

The Enemies Within: Overcoming Organizational Barriers to Innovation

Jeff Krull

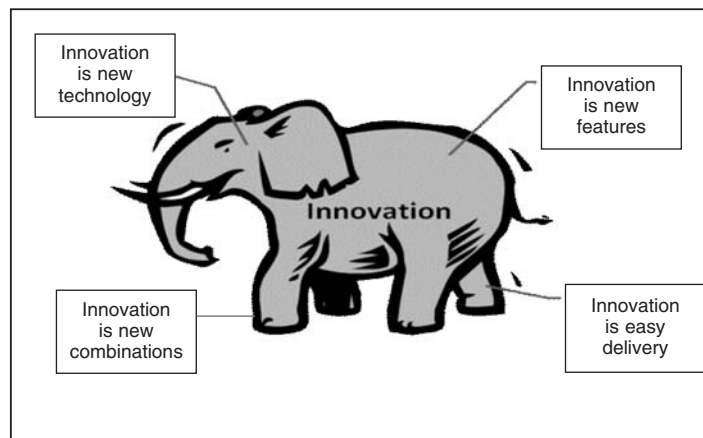
I am tired of hearing the word innovation. The word is everywhere, particularly if you happen to work in product development. It's the new panacea, the end-all, be-all, miracle cure for corporate growth. It's the subject of countless articles and has produced a new generation of soothsayers in the consulting world. Innovation is guaranteed to turn your red ocean blue and take customers by storm. All you have to do is go out and innovate. What are you waiting for?

You've seen the commercials. The CEO pounds the table like a TV pitchman and demands "we have to be more innovative." The assembled team nod their heads in agreement. It's done, the company is assured domination within their market, perhaps the world. It's as simple as that. Of course, we all know that it isn't, and that this approach is doomed to failure. What began as an energetic call to action will wind up as the fad of the month. So what do we need to do to get "more innovation?"

At the outset, it's important to recognize that when CEO's and their like ask for "more innovation," it's not always clear what they mean. Some use the term innovation as a proxy for more revenue. To others, it invokes some high-tech playground where new technologies are tried on for size. Still others are looking for imaginative new products that take the market by storm. All of these concepts have validity, but each is very different to implement. It's therefore important to be clear from the beginning on the problem you are trying to solve.

If you take out Webster's Dictionary, you would find innovation to be defined as "the introduction of something new." Others, such as Jay Paap of MIT and Caltech, elaborate by adding the notion of bringing

value to customers through the use of old or new ideas to improve the performance of old or new processes, products, or services. These simple additions are critical. The introduction of something new, just because it's 'cool,' never guarantees success. Business history is littered with products like the Ford Edsel and the Apple Newton.



As indicated above, there are several different types of innovation. Some speak of breakthrough innovation. This is the innovation that changes the "rules of the game," often transforming an industry. It is typified by the original introduction of the Xerox copy machine or the digital camera. They are innovations that begin as doubtful technologies from scientists in white coats. This group could be described as the great inventions.

Another type of innovation happens as the leading performance attribute of a product becomes a commodity. Solutions to the second-order annoyances then come to the forefront and become the market driving force. This is sometimes called incremental innovation. A classic example of this is the journey of telephones from dial-driven, tethered devices to free-roaming, multi-media

powerhouses. Telephones back then competed on sound quality and reliability. We gave up some of that for the freedom of wireless. In the end, this type of innovation redefines the entire customer value proposition and becomes wildly successful.

Still another view of innovation is highlighted in the book "Blue Ocean Strategy" by W. Chan Kim and Renee Mauborgne. From a customer's perspective, a product is as much about the overall experience as it is about the physical item itself. Innovation may reside in how a product is purchased or in the service received after the sale. It may be a radical simplification in how a product is positioned

in the marketplace, simplifying the overall buying decision. These innovations consider the total experience package and may not have anything at all to do with "whiz bang" technology.

Do you recall the story of the blind men and the elephant, the tale of different viewpoints on the same animal? I maintain that these different types of innovation are all parts of the same beast. In the end, innovation is about harnessing creativity to produce value for the customer.

Victims of Their Own Success

Growth is good, right? You know the American dream: a passionate entrepreneur begins with a dream and no money. They hit upon a product or service that

works. Sometimes it's an invention born out of their individual genius. More often they assemble ideas and pieces into new combinations. They bother their friends, families and neighbors with it. Then a funny thing begins to happen — the product sells and the fledgling company begins to grow. Our entrepreneur works 18 hour days and puts love into each widget that rolls out of their garage.

That's when Frederick Taylor of scientific management fame joins the company. He takes over the HR department and work is broken down to the sub-atomic level. Our little company begins to hire people to support the mission. Departments spring up like mini-malls along the highway. Product Managers emerge that are responsible for propagating their buggy whips to the ends of time. Electronics companies hire electrical engineers; plumbing companies hire mechanical engineers, and so on. Financial professionals report on the margins of product lines. Quality people tell you how imperfect your buggy whips have become. Shortly, the laser beam focus on the customer becomes watered down through multiple levels of management, corporate board meetings and vacation time that expires soon.

Perhaps even more insidious, the language a company uses changes over time. Instead of speaking about real problems described in English, a funny sort of code language develops. All of you have experienced this. You come home from work and talk about your day with your spouse or friends. I'm referring to the words and acronyms that get the quizzical looks, followed by the guttural "huh?" "Honey, my PTPP was accepted by the SBPC, but only after we revised the output to be 120dB." Besides confusing those closest to you, this language becomes a barrier between you and innovation.

Attack of the Process Police

Along with the added bulk, new rules are put in place to manage all the activity. Large groups of people need ways of working together to avoid feelings getting hurt. Any of you that have implemented process changes have heard the power of "that's the way we've always done it." Unfortunately, processes often develop so much momentum that they become impervious to change. The sheer paperwork alone is often enough to dissuade would-be change agents.

Other company systems help enforce this behavior. Performance review systems reward individuals for the current way of doing business. Quality systems gather data on what has been done to apply to future versions of products and services. Unfortunately, the strong status quo doesn't take kindly to upstart innovative ideas. The excited "why couldn't we" is met with the stern "we've always done it this way." The strong bias toward conformity acts like an antibody killing newness.

The Language of the Status Quo — Do You Hear This at Work?

We tried that before and it never worked.
Nobody will buy that, it's junk.
Just tell me what you want me to build.
Our product goes 5 feet further, so it's better!
We make stamped metal toys, what do you mean we should make plastic wagons?
The Research group will drive innovation through the company.
We need a product like (insert your competitor here) and we need it yesterday!

The larger a set of accepted practices becomes, the more inertia is developed behind those practices and the more difficult change and innovation become.

I admit, as a change agent it's too easy and quite unfair to become cynical of work done by past generations. The processes and organizations you have today are what made the company successful. Still, yesterday's corporate systems were designed to solve the business problems

that existed at the time they were created, and the world is constantly changing. As Charles Darwin might have said, "evolve or become extinct." It is all too easy to become a victim of your own success.

Chris Barlow, of the Co-Creativity Institute, tells an interesting story of the South Seas Monkey trap during his instruction on innovation and creativity. South Sea Natives found a novel way of capturing monkeys by exploiting a weakness. They would put a hole in a coconut just large enough for a monkey to squeeze its hand inside. Then they would place a morsel of tasty fish inside. The monkey would squeeze its little hand in to grasp the prize, only to find that it is unable to pull its fist through the hole. Unwilling to abandon its prize, the monkey is unable to escape through the trees and is quickly caught.

The point of the story is not to enrage the animal rights people or start a cause to outlaw the monkey trap. It is to politely point out that your company might be the monkey in this story. Companies become brain-washed and hang onto products, language and processes that are no longer relevant to customer value. Industries suffer similar fates. The larger a set of accepted practices becomes, the more inertia is developed behind those practices and the more difficult change and innovation become.

Therefore, the challenge becomes fostering innovation while the maelstrom of everyday corporate life goes on around. How can you make it systematic without having to recruit Braveheart to break down the corporate silos? Alternately, how can you ensure that the corporate antibodies won't kill your innovation before it starts?

It Doesn't Start With the Customer

Does that sound sacrilegious? The most critical aspect of an innovation system is alignment among the top brass. The entire executive team needs to understand and agree upon what they are trying to achieve

with a system of innovation. Budgetary and human resources need to be allocated to innovation with the highest overall priority. I will go further with this heresy. I claim that innovation and strategic planning are really one and the same. Typical strategic planning focuses on projects intended to make the company better. The sessions begin with last year's mission statement and some form of value proposition. On the other hand, innovation is really a systematic examination of customer value from all aspects. Shouldn't customer value be the source for all corporate initiatives?

The most critical aspect of an innovation system is alignment among the top brass.

Turning your entire company on its head is a very high-stakes game. I wouldn't advocate turning over all or even most of your resources to innovation. That would be a bit like betting the farm on some unproven idea. Top management must agree upon a realistic amount of resources to set aside for innovation. I think of it as retirement savings. One rule of thumb is to put aside 10% of your resources for innovation.

Once this level is set, the key human resources among this group must be 100% dedicated to the task. Sharing with other lower priority programs is a recipe for trouble. The kind of people you choose is very important too. You're looking for those entrepreneurial people that almost cross the line of being subversive. They're the folks that constantly ask "why not?" at the least convenient time. Their very nature makes them question the status quo.

Be prepared to spend extra time with these dreamers, reinforcing and negotiating the common vision. Not everyone is cut out for this. Some people are just not wired to work at the threshold of innovative concepts. Probably very few are. Ambiguity makes many people uncomfortable. These folks may be better utilized as the dependable resources for implementing commercialization.

Many companies begin their journeys into innovation with the Engineering or Research departments. They're a bunch of techies, right? Seems like the natural home for innovation. That way, they can come up with some wonderful new inventions that delight everyone. These groups become known as R&D, skunk works, advanced development or other such colorful names. Some legendary products have come from this type of system.

This type of system is not sufficient to guarantee systematic innovation, however. For

this type of system to succeed, you'll need that rarest of breeds on your side, the person that fits comfortably within both the engineering and the marketing worlds. You will need this person to be the bridge between the world of black and white techno-speak and the world of needs, spin and customer delight. The type of individual that makes this system work may be engineers that are end-users of your product or service. These are the techies that don't give you night terrors when you think about putting them in front of a customer.

Failures are acceptable as long as the organization learns from the experience. Note, I said "organization" and not simply the individual.

What about the Customer?

Of course, you do have to include the customer at some point. By now you're aware that you can't simply walk up to them and ask what innovative things they're looking for. That's a bit like traveling back in time to the 1950's and asking passers-by what type of keyboard they want for their lap-

tops. Innovation is about the underlying problems of everyday existence. It comes out through frustration with current solutions, the Holy Grail-type function that nobody's product can get to. They are the suggestions that sales people laugh off as impossible when you bring them up.

Voice of the customer-type processes are a good way to get at this information and are well documented. In short, this type of process asks you to watch your customers in action. Look for curious practices that go along with your product or service. See how they really act. Cross-functional representation on these teams is very important. You never know where that next great idea will come from. Your manufacturing person might just pick the killer feature.

Another effective tool is to leverage internal company knowledge. The idea is to stage a group exercise. A facilitator should lead the group through exercises designed to bring out the sci-fi type of ideas latent in the heads of group members. A good facilitator will cause the group discussion to first diverge, almost to the point of silliness, then bring it back to some concrete concepts. Bring representatives from differing functions or points of view. You may even want to have some of your lead adopter customers attend too. Beyond the list of cool concepts, a meeting like this will galvanize the group and create a language and culture of innovation that can last for years.

Both these approaches to identifying innovation opportunities create lists of ideas.

Be careful to challenge ideas that are specific products. Specific product ideas are a person's perceived solution to a problem. Their assessment of the problem is probably pretty good, since they're experienced in their craft. Challenging them to identify the problem associated with the product concept brings some important benefits. First,

discussion of the problems brings further focus and refinement to the understanding of the issue.

Secondly, couching an idea in terms of a product brings baggage with it. It immediately places you in your current paradigm of operation. The discussion heads toward “which plant will we manufacture that in,” or “we can’t use our current packaging.” Knowing the underlying problem, however, allows you to explore other solutions without the bias and baggage of putting a product around the concept. Further, it allows you to combine many different ‘product’ ideas into a relatively few innovation opportunity statements.

Some Final Thoughts

By now, you’ve recruited the right people into your fledgling innovation engine. You’ve had the debates at the top and will invest in this type of work amongst all the noise of your everyday world. You’ve been out to observe your customers. You have a list of key problems in your area of business. Now what? Executing on the ideas should be as systematic as your approach to gathering them. Please note we’re talking problems here, not finely honed sets of requirements. Therefore, your process will resemble a scientific experiment more than a product commercialization effort. Develop a simple process to

clearly identify where the effort stands. Although the outcome of the experiment may be uncertain, the timeline and resources needed to complete the experiment should be crystal clear.

Once you get going, show some patience. It will take some time to get the programs flowing and tied to product roadmaps. You will have “failures,” in the sense that it is determined that the proposed innovation is unfeasible. Failures are acceptable as long as the organization learns from the experience. Note, I said “organization” and not simply the individual. You will have successes too. Celebrate both. ■

About the Author:



Jeff Krull (jeff.krull@sloanvalve.com) is the Vice President of Research & Development with Sloan Valve in Chicago. With over 18 years of industry experience, Jeff has been Vice President of Product Development for Shure, Inc. His organizations have produced products that have won several industry-related and innovation awards. Jeff holds Bachelor’s and Master of Science degrees in Mechanical and Aerospace Engineering from the Illinois Institute of Technology, and an MBA from the Stuart School of Business.