How to Apply Entrepreneurial Tools to Corporations- Easily!

By

Lucia Tseng Kamm

Bachelors of Science
Boston University School of Management, 2005

SUBMITTED TO THE MIT SLOAN SCHOOL OF MANAGEMENT IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF BUSINESS ADMINISTRATION
AT THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

JUNE 2015

©2015 Lucia Tseng Kamm. All rights reserved.

The author hereby grants to MIT permission to reproduce
and to distribute publicly paper and electronic
copies of this thesis document in whole or in part
in any medium now known or hereafter created.

Signature of Author:

__________________________
Lucia Tseng Kamm
MIT Sloan School of Management
May 8, 2015

Certified by:

__________________________
William K Aulet
Managing Director Martin Trust Center for MIT Entrepreneurship
Senior lecturer, MIT Sloan School of Management
Thesis Supervisor

Accepted by:

__________________________
Maura Herson
Director, MBA Program
MIT Sloan School of Management
How to Apply Entrepreneurial Tools to Corporations- Easily!

By

Lucia Tseng Kamm

Submitted to MIT Sloan School of Management
on May 8, 2015 in Partial Fulfillment of the
requirements for the Degree of Master of Business Administration.

ABSTRACT
Corporations can benefit from leveraging commonly used emerging entrepreneurial tools such as hackathons and accelerators to achieve their innovation goals, but the answer of how to do so is not as simple as they wish. Many large corporations are eager to partner with entrepreneurs or startups and want to learn how startups are able to solve similar business challenges. This paper will provide a few case studies and lessons learned from different corporations’ experiences with these tools and how they have partnered with startups. These valuable insights can help companies of all sizes learn and practice innovation differently.

This paper will identify the key issues that corporations face when trying to leverage these emerging entrepreneurial tools, explore examples of how companies are leveraging these tools, and an overview of steps that corporations should consider before trying these tools. This paper will outline the important steps and considerations that companies should address prior to engaging with startups, entrepreneurs, and emerging entrepreneurial tools like hackathons and accelerators.

Thesis Supervisor: William K Aulet

Title: Managing Director Martin Trust Center for MIT Entrepreneurship & Senior lecturer, MIT Sloan School of Management.
ACKNOWLEDGEMENTS

Cambridge, Massachusetts
May 8, 2015

Writing this thesis was an opportunity to embark on my own entrepreneurial journey and one that will be the first of many. I found my “village” of wonderful people who supported me along the way and who generously provided their time to be of tremendous help.

I would like to first thank the incredible corporate entrepreneurs and innovation leaders who offered their time and great perspective for my interviews. Without their valuable inputs for this research project, the analysis and findings would not have been possible. I am utterly grateful for their generosity in imparting their lessons about their own “entrepreneurial innovation journey.”

For constant guidance and advice, I would like to thank Charlie Kiefer who has mentored me during this corporate entrepreneurial exploration from the beginning and has a way of solving my moments of panic with simple and practical solutions. Thank you as well to my thesis advisor, Bill Aulet, whose management style I credit for pushing me to be a better entrepreneur so I end up not like “everyone else.”

I would also like to thank my MBA advisor, Amy DiMattia for her monthly check-ins and for making sure I had everything I needed along the way. I would also like to thank my classmate and friend, Laura Diamond, who shares my passion for corporate innovation, cheered and supported me along the way. Also, a huge thanks you to my sister Eva Tseng, who spent many hours editing!

Most of all, I want to thank my incredible husband, Joel Kamm, and my son Charles for supporting me unconditionally through this long process and cheering me to the finish line. This paper is dedicated to Team Kamm.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>SECTION I: EXECUTIVE SUMMARY</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Overview</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Objective</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Research Methodology</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Common Misconceptions of Entrepreneurial Innovation</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Entrepreneurial Innovation Roadmap</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Case Study Analysis &amp; Findings</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>SECTION II: CASE STUDIES</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Overview</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>CASE STUDY #1: QUALCOMM</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>CASE STUDY #2: ATHENAHEALTH</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>CASE STUDY #3: MICHELIN</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>CASE STUDY #4: GENERAL MOTORS</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>CASE STUDY #5: THE COCA-COLA COMPANY</td>
<td></td>
<td>54</td>
</tr>
<tr>
<td>ADDITIONAL CASE STUDY LEARNINGS</td>
<td></td>
<td>62</td>
</tr>
<tr>
<td>SECTION III: CONCLUSIONS</td>
<td></td>
<td>64</td>
</tr>
<tr>
<td>SECTION IV: LITERATURE REVIEW</td>
<td></td>
<td>65</td>
</tr>
<tr>
<td>SECTION V: BIBLIOGRAPHY</td>
<td></td>
<td>66</td>
</tr>
<tr>
<td>SECTION VI: APPENDIX</td>
<td></td>
<td>69</td>
</tr>
</tbody>
</table>
SECTION I: EXECUTIVE SUMMARY

Overview

Corporations can benefit from leveraging commonly used tools found in the entrepreneurial ecosystem to achieve their innovation goals, but the answer of how to do so is not as simple as they think. Many large corporations are eager to partner with entrepreneurs or startups and want to learn how they are able to solve business challenges similar to the ones they face. For the purpose of this paper, the entrepreneurial ecosystem will be defined as “a group of companies, including startups, and one or more coordination entities, which share similar goals, agility, and strong entrepreneurial drive.” There are valuable insights and lessons to be learned from corporations who have partnered with the entrepreneurial ecosystem that can help companies of all sizes learn and practice innovation differently.

I set out to research a diverse group of stakeholders who have personal experience with hackathons and accelerators—two of the most common emerging entrepreneurial tools used by large corporations, especially those that I interviewed and worked with at the MIT Martin Trust Center for Entrepreneurship. These emerging entrepreneurial tools help corporate and non-corporate entrepreneurs identify, create, and scale an idea or business. The original goal was to create a list of best practices when implementing hackathons and accelerators. In the course of my research, I discovered a number of strategic steps that have to be taken even before a hackathon or accelerator is implemented. If these strategic steps are not addressed first, even the most knowledgeable company armed with the “best
practices” will be unable and unsuccessful in using emerging entrepreneurial tools for innovation.

**Objective**

Corporate entrepreneurs are defined as the individuals leading and executing the company’s innovation agenda by leveraging emerging entrepreneurial tools such as hackathons and accelerators. The goal of this thesis is to better inform corporate entrepreneurs on how to navigate and engage the start-up ecosystem; achieve a higher success rate in accomplishing their innovation goals; and be more confident in how they partner with the start-up ecosystem. Lastly, I wanted to take a practitioner rather than a researcher’s approach to this paper so that it is relevant and useful to practitioners in corporations today.

**Research Methodology**

The primary method of data collection and analysis is through the “case study research” method. The primary source I used for this approach is the book, “Case Study Research: Design and Methods” by Robert K. Yin. The primary method of data collection for the case studies is interviews that are 30-60 minutes in length. In total, I conducted over 40 interviews. See Appendix A. The emerging nature of these tools supports that interviews are the best way to capture these leanings.

I strived to identify a diverse selection of participant perspectives based off my original research goal of understanding hackathons and accelerators better. As a result interview candidates are global and from a variety of industries and company sizes. I also felt it was important to recruit interviewees who represented one of
three perspectives I describe below because each one plays an important role in the successful corporate implementation of an emerging entrepreneurial tool. Their descriptions are listed below:

**The Corporate Entrepreneur** - The individual working for an organization tasked with creating partnerships between their organization (internal) and the entrepreneurial ecosystem (external) as a means to solve business problems or challenges. This perspective is useful in understanding the motivations of companies that want to partner with the entrepreneurial ecosystem via emerging entrepreneurial tools like hackathons and accelerators.

**The Startup Founder**- There are two sets of startup founders I interviewed. For hackathons, I interviewed individuals who founded and started their own company as a result of participating in a hackathon. For accelerators, I interviewed individuals who formed their startup prior to participating in an accelerator as a means to grow their start-up. In certain cases, the startup founder participated in both a hackathon and accelerator program, which helped them create and grow their company. This perspective is helpful for understanding the difference in motivations and actions of entrepreneurs versus corporate employees regarding their work, ultimately leading to better outcomes.

**The Hackathon and Accelerator Program Organizers**- These individuals are responsible for creating, leading, and organizing the hackathons or accelerator programs. I targeted specific organizers who have experience working with corporations. In some cases, the program organizers are the corporate entrepreneurs trying to implement these tools internally. This perspective is helpful
because many corporations are leveraging their expertise to implement these tools on their behalf, and they have observed what behaviors contribute to a corporation's success.

Lastly, I recruited interviewees based on interest and availability to participate in my narrow two-month research window of March and April 2015.

**Common Misconceptions of Entrepreneurial Innovation**

My primary market research revealed a few key problems and misconceptions that corporations have when they start to engage with startups and entrepreneurs. I have captured the top misconceptions that I have heard consistently from corporate entrepreneurs and program leaders.

**Problem #1: “I know best...”**

Corporations have varying knowledge and experience with HOW to approach and partner on innovation work with key stakeholders from the entrepreneurial ecosystem. They often do not take the first step to acknowledge “I don’t know everything” and seek out the appropriate help. In fact, they have to admit they are lost in a process that corporations are not good at navigating. As a result, they manage their relationships and partnerships in the same way they manage their core businesses, applying similar processes, metrics, expectations and guidelines because “it’s easy” and the only way they know how. Majority of the program leaders and startup entrepreneurs I interviewed cited this problem as one of their biggest barriers to successfully partnering with corporations.

**Problem #2: Our lack of innovation can be “fixed” with an entrepreneurial “magic pill.”**
Instead of looking at the root cause and creating a long-term solution and infrastructure for entrepreneurial innovation, corporations believe that partnering with the ecosystem is like taking a “magic pill” that will make them innovative immediately, which only addresses their “symptoms.” All of the program leaders I spoke with observed that about half of companies they work with often have unrealistic expectations about the immediacy and impact of leveraging entrepreneurial tools. The most common reason they cited is that corporations do not identify upfront the right business challenges that need to be solved. This approach causes corporations to invest significant funds in the name of these partnerships and tools without thinking about their goals. As a result, many of these partnerships are short lived. These failures also set the precedence internally that entrepreneurial tools cannot be successful and create unnecessary work and inefficiencies for both corporate and entrepreneurial ecosystem stakeholders.

**Problem #3: I need to be innovative ASAP!**

The short-term focus and sense of urgency corporations have cause them to expect and secure solutions and business results immediately when partnering with the entrepreneurial ecosystem. However, fostering innovation requires a long-term strategy, planning and implementation as noted by many of my interviewees leading their company’s innovation agenda. This approach can cause corporations to not be “honest brokers” when working with startups because they need quick business wins to show to management. As a result, many of the entrepreneurs I interviewed noted a sense of distrust and skepticism of corporations’ intentions, which can prevents good communication and collaboration between the two.
Entrepreneurial Innovation Roadmap

My findings have led me to outline what I am calling the “Entrepreneurial Innovation Roadmap” which calls out the important steps and considerations that companies need to address prior to engaging with startups, entrepreneurs, and emerging entrepreneurial tools like hackathons and accelerators. These 5 steps are summarized below:

Entrepreneurial Innovation Roadmap Overview

• Step I- Finding the Right Entrepreneurial Innovation Model for Your Company is an Entrepreneurial Journey.

• Step II- Identify the Right Corporate Entrepreneur to Lead.

• Step III- Secure CEO and C-Level Sponsorship and Alignment.

• Step IV- Execute a Company-Centric Entrepreneurial Innovation Model.

• Step V- Recalibrate and Execute.

Lastly, I have included five key case studies that were identified from conducting over 40 primary market research interviews, which helped me to develop my conclusions and effectively illustrate my findings.

Case Study Analysis & Findings

I compiled a number of key lessons learned and observations from my interviews that helped me create the final Entrepreneurial Innovation Roadmap. A more detailed explanation of each step with supporting observations is included below:

Step #1: Finding the right entrepreneurial innovation model for your company is an entrepreneurial journey. The five case studies are examples of corporate
entrepreneurs who learned before, during or after building their innovation model that the process is an entrepreneurial journey. They learned the following lessons:

☑ There is not one process or formula that fits all companies when determining which entrepreneurial tools to leverage because the business challenges, culture, leadership, and goals vary from corporation to corporation. Each company is best equipped to identify the ideal portfolio because they understand their company better than anyone else externally.

☑ The journey is inherently uncertain and the logical approach is try something and learn your way into the future.

☑ Accept failures along the way and that a learning curve is inevitable, but learning lessons quickly will put you ahead of others. Learning will be iterative and will help you pivot closer to your goals.

☑ Existing corporate metrics and methods for measuring and modeling success and outcomes cannot be used when evaluating progress and success with entrepreneurial innovation tools. A new set of success criteria will need to be created and aligned when leveraging these tools.

**Step #2: Identify the right corporate entrepreneur to lead.** All of the corporate entrepreneurs I interviewed had diverse backgrounds, but quickly adopted a “second” language and learned to be fluent in how entrepreneurs and startups work in order to be successful. Below are the two most important traits to look for in a corporate entrepreneur:
☑ Bilingual and fluent in how both large corporations and startups work and accomplish innovation. These individuals do not have an “accent” or preference in favor or against either of these organizations. They weigh the strengths and weaknesses equally because they understand why a large corporation and startup operate in the way they do from managing people, getting work done, or implementing a process or lack thereof. This person understands “HOW” work is done successfully in both a startup and large corporation. As a result, they are resourceful at leveraging the strengths and capabilities of a large corporation in combination with that of startups to achieve unique outcomes.

☑ They are humble, determined, and they persevere. These corporate entrepreneurs understand that they do not have all of the answers, but they are willing to find a way forward. They have the determination and passion of an entrepreneur and the endurance to match. Since they have to navigate both the corporate and startup worlds, they are politically and people savvy and strong collaborators.

**Step #3: Secure CEO and C-Level Sponsorship and Alignment.** Long-term commitment and perspective is required so top-level management is a must, ideally from the CEO and C-level executive team. Founder-led companies will have an advantage because they are more willing to take risks and commit to getting through the tough learning curve. **Top-level management support helps build a strong foundation for your emerging entrepreneurial innovation portfolio.** My
interviews with Coke, Qualcomm, and athenahealth, revealed shared actions that each corporate entrepreneur took to help streamline and ensure top-level management support:

- **Make sure your entrepreneurial innovation goals are aligned with the company’s larger goals and strategies!** One helpful strategy that many of these case studies implemented was getting buy in directly from business unit leaders and holding them accountable from the beginning of the process. They also made sure the outputs from the hackathons or accelerators were aligned back with business unit teams.

- **Be clear about your goals, desired outcomes, assign a priority, and identify feasibility.** Across all of my interviews, when I asked how a corporate entrepreneur should navigate and decide which emerging entrepreneurial tools to use, every single respondent answered that the first step is to clearly understand and articulate your goals. Without it, these entrepreneurial innovation tools cannot be leveraged effectively.

- **Understand your strengths and which capabilities internally are a competitive advantage.** This understanding will help you determine which capabilities and tools you need to source externally to address your needs. Consider competitors and competitive landscape, industry considerations, and market trends and assessments before identifying tools to leverage.

**Step #4: Execute a company-centric entrepreneurial innovation model.** The companies that were most effective at creating an Entrepreneurial Innovation
Model, that is well supported by the company and its employees, had a deep understanding of internal capabilities before engaging startups and entrepreneurs. They also created the right infrastructure to support these programs and incorporated the following design considerations:

- **Leverage a portfolio mindset to assemble tools** because it will take a few different tools to see what works best. Tools will evolve over time and this evolution is part of the process.

- **Understand tradeoffs on sourcing tools externally versus leveraging tools to build capabilities internally.** Each emerging entrepreneurial tool can be developed differently depending on your desired outcome. The best way to do this is to learn how other companies have approached and lessons learned. Many of the corporate entrepreneurs and program leaders I spoke with conducted extensive research in their entrepreneurial network to learn best practices and lessons before designing their own portfolio of tools.

- **Create the right infrastructure internally and externally to support in terms of the right people, process, resources, and culture.** Without the right infrastructure and support, none of the output from these tools will have business impact.

- **Identify and establish the entry and exit points** of how ideas, output, and value-add of these tools are brought back and forth to benefit both the corporation and startup ecosystem. Most large corporations are strapped for resources and time so the more upfront planning and
alignment that is completed, the easier it is for corporations and startups to help one another.

☑ **Be an honest broker when working with the startup ecosystem.** Startups and entrepreneurs are already wary of working with large corporations and they have their own goals they want to accomplish. The only way to build a successful entrepreneurial innovation portfolio is to build a reputation for being an honest broker and a company who is willing to make a long-term investment in the ecosystem. It will help in the long run.

**Step #5: Recalibrate and execute.** All of the case studies, with an exception of General Motors, are refining and creating their model to “better fit” their company as the challenges and goals evolve over time. By recalibrating and “executing,” a corporate entrepreneur is able to help “steer” the company closer to their innovation goals.

☑ **Don’t give up and recalibrate to stay ahead.** It is clear from my research that the corporations that have learned the most are the ones who have been able to evolve and progress their portfolio of tools. As a result, they are able to create a portfolio that helps them achieve their business challenges and goals more comprehensively.

☑ **Learn, Do, Teach.** These emerging entrepreneurial tools are a great opportunity to build capabilities internally so there is a better-suited culture and people to help support this work throughout the entire organization. This mantra also helps to reinforce the benefit of “learning
by doing,” which can help less entrepreneurial-minded employees and
teams work differently at solving problems.

☑ Create early wins. Find ways to create early wins that encourage the
organization to continue supporting these entrepreneurial endeavors. It
also creates a push and pull affect where the core business units are
actively requesting to participate in entrepreneurial innovation tools
because they understand and see the benefits.

The chart below summarizes the “steps” each company completed to design
their entrepreneurial innovation model.

Table 1- Overview of Companies and Their Entrepreneurial Innovation Journey

<table>
<thead>
<tr>
<th></th>
<th>Step 1 Finding the Right Entrepreneurial Innovation Model</th>
<th>Step 2 Identify the Right Corporate Entrepreneur to Lead</th>
<th>Step 3 Secure CEO and C-Level Sponsorship and Alignment</th>
<th>Step 4 Execute a Company-Centric Entrepreneurial Innovation Model</th>
<th>Step 5 Recalibrate &amp; Execute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualcomm</td>
<td>✔</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>✔</td>
</tr>
<tr>
<td>athenahealth</td>
<td>✔</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>✔</td>
</tr>
<tr>
<td>Michelin</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>✔</td>
</tr>
<tr>
<td>General Motors</td>
<td></td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>✔</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>✔</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>✔</td>
</tr>
</tbody>
</table>
SECTION II: CASE STUDIES

Overview

Below is an overview of the corporations I selected as case studies and noted the different uses of hackathons and accelerators internally or externally for each. The case studies include a brief overview of the company and interviewees, followed by an overview of their Entrepreneurial Innovation Model, a description of their journey, key lesson’s learned, and advice for other corporate entrepreneurs.

Table 2- Overview of Case Study Companies and Their Emerging Entrepreneurial Tools

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Hackathon</th>
<th>Accelerator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>Qualcomm</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>athenahealth</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Michelin</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>General Motors</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>☑️</td>
<td>☑️</td>
</tr>
</tbody>
</table>
CASE STUDY #1: QUALCOMM

<table>
<thead>
<tr>
<th>Person Interviewed</th>
<th>Navrina Singh</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title &amp; Role</strong></td>
<td>Head of Qualcomm Innovation Program, Product Management and Corporate Strategy leader</td>
</tr>
<tr>
<td><strong>Date of Interview</strong></td>
<td>4/9/15</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>Digital Wireless Communications Products, Technologies &amp; Services</td>
</tr>
<tr>
<td><strong>Size of Company</strong></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>$26.4 billion²</td>
</tr>
<tr>
<td># of Employees</td>
<td>31,300³</td>
</tr>
<tr>
<td><strong>Entrepreneurial Tool</strong></td>
<td>Internal hackathons and accelerator.</td>
</tr>
</tbody>
</table>

Background

The beginning of Qualcomm’s entrepreneurial innovation journey started in 2006 when CEO Dr. Paul Jacobs requested a platform to be created in order to ensure employees could share ideas with the executive team; the resulting Qualcomm Innovation Network (QIN) was created. QIN was an internal online idea management system and it was the platform for a newly created employee business plan competition called Qualcomm Venturefest. Venturefest was created in 2006 as a means of educating and involving employees in corporate innovation. The competition involved employees submitting ideas; and creating a business plan and ad hoc teams to support the idea. While this competition was a great vehicle for engaging employees, there was no mechanism in place to ensure the implementation of ideas back into the business.

To better address this need, the business plan competition was replaced by a new program called Qualcomm ImpaQt in 2011, which was created by Navrina and
her team. To ensure the program she was creating was impactful, her first step was to ask the executive team about their goals and align a definition of innovation for Qualcomm. Navrina also made sure the final design of the program took into account Qualcomm's innovation culture, size, talent, competition, resources and industry considerations. Innovation happens across all of Qualcomm’s business units and within specific business units. Navrina’s team focuses on the former and for the purpose of this case study, I will focus on the Qualcomm ImpaQt model.

Goal of Qualcomm ImpaQt

Qualcomm ImpaQt's goal is to create and execute innovation, which means solving a technology or business problem with the end goal of driving company growth and shareholder value.

Qualcomm ImpaQt Overview

The final Qualcomm ImpaQt model was launched in 2012 and is an internal accelerator program that consists of a nine-step process. This program was designed to meet the needs of Qualcomm and its employees, of which 70% are engineers/inventors. There are three phases to the program that typically run anywhere between 3 to 4 months each: Ideation, Review, and Prototyping, which are detailed below.

Phase I - IDEATION: Theme Research, Theme Reveal, and Submit Ideas, Collaborate & Connect

As a starting point, Navrina’s team identifies strategic focus areas for their innovation challenges and builds a significant knowledge base on relevant trends, market considerations, technology identification, and industry changes. These “innovation constraints” and focus areas guide help to ensure that better ideas are
submitted by employees to the ImpaQt model. Much of this knowledge is then shared with employee. Acquiring and disseminating this information throughout the Qualcomm organization helps establish the ImpaQt team as an “innovation hub” for related questions and also educates employees on the overall innovation vision for the company.

In this first phase, employees around the world submit their ideas and top ones are selected. Then internal and external experts are recruited to provide guidance through a unique ideation and discovery process where the inventors learn to pivot and further build out their ideas. Some of these ideas are then selected to proceed to Phase II and others are “tabled” for consideration at a later time.

**Phase II - REVIEW: Technology & Business Review, Silent Auction, and Resource Allocation**

The few ideas that are selected by the panel of experts are then placed into a “Silent Auction” where the business unit executives have an opportunity to view the pre-selected ideas, “bid” on ideas, and provide their unique, individual feedback to the inventor. The “Silent Auction” format helps remove any bias or influence between the different levels of leadership and ensures that “power plays” and hierarchy do not affect which ideas are selected. Through this process, “sponsors” and “investors” are matched with inventors and the ImpaQt team helps to assign the best team members in order to move into Phase III. The selected inventor and his team is now considered an “internal startup team” within Qualcomm. In addition, the sponsors and investors are the business unit leaders who are held accountable for their support by providing the startup team with funding and resources. By identifying a sponsor and investor early on in the process, it paves the way for a
more seamless technology transfer when products and ventures from ImpaQt are brought back into the business unit in Phase III.

**Phase III - PROTOTYPING: Prototyping, Executive Demo & Showcase, ImpaQt Exit & Integration**

This process is based off the Lean Startup Methodology where there is rapid prototyping to acquire customer feedback, create faster product iterations, and assess the viability of the product. Prototypes are often shared with internal experts or Qualcomm partners and suppliers. Navrina stresses the importance of prototyping as an important part of learning:

> It’s only when you start building something that you can really understand constraints and what can or cannot work. Previously, every idea was a billion dollar idea because teams would do an economic analysis based off market size and assumptions and their business plan would have a hockey stick model, which is dangerous for a corporation like Qualcomm because of the amount of money that needs to be invested. This investment would be made without actually understanding whether the idea was viable in real life.

The other benefit of rapid prototyping is in creating efficiencies in the innovation process because you learn faster if an idea does not work and whether a successful proof of concept can be created. Also, the ImpaQt timelines require that sponsors and investors provide feedback and decisions faster. If gaps are identified, the sponsors and investors also play an important role in helping to identify customers or potential partners to promote progress.

Once the prototyping is completed, the final ideas are shared with the executive team as a progress update only. The technology transfer into the sponsor’s business unit is also started at this point. There are some circumstances
where the ImpaQt team takes the final product directly to customers and sponsors earlier in the process. The sponsors identify these exceptions during Phase I.

**Metrics for Success**

Original metrics that were leveraged included the quality of ideas and how many ideas business unit executives are sponsoring. Key metrics that the ImpaQt team takes into account include measurable outcomes such as filling and influencing the company's product roadmap; creating go-to-market ideas that generate revenue and increasing the number of research ideas.

**Initial Results & Learnings**

Navrina noted that the first year was tough for the team because it was difficult to show successes as the program was being setup, but over the last three and a half years, they have been able to show a high level of adoption of ideas by the business units for their own projects. From all of the ideas that are pitched, approximately 10-20% are adopted into business units. In addition, the ImpaQt model has been adopted globally for other regions and local needs. The model has also been replicated in specific business units to help manage their specific projects and business units are directly reaching out to the ImpaQt team for partnership opportunities. With the help of the ImpaQt team, business units will identify a specific problem, form a team, and adopt the Lean Startup method in order to create faster outcomes for leadership. Lastly, there have been a few other corporations who are currently adopting and replicating their own version of the ImpaQt model as well. Unfortunately, I am unable to reveal the names of these corporations due to confidentiality reasons.
Specific Hackathon Learnings

Qualcomm ImpaQt also runs their own internal hackathons, which is set up like their accelerator program and condensed into a 30-hour time period. These hackathons have helped a larger scale of employees experience firsthand the benefit of “learning by doing.” Navrina notes that the biggest impact of the hackathons has been how in changing the perspectives of employees on what is possible for innovation. There has been a huge pull for these hackathons internally because of the condensed time period and results. As a result, the ImpaQt team is now working through a 2.0 version where there is an external component to their hackathon model.

Summary of Entrepreneurial Tools & Innovation Learnings

- **Lesson #1: It is important to secure CEO and top-level management support first.** Navrina was successful at first securing CEO level sponsorship and funding to support this program for the long term. She was also successful in securing the business unit leadership’s commitment that at a minimum, they would commit resources if she was able to bring the right ideas to them. Navrina’s advice is that having the support of “bold” leadership is the underlying foundation for the work of a corporate innovation program, corporate entrepreneurs, or any company trying to reinvent themselves.

- **Lesson #2: The ideal entrepreneurial innovation model is highly dependent on the industry, company, leadership and culture of the company so there is no one model that fits all.** Due to the success of the ImpaQt model, it has been replicated to regional offices across the globe and because of regional
needs, the other models are different. If the ImpaQt model is different even within Qualcomm, different models will have to exist for other companies.

- **Lesson #3: Understand an organization’s innovation culture, appetite for risk, and reaction to change.** Qualcomm has a “big stamina for taking on risk and failing.” Navrina notes that the company’s culture views failing as a learning opportunity and when they do, they have “reset times” where the team goes back to identify the problem and creates new solutions. She also cited from a study that found that one of the top three reasons for why 90% of corporate innovation programs fail within the first 18 months is because the culture reacts poorly to risk and change. The other two reasons are that companies do not define innovation upfront and do not identify their innovation program’s value to the company.

- **Lesson #4: Leverage cross-functional and leadership input to identify the right business challenges.** The ImpaQt team focuses on three to four strategic themes / areas of strategic interest each year and they are created with different internal business units such as IP department, emerging business units, and executive input. These proposed challenge areas are presented quarterly and leadership has final input on whether they are approved.

- **Lesson #5: Create the right long-term infrastructure and expectations for innovation and work with leadership and human resources (HR) to determine.** There is always initial resistance to change, but the key to getting through it is to grow the number of participants and supporters. Part of this
work involves having the right communication messages around innovation, which can be conveyed through the power of storytelling on how innovation impacts the business. The other part of this work is helping management understand that there must not only be a focus on delivering what the customer wants now, but delivering what the customer wants next. There are also monetary rewards and recognition depending on how far a certain idea progresses.

- **Lesson #6: Focus on short-term wins at the beginning.** Navrina and her team have focused on adjacent and not transformational innovation, the latter of which requires 10 or more years to develop. The reason for this strategic decision is to garner the early wins that first build organizational capabilities and support to pursue the more transformative innovation down the line. From experience, it is extremely difficult to pursue transformational innovation immediately as your model needs time to evolve.

- **Lesson #7: Understand what gaps occur when you overlay business challenges with internal capabilities to determine the right mix of internal vs. external resources to leverage.** ImpaQt first does a call for internal experts to check whether capabilities exist internally before going externally. If the innovation challenge is in a completely new area where no internal resources exist, then the team identifies potential external partnerships or tech transfer opportunities with external partners. This decision typically takes place during the Collaborate & Connect portion in Phase I.
• **Lesson #8: Corporate entrepreneurship is not a job, but rather an opportunity and a passion to do innovation better.** From Navrina’s perspective, the corporate entrepreneur pursuing this work needs to understand technology, goals of the company, leadership mindset and their ability or influence to make the changes necessary for a successful model. In addition, they also need to have a breadth of company understanding starting from its history, HR practices, diversity goals, M&A team goals, how they add value, and most importantly, getting the right sponsors and people the right information.
CASE STUDY #2: ATHENAHEALTH

<table>
<thead>
<tr>
<th>Person Interviewed</th>
<th>Erin Trimble</th>
<th>Trish Hao</th>
<th>Chris Moses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title &amp; Role</td>
<td>MBA Intern, Business Development for More Disruption Please.</td>
<td>Product Innovation Manager (R&amp;D)</td>
<td>Co-founder, CEO at Smart Scheduling, MDP startup team accelerator participant</td>
</tr>
<tr>
<td>Date of Interview</td>
<td>4/10/15</td>
<td>4/8/15</td>
<td>4/8/15</td>
</tr>
<tr>
<td>Company Overview</td>
<td>Cloud-based services for electronic health records (EHR), revenue cycle management and medical billing, patient engagement, care coordination, and population health management, as well as Epocrates and other point-of-care mobile apps.</td>
<td>Smart scheduling software for doctors' offices.</td>
<td></td>
</tr>
<tr>
<td>Size of Company</td>
<td>Revenue $752.6 Million[^2]</td>
<td>Confidential</td>
<td></td>
</tr>
<tr>
<td></td>
<td># of Employees 3,676[^4]</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial Tool</td>
<td>Accelerators</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Background**

Jonathan Bush is the CEO and cofounder of athenahealth and one of the biggest and most vocal advocate for innovation and healthcare, an industry where the “entrenched ranks resist innovation[...]and the opposition is especially fierce.” In his book, “Where Does it Hurt?” Jonathan outlines his vision for athenahealth as a potential platform to empower and help the entrepreneurs who are creating startups in an extremely difficult industry. The resulting inspiration has taken form in the creation of athenahealth’s More Disruption Please initiative, which was inspired during his time as a student of Clayton Christensen’s at Harvard Business School. Jonathan goes on to describe his goal and vision for this program:

> It will feed into our own health data app store, following the models of Apple and Google and the enterprise software powerhouse, Salesforce.com. It is the antithesis of a closed and uniform ecosystem, like Epic’s [a competitive electronic healthcare records company].
More than a single company, we’re intent on creating a vast platform for health data. Everything on this platform must meet our security and patient privacy standards, be sold as a service (with only implementation fees up front), and measure the outcomes it promises. Within those constraints, we’ll welcome any idea, no matter how crazy, as long as it meets at least one of three conditions: It must drive revenue to our customers, take work off their plate, or improve their results. If an app is successful, our service grows richer, the entrepreneur makes money- and we keep a slice of the revenue. Win-win-win (150).

The athenahealth Marketplace was launched in 2013 with the vision of becoming a health care app store where technologies and startup companies can connect to their cloud-based network to offer complementary services that enhanced the company’s main platform called athenaNet. He wanted to find a way to accelerate the number of company partners that they could bring onto the platform and develop the platform aggressively.

Erin joined as a MBA intern in 2014 working on the athenahealth team that designed and developed the MDP Accelerator, and she will be leading the accelerator program as a manager post-graduation. She leveraged her past work experience at Rock Health, an accelerator turned full-service seed funding VC for digital health startups. She also conducted extensive research on the accelerator landscape and explored different models ranging from “sponsored by Techstars” to standalone, non-corporate accelerator models such as Y Combinator, Healthbox, and Blueprint Health.

Her research along with Jonathan’s vision in mind helped the team design and launch the final MDP accelerator model in June 2014. While Erin found that most corporate accelerator programs were standalone entities, where corporate involvement is mainly in the form of sponsorship, the team felt a different model
was required to better bring the MDP Accelerator vision to life. The reason is they wanted their accelerator model to have business impact beyond public relations, which they felt was the typical output for most corporations when they sponsor a standalone accelerator program.

Overall, the vision for MDP as a whole is to “drive disruption in health care by fostering the growth of high-potential, early-stage startups.” There are three pillars for MDP: the MDP Accelerator, athenahealth Marketplace, and MDP network. The MDP network is an opportunity for companies interested in working with MDP to have access and test athenahealth's APIs through a developer portal, which is designed to streamline global connectivity with athenaNet. For the purpose of this case study, I will focus on the MDP Accelerator program from the perspective of the MDP Accelerator program leader Erin, MDP R&D member Patricia, and participating startup founder Chris.

**MDP Accelerator Implementation**

The first MDP Accelerator location was at their headquarters in Watertown, MA followed by locations in San Francisco, Austin and Atlanta; the latter two will be launched later this year. The reason for locating these accelerator programs in athenahealth offices is to “create a beating heart for entrepreneurship” with the goal that these programs will help employees collaborate better internally and externally. The goal is also that these accelerator programs will bring more “entrepreneurial energy” to campus. In terms of program design, Erin considers the MDP Accelerator “like a graduate school for start-ups that” helps them mature and scale.
The key benefit that MDP Accelerator offers their startup partners is access to the 62,000 health care providers through their platform. In return for startups’ participation, athenahealth offers seed funding, free office space, a tailored program, and ongoing mentorship from athenahealth experts, advisors-in-residence, and partners. While the company found that many startups were eager to join the Marketplace with great ideas, their products needed additional “TLC”, funding, mentorship, network connections, and other forms of help. The Accelerator program is setup to address these needs and to help startups scale to the point where they are ready to “go live” to all of athenahealth’s providers.

To help achieve Jonathan’s Win-Win-Win vision for the MDP Accelerator, the benefits to the athenahealth are as follows: 1) Provide their customers (medical providers) a better experience with their platform and products given the number of integrated solutions that are offered. 2) The startup partners are incentivized to sell via MDP because of the size and access to providers. 3) Revenue share with the startup partners as athenahealth takes a 20% share of their revenues.

Erin has also spent much of her time helping to “position” the program in the right way both internally and externally. Externally, she and fellow MDP team members created an extensive outreach and engagement calendar to help promote the Accelerator and “feed the funnel” of interested startup companies. In addition, she created the application process and the final program design as the startup teams were selected and starting the program. Internally, the team hosted key “open house” events for employees to help them understand what is an accelerator, who are the participating startup teams, and what are the program’s goals. The open
house included a supportive speech by Jonathan, product demos from the startup teams, and tours of the space, which was carefully designed to still have the athenahealth “look and feel.” The goal of the open house was to make sure the program was “socialized properly” among employees and that all of them felt welcomed.

IMPLEMENTATION

MDP Accelerator Program Leader’s Perspective (Erin)

In terms of implementation, there are two tough areas that the MDP business development team is working to streamline and address. First, identifying the right startup pipeline is critical and it can be extremely difficult to find the right high potential companies for the program. In terms of developing the startup selection criteria, the team’s first step is to identify which startups will benefit the most from participating in the program, which means their product is developed enough that it can be improved and ready to be scaled by partnering with athenahealth. In addition, they selected startup founders who can work independently and know when to ask for resources and help. Their criteria for team selection involves identifying startups who have health care providers as customers, likely to be able to integrate with athenahealth’s platform, have a solid team, and able to commit a certain amount of face time with athenahealth. The goal is also to find startups that understand the difficulty of selling their products to healthcare providers and integrating with healthcare IT, which allows athenahealth to identify the startups that appreciate the benefits that athenahealth will be providing them, which is scale and access to their customers, marketing and integration support. In general, the
accelerator program that they put together is a customized experienced for each startup and not a “one program that fits all.” There is also a governance committee that provides the final approvals for startups that participate in the program.

The second consideration that Erin and the MDP team are actively working on is determining the balance of how much “risk” the Accelerator program should be exploring. Ultimately, the team is trying to determine their “investment thesis” for the Accelerator program. Is the program trying to help the company fill a gap on the product roadmap and if so, how far out or how much of a risk should the program be exploring? In the near future, the team has decided to take smaller risks in the upfront in order to create early wins and learnings as the startups start to ramp up into the Marketplace.

**MDP R&D Integration Perspective (Trish)**

Trish’s role at athenahealth is to work on building the relationships with startup partners, understanding their workflow, determining how their products integrate into athenahealth's platform, and designing the actual implementation. Trish’s perspective provides an understanding of how difficult it is to “integrate” or “consolidate” external entrepreneurial innovation from startups and bring them internally to benefit the company.

This work of integration is very difficult and complex for a few reasons. First, it is difficult for an “outsider” like a startup to understand and quickly learn how to navigate internal athenahealth products. As a result, it takes time and thought to create intuitive tools that help these startup partners quickly learn how to climb up the learning curve.
Second, it is important to understand the role of the startup team’s product within the existing portfolio in order to ensure there is no overlap and offerings are complimentary. Trish spends much of her time in a “negotiator role” between the product teams for athenahealth and startups, which can be difficult to navigate at times. The difficulty stems from the fact that most of this understanding is not clear until the team specifically undergoes this discovery phase of implementation.

Third, while a startup partner may be selected because they meet the business development team’s selection criteria and have a “strategic fit” with athenahealth, there is extensive and complex work to be done in order for the benefit to be realized at the company level between the startup partner and athenahealth. There is work underway at athenahealth to ensure that there is a feedback loop between R&D and business development on this issue.

Despite the complex and difficult nature of this integration work, Trish advises that the only way to produce the innovative output from partnerships is to “just do it.” From her perspective, “innovation is a black box, no matter how much vetting you do, you need to just do it to find the magic of bringing two partners together.” Essentially, the “magic” is created when athenahealth “learns by doing” to make an external partnership with a startup or partner company successful. Open and honest communication while building trust in a relationship can create this magic. When I asked Trish whether more “vetting” and analysis should be done ahead of time to make the integration work smoother, she was quick to point out that such a focus would interfere with the innovation “magic”, which is counterproductive.
**MDP Accelerator Startup Partner Perspective (Chris)**

Chris founded Smart Scheduling after participating in the Hacking Medicine@MIT hackathon. He also participated in a healthcare accelerator called Healthbox and was the first startup to participate in the MDP Accelerator. He was drawn to athenahealth’s positioning as the “an open platform and backbone of US healthcare.” As part of the MDP Accelerator program, it was up to Chris and his team to ask for help and determine their own goals for the program, which he observed was a cultural expectation from athenahealth of the startup companies.

As the startup founder and CEO, Chris views his participation in the accelerator as a “funnel” of potential opportunities. The first step is to secure one of the coveted spots to partner with athenahealth, have access to their API, and go through integration. Once the integration is complete, you are able to “go GA”, which means General Availability and sell to all 62,000 athenahealth providers on the platform. The final step is the potential opportunity of being acquired by athenahealth.

Even in light of this acquisition opportunity, Chris still believes strongly in maintaining their independence and pursuing all opportunities to grow their business. There are no legal ramifications for Chris if he decides to partner with an athenahealth competitor. Even after “GA”, the startups are an independent entity and keep their official status as a “partner” of athenahealth. The one shared consideration between athenahealth and Chris’ startup is the financial goals that he has to meet or exceed, which is determined in partnership with athenahealth.

**Metrics for Success**
For both Trish and Erin, the success criterion is the number of external partners that are successful in integrating and joining their “Marketplace.” Trish notes that the team creates performance metrics that the startup team is accountable for meeting and is covered as part of the integration onboarding process. There is also a continuous feedback loop between athenahealth and the startup teams. MDP currently has 30-35 partners whereas 6-8 months ago, there were only 20 partners so they are rapidly growing.

For Chris, his success criterion is being able to generate revenue and acquire additional customers to his business by partnering with athenahealth. He is also given productivity metrics from athenahealth by which he and his team will be measured.

Summary of Entrepreneurial Tools & Innovation Learnings

• **Lesson #1:** It is a difficult process to identify how the “benefits” of startup partnerships “enter” back into the corporate company.

• **Lesson #2:** Achieving the right positioning of an emerging entrepreneurial tool with employees is key to ensure internal support for an accelerator program.

• **Lesson #3:** Disruption is actually a real thing and be aware that disruption is possible by you and your competitors. MDP Accelerator is athenahealth’s way of reinventing and disrupting themselves to stay innovative or else risk being disrupted by someone else. They are implementing this work even as their core business is growing 30% annually, which is key because emerging
entrepreneurial tools are difficult to create when the core business is not growing.

- **Lessons #4:** Entrepreneurs are looking for organizational openness, willingness to help, speed and agility, transparency of motivations and alignment of goals between the corporate and startup.
CASE STUDY #3: MICHELIN

Overview

Michelin created the global Incubator Program Office (IPO) to help the company find a way to design innovations outside of their core “tire” business. They launched their first incubator location in a separate building near their North America headquarters in Greenville, South Carolina in 2014. Additional regional IPO offices were launched in Asia (China) in 2014, followed by a Western Europe (France) office in 2015. The IPO program was designed to help reinvigorate the spirit of innovation that was instrumental in driving Michelin’s success over the years. Michelin wanted to infuse the company with this innovative spirit, unleash the creative talent of employees, and also provide “an avenue” to take innovative ideas to market. Michelin believes their strength and competitive advantage is in product innovation for the space of “mobility”, which Michelin has excelled for over 125 years. IPO was created so that Michelin can innovate faster outside of their core products of tires and Michelin travel guides. To do so, they built an internal startup
ecosystem through their incubator program to produce external innovations to their core businesses.

**HOW**

The beginnings of IPO started with an internal call-for-ideas in the general space of mobility. There were later calls-for-ideas where five “domains” were selected to sharpen the focus on specific areas of interest within the mobility space. The call-for-ideas stemmed from the CEO and leadership’s desire to mine for the most innovative ideas internally. A pre-IPO team, including Johannes, narrowed hundreds of ideas for the top 10 to be moved forward. The leaders of these top 10 ideas were given time to recruit a cross-functional team for building out their idea into a startup team.

The final teams then pitched their developed idea further in front of a panel of judges, from which 6 ideas were selected and the teams themselves were vetted through additional interviews. The final 6 teams were then placed in a 10 day boot camp to explore whether a viable MVP could be produced. The boot camp was structured around proving out feasibility of their idea. They leveraged Bill Aulet’s “Disciplined Entrepreneurship- 24 Steps to a Successful Startup,” which proved to be a helpful resource for teams because it was a structured process for how ideas can be developed into startups, which fit nicely with Michelin’s very process driven corporate culture. The IPO program was then fully established post boot camp to support the startup teams in developing their ideas. There were 5 startups selected in North America, 3 in Asia and 5 in Western Europe IPOs.

**IPO Goal**
In the broad mobility space, the mission of the IPO is to seek, promote, develop and deliver, novel business activities, beyond Michelin Group’s core business, which will create value and contribute to profitable growth for the Group. It is expected this mission will increase the innovation capability of the Michelin Group.

**Metrics for Success**

Johannes and the team did extensive analysis and research around how their emerging entrepreneurial tools like their incubator model for startups and M&A strategy could contribute to the business goals they wanted to deliver. At the end of this analysis, they were able to identify some metrics that help to measure the health of the portfolio. To date, 3 of the startups in the North America and China IPOs have been disbanded because of market opportunity size and/or lack of business viability.

**Incubator Model Learnings**

The IPO team is now 18 months into their program and they have learned much about both the benefits and limitations of an internal startup incubator program. They are continuing the process of refining and updating their model to become more externally facing and they have several axis they are trying to execute upon. The first axis is the continued refinement of the process & methodology including check-ins with Ralph Dimenna, VP of Global IPO and the IPO leadership team every 90-120 days. The goal of check-ins is to decide whether the internal startup teams have made enough progress to be able to receive additional funding to continue. If the team is approved, they are able to continue, however, if the team
is unable to receive funding and approval, they are disbanded and employees are asked to return to the core business or join another startup team. The goal is these check-ins will help ensure teams are on track and learnings are dynamically captured. The second axis is collaboration with the core businesses, building ideas and businesses together with the core. This work is still being developed.

The third axis is looking externally for non-core ideas. Under Ralph’s leadership, the IPO team is looking internally and externally for the next big innovation for Michelin and there is an understanding now that the talent to help bring this vision to life may not reside within Michelin. In addition, the IPO team believes that by partnering externally, they will be more effective at helping Michelin move faster.

Summary of Entrepreneurial Tools & Innovation Learnings

- **Lesson #1: Internal incubation models are like “building an aquarium besides an ocean when what you should do is jump into the ocean.”**
  
  Through his external benchmarking of companies and his own learnings with Michelin IPO, Johannes has learned that “breakthroughs and ideas that go well-beyond core business capabilities and an authentic entrepreneurship experience, by definition, live outside [your company].” As a result, for disruptive innovation, Johannes believes you must partner with the external entrepreneurial ecosystem in order to “explore the ocean” instead of “building an aquarium.”

- **Lesson #2: Internal incubation is a model most helpful for innovations closer to your core and adjacent innovations.** The sweet spot for an internal
incubation model is as a “tool” for igniting the innovative spirit among employees and/or an opportunity to leverage internal capability that is a competitive advantage, or as an adjacent innovation to expand your core “bubble.” In addition, an internal incubator model can be helpful as a “holding spot to grow and nurture ideas that may lead to a better understanding of trends, markets and business models in order to make more educated business and investment decisions.”

• **Lesson #3: Alignment from leadership on goals for an entrepreneurial innovation program is key.** The key to success is to ensure there is full buy in from leadership. For IPO, they had a clear direction for their program, but still in the process of getting their strategic focus areas completely validated and adopted by leadership. Johannes advises that “when you do strategy bottom-up, it’s a much more difficult road to take.”

• **Lesson #4: Corporations must make a long-term investment in the entrepreneurial ecosystem to be successful.** Johannes noted that it is key to take the time to be involved in the entrepreneurial ecosystem in order to be recognized as a credible player, which is necessary for idea and deal flow. By doing so, companies are then able to get “front row seats” to innovation and able to establish yourself as “approachable” by startups and entrepreneurs.

• **Lesson #5: Do not be a complicated investor when partnering with a startup.** Successful corporations that partner well allow the startups freedom to be a startup without putting heavy corporate impositions on them. If you are a
complicated investor, startups and potential partners in the ecosystem will know and will not be open to collaborating.

- **Lesson #6:** Key to success is to adjust your internal processes to the external speed of movement [to match that of startups]. Johannes cautions corporations that they must adapt or risk being left behind in the startup ecosystem because they operate so much faster than a large corporation.

- **Lesson #7:** Lessons on how to build startups internally can be a good learning platform to help corporations to be a smarter external investor. The experience of understanding how hard it is to build a business helps you understand better where and how to make investments because you are more aware of market dynamics - both the inherent risks and opportunities.

- **Lesson #8:** Ensure expectations for outcomes of emerging entrepreneurial tool like hackathons are within reason. For Michelin, the expectations that came out of a recent hackathon were so positive that it set expectations at an unrealistic level. At the end of a hackathon, the output is usually a set of great ideas with very few of them viable. Extensive work, time, and money needs to go into converting those “few ideas” into viable ventures. It’s important to dispel the widely circulated “Hollywood view of entrepreneurship” that can lead to unrealistic expectations of a “flashy-easy-no-investment-required entrepreneurial experience”.

© 2015 Lucia Tseng Kamm
CASE STUDY #4: GENERAL MOTORS

<table>
<thead>
<tr>
<th>Person Interviewed</th>
<th>Anthony Vigiletti</th>
<th>Nick Pudar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Person Interviewed</strong></td>
<td><strong>Anthony Vigiletti</strong></td>
<td><strong>Nick Pudar</strong></td>
</tr>
<tr>
<td><strong>Title &amp; Role</strong></td>
<td><strong>Current</strong></td>
<td><strong>During Hackathon Event</strong></td>
</tr>
<tr>
<td><strong>Product Manager- GM Fleet Solutions</strong></td>
<td><strong>App Development &amp; Engagement Manager. Part of the OnStar Business Development team.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hackathon Role</strong></td>
<td>Managed activation in partnership with a development company Chaotic Moon and GM developer team for technical issues.</td>
<td>Led the OnStar business unit where hackathons were implemented.</td>
</tr>
<tr>
<td><strong>Date of Interview</strong></td>
<td>March 24, 2015</td>
<td>April 7, 2015</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>Auto Manufacturer</td>
<td></td>
</tr>
<tr>
<td><strong>Size of Company</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td>$155,929 Million</td>
<td></td>
</tr>
<tr>
<td><strong># of Employees</strong></td>
<td>219,000 employees</td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurial Tool</strong></td>
<td>Hackathons (internal &amp; external)</td>
<td></td>
</tr>
</tbody>
</table>

**Overview**

Overall, the GM OnStar team operated like a startup within a larger company. They sponsored a roadshow series of eight hackathons to engage the development community around the world with the goal of incentivizing apps to be built for the GM AppShop, an app marketplace for their vehicles. The AppShop would be exclusive to GM because of the OnStar functionality found in their cars. The GM team partnered with a software development agency called Chaotic Moon and a variety of third-party organizations that helped them put on the hackathons including TechCrunch Disrupt and AppsWorld. The hackathon events were located in different cities around the world. The AppShop’s goal was to improve the customer experience in vehicles and to drive up revenue for GM. At the hackathons, GM offered prize money to winners, co-creation opportunities for app development, and
access to simulated vehicle information available via OnStar such as speed, location, and additional data points. GM started with a US hackathon series followed by one in Europe and had plans for other regions as well.

**Hackathon Goals**

1) **Improve the customer experience in GM vehicles through the creation of exciting content** from developers that leverage the OnStar functionality, which is unique to GM.

2) **Global PR campaign to change and improve brand perception of GM and specific vehicle brands in key markets** (Chevrolet, Buick, GMC, Cadillac, Opel, Vauxhall). The goal was to change the perspective that GM can “bring your connected life to your vehicle and bring your vehicle to your connected life” and not “behind the times.” Also, the goal was to help potential consumers and tech community journalists realize that a company like GM also pushes boundaries in innovation and is moving towards a more open versus closed innovation ecosystem.

3) **Identify talented entrepreneurs, innovators, and developer partnerships** to build innovative tech products for GM vehicles.

**Hackathon Results**

✓ Successful in accomplishing goals #2 and #3 above. Exceeded awareness goals by 3X and the number of partnerships for content, talent, and developers. Hackathons helped put GM “on the map” with developers and also created a very successful PR campaign. Recruited 3000 developers to attend.
× AppStore launch and content was delayed due to internal considerations.

GM’s AppShop was initially slated to launch alongside GM’s 2015 model year vehicles with OnStar 4G LTE Connectivity.12

Metrics for Success

The GM team tracked the number of impressions, registrants for events, logins for hackathon database, and number of potential developer partnerships.

Hackathon Learnings

The GM OnStar team has a number of key learnings from their hackathon event series despite the AppShop launch delay. The experience of participating in a hackathon provided training and knowledge about a new industry of tech and consumer electronics. Through his experience, Anthony was able to better understand how an automobile manufacturer like GM could successfully position themselves versus other competitors like Apple and Google who were competing in a similar space. The hackathon also provided a hands-on learning opportunity and exposed the team to constraints surrounding nuances of delivering app content in a car environment. For example, the team learned about the potential implementation issues for video advertising or app payment logistics in a driving environment, which GM needed to solve in order for developers to successfully monetize their apps.

The GM team also experienced the incredible speed at which developers and entrepreneurs could prototype and create solutions. However, the different working styles highlighted how tensions can arise between a more agile method of working, which created different solutions that conflicted with R&D approaches and
constraints. As a result, the internal R&D team was not as able to action all of the feedback and learnings fully from developers. Overall, the GM team learned that hackathons are a better tool for surfacing ideas and identifying and hiring talent, but not necessarily the best vehicle for creating more developed ventures or app creations. One explanation is that most people who attend hackathons just want to code or work on a great idea, and it is difficult to incentivize them to continue building their ideas into more developed businesses.

There are a few learnings that in hindsight the team would have implemented differently. The GM team would have created a more robust support system to help developers understand the various stipulations and constraints that GM has to work with, in terms of regulatory concerns or tech and hardware specs, so that the final apps better addressed these constraints. In addition, the team would have planned ahead of time to provide better access to GM’s prototyping tools, which were based in Detroit post-hackathon. As a result, developers had to make more of an investment to partner with GM and providing better access to these tools would have made the collaboration easier for developers.

**Summary of Entrepreneurial Tools & Innovation Learnings**

**Lesson #1: Emerging entrepreneurial tools like hackathons have a role in corporate innovation.**

From Nick’s perspective, part of innovation is about “transforming the internal processes” and leveraging “external activities as a mechanism by which you shine a light on those different processes.” However, one barrier for innovation at a large company is that these ideas “need to get really big before they [large
corporations] are interested in it and the question of materiality is a very, very important one.” As a result, Nick believes there are two approaches that corporations generally take when it comes to innovation: “One is to kind of experiment, scavenge the landscape and try to figure out what is possible and then pick your favorite of what's possible.”

The other approach is to know what you want and to understand deeply what is necessary and then go aggressively, implement what you want.” From Nick’s perspective, 100% certainty and the latter statement are required for successfully accomplishing disruptive innovation in a large corporation. As a result, Nick recommends “mechanisms” like hackathons for corporate innovators to help them think through different possible futures and scenarios, and to explore the edges of innovation to achieve some of this certainty. The goal of exploring the edges through hackathons and accelerators/incubators is to help “recast and redefine your ideal design”—essentially pivoting and learning your way into the future and closer towards one’s innovation goals.

**Lesson #2: There is power in “learning by doing.”**

What is evident from these research interviews is how difficult it is to explain to a corporate innovator who has never participated in an emerging entrepreneurial tool that through “doing” and “learning” there can be progress. Nick provides two great examples that illustrate well how “actioning innovation” through hackathons and accelerators/incubators for corporates is a helpful first step. Below is Nick’s example from his GM OnStar experience:

If you were to ask me two years ago what the ideal design was for GM’s connected vehicle strategy, I would describe it one way. If you
ask me that same question today, my answer is largely the same, but with a few interesting nuances and flexibilities that have emerged in the last couple years because of what’s happening in innovation [...] by participating in a hackathon, we were able to observe a completely different solution to this issue and it opened our eyes to things outside the box. The thing is, you have to know that you are even thinking outside the box. I would prefer that we didn’t know where the box was. And I think hackathons and these kinds of programs completely remove us from this inside the box development and thinking.

To illustrate this learning further, Nick provides a helpful non-business explanation using the game of chess to illustrate how hackathons can be leveraged to explore the edges of innovation with successful outcomes:

Chess masters play differently because they know exactly how the game is going to end. And what they do in their mind is they unravel the game backwards and they maneuver the game towards their desired outcome. But in order to even know that certain moves can provide a really good outcome, they have to study and explore different possibilities.

Through this example, Nick sees the role of the corporate innovator as someone who creates the company’s “ideal strategy design” for innovation. However, in order to do so they must explore what is happening in the field of technology, trends, and business, especially through tools such as hackathons to unearth the best strategy that wins the game over their competition. Since experiencing these emerging entrepreneurial tools are fundamental to understanding its benefits, internal education and knowledge sharing during this entrepreneurial innovation journey will be key to internal receptivity and acceptance. As a result, Nick embarked on an internal roadshow to talk about his team’s “hackathon story” and to help the rest of the company understand how hackathon outcomes can create better products or business ideas for GM vehicles.
Lesson #3: Securing top-level management sign off and alignment at the beginning is key and have a portfolio approach to assembling your entrepreneurial tools.

Before venturing into the startup ecosystem, Nick has a few recommendations that corporate innovators should consider before embarking on partnerships with the startup ecosystem. First, there needs to be a “very senior level of protection and oversight from someone in the company that has a portfolio mindset.” A leader with a portfolio mindset is key because they have both a short-term and long-term perspective and vested interest in focusing on core and non-core innovations. In addition, the corporate innovator must ensure there is a line of sight between this entrepreneurial work and how it will help further the strategic objectives of the company. Nick stresses the importance of ensuring that the corporate innovator’s work is connected to strategic objectives and to the operating commitments of the company. In his experience, “executing in those commitments does not tolerate much experimentation”, which is required when leveraging emerging entrepreneurial tools.

Lesson #4: Find ways to explore, observe and participate as a starting point for your entrepreneurial innovation journey.

In terms of a starting point for corporate innovators, Nick recommends that the first step on this entrepreneurial innovation journey is to observe a hackathon. The observer will discover two things: first, the amount of innovation that is “out there” is significantly more than what one could have ever imagined. Second, the
most innovative ideas are happening in an open sourced environment like a hackathon where young people are engaged at the forefront. Through his experience with hackathons, Nick observes that the most innovative thinking is not happening inside a company, but is rather happening in a very decentralized and disaggregated manner externally and cannot be controlled internally by companies. A hackathon also helps to widen the funnel and volume of new ideas and Nick is quick to highlight that volume helps improve quality because “the quality of creative thought as you are engaged in another creative thought, it improves.”

Lesson #5: Early learnings on this journey can lead to new ideas on other emerging entrepreneurial tools to test and learn.

Nick learned there is potentially a better set of emerging entrepreneurial tools to help them identify more developed, early stage companies. He suggests a model that combines the following tools: a 9-12 month competition for ideas + an incubator/accelerator model + partnership with GM Ventures (their corporate venture capital group). From Nick’s perspective, this model would allow him a “portfolio strategy with a venture capitalist mindset” and would have been the next step in his entrepreneurial innovation journey.
CASE STUDY #5: THE COCA-COLA COMPANY

<table>
<thead>
<tr>
<th>Person Interviewed</th>
<th>David Butler</th>
<th>Ross Kimbel</th>
<th>Marius Swart</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title &amp; Role</strong></td>
<td>VP, Innovation &amp; Entrepreneurship</td>
<td>Global Innovation Director (Operations)</td>
<td>Global Innovation Director (Finance)</td>
</tr>
<tr>
<td><strong>Date of Interview</strong></td>
<td>3/18/15, 4/22/15</td>
<td>4/7/15, 4/29/15</td>
<td>4/7/15</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>World's largest beverage company of still and sparkling beverages.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Size of Company</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>$8,264 Million14</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Employees</td>
<td>11,650 employees15</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurial Tool</strong></td>
<td>Hackathons (internal and external), Accelerators, Co-creation Model</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overview of Coke’s Entrepreneurial Innovation Journey

David, Ross, and Marius have been on an evolving journey to determine Coke’s best “entrepreneurial model for innovation.” With management support from the CEO, top C-level executives, and group presidents, they have experimented with three models to date. In 2013, they were asked by management to explore disruptive innovation at Coke. David and his team identified Coke’s top employees to create internal startup teams that worked on the most disruptive innovation projects hand selected by top-level management and provided funding to support. However, six months later, none of the teams made significant progress. David and his team identified two issues. First, employees were not allocated time on their work plans and progress was difficult because bonuses were tied to their fulltime “day job.” Second, David felt that internal employees did not have the
“entrepreneurial exploration” skillset that was necessary to make progress like an external startup:

We hire people who know how to execute, not people who know how to explore. You can’t take someone who is great at execution, just shines in executing at scale, and ask them to go create or even drive something that’s new. How do they do that? There aren’t any tools and they’re not even equipped for that. They’re good at executing a business model that pre-existing.

David’s team disbanded this model and developed a “version 2.0.” Version 2.0 of their model entailed hiring external entrepreneurs as Coke employees to launch internal startups. David and his team noticed it was difficult for the entrepreneurs to operate within corporate constraints. They felt the main barrier was internal processes, rules, and guidelines and prohibited the startup from expanding their business. For example, it was difficult for startups to expand their partnerships with other companies or offer certain services because there was no precedence or process in place to manage. Ultimately, David and his team felt the growth of the startups was being constrained by the company. To give these startups oxygen to grow, David and his team decided to “spin out” the startups from the company and allowed the entrepreneurs to retain full IP ownership. The result was the creation of their third model, which is a program called Coca-Cola Founders.

The Coca-Cola Founders platform is a new model for creating seed-stage startups. David and his team collaborates with experienced entrepreneurs around the world and gives them access to Coke’s corporate resources before the entrepreneurs develop their next startup through what they call a co-creation
model. Lessons that Helped Create Coca-Cola Founders

Understanding the respective strengths of a corporation versus a startup is an evolution that the team has learned by trying a number of different entrepreneurial tools. For example, it took their experience with corporate VC funding to realize that a company like Coke can offer more than just funding. They can offer access to all of the 3 R’s: Relationships (retailers, leaders, media, partnerships and vendors), Resources (people, expertise, and equipment), and Reach (operations, consumers and distribution). In addition, David and his team also learned it is very difficult to optimize benefits for both sides in a VC funding model because the startup and company are “engaged in an awkward dance of ‘what do I need’ and ‘what am I willing to give up.’”

One advantage Coke has in creating these partnerships with the entrepreneurial ecosystem is the company’s experience and history with external partnerships. Before Coke’s inventor Dr. John S. Pemberton died, he sold a majority share of his company to an Atlanta businessman Asa G. Candler. Candler was responsible for establishing external partnerships to help distribute and sell Coke via soda fountains in 1888 and bottlers in 1899. David and his team believe that creating successful external partnerships are core to Coke’s DNA and success.

Goal of Coca-Cola Founders

Coca-Cola Founders began as a way to prove whether a company like Coke can successfully recruit serial entrepreneurs, share with them Coke’s biggest
business challenges, and see if they can create a startup business that uniquely helps both parties. The desired outcome is to create mutually beneficial partnerships to both Coke and startups that can “drive topline growth via product or service sales, as well as bottom line growth via operational efficiencies.”

Implementation of Coca-Cola Founders

As a starting point for the Coca-Cola Founder’s model, David and his team focus on what they call “shark bite” problems, which are billion dollar issues that currently affect people at a global level and the “pain” level is high. These problems are relevant to companies outside of Coke and the corresponding solutions can be implemented immediately. Once David and his team receive the approval from a business unit leader, they take the first step to reach out to the local entrepreneurial ecosystem to begin recruiting potential startup founders.

The startup founders for the program are hand-selected and there is no formal application process. The main criteria for selection of founders is that they are repeat entrepreneurs who have extensive experience searching for a problem, designing a product, building a team, raising funding, marketing products, and developing customers. They also identify entrepreneurs who recognize the level of impact that can be made only through a partnership with a large corporation like Coke. In terms of capabilities, the selected entrepreneurs have gone through either a huge failure or significant exit of their startup business and are experts in the Lean Startup methodology for building startups. All potential founder candidates go through an extensive interview process that involves a rigorous case study
interview, a fit-with-the-culture and behavioral interview, and a team case interview where the finalists founders work together in different team combinations.

Once selected, the entrepreneur joins Coca-Cola’s Co-Founder Network, creates their startup as its own legal entity, and has 100% ownership over the startup. Coke then provides access to their assets, people, and seed funding, which they designate as “an inside connection to Coke.” The founders go through an extensive “immersion” process where they interview a number of key business leaders and stakeholders, from company to bottlers, in order to understand and identify the biggest problems and challenges to tackle. It is up to the startup founder to identify which problems a startup can be built from. Once the team validates their business model and the business is ready to scale, Coke converts their investment to a minority share of equity based on market valuation.\(^{21}\) It is up to David and his team to decide when and how the “startup” is “integrated” back to the company to add value to the business—it will vary depending on the strategic value the startup offers and timing. David’s team always ensures that the startup is able to offer two things: 1) Strategic value to the company, revenue or create operational efficiency or productivity and 2) Financial returns on startup investment for the company. However, the former is the dominant priority because David’s team does not want to operate as a corporate venture fund. The strategic value is much more important than the financial value.

In terms of funding and support, all of Coke’s 20 business units around the world help to identify and partner with startup founders on their top business problems and challenges. The business units are located in a specific local market
and each founder’s startup is based within a specific business unit. For additional accountability and “skin in the game,” David’s team has a funding model that is jointly shared with each business unit. One future goal the team is working on is bringing in other corporations that are facing similar problems and having them join with Coke in leveraging their resources and funding to support these startups.

**Metrics for Success**

David and his team are leveraging metrics used by the VC community to keep startups on track. There are success metrics for both the startup and business side of the co-creation model. On the startup founder’s side, David’s team implements development milestones at the beginning and then transitions into business metrics that measure market traction as the startup gets bigger. For example, development milestones can include whether the startup has hired or secured a larger co-working space because the startup is growing. Another milestone could be whether the company has delivered a minimum viable product by a certain date. These milestones evolve into business metrics, which may include tracking the number of users, user growth targets, revenue, retention, expansion of customer partners, and burn rate, which is how fast the startups are using their money.

The measure of success for David’s team is the number of signed commercial agreements between the startups and Coke’s 20 business units around the world. They believe this metric is the best way to determine whether a startup can generate market traction that adds real value and growth for the business units; and “lives and dies” by this success metric.
David also takes a unique approach to driving accountability with the startup teams. They feel it is important to not approach their startups with a “big stick” when discussing funding requirements and instead use their weekly check-in’s as an opportunity to keep the startups on track. The startup teams establish their own metrics and David’s team holds them accountable while offering helpful “domain” expertise such as design, finance, or operations where needed.

David also spends much of his time communicating back to the larger Coke organization and management in different ways in order to find a “disciplined” way of sharing progress. They actively track metrics via financial spreadsheets to show growth and returns on investments; share global portfolio updates on their startup companies to senior management including specific local market findings and results; communicate learnings about market developments and trend for marketing teams; and create modules on their learnings and results for the broader Coke organization.

**Initial Results & Learnings from Coca-Cola Founders**

The Coca-Cola Founders program is 18 months into implementation of its co-creation model. Coke has selected 18 entrepreneurs in 10 markets around the world working on 9 startups and counting. An example of an early success story from Ross is a startup company called Wonolo, which is an on-demand staffing app that connects businesses with temporary workers. Wonolo has made quite a bit of progress and raised series A round, generating more than $1 million in revenue in the first 12 months and growing by 70% each month in revenue. Wonolo is also creating value and making an impact across Coca-Cola’s business by helping to
streamline their business functions such as retailer surveys, warehouse management, and tracking out of stocks.

**The Bridge by Coca-Cola Accelerator**

David and his team continues to support accelerators through their program called “The Bridge by Coca-Cola” based in Tel Aviv, Israel. The Bridge is a global commercialization program for startups that lasts six months and provides startups with in-depth marketing training, access to experienced business mentors and connection to Coke’s business sponsors. Essentially, Coke leverages their co-creation model and applies it to an accelerator model. This accelerator program offers startups access to Coke’s commercialization capabilities including an opportunity to pilot with them and license their product to Coke and/or its partners. Coke in return gets early access to ventures and the opportunity to run a pilot with the startup, which is a way for Coke to “learn by doing” with a startup. The program does not require any equity or IP ownership, which is an advantage for startup teams who want to participate.

**Entrepreneurial Tools & Innovation Learning Takeaway**

Finding the right entrepreneurial innovation model for your company is in itself an entrepreneurial journey and endeavor. As Ross notes, “This process takes time, it’s a meandering path. You’ve got to learn by doing. You’ve got to learn through failure.”
There are a few additional lessons I heard frequently across the remainder of my research that I wanted to highlight.

**Lesson #1:** There are a few other “tools” besides hackathons and accelerators such as Design Thinking and Learn Startup Methodology that are helpful to consider as part of your entrepreneurial innovation portfolio. Design Thinking and Lean Start Up were both mentioned in more than half of my interviews with corporate entrepreneurs and program leaders including Capital One Labs, Constant Contact, Coca-Cola, Qualcomm, and Ericsson, athenahealth. Design Thinking is “a human-centered approach to innovation that draws from the designer’s toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success.” Learn Startup “provides a scientific approach to creating and managing startups to get a desired product to customers’ hands faster by building, learning, and measuring faster.” These companies felt these tools helped them execute and learn faster while understanding the needs of their consumers and markets better.

**Lesson #2:** Emerging entrepreneurial tools help companies of all sizes, including startups. My interview with Eddy Wong, the CTO of startup Wanderu, which has less than 50 employees, uses hackathons almost quarterly because he finds them to be a great tool for cross-functional collaboration and what he calls “pleasant surprise.” These surprises can range from watching two employees from different teams work together well for the first time and breaking down functional silos or identifying internal talent that may not have been noticed before.
Eddy decided to implement cross-functional hackathons because he found himself starting to feel like a big companies in the sense that “success pulls you in a certain strategic direction and it becomes difficult to change it.” Hackathons have proven helpful for a startup like Wanderu to think outside of the box for innovation.

**Lesson #3: Hackathons are a great way to identify talent externally and internally and a great recruiting tool because of the positive PR it can generate for prospective applicants.** These tools are also great at helping to build capabilities such as building entrepreneurial spirit or design thinking skills among employees not associated with the team leveraging these tools. By teaching employees how to use these tools through learning, doing, and eventually teaching, corporations have found it to be an effective way to teach employees and build a culture more open to “learning by doing.” It also shows first-hand a different way of solving problems. I saw this training process in my interviews with Capital One Labs, Constant Contact, Ericsson, General Motors, and athenahealth.

**Lesson #4: When the entrepreneurial innovation teams develop a strong enough relationship with the core business units and have early wins, they can generate both inbound and outbound requests for their help to solve core and non-core business challenges.** For example, Capital One Labs has three approaches in working with business units that they created and evolved over time. The first approach is when business unit leaders approach the entrepreneurial innovation team to lead a design thinking session and they partner with them to create solutions together. A second approach is business unit leaders approaching the entrepreneurial innovation teams and asking them work on developing the
entire solution. Lastly, the third approach is where the entrepreneurial innovation teams trains regular business unit employees so the business unit employees are able to run their own design thinking and business problem solving sessions.

SECTION III: CONCLUSIONS

In closing, I believe these emerging entrepreneurial tools will play an increasing role in helping companies of all sizes innovate faster and better. These tools have proven through my primary market research to help with idea and venture creation and commercialization; cross-functional and internal & external collaboration; faster innovation execution; and talent identification, which are all key for innovation success. Through my interviews, I have learned that while the portfolio of emerging entrepreneurial tools will change over time, the Entrepreneurial Innovation Roadmap steps are likely to remain the same.
I adopted a practical approach to my research and studied both academic and practitioner literature. Below is a list of readings I recommend to any corporate entrepreneur looking to learn more about this topic:

Henry Chesbrough: Open Business Models: How to Thrive in the New Innovation

Clayton M. Christensen and Michael E. Raynor: The Innovator’s Solution: Creating and Sustaining Successful Growth.

Clayton M. Christensen: The Innovator’s Dilemma- When New Technologies Cause Great Firms to Fail.


John P. Kotter: XLR8 Accelerate.

Rita Gunther McGrath: The End of Competitive Advantage- How to Keep Your Strategy Moving as Fast As Your Business.

Trevor Owens and Obie Fernandez: The Lean Enterprise: How Corporations can Innovate Like Startups.

Eric Ries: The Lean Startup.

Vijay Sathe: Corporate Entrepreneurship- Top Managers and New Business Creation.

SECTION V: BIBLIOGRAPHY


© 2015 Lucia Tseng Kamm


## SECTION VI: APPENDIX

### Appendix A- List of Interviewees

<table>
<thead>
<tr>
<th>Stakeholder Role</th>
<th>Name</th>
<th>Company Name</th>
<th>Title</th>
<th>Company Overview</th>
<th>Hackathon</th>
<th>Accelerator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Entrepreneur</td>
<td>Charlie Maher</td>
<td>Naval Undersea Warfare Center</td>
<td>Chief of Staff</td>
<td>Naval Undersea Warfare Center is the Navy's full-spectrum research, development, test and evaluation, engineering, and fleet support center for submarine warfare systems and many other systems associated with the undersea battle space.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Tony Viglietti</td>
<td>General Motors</td>
<td>App Development &amp; Engagement Manager for OnStar</td>
<td>Auto Manufacturer</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Nick Pudar</td>
<td>General Motors</td>
<td>Vice President Planning &amp; Business Development at OnStar</td>
<td>Auto Manufacturer</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>David Knies</td>
<td>Breakaway Innovation Group</td>
<td>Chief Strategy + Talent Officer at Breakaway Innovation Group</td>
<td>A hybrid strategic consultancy, creative agency &amp; venture capital firm.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Paul Tyra</td>
<td>Market Genesis</td>
<td>Principal</td>
<td>Market Genesis provides services to early to mid-stage-technology and manufacturing companies</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Tetsuya O'hara</td>
<td>Patagonia</td>
<td>Director of Innovation Research</td>
<td>Outdoor apparel company</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>David Butler</td>
<td>Coca-Cola Company</td>
<td>VP, Innovation and Entrepreneurship</td>
<td>World's largest beverage company of still and sparkling beverages.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Jeremy Segal</td>
<td>Akamai</td>
<td>Vice President, Corporate Development</td>
<td>Leading provider of cloud services for enterprises provide secure, high-performing user experiences on any device, anywhere.</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Ligi Peng</td>
<td>Procter &amp; Gamble</td>
<td>Marketing Director</td>
<td>Consumer packaged goods company</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Reed Sturtevant</td>
<td>Project 11, techstars</td>
<td>Former Managing Director</td>
<td>Invests in and assists early stage startups</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Stakeholder Role</td>
<td>Name</td>
<td>Company Name</td>
<td>Title</td>
<td>Company Overview</td>
<td>Hackathon</td>
<td>Accelerator</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Andy Miller</td>
<td>Constant Contact Labs</td>
<td>Chief Innovation Architect</td>
<td>A leading digital marketing company for SMBs. Also home to newly formed Small Business Innovation Loft, the only SMB-focused startup accelerator program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Smitha Gudapaka</td>
<td>Consortium for Affordable Medical Technologies (CAMTech) Center for Global Health at Massachusetts General Hospital</td>
<td>Business Development Manager</td>
<td>Accelerate medical technology innovation and build entrepreneurial capacity to improve health outcomes in low- and middle-income countries (LMICs).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Alexis Steel</td>
<td>Consortium for Affordable Medical Technologies (CAMTech) Center for Global Health at Massachusetts General Hospital</td>
<td>Program Manager</td>
<td>Accelerate medical technology innovation and build entrepreneurial capacity to improve health outcomes in low- and middle-income countries (LMICs).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Ross Kimbel</td>
<td>Coca-Cola Company</td>
<td>Global Innovation Director</td>
<td>World's largest beverage company of still and sparkling beverages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Marius Swart</td>
<td>Coca-Cola Company</td>
<td>Global Innovation Director</td>
<td>World's largest beverage company of still and sparkling beverages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Patricia Hao</td>
<td>AthenaHealth</td>
<td>Product Innovation Manager (R&amp;D)</td>
<td>Cloud-based services for electronic health records (EHR), revenue cycle management and medical billing, patient engagement, care coordination, and population health management, as well as Epocrates and other point-of-care mobile apps.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Entrepreneur</td>
<td>Stacey Soper</td>
<td>Ericsson</td>
<td>VP, Head of Project Development</td>
<td>Provider of technology and services to telecom operators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Entrepreneur / Accelerator Program Leader</td>
<td>Navrina Singh</td>
<td>Qualcomm</td>
<td>Head of Qualcomm Innovation Program, Management and Corporate Strategy Leader</td>
<td>Mobile technology company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Entrepreneur / Accelerator Program Leader</td>
<td>Johannes Mutzke</td>
<td>Michelin</td>
<td>New Venture Incubator - Chief of Staff</td>
<td>Tires company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Leader - Accelerator</td>
<td>Jenny Fielding</td>
<td>techstars</td>
<td>Managing Director (&quot;powered by techstars&quot; programs focused on Hardware, Internet of Things and Fintech)</td>
<td>Techstars is a mentorship-driven seed stage investment program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder Role</td>
<td>Name</td>
<td>Company Name</td>
<td>Title</td>
<td>Company Overview</td>
<td>Hackathon</td>
<td>Accelerator</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------</td>
<td>--------------</td>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Program Leader-Accelerator</td>
<td>Kyle Judah</td>
<td>Martin Trust</td>
<td>Entrepreneur in Residence Program Director, MIT Global Founder Skills Accelerator</td>
<td>Center at MIT that provides expertise, support and connections needed for MIT students to become effective entrepreneurs. We serve all MIT students, across all disciplines.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Accelerator</td>
<td>Dave Knox</td>
<td>The Brandery</td>
<td>Co-Founder of The Brandery, CMO of Rockfish Interactive</td>
<td>Seed stage consumer marketing venture accelerator.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Accelerator</td>
<td>Edwina Johnson</td>
<td>Start-up Bootcamp Fintech London</td>
<td>Chief Operating Officer</td>
<td>Making education and growth accessible to anyone – especially underrepresented groups in the tech industry. Whether you’re a founder, student, or just someone who wants to level up their career.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Accelerator / Corporate Entrepreneur</td>
<td>Nick Wyman</td>
<td>Galvanize</td>
<td>Director</td>
<td>Cloud-based services for electronic health records (EHR), revenue cycle management and medical billing, patient engagement, care coordination, demand population health management, as well as Epocrates and other point-of-care mobile apps.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Accelerator / Hackathon</td>
<td>Erin Trimble</td>
<td>AthenaHealth</td>
<td>Business Development, leader of More Disruption Please Accelerator at AthenaHealth</td>
<td>Startup incubator founding its own companies and designing incubation programs for some of the world’s biggest companies.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Accelerator / Hackathon</td>
<td>Phil Morie</td>
<td>Pollenizer</td>
<td>CEO</td>
<td>Europe’s largest technology accelerator space for finance and retail technologies.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Accelerator / Hackathon</td>
<td>Adizah Tegani</td>
<td>Level39</td>
<td>Head of Ecosystem Development at Level39</td>
<td>Global startup accelerator</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Accelerator / Hackathon</td>
<td>Carsten Kolbek</td>
<td>Startup Bootcamp</td>
<td>Co-Founder</td>
<td>Leading provider of incubation services and support for early stage, growing businesses in Scotland.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Accelerator, Corporate Entrepreneur (former)</td>
<td>Andrew McGee</td>
<td>Innovation Center Scotland</td>
<td>Commercialization Adviser</td>
<td>Supports the aspirations for impact through innovation of all members of the MIT community. It supports MIT’s focus on solving a range of critical challenges in energy, the health of the planet, human health and beyond.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Leader-Hackathon</td>
<td>Steve Haraguchi</td>
<td>MIT Innovation Initiative</td>
<td>Director, Program Design and Implementation at MIT Innovation Initiative</td>
<td>Seed stage consumer marketing venture accelerator.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Stakeholder Role</td>
<td>Name</td>
<td>Company Name</td>
<td>Title</td>
<td>Company Overview</td>
<td>Hackathon</td>
<td>Accelerator</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------</td>
<td>------------------------------</td>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Program Leader-Hackathon</td>
<td>Christopher Lee</td>
<td>Hacking Medicine @ MIT</td>
<td>Team Member</td>
<td>We bring together people with technology and healthcare backgrounds to solve real problems.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Program Leader-Hackathon</td>
<td>Nausheen Ali</td>
<td>Angelhack</td>
<td>Marketing Director</td>
<td>Hackathon program leaders who help corporates drive open innovation for products, platforms and brands by connecting them to the smarts, scale and speed of the world's most vibrant hacker community.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder</td>
<td>Eddy Wong</td>
<td>Wanderu</td>
<td>CTO</td>
<td>Simple way to find and book inter-city buses and trains between any two points.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder</td>
<td>Jon Bloom</td>
<td>Podometrics</td>
<td>CEO / Co founder</td>
<td>A system designed to help diabetic feet healthy.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder</td>
<td>Gabriel Blanchet</td>
<td>Grove Labs</td>
<td>CEO / Co founder</td>
<td>Marketing company specializing in technology solutions for the airport to improve the passenger experience.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder</td>
<td>Amanda Anthony</td>
<td>FlyinStyle</td>
<td>Founder / CEO</td>
<td>Creates high-quality custom blends of essential everyday items through our innovative mixing technology.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder</td>
<td>Megan Cox</td>
<td>Miramix</td>
<td>Co Founder / Miramix</td>
<td>Developing products and networks to enable people with food allergies to trust their food.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder</td>
<td>Shireen Yates</td>
<td>SixthSense Labs</td>
<td>CEO / Co founder</td>
<td>Building smart scheduling software for different industries.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder / Corporate Entrepreneur (former)</td>
<td>Tudor Coman</td>
<td>Flocations.com</td>
<td>Co-Founder / CEO</td>
<td>Asia's biggest meta-search engine for travel packages and tours from hundreds of local travel agencies.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder / Corporate Entrepreneur (former)</td>
<td>Dip Patel</td>
<td>ecovent</td>
<td>Founder / CEO</td>
<td>System of wireless vents and sensors that makes any forced air heating and cooling system smarter.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Startup Founder / Program Leader-Hackathon (former)</td>
<td>Elliot Cohen</td>
<td>PillPack &amp; Hacking Medicine @ MIT</td>
<td>CEO / Co founder</td>
<td>We leverage service and technology to simplify the management of complex medication regimes</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>Laura Diamond</td>
<td>2014 MBA Intern for Michelin IPO</td>
<td>MBA Student MIT Sloan</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

2 Source: [Qualcomm Incorporated company information], via LexisNexis, accessed [April 2015].

3 Source: [Qualcomm company information], via LexisNexis, accessed [April 2015].

4 Source: [Athenahealth company information], via LexisNexis, accessed [April 2015].

5 Source: [Athenahealth company information], via LexisNexis, accessed [April 2015].

6 Source: [Athenahealth company information], via LexisNexis, accessed [April 2015].


8 Source: [Michelin Company Information], via LexisNexis, accessed [April 2015].

9 Source: [Michelin Company Information], via LexisNexis, accessed [April 2015].

10 Source: [General Motors Company Information], via LexisNexis, accessed [April 2015].

11 Source: [General Motors Company Information], via LexisNexis, accessed [April 2015].


13 Source: [Coca-Cola Company Information], via LexisNexis, accessed [April 2015].

14 Source: [Coca-Cola Company Information], via LexisNexis, accessed [April 2015].

15 Source: [Coca-Cola Company Information], via LexisNexis, accessed [April 2015].


