



# The secrets of innovators

Regardless of our natural imagination or creativity, we can significantly develop our inventiveness. Indeed, the authors of *The Innovator's DNA* studied what characterizes great innovators who have made world-changing discoveries or designed revolutionary business models. Their findings show that **the difference lies less in a particular form of intelligence or innovative ability than in a person's everyday mindset and behavior.**

Indeed, the biggest obstacle to creativity is often our attitude. We can thus significantly liberate our creativity by learning from the best innovators and adopting some of their behaviors.

## Put aside what you "know"

We tend to consider our knowledge as an asset. We carefully accumulate knowledge and develop our skills through formal education and experiences. However, as invaluable as this knowledge may be, it often stands in the way of new ideas. Take, for example, an engineer who "knows" that the proposed solution won't work, a marketing director who "knows" the needs of his or her customers, the executive who has no doubts as to what makes

Becoming more creative often requires a change in mindset.

his business profitable, etc. While such certitudes may help in running daily business operations efficiently, they can become blinders that prevent us from seeing alternatives to proven models.

## Liberate yourself from precise objectives and plans

Another fundamental rule of professional efficiency is to set clear objectives and plan the path to achieve them. These best practices are not necessarily conducive to innovation, which tends to emerge when we let our minds wander. "*What I'm doing shows me what I'm looking for,*" said the painter Pierre Soulages. In fact, creativity operates through the free association of ideas and depends on our ability to leave the beaten path and take a different road. Establishing precise objectives and plans thus tends to stifle creativity. This realization is one of the keys to the success of companies like 3M and Google, which encourage their employees to

devote a significant portion of their time to innovative projects of their choosing. Far from creating anarchy, this freedom actually fosters an explosion of creativity which could not exist if everyone were forced to follow a pre-defined action plan.

## Integrate failure into the innovation process

Many companies say their credo is to tolerate failure, but often have great difficulty translating this desire into reality. Indeed, the best innovators don't just tolerate failure; they realize that it is an integral part of the innovation process. Post-it is the most famous example, born from the failure of a team of researchers who were working to develop an extra-strength glue. The final product certainly bore no resemblance to the initial goal. Yet, researchers were able to put aside their preconceived ideas and look past this apparent failure to discover what could be gained from the experiment.

Emulate five behaviors typical of great innovators to develop your creativity.

- 1 **Observe** without preconceived ideas
- 2 **Ask questions** to open up new possibilities
- 3 **Associate** the improbable and the incompatible
- 4 **Share** your ideas with a network
- 5 **Try**, fail and try again

## Tips

The observational skills required for creativity can be developed through systematic practice:

- **Change your surroundings**  
The inventor of Starbucks had the idea of Caffè Latte when traveling in Italy. He states that being in an unfamiliar environment made him more attentive to new sensations.
- **Seek anomalies**  
By observing early cardiac bypass operations, Gary Crocker, founder of Medical Research inc., thought of using traditional plumbing solutions as inspiration to design equipment to solve blood leakage issues.
- **Use all of your senses**  
A systematic exploration of sensorial perceptions opens up possibilities to look at situations from a new angle. Sounds, smell and touch are part of our experience. Holding a meeting in the dark or in silence may thus foster the emergence of new ideas.

## 1<sup>st</sup> behavior

### Observe without preconceived ideas

Ideas do not spring from our brain, but from environmental stimuli. Still, we must be able to capture these stimuli. How can one explain that some people see what others do not?

**To develop your observational skills, start by expanding what you perceive.** This means more than just observing the practical features of a product, but also its secondary benefits, social value and emotional impact. Quicken personal accounting software, for example, was invented by a man who observed the frustration of his wife doing the family accounts. Rather than assuming that accounting is necessarily

Observe attentively to see reality in all of its facets.

a painful process, the inventor focused on the emotions it triggered. Hence the idea of an ultra-simple product completely focused on simplicity of use.

Just as important is the faculty **to observe a “mirror image,”** that is, what is not happening that should or could be happening? How do the users of an offering get around a given problem? The inexpensive Tata Nano automobile emerged from the observation of how scooters are used in Asia to transport entire families, regardless of safety considerations.

The key is thus to free ourselves from what we think we should see.

## Be constantly on the lookout

In a world that is changing faster and faster, a permanent willingness to radically challenge habitual routines and practices has become essential.

### Take pause regularly

to become aware of changes in the environment, and how you have adapted to them.

**Look everywhere** to take account of all available data and observe what contradicts your assumptions.

### Listen to the environment

to capitalize on feedback, contradictions and divergent perspectives.

Based on *The Plugged-In Manager*, Terri L. Griffith, Jossey-Bass, 2011.

## 2<sup>nd</sup> behavior

### Ask questions to open up new possibilities

## Checklist

Questions are a good way of encouraging people to adopt different perspectives on a situation and thus find creative solutions to problems.

- What is the situation?
- What should the situation be?
- Why isn't the situation different?
- What would happen if a given parameter were to change?
- What if we assumed the opposite? How could we ...

Asking questions is characteristic of people who are not satisfied with obvious answers. In consequence, this is one of the foundations of creativity. Even so, many people hesitate to challenge the status quo, for fear of appearing stupid or out of a desire to preserve harmony.

**However, the most inventive leaders are specifically known for their ability to expand the scope of possibilities by asking questions.** Orit Gadiesh, president of the Bain&Co consulting firm, applied the principle of asking questions until she had gained a good understanding of how things worked, how they could have worked, how to

Real innovators have an uncommon ability to ask questions.

explain these gaps and how to reduce them. An expert in “What if...” questions, she understood that by posing constraints, she forced those around her to be more creative.

Everyday pressures can make a systematic questioning attitude difficult at times. Holding “question-storming” sessions, while steadfastly resisting the urge to suggest solutions, is a good way

to help your team look at situations differently. Some people keep a “questions notebook” where they jot down their questions as they occur, to ask at a more appropriate time, if necessary. This is a good way to continuously exercise your curiosity.

### 3<sup>rd</sup> behavior

## Associate the improbable and the incompatible

If there is one faculty that differentiates inventors from less creative people, it is primarily the **ability to make associations—a gymnastic of the mind that helps to link ideas without taking account of logical or habitual connections or reasoning.** Indeed, spotting opportunities through observation and questioning is not enough. It is equally important to find solutions that correspond to these opportunities. This is where inventors are able to make links missed by others.

In the history of humanity, great periods of invention coincide with the meeting of hitherto-unconnected

Innovators naturally link ideas that seem unrelated to one another.

cultural currents and fields of knowledge. The “Medicis effect,” for example, describes the creative explosion that took place when the Medicis family gathered together inventors in domains as varied as painting, sculpture, science, philosophy, literature and architecture. Well before the Italian Renaissance, the Arab Golden Age gave birth to many innovations as travelers from across the world converged in Mecca.

Improbable associations and the friction between apparently incompatible elements may trigger the emergence of

original ideas, including some that can be realized concretely. Marc Benioff, founder of Salesforces.com, thus recounts in *The Innovator’s DNA* a combination game conducted with his teams in order to reconcile Amazon’s business concept with the software firm model.

Developing the ability to make associations takes practice. It requires calling on a **natural faculty of the brain**, that is, the fact that information stored in memory is not recalled in a linear fashion, but through analogies. Many stimuli may thus enter into account when we suddenly remember a play, for example. We may

hear the word “movie,” which makes us think of “theater,” a friend we saw that day, a color that evokes a curtain, a phrase that reminds us of a quote from the play, a feeling of boredom akin to what we felt during a slow part of the play, etc.

Such associations can be easily recreated, particularly when we feel relaxed and unconstrained. By regularly practicing simple exercises such as those cited in the inset, we can form habits that foster our creativity immensely.

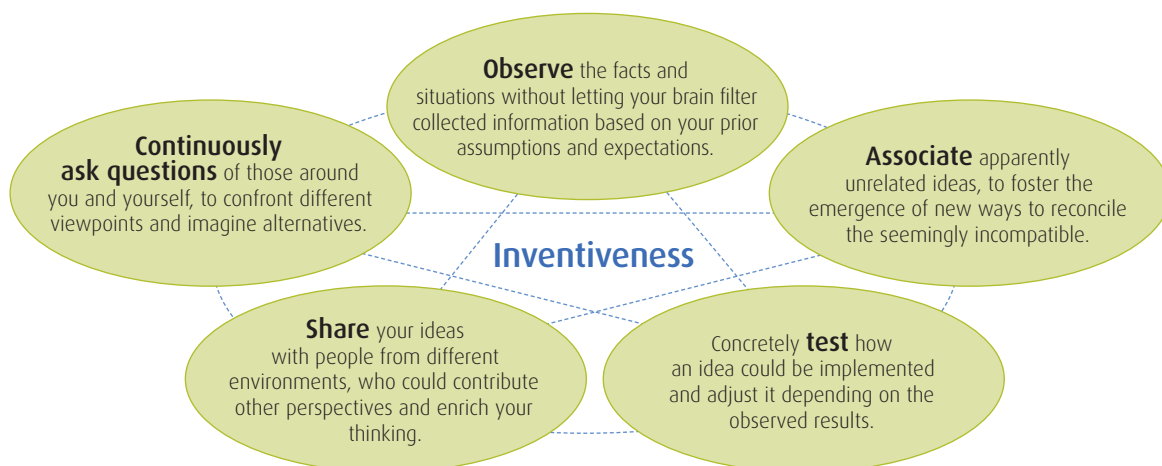
### Helpful techniques

Everyone does not naturally associate ideas. But everyone can stimulate their creativity with a few simple exercises:

- **Purposely make improbable associations**  
e.g.: Take two items from a catalogue at random from two different sections, and imagine how they could be used to meet the same need.
- **Put yourself in someone else’s shoes**  
Choose a character or a personality from a completely different setting and ask yourself how he or she would perceive the environment, e.g.: What would Steve Jobs do in my shoes?
- **Create metaphors**  
e.g.: “What if watching TV were more like... reading a magazine? Metaphors force you to connect one reality with elements from another.
- **Zoom in, zoom out**  
Changing viewpoints forces you to connect ideas, e.g., alternate between the big picture and the details, invert or substitute certain elements, etc.

### Five qualities of innovators

The behaviors that distinguish innovators from less creative people are very easy to reproduce. People who want to develop their creative abilities are advised to make these behaviors a regular part of their regimen.



Based on *The Innovator’s DNA*, Jeff Dyer, Hal Gregersen, Clayton M. Christensen, Harvard Business Review Press, 2011.

## 4<sup>th</sup> behavior

### Share your ideas with a network

#### Build your network

Two conditions are essential to ensure that your network operates as a source of creativity:

- **Validate the viewpoint of the other person**

Faced with counterparts of diverse origins, you must often specify and review what type of contribution is expected, e.g., "I am interested in your ideas and opinions."

- **Express your ideas clearly and concisely**

People from different backgrounds have a harder time understanding one another. Clearly expressing your ideas is thus critical to receive useful feedback. Tip: imagine that you have to get your message across to the other person during the time it takes to complete an elevator ride together.

Great innovators are seldom isolated. Indeed, there are two advantages to exchanging ideas regularly with a widely diverse network of contacts. **First, it helps enrich your thinking with viewpoints and original ideas which might otherwise have escaped you.** For example, Michael Lazaridi, founder of Research in Motion, invented the precursor of the Blackberry by discovering through his network of contacts a wireless communication system used in Coke machines. Moreover, regular interaction will help you **enrich your own ideas** with input from others. Innovation thus becomes more collective and collaborative. Michael Dell, for instance, was heard to say, "I often have trouble explaining how we innovate at Dell, because we do it collaboratively and build on the ideas of others. It's impossible in the end to say, that was so-and-so's idea."

A network that connects individuals from fields as divergent as possible is most conducive to innovation.

Because the goal of this network is to generate new ideas, **diversity is more important than the level of expertise of its members.** Pierre Omidyar, founder of eBay, consequently cultivates his network with the objective of gaining access to people with the most unusual and original points of view, not necessarily the experts in a given domain. Indeed, he notes, the latter may even

be an obstacle to innovation because of their tendency to reinforce established models.

Deliberate effort is required to maintain a truly effective collabora-

tive network, because chance meetings do not foster diversity. You must also be ready to hear criticism and see your ideas rejected or significantly amended. Practice makes this easier. Everyone notes when innovating collaboratively that the ideas generated are much richer and more innovative.

*"Most of what I learned as an entrepreneur, I learned through trial and error."*

Gordon Moore, founder of Intel

## 5<sup>th</sup> behavior

### Try, fail, and try again...

#### Helpful tips

Experimentation is not always natural and can be perceived as risky. The ability to test and learn can be developed with the following practices:

- Change frameworks
- Try new activities
- Disassemble and reassemble products
- Launch pilot projects
- Build prototypes
- Etc.

Creativity is favorable to innovation only if ideas can be translated into reality. However, when applied in the real world, the results are often very different from the original hypotheses. Rather than considering this a failure, true innovators see it as part of the basic innovation process. Only by successive trial and error can they arrive at a truly "great" idea that will ultimately succeed.

For innovators, the world is a laboratory. A new idea is valid only if tested.

**Continuous experimentation is thus a key element in the behavior of innovators.** Michael Dell tells how he had the idea of his company's radically innovative business model using such

an experimental approach. Thinking about what he could do in this area, he started taking PCs apart to observe them and reassemble them in different ways. He then began to ponder a fundamental question, i.e. "Why does a complete PC cost five times as much as the sum of its components?"

The seed of the idea was planted.

Rather than polish an idea interminably, it is thus better to **build**

**prototypes** to confront the idea with reality. This is the approach followed by PayPal. Only after many disappointing attempts did the online payment system meet with global success.