Three Innovation Distinctions
by Stephen Shapiro

I RECENTLY ATTENDED A MEETING WITH A GROUP of extremely successful entrepreneurs in Las Vegas. I was a bit of an outlier as my background is mainly with large, multi-billion dollar businesses. Everyone else in the room came from the start-up world. Also, nearly everyone in the room worked exclusively with speakers and authors. Although I too am a speaker and an author, it was clear that my perspectives were a bit different than everyone else in the room. Or as one entrepreneur said, "Steve, you have distinctions in innovation that we don't."

So they asked me to share my point of view. What I shared were three simple distinctions on innovation.

1. **Challenges not Ideas**
2. **Process not Events**
3. **Diversity not Homogeneity**

Let's tackle them one at a time.

CHALLENGES, NOT IDEAS

Signal-to-Noise Ratio
One of the most important, yet under-considered measure in the innovation process is the signal-to-noise ratio. The signal-to-noise ratio is the ratio of a signal power to the noise power corrupting the signal. In layman's terms, it is the ratio between what you want and what you don't want. For example, in audio recordings, it is the ratio between the music and the background noise.

Organizations do not have a shortage of ideas. They have a shortage of good ideas that matter.

In innovation, the signal is comprised of the good ideas. The useful ideas. The ideas that can and will ultimately be implemented in such a way that they create value. The noise is made up of all of the other ideas. Useless suggestions. Solutions to problems that don't matter. Ideas that will never come to fruition.

To increase innovation's your signal to noise ratio the first thing you want to do is stop asking for ideas.

Drowning in Ideas
Suggestion boxes are cluttered with noise. The amount of time required to sift through the chaff to get to the wheat is huge. And even when you do find a good solution, the amount of effort required to rally to troops to implement the problem is huge.

The innovation team of a large retail bank implemented a major suggestion box program. They received thousands of ideas. Evaluators looked at every idea. In the end, none were implemented. In the aftermath of their efforts, they asked me for my observations. In hindsight, the submitted ideas could have been categorized into 3 groups:

1. **Duds:** A large percentage of the ideas were clearly not worth pursuing. These ideas were not new, or were unlikely to show a positive ROI. However, even with these, there might have been a nugget of usefulness that was missed. However the energy to nurture these nuggets was probably not worth it.

2. **False Negatives:** There were, from my perspective, many ideas that were indeed good. But for whatever reason, the evaluators dismissed them. Part of it had to do with biases of the evaluators. Sometimes it was due to a lack of knowledge on the

part of the evaluators. And often, it was because the ideas were not fleshed out enough making it difficult for them to be properly judged.

3. **Good, But No Home:** This was the most disconcerting category. These were ideas that were good ideas that the evaluators liked, but sadly they had no organizational home. As a result, the ideas withered on the vine and were never implemented. They never got the resources or funding necessary to move them to the next level.

The company's innovation program lasted a total of 18 months. It was shut down and deemed a huge failure.

I have seen similar results in other organizations. One large company I know has a competition each year where employees submit new product ideas. The winner gets a large check and the company implements the best idea. I asked the person responsible for this program if it was viewed as a success. The answer was, "It was a PR success but a commercial failure." The competition generated buzz in the media, but none of the products have yet to generate a positive ROI. Contrast this with their more focused efforts on creating or improving specific product lines. In nearly every case, these were commercial successes. Their idea-based programs did not generate good bottom-line results, while their challenge-based initiatives did.

The other issue with ideas is that there is no level of accountability. Because people tend to develop ideas on their own time, there are no time tracking methods that can keep tabs on how much energy is invested in idea generation. If you encourage ideas, I suspect that you are spending a lot more money on those initiatives than you could ever imagine. You might be able to measure the ROI of a winning idea. But I doubt you can determine the ROI of your overall ideas-based program. There is no way to know how much time was spent on the thousands of duds that never see the light of day.

The Power of Challenges

Contrast this with challenges. With challenges you assign owners, resources, evaluators, evaluation criteria, and funding *up front*. We know that the solution to a challenge will be relevant to the needs of the organization, so if a solution is found we know it will be valuable. Also, because of the nature of challenges, we have better tools to evaluate the amount of time spent on finding solutions. We can truly measure the ROI of each challenge *and* the overall challenge-based program.

Some of you may see a loophole in my logic. You might think, "Ok Steve, why not just post a challenge that asks for new ideas. This would seem to be a challenge-based approach. But of course all you are getting back are ideas." This is true. And this is why it is important to discuss the construction of challenges.

The Goldilocks Principle

Good challenges must adhere to the [Goldilocks Principle](#). That is they can't be too big (broad, novel, abstract – e.g., asking for new ideas) or too small (overly specific). They must be "just right." As Dwayne Spradlin said in his [InnoCentive blog entry on the topic](#):

For example, the big problem is not the need for a new drug for a neglected disease, it is the elimination and/or minimization of the human suffering caused by the disease. The right questions might include: How do we limit transmission? How can we cost effectively produce treatments that comprehend market based economics to ensure a sustainable model? How do we distribute treatments in the developing world? Even these questions require further decomposition until we get to well formulated challenges (e.g., Can we get 5X more vaccine into the hands of those that need it in the context

of real world economic, cultural, and political constraints in Sub-Saharan Africa?).

The key is good challenges. The right challenges.

A lot more could be said on this topic. But I will close with a quote from Albert Einstein, who in 1938 said, "The mere formulation of a problem is far more often essential than its solution, which may be merely a matter of mathematical or experimental skill. To raise new questions, new possibilities, to regard old problems from a new angle requires creative imagination and marks real advances in science."

I couldn't have said it better myself.

Now, to the second distinction and back to my meeting with the speakers/authors in Las Vegas.

PROCESS, NOT EVENTS
In the speaking industry, conferences/conventions are the primary model for professional development. That is, a bunch of people get together for a few days. The days are comprised of presenters on the stage who share their "wisdom" with attendees. When the event is over, the learning ends. And for most individuals, progress ends.

People who attend these events leave with a laundry list of ideas. Most people never implement any of the ideas. They just sit on the shelf in a binder.

This, in a nutshell, is what happens in the innovation programs of many businesses. They hold ad hoc brainstorming sessions. Or maybe they run a campaign using a crowdsourcing tool. They develop new ideas. If they are lucky, those ideas do get implemented. But quite often, the event ends and progress ends. Regardless, innovation does not happen again until

someone has another stroke of inspiration and decides to hold another event.

Innovation in most organizations is episodic. It is unpredictable. And it is certainly not repeatable.

But what if you had a systematic way for ensuring that innovation continued long after the event? What if you didn't need to wait for divine intervention for your next big idea to sprout? What if you could make innovation repeatable? To do this, you want to move from "innovation as an event" to "innovation as a process."

Back to the authors and speakers…what if, instead of just events, there was a process that helped people see their ideas through to fruition? What if everyone came to the event with some [challenges](#)? The process could involve regular mentoring or an online community. There could be measures in place to help monitor progress. The point is, there is a process to help ensure progress.

In the business world, we have the opportunity to take this process-driven innovation concept a bit further.

For this "event to process" transition to be successful, the first step is to start treating innovation like you would treat any other part of the business. For example, your organization's finance department has skilled experts, measures, supporting technology (e.g., Oracle or SAP), processes (e.g., processes for closing the books at year end), an owner (the CFO), and a strategy.

The innovation "process" requires all of these elements, and more, including skilled innovation experts (e.g., an innovation center of excellence aka innovation master blackbelts), innovation measures (e.g., return on investment for each idea), innovation management technologies (e.g., InnoCentive's @Work solution), an

innovation process, an innovation "czar" (aka advocate, Chief Innovation Officer, VP Innovation), and a clearly articulated innovation strategy (what you expect to achieve with your innovation program).

I call this level either "innovation as a process" or more accurately, "innovation as a *discrete* capability." You can read more about this in my "**Innovation Philosophy**" page.

With these fundamentals in place, you can begin to make innovation a repeatable and predictable process whereby creativity is encouraged throughout the organization and the best ideas are implemented.

It's worth noting that after successfully moving through the process level of innovation, the highest level of innovation is embedded innovation (aka embedded capability or environment). With both the event- and process-driven levels, innovation tends to be reactionary and discrete. It is somewhat separate from the business. With embedded innovation, people not only innovate to deal with "problems/challenges" that are presented to them, but in everything they do. They continuously, even radically, improve their products, processes and organization.

I could write much more on this topic. In fact I did. I originally wrote about the three level of innovation in my 2001 book, 24/7 Innovation," and upgraded the concepts for my "Little Book of BIG Innovation Ideas."

DIVERSITY, NOT HOMOGENEITY

This final distinction focused on why innovation requires "Diversity not Homogeneity."

As mentioned previously, I first shared these distinctions with a group of speakers and authors who were brainstorming ways to improve the learning experience for other speakers and authors who attend their conferences. Here's the Catch 22: Having only speakers and authors speaking to other speakers and authors does not lead to much creativity. Most of the "ideas" presented are well-worn and don't address the "real world" outside of the industry.

Therefore, my last suggestion to the group was to increase the level of diversity at these learning experiences. This would provide a wider range of ideas, suggestions, and points-of-view.

How does diversity apply to an organization?

Diversity can mean a wide variety of things:

- Diversity of race, creed, color, sex, etc
- Diversity of innovation styles
- Diversity of disciplines

I won't address the first point as that has been a topic of discussion for decades. Let me tackle the next two.

Diversity of Innovation Styles
The second point ties directly to my Innovation Personality Poker system.

In the card-based game, I discuss the four primary innovation styles: analytical, creative, planning/action, engagement. Most organizations favor one over another and therefore do not have a good balance of styles. There's a reason for this.

Although homogeneous teams are often more efficient (i.e., you get things done faster), having a bunch of "yes

men" working for you is not the answer for long-term growth. When people think too much alike, new ideas struggle to surface. In these homogeneous climates, innovation and growth (i.e., effectiveness) suffer.

The essence of successful companies, then, is the ability to be both efficient and effective. They are able to focus on both production and innovation, not just doing things right but also doing the right things.

There's plenty of evidence that team diversity translates directly into corporate profits. Sigal Barsade and colleagues at the University of Pennsylvania's Wharton business school studied top management teams at large corporations in the United States. Interestingly, the more diverse the functional roles of the members of those teams were, the greater the average, market-adjusted financial return in those companies. Diversity of the top leaders translated into bottom-line results.

In Personality Poker, there are four key concepts:

- You need people in your organization "**play to their strong suit**." That is, make sure that everyone understands how they contribute to and detract from the innovation process. This includes ensuring that you have the right people with the right leadership styles in your organization.

- As an organization, "**play with a full deck**." You must embrace a wide range of innovation styles. Instead of hiring on competency and chemistry, also hire for a diversity of innovation styles. Every step of the innovation process must be addressed. You need people who are great at conducting research, delivering results, developing plans and reports, building relationships, and creating new ideas, amongst other things.

- "**Deal out the work**." That is, you must divide and conquer. You can't have everyone in your organization do everything. Instead, get them to divvy up the work based on which style is most effective at a given task. You can't have everyone generating ideas, or focusing on planning.

- *Recognize that in order to treat everyone the same, you must treat everyone differently*. People have different needs in terms of how they like to be managed, how they like to be praised, and how they want to contribute to the organization. In order to attract and retain a well-balanced organization you must be prepared to treat people as they want to be treated. To do this, you must overcome the inertia of your company's personality and embrace the needs of the individual personalities.

I could write a whole book on the value of diverse teams. Oh, wait, I did! My Personality Poker book will be published by Penguin's Portfolio imprint Fall 2010. Throughout, I provide examples of, and evidence for the value of having a diversity of "styles" within your organization.

But what about the third type of diversity: The diversity of disciplines.

Diversity of Discipline

A discipline is any area of expertise like biology, chemistry, physics or mathematics. You can have an organization comprised of diverse innovation styles while sharing only one discipline.

A while back, I spoke with Al Bredenberg, Senior Researcher from ILO Institute. He subsequently wrote an excellent blog entry on the topic of diversity where he quotes me. He also mentions a Harvard Business Review article by Lee Fleming that suggests that

companies with less diversity of discipline produce better overall financial results than highly diverse ones.

"The financial value of the innovations resulting from such cross-pollination is lower, on average, than the value of those that come out of more conventional, siloed approaches. In other words, as the distance between the team members' fields or disciplines increases, the overall quality of the innovations falls…. But my research also suggests that the breakthroughs that do arise from such multidisciplinary work, though extremely rare, are frequently of unusually high value—superior to the best innovations achieved by conventional approaches…When members of a team are cut from the same cloth, you don't see many failures, but you don't see many extraordinary breakthroughs either."

However, as the diversity of disciplines increases, "the average value of the team's innovations falls while the variation in value around that average increases. You see more failures, but you also see occasional breakthroughs of unusually high value."

Therefore, although there is value to diversity of disciplines, the challenges seem to outweigh the benefits.

What's the solution to having a diversity of disciplines without having to deal with the inherent complexities?

Open Innovation. By working with companies like [InnoCentive](), you get the value of discipline diversity while having few of the downsides. You get the take advantage of a wide range of experiences while only paying for successful solutions.

The Bottom Line

Diversity can create incredible value for an organization. It can help facilitate the innovation process. It can help increase the quantity and quality of breakthrough ideas. The key is knowing the right way of managing and engaging a diverse set of perspectives.

If you combine this with a repeatable innovation process and a focus on challenges, you have a powerful innovation model.

During his 15-year tenure with the international consulting firm Accenture, Shapiro established and led their Global Process Excellence Practice, delivering innovation training to 20,000 consultants. In 2001 he left the management consulting world to write his first book, 24/7 Innovation. *He has since been featured in* Newsweek*,* Investor's Business Daily*,* Entrepreneur Magazine*,* O - The Oprah Magazine, The New York Times*, and other prestigious publications. He is also the author of* Goal-Free Living *and* The Little Book of BIG Innovation Ideas. *His next book is* Innovation Personality Poker *to be published by Penguin's Portfolio imprint September 2010. He has presented his own tried-and-tested formula for success to hundreds of thousands of people in 40 countries. Among the dozens of leading organizations he has advised are Staples, GE, BP, Dell, O2, Johnson & Johnson, Fidelity Investments, Pearson Education, Nestle, and Bristol-Myers Squibb. In addition to writing books and giving speeches, he is the Chief Innovation Evangelist for InnoCentive.*