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The Discipline of Creativity

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[INNOVATION]

The Discipline of Creativity

Ideas can come from anywhere. But that doesn't mean managers can afford to rely on haphazard, hit-or-miss approaches to idea generation.

BY JOSEPH V. SINFIELD, TIM GUSTAFSON AND BRIAN HINDO

Businesses win through new ideas: new ideas for products, for developing and refining processes, and for tackling strategic and operational challenges. Given the complexity and volatility that characterize today's business landscape, the ability to develop creative new ideas is more important than ever. In fact, a recent IBM survey of 1,500 CEOs from more than 60 countries named creativity the most important leadership quality.

But coming up with creative ideas on demand is only part of the answer. Just as crucial is how ideas link to action. In a business context, creativity is only useful when it leads to innovation. Managers must be able to apply creative thinking in a systematic way that achieves results: revenue growth, delighted customers, a stronger community or some other measure of impact. In addition, ideas must fit with an organization's strategy or take it in a new, purposeful direction. They must solve real problems for stakeholders such as customers or employees, and they must be able to be tested.

Many brainstorming exercises that companies undertake fall short in this regard. Although such sessions are frequently fun for participants, the output is too often considered impractical just days after the exercise. Against this backdrop, we have developed an integrative process for idea generation based on approaches drawn from several domains, including education, consumer research, business model design and emergent strategy. The seven steps have been honed through our research and client work over the past decade. The first three steps are designed to help managers understand the problem deeply. Steps four through six describe how to generate tangible ideas for solutions. And the final step explains how to translate the ideas into action.

To illustrate the approach, we will describe our recent efforts to develop new approaches for solving a vexing problem involving the distribution of drugs for multidrug-resistant tuberculosis (MDR-TB). Some TB strains have advanced to become resistant to first-line drug treatments, and there are more than 500,000 cases of MDR-TB globally, mainly in India, Russia, China and South Africa. Yet, for a variety of reasons, only about 20,000 of the patients are appropriately treated with quality-assured second-line drugs.

Lilly Foundation's MDR-TB Partnership asked us to work with their leadership and the World Health Organization's Stop TB Partnership to convene some of the world's top thinkers in global health, TB, supply chain management and other fields for a two-day ideation session. The goal was to develop ideas that would enable people with TB to access the drugs they needed more easily and consistently.

STEP 1: Define the problem and solution space. Many people make an intuitive connection between creative ideas and unconstrained, blue-sky thinking. Yet many executives are not clear enough about what they would consider a good idea and what's a nonstarter in light of the organization's strategic priorities. Although thinking divergently is critical to idea generation, it's important to delineate boundaries around both the problem (what exactly you're proposing to solve) and the solution (what types of answers you seek and find acceptable).

Beyond the obvious benefit of ensuring that employees don't waste time and resources pursuing ideas that are destined for the cutting room floor, having clearly defined boundaries can help expand, rather than constrict, the sense of what's possible and the range of ideas generated. Additionally, constraining the problem and solution space forces idea generators to delve into an area. The result is typically a much broader range of ideas that are on target and have real potential to move forward toward impact.

The first step in the MDR-TB initiative was to define guidelines and boundaries. Working with our project partners, we made several decisions. For instance, we quickly decided to focus on the TB drug supply chain, on the assumption that this was where our ideation efforts were likely to have the greatest impact. Thus, we deemphasized other problematic areas, such as drug development, diagnosis or geopolitics.

At the same time, we discussed various elements of potential solutions. For example, we decided that solutions should result in patient impact within three years. This was a calculated risk: We knew that this constraint might tamp down "moon-shot thinking," but we reasoned that quick, tangible wins were the more important goal.

STEP 2: Break the problem down. Even after our decision to focus on the MDR-TB supply chain, the problem was too complex to move directly into idea generation. Attempting to tackle everything at once was too daunting. Indeed, manufacturing the right quantities of quality-assured second-line drugs and distributing them efficiently and accurately to match the demand from thousands of individual clinics involves hundreds of individual transactions.

Therefore, we decided to create a map of all the components of the MDR-TB drug supply chain. Relying on a combination of research and interviews with experts, we identified several specific barriers preventing drugs from efficiently reaching patients in need. One barrier stemmed from the fact that current detection and tracking methods for cases were not effective, which led to potential mismatches between supply and demand. Another barrier was the high price of "quality-assured" drugs. In all, we identified 12 barriers.

STEP 3: Make the problem personal. As a third step, we studied each of the individual barriers and developed specific targets for solution development. But even though we were sometimes dealing with broad issues, we didn't treat them as abstract challenges. Rather, we approached the problems with empathy, because we knew that each of them affected individuals. One of the best ways we know of to encourage empathy is, as Clayton Christensen has written, to define the "jobs to be done" for which you need to "hire" solutions. That requires getting in front of customers or stakeholders and observing them. In particular, we looked for jobs to be done that are important to stakeholders, where no adequate solutions have been found and where there is sure to be lots of demand. In our experience, the jobs tend to fall into three broad categories — functional, emotional and social — and in order to fully understand the problem you need to solve, you must consider all three.

Once the job is defined, the goal is to make it as real as possible to the people who will be generating ideas. For example, community health workers were frustrated that case tracking data were not adequately shared between international and local health authorities; hospital officials struggled to manage demand from volumes of patients they hadn't anticipated. To bring these problems to life, we created posters depicting the problems and featuring quotes from the individuals involved. During day one, we divided the group into teams of four to six. They were asked to spend 90 minutes examining a specific problem and generating solutions.

STEP 4: Apply an outside-in perspective. Developing new ideas often requires new perspectives and a willingness to challenge existing organizational and industry assumptions by considering concepts from other contexts. In hopes of promoting this kind of associative thinking, we worked with our partners at Lilly to invite a diverse set of people to the ideation summit. In addition to public health experts and specialists with deep experience in MDR-TB, we included participants from outside that field: retail supply chain managers, technology experts and other people the summit organizers saw as smart and creative.

This approach was consistent with academic research that shows that bringing together individuals with diverse backgrounds can enhance the flow of ideas, making people more open to new information and finding ways to integrate it into solutions. For example, having supply chain experts in each breakout group allowed us to make connections very quickly between specific chokepoints in the MDR-TB system and other supply chains where similar problems have been solved. One outcome of these discussions was the decision to create a supply chain "dashboard" where managers from government and nongovernmental organizations can monitor supply, demand and effective delivery of drugs to those in need.

STEP 5: Diverge before you converge. In confronting creative challenges, it makes sense to consider as many ideas as possible. However, unless you're careful, traditional brainstorming sessions can be risky: One powerful voice can overwhelm the others and cause the group to settle on early suggestions prematurely.

How do you make sure that you are taking full advantage of the divergent viewpoints? We have found that, rather than beginning with a group discussion, it's helpful to start by asking participants to write down as many ideas as they can individually (Continued on page 26)

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for five to 10 minutes. In our experience, the technique has two benefits. First, it gives introverts — who may be shy about sharing their suggestions in a larger group setting — a chance to maximize their contribution. Second, having lots of ideas on paper before the discussion begins prevents the group from rallying around any specific solution too soon.

At the MDR-TB summit, we divided the 35 participants into seven teams, each led by a facilitator. During the first 10 minutes of the 90-minute sessions, individuals quietly made their own lists before joining their teams. Each team came up with at least 20 sticky notes with ideas; in considering the 12 barriers, meeting attendees came up with more than 250 different ideas.

A recent study led by Karan Girotra, assistant professor of technology and operations management at INSEAD, affirmed the value of mixing individual thinking and group thinking: Teams employing this hybrid approach were nearly three times as productive as group brainstorming teams, measured by the number of ideas they generated; as for idea quality, the ideas of the hybrid teams were rated by independent outsiders as more valuable and attractive to potential users than the groups' ideas.

STEP 6: Create "idea resumes" for a complete solution. Once individuals have made their own lists, we recommend that teams review the ideas and sort them into categories (for example, big picture, finer details). To ensure that the output is fully developed, we ask teams to detail the ideas in a one-page "idea resume" that is customized to the problem at hand. Idea resumes should describe the main solution features: how customers will learn about it or access it; what resources or processes are needed to make it a reality; and how the solution will achieve economic sustainability. Examining ideas in a structured and consistent manner facilitates "apples-to-apples" comparisons and ensures that ideas are evaluated on their merits rather than on how well they are pitched.

For the MDR-TB idea resume, we asked participants to explain who would use a particular solution and under what circumstances. In addition, we pressed them on why the new solution was better than existing solutions. During the two days, we generated some 90 idea resumes. Some were relatively mundane, but others — for example, opportunities to produce medications using 3-D printing — were quite radical.

STEP 7: Create a plan to learn. The work doesn't end with the ideation sessions. Just as Hollywood studios take videos from movie shoots and send them out for post-production editing, there are various activities that are intended to ensure that the most promising ideas get developed. And for businesses hoping to translate ideas into action, this is where the real work begins.

During the second day of the MDR-TB summit, participants were asked to develop integrated solutions that would provide a comprehensive solution across the entire MDR-TB ecosystem. Each solution platform was evaluated by participating members of the Stop TB Partnership and the Lilly MDR-TB Partnership for its attractiveness and feasibility.

Three ideas were selected for immediate development. The first was a communications program to "rebrand" MDR-TB with an eye toward catalyzing public understanding and support for the often-marginalized TB patient populations. The second idea was for an app to allow doctors to access up-to-date best practice treatment recommendations. The third idea was to create an MDR-TB patient detection and tracking system to prevent patients from "falling off the map" once a diagnosis is made; mobile and other types of Internet-based tracking tools would make it easier to report, aggregate and visualize data on incidences of MDR-TB.

In the case of the MDR-TB summit, all the prep work — breaking down the problem, examining stakeholder needs, making use of creative minds from inside and outside the field — gave us confidence that we had prioritized three important areas. However, each of them still had embedded assumptions that had to be studied closely. We made a list of the most important ones we needed to validate and designed tests for each of them. We spelled out exactly how much money and time each test would require, what we hoped to learn from them and how we would reshape the platform based on the results. We call this collection of assumptions and tests a "plan to learn."

Within five months of the two-day meeting, each of the three ideas had received commitments of funding and/or piloting by prominent public health organizations. One additional idea that wasn't initially prioritized, a device that "prints" drugs on dissolvable strips, has since been taken up by researchers at MIT and is currently moving toward early prototyping.

Ideas can really come from anywhere — a chance encounter in the hallway, a thought during the drive home, a "eureka" moment in the bathtub. But managers can't afford to rely on haphazard, hit-or-miss approaches. Unlike traditional brainstorming, the approach we have outlined weaves in a deep understanding of the marketplace, business model generation and emergent strategy. In that way, it increases the chances that the thinking it generates can lead to real business impact.

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