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What are the most effective approaches to drive an innovation pipeline?

By Chuck Frey and Hitendra Patel

1. What are the best processes and tools to put in place to drive innovation across the enterprise from concept to customer?

One of the best methods of idea management is to create an online, web-based system for the input of ideas and concepts across the entire organization. Very often, this is already done locally in various teams and sub-organizations. However, in such cases most of the ideas pertain to the specific function of the team. What gets filtered out, and eventually disappears, are the ideas that apply across the organization, or even to different sub-groups than the originating team or department.

Enterprise-wide idea management systems can potentially overcome this limitation, liberate the ideation process, and facilitate the free flow of ideas across the entire enterprise. However, this effort would be a marginal success without dedicated staff to support it, and a transparent and credible review process. The most critical element is feedback to the ideator, that their idea is taken seriously, being reviewed critically, and will be responded to (even rejected) in a timely fashion. Today, the tools of the internet, intranet, and various commercial software make the mechanics of enterprise idea management a relatively straightforward process. The challenge lies in gaining the commitment from senior management and of entrepreneurial units to run with ideas, and above all gaining the trust of employees.

-- Dr. Makarand "Chips" Chipalkatti, Osram Sylvania

Innovation should not be an "add-on" process but a natural extension of activities that occur throughout the workday. Accountability, responsibility and ownership of the innovation process must be defined, appropriately implemented and monitored. While these three attributes can reside within a single innovator or shared across a team, program/project management tools should be used to monitor their implementation in the innovation process.

-- Marc Chason, Motorola Labs

It's all about having a discipline. The firms that thrive on regimen really benefit from a stage and gate process. The most valuable part of a stage and gate process is the alignment with senior management on strategy, priorities and resources for innovation projects. Some firms may not want the process-heavy stage and gate approach, but they need to ensure that the senior management alignment happens through some forum. Another critical element of any innovation discipline is the willingness to kill projects. Too many times a project stays alive because of pride, ego, false hope, or misguided but well-intentioned plans. There needs to be permission in the culture to kill projects. Killing them doesn't mean failure. It simply means the organization has clear strategies

and measures. While “killing” sounds negative and “anti-innovation,” it actually gives life to real innovation by clarifying focus and freeing up resources to spend on the projects that will make it to market.

-- *Troy Geesaman, Laga*

One of the most important characteristics of an innovation process is that it connects a number of other processes and should not be confused with more narrowly defined product development processes or stage gate project management processes. It is also important that it be recognized as a multi-track process, with specific points in the process where choices are made as to what track a given initiative should be on.

The innovation process or system should also be considered as an iterative process that runs from:

- Up-front visioning and target setting, through multi-sourced insight and ideation activities, through a series of parallel exploration and development activities to define lead concepts or offerings, and then through
- A more convergent strategic innovation process to select priority opportunity spaces and lead concepts and convert them into strategic initiatives and programs, and finally through
- A more conventional but accelerated development, launch and rollout activities, all with a strong overlay of partnering and investment processes

a. Up-front visioning and target setting activities should be focused on establishing the innovation mandate and stretch targets (both top line and bottom line) and should incorporate visioning and roadmapping (of emerging trends and potentially disruptive events or technologies), scenario planning, and the identification of real options for future sustainable growth and development. The output of this part of the process should be specific innovation mandates and stretch targets that are incorporated in the corporate and business unit strategies and in the performance objectives of key teams and individuals. It is also helpful if these are explicitly shared with key external and internal partners.

b. Multi-sourced insight and ideation activities should be focused on building the most robust innovation landscapes relevant to the company's business using multiple sources to explore emerging customer purchase and use behaviors, emerging needs and potential solutions, most prevalent innovation themes, and the generation and development of ideas or opportunities related to these landscapes and themes. There are a multitude of specific tools and approaches; what is important is that multiple complementary approaches be used and then integrated into overall landscapes and perspectives of the emerging internal and external marketplaces for innovation. The output of this part of the process should be a clear and compelling set of innovation landscapes and emerging themes that cover black space, grey space, white space and grey space, with a wide range of specific idea fragments or opportunities, and with the identification of the most compelling hot spots for innovation.

c. Parallel exploration and development activities should be focused on exporting the most compelling hot spots or fields of play for innovation and should include concept development and testing, overall solution or offering development and simulation, and reverse engineering to identify key success and failure aspects. The output of this part of the process should be clearly defined and operationalized innovation concepts or offerings sufficiently tested to enable more significant investment and partnering decisions

d. A more convergent strategic innovation process and set of selection activities should then be focused on selecting priority opportunity spaces and lead concepts and converting them into prioritized strategic initiatives and innovation investment programs.
The output of this part of the process should be prioritized strategic innovation initiatives and investment programs that can be balanced into the best innovation portfolio. The end of this step of the process should also involve a “triage” that identifies which development track a specific set of innovation initiatives should follow.

e. Accelerated development, launch, and rollout activities should then be managed across multiple parallel tracks (e.g. of Just Do It, Incremental Product or Process Development, Innovation Platform Investment, and Venturing), and integrated with this overall innovation process to assure seamless and accelerated concept to customer innovation and feedback to the front end of the innovation process.

f. Partnering and investment processes and activates should be an essential overlay to any successful innovation process and should include choices at the front end (e.g. sources and partners for innovation insight and ideation), in the midstream (make/collaborate/buy processes to optimize investment leveraging, strategic partnering and time to market), and in the downstream (launch and rollout activities).

-- Ron Jonash, The Monitor Group

Since we do not know where the next powerful idea will come from, we want to get everyone in the company innovating. The Japanese recognize that new, powerful ideas rarely come from the top and have developed a wonderful technique called "Quick and Easy Kaizen," which asks everyone in the company to identify problems and to find solutions – to look for small opportunities to be more efficient, to reduce costs, to improve quality, to improve safety and to improve customer service. Gulfstream for example, received 16 ideas in February 2005 and last year received 27,000 implemented ideas from 1,000 people. Of course, most of these ideas are very small, but imagine how people feel about themselves when they take ownership of their job. They saved millions of dollars from those ideas and the products are now delivered on time with much higher quality. We simply ask the worker to make their work more interesting, to make their work easier, to focus on building their skills and capabilities. Instead of always waiting for management to "allow them to do things," we want them to take the initiative to be involved in continuous improvement . When you get tens of thousands of ideas, some of them will be real jewels.

-- Norman Bodek, PCS Inc.

I'll answer the question, but I think something is missing in the question. Real innovation doesn't start with a concept. In fact that's often the problem – starting with a concept pre-supposes that you understand the needs of your customers (or the market). The most important tools of innovation are not concept generation tools or design tools, but the tools of understanding.

Design tools – let's put them aside; they've been around for decades and have been dramatically improved over the past ten years through approaches such as Design for Six Sigma. Concept generation tools – they continue to evolve. Some have been around for ages (e.g., function structure, TILMAG and lateral thinking tools). Others are fairly new or are continuing to mature (e.g., biomimicry).

What's evolving at the greatest rate are the tools designed to help you determine "the job to be done," or "the job that needs to be done." Take, for example, the case of a company that makes machine guns for fighter aircraft. The sophisticated analysis said that machine guns are no longer needed: close-in dog fights are a thing of the past, as are strafing runs, replaced by precision-guided bombs. So the designers concluded the machine guns could come out of newly- designed fighters and more bombs or electronics can be put on in their place. Then, at the eleventh hour, the Navy or Air Force asked to have machine guns put back in. Why? Because the pilots demanded them. Arguments ensued. Eventually someone caved.

But is that really the way to make decisions? Instead, what if we employ some tools to discover the "job to be done," by the machine gun? After some analysis, you'll find that it's not a "military mission," but rather a sense of security for the pilot who was trained on a plane with a machine gun and likes to have his finger on the trigger. Now you can explore other ways to "get the job done." That's a completely different concept than figuring out innovative ways to meet the plane's specifications.

-- David Silverstein, Breakthrough Management Group

Our Analysis

Too many companies are putting the cart before the horse. Before putting any concept into the pipeline, the company has to define the criteria for what concepts are considered relevant, attractive or compelling. This has to be determined by the business needs, customer met/unmet needs and market trends. Ron Jonash of Monitor talks about linking criteria to the strategic vision and business targets while David Silverstein of BMGI emphasizes the importance of identifying the opportunity first, before rushing into developing

concepts.

Troy Geesaman of Laga reminds us that innovation management is very much about aligning leadership and being disciplined about execution. He describes the Stage and Gate process as an effective way to do both. Ron Jonash and Marc Chason of Motorola remind us that the innovation process connects to many more business processes and facilitates more diverse ideas than a product development process. As a result, he encourages companies to have a portfolio of Stage and Gate processes for ideas from easy ideas (just-do-it process) to big and bold ideas (requiring senior executive funding and attention).

Makarand Chipalkatti of Osram Sylvania has found that web-based solutions work very well to broaden the reach for sharing issues and problems, capturing ideas in white spaces, and having transparency for progress of projects and decisions. He, too, reminds us that that is not enough. The web tools need to be supported by leadership and resource commitment, a team to manage the web tool and process, objective and transparent evaluation, and entrepreneurial units that are willing to run with the ideas.

In summary, be clear about where you want to innovate, recognize that one stage and gate process is not sufficient for innovation, and IT tools are great enablers for connecting to other processes and to people. However, these systems and tools need to be supported by a strategic vision, resources, organizations and a culture that runs with the ideas.

-- Chuck Frey/Hitendra Patel

2. What is the best way to implement an innovation process and how do you integrate it into the organization's day-to-day business operations?

Implementation of innovation processes are ultimately the innovator's responsibility. Tying the use of innovation processes or practices to the innovator's performance review rewards innovation implementation. For the innovator, it also reduces the conflict arising from potentially nebulous innovation targets from those required to meet day-to-day operations.

Performance review goals can be appropriately written to address innovation, while still being specific and measurable. For example, a goal such as "identify and implement at least two programs to increase office efficiency" gives the innovator the opportunity and responsibility to be innovative, while the manager becomes responsible for jointly determining the quality and value of the work generated to meet the goal. A similar goal, such as "define three potential project concepts for proof-of-concept demonstration" opens up the opportunity for tremendous amounts of innovation on the part of the innovator while putting in place the opportunity for the manager to measure the goal and provide mentoring/coaching opportunities.

-- Marc Chason, Motorola Labs

This is a very complex question. If one were to focus on the most critical element, I would say it is communication (and training). Coupled with communications is top-down support of the innovation process: both in terms of the concept, but also in allocating resources. Employees need to get repeated reinforcement that their management is behind the innovation process and supports it. They need to be rewarded promptly for their support and participation. In fact, an excellent example of an efficiency process that has gained widespread acceptance and support is Six Sigma. It is the perfect analogy. The key difference is that with efficiency measures, the financial results are in the present and therefore immediately visible. With innovation processes, the results are in the future, less tangible, and therefore harder to communicate and justify. Innovation metrics therefore play a crucial role in innovation management.

-- Dr. Makarand "Chips" Chipalkatti, Osram Sylvania

One of the most important success factors for implementing a broader concept to customer innovation process is the effective integration of already existing business processes. Otherwise the battle of the process leaders devolves into chaos and inaction.

a. At the front end this is generally more successfully accomplished by recognizing the value of diversity and multi-sourcing in the insight and ideation processes so that multiple existing approaches and process can be complemented by more and assembled into an overall insight and ideation system.

b. In the midstream, this usually involves interfaces with the business planning and strategy processes and requires considerable discipline around the issue of multiple planning horizons and the need to incorporate options and uncertainties into the business planning and strategy considerations for innovation

c. Downstream, this usually involves establishing a clear triage point when priority choices are made and initiatives are assigned to different innovation tracks (which need to be integrated with existing new business development and investment tracks, venturing tracks, product and process development tracks, etc.)

d. Partnering and investment processes need to be made clear and explicit and implementation approaches vary widely from company to company.

-- Ron Jonash, The Monitor Group

We're talking about innovation, right? Well then, there is no ONE BEST WAY. In fact imagine if I answered the question and you said, "Wow, that's it!" And at the same time so did 50 other companies, wouldn't you all essentially be doing the same thing? And if you did, you might feel innovative today, but what are the odds that your primary goal – call it "differentiation" – is satisfied three years from now, when you look just like 50 other companies, including three or four of your competitors?

Your company's innovation "style" has a lot to do with the style of its leader, along with your history and your industry. Determining the right approach for your company should be among your first steps.

-- David Silverstein, Breakthrough Management Group

In a word: Leadership. The senior leadership needs to make innovation a priority and provide the resources to demonstrate they mean it. The company needs to identify a "spiritual" leader of the movement and discipline in the organization. There are lots of approaches to successful innovation, and a strong leader will be able to evaluate the existing culture to determine the best approach to commercializing innovation in the organization. A leader will attract the right talent to the team from various functions in the business. Passionate, smart, creative and collaborative leaders are essential for success on the innovation team. Lastly, a strong leader will inspire and challenge the organization to press on to greatness, to stretch beyond its perceived and real constraints to deliver consumer-focused ideas as quickly and differentiated as possible. The broader employee base will jump on board with innovation when they see the commitment from management and the leadership devoted to directly driving innovation to success in the marketplace.

-- Troy Geesaman, Laga

You ask, you get. Simply, ask all of your employees to be part of the innovation process. "I want you to come up with one improvement idea per week." Ask, then listen, then trust and allow them to be real partners in your business.

-- Norman Bodek, PCS Inc.

Our Analysis

Based on our experts, the support required to implement an innovation process is not so different than that required for a major organizational change initiative. Our experts emphasized the need for leadership support and continued communication about the importance of innovation. They suggest pushing innovation down the ranks and expect managers to explicitly ask employees to innovate and to measure and rewarding the quality and value of their efforts.

The Motorola example by Marc Chason hits home where each manager asks employees to generate three “concepts” reminding us that if you do not ask (and measure) than you will not get. Troy from Laga adds that nurturing a culture of collaboration, risk taking and learning is necessary to make the innovation process stick. Lastly, Ron breaks up the innovation process into the front, middle and the end, and shows that each stage of the process actually has existing processes whether in marketing or R&D for insights or strategy and planning for resource allocation or manufacturing and sales for commercial launch. Pretending that these processes don’t exist will result in the innovation process going away, not the existing processes. You need to work with these processes.

Clearly, assigning the innovation process role to a manager may sound like a good idea but will fail unless there is a recognition that innovation is a change initiative.

-- *Chuck Frey/Hitendra Patel*

In the next interview:

How do you build and sustain a culture and climate for innovation and entrepreneurship?

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