IRis

Northeastern University

STE Update

School of Technological Entrepreneurship

March 01, 2007

STE Update : 03/2007

Northeastern University

Recommended Citation

Northeastern University, "STE Update : 03/2007" (2007). *STE Update*. Paper 2. http://hdl.handle.net/2047/d20000191

This work is available open access, hosted by Northeastern University.

Northeastern UNIVERSITY

Higher Learning. Richer Experience.

School of TECHNOLOGICAL ENTREPRENEURSHIP

STE Update

March 2007

moving technology from idea to reality

Letter from the Dean

Dear Alumni and Friends,

We finished the fall semester of the academic year with our first group of graduate students. These are a great group of young people. They have wonderful ideas, incredible drive, and infectious enthusiasm. They are impressive, and our faculty enjoys interacting with them.

We also put a lot of effort into two major events surrounding EntrepreneurshipWeek USA. We organized a full week of activity at Northeastern between February 26th and March 2nd. Each day during the week we had a breakfast panel, two workshops, and a movie focused on entrepreneurship. The second event was a networking event for leaders of entrepreneurial organizations around the state. Mayor Thomas Menino and Senator John Kerry gave the keynote speeches. Northeastern teamed with the NCIIA and The MTTC to organize the event. Both events were spectacularly successful.

The school needs to grow in a number of ways. To accelerate growth, we are adding two key positions. The first is a chaired professorship created in response to a gift from Robert Shillman, This valuable gift will allow us to attract a senior academic with a proven track record in research and teaching. The second position is for a junior faculty member. The process of identifying and hiring this assistant professor has been completed and we hired a promising young entrepreneur who returned to college to get a PhD in Industrial Engineering. These two positions will help us launch a research program in the School of Technological Entrepreneurship that focuses on aspects of starting and running high growth high tech companies. Finally, we are also launching an Entrepreneur in Residence program with our first, in what's planned to be a number of qualified entrepreneurs who are between opportunities.

This ongoing spring semester, both undergraduate and graduate students are working on projects. Several have chosen their own ideas to pursue, but others are involved in the Digital Media I-Cubator.

The program continues to grow and with your continued help and support, we will create an academic and experiential learning experience that is truly exceptional.

Paul M. Zavracky

Undergraduate Program

During this current semester (Spring '07), six undergraduate students signed up for the final course in the undergraduate minor series, the project course. Students are working in a team under the direction of John Friar. One of these students is a senior and has completed all the courses in the minor. Of course this means that our first undergraduate student of the Minor in Technological Entrepreneurship will be graduating this year. This certainly represents a milestone and one that is made more impressive by the fact that we have only been offering the program for two years.

The distribution of students between colleges hasn't change since the onset of the program with most coming from engineering, but still a significant number are coming from CBA (about 20% of the total). We had our biggest fall ever with 27 students and this spring has the most ever in any semester since the beginning of the offering (see Figure 1).

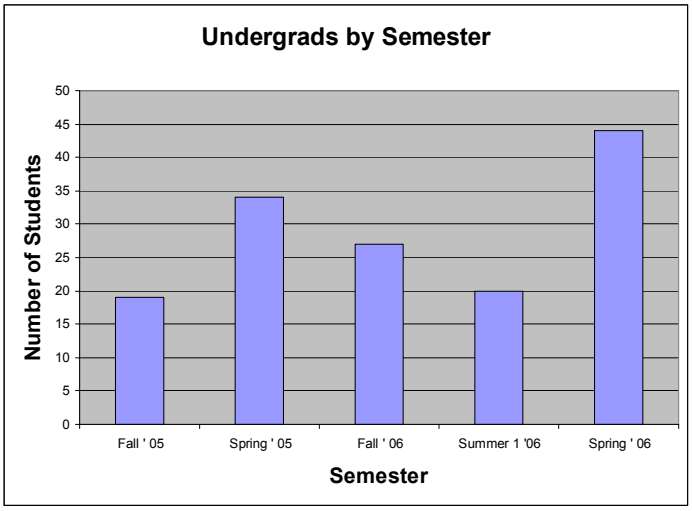

Figure 1. *Chart of undergraduate student number enrolled in the minor by semester.*

Graduate Program

By all measures, our first graduate class has been fantastic. These students came to our program because they were looking for relevance to technology and for an education in business and business venturing. They have expressed a high degree of satisfaction with the program.

Immediately after beginning his MSTE (Master's in Technological Entrepreneurship), one of our graduate

students accepted the challenge of establishing a student advisory group whose role would be to advise the dean on student issues relevant for our program. This 'voice of the customer' is important in insuring that we direct our efforts in areas that make a difference to the students we serve.

The STE Student Advisory Board has met with the dean three times. The first order of business was to establish a constitution for the group, a guide to their role and activities. Subsequently, this team of students created a document of ideas for implementation that were thoroughly explained therein. They later boiled the document down into the five most important issues they would like the school and its faculty to consider. The items are:

- On-Line Student Resource Center,
- Entrepreneurial Resource Kit,
- Better Definition of Pre-requisites,
- The Long Case, and
- STE generated business cases.

The first item refers to an on-line access point to mentors who might be able to help students with their business development. We have a number of ways of addressing this request. The first possibility is the creation of a blog. The advantage of a blog is that it records the history of the interaction for others to see and absorb. While the blog is an interesting approach, it requires alumni to monitor the blog on a daily basis. It might be better to have students' questions broadcast to an email list of participating alumni. This would allow the mentor to respond directly to the student if she/he is so inclined. A final approach would be an on-line list of alumni mentors, their areas of expertise and their email addresses. Students would simple choose from the list and email the alumnus directly. An email request for participation has been mailed to the STE list of interested alumni.

The second item refers to the availability of educational materials specific to Technological Entrepreneurship and to faculty at NU who can help students with the project development. The third item refers to the mix of part-time and full-time students (a problem easily addressed by the school). The fourth item is a suggestion that continuity across courses through the use of long cases might help to keep the classes aligned. And the final item is more of a suggestion and hope for the future, one we are taking very seriously by adding appropriate personnel and initiating cooperative research efforts with the College of Business.

Recruitment statistics show that our program appeals to a younger student than we anticipated. As a result, we are tuning the program to match their particular needs. We are targeting the same market segment for the next class (Fall '07). To increase interest and capture students from this population, we are advertising heavily in student magazines at regional universities. Current data indicate that inquiries have increased above last year's levels as shown in the Figure 2 below where inquiries are plotted by month.

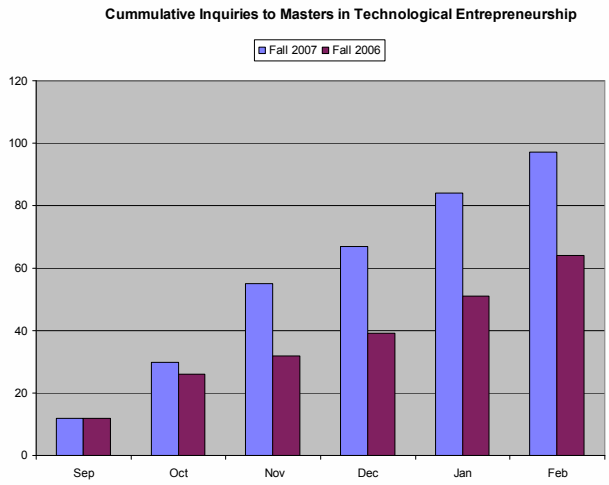

Figure 2. *Comparison of cumulative inquiries for the Fall of 06 and Fall of 07.*

I-Cubators

The Digital Media I-cubator has made solid progress over the last several months. While many aspects of our opportunity in the digital media industry are unique, our work in that area will inform how we introduce additional I-cubators in segments where Northeastern has strong capabilities, including engineering, biotechnology, and nanotechnology. As students have gotten involved with the Digital Media I-cubator, we continue to be convinced that their direct involvement in commercializing ideas will be a valuable experiential component of their curricular program.

In the last six months, through word-of-mouth alone, twenty students, faculty, and entrepreneurs have approached the Digital Media I-cubator to discuss their ideas for businesses and to learn about the new capability. In several cases, these discussions are ongoing as we try to determine whether the I-cubator should assume a formal role in some of these ideas. As we gain experience, capability, and funding, we are extremely optimistic about the quality and extent of the digital media business concepts we will review.

The Digital Media I-cubator currently has two active commercialization projects. Pulse Point is a wireless Web 2.0 application that is designed to build a vast database of user-generated information about places and events in metropolitan markets. This project has eight students from the College of Arts and Sciences, and two students from STE working on the final stages of prototype development and early business planning in anticipation of presentations to investors. Meetings with venture capital firms and angels are scheduled to begin in April. Visual Music is a research project designed to determine if a new art form that melds music and video in innovative ways can be developed into a commercially viable business that will capitalize on the growing demand for high definition television content and the anticipated proliferation of flat screen monitors in commercial and residential spaces. We have assigned an STE student to carry out preliminary research as part of his two semester-long project course.

Protecting the interests of the University's in the development of intellectual property and to generating adequate financial return and ownership in the ventures we launch into the market are high priorities. We have had a very constructive engagement with Tony Pirri and the Technology Transfer Office as we work to communicate existing University IP policy to students, faculty, entrepreneurs, strategic partners, and investors who engage with the I-cubator. The emergence of Pulse Point requires that policies and practices be clear and well communicated as investors begin to consider this early stage venture in April.

Initially, we felt that the best path to funding commercialization projects would be to build an innovation fund raised through charitable contributions from individuals and institutions. Having an innovation fund would give I-cubator management flexibility in nurturing early stage ideas. Additionally, since the Internet meltdown in 1999-2000, there had been significant "funding gap" where investors shied from digital media ventures until there were mature, revenue- and profit-generating companies; this would be filled through the use of a fund. However, in the last 6-12 months, there has been a shift back to more aggressive, earlier stage investment as digital media and Internet-centric businesses. Digital media companies require far less capital and, if they are destined for success, often grow very quickly, even some of the largest of venture investors now express a willingness to invest early, even before a company is formed.

Finally, we have been active in an effort to become a "convener" of the parties that drive economic development in digital media. There is an emerging consensus amongst investors, digital media companies, and entrepreneurs that Boston and New England should be in a stronger competitive position in digital media. Beginning with a conference on the digital game industry in April, Northeastern is collaborating with City and State Government, Academia, Companies and the Investment community to convene the leadership of these constituencies to accelerate the region's competitiveness.

E-Lab

The E-Lab was completed in time for the spring semester. It consists of three office areas in which teams can store records of their projects, conduct project related activities, and meet to share ideas and coordinate effort. A fourth office was added for faculty to use while interacting with the student teams. The room also provides a conference area where teams presentations take place, board members of the I-Cubators meet and Alumni and guest seminars take place. The Provost provided additional funds to equip the E-Lab with a Polycom, projection system and office equipment. A gift from Jack Yeaton (AS '70, BS '73) was used to purchase computers for the lab.

Staffing

The Robert J. Shillman Trustee Professor of Entrepreneurship, made possible by a generous

donation from Robert Shillman, (BSEE '68, Founder and CEO of Cognex Corporation) is well underway.

In the last update, we reported opening two faculty positions in addition to the Shillman Chair. One of the positions has been recently filled with a young entrepreneur with a PhD in Industrial Engineering and MBA. Tucker Marian will be starting in August in a tenure track position as assistant professor in the STE.

We have one more joint position to fill. This is a joint position with the College of Business. We hope to fill this position by the fall as well.

We are also actively seeking volunteers for positions as Entrepreneur or Mentor in Residence. In these positions, experience entrepreneurs will help develop the program and will interact in an advisory role with students. Office space will be made available for these individuals.

External Activities

EntrepreneurshipWeek USA Success

By all measures, the EntrepreneurshipWeek USA series of events held at Northeastern University during the week of February 26th was a major success. Planning for the event was overseen by Professor Anthony De Ritis (MBA '02), Chair of the Music Department and active participant in the formation of the STE and its programs. Learn about all the activity through podcasts and vodcasts at www.neu.edu/eweek.

This event was made possible with generous support from :

- First Light Capital
- Highland Capital Partners
- North Bridge Venture Partners
- Foster Miller
- Charles River Ventures
- Analog Devices
- The Boston Redevelopment Authority
- Entrepreneurs Organization, Boston
- The Office of Business Development, Boston

Northeastern Co-sponsors MassEntrepreneurship Event

The National Collegiate Inventors and Innovators Alliance (NCIIA), Massachusetts Technology Transfer Center (MTTC) and Northeastern University (NEU) sponsored the first ever state-wide Mass Entrepreneurship event, as the Massachusetts kick-off to EntrepreneurshipWeek USA. Mass Entrepreneurship is a gathering of the leaders of technology entrepreneurship programs and organizations within the state of Massachusetts. The event was held at the Langham Hotel, Boston, on Monday, February 26th at 1:30pm. Senator Kerry and Mayor Thomas Menino presented the keynote address.

Immediately following, the results of a survey taken of the Entrepreneurial support organizations and centers throughout the state was presented. That was followed by a panel discussion with panelists Roger Marino (NU E'61, Hon.'96), Founder, EMC and Angel Investor, Dr. Richard Lester, Founding Director, Industrial Performance Center (IPC), MIT, and Representative Dan Bosley, MA State Legislature & co-Chair of Technology Economic Development Committee moderated by Dean Zavracky. They responded to the survey that assessed the collective assets, needs and potential for collaboration to improve our state's effectiveness in supporting new technology startups.

Figure 3. *From right, Roger Marino, Mayor Menino and Dean Zavracky participate in MassEntrepeneurship, an event organized by the Mass Tech Transfer Center, the National Collegiate Inventors and Innovators Alliance, and The School of*

Technological Entrepreneurship.

Alumni/ae Opportunities

We depend on the support of Northeastern's alumni/ae. Please give some thought to the following areas of interest and need:

1) Help identify and direct students to the Master's program. We need top quality students with ideas for businesses. Our program is designed to help these students launch successful companies. The ideal candidate would have six or more years of industrial experience. As mentioned earlier, the program can be taken on a part time basis.
2) Please let me know if you would like to participate in an on-line mentoring program (yet to be developed).
3) We are looking for industrial partnerships for our I-Cubators in the areas of Digital Media and BioTech. Connections to firms that might have an interest in seeing ideas vetted by student teams will be very important to the success of the program.

Things of Note

To get more information about the STE, visit www.ste.neu.edu.