Innovation in a Box

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Introducing Innovation in a Box

Innovation is crucial to the success of every organization - regardless of its business. While organizations say that we “need to be more innovative”, at a grassroots level individuals and teams often don’t know how to translate that need into action. This knowledge/practice gap led Rick Boersma to write a graphic guide to innovation, Innovation in a Box, which will be released in early 2012.

Meanwhile this e-book highlights some learnings excerpted from Chapters 1-4 of Innovation in a Box and the associated training program. In it we discuss the interplay between thinking preferences, emotional intelligence, openness, and idea generation. We explore the metaphor of “the box”, and why individuals may be better off operating “in the box” than out of it.

As Oscar Wilde said, “Be yourself. Everyone else is already taken.”

The Innovation in a Box™ training program equips participants with the knowledge, skills, and experience they need to generate breakthrough ideas and solutions. As a “grassroots” program, Innovation in a Box™ puts tools into the hands of managers and frontline employees that they can use immediately to problem-solve day-to-day issues. Innovation in a Box™ creates a “culture of innovation” by enabling small groups to be successful on real projects.
If we’re already working on a graphic-guide, why do an ebook?

Jennifer, a colleague in California, was on a sales call with the CEO of a global logistics firm named Kurt. As they were exploring his organization’s challenges and needs, the topic of innovation came up. This was a cue for Jennifer to talk about Juice’s Innovation in a Box™ training program, but Kurt stopped her cold.

“Innovation is a big red flag for us, but I don’t believe you can teach people creativity.” Jennifer must have looked puzzled because he continued, “Folks are either born creative or they’re not. I don’t think you can train for it.” When Jennifer asked him how they approached innovation at his firm he answered, “We select ‘creatives’, and bring them together. In some cases we bring in outside consultants and facilitators to help. But like I said, I don’t believe that you can change someone’s wiring through training. They’re either creative or they’re not.”

When Jennifer and I debriefed the call later, she was curious how I would have responded to the CEO’s statement and approach, which effectively shut down the discussion about innovation training.

This e-book is my response. It highlights some learnings from the Innovation in a Box training program and is excerpted from Chapter’s 1-4 of the Innovation in a Box Graphic Guide, to be released in 2012. I agree with Kurt in the sense that training won’t change someone’s hard-wiring, but you can absolutely increase the creative output of teams and individuals by structuring your innovation efforts so that participants are engaged, thereby increasing their openness, and the range and originality of their ideas.

For more information about our innovation philosophy, I invite you to check out the other resources available on the Juice Website. You can find a video of our philosophy and approach, a webinar highlighting some of our ideas and the opportunity to contribute to the success of the upcoming graphic innovation guide.

Rick
**Hard-wiring**

*The Torrance Test of Creative Thinking* indicates people are not all created equal when it comes to Innovation. Kurt’s practice of cherry-picking individuals to form what we call “Dream Teams” is valid. This is exactly what top innovation consultancies do - they hire the best people they can find to tame problems.

But this needn’t be an either-or proposition. Forming a dream team is only one approach to innovation. You can also outsource innovation, bring in facilitators, create an internal innovation *skunk works*, train a core of internal innovation coaches or ninjas (think *six-sigma black belts*) and (despite Kurt’s belief) train people to become better innovators. Given the range of needs in organizations, this last option is actually the best - especially if your ultimate goal is to create a culture of innovation.

For most organizations, outsourcing innovation is a limited option, and useful for targeting only specific challenges. Meanwhile, building broad internal capacity for innovation is the best possible solution to address the generalized array of challenges innovation is meant to address.

In *Chapter One* of the Graphic Innovation Guide, we learn the Torrance Test measures an individual’s openness, and their ability to generate and elaborate a wide range of original ideas. In *Chapter Two* we affirm the adage that “two brains are better than one”. You can increase innovation output by enlisting a team of thinkers to your cause - and the more open, diverse, and original their minds, the better.
Chapter Three contends you can stretch a team’s thinking, and the thinking of every individual on that team - regardless of how creative or innovative they or you think they are. You can do this by:

• Following a simple but disciplined process called the i5, and

• Using robust thinking tools or techniques at each stage of that process to help you stretch, but that are also aligned with the teams’ thinking preferences.

The core metaphor of this ebook springboards from the phrase “thinking outside of the box” - but not in the way you may think. We actually contend that you need to exploit the “boxes” that people are most comfortable operating in. Thinking “out of the box” is an overused, simplistic cliché and it has become an emotional trigger that actually causes peoples’ thinking to freeze. If you tell someone to think outside of the box, and then fail to support them, you’re actually setting them, and your own innovation initiative, up for failure.

Why does “creativity on demand” do exactly the opposite of what we need – shutting people down rather than opening them up?

We think there are three reasons:

• We don’t know how to think outside of our boxes. This lack of clarity, direction and support triggers stress.

• Stress impacts our ability to be open and our focus literally narrows. We produce fewer ideas, a smaller range of ideas and therefore decrease the likelihood of breakthrough ideas.

• Even when we do provide support and training, too often the tools we give people are untethered from an understanding of both the emotional and cognitive drivers required to facilitate innovation.

Individuals and organizations develop competencies, strengths, and processes - boxes - that enable them to fly high.
Extending the Metaphor

“Thinking outside of the box” isn’t a completely missed-metaphor. It recognizes we all operate in “boxes” of sorts. My box is the product of nature and nurture. Nature in the sense that I was born with innate preferences which were the product of my own unique genetic code. I was born with a tendency toward a certain physical, psychological, cognitive and emotional traits.

There’s an element of determinism in this. I’m “wired” to be a long-distance runner rather than a sprinter. Perhaps I have a pre-disposition towards either heart disease or long-life, or I’m naturally a people-person, or a loner. Traits can be reinforced through nurture, or left dormant through the lack of it.

My heritage is Dutch on both sides, and the Dutch tend to be tall. I was raised on a classic European diet: meat, potatoes and vegetables, with a lot of dairy, which in turn provided lots of fuel for my tallness genes to express themselves. (The bovine growth hormones in the milk and cheese probably did their bit as well.)

By the time I was 12, I was over six feet tall, and was “drafted” onto the middle-school basketball team because of my height. I was a good player and basketball became my sport through the remainder of my school career. I have a brother who is four years older who we’ll call Mike. We have the same parents, the same upbringing, and he is an inch taller. He too was drafted in grade 8 but he never left the bench. After two years of unhappy participation he left the team and never played again despite his height. Again, we had the same parents, same upbringing and similar genetics, but very different outcomes. What was at the root? Nurture.

The contrast between our basketball careers can be traced to a move we made from Massachusetts to New York the summer I turned eight and Mike was 12. In Boston we never played formal sports. It wasn’t something our parents nurtured. In our neighborhood, play consisted of pick-up games of kick-
the-can, bike riding, and playing variations of “war” in the woods with the neighborhood kids. Tree forts were also big.

When we moved, Mike was immediately put on the basketball team because of his height. He simply hadn't had a chance to develop the specific skills, nor the general coordination required for ball sports. In my case, I was only eight when we moved and my best friend in our new neighborhood was from an all-American backyard pick-up baseball, basketball, and football-playing family. There was always a game going on or a ball in the air and I played along every day after school for four years. By the time I started playing formal basketball in grade 8, I was tall, skinny, a bit gawky, but coordinated.

In other words, my natural height and nurtured athleticism came together. And from that point the nurturing continued because I was now on a team where practice was formalized. I steadily became more coordinated, stronger, etc. Mike and I were both pre-disposed for tallness, we both received the nourishment necessary for physical growth, but only I got the nurturing to be a basketball player. If you asked me to define my box at the end of high school, one of the attributes would have been “athlete”. If you asked Mike the same question, sports would not have figured into his box.

**Basketballs, Boats, and Boxes**

Our thinking preferences are also the product of nature and nurture. Again, I will use Mike as an example. Remember those tree forts in Boston? Mike was one of the major forces behind all that arboreal construction. He was the principle architect and builder of a 12-tree, double-decker confection, constructed of scrap lumber and scavenged hardware.
Once we moved to New York (while I was out shooting hoops), Mike was building things in the garage, experimenting with wood, metal, and fiberglass. He’d often work side-by-side with my father who was a trained engineer. My father was constantly building: stone walls, small boats, and buildings on our vacation property. Of his four children, Mike showed the most inclination to do the same. When he was done with high school, Mike trained as a naval architect, and went on to work in shipyards.

As an adult, he continues to build, renovate, and repair. When I recently asked him whether they would be moving anytime soon, he said “Have you seen my backyard? I have over 100 linear feet of different boats back there!” He has kayaks, canoes, sail boats, a cabin-cruiser, and two of his latest projects - rowing sculls. He may have had a terrible jump shot, but if I have a hands-on construction project that needs to be done, Mike’s the guy I call.

Nature probably gave Mike an inclination towards engineering and building - his upbringing, working side-by-side with our father - nurtured this preference. His career choices, and lifestyle choices, further reinforced it. Is he an engineer because of his thinking preferences? Or are his thinking preferences the result of his being an engineer? I’d argue that it’s nature and nurture – the one reinforcing the other, and the science tends to agree.

Thinking *in* my box = success

Does Mike have a “box” he “thinks in”? Yes, and it’s a formidable. He has abilities to analyze, deconstruct and problem-solve technical challenges I would love to possess. He has the knowledge (and interest) required to follow and follow-through on detailed projects like boat building from a set of blueprints, and the skill to actually pick up the tools and build it.

Mike’s box is the product of his nature and nurture, thinking-preferences and birth-order, where he was born, when he was born, his family and upbringing, friends and experiences, education and work, ethnicity, cultural background, mental-models and a myriad of other environmental influences.
Now let’s put Mike into a workplace setting. Once again, he became an engineer because of nature/nurture. He excelled in university because the courses fit. He was interested and good at them; they reinforced his natural preferences and his box got stronger. During his work placements, the ones that were the best fit gave him the most satisfaction. He sought similar experiences. Those episodes helped him decide on a career path and once again he was successful because he was operating within and continuously reinforcing his box. The consulting-engineering firm for whom he worked was successful because they were good at operating in *their* box. They hired Mike, and others like him, because they were good at analysis, problem-solving, and implementation. In turn the organization prospered.

But, then the world *changed*…

Perhaps clients started off-shoring some of their consulting, perhaps Mike’s teams’ core technical competencies were lagging, their analog capabilities becoming less pertinent in an increasingly digital world. Perhaps their customers were placing new demands on them. Maybe someone came up with a disruptive innovation that completely reset the rules of the game. Maybe their competitors were simply faster and more nimble than they were...

**Einstein famously said the definition of insanity is**

“...doing the same thing over and over again and expecting different results.”

One of the conundrums is that in Mike’s case (and in most of our cases) “the same thing” had generally been the *right* thing, producing good results. His whole life has reinforced the efficacy of his box. It’s what made him, and the organization, successful. As [Malcolm Gladwell discusses in Outliers, it takes 10,000 hours](https://www.ted.com/talks/malcolm_gladwell_it_takes_ten_thousand_hours_to_master_your_skill) to achieve mastery. In Mike’s case, it took 10,000 + hours to create an effective box. Thinking outside of it was going to be tough, practically and emotionally. Let’s look at each of these in turn.
Roses are Red, Analytics are Blue

In Chapter 2 of the Innovation in a Box Graphic Guide we explore thinking *out of the box* in terms of a four-quadrant model which is closely aligned with the work of Ned Herrmann. To summarize, it suggests that each of us has thinking preferences, and in the four “box” metaphor we may have a bias towards either *investigation, ideation, impact,* or *implementation.* According to this model, Mike’s profile is strongest on the left or blue/green side. He’s strong at analysis and problem solving. He is analytical and logical and he’s very good at implementation. His box, in a sense, is made up of equal parts "blue" and "green", with some creative/strategic ideation "yellow," and inter-personal "red." The approach to innovation of someone with this profile is likely to be logical, linear and iterative. He will analyze the problem, identify the gaps, devise a solution and then build it. And this is a classic engineering approach, e.g. "There's a chasm. We need to cross it. Let's design and build a bridge."

But let’s say he is asked to think OUT of his box - to think in a purely creative mode, and devise a new way of approaching his core business. This means thinking in the "yellow box" which is the territory of the stereotypical “creative”. It rewards divergent and lateral thinking, rather than his usual rational, iterative approach. And frankly, this doesn't come naturally to Mike, nor has he reinforced this ability through experience and practice. He doesn't have the knowledge, experience, or tools required to be effective.

This is partially a matter of experience. Mike is competent at operating in his box, and equally inexperienced at thinking outside of it. His box provides him with structure, direction, processes, experience, knowledge, and even the basis for intuition. While in it he feels grounded and capable. When he steps outside of his box, it's like stepping off a ship and onto the soil of a
foreign land. He's disoriented and staggering on sea legs. He's rootless, lacking knowledge of the language, weather or customs.

And it's important to remember that he's not there as a tourist - as in choosing to be there for the adventure of learning something new. He's more like a refuge, uprooted from familiar ground, forced to change, on-the-run and under threat. He doesn't know which way to turn, and how do you suppose he feels? Uncertain? Stressed? Frightened?

One of the biggest conundrums of innovation is that the very pressures that drive us to be effective innovators can trigger emotional responses that undermine our ability to generate breakthrough solutions.

*Emotional intelligence* is described by Daniel Goleman as the ability, capacity, skill to identify, assess, manage and control the emotions of one’s self, of others and groups. Why is emotional intelligence an important component to innovation?

Inherent to innovation is the ability to navigate conflict and explore unchartered territories. It requires us to step into diverse opinions and break away from traditional thoughts and processes, and a vulnerability that can induce stress and fear, that can trigger the emotional side of our brains that says, “Fight!” or “Flight!”, shutting down our ability to think creatively. Empathy and effective social skills also create the kind of safe and playful environment that fosters the flow of ideas. An inability to manage emotions such as fear, anger or rejection, shuts down your brain’s ability to think...
creatively. The ability to foster joy, curiosity and confidence will allow innovation to flourish.

**With innovation work, we’re asking people for their best, break-through thinking. But we often create conditions that create exactly the *opposite* effect.**

This can happen no matter what your thinking preference might be. If you’re a blue-box/investigator, when you’re told you need to think outside of the box it probably means they want you to think like someone in the YELLOW box - i.e. to ideate. Or perhaps they want you to think from a more human-centric perspective. For example, this might apply where the engineers from medical device manufacturer (operating in their blue/green boxes) need to design for users, nurses, who are operating in their own red-box.

At their best, our brains are capable of incredible acts of combinatorial thinking: taking information from different sources and synthesizing it at lightening speed. We do this in mundane ways (consider the information streams you access when driving a car), and when innovating, in incredibly novel and complex ways.
5 Drivers of Employee Engagement

The comfort and effectiveness provided by “our boxes” gives us clues about how to think outside of them without getting triggered. In the past several decades significant research has revealed some critical discoveries about what creates the most highly engaged people from *Towers Perrin – Towers Watson, BlessingWhite, Hewitt* and *Melcrum*. We’ve also learned how to create the most highly productive workforce from the *Gallup Organization*. And we’ve learned what creates the most highly effective leaders from *Daniel Goleman* and other Emotional Intelligence researchers, and the most highly change-adaptive employees from *John Kotter*. Finally, we’ve learned what creates the most high-performing employees from the *Corporate Leadership Council*.

At Juice Inc. our research is based on both literature reviews and primary research has identified five core drivers of employee engagement:

1. I Fit
2. I’m Clear
3. I’m Supported
4. I’m Valued
5. I’m Inspired

Who we are works. *If* you meet people “where they’re at”, i.e. with tools that work with their thinking preferences.
Your Innovation Team and the Five Drivers

Imagine yourself as a manager driving an innovation initiative and you’re thinking about who you want on your team. Of course you want the best team possible - a dream team - but teams are made up of individuals. What is the first thing you look for in a candidate? A perfect “fit”. So you feel fortunate you have Olga. She’s a recent university graduate and new to the company. She promises to have both the talents and personality to complement the team. When you tell her about the project she is excited, and you can see her mental-cogs spinning as she offers you some immediate insights. One of the first things she wants to know; who else is on the team? This isn’t surprising. She wants to know whether the group will feel effective and fun, or if it will be a slog. As a new employee, is she going to feel safe - or is she going to be devoting energy to wondering where she fits, what her role is, or what the rules are?

Do I fit?

If each member of your team is a good fit for the project and with one another, then they will be able to focus their energy and insights on innovation. As soon as Olga begins to wonder “Do I belong here?” interference will hijack her focus. Her energy will be directed at her problem of not fitting in, instead of the opportunity to innovate.

Now amplify this issue by the number of members you have on your team. Do they all fit the project? Do they fit well with one another?
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<th>Fit</th>
<th>Non-Fit</th>
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<td>• She feels secure, and can focus on the problem, and opportunities, rather than her own needs.</td>
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<td>• She wants to know who is on the team for the same reason - is the group going to be safe and fun? Or is it going to be a slog?</td>
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<td>• She feels unsafe, and understandably wants to alleviate the feeling of insecurity.</td>
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When we move away from dream teams however, the issue gets more complicated. What happens when you’re innovating with your team - which includes members (perhaps even a majority of members) who don’t regard themselves as “creative”. You know what you want to achieve - lots of diverse, impactful breakthrough solutions - but you and they know that they are the wrong fit.

What do you do?

The traditional approach is either to ignore them (Kurt’s response) or to attempt a type of brow-beating using creativity techniques that are ill-suited to their thinking preferences.

Clarity

Once the team has been put together, Olga’s next questions focus on clarity. Numerous research studies demonstrate how important clarity is to employee motivation (Gallup, et al). Employees need to understand the big picture, and also the goals, objectives and actions that are expected of them. It’s safe to say that not everyone has the same need around clarity. (To determine your energy drivers, take this quick [What Juices You?](#) assessment.) Some of us are more comfortable with ambiguity than others. A lack of clarity around the big-picture objectives of a project may lead to false starts, while a lack of
clarity around the parameters - budget, target audience, time-frames - can lead to cost overruns, wasted efforts, and missed deadlines. An absence of clarity around roles and process can lead to confusion, friction, and conflict. A team in conflict is a team of individuals who are triggered and focused on their own needs. Even if Olga loves the rough and tumble of exploration and prototyping, she may still become derailed by the emotional and practical whirlwind created by a lack of clarity.

In fact at each stage of the innovation process, whether you’re in the investigation, ideation or impact modes, there are tools that will provide more or less clarity. If you have linear, left-brained thinkers on your team, who need a great deal of structure, than you need to use stimuli and tools that provide them with a great deal of structure. A failure to do so will shut them down, and potentially shut the entire brainstorming process down.
Support

It is important to support Olga by equipping her with all the resources she needs to contribute: time, training, tools and processes. Assuming the motivational “hygiene” factors are looked after - e.g. compensation and benefits - then the support will free her both practically and emotionally to remain open-minded around innovation. She is supported with all the tools she needs, but she also needs to feel her manager or supervisor support her by “having her back”.

Innovation is also about taking risks. Support has to extend the team the freedom and authority required to take chances, explore and make mistakes. This has a practical element because the path forward in innovation is uncharted, and failing fast and failing often when prototyping is the number one tool in the innovator’s arsenal.

Since prototyping is defined by “learning through mistakes”, Olga needs the freedom and authority to make mistakes with the support of her boss. If that support is not there (by her manager, by the organization, or by her team) she’ll become hijacked and shut down. The chances of breakthrough thinking will decrease as the number and range of ideas she generates, decreases.
Valued

Olga may be new to the organization, or simply to this project or a new way of innovating. If she has any doubts about her value to the team or believes the team has doubts, she can become triggered. A cardinal rule of brainstorming is “no judgment”. The practical rationale for this is that judgment interrupts the flow of ideas because it leads to debate. The bigger reason is that judgment hijacks. It doesn’t simply interrupt the flow of ideas, it’ll stop them in their tracks if it’s perceived as an attack or threat. It isn’t about Olga’s rational response to the situation, i.e. “Oh! A judgment! Well, I know that they didn’t mean to. It’s okay, I’ll stay open…” Rather it’s “Oh!...Oh!...Oh!...”

Getting triggered is an immediate emotional reaction at the expense of rational cognition.

Gee...

Thanks!
Inspired

Ultimately, innovation has to matter. Olga may simply be inspired by the act of creativity - the process of innovation may put her into flow. But true, long-term engagement requires more than simply being engaged in a fun project. The work of psychologists Mihaly Csikszentmihalyi and Martin Seligman show that inspiration is the combination of three things:

• Your basic needs are met.

• You’re doing work that fits - you’re operating in your box and in flow.

• Your work has meaning and purpose - it matters.

Make no mistake, when you ask people to innovate, you’re asking them for their best thinking. Breakthrough innovation thinking includes: Root-cause analysis, strategic thinking, design, complex decision-making, and creating plans that will guarantee execution. But too often we create conditions for innovation that produce the opposite effect by hijacking individuals and the innovation process.

If a team member is triggered, physiology takes over. Unintentionally, people focus on the threat and revert to closed, convergent thinking instead of the open, solution-focused divergent thinking that leads to increases in the number, range and originality of ideas generated.

I love this project...
Now What?

This e-book is an introduction to the *Innovation in a Box™* training program. We invite you to join our online community where you can receive a preview of the *Innovation in a Box Graphic Guide*, and contribute to the success of the book by offering your feedback. We also have videos and webinars that will help support you in your innovation pursuit.

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ABOUT THE AUTHOR

Rick Boersma is the co-founder of Floworks Training. He’s a Designer & Innovator at Juice Inc., based in Guelph, Ontario. Rick has been an educator and trainer since 1985, working with dozens of Fortune 500 corporations, as well as hundreds of smaller companies, designing and facilitating experiential training programs. After working the innovation process for over eight years, Rick has developed the Innovation in a Box™ training program and is writing and illustrating a Graphic Innovation Guide.

ABOUT JUICE INC.

Juice Inc. delivers training and development services to increase employee engagement and productivity. Juice works with companies that want to build a productive culture and understand that interactions between people are major drivers of organizational success. Juice’s conversation-enhancing methodology delivers a process for improving the human experience in the workplace, while driving employee performance and business results.

If you would like more information about how Juice can help your organization, e-mail Rick Boersma: rboersma@juiceinc.com
BIBLIOGRAPHY


WEBSITES

http://floworksinnovation.wordpress.com/

http://www.mycoted.com

http://www.mindtools.com/

http://www.businessballs.com/

http://endlessinnovation.typepad.com/

http://www.innovationtools.com/

http://www.businessweek.com/innovate/