DIY INNOVATION:

CREATING AN *innovation* CAPABILITY *within your* ORGANIZATION

By paying close attention to six factors, you will be on the road to innovation that impacts your bottom line and is embraced by all.

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IN RECENT YEARS, organizations of all shapes and sizes have become exponentially more interested in the practice of innovation. It is now so widely embraced that some have taken the step to develop innovation as a core internal competency. In our work, we have been involved in several attempts to do this, and the results have been mixed.

What we find is, when an internal 'innovation unit' is created, it is often disconnected from the firm's core business functions and the profit-and-loss centres that drive strategic and tactical investments; and as a result, it is marginalized.

In this article we will introduce a framework for building a powerful innovation capacity within your organization, and introduce ways to measure how innovation adds direct value to your core business.

A Framework for Internal Innovation

The framework we have developed focuses on six vital aspects of an internal innovation program:

1. Involving internal partners;
2. Embracing failure;
3. Collaborative learning;
4. Maintaining a portfolio of options;
5. Building external partnerships; and
6. Recognizing secondary benefits.

We will discuss each in turn, providing a framework to help you analyze your own internal innovation initiatives.

1. Internal Partners

We have found that many internal innovation teams lack the authority to truly 'take on' the issue they have been assigned. Furthermore, executives are often dismissive of a project until an influential individual from the operating side of the business partners up with the team. Opening up your innovation process to stakeholders from all areas of your organization will make people more invested in the outcome.

CASE STUDY: In 2006-2007, a large U.S.-based health insurer was struggling with its evolution towards 'consumer-driven healthcare', and decided to create an internal innovation team. The team quickly figured out that its customers were making health decisions that were not in their best interest. This was especially problematic because the organization's stated mission was to help customers make better decisions, contain costs and reduce risks.

The team hired **frog design** to help it develop an over-arching customer experience strategy. frog proposed a user-centered design process: rather than focusing on representative samplings or large-scale market surveys—which the firm favoured—the team would focus on a small group of 'particularly representative' plan members who were identified as being critical to its success: customers with very limited incomes and high deductibles. These consumers were likely to be on the front lines of personal health decision-making.

While this approach was sound, the innovation team was too disconnected from the core business to effectively drive any sort of over-arching strategy. So, frog worked with the team to 'shop' the approach around to key stakeholders across business lines. The turning point came when a division head participated in a collaborative design session with the selected consumers. He was personally struck by the experience of an elderly woman with severe arthritis who was stretching out her medications to save money, even though the prescriptions were fully covered. She was also afraid to go back to the doctor, fearing it might increase her premiums (although this was not the case.)

The division head had to face the fact that his offerings were not reaching this customer in an effective manner, placing both her and the firm at risk. He personally took steps to fix the situation, and afterwards, was able to sell the process—and the need for it—from the perspective of a core P&L centre. The result: it was no longer seen as an innovation project, because 'ownership' had transferred to him and his division. The innovation team was able to use this as a case study and create an over-arching set of principles and insights to guide the entire organization moving forward.

INTERNAL PARTNERS SCORECARD

- Are your innovation leaders liked and trusted within the organization?
- Are you drawing insights from multiple domains?
- Are the direct beneficiaries of the work (i.e. users) engaged?
- Are there broad and open channels to solicit and capture insights?
- Is there a dedicated place for sharing?
- Is a broad range of ideas tolerated?
- Is there a model for maturing and letting go of ideas?

2. Embracing Failure

The old adage, 'Fail fast' misses the point. It is not enough to generate a stream of ideas and throw out the ones that fail. No idea that is original enough to matter can be conceived and delivered in one pass: effective innovation is an incremental process that

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involves learning and adjusting. That's why effective innovation teams build 'intentional feedback loops' so that everyone knows what is and isn't working, and people can actively respond to the knowledge they glean from taking action.

CASE STUDY: More and more educational institutions are breaking with long-established traditions, and as a result, the field itself is being reinvented at the ground level. Guidance for innovators in this arena necessarily comes from learning from the emerging market, since the definition of 'best practices' is currently in flux.

In 2012, **ThoughtWorks**, a custom software development firm that specializes in a systems thinking approach to product development, engaged in an effort with a leading education technology company to create a digital classroom tool for K-12 education. The initiative began with substantial research to understand the specific needs of the classroom and the operation of the school. ThoughtWorks employed its agile methodology to get the simplest version of a product in front of students to try, so they could capture immediate feedback.

Researchers had to consider the specifics of how the tool would be used: how it would sit on a desk, how it fit inside the desk, its weight when taking it out to use, the durability of the screen if it were to fall on the ground, and the length of time it would take for the screen and WiFi to turn on. While these aren't typical considerations for digital tools, they were revealed to be critical in an educational context.

The team made repeat visits to schools, interacting with students and teachers, and recording observations. They also set up a classroom lab to test the prototypes in iterative cycles. Initial cycles revolved around product choices, while a second set of cycles began to question how the learning application itself would work in a classroom setting. Insights could not have emerged unless the varied participants,—teachers, students and the physical classroom environment—all interacted directly with the early product prototypes.

Early failure was key to the process. The team found that placing the prototype on a traditional classroom desk didn't work: the slanted design of the desks made it slide off and break. The possibility of designing a non-slanted desk was briefly considered, but rejected as financially unfeasible. The answer: a rubber case would allow the tool to stick to the desk's surface and would also cushion it in case of a fall.

The team also had issues with inconsistent Wi-Fi connectivity in the schools, which resulted in a strategic pivot to design an 'offline' mode. This added time to the project, but it also had immediate benefits. In the end, testing the product in the early stages of development—and witnessing its failures first hand—allowed the team to build a superior product that met the needs of the classroom and saved time by quickly incorporating multiple feedback points into the development process.

A FAILURE SCORECARD:

- Can the team sell the value of learning and uncertainty to executives?
- Are multiple dimensions of the project (i.e. purpose, design, execution) open to change?
- Is feedback on prototypes captured quickly, and is it readily available to all involved?
- Are there frequent opportunities to apply learnings and make decisions?
- Can changes in direction be made quickly?

3. Learning Through Collaboration

Since they are not usually subject experts, innovation teams must draw on a complex web of partners and collaborators in order to learn. While this seems fairly obvious, these interactions also have external value, because if they are catalogued and shared, they can be re-used in the future—thus lowering the 'unit cost' of innovation.

CASE STUDY: The **Mayo Clinic Health System** has a network of over 70 Family Medicine Clinics that serve as the first point of contact for smaller communities and, when necessary, refer patients to specialists. In 2011, the Clinic's Center for Innovation recognized that U.S. healthcare reform's shift from a fee-for-service to pay-for-value reimbursement would significantly affect the family clinics' business model, and it launched an initiative to transform community health. Stakeholders included medical providers and administrative staff at the clinics as well as community members.

A crucial collaborator presented himself when a physician from one of the family clinics indicated his interest in using his clinic as a 'learning lab'. Having obtained his buy-in, the team derived credibility that would have been difficult to achieve otherwise. In the doctor's words: "As a physician, your identity

is linked to taking good care of people. But when the designers started asking me why I was doing certain things, it became apparent that I was not helping my patients as much as I could. It was a truly revealing experience."

The team had to establish a fast and firm network across a series of domain skills. For example, testing a protocol for electronic consults with specialists (to avoid unnecessary visits) required the involvement of IT staff to create a framework, a variety of specialists willing to experiment, and billing staff to determine and bill fees. To recruit new allies, the team leveraged personal relationships and orchestrated 'road shows', presenting its work to disparate groups within Mayo.

Collaborations across domains, with a transfer of value from the innovation team to the technical partners, were key to this endeavour. Having stakeholders who not only benefited from the work, but who were also part of the design process allowed the design efforts to scale, and the structures and processes created transcended the original project.

For example, the local team recognized that interactions with clinic personnel account for less than one per cent of a person's life; most of what determines patient health happens within the fabric of their community. Therefore the team created a new role—Community Engagement Coordinator—to serve as a bridge between the clinic and the community. To drive the wellness movement without it being owned solely by Mayo, the coordinator started a Community Health Coalition working group in the area to solicit input from a broader set of stakeholders. Six other Mayo family clinics are now piloting similar models.

A COLLABORATION SCORECARD:

- Are cross-organizational interactions being enabled?
- Does the team have credibility, power and resources?
- Is there a way to 'break the rules' and drive new precedents for collaboration?
- Are you drawing insights and partners from multiple domains?
- Have you established mechanisms to share consolidated insights?
- Do relationships remain after you leave?

4. Maintain a Portfolio of Options

Disruptive innovations often lead to unexpected results, but the financial returns and potential new avenues opened up are difficult to anticipate in advance. For this reason, the same evaluation processes used in traditional business analysis (for example, discounted cash-flow analysis) can systematically bias executives against the type of innovations that could provide catalyzing changes. Investments in exploratory innovation typically evolve in stages, starting with small bets and only increasing as key uncertainties are resolved. That's why having a suite of projects underway is so important.

CASE STUDY: In the summer of 2012, **Verizon** launched its 'Share Everything' plan, becoming the first U.S. telecom company to allow members of a family plan to share unlimited data through their mobile phones. Its success—and imitation by competitors—further sensitized Verizon to the need for more and better mechanisms to consistently innovate. It also showed that the company's traditional investment-evaluation process often neglected or prematurely terminated investments in potentially revolutionary—if riskier—innovations.

Shortly after the launch of Share Everything, an internal innovation contest surfaced an employee project called Hotspotio, which would allow users to 'gift' mobile data access to friends. While the idea had potential, some major risks were identified. In particular, Hotspotio emerged soon after the launch of Share Everything, and the similarities to that plan might confuse many customers.

To explore the idea further while protecting it from Verizon's investing restrictions, the venture team built Hotspotio as a stand-alone company through a co-incubation model with **prehype**, a venture firm. The process was lean, efficient and off-brand, operating outside of the constraints of the firm. This allowed for staging investments according to early results, rather than committing everything up front. It also gave Hotspotio the freedom to shift strategies based on early experimentation, or to shut down if it was not meeting success metrics.

Ultimately, the project did not reach the user adoption goals that had been jointly agreed upon, and Hotspotio was not integrated back into Verizon. However, the endeavour was successful in that it allowed Verizon to experiment quickly with a new employee-driven idea, and the company gained both technical and user feedback to guide future investments in social and sponsored data.

The evaluation processes used in traditional business analysis can systematically bias executives against innovations.

A PORTFOLIO OF OPTIONS SCORECARD

- Can you document a visible portfolio of work underway?
- Have you defined a clear set of stages of development (exploratory, early development, etc.)?
- Have you defined different types of innovation investments (incremental, organizational, business model, etc.)?
- Have you created a set of categories to break down investment opportunities according to their different types of risks—i.e. short-term vs. long-term opportunities, alliance opportunities, potential revenue, etc.? Do you compare investment opportunities across all of these dimensions?
- Do you shield exploratory investments from premature financial evaluation?
- How willing are you to try more than one approach to a project?

5. External Partnerships

The greatest challenges—and opportunities—faced by today's organizations extend beyond their own boundaries, and as a result, the approaches to innovating around these challenges will come from a broader ecosystem and set of markets. Flexible, authentic partnerships allow a firm to engage outside of traditional business operations and create new value streams and opportunities.

CASE STUDY: **UNICEF** delivers development programs at scale, working hand-in-hand with governments to provide essential services for women and children. Charged with improving community health systems in Sub-Saharan Africa, UNICEF recognized that it should integrate new technologies—particularly mobile—into its work.

Given historical difficulties with achieving this, UNICEF sought non-traditional partners with expertise in these areas. frog was a natural fit, given its expertise in the health care and mobile technology realms. The two organizations began conversations in 2009. Early on, both parties realized that this could not be a traditional designer-client partnership: the community health systems they would be working on were so complex that even framing the challenge was initially difficult to envision. As a result, the partnership required unusual degrees of flexibility.

Working together, the team was able to empower frontline health workers through mobile technology, and establish UNICEF as a leader in innovative service delivery at a community level. While frog's initial motivation was to demonstrate a commitment to social responsibility, it ended up gleaning unexpected insights into mobile usage, health systems modeling in austere environments, and the role of the design process in development. All of these insights were documented in open-source publications, creating 'public goods' that continue to be of use in health systems innovation.

UNICEF's global reach and sheer size also allowed it to bring other partners into the discussion. By year two, the group of partners working on ending the transmission of HIV from pregnant women to their children included **Johnson & Johnson**, the **mHealth Alliance** and **The Elizabeth Glaser Pediatric AIDS Foundation**. Because each interaction between partners informs the next, such partnerships can grow to encompass other opportunities. In 2013, a different team of collaborators from UNICEF and frog, along with **General Electric** (a client of frog and partner of UNICEF) organized around the same principles and worked in Rwanda to expand a project that registers pregnant women and provides better access to antenatal care.

A note of caution: project extensions to broader collaboration networks are not possible within the framework of a traditional client-vendor contract. They require open, trusting, and flexible partnerships, which must be established from the beginning.

AN EXTERNAL RELATIONSHIPS SCORECARD:

- Are there shared goals and problem ownership?
- Does everyone involved have equity/skin in the game?
- Are relationships responsive and flexible?
- Does the partner enable innovation practices?
- Is there open sharing between partners?
- Is there repeatable partnering?

6. Identify Secondary Effects

Most innovation initiatives focus primarily on a pre-determined end result, and are measured accordingly. However, innovation often delivers benefits from *secondary* effects as well—including the ability to recruit and retain top talent, the development of new skills, re-usable approaches, and the opening up of new markets.

CASE STUDY: In 2007, UNICEF was asked to help monitor the distribution of 65 million mosquito nets in Nigeria, the largest distribution in history and part of the multi-partner **Roll Back Malaria** campaign. Given the size and complexity of the campaign, paper data collection was not an option: when lined up, the trucks carrying the nets spanned some 25 kilometers. The

ubiquity of mobile phones in Nigeria presented an opportunity to use text messaging to track the distribution. This allowed program partners to monitor distribution in real time and respond to issues. Partnership negotiations laid the foundation for the initiative. In particular, three sets of partnerships were necessary to create this system:

1. Local open-source developers to program the code;
2. Local phone providers to provide toll-free codes accessible to anyone in the system; and
3. Champions in government to provide institutional support.

The system worked, providing real-time information about bed-net distribution. It also allowed the team to overlay distribution information onto census data and other demographic data sets to identify areas where the campaign needed adjustments.

Five years later, the Innovation Unit at UNICEF learned that **Noriko Izumi**, chief of child protection for UNICEF Nigeria, had devised a solution to provide real-time information on national birth registration: she had made it possible to instantly get data on births throughout the country. More than eight million people were registered in just 12 months and not all were newborns—some were older individuals who had never been registered.

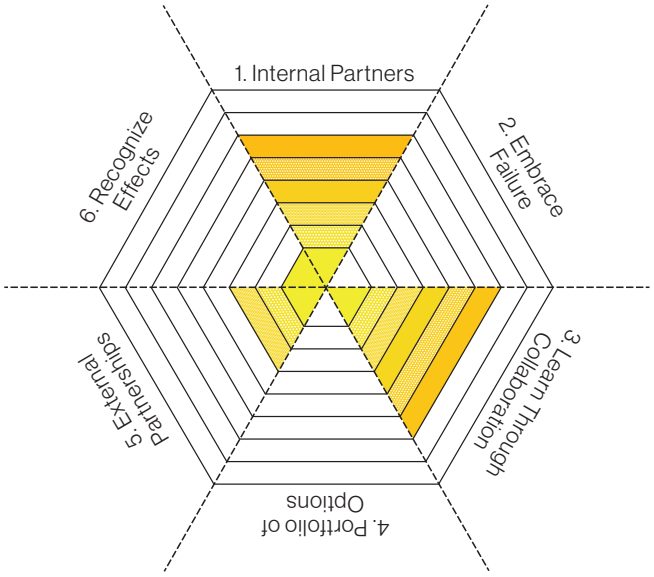
It turned out that Noriko built upon the earlier bed-net effort to create the largest mobile health project in the world: she worked with the same programmers, toll-free codes and government officials who had worked on solutions for the bed-net program. The depth of the original project's negotiations and the openness of the resulting partnerships had created a framework that was easily adapted to birth registrations, without the need for renegotiations.

The discovery of this significant second-order effect has led UNICEF to replicate its model of doing the initial groundwork and network building, creating local capacity around a focused problem, and then expanding to broader challenges.

A SECONDARY EFFECTS SCORECARD:

- Are you able to track second and even third-level effects? How?
- Are you attracting new types of talent?
- Do relationships remain after you go, creating a sustainable network?
- Is there external mimicry?
- Did the project create new business models?
- Did it result in new team/staff capabilities?
- Did it drive organizational goodwill (i.e. new funders/allies)?

A Framework for Internal Innovation



In closing

The six-part framework for successful internal innovation programs described herein can apply to organizations in any industry. We encourage you to begin by stating a clear and ambitious mission for your innovation program. This mission statement must be rooted in your organization's core values and will provide a critical shared identity for the diverse set of stakeholders that will become involved. Then, by paying close attention to the six factors we have described, you will be on the road to innovation that impacts your bottom line and is embraced by everyone involved. ***RM***

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