The Process of Idea Generation

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By

Heather A. Smith
James D. McKeen
Introduction

This meeting of the CIO Brief was the second of four this year that will focus on innovation and IT. At the last session, three IT executives discussed their approaches to innovation with IT, and described the challenges and opportunities they face in bringing innovation to their organizations. A key question that emerged was how to create a sustainable innovation process. Since the first step of this process is idea generation, the CIO Brief invited two IT executives with proven innovation track records to describe how ideation works in their organizations.

Rapid Innovation at WSIB

John Hill is CIO and VP of Transformation for the Workplace Safety and Insurance Board (WSIB). He is not only responsible for leading all aspects of enterprise IT, but as VP of Transformation, he leads WSIB’s effort to modernize its processes and systems across its key business areas. With over 20 years’ experience in a variety of executive positions, he has proven expertise in the ability to lead large-scale transformation. “I am an accidental CIO,” he said. “My experiences as a business leader working with IT’s bureaucracy and long delivery times have coloured my approach to innovation.”

The WSIB is the third largest group insurer in North America with over 4,200 staff at 15 locations, $3.8B in premiums, and 250,000 new claims each year. Although the WSIB is an agency of the Ontario government, it receives no government funding, is financed entirely by employer premiums, and operates at arm’s length from the Ministry of Labour. It provides no fault workplace insurance for employers and their workers and offers benefits and services to insured and ill workers and their families. It also assists workers in returning to work and work transitioning. “We know that the longer a worker is at home, the less likely he is to return to work, so speed in delivering benefits and services is a key objective for us,” John said.

In 2011, the WSIB faced several large challenges. After nine years of losses, all its senior executives were replaced. The new leadership team was given a mandate to transform the organization to reduce costs and improve the quality and speed of services. John joined as CIO at this time. “We had 30 year old systems and long approval processes for projects,” he recalled. “It took too long to deliver results.” Experimentation was an ad-hoc effort within IT and undertaken without business engagement. Proof of concept solutions ended up becoming production solutions that didn’t work well.

Over the next twelve months, John replaced the network, redesigned IT to incorporate outsourcing and business architecture, overhauled the management team, and transformed IT into an agile organization, as well as
introducing innovation. “There’s no good time for innovation,” he has concluded. “In IT we’re always very busy. Therefore, it must be a priority.”

The top priority on his innovation agenda was to alter IT’s orientation to change. “We had a very rigid approach and I wanted to use our innovation program to demonstrate a completely different way to seek out and follow through on opportunities.” This involved five significant transformations:

1. **Focusing on emerging technology.** Previously, IT was designed to support its legacy systems. Now, it had to become more forward-looking.

2. **Eliminating unnecessary formality,** especially the long project approval process. Staff members who had new ideas are now empowered to innovate without tying innovation to value.

3. **Reducing the innovation cycle.** Instead of “never-ending” projects, proofs of concept are limited to between one and three months.

4. **Collaborating with business.** Innovative ideas from any employee are welcomed but experiments must include business and/or external participation and results are published across the organization.

5. **Decommissioning innovation project solutions.** All innovation project solutions are now turned off at the end of the innovation cycle, rather than moving into production. “This caused some pain and meant we had to redo some work, but it is preferable to having production solutions that are not scalable or well-supported,” John said.

John’s second priority was to eliminate the “skunkworks” mindset around innovation and to make it into a legitimate stream of work. “I wanted to make innovation ongoing and to show its value not just in IT but also in the business,” he said. Therefore, he sought and received a dedicated innovation budget. He also created a Technical Research Assistant position to lead innovation. Her role is to be an innovation driver but not to undertake innovation itself. In fact, whereas previously, WSIB had dedicated IT resources for innovation, the Research Assistant’s role is to ensure that the same IT and business resources were not used on every innovation project. “We want to ensure that a percentage of everyone’s time is spent on innovation,” explained John. “The Research Assistant is the only constant.”

Vendors have been very supportive of this new innovation process and have provided technology for proofs of concept without cost and with no promises their technology will be used in the production product. “They recognize
“that we are creating a market for their technology within our organization,” said John, “and they’re happy to compete for the opportunity.” However, he warned that this approach has only been successful because the new approach to innovation has delivered significant opportunities for vendors. “They must see that something is happening and that we’re not just playing with technology or the well will dry up,” he said.

John believes the key to delivering innovation is to shorten the process between ideation and evaluation. “This is a fail fast, fail cheap approach to innovation,” he said. Even though people don’t like failure, a CIO can guide this mentality by talking about extracting learning from failures. In addition, some staff members are better at doing this than others and John is stressing collaboration skills in new hires. “A CIO must be a cheerleader for innovation,” he stated.

This new approach is still evolving but has been very successful in helping the organization to explore and understand new technologies such as gamification, mobile device management, and crowdsourcing. For example, experiments with advanced OCR have helped the organization learn about mobile data capture. Gamification experiments have been applied in project management to help IT leaders learn about problems earlier in the development process and agile analytics have been used to help build an internal app store. Every experiment is reported back to the business at all levels.

**Organic Innovation at EMC**

Calvin Smith is the Principal Manager of Global Innovation within the Innovation Network of the Office of the CTO at EMC. EMC is a global leader in enabling businesses and service providers to transform their operations and deliver information technology as a service (ITaaS). Through innovative products and services, EMC facilitates the journey to cloud computing, helping IT departments to store, manage, protect and analyze their most valuable asset — information — in an agile, trusted and cost-efficient way. At EMC, Calvin is responsible for driving organic ideation and innovation and developing the “innovation roadmap”, which is EMC’s internal idea competition and innovation engine that taps into the collective expertise of EMC’s 60,000 employees across 100 countries.

Calvin defines innovation as a new idea or invention that is brought to use. “We not only need great ideas,” said Calvin, “but we need to deliver them.” Innovation can occur in products, services, or processes and can be incremental or radical, top-down or bottom-up, and from internal or external sources. Although innovation can also come from academic sources or through acquisitions, Calvin’s focus is on internal innovation within EMC. This organic innovation has been refined into a replicable process that leverages EMC’s worldwide employee base.
EMC promotes innovation through the creation of an innovation roadmap. It begins with an *ideation phase* that has seven steps designed to stimulate and develop a pipeline of high-value ideas:

1. **Problem identification.** Business units, divisions, and organizations at EMC put out “sponsor challenges” to solve their or their customers’ most pressing challenges. In 2012, 28 challenges were created.

2. **Employee submissions.** Employees across EMC respond to these challenges by submitting their innovative ideas to solve these sponsor challenges. The 28 2012 challenges generated 2200 ideas from 28 countries.

3. **Idea selection.** Sponsors form judging teams which represent their organizations and choose three finalist ideas from the pool of ideas submitted. Ninety-three finalist ideas were selected in 2012.

4. **“Elevator pitch”**. Calvin and his team help the winners develop short presentations and videos to present to their sponsors.

5. **Winner selection.** Each sponsor chooses a winning idea and these are announced at the annual EMC innovation conference. Twenty-eight winners were selected in 2012.

6. **Best-in-Show selection.** Calvin and his team at the Innovation Network also select three “best-in-show” winners.

7. **Annual innovation conference.** This conference, held in 15 locations, is designed to celebrate creativity. In addition to hearing the best new ideas of the year, its 5000 participants are challenged by top innovative speakers.

The innovation conference marks the end of the ideation phase and the beginning of the incubation phase for the winning ideas. “We have seen a huge uptick in new idea submissions since we first began this process in 2007,” said Calvin. About 29% of winners have been incremental changes, while 24% have been adjacent changes, i.e., a move into a new market. Thirty-two percent have been disruptive changes using new technology in existing markets and 15% have been radical changes with both new technologies and new markets.

This process has resulted in over $200 M in revenues for EMC and more than 300 invention disclosures. In addition, “the goodwill it generates is tremendous”, said Calvin. “People love to see their ideas come to life. “EMC is continually enhancing its ideation process both to stimulate more ideas and enable more ideas to flow through to
incubation. The incubation phase develops a business case, proof of concept, prototype, and demonstration. Ideas that make it through these steps can then be implemented. At present, there is about a 40% success rate for projects in this phase.

Discussion

The presenters were then asked a set of questions about innovation, which were outlined at the previous CIO Brief session:

- **Who “owns” innovation?** A better way to think about this question would be to ask who drives innovation or curates it, said Calvin. At EMC, everyone contributes to the process so innovation is broadly owned, but Calvin is its driver. At the WSIB, it is clear that John Hill “owns” the process.

- **Does everyone in the company know how to bring an idea to life?** The ideation process has very good visibility at EMC; however, not everyone at the WSIB is aware of it yet.

- **Do we have a corporate culture that supports innovation?** WSIB is still developing this, while EMC has spent the past six years developing a strong culture of innovation.

- **Is innovation celebrated?** Both companies feel this is done well.

- **Do we have the programs, processes, funding and desire to create and sustain an innovation culture?** Both organizations have strong processes in place. They are both still working on getting more business involvement and EMC would like to see more funding devoted to innovation. The key to getting business people engaged is to start innovating, both presenters agreed. “There is a lot you can do with no budget,” said John. Calvin agreed. “Do not underestimate the power of co-creation,” Calvin said.

- **Are current innovation programs working?** Both John and Calvin feel their programs are working well. The critical success factors in each are joint business-IT ownership of innovation, failing fast, and delivering on innovative ideas. “Once people start seeing them in action, they start to change,” said Calvin.

- **Can innovation be operationalized into a process?** EMC has worked hard at this, but Calvin says that operationalizing innovation is “like herding cats”. WSIB is still operating on an idea-by-idea basis.

- **Where does IT fit?** Innovation needs a centralized executive as leader to drive it across the organization. If
innovation is promoted in the business units, it will not be an enterprise-wide initiative. In non-technology companies, it makes sense for IT to lead innovation because it has both technical knowledge and project management expertise. “This is THE opportunity for IT,” said John. However, if IT is viewed as a cost centre, it will be difficult for IT to drive innovation. Both Calvin and John have been able to accomplish innovation because they have a transformation mandate.

• **What are the most important things you’ve learned about innovation?** John stated that innovation doesn’t need to involve process changes but simply new approaches to problem-solving. Calvin believes that EMC has developed an important innovation body of knowledge. He recommended that CIOs “just start and stick with it” because developing this knowledge and skill takes time.
Concept
The purpose is to bring together CIOs from leading edge organizations to exchange best practices concerning IT management strategy. The name "brief" reflects the focused and direct nature of the sessions.

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Membership
Membership is by invitation only. Please direct inquiries to James McKeen at jmckeen@business.queensu.ca.