a scenario. Let's say, making your fingers into a gun, pointing it at another person and saying, “I’m zapping you with my laser beam.” The next person then says, “Yes, and...” and builds on what the previous person said. So, the second child may say, “yes, and... I am wearing my mirror suit so that it bounces back at you.” And the game continues going back and forth between two or more children. Very simple, and the game...
can go on for hours. Interestingly, if you watch adults play this game, they are more likely to respond with “yeah, but” rather than “yes, and...” Instead of contributing back, they shoot down the previous idea. So, if the first adult makes his fingers into a gun, points it at his friend, and says, “I’m zapping you with my laser beam,” the next adult would probably fall over and say, “I’m dead”. Not much of a contribution, and the game would end quite quickly. This is particularly true of people who are good “implementers”. They see all of the reasons why things won’t work. They put the “NO” in innovation. So, be a kid, and keep the play alive. This is a technique that can help you generate new ideas rapidly...and have fun while doing it. In fact, according to Neil Mullarkey, a well-known comedian, the “yes, and...” approach is core to improvisational comedy. Therefore, the next time you have a problem to solve, like inventing the next hot design for a toilet, try this game. Have one person throw out the first idea, and then continue with, “Yes, and...”, building on the previous idea. The key is to answer quickly and avoid thinking too much. Top-of-head answers tend to tap into a part of the brain we don’t use during our normal thinking process. And be sure that your answer is a contribution. It should build on what the previous person said rather than invalidate it. You will develop many new ideas over the course of play. Many of the ideas will be duds. But don’t worry. Play with it. Have fun. You never know when a real gem will be found. After all, it is only a game. And over time, this will become a normal mode of operating. You will become the master at breakthrough thinking on a regular basis by building on the ideas of others.

1. Oppose the Assumption
This technique has two parts. The first part is to surface any assumptions. The next part is to challenge the assumption and think in opposites. How do you surface hidden assumptions? One clue to an assumption is when people say, “We always do it this way”, or “We never do it that way.” Then ask, “What if the opposite were true?” Challenge all assumptions. Another way of surfacing hidden, concealed assumptions is to ask “who, what, where, when, how, much, and why” questions. I used this in challenging some models of consulting. For example, in determining the fees paid to a consultant, typically the consultant (who) sets the rate (how much) before (when) the work is done. I have introduced a billing concept where the client (who) determines how much to pay me after (when) my work is done. The amount is solely at their discretion. Although this idea could have been derived from assumption busting, I in fact got the idea from a Chinese restaurant in London that has no prices on its menu. When the customer receives the bill, they pay what they feel the meal was worth. Connecting dots.

2. Worst Idea
Sometimes the best ideas seem like the worst ideas. The California Dancing Raisins advertisement came from asking the question, “What is the worst way we could sell raisins?” Think about the world prior to vaccines. What would be the stupidest way to prevent an outbreak of polio? Inject everyone with the virus. But of course that is exactly how it is done. Breakthrough answers are often hiding in illogical solutions.

3. Illogical Combinations
One way of coming up with new ideas is to force illogical combinations. The way it works is simple: select some or all of the “who, what, where, when, how, and how much”...
attributes. Next, come up with various answers for each attribute to solve your problem. Then randomly mix and match various combinations. For example, if redesigning the supermarket checkout process, we might look at “who”, “where”, and “when”. The typical combination for checkout is that it is done by the cashier (who), at the cash register (where), after all of the purchases are made (when). Try different random combination. What if the customer (who) did the scanning as they make their purchases (when) at their shopping cart (where)? A number of supermarkets are now experimenting with a similar checkout system whereby customers scan in prices as they make purchases. And random audits help prevent theft or miscounting. Some of the most creative ideas come from the most unnatural combinations. One amusing tool we developed is a “slot machine” that facilitates illogical combinations. You simply enter in different “who, what, where, when, how, and how much” parameters (e.g., in the shopping example above, “who” may include customers, checkout clerks, the butcher, the security guard, or the cleaning lady), you then pull the handle, and see what random combination comes up. Many combinations do end up being losers. But when you get a winner, the payoff can be huge. And using this approach is a great way to uncover implicit assumptions about the business. When you generate combinations that are different than have been done in the past, people will almost surely say, “Hey, we can’t do that because…” You then begin to uncover the underlying assumptions. This is where real innovation can emerge. So, you get the idea. So go wild and try lots of interesting combinations.

4. Competitor War Games
The best way to beat your competition is ask the question, “What are you most afraid your competition will do to you?” Only then can you try and beat them to the punch. If you really want to see how the competition thinks, immerse yourself in their competitor’s shoes. Play a competitor war game. Have your team act as though they are the competition vying to make a sale to your target customer. Play the game for a day. Don’t let up. Only after you really believe that your can think, breathe, talk, and act like your competition should you step out of the role play and back into your own shoes. Armed with this valuable information about how your competitors will try and beat you, beat them at their own game.

5. Innovation Targeting Matrix
Although not specifically a tool for unleashing the inner innovator, a powerful “contrarian-thinking” tool is the Innovation Targeting Matrix (ITM). The ITM is a useful framework for turning the operating model of your organization on its head. It is a 2 x 3 matrix. Along one axis are two very distinct types of capability: “transaction” and “knowledge”. The other axis is organized around strategic importance: “differentiating”, “core”, and “support”. First, map your capabilities on this chart. Next, on a separate chart, map your competitor. Companies that are in similar businesses can have very different positions on the matrix. For one firm, its own internal research may be central to its differentiation, while a rival in the same business may depend on licensing arrangements for its new products. Such differences can make you aware that competitors know something you don’t. However, looking at your positions within the boxes of the matrix is only part of the story. The real power of the ITM is in the lines, the moves that you can make to change your business model. Try down-skilling a knowledge-based capability and transactionalize it. Or up-skill a transactional capability, so that it is now knowledge-based. Alternatively take a support capability and make it differentiating. The number of moves is limitless. Try moving an activity to somewhere on the matrix that seems counter-intuitive and illogical. This is certain to stimulate some interesting discussion. The implications of switching activities from what seems to be their “natural” position on the matrix to somewhere else can reveal insights into the rigidities of the existing structure. And it helps uncover hidden assumptions. I describe the Innovation Targeting Matrix more fully in Chapter 7 of my book, 24/7 Innovation.
Thinking Like a ... Whole Brained Team

The last way to think is more organizational in nature. It is quite simply to think and work like a whole brained team. It is human nature to surround ourselves with people we get along with. Recruiting processes tend to focus highly on competencies and chemistry. Interestingly, nearly every company looks for people who “fit the mold”. Unfortunately, all this does is perpetuate the thinking and culture of the past. Having people on your team that you get along with and who are “yes” people may make you feel better and make your job easier. But rarely will it lead to new and more innovative ideas. When everyone thinks the same way there is little opportunity for something new. Creativity comes from tension. Differing viewpoints. Differing ways of solving problems. So, on your team, surround yourself with people who think differently than you. Choose people with different analytical, creative, and personality styles. Welcome the creative tension that is inevitable. Relish not always getting your way. New ideas are bound to emerge, and as long as you are open to them, your whole brained team will create new ideas never previously conceived.

Thinking Like an ... Innovator

If you try these techniques and really put them to practice, you will build the brain muscle necessary to think like an innovator. If you are already creative, this may help provide some new angles. If you are an implementer who rarely likes to challenge norms, this may have a profound impact on the way you view the world. Not only will you have more fun, but you’ll be able to add more value to your organization...and to your life.

1 A pack rat is type of rat that collects various objects and bits of material to deposit in, or use in the construction of, their nests. It is also an expression used to describe a person who hoards things.

2 My colleague, Brad Kolar, coined this expression.

3 Neil Mullarkey co-founded Britain’s most famous improv troupe, the Comedy Store Players, in 1985 and still performs with them. His other credits include Who’s Line Is It Anyway and two Austin Powers movies. “Yes, and...” is one of the many improv games he uses in his management training classes.

About the author

Stephen Shapiro is the author of 24/7 Innovation: A Blueprint for Surviving and Thriving in an Age of Change (McGraw-Hill, 2002, ISBN: 0-07-137626-7, $29.95) and founder of The 24/7 Innovation Group. Previously, he spent 15 years at Accenture. During his last three years, he was based in London and led the firm’s European Process Excellence practice. In 1996, he was one of the founders and directors of Accenture’s Global Process Excellence practice. And he was one of the leaders of the firm’s reengineering practice from its inception in 1992. Shapiro has advised many of the world’s leading organizations, from BMW WilliamsF1, ABB and UPS to Lucent and Xerox. He has also collaborated with other thought leaders including Michael Hammer and Peter Keen, and is recognized as one of today’s most influential consultants in the area of process and innovation. Articles by Shapiro have appeared in over two dozen newspapers and magazines, and he was recently quoted in The New York Times.

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