Proto Ventures Program Overview

Mission Statement

The vision of Proto Ventures (PV) is to systematically discover, experiment, mature, and launch new transformative technology ventures capable of having extraordinarily positive impact on the world.

Values Statement

A collaborate, diverse, and inclusive community within MIT is capable of manifesting into the world new transformative technology ventures that are the keystones to solving the greatest challenges of the 21st century.

Background

In furtherance of its mission to bring knowledge to bear on the world’s great challenges, MIT is launching a fresh approach to venture formation. Led by the MIT Innovation Initiative (MITii), the MIT Proto Ventures Program places emphasis on transformative and impactful opportunities that can be uniquely uncovered with technology.

Rather than starting with a solution, PV will start by defining unrecognized opportunities and construct solutions within the MIT network of students, researchers, and faculty. These innovations typically yield the discovery of new, unforeseen, and impactful uses for new and existing technologies. Importantly, they also spawn new and enduring technology companies that thrive. Problem identification will include discussions with potential corporate, non-profit, and government customers.

Technology based companies grow to unicorn status because they either (a) create or bring enabling technology to solve a problem that is compelling to the user (e.g. many life science and health care companies that address important unmet medical needs), or (b) define a need for a large user community where the user is willing to pay (e.g. ride-sharing, smart phones, and social media apps). In all cases, the entrepreneur builds on a vision that addresses or defines a compelling problem and converges the science and technology that enables a compelling, scalable, and marketable product or service.

Modelled after the “research investment firm,” the Proto Ventures Program will not only capture hidden value from scientific discovery, but also build an ecosystem and train entrepreneurs to build ventures directed to big problems with global markets. Our strategy is to place MIT squarely in the middle of the Proto Venture paradigm by practicing it ourselves.

Proto Ventures Process
The process will start with identification of opportunities that connect cutting edge problem spaces to academic research labs. Potential spaces will be divided into different “channels.” A Venture Builder will lead the effort in each channel with advice from domain experts that are experienced in technology translation. The Venture Builder and an MIT team composed of Venture Fellows (e.g. post docs) will de-risk any proposed solutions during the Discovery and Experimentation phases. These activities culminate with the forming of a Proto Venture which focuses on a technically feasible solution, a clear value proposition, a product-market fit, and a beachhead customer. A select few in this stage progress further to fully incorporate as a venture outside of MIT.

The Proto Venture Program is focused on using the MIT ecosystem, along with two new classes of MIT employees to discover new venture opportunities inside MIT: Venture Builders and Venture Fellows.

**Output Goals:**

A scalable venture is one that can maintain or improve profit as volume increases. But before ventures can even get to that scalable phase, they have to find a technically feasible solution, the value proposition, a product-market fit and a beachhead customer. The Proto Ventures process will help find and create more impactful ventures from hidden space ideas inside MIT and in doing so, produce more scalable ventures downstream as a result.

The Proto Ventures paths to impact will include the creation of new for-profit ventures and new sustainable non-profit (or other types of social benefit) ventures, as well as changing the practices and operations of existing corporations and institutions connected to our robust innovation ecosystem. The program will focus on creating impact from all types of ventures, whether they are for-profit, nonprofit, or internal venture.

**Input Channels:**

The process will start with identification of hidden space opportunities that connect cutting edge problem spaces to academic research labs. Potential spaces will be divided into different “channels” such as “AI & Medicine” or “Design & Engineering.” Each channel will be led by a Venture Builder.

**Proto Ventures Roles**
A Venture Builder will be a fully funded, high profile vetted position to find MIT ideas that are translatable. These are individuals with deep technical experience, relevant market knowledge, and varying degrees of experience. The position will be advertised in the same fashion as MIT faculty positions and the Venture Builder will get a budget to incentivize MIT faculty to participate in the proto venture process. They are full-time MIT employees and will have appointments similar to that of post-doctoral associates or an Entrepreneur-in-Residence.

Venture Builders will be expected to perform as drivers of new venture formation by extending and applying deep technical knowledge. Venture Builders are not burdened by prior experience on how things should be done, but instead are totally dedicated to discovering the “right” answer and not making the problem fit a particular answer.

Venture Builders will lead team formation and research through the early development phases. Venture Builders will join for a period of one to two years, they will be expected to oversee and develop multiple venture exploration and building projects and to foster a multi-disciplinary problem-solving culture. We expect they will join a resulting Proto Venture as senior management.

Each Venture Builder will oversee a team of Venture Fellows. In early phases, the Venture Builder will train, employ, and supervise this select group tasked with overseeing the management of projects.

Venture Fellows and Team:

Venture Fellows are post-docs or graduate students in deep tech areas with a passion to change the world with technology that participate in the venture building process for a limited period of time. Many Venture Fellows will decide to join the Proto Venture full time.

We expect the position of Venture Fellows may be filled with individuals that would have opted to post-doctoral positions elsewhere, technically savvy Sloan fellows, or graduating Master students that have shown an unusual inclination for multi-disciplinary work straddling the academic-industry boundary. On the job “training” and supervision will supplement the background of these candidates with the skills necessary to succeed as Venture Fellows.

MIT Faculty:

Key faculty members from MIT will be the source of big ideas and technologies that can create high impact. Most will act as technical advisors and consultants to the Proto Venture.

Advisory Board:

The Proto Ventures Program will have multiple channels. Each channel will have an advisory board made up of experts from around MIT that are in related fields to the channel. In early stages, the board helps define the focus areas. Subsequently, the board will be the decision body that approves ideas moving through each phase and will select projects for Proto Venture funding.

MIT Innovation Initiative and MIT at large:
Development, coordination, and administration of the Proto Ventures Program will be executed by the MIT Innovation Initiative with oversight by the deans of engineering and Sloan School, and the MIT Provost. Governance of contracts, intellectual property, and other related subjects will be handled through the normal MIT offices and processes.

Selection, Training, and Support:

Rather than creating a training program for Venture Builders, we will focus on providing the Venture Builders mentorship from MIT and an advisory board to support him or her through the program. Since this will be a highly competitive, global search, we expect the Venture Builders will have sufficient experience so that additional ramp up and training isn't necessary. Rather, we will make the significant resources and tools focused on translation at MIT available to the Venture Builder and team.

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