Visibility of the MIT Entrepreneurship Ecosystem: MIT Undergraduate Awareness of On-Campus Entrepreneurship Resources

by

Kuan Cheng

Submitted to the Department of Mechanical Engineering in Partial Fulfillment of the Requirements for the Degree of

Bachelor of Science in Mechanical Engineering

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ABSTRACT

MIT has a vibrant culture of innovation and a rich history of entrepreneurship. Over the years, many organizations, programs, centers, courses, and competitions have been created to kindle, foster, and celebrate the entrepreneurial spirit on-campus. Together, these form the MIT entrepreneurial ecosystem. Despite the wealth of these resources, more than half of graduating seniors say that they are not prepared to start a company. This thesis seeks to understand this phenomenon by investigating the undergraduate student body's awareness of various parts of the entrepreneurial ecosystem through a survey questionnaire.

Lack of visibility of these resources is hypothesized and then proven. It was found that students who are not interested in entrepreneurship have not heard about any resource other than the \$100K Competition. It was also found that the majority of students who are interested did not know about many of the resources that their peers have found the most helpful.

Based on survey data, three groups (the Martin Trust Center for MIT Entrepreneurship, Founder's Journey, and the MIT \$100K Competition) were chosen for an in-depth study because they have done an exceptional job raising awareness for themselves, allowing them to provide tremendous value for their students. Longer interviews were conducted with a representative from each of these groups. Shorter interviews, often by email, were also conducted with 25+ students to learn about what resources were most valuable to them and how they found them.

It was found that these programs reached out to the student body in two major ways: emails to large mailing lists and word of mouth. Using emails sent to the majority of the student body, the\$100K was able to gain tremendous visibility to undergraduate students, unrivaled by any other groups. On the other hand, the Trust Center does not use mass emails, relying instead on word-of-mouth recommendations from the students who are already familiar with the Center. This highly targeted advertising gives it the highest utilization rate (percentage of students who know about it who also use it) of all the parts of the ecosystem. Founder's Journey uses both of these methods, though most of its students enroll because of a word-of-mouth recommendation.

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1 Introduction

On the day she was elected, to a standing-room-only crowd in MIT's largest lecture hall, MIT president Susan Hockfield said, "I want MIT to be the dream of every child who wants to make the world a better place."

Each year, MIT draws in more than 1000 new undergraduates² and more than 2000 new graduate students³ who are eager to do just that. During their time at MIT, the Institute equips them with many of the skills they will need to fulfill this mission- rigorous analytical thinking, clear communication, group work, perseverance, and dedication. The Institute's vibrant culture of innovation drives their work. With the support of the programs and people here, they are inventing the future. However, if these innovations are not brought before the world, they cannot make an impact. Entrepreneurship is the path to bring MIT's innovations to the world's markets.

1.1 MIT's History and Culture of Innovation and Entrepreneurship

MIT alumni have an exceptional history of innovation and entrepreneurship. A widely cited 2009 study by the Kauffman Foundation found that if active companies founded by MIT graduates formed an independent nation, its revenues would make it the 17th largest economy in the world.⁴ The 25,800 currently active companies founded by MIT alumni employ about 3.3 million people and generate around 2 trillion dollars of revenue.⁵ The list of MIT graduate founded companies includes many well-known names: Gillette, Raytheon, Texas Instruments, Harmonix, Bose, Genentech, Dropbox, and many more.⁶

¹ Thomson, E. (2004, September). President-elect displays warmth and crowd-appeal. *MIT news*. Retrieved from http://www.mit.edu/newsoffice/2004/hockfield-meet-0901.html.

² MIT Class of 2015: Incoming Freshmen Stats. (2011, May). *MIT faculty newsletter*. Retrieved from http://web.mit.edu/fnl/volume/235/freshmen.html.

³ Admission. (2012). MIT facts. Retrieved from http://web.mit.edu/facts/admission.html.

⁴ Roberts, E., & Eesley C. (2009). *Entrepreneurial impact: The role of MIT.* Kauffman: The Foundation of Entrepreneurship.

⁵ Roberts, E., & Eesley C. (2009). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

⁶ MIT's Influence on the World. (2011, November). *MITAdmissions wiki*. Retrieved from http://wiki.mitadmissions.org/MIT's Influence on the World.

There are many aspects to MIT's innate culture that foster innovation and entrepreneurship: a dedication to an education that is both theoretical and practical, a long tradition of multi-disciplinary collaboration, and a powerful combination of technical and business talents.

1.2 MIT Entrepreneurship Ecosystem

A strong community dedicated to entrepreneurship has grown to support the community's innovations. Over the years, many organizations, programs, centers, courses, and competitions have been created to kindle, foster, and celebrate the entrepreneurial spirit on campus. Each serves its own niche, but also contributes to the community as a whole. The word "ecosystem" is often used to describe this collaboration. The entrepreneurial resources and community at MIT is distributed and diverse, with no central governing body.

Students that successfully find and navigate the ecosystem will find support in some parts of the ecosystem for their own unique needs. These students can derive great value from the resources available at MIT.

1.3 Graduating Students Are Not Prepared to Start a Company

Yet, according to an exit survey given in the spring semester of their senior year, more than half (58%) of the Class of 2012 said their undergraduate experiences did not adequately prepare them to "start a company." Nearly a fifth of respondents said that they were "very poorly" prepared to "start a company."

This thesis seeks to understand this by investigating the undergraduate student body's awareness of various parts of the entrepreneurial ecosystem through a survey questionnaire. This

⁷ 2012 Senior Survey - Overall Results. (2012, May). *MIT office of the provost, Institutional research*. Retrieved from

http://web.mit.edu/ir/surveys/2012SeniorSurvey_Overall.pdf.

⁸ 2012 Senior Survey - Overall Results. (2012, May). *MIT office of the provost, Institutional research*. Retrieved from http://web.mit.edu/ir/surveys/2012SeniorSurvey Overall.pdf.

is accompanied by an in-depth exploration of three groups that have done an exceptional job raising awareness for themselves, allowing them to provide tremendous value for their students.

2 Introduction to the Components of the MIT Entrepreneurship Ecosystem

Fifteen parts of the ecosystem were selected to be studied. Groups with very specific focuses, such as the MIT Clean Energy Prize, were not included. At MIT, entrepreneurship and innovation are very close entwined. For this study, only groups that had an explicit interest in entrepreneurship were studied. For example, the Lemelson-MIT Program, which is solely about innovation and invention, is not included.

Data for one of the groups, the MIT Entrepreneurship Review (MITER) is not included because its name is similar to another student group, the MIT Electronics Research Society (MITERS), invalidating the survey results. Fourteen groups are discussed in this thesis. These 14 groups can be split into three broad categories: official MIT centers and offices (6 groups), academic classes (2 classes), and student groups and student run competitions (6 groups). Data for Innovation Club, which was included on the survey but is no longer active, is also not considered.

2.1 Institute Offices and Centers

Institute offices and centers dedicated to entrepreneurship, both in general and with specific applications, are an important part of the ecosystem. These offices are centers are located within and supported through various parts of the institute administration: the School of Engineering, the Sloan Business School, the Vice President of Research, the MIT Technology Review, the Office of the Provost, etc. They support students' entrepreneurial efforts through a variety of programs: lecture series, mentor matching, supportive staff, grants and funding, fellowships, etc.

Six institutional offices were selected to be studied in the survey.

2.1.1 Deshpande Center for Technological Innovation

The Deshpande Center for Technological Innovation was established in 2002 to "increase the impact of MIT technologies in the marketplace." It serves to bridge the "Innovation Gap," a term which describes the phenomenon where valuable emerging research does not transition out of the laboratory and become a viable product in the marketplace, by providing grant funding to promising technology early its the development, connecting researchers at MIT to the business community, and tying MIT's research to market needs. This is done through a variety of activities including: grants, the Catalyst Program, X Prize Lab, the i-Teams Course, and a variety of events.

Since its founding, the Deshpande Center has reviewed more than 500 proposals and funded more than 90 projects with more than \$11 million in grants. It has enabled 26 companies that have together raised more than \$350 million in funding.¹⁰

Because of its focus on taking the research in MIT's laboratories to market, the Deshpande Center does not actively reach out to students. While some of their programs work with students (though mostly graduate students), the core of the Center's work, their Grant Program, only accepts proposals from the faculty. Students are supported by the Deshpande Center if their faculty member submits their research to the Center.

2.1.2 Enterprise Forum

The MIT Enterprise Forum seeks to build connections between technology entrepreneurs and their local communities through a network of 28 worldwide chapters. These chapters work together to offer over 400 educational and networking events annually. Membership is open to anyone interested in or involved with technology entrepreneurship- the networking component of the Enterprise Forum is considered the most valuable.

The Cambridge chapter was the first Enterprise Forum chapter. Its programs include Innovation Series, a monthly lecture series, Startup Clinic & Concept Clinic, smaller interest group meetings, and three "CEO Services" programs.

⁹ Deshpande Center for Technological Innovation. (2010). *About the center*. Retrieved from http://web.mit.edu/deshpandecenter/about.html.

¹⁰ Deshpande Center for Technological Innovation. (2010). *About the center*. Retrieved from http://web.mit.edu/deshpandecenter/about.html.



Figure 1: Map of Enterprise Forum Chapter Locations.

Twenty-eight chapters are located all over the world. The first one was in Cambridge, MA, USA. http://www.mitef.org/s/1314/interior-2-col.aspx?sid=1314&gid=5&pgid=473.

Since July 2011, the Enterprise Forum has been a part of the MIT Technology Review, an independent media company owned by MIT. ¹¹ It was originally founded in 1978 as part of the MIT Alumni Association.

2.1.3 Legatum Center for Development and Entrepreneurship

The Legatum Center for Development and Entrepreneurship was established in 2007 to promote innovation and entrepreneurship in low-income countries. It was founded on the belief that "economic progress and good governance in low-income countries emerge from entrepreneurship and innovations that empower ordinary citizens." It is named after Legatum, a global investment firm whose \$50 million structured gift helped establish the center.

The Center runs a variety of programs and events centered on the ideas of transformative innovation, entrepreneurial leadership and grassroots development to further their mission. Each fall, the Center hosts a two-day conference, Legatum Convergence. The conference gathers

¹¹ MIT Enterprise Forum. (n.d.). *About us*. Retrieved from http://www.mitef.org/s/1314/interior-2-col.aspx?sid=1314&gid=5&pgid=472.

¹² Legatum Center for Development and Entrepreneurship. (2012). *About us.* Retrieved from http://legatum.mit.edu/aboutus.

thought-leaders and entrepreneurs from around the globe to MIT, in order to discuss international development, innovation and entrepreneurship. In addition to the annual conference, the Legatum Center Lecture series brings, entrepreneurs, innovators, investors, intellectuals and public officials come to MIT throughout the year.

The Center also runs a highly competitive fellowship program to prepare MIT graduate students who intend to launch enterprises in low-income countries. Legatum Fellows come from across all academic disciplines and work on projects all over the globe. In addition to the fellowships, it also provides grants to fund market research, travel, accommodations, project scoping, and pilot studies or proofs of concept.



Figure 2: Map of 2012 Legatum Fellow Locations.
Legatum's focus on international development takes its fellows all over the world. They are also a part of the international development ecosystem. http://legatum.mit.edu/byfocus.

Finally, the Deshpande Center offers classes such as "15.S15 Entrepreneurship and Prosperity in Low-income Countries."

2.1.4 Martin Trust Center for MIT Entrepreneurship

The mission of the Martin Trust Center for MIT Entrepreneurship is to educate, inspire, and coach new generations of entrepreneurs by helping them cultivate the skills and connections they need to be successful. It began as the MIT Entrepreneurship Center, an MIT-wide

entrepreneurship program. The Trust Center supports students (undergraduate and graduate) and faculty from all five schools at MIT, and serves as a bridge between them. Its activities for students include nearly 30 classes on entrepreneurship, networking events, and support for student groups and student run competitions. An in-depth discussion of the Trust Center can be found in Section 5.1.

2.1.5 MIT Technology Licensing Office

The MIT Technology Licensing Office has a mission to "benefit the public by moving results of MIT research into societal use via technology licensing." It hopes to foster commercial investment in developing inventions and technologies from MIT and MIT Lincoln Laboratory's research by licensing of the intellectual property from this research. The MIT TLO is one of the most active technology transfer offices in the country.

The TLO operates as a department of the university, reporting to the Vice President of Research, who in turn reports to the Provost. The office has 37 staff.¹⁴

While the TLO typically works with startups by licensing MIT's intellectual property out to them (29 percent of licenses in 2010 were to startup companies). Though it does not participate in any of the activities traditionally associated with entrepreneurship (writing business plans, assembling management teams, running incubators, investing money, etc.), the TLO has started many companies by identify technologies potentially suitable for startups and introducing it to potential investors. If a company is formed, it then licenses that technology from MIT.

¹⁴ MIT TLO. (2006). FAQ. Retrieved from http://web.mit.edu/tlo/www/about/faq.html

¹³ MIT TLO. (2006). *Our mission*. Retrieved from http://web.mit.edu/tlo/www/about/our mission.html.

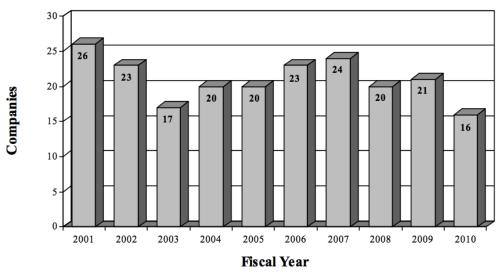


Figure 3: Number of Companies Started at MIT by Fiscal Year, 2001-2010. The TLO keeps records such as the number of companies started at MIT each year. http://web.mit.edu/tlo/www/downloads/ppt/TLO_Stats.pdf.

Most importantly to the student entrepreneur, the TLO also works to promote innovation and entrepreneurship within MIT by helping the community protect its inventions. The TLO will help file patents for new inventions, with inventors receiving a share of the royalties. In 2011, over \$13 million were distributed to inventors. Along with these efforts, in 2010, the TLO published, "An Inventor's Guide to Startups: for Faculty and Students," a 28 page booklet about how to start a company at MIT. It summarizes the many resources available to MIT inventors (both within the TLO and in other components of the MIT entrepreneur ecosystem), gives an overview of institute policies that may be relevant, and answers many of the questions frequently asked to the TLO. The TLO also gives lectures on these topics, such as "Turning Your Invention into a Startup," a lecture given during MIT's January 2012 IAP term.

2.1.6 MIT Venture Mentoring Service

MIT's long history of entrepreneurship has created a large group of successful entrepreneurs and business people eager to give back to the Institute. The Venture Mentoring Service was created in 2000 under the Provost's Office to provide entrepreneurs at MIT the

¹⁵ MIT TLO. (2006). FAQ. Retrieved from http://web.mit.edu/tlo/www/about/faq.html

mentoring, advice, and help they need to develop their enterprises. VMS believes that a young fledgling business is more likely to succeed when partnered with mentors with more experience.

VMS helps prospective entrepreneurs by matching them to a skilled team of 3 to 4 volunteer mentors who increase the startup's chance of success by offering practical, hands-on mentoring across a broad range of business activity- including product development, marketing, intellectual property law, finance, human resources, and founders issues. Mentors are matched with ventures based on the relevance of their skill set and experience, and their enthusiasm for the venture. The mentoring service is open to MIT faculty, students, alumni, staff, and licensees of MIT technology, who reside in the Boston area.

VMS does not charge or ask for equity. Though the mentors are volunteers, the mentor matching service relies almost entirely on private donations.

2.2 Academic Classes

MIT offers more than 30 classes on entrepreneurship 16 across both the School of Engineering and the Sloan School of Management. They range from "6.933 Founder's Journey," which introduces students to entrepreneurship to much more specific classes such as "15.383 Entrepreneurship and Sustainable Economic Development: The Case of Puerto Rico." In addition to formal offerings in entrepreneurship, many technical classes often produce innovative technologies that go on to become the backbones of successful startups. For example, Nyx Devices, which has raised 500K in venture funding, came out of a project in "2.75 Precision Machine Design," a class that partners with local doctors to design and develop medical devices. The two classes in this study, "6.933 Founder's Journey" and "15.390 New Enterprises," were chosen out of the 30 based on feedback from student entrepreneurs on campus about the most well-known and most-used classes for undergraduate students.

 $^{^{16}}$ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

¹⁷ Concept to company in 12 months: NyX Devices, Inc, a new MIT MechE startup, closes \$0.5 Million financing. (2011, September). *Precision engineering research group-Medical devices innovation center*. Retrieved from http://web.mit.edu/2.75/news/MIT%20Startup%20Nyx%20Devices%20Receives%20Funding.pd f.

2.2.1 6.933 Founder's Journey

Founder's Journey is a class for those with a technical background who are interested in finding out more about entrepreneurship. It seeks to help students "find and activate their entrepreneurial energy," by showing them what it takes to prepare the mind of a startup founder. It is taught as a series of guest lectures from distinguished guests with experience in various aspects of entrepreneurship. These lectures are accompanied by assignments which ask students to reflect on how these lectures tie into their journey. They also work in small teams to think through the process of an idea.

Founder's Journey began in the Fall of 2009 as a special subject in the EECS department, with a small group of about 15 handpicked students. It quickly grew to about 60 students, the size it is today. ¹⁹ In Fall 2012, it will move from its current status as a special subject (6.S976) to a regularly listed class in the EECS department (6.933).

An in-depth discussion of Founder's Journey can be found in Section 5.2.

2.2.2 15.390 A/B New Enterprises

The 15.390 New Enterprises class introduces itself as the class in which "we not only study entrepreneurs, we become entrepreneurs." ²⁰It is intended for students who want to start their own business, further develop an existing business, be on the management team in new enterprises, or better understand the entrepreneurial process. In this semester-long class, students will work in groups of three to create a technology-based enterprise, complete with business plan and investor pitch. Another important part of the course is a line-up of guest speakers and mentors who have experience with various facets of entrepreneurship.

Introduced in the 1960s, this class was the first entrepreneurship subject at MIT, and remained the only MIT class related to entrepreneurship until as late as 1990.²¹ Today, it is described by the Trust Center as "the gold standard foundation class for entrepreneurship

²⁰ 15.390 New Enterprises. (2011). *Syllabus*. Retrieved from http://entrepreneurship.mit.edu/sites/default/files/15.390_NewEnterprises_Fall11.pdf.

¹⁸ The Founder's Journey. (2012). *Overview*. Retrieved from http://web.mit.edu/founders/www/6.976%20information/details.html.

¹⁹ Zolot, K. (2012, May). Telephone interview.

²¹ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

learning in practice at MIT."²² Five out of six of the 2011 \$100K Business Plan Competition finalists were from 15.390.²³ Alumni of the class have founded companies such as MAST Industries, Genentech, and SolidWorks, Hubspot, and A123. It is now taught through the Trust Center.

2.3 Student Groups and Student Run Competitions

An important part of the MIT entrepreneurial ecosystem is the student groups and student-run competitions. They range from informal gatherings of like-minded students to share ideas and support each other, to complex programs that run the largest entrepreneurship competition on campus.

Many of these groups are Institute-wide, with participation from undergraduate and graduate students from technical fields and the Sloan school of business. Others are branded as Institute-wide but in practice only advertise to and involve Sloan students. Finally, some are branded as just for Sloan students. They are included in this study to measure their penetration to the technical undergraduates at MIT.

2.3.1 Entrepreneurs Club

Now in its 24th year, the MIT Entrepreneurs Club (E-Club) was formed in 1988.²⁴ It serves the student, faculty, staff, and alumni of the MIT, Harvard, and Wellesley communities. It focuses on developing all aspects of science and technology business creation. Though it welcomes members from business, engineering, arts and sciences, but is known for its mostly engineering focus. In 1989, the E-Club partnered with Sloan's New Ventures Association to

²² Martin Trust Center for MIT Entrepreneurship. (2012). *15.390 A/B new enterprises* (*spring, fall*). Retrieved from http://entrepreneurship.mit.edu/course/15390-ab-new-enterprises. (*spring, fall*). Retrieved from http://entrepreneurship.mit.edu/course/15390-ab-new-enterprises.

Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

form the MIT \$10K Competition, which is now known across campus, as the MIT \$100K Competition.²⁵

Club members support each other through the whole entrepreneurial process from "practice sessions for presenters, networking opportunities for current and potential team members, market research, seed and other funding research and matchmaking" to "conflict resolution (including negotiation and mediation) and post-mortems." The club does not focus on business plans, but is happy to help on the details and introduce new potential advisors, mentors and funders.

During academic terms, the E-Club meets every Tuesday at 6PM on MIT's campus. The meetings are composed of short 3-10 minute presentations followed by 10-20 minutes of intense feedback and discussion. The meetings are self-described as a "friendly, if critical, forum" for members to "present new science and technology startup ideas, develop and practice business presentation skills, and network across MIT's departments and research labs." Equally important is the informal networking that takes place after the meeting, as members share ideas, advice, contacts, and feedback.

The E-Club runs MIT's famous "The Nuts and Bolts of Business Plans" class during the January IAP term, which was offered for the 23rd time in January 2012. This six-session class was named one of nine Inc magazine's "Best Entrepreneurship Courses in America." Traditionally, about half of the class has been from the Engineering/Science/Architecture Schools and the other half from the Sloan School of Management. This class is often recommended to those planning to enter the MIT \$100K Competition.

 $^{^{25}}$ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

²⁶ E-Club. (n.d.). *About us.* Retrieved from http://web.mit.edu/e-club/www/about.html.

²⁷ E-Club. (n.d.). *Meetings*. Retrieved from http://web.mit.edu/e-club/www/meetings.html.

²⁸ Inc. Magazine (2010). *The best entrepreneurship courses in America*. Retrieved from http://www.inc.com/ss/best-entrepreneurship-courses-america#8.

²⁹ MIT Course 15.S21 The Nuts and Bolts of Business Plans. (2012). *Course information*. Retrieved from http://nutsandbolts.mit.edu/info.php.

2.3.2 Entrepreneurship Review

The MIT Entrepreneurship Review (MITER) was founded in 2010 as an online publication that examines the intersection of science, technology, and entrepreneurship- as captured in MITER's tagline: where Einstein meets Edison. MITER is student run, with a leadership team composed of MIT technical graduate students and MIT Sloan business students.

To meet its mission, MITER publishes articles that range from information on the latest innovations coming out of MIT to real-life stories from entrepreneurs. It includes a special section called the Entrepreneur's toolkit that provides selected articles with advice for aspiring entrepreneurs.

Though MITER was selected to be one of the components of the ecosystem studied in this thesis, it will not be included in the survey data presented. Unfortunately, the acronym MITER is very similar to MITERS, the MIT Electronics Research Society, a prominent undergraduate club devoted to building projects. This confusion caused survey respondents who were aware of MITERS to select that they were aware of MITER.

2.3.3 Global Startup Workshop

The MIT Global Startup Workshop (GSW) grew out of the MIT \$50K (now \$100K) competition. It was formed in response to queries coming in from organizations around the world about how to build a business plan competition for their communities. Each year, the GSW brings together "an international community committed to launching business plan competitions to stimulate and nurture entrepreneurship worldwide." At the 3-day workshop, MIT students pass on lessons they have learned about student team-based entrepreneurship to academic institutions from all over the world. Attendees ranging from entrepreneurs and financiers to professors and government agents discuss problems, generate ideas, share best practices, and network together.

The first MIT GSW was held in Cambridge, Massachusetts, USA in March 1998 and subsequent ones were held in locations all over the world. Each year, the MIT GSW is coplanned by a team of MIT students and a local team based in that year's workshop location.

³⁰ MIT GSW. (2012). *14 Years of GSW- 1998 to 2011*. Retrieved from http://www.mitgsw.org/index.php?id=4.

Today, the workshop brings together over 300 attendees every year. It has been held on six continents (except Antarctica!) and attracted participants from over 70 nations. ³¹

2.3.4 \$100K Entrepreneurship Competition

The MIT \$100K Entrepreneurship Competition is an umbrella term that encompasses three contests. Across the three contests, more than \$350 thousand dollars in prizes are given each year. ³² The winner of the Business Plan Contest is given the eponymous 100 thousand dollars. It is very well recognized across the Institute. The \$100K is often regarded the "the Granddaddy of university business plan competitions."³³

The competition is entirely student run, with a leadership team comprised mostly of Sloan students, working alongside MIT graduate and undergraduate students. Funding for the 100K comes from sponsors, including law firms, venture capital firms, public relations agencies, philanthropic foundations, and technology companies.³⁴

The \$100K began in 1989 as the MIT \$10K, in a collaboration between the MIT Entrepreneurs Club (which had mostly engineers)³⁵ and Sloan's New Ventures Association. The two organizations worked together to "create a competition that would take advantage of the winning combination of engineers and business students."³⁶

An in-depth discussion of the \$100K Entrepreneurship Competition can be found in Section 5.3.

³¹ MIT GSW. (2012). 14 Years of GSW- 1998 to 2011. Retrieved from http://www.mitgsw.org/index.php?id=4.

32 MIT \$100K. (n.d.). *Home*. Retrieved from http://mit100k.org/.

³³ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT.* Kauffman: The Foundation of Entrepreneurship.

³⁴ MIT \$100K. (n.d.). Current sponsors. Retrieved from http://mit100k.org/about/currentsponsors/.

³⁵ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT.* Kauffman: The Foundation of Entrepreneurship.

³⁶ MIT \$100K. (n.d.). *About*. Retrieved from http://mit100k.org/about/.

2.3.5 Sloan Entrepreneurs for International Development

Sloan Entrepreneurs for International Development (SEID) is a student-run organization for those that seek to drive sustainable global development through entrepreneurship. It sits at the intersection of international development and entrepreneurship at MIT Sloan, and is an active part of the MIT international development ecosystem.

SEID supports Sloan students who are interested in entrepreneurship by providing information on development classes at Sloan, working with the Career Development office to provide a variety of resources and networks to help support students interested in a career in international development, and offering SEID projects, which are consulting projects in which Sloan students work with companies focused on entrepreneurial international development work. It also keeps a blog giving information about international development opportunities at MIT and celebrating students' SEID projects.

2.3.6 Venture Capital & Private Equity Club

The MIT Venture Capital & Private Equity Club (VCPE) is a student group whose mission is to help its members learn more about and develop contacts within the venture capital and private equity industries. It hosts and co-hosts events at MIT about venture capital, private equity, entrepreneurship, and the commercialization of MIT technologies. These activities include speaker series, lectures, workshops, breakfast discussion series, symposiums, competitions, and conferences.

It brands itself as "one of MIT's largest and most visible cross-campus organizations." However, it is based at MIT Sloan and its leadership team is composed entirely of Sloan business students.

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³⁷ MIT Venture Capital & Private Equity Club. (n.d.). *Home*. Retrieved from http://www.mitvcpe.com/.

3 Study Design

The broadest goal of the study was to explore the visibility of various parts of the MIT entrepreneurship ecosystem and how that came to be. The study examines the ecosystem's visibility to the whole student population, from those who are not interested in entrepreneurship to those who have started a company while at MIT.

The study consists of two parts: a broad survey of a large population to gauge their awareness level of different parts of the ecosystem, followed by in-depth case studies of some of the groups that have been most effective in getting their name out.

This structured evolved as a way to address the tension between the need for the study to be short, so that it is appealing to more people, even though who are not interested in entrepreneurship, and the need to engage more deeply to learn more about individual experiences. The survey ends with an open-ended answer. From these responses, participants who might be interested in continuing the conversation further are identified and contacted.

3.1 Survey

There are many advantages to a web-based survey that make it well suited to gathering basic information from a large sample of people: convenience, rapid data collection, cost-effectiveness, and confidentiality.³⁸ In this study, these attributes to leveraged to get a large sample of responses from across the student population.

3.1.1 Survey Development Process

Survey development began by identifying the central questions to the study and creating a preliminary survey. At this stage, the study was still limited to only those that were interested in entrepreneurship and had started a company. The questions were more extensive and covered many aspects of their entrepreneurship experience- ranging from detailed demographic

³⁸ Rea, L., & Parker, R. (2005). *Designing and conducting survey research: A comprehensive guide*. San Francisco, CA: Jossey-Bass.

information, to their level of engagement with parts of the entrepreneurship ecosystem, to open ended questions about why they found each helpful or not.

This survey was then shown to two startup founders who offered feedback on the survey questions and design. The most important piece of feedback to come from this process was that it was too long. One of the startup founders interviewed said that he would not answer any survey that was more than 7 questions long.³⁹ Founders are notoriously busy and value their time very highly. In order to have many survey respondents, it was important for the survey to be short and straightforward.

Driven by this feedback, the survey was reborn in its current form, as shown in Appendix I. It was stripped to just the bare basics- asking about the respondent's exposure to each part of the entrepreneurship ecosystem. More open-ended, in-depth, and specific questions were moved to the interview portion of the study. Everyone on campus, not just startup founders, could answer the survey that remained. It was decided to expand the scope of the survey to include all segments of the student population, not just those that had started companies.

3.1.2 Final Survey Design

The final survey had 5 questions- 1 short answer for demographics, 2 yes/no questions to categorize the participant, 1 extended question about engagement with various parts of the ecosystem, and 1 long answer about which was the most helpful. See Appendix I for the final survey, as it was distributed.

3.1.2.1 Introducing the Survey

At the beginning of the survey, the respondent is greeted with a welcome message that conveys the following important points:

- Goal of the study: to better understand which parts of the ecosystem are visible to and work best for students.
- Impact of the study: help shape new entrepreneurship track at MIT.
- Confidentiality: identity never associated with answers or comments.
- Prizes: \$30 raffle. To induce participation, especially from those who are not interested in entrepreneurship, as they are less likely to participate simply to help improve the community.
- Follow-up: contact information for questions and concerns.

³⁹ Rustagi, K. (2012, May). In-person interview.

3.1.2.2 Demographic Information

Question 1: Email

MIT keeps a large database of information on the MIT community, the MIT People Directory. It can be used in an internet browser at http://web.mit.edu/people.html or through the "ldap" tool on Athena machines. This tool allows the collection of demographic information, such as name, graduating year, and major, by simply asking for an email, allowing the survey to be much shorter.

3.1.2.3 Splitting the Respondent Pool

Question 2: Are you interested in entrepreneurship?

Question 3: Have you started a company? (We'll leave it up to you to decide if your project would be considered a "company". Feel free to leave a note in the comment to clarify.)

These questions were used to divide the pool of all survey respondents into three sets: (1) those who are not interested in entrepreneurship, (2) those who are interested but have not yet started a company, and (3) those who are interested in entrepreneurship and have started a company. For the purpose of data analysis, the last two groups are often combined to reflect the group of all people who are interested in entrepreneurship.

For both questions, respondents were asked to self-identify, and those responses were taken at face values. No judgments were made by the researchers concerning the validity or legitimacy of the respondent's "interest" or "company." Options considered included only allowing companies that have raised money, had people working on it full-time, were making revenue, etc. Ultimately, it is the student's self-perception to their level of interest and the legitimacy of their company that most matters, so their self-assessment was used.

3.1.2.4 Awareness of and Engagement with MIT Entrepreneurship Resources

Question 4: What is your level of engagement with the following MIT entrepreneurship resources? Alumni: Please answer based on your familiarity at the time of graduation.

This question is a large 15 by 5 matrix of options. Each of the 14 parts of the ecosystem listed in Section 2 is listed (the 15th option is now Innovation Club, which is no longer active). Respondents are asked to choose their level of engagement with each of the 15 groups from the following 5 options: (1) Never heard of, (2) Heard of, but not used, (3) Participated in one of their programs [if any], (4) Worked with outside of formal programs [if any], (5) It's practically my second home.

Option 2 is important because it measures just the basic awareness of various parts of the ecosystem. While a student may not choose to engage with various groups and use those resources, these students can be aware of what is available to them.

Options 3 and 4 were included as two distinct choices in an effort to separate those who had simply entered a formal program from those who have gone above and beyond and really engaged with the resource. Informal discussion with survey respondents showed that these two choices were often confusing for respondents. Some groups had formal programs, others did not, and some respondents were not sure if their participation qualified as formal programs. For the purpose of data analysis, these options have been grouped into one category, "Have worked with."

Option 5 evolved out of the survey feedback from the student founders interviewed. They wanted to differentiate the programs that have had a huge role in their time at MIT and the life of their company from those they have worked with more briefly.

3.1.2.5 *Most Valuable Resources*

Question 5: Of the various resources, you've engaged with, which has been the most valuable to you and why?

We're interested in what works for students, so that we can make the MIT entrepreneurship community even stronger. If a resource has been especially great for you, brag to us about it! Feel free to name one that is not on the list above.

This question gives respondents a chance to engage more deeply with the survey. In addition to collecting information on the most valuable parts of the ecosystem, this question also enables identification of people who are excited about the topic and potentially willing to contribute more through in interviews.

3.1.3 Survey Distribution

The survey was developed and administered through SurveyMonkey, an online survey software and questionnaire tool. A raffle for a \$30 Amazon.com gift card was used to incentivize participation. The survey was distributed to the following mailing lists.

- Alpha Chi Omega sisters
- Class list for 15.S17. Special Seminar in Management: Application of Advanced Entrepreneurial Techniques
- Class list for 6.S976 Founder's Journey
- Jobslist, administered by EECS's Anne Hunter
- Mechanical Engineering undergraduates
- Next House residents
- Techfair planning board members

3.2 Interviews

Based on the results of survey, especially well-known groups from each of the three broad categories were identified and selected for an in-depth look. A key person in each of these three groups was interviewed to learn more about that resource and how it is made known to the student body. Undergraduate students who have devoted considerable time and energy to examining the entrepreneurship ecosystem at MIT were interviewed for their perspective. Finally, more than 25 students were contacted for input on how they found the resources that were most valuable to them.

4 Survey Results

A total of 130 responses were obtained. From these, 116 responses were used for this study (after graduate students, Sloan business students, and responses without email addresses were identified and removed). Most responses were from current students, with a few alumni responses.

4.1 Respondent Profile Summary

This data set was divided into two samples, based on whether students self-identified as being interested in entrepreneurship or not. The students who are interested in entrepreneurship

can then be further subdivided into those who have started a company, and those who have not yet done so. The sizes of each data set are shown in Table 1.

Total: 116					
Not Interested in Entrepreneurship	Interested in Entrepreneurship: 76				
	Company: 19	No Company: 56			

Table 1: Number of Survey Respondents at Each Level of Interest in Entrepreneurship.The pools are split based on self-identified interest in entrepreneurship and company founding history.

The composition of these responses cannot be seem as representative of entrepreneurship interest on campus. Two factors greatly increased the response rate from those who are interested in entrepreneurship: (1) survey distribution targeted specific mailing lists for those that were already interested in entrepreneurship, (2) the context of the study was more interesting to those who are already interested in entrepreneurship, so they are more likely to respond.

4.1.1 Students Not Interested In Entrepreneurship

A small sample of 40 undergraduate students and alumni who self-identified as not interested in entrepreneurship were surveyed. This represents about 1 percent of the total MIT undergraduate enrollment of 4384.

All four class years were evenly represented, with about a quarter of the respondents from each graduating year (2012-2015).

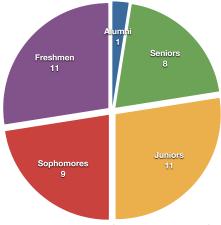


Figure 4: Class Year Makeup of Respondents Not Interested in Entrepreneurship. There was about even representation of each.

Ten majors were represented, including respondents from each of the top 6 largest majors at MIT. ⁴⁰ The most represented major in the survey was Mechanical Engineering (32.5%), followed by Electrical Engineering and Computer Science (25%). These are also the two largest majors at MIT. The majority of respondents were from the School of Engineering (75%). The School of Science was also represented (20%). The other three schools: Management; Humanities, Arts, and Socials Sciences; and Architecture and Planning were not represented.

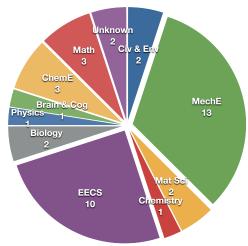


Figure 5: Major Makeup of Respondents Not Interested in Entrepreneurship. Mechanical Engineering and EECS students formed the majority of respondents.

4.1.2 Students Interested In Entrepreneurship

Seventy-six students and alumni who were interested in entrepreneurship responded to the survey.

All four class years were represented (class of 2012-2015), with a larger representation of seniors. The 5 alumni respondents were asked to answer based on their undergraduate experience, as of the end of their senior year.

⁴⁰ S., Chris. (2009, December). MIT Undergraduates by Major. *MIT Admissions*. Retrieved from http://mitadmissions.org/blogs/entry/mit_undergraduates_by_major.

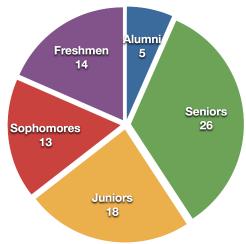


Figure 6: Class Year Makeup of Respondents Interested in Entrepreneurship. There were more seniors than the other classes.

The 76 respondents who are interested in entrepreneurship represent 9 undergraduate majors. Again, the majority of respondents were from EECS (45.8%) and Mechanical Engineering (38.9%), the two largest majors at MIT. The respondents who self-identified as being interested in engineering were overwhelmingly from the School of Engineering. The Sloan School of Management and the School of Science are also represented.

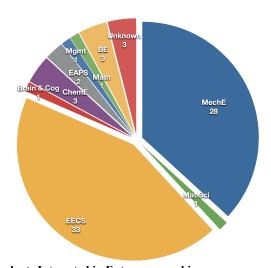


Figure 7: Major Makeup of Respondents Interested in Entrepreneurship.There is a significantly smaller fraction of students from majors other than EECS and mechanical engineering than for the respondents not interested in entrepreneurship.

4.1.3 Sampling Bias

In considering the data presented in this section, it is important to consider sampling biases resulting from survey distribution. This effects both the distribution of survey respondents and the frequencies of some answers.

For example, it was sent to the Mechanical Engineering undergraduate mailing list, causing an over-representation of mechanical engineering students in survey respondents. It was also sent to a jobs mailing list that, while open to all majors, consists primarily of EECS jobs and is administered through that department.

In order to most effectively reach students who were interested and/or active in entrepreneurship, several mailing lists of specific groups were targeted, including the Founder's Journey class mailing list and a small group of active student entrepreneurs who work with the Trust Center. This sampling bias exaggerates the visibility of some of these groups. However, this does not skew the data for students who are not interested in entrepreneurship.

4.2 Undergraduate Student Engagement with the Entrepreneurship Ecosystem

The response sample is over-representative of those who are interested in entrepreneurship, so the data cannot be considered in one large group of 116 responses from participants of all interest levels. Instead, the large data sample will be split into two samples, one from students who aren't interested in entrepreneurship, and one from students who are interested.

4.2.1 Engagement by Students Who Are Not Interested in Entrepreneurship

2.1 Engagement by Students who Are Not Interested in Entrepreneurship						
	Never heard of	Heard of, but not used	Have worked with	It's practically my second home		
Deshpande Center for Technological Innovation	93%	8%	0%	0%		
Enterprise Forum	83%	18%	0%	0%		
Legatum Center for Development and Entrepreneurship	78%	20%	3%	0%		
Martin Trust Center for MIT Entrepreneurship	98%	3%	0%	0%		
Technology Licensing Office	83%	18%	0%	0%		
Venture Mentoring Service	98%	3%	0%	0%		
Founder's Journey (6.S976)	70%	30%	0%	0%		
New Enterprises (15.390)	93%	8%	0%	0%		
Entrepreneurs Club (E-Club)	90%	10%	0%	0%		
Global Startup Workshop	80%	20%	0%	0%		
\$100K Entrepreneurship Competition	15%	80%	5%	0%		
Sloan Entrepreneurs for International Development	90%	10%	0%	0%		
Venture Capital & Private Equity Club	90%	10%	0%	0%		

Table 2: Table- Engagement with 13 Different Parts of the Entrepreneurship Ecosystem by Students Who Are Not Interested in Entrepreneurship.

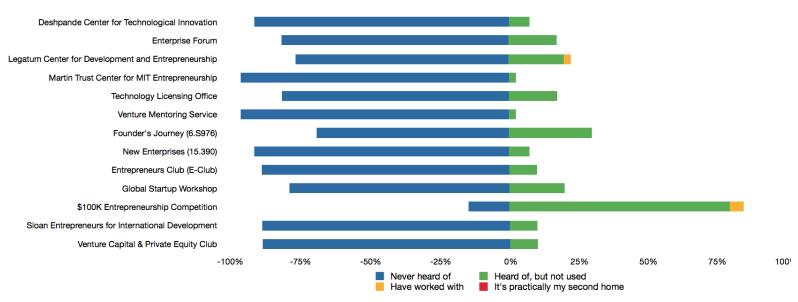


Figure 8: Graph- Engagement with 13 Different Parts of the Entrepreneurship Ecosystem by Students Who Are Not Interested in Entrepreneurship.

There is low visibility and engagement.

Among those who self self-identify as not interested in entrepreneurship, most have not worked with any of the parts of the entrepreneurship ecosystem. Of the 40 participants surveyed, only 3 had worked with any of the groups. Of the parts of the ecosystem listed, only this population had only used the \$100K and the Trust Center.

To those who are not interested in entrepreneurship, the ecosystem is largely invisible. All but one of the groups has been heard of by less than a third of this population. The Trust Center, VMS, and 15.390 New Enterprises, three of the resources that students who have started companies have identified as the most valuable, 41 are each unknown to more than 90 percent of those not interested in entrepreneurship. In other words, some of the strongest parts of the ecosystem, which would be naturally good ambassadors for entrepreneurship on campus, are unknown to those whose interests are not already peaked.

This fact explains the statistic that more than half (58%) of graduating class of 2012 did not feel adequately prepared to "start a company." The entrepreneurship ecosystem at MIT may be rich and robust, but it remains invisible if you are not interested in looking for it.

The one clear exception to this is the MIT \$100K Competition, which has an incredibly high rate of name recognition among those who are not interested in entrepreneurship. About 6 out every 7 students, even though they are not interested in entrepreneurship, have heard of the \$100K. The widespread recognition of the competition makes it a likely first-stop for those who are beginning to be interested in entrepreneurship for the first time.

The second most well-known part of the ecosystem is the class 6.S976 Founder's Journey. With goal of finding and activating a student's startup energy, this class asks its alumni to spread the word about the class and advertises regularly on various mailing lists.

The third most well-known group is the Legatum Center, which focuses on entrepreneurship for international development. It in addition to being involved in the entrepreneurial ecosystem, it is also involved in MIT's international development ecosystem (D-Lab, Poverty Action Lab, Public Service Center, etc.), which makes it more well known. For

Survey comments. See Appendix II.
 2012 Senior Survey - Overall Results. (2012, May). MIT office of the provost, *Institutional research*. Retrieved from http://web.mit.edu/ir/surveys/2012SeniorSurvey Overall.pdf.

example, one of the survey respondents who has only worked with Legatum Center commented that she has only worked with it "in conjunction with finding funding for D-Lab projects."

4.2.2 Engagement by Students Who Are Interested in Entrepreneurship

	Never heard of	Heard of, but not used	Have worked with	It's practically my second home
Deshpande Center for Technological Innovation	74%	24%	3%	0%
Enterprise Forum	75%	25%	0%	0%
Legatum Center for Development and Entrepreneurship	57%	38%	5%	0%
Martin Trust Center for MIT Entrepreneurship	70%	20%	4%	7%
Technology Licensing Office	46%	42%	12%	0%
Venture Mentoring Service	64%	24%	12%	0%
Founder's Journey (6.S976)	28%	54%	17%	1%
New Enterprises (15.390)	59%	34%	4%	3%
Entrepreneurs Club (E-Club)	53%	37%	11%	0%
Global Startup Workshop	63%	34%	3%	0%
\$100K Entrepreneurship Competition	3%	78%	18%	1%
Sloan Entrepreneurs for International Development	90%	10%	0%	0%
Venture Capital & Private Equity Club	90%	10%	0%	0%

Table 3: Data Table- Engagement with 13 Different Parts of the Entrepreneurship Ecosystem by Students Who Are Interested in Entrepreneurship.

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⁴³ Survey comment.

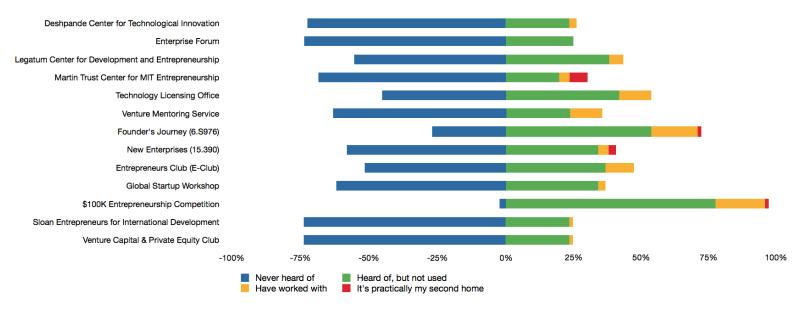


Figure 9: Graph- Engagement with 13 Different Parts of the Entrepreneurship Ecosystem by Students Who Are Interested in Entrepreneurship.

There is higher visibility and engagement. The Trust Center emerges as a place that people really value.

Awareness of the ecosystem increases for those who are interested in entrepreneurship, but not hugely so. Of the parts of the ecosystem studied, only three-\$100K, 6.S976 Founder's Journey, and the Technology Licensing Office- are known about by more than half of those surveyed who are interested in entrepreneurship. The majority of this population has not heard of Venture Mentoring Service and the Trust Center, which were often named as the most valuable resources in the ecosystem by students who have started companies.

None of the parts of the ecosystem studied have been used by more than a fifth of those interested in entrepreneurship. This may be due to low engagement with the ecosystem by students, but it also speaks to how the entrepreneurship ecosystem at MIT works. Members of the ecosystem tend not to go to every group, getting a little from each. Rather, members find their niche and engage deeply there- of the 19 students who have founded companies, 7 (37%) of them have found a place in the ecosystem that they would describe as "practically my second home."

The \$100K and Founder's Journey are also the most well-known parts of the ecosystem to those who are interested in entrepreneurship. These resources will be discussed in more detail in Section 5.2 and 5.3. For those who are interested in entrepreneurship, they are also the most utilized parts of the ecosystem. Other frequently used resources are VMS, the TLO, and the Trust Center.

4.3 Progression of Interest in Entrepreneurship over MIT Career

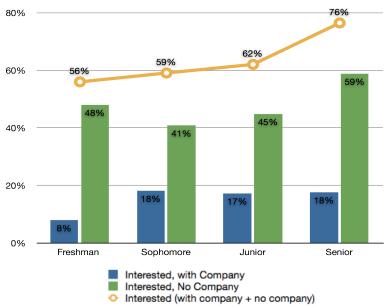


Figure 10: Growth in Student Interest in Entrepreneurship over Time at MIT.

Due to the way the survey participation was solicited (target emails to student groups and classes with high interest in entrepreneurship), these numbers cannot be seen as absolute values of the MIT student body's interest in entrepreneurship. However, it is valid to see that the interest *is* increasing over time.

MIT students show increased interest in entrepreneurship over the course of their undergraduate career. Since there is sampling bias that over-samples those who are interested in entrepreneurship, the numbers in the chart above cannot be viewed as absolute values for the percentage of the MIT undergraduate student body that is interested in entrepreneurship. Rather, it is important to note the increase in that percentage over time. While 56 percent of freshmen surveyed were interested in entrepreneurship, 76 percent of seniors surveyed were interested in entrepreneurship- an increase of 20 percent.

Those who are interested in entrepreneurship can be split into two categories- those who have started a company, and those who have not. Those who have started a company are more serious about entrepreneurship, while those who are only interested have not expressed that same level of dedication. The percentage of those who have started a company increases between freshman and sophomore years, and then stays approximately the same through the next three years. In other words, arrival at MIT allows students a chance to try starting their own company, but a student's tendency to take advantage of that freedom does not increase as they progress through their undergraduate career. The percentage of students who are more casually interested

in entrepreneurship fluctuates throughout the first three years, and is markedly higher in the senior year. Students are showing an uptick in entrepreneurial interest at the end of their MIT undergraduate career.

5 In-Depth Case Studies

In this section, case studies of three different parts of the ecosystem will be conducted indepth. A group was chosen from each of the three broad categories:

- Institute Offices and Centers: Martin Trust Center for MIT Entrepreneurship
- Academic Classes: Founder's Journey
- Student Groups and Student Run Competitions: \$100K Entrepreneurship Competition

5.1 MIT Offices and Centers: Martin Trust Center for MIT Entrepreneurship

The Trust Center began as the MIT Entrepreneurship Center, when, in 1990, Professor Edward Roberts '57 proposed the formation of an MIT-wide entrepreneurship program. At the time the Center was proposed, MIT offered only one related class and had only one faculty member doing research in the field. From the beginning, the Trust Center has had a people focus- the goal of the original Entrepreneurship Center was to "educate and develop those who will create, build and lead tomorrow's successful high tech ventures. Following MIT's motto of "Mens et Manus," Roberts wanted to build a teaching program accompanied by direct coaching and mentoring. The Center was expanded, renovated, and re-dedicated as the Martin (1958) Trust Center for MIT Entrepreneurship in November 2011. The Trust Family Foundation's donated \$10 million to support "construction costs and ongoing programming."

⁴⁴ Martin Trust Center for MIT Entrepreneurship. (n.d.). *History of the Trust center for MIT entrepreneurship*. Retrieved from

http://entrepreneurship.mit.edu/about/history-mit-entrepreneurship-center

⁴⁵ Martin Trust Center for MIT Entrepreneurship. (n.d.). *History of the Trust center for MIT entrepreneurship*. Retrieved from

http://entrepreneurship.mit.edu/about/history-mit-entrepreneurship-center

5.1.1 Trust Center Programming

The Trust Center sees its support and activities for students as falling under one of four main categories: Education, Nurturing, Networking, and Celebration.

1. Education

The Center offers nearly 30 courses, seminars, and labs that educate and develop leaders of new high-tech ventures based on MIT's leading-edge technology and business research. The classes cover both the foundational areas of the theory and practice of entrepreneurship, and include courses that focus on specific entrepreneurial skill sets, industries, and hands-on learning. ⁴⁶

2. Nurturing

The Center nurtures the entrepreneurship community on-campus by supporting the many student-run entrepreneurship organizations, such as the MIT \$100K Competition. It also nurtures students more individually through its Entrepreneurs in Residence program, which allows students to quickly get in touch with external advisors and resources. There are 16 entrepreneurs in residence, each with their own focus area. They hold short office hours throughout the semester to offer students unbiased professional advice.

3. Networking

The Center hosts networking events throughout the year to connect top students, faculty, entrepreneurs, and venture capitalists. It keeps a comprehensive calendar of entrepreneurship related events at MIT, both those hosted by the Trust Center and those of other programs in the MIT entrepreneurial ecosystem.

4. Celebrating

Finally, the Center celebrates the successes of MIT entrepreneurs by providing news from all the programs of the ecosystem through blogs, news posts, and Trust Center TV, a series of short videos by the Trust Center staff.

In addition to these resources, the Trust Center also offers its facilities to students, providing a space where they can meet together or work on their own projects. While the office

⁴⁶ Martin Trust Center for MIT Entrepreneurship. (n.d.). *Entrepreneurship Education Curriculum Tool*. Retrieved from http://entrepreneurship.mit.edu/curriculum/entrepreneurship-education-curriculum-tool.

officially has normal weekday work hours, authorized students have access to the space after hours. It has evolved into a physical center around which a small, active group of student entrepreneurs have formed a community.

5.1.2 Data and Discussion

While the Trust Center is not well known to those who are not interested in entrepreneurship, it is well-known and well-beloved to active student entrepreneurs who have started companies. Only 1 of the 40 (2.5%) student students who are not interested in entrepreneurship have heard of the Trust Center. Among students who are interested in entrepreneurship, nearly a third (30%) have heard of the Trust Center. The true value of the Trust Center is best seen when focusing on just the subset of the respondents who not only are interested in entrepreneurship, but have also started companies. In this population, four out of 5 respondents (79%) know of the Trust Center, and over a quarter describe it as practically their second home. This data is shown in Figure 11.



Figure 11: Awareness of Martin Trust Center for MIT Entrepreneurship by Groups with Varying Levels of Interst in Entrepreneurship.

Top: not interested. Middle: interested, but haven't started a company. Bottom: interested and has started a company.

The Trust Center's focus is on people, not the ventures. Rather than critiquing the idea, the Trust Center focuses on helping students cultivate the skills and connections needed to start successful ventures. Colin Kennedy, the Program Manager at the Trust Center believes that students should do 90% of what he does and is dedicated to creating a community of engaged students to make it possible. He cites StartLabs, a non-profit created by MIT students with the goal of helping student engineers bring technical innovations to society through entrepreneurship, as an example of this student-driven approach. In Spring 2012, the Trust Center started 15.S17 Special Seminar in Management: Application of Advanced Entrepreneurial Techniques, a night class that offers students who are working on creating new ventures a place to support each other through a small peer group.

There are several factors that contribute to the Trust Center's low name-recognition among the student body at large (especially those who are not interested in entrepreneurship). First, it was only recently re-dedicated as the Martin Trust Center for MIT Entrepreneurship. For most of its history, it was known simply as the MIT "Entrepreneurship Center," often called the "E-Center." Survey respondents may have known about the "E-Center," but not recognized it as the "Trust Center." Second, while the Center runs and supports many programs to promote entrepreneurship, it is those programs who gain name-recognition, not the Center itself. For example, two of the programs it sponsors to increase the visibility of entrepreneurship at MIT are Startup Bootcamp and t=0. If a student is interested enough to investigate further, these programs might lead them to the Trust Center. For example, one of the students interviewed said that he had found the Trust Center through the Center's "H@cking Medicine" event. House of the students who do not engage in this follow-up, the Trust Center's name remains unknown.

The most common way for students to find their way to the Trust Center is through referrals. Kennedy believes that word-of-mouth is the best way to reach students and that it is not effective to "flyer all the walls saying 'If you have an idea, come by our office.'" Instead, the Trust Center believes that "good people recruit good people" and relies on students who've found value there to tell their friends about this resource. This is confirmed in brief email interviews with survey respondents who have used the Trust Center. The reliance on word-of-mouth explains the Trust Center's low name-recognition among students who are not interested in entrepreneurship, but dramatically increased recognition as students become more interested in entrepreneurship. However, among all the parts of the ecosystem studied, the Trust Center has the highest utilization rate of students who have heard of it. The "utilization rate" refers to the fraction of students who have used a resource out of all the students who have heard of it.

⁴⁷ Anonymous. (2012, May). Email interview.

Part of Entrepreneurship Ecosystem	Utilization Rate
Deshpande Center for Technological Innovation	10%
Enterprise Forum	0%
Legatum Center for Development and Entrepreneurship	12%
Martin Trust Center for MIT Entrepreneurship	35%
Technology Licensing Office	22%
Venture Mentoring Service	33%
Founder's Journey (6.S976)	25%
New Enterprises (15.390)	16%
Entrepreneurs Club (E-Club)	22%
Global Startup Workshop	7%
\$100K Entrepreneurship Competition	20%
Sloan Entrepreneurs for International Development	5%
Venture Capital & Private Equity Club	5%

Table 4: Utilization Rate of Various Parts of the Entrepreneurship Ecosystem.

The Trust Center has the highest utilization rate, which means the largest fraction of those who has heard of it have used it.

The Trust Center does not do mass-advertising to the entire student body, instead relying on people who are already involved to tell those who would find value there. Once students do become engaged with the Trust Center, they tend to find tremendous value there, as evidenced by the high proportion of students who consider it "practically a second home" (26%). When asked what resource has been most valuable to them, survey respondents raved:

"Hands down - the Trust Center. They have been extremely generous and always there for us. Bill Aulet is an amazing source of sound feedback and advice and I am constantly grateful that he takes the time for students and alumni like myself to directly foster entrepreneurship."

"The Martin Trust Center for Entrepreneurship has been by far the most attractive and valuable resource for entrepreneurship on campus. Having experienced, fast-paced, friendly and welcoming mentors requires people with a rare balance of intelligence, experience, intuition and humbleness. Those at the Trust Center have just that balance and the space is also excellent."

"The Martin Trust Center for MIT Entrepreneurship has been a fantastic resource, cultivating me from an idea to a plan to a company that we're

5.2 Academic Classes: 6.933 Founder's Journey

Since it began as a small special subject for a handpicked group of 15 students in Fall 2009, Founder's Journey has grown to be one of the most talked about and well-known entrepreneurship classes at MIT. It is a class designed for engineering undergraduates who aspire to be first-time company founders. It tries to demystify the process of starting a company and provide students experience with rapid project iterations to explore the process of validating an idea, connections with like minded students, and access role models and inspirations through guest speakers. According to its instructor, Ken Zolot, it is ideally taken during the student's sophomore or junior year. ⁴⁸

5.2.1 Founder's Journey Curriculum

In Founder's Journey, students are asked to engage the process of ideating and vetting those ideas in quick succession. While it is certainly encouraged to think through the ideas deeply and research it well, the focus is on rapid iteration and experiencing the process of beginning a venture many times during the course of a semester. This is usually done in teams, so that students can get to know others in the community. Students are asked to create new ideas for fresh ventures, rather than reusing their favorite idea from before they started the class. The focus is on process, not product. Zolot believes firmly in learning by doing.

An important part of the class are the guest speakers that the class hosts. Past guest speakers have included Diane Greene, Paul English, Drew Houston, Bob Langer, and Peter Thiel. In addition to these prominent members of the entrepreneurial community, the class has a diversity of guests who speak to all different parts of the founder's experience, in order to give students a sense of the journey they are about to undertake. For example, previous semesters' students who've gone on to found companies speak to serve as a role model that is more

⁴⁸ Zolot, K. (2012, May). Telephone interview.

accessible. Guests are brought in to give a nano-MBA, imparting essential business knowledge, or to speak about search engine optimization.

These speakers often blog about or mention the class, giving it a reputation beyond MIT. The class was given a shout-out during Inc. Magazine's discussion of the best entrepreneurship classes of 2011.

5.2.2 Data and Discussion

Of MIT's 30 plus classes on entrepreneurship⁵⁰ Founder's Journey is one of the most well-known to undergraduate students on campus, with nearly 1 in 3 (30%) of students who are not interested in entrepreneurship knowing about it. Among students who are interested, its visibility rises to 72 percent. It is designed to be an introduction class for those at the very beginning of the process. For many of its students, the class is their first step in their journey. This explains the unusual result that a survey participant who is interested in entrepreneurship but has not yet founded a company considers it practically their second home, while none of the participants who have started a company are engaging that deeply with the resource. Of those who have already founded a company, 32 percent have taken Founder's Journey, while 21 percent have never heard of it.



Figure 12: Awareness of Founder's Journey by Groups with Varying Levels of Interest in Entrepreneurship. Top: not interested. Middle: interested, but haven't started a company. Bottom: interested and has started a company.

The class is advertised to the course mailing lists, but is also spread by word of mouth. Each semester, the instructor encourages current students to recommend the class to those with

⁴⁹ Buchanan, L., (2011). The 10 best entrepreneurship courses in America. *Inc. Magazine*. Retrieved from http://www.inc.com/magazine/20110401/the-10-best-entrepreneurship-courses-of-2011.html

⁵⁰ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

an interest in entrepreneurship who would benefit from it. When current students were asked about how they heard about the class, most attributed it to a friend's recommendation.⁵¹

Through Spring 2012, Founder's Journey was considered a special subject in the EECS department, and did not have an official course listing (See Figure 13). This prevented it from being stumbled upon in the course catalog. This contrast sharply to 15.390 New Enterprises, which the majority of students contacted in an email interview said they found through the course listings. Beginning Fall 2012, Founder's Journey will also be in the course listings, and may see tremendous growth.

6.S976-6.S979 Special Subject: Electrical Engineering

G (🗣, 🕏) 🏗 🖰

Prereq: Permission of instructor

Units arranged

Covers subject matter not offered in the regular curriculum. Consult department to learn of offerings for a particular term.

Consult Department

Figure 13: Spring 2012 course listing for Founder's Journey.

Through this semester, the class was a special subject and the course description did not include any details on what the class was about

When asked if the class had reached capacity, Zolot mentioned that while the physical capacity of the classroom (90 people) had not been reached, it was best for speakers and lecturers if the class had the size of about 40 to 50. However, if interest in the class grew, he could more sections and have others teach those sections.

A few of the survey respondents who did not take Founder's Journey mentioned that they had heard excellent things about the class from friends and would have taken it if it had fit in their schedule. In describing why the class had been the most valuable resource to him, survey respondents answered:

"Founder's Journey was a great overview of the topic of entrepreneurship. I feel like I got a good idea of resources available, and a good network of people to ask for advice."

"I've been taking part in Founder's Journey and think it's a great class since we get to see many amazing guest speakers every week."

"Founder's Journey was a great overview of the topic of entrepreneurship. I feel like I got a good idea of resources available, and a good network of

⁵¹ 8 email interviews with current students. (2012, May).

5.3 Student Groups and Student-Run Competitions: MIT \$100K Competition

The MIT \$100K Entrepreneurship Competition first began in 1990 as the MIT \$10K. From the beginning, it has had a strong emphasis on engaging both the technical and business sides of campus. It is run under the Engineering School and Deshpande Center, but has an office space and gets support from the Trust Center. The Competition has grown tremendously its inception, becoming the \$50K in 1996, and the \$100K, as we know it today, in 2006. There were 54 participants in 1990's first \$10K, and the competition has grown considerably. In 2012, the \$100K received 305 applications (including the Clean Energy Prize).

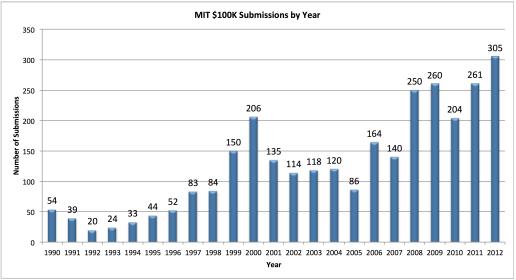


Figure 14: MIT \$10/50/100K Submissions by Year.

2008, 2009, and 2011 include Clean Energy Prize Submissions. Data sent as follow-up to interview with Adam Borelli, 2012 Managing Director of the \$100K Competition.

⁵² Borelli, A. (2012, May). Telephone interview.

⁵³ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

Over the course of the past 22 years, participants have come from all 5 of MIT's schools and more than 27 of its departments and labs. ⁵⁴

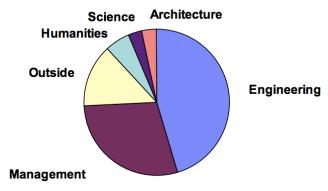


Figure 15: Breakdown of \$100K Participants by MIT School. Every school participates, with the most participants coming from the School of Engineering. http://www.mitarabcompetition.com/images/pdf/ken-morse.pdf

5.3.1 MIT \$100K Competitions Structure

Today, the \$100K Entrepreneurship Competition is composed of three different contests: Elevator Pitch Contest, ACCELERATE Contest, and the Business Plan Contest. Over the course of the three contests, more than \$350K in cash and prizes are given annually. Waseem Daher, COO of Ksplice, the 2009 Business Plan Contest winner, describes the set of \$100K contests as "year long experience" like a "long distance race" where the Elevator Pitch Contest is the "warm-up" and the Business Plan Contest is the "marathon." 55

The Elevator Pitch Contest is held in the fall. Contestants are given 60 seconds to pitch an idea for the 5000 dollar prize. According to the \$100K, the Elevator Pitch Contest is about "idea generation, connecting with others who have similar interests, and learning how to present your pitch to a potential investor in a moment's notice." In January 2012, the \$100K launched the first ever ACCELERATE, an intense month-long program where a team executes their idea with the help of mentors and a thousand dollar funding. It ends with Demo Day, where the teams

 $^{^{54}}$ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

⁵⁵ Daher, W., (2009, May). Inside View of the MIT 100K Competition—How One Team Got to Tonight's Finals. *Xconomy*. Retrieved from http://www.xconomy.com/boston/2009/05/13/inside-view-of-the-mit-100k-competition-how-

one-team-got-to-tonights-finals/.

56 MIT \$100K. (n.d.). *EPC*. Retrieved from http://mit100k.org/epc/.

compete for the 10 thousand dollar prize. Finally, teams can present completed ideas and business plans for the largest contest, the Business Plan Contest. A panel of experienced entrepreneurs, venture capitalists, and legal professionals judges the business plans.

For each of these contests, there are six distinct tracks: (1) Emerging Market, (2) Energy, (3) Life Sciences, (4) Mobile, (5) Products and Services, and (6) Web/IT. ⁵⁷A semi-finalist is chosen from each of these tracks.

MIT Business Plan Contest (BPC) Grand Prize Judging (3:00-6:00) Grand Prize May 14th BPC Ceremony (7:00) Judging 15 judges Panel Judging Panel Panel Panel Panel Panel full bolan 5 judges per panel 1 VC mentor Consumer Mobile Develop Energy Aero 1 legal mentor. categories 5 teams 51k expense account Semi-finalist Announcement Ceremony (5 teams per track) Ceremony March 6 5 judges Panel Bio Product Mobile Web Develop Energy Agro Feb 28* 150-200 teams

Figure 16: Sample \$100K Business Plan Contest Structure and Calendar.

The contest consists of several steps spread over the course of a few months. Each team competes first within a specific track and then against winners of other tracks.

For its participants, the \$100K aims to help them through the process of constructing a new venture by bringing together a network of resources such as feedback from top VCs and entrepreneurs, media exposure, mentorship, educational guidance, networking and the cash and prizes. In addition to running the competition, the \$100K Competition also provides support. All participants have access to "coaches corners." Semifinalists are assigned two mentors, one

⁵⁷ MIT \$100K. (n.d.). *About*. Retrieved from http://mit100k.org/about/.

venture mentor (VC's, entrepreneurs, etc.) and one legal mentor. The \$100K is more than a competition, it is a community.

The \$100K has a proud history as both a pioneer and modern leader in on-campus business competitions. In its March 1998 profile of the contest, Inc magazine describes its role as: "Not all business-plan competitions on university campuses are equal. To put it another way, the one at the Massachusetts Institute of Technology, in Cambridge, Mass., is more equal than all the others." Throughout its history the \$100K has created of "over 160+ companies with aggregate exit values of \$2.5 billion captured and a market cap of over \$15 billion." These companies have raised \$1.3 billion in venture capital funding and have created more than 4600 jobs. There have been at least 5 \$100K companies that have completed successful public offerings.

5.3.2 Data and Discussion

The \$100K stands out as the most well-known part of the entrepreneurship ecosystem to the undergraduate student body. This is especially pronounced among students who self-identify as not being interested in entrepreneurship. In this demographics, 85 percent of survey participants have heard of the \$100K, while most of the other parts of the ecosystem have a name recognition of less than 50 percent. Among students who are interested in entrepreneurship, only 2 of the 76 (3.5%) have not heard of the \$100K. It also has the distinction of being the only group studied that is known to everyone survey participant who has started a company.



Figure 17: Awareness of Founder's Journey by Groups with Varying Levels of Interest in Entrepreneurship. Top: not interested. Middle: interested, but haven't started a company. Bottom: interested and has started a company.

http://mit100k.org/about/.

http://mit100k.org/about/.

⁵⁸ Ballon, M., (1998, March). Entree to Riches: Winning at MIT. *Inc. Magazine*. Retrieved from http://www.inc.com/magazine/19980301/882.html

⁵⁹ MIT \$100K. (n.d.). *About*. Retrieved from

⁶⁰ MIT \$100K. (n.d.). *About*. Retrieved from

⁶¹ Roberts, E., & Eesley C. (2011). *Entrepreneurial impact: The role of MIT*. Kauffman: The Foundation of Entrepreneurship.

The primary way the \$100K Competition advertises is through email. It sends out notices about its events and competitions to all the course mailing lists, both undergraduate and graduate. It also tries to reach the entire campus by putting up posters throughout the school and advertisements on the LCD screens in the halls. The \$100K also does targeted outreach by pitching to relevant classes and student groups.

The \$100K Competition has traditionally had an easier time getting graduate and business students than undergraduates, and is actively working to improve their undergraduate participation. In 2012, it launched the first ever "Greek Challenge," promising one sorority and one fraternity with the most entries to the Business Plan Contest 500 dollars in cash prizes. That year about 45 to 50 of the 215 teams were composed of primarily undergraduate students. ⁶²

In addition to the \$100K Competition's own efforts, wide press coverage of the competition and its winners from both within and outside of MIT helps to bolster its reputation. Borelli emphasizes that the \$100K Competition's history contributes to its name-recognition, with each successive year's efforts adding to that.⁶³

As the most well-known part of the MIT entrepreneurship ecosystem, the \$100K Competition receives many submissions. It is currently not at capacity, but would have to find more judges if participation grew substantially- a problem it would welcome. More importantly, since the \$100K Competition is a high-visibility program, it will attract many submissions, but since it is also hyper-competitive, few of those submissions will do well in the competition. While the \$100K leadership team is glad to see people who are interested in entrepreneurship jumping in and getting started by participating in the competition, they also acknowledge that only few of the teams can do well and do not want to discourage teams that don't do well from their idea or entrepreneurship in general.

The \$100K is open to collaborating with other parts of the ecosystem to provide resources for students who are earlier in their entrepreneurial journey and need more support. The \$100K has also considered starting its own year-long program to help prepare students who

Borelli, A. (2012, May). Telephone interview.
 Borelli, A. (2012, May). Telephone interview.

are interested in entrepreneurship and need more time to develop both that interest and their skills. ⁶⁴

Even for students who are not ready to be competitive, the \$100K Competition still serves to increase the visibility of entrepreneurship on campus. One survey respondent commented: "100k has been useful to really see the success of various start ups and how they got there." Another commented that the \$100K "seems the most exciting." Finally, the founder of a former Business Plan Competition winner said:

"The 100K Business Plan Competition was life changing for me. It gave me the resources to start my company, and winning it gave me the credibility to get even more funding. It really got me out of my comfort zone...shmoozing with the Sloan people, making me realize maybe I should wear something other than a hoodie and T-shirt."

6 Conclusion

This study sought to understand why the majority of undergraduate graduating seniors do not feel adequately prepared for entrepreneurial enterprises, despite all the various resources available through the different parts of MIT's entrepreneurship ecosystem, by focusing on lack visibility as the central hypothesis.

Awareness of entrepreneurial resources, by both students interested in and not interested in entrepreneurship, was measured through an online survey. Survey results confirm they hypothesis that there is low awareness of the parts of the entrepreneurial ecosystem. Students who self-identified as being not interested in entrepreneurship did not know any of the programs but the \$100K Competition. The majority of students who self-identified as being interested in entrepreneurship did not know about many of the resources their peers who have started companies have found the most helpful.

Follow-up interviews were conducted with students to hear about their entrepreneurship experiences. Three different programs who were exemplary in raising awareness and providing valuable services were selected for in-depth analysis: the Martin Trust Center for MIT Entrepreneurship, Founder's Journey, and the MIT \$100K Competition.

⁶⁴ Borelli, A. (2012, May). Telephone interview.

These programs reached out to the student body in two major ways: emails to course mailing lists and word of mouth. Using emails sent to the majority of the student body, the\$100K was able to gain massive visibility to undergraduate students. On the other hand, the Trust Center does not use mass emails, relying instead on word-of-mouth recommendations from the students who are already familiar with the Center. This highly targeted advertising gives it the highest utilization rate (percentage of students who know about it who also use it) of all the parts of the ecosystem. It also allows the Trust Center to build a community of students who have found a second home there. Founder's Journey uses both of these methods, though most of its students sign-up because of a word-of-mouth recommendation. Moving forward, it will gain a more permanent place in the course listing, alongside a clear description of the class- this may lead to a shrinking of the role of word-of-mouth in the enrollment of future students.

Appendix I: Survey

ntrepreneurship Survey					Exit this surve
hank you for your input!					
am writing a thesis on the entreprer	neurship ecosystem he	ere at MIT. We hope to bette	er understand what works t	or students, and what does	n't.
his information will also help shape	a potential new entrep	oreneurship track. Your opin	ions will make the new pro	ogram the best it can be.	
Rest assured that your email and ide	ntity will never be ass	ociated with your answers a	nd comments.		
hank you again for your help! Every	one that participates i	n the survey will be entered	into a raffle for a \$30 Ama	zon.com gift card.	
you have any questions, please fee	el free to email me at l	kuan@mit.edu.			
k 1. Email					
≮2. Are you interested in entrepre	eneurshin?				
Yes!					
Nope.					
3. Have you started a company? (We'll leave it up to you to decid		ıld be considered a "comp	any". Feel free to leave	a note in the comment cla	rify.)
Yes.					
No.					
Comments (if any)					
		<u>//</u>			
≮4. What is your level of engagen	ant with the following	ag MIT ontropropourship r	neourone?		
Alumni: Please answer based or			esources		
	Never heard of	Heard of, but not used	Participated in one of their programs (if any)	Worked with outside of formal programs (if any)	It's practically my second home
Technology Licensing Office	0	0	O	O	0
nnovation Club	0	0	0	0	0
Entrepreneurship Review (MITER)	0	0	0	0	0
Deshpande Center for Technological			0		
Venture Capital & Private Equity Club	0	0	0	0	0
New Ventures (15.390)	0	0	0	0	0
Enterprise Forum	0	0	0	0	0
Martin Trust Center for MIT	0	0	0	0	0
Entrepreneurship Founder's Journey (6.S976)	0	0	0	0	0
\$100K Entrepreneurship Competition	0	0	0	0	0
Global Startup Workshop	0	0	0	0	0
Legatum Center for Development and	0	0	0	0	0
Entrepreneurship Entrepreneurs Club (E-Club)	0	0	0	0	0
	0	0	0	0	0
Venture Mentoring Service Sloan Entrepreneurs for International	0	0	0	0	0
Development	0	0	0	0	0
Comments (if any)					
5. Of the various resources, you We're interested in what works f				even stronger. If a resour	rce has been especially
reat for you, brag to us about it!		and the same of th			
eel free to name one that is not o	n the list above.		7		
		Done			

Appendix II: Selected Comments

- \$100K Entrepreneurship Competition has the most publicity to induce participation.
- \$100K, but i think the problem with the 100K is that it's geared towards MBAs only and because of its public visibility, it event results in non-MIT teams adding a Sloanie on their team just to get in on the competition
- 100k Entrepreneurship Competition: it seems the most exciting in terms of competition.
- 100k has been useful to really see the success of various start ups and how they got there.
- 15.390 -> well taught class with very practical curriculum. Guest speakers provide deep insights.
- 15.390 was amazing. Ohours with Colin Kennedy at e center was incredibly useful. E center is very open to new people Ninjas on a Monday might at e center was fantastic
- 6.976 Founder's Journey. I took the class, which forced me to really think about my ideas and write business plans, which I then got feedback on.
- 6.S976 seems sort of cool?
- Actually, the best advice and help I have gotten about consulting and entrepreneurship has been from my peers through casual interactions.
- Although I have not participated in The Founder's Journey, I certainly would have taken it, had it fit into my schedule. I have heard from students who did participate that they learned a lot and really enjoyed the class.
- Classes (6.S976) and start-up competitions (\$100K)
- During the UPOP IAP skill development week we discussed start-ups and entrepreneurships with CEOs from various companies. That helped quell any fears I had about being able to work in a start-up.
- Founder's Journey was a great overview of the topic of entrepreneurship. I feel like I got a good idea of resources available, and a good network of people to ask for advice.
- Founders journey. I'm in the freshmen only version, founders light, and it's been pretty good at exposing me to role models in entrepreneurship. It could be better at foster networking connections though
- Global Startup Workshop
- Hands down the Trust Center. They have been extremely generous and always there for us. Bill Aulet is an amazing source of sound feedback and advice and I am constantly grateful that he takes the time for students and alumni like myself to directly foster entrepreneurship. VMS is also amazing, especially for the mission to help build 'the entrepreneur' rather than specifically only making the company huge.
- Haven't really engaged in any--wasn't aware of most of them?
- Here is what I have heard from friends who have started companies here: the mentoring program is good (connected with alumni who have also started companies) flexibility to come back to school if startup doesn't work great protection connections with funders is great at MIT
- I am probably not as seriously interested as many other students are.
- I don't know much about entrepreneurship, and I haven't used/spoken to people at resources for it.
- I don't think any of them were particularly very hands-on, which is what I was looking for. (I also dropped founder's journey halfway through, but I know they do some hands

- on things). 15.390 had a project, but I guess I just didn't really enjoy the course. I do like Legatum Center though, but their programs are mostly about lectures for inspiration.
- I have engaged with all of those selected as 'not used' and decided against using them for various reasons. The Martin Trust Center for Entrepreneurship has been by far the most attractive and valuable resource for entrepreneurship on campus. Having experienced, fast-paced, friendly and welcoming mentors requires people with a rare balance of intelligence, experience, intuition and humbleness. Those at the Trust Center have just that balance and the space is also excellent.
- I haven't really worked with any entrepreneurship resource groups directly, only in conjunction with finding funding for D-Lab projects.
- i just don't have enough time to devote to entrepreneurship.
- I think the talks at career fairs about how to make startups are probably useful.
- I think the UROP office and the Edgerton center have been the most helpful entities at MIT in terms of working with projects outside of the curriculum, although they are not specifically focused on entrepreneurship.
- i'm looking forward to founder's journey and new ventures because they'll be really hands on experiences led by great mentors that will hopefully introduce me to a lot more aspects of entrepreneurship in a positive environment.
- I've been taking part in Founder's Journey and think it's a great class since we get to see many amazing guest speakers every week. I've gone to a few e-club classes but none of the class were ever really that attractive. I liked a class that was offered during IAP by the e-club called "The nuts and bolts of business plans". I've also gotten lots of help from Joe Hadzima from the e-club.
- I've met with Colin Kennedy about advice on starting up a company before it's been very useful to talk to him.
- I've never heard of most of the above, but MITER is the one that I feel I would use first. I have a few vague ideas that I would like to work out and see implemented, and if I ever develop that entrepreneurial spirit I'd probably go to them first.
- I've only taken The Founder's Journey (one or two years ago), but dropped the class because I didn't find it useful.
- Last semester I took i-teams, e-lab, and 15.390, which was a very effective combination. The late night class at the e-center is also very helpful; and the e-center staff & their support and advice are extremely helpful.
- MIT 100K competition offers funding, mentorship and most importantly, networking opportunities.
- MIT VMS has been very helpful in making sure that we are considering the practical aspects of what we are working on. The focus has been on getting stuff done.
- None, really, the OME is the closest thing to a resource I interact with and I don't interact with them that much. I do have a growing interest in entrepeneurship but it's far from developed.
- Nothing really works, and I feel the entrepreneurship ecosystem is exclusive, which makes sense...
- One of the best things for me is to hear professors and other students talk about their entrepreneurial experiences in context of classes and projects. Most of the resources

mentioned above are poorly advertised to the general student body. Even though I'm quite interested in entrepreneurism, I haven't heard of most of them.

- Other students
- reaching out to those in the industry locally
- StartLabs because it was started by MIT students that I know personally and they publicized it very well to the undergraduate class.
- Talking to people.
- Talking with startups has been very informative and interesting! Career Fair is good if you can get someone to chat with you.
- The 100K Business Plan Competition was life changing for me. It gave me the resources to start my company, and winning it gave me the credibility to get even more funding. It really got me out of my comfort zone...shmoozing with the Sloan people, making me realize maybe I should wear something other than a hoodie and T-shirt. I think Joost Bonsen is probably the most important person in all the MIT entrepreneurship community. He knows all of us entrepreneurs who spun out of MIT. You should probably talk to him, as he's sort of created what it is today. Good luck on your thesis! I remember all the stresses involved. LITB from an Alpha Chi, pledge class of '06.
- The Martin Trust Center for MIT Entrepreneurship has been a fantastic resource, cultivating me from an idea to a plan to a company that we're going to work on full time. I only wish I had gone there sooner
- The teacher from Fouder's Journey co-teaches the mobile app development class and that was very interesting. I felt it useful to learn how to make a mobile app and then turn it into something bigger.
- The thing is that there's no centralized group that people can turn to for entrepreneurship at MIT. Having been at Stanford, they have a much more centralized and vibrant culture and it's something I wish MIT can have.
- This is less entrepreneurship-based, but I participated in the OME's Momentum program where we learn rapid product design and prototyping (< 2 weeks). It was rigorous, but I learned so much about product development and got a lot of great opportunities out of it.
- TLO actually going through the design and determining what is important for licensing
- Trust Center
- UPOP is pretty good also.
- VC&PE club is catered more to investing than entrepreneurship. Have not taken the Founder's Journey course (6.S976), but I've heard strong reviews about it.
- VMS -- probably learned the most from them.
- VMS has been very helpful, but it is the rich community of creative thinkers that helped LeafLabs get off the ground.
- Well the people here are of course the best entrepreneurial resource. After that it's a crapshoot...I guess VMS.
- Working informally on non-academic projects with other students has probably been most useful.