

Managing Change and Innovation

Volatile, uncertain market conditions and shifting customer demands underscore the need for corporate agility and creativity

By Robert Grace

edical doctors subscribe to the ethical canon of, "First, do no harm." Industrial designers, on the other hand, have no such singular purpose. But if they did, I suggest it would be to strive to "Improve the human condition." This aspiration is not widely recognized as a stated goal but is implicit in much that designers do.

Every company, big and small, wants to innovate. The ability to be responsive to shifting market conditions and customer desires can determine an organization's level of growth or even its very survival. And yet, many fail in the quest to launch and nurture innovation initiatives. Why?

the keys to leading successful innovation projects, the challenges inherent in managing them, and the change that surrounds them.

Manuck, who started Techmer PM in Los Angeles in 1981, made reference to a sailing analogy. "You have a starting point and an end point," he said, "and you start, then you course correct all the way along. It's not a question of whether you made a mistake before, but you're adapting to the environment."

That has to be the culture that everyone in your organization clearly understands, that you must course

Many books have been written, conferences held, and TED talks given on the subject, but it's always worth exploring. I had the opportunity in March to moderate a panel on the topic of innovation leadership in Chattanooga, Tenn. The session was part of Fibertech 2020, the 21st edition of an annual gathering of textile and fiber officials initiated and hosted by Techmer PM LLC, a materials design firm in Clinton, Tenn.

Panelists included Jenny Whitener, founder and chief executive officer of Bridge Innovate; Marc Shillum, founder of Chief Creative Office LLC; and John Manuck, chairman, CEO, and founder of Techmer PM. Key topics included



The innovation leadership panel (from left)—John Manuck, Jenny Whitener, and Marc Shillum—was a highlight of Techmer PM's Fibertech 2020 conference in Chattanooga. Courtesy of Debbie Wilson/Techmer PM

correct all the time, he stressed. "Don't look back, look forward. Look at the current conditions and how you can respond to those." This is the cultural shift to which every organization needs to adapt in order to survive, he suggested.

Getting Beyond Your Bias

Whitener, who founded Bridge Innovate in Atlanta nearly 18 years ago after serving in senior learning and innovation roles for consultants Cap Gemini and Ernst & Young, counseled that, "For executives, for leaders, you have to get beyond your bias"—a condition she calls "educated incapacity."

What that means, Whitener explained in a follow-up interview, is that your depth of industry knowledge and experience can tend to blind you to potential disruptive risks and market opportunities.

"You are so deep in your knowledge that you can't see opportunity around you. You're so wedded to your current business model, you're so wedded to your current distribution channels, you're so ingrained in how the business functions now that when new opportunities come forward, you're the one who says, 'That will never happen'."

Shillum, a Muir Woods, Calif.-based consultant, most recently served as senior director of both global brand and end-to-end product experience at eBay. Before that he was the former founding chief experience officer of Matternet, a pioneering startup that created a network of autonomous drones designed to deliver medication and diagnostic samples to regions largely inaccessible by normal roads. As head of his current company, CCO, the British native has worked with firms such as Lego, GoPro, Adobe, and RH (the former Restoration Hardware).

Disney's Creative Strategy

"How do new ideas, new things come to life?" Shillum asked. "Typically, they're either systems or stories." He referenced Walt Disney's creative strategy of "The Dreamer, The Realist, and the Critic." These are three specific modes of thinking and ideation, as outlined in a 2015 article by U.K.-based design researcher and university lecturer Rafiq Elmansey, who summarized the process as follows:

The dreamer asks questions that help describe ideas, such as the following:

- » What do we want?
- » What is the solution?
- » How do we imagine the solution?
- » What are the benefits of applying this solution?

The realist mode involves a more logical planning style. Shillum considers this the "engineering" phase. The aim is to turn the imaginary ideas into a manageable action plan, and includes such questions as:

» How can we apply this idea in reality?

- » What is the action plan to apply the idea?
- » What is the timeline to apply this idea?
- » How do we evaluate the idea?

Finally, after having an action plan to turn the idea into reality, the critic mode strives to find the barriers of applying the idea and how to overcome them. The critic team might ask questions such as:

- » What could be wrong with the idea?
- » What is missing?
- » Why can we not apply it?
- » What are the weaknesses in the plan?

Shillum stressed how following the order of this process is vital. "If you're a critic or an engineer in the dreaming space, you destroy it." The dreaming phase is all about the narrative of stories, while the realist phase focuses on systems, and what's involved with making it happen.

The last stage, the critic, then challenges the concept, by stating, "It's a good idea, and we can build it, but should it exist? Is it good enough?"

"I have learned a lot from mitigating using the wrong mindset in the wrong phase," Shillum told attendees. "Because you can be really critical really quickly and destroy a good idea that would be amazing. But you should never think a good idea doesn't need to have the structural power of good engineering thinking and good business smarts."

Applying Strategic Foresight

Whitener also referenced Disney as an early adopter of a process called "strategic foresight," formerly a narrow discipline limited to so-called strategists that she now sees becoming more important and widely adopted in corporate boardrooms and across entire organizations.

Strategic foresight involves looking at patterns and trends, assessing these early signals, and then trying to extrapolate what might happen and how that could impact your business, she explained, "so that we're able to shape futures, rather than being victims of futures."

In the past, one or two people in a company may have been charged at looking at futures, Whitener said. Now, it's important to charge more in the organization with such tasks.

"For executive teams of today, what are you doing to globalize strategic foresights in your companies?" For example, she noted, citing a relevant current event how fast has this market shifted with the coronavirus pandemic? Within your company, did you have alternate plans to address that? Did you see it coming? What parts of your leadership teams were meeting, looking at possible futures?

Some educators, she noted, previously said they would need years to transition to more online-based learning.



But once the COVID-19 crisis all but shut down society, "many school systems did it in three days."

In these fast-changing times, Whitener says, it is vital not only to "unpack bias," but also to make strategic foresight a common leadership competency that's not constrained to only a few key individuals. The pace and scale of change, and the volatility in the market, happens so quickly now that if you're not prepared to act, you'll miss the window of opportunity.



Drawing on Disney's creative strategy, Shillum created this diagram outlining the different phases of innovation. Courtesy of Chief Creative Office

Organizations need to develop a leadership capacity "that helps to build the critical thinking and the strategic foresight skills to anticipate and then formulate responses that sustain their growth strategy." She sees this becoming a skill set that company leaders will need to apply to any competitive trend or possibility that might be coming down the path.

Hard Lessons

Camera and film giant Eastman Kodak offered a good case in point, noted Shillum. Kodak—which in 1996 had 145,000 workers, revenues of nearly \$16 billion, and two-thirds of global market share for its products—declared bankruptcy in 2012. The company invented the first digital camera in 1975, but ignored the technology for 20 years, and then later failed to understand how

its customers' use habits had changed. Kodak suffered, Whitener would say, from educated incapacity.

With the rise of digital photography and the selfie culture, Shillum said, "The camera had turned around, from looking at vistas to looking at ourselves. Kodak was still making cameras that looked outwards," and this lack of vision and strategic foresight cost the company dearly. The hardware likely could have been adapted to work fine, but the company completely missed the user need.

Another fateful example involves one of the very first consumer drone makers, 3D Robotics. Shillum, who previously helped Mountain View, Calif.-based Matternet to develop its successful commercial drone delivery model, said that 3DR in 2015 was a successful startup that launched the first mass-market drone, called Solo. But he claimed the company badly miscalculated the speed at which the market would change.

3DR injection molded components for 100,000 or so drones, thinking they needed to amortize the costs it had sunk into tooling and manufacturing over a high volume of units. Then, when market needs and production technology shifted and a low-cost Chinese competitor named SZ DJI Technology Co. burst on the scene, 3DR was left with a warehouse full of unwanted drone components that completely tanked its business model.

If instead, says Shillum—who is currently writing a book called "Marketing at the Speed of the Product"—3DR had considered more agile alternative manufacturing techniques, such as 3D printing, and had started by making just 5,000 of its initial drones, then the company could have adapted to the changing needs quickly and less expensively. Matternet—which now helps pharmacy chains such as CVS to launch drug deliveries in this pandemic—today 3D prints most of its drones.

About Multidisciplinary Teams

Another key aspect of successfully fostering innovation, panelists agreed, involves selecting the right team to make it happen. Too often, Whitener said, companies launching an innovation initiative take the easiest route, and choose whoever happens to be available on that team, rather than carefully tapping those with the necessary skill sets.

"It ends up being a kind of a theater," she said of such companies, "so they can say to their shareholders that they have an 'innovation room', but they aren't mobilizing the interdisciplinary talent at the highest level around the most significant new venture that they're launching for their business."

Shillum chimed in, citing one of his favorite authors,

the renowned American architect, designer, and futurist Buckminster Fuller, and his theory on the desirability of individuals becoming "comprehensivists." Shillum said that Fuller disdained society's tendency to create silos of specialists and argued that the smartest people should be generalists.

Fuller's service in the U.S. Navy significantly shaped his thinking about this. Contrary to much of the education happening on land, naval officers were trained to be good at all vital tasks, capable of taking over from others if the situation at sea called for it.

BRIDGE INNOVATE Strategic Foresight | At A Glance



Whitener offers this three-phase guidance for learning to effectively apply strategic foresight. Courtesy of Bridge Innovate

It makes sense, Shillum suggested in an April 30 interview, to apply similar logic to our companies and product development teams, noting that this cross-fertilization helps to encourage empathy and understanding both with the customer and with other team members. (Read more in this recent post on his website: https://bit.ly/Shillum_comprehensive)

And Whitener agrees that engaging team members with a diversity of skill sets and opinions is vital to any successful innovation challenge, as is assessing any opportunity from the perspective of the customer.

Preparing the C Suite

Further, she says, it's essential to educate C suite executives on how to nurture a culture of innovation and curiosity. They need the ability to fund and spawn early, bold concepts that do not yet have a return-on-investment.

A lot of organizations are just addressing the tactical challenges (such as managing supply chain problems during a pandemic). And, Whitener acknowledged, you have to address the tactical in order to generate the revenue and to maintain your position of growth.

"But if you're not also nurturing these bold, creative thoughts around either consumer patterns or technological patterns that you're seeing trend, you're never going to get ahead of the wave." It's the job of an executive to listen, she asserted, and to say things such as: "Tell me more. How do you see that working? How do you see that rolling out? What indicators are in the market that that kind of thing can happen?" The C suite must be prepared to nurture innovation, not squash it in its infancy.

Too many view risk and disruption through the prism of fear rather than opportunity. "If everything that you launch has to be 100 percent on, then you're not taking any risks," she said. "So many times, as corporate executives, we're accustomed to managing risk. We think in terms of how to keep risk down, instead of going what's our greatest risk and let's figure out how to take it on."

The leaders who recognize the need to sniff out and identify trends beyond their current expertise, she noted, will put teams around them who bring disruption, who are challenged with looking for things that they would miss. They are chartered with finding the disruption and presenting it to the C suite.

Managing the Pipeline

Manuck agreed but also offered a word of caution. While wanting to encourage innovation and free thinking in your organization, it can be easy for lots of projects to spring up. The organization's resources could start to be chewed up by lots of projects going on everywhere, with many of them going nowhere.

That can become a challenge, he said. One needs to learn how to balance the fact that you want to create an environment where people are encouraged to initiate innovative projects, while at the same time understanding that, at some point, those projects need to be vetted and assessed for their viability.

"The big word in our company all the time now is pipeline," said the Techmer PM CEO. "We ask 'How's the pipeline?' If you have too many projects going on, it's like the pipeline has too many leaks—you're using up energy, you're using up talent, and not getting any results.

"I don't have a full answer to that, it's just a caution to everybody," Manuck admitted. At some point, though, you're going to have to be able to put a cost or returnon-investment number on it, "or else it's just a dream."

ABOUT THE AUTHOR

Robert Grace is a writer, editor and marketing communications professional who has been active in B2B journalism since 1980. He was founding editor of and worked for 25 years at Plastics News, serving as editorial director, associate publisher and conference director. He is now both editor of SPE's *Journal of Blow Molding* and a regular contributor to various outlets. A long-time member of the Industrial Designers Society of America, he runs his own firm, RC Grace LLC, in Daytona Beach, Fla., and can be contacted at <u>bob@rcgrace.com</u>.

