Tech and the City: Customer-Centric Digital Entrepreneurship  
Spring 2017

| Course Instructors                  | Arun Sundararajan (Professor, NYU Stern School of Business)  
                                         | Albert Wenger (Partner, Union Square Ventures) |
|-------------------------------------|---------------------------------------------------------------|
| Experiential Learning Management    | Jamie Rose (Executive Director, NYU Stern OSE)               |
| Administrative                      | Sharon Kim (x8-0810, skim2@stern.nyu.edu)                     |
| Classroom Sessions                  | Tuesday and/or Thursday, 1:30pm-2:50pm                       |

**Course Overview**  
Have you ever wondered what it’s like to run a high-tech startup? This course provides students with immersive experiential learning about digital entrepreneurship through the lens of successful early-stage technology companies. Student teams are each embedded for a semester into different New York City-based mid-stage startups from the investment portfolios of Union Square Ventures and other leading tech-focused venture capital firms. Over the course of this immersion, students will work with founders, investors and startup teams to understand business models, assess metrics and their connection to growth and funding, and lead a customer-centric assessment of the company’s products. Weekly critical reflection activities that include structured discussions, journal writing and in-class peer presentations coupled with guest sessions from industry experts allow students to deepen their understanding of both their own company as well as the other participating startups. They emerge from the course with an experience-based appreciation of the transformative potential of digital technologies, of the vibrant tech entrepreneurship environment of New York City, and of the risks faced by high-tech startups that underinvest in understanding their customers.

In Spring 2016, students were embedded into the following companies: **Alfred, Clarifai, Codecademy, Handy, Minibar, Shapeways, Skillshare, and YouNow**. Many of these companies have since implemented and launched the recommendations of our student teams.

**Course Goals**  
The course is designed to impart a deeper understanding of the impacts of digital technologies on the economy and on society, achieving this understanding through a combination of classroom discussion and immersive experiential learning, and connecting it to the emergence of digital entrepreneurship in New York. Students gain an in-depth understanding of startup metrics and digital industries, as well as a experiential understanding of their companies during the first part of the course, and contribute, through real-world analysis and projects, to the company’s evolution in the rest of the course. As a result, this course will:

- Provide students the opportunity to experience the transformative power of digital technologies by engaging with an executive team running a successful startup that embodies such transformation.
- Provide experience-based insights into the specific challenges of the high-tech startup world that may be challenging to communicate in a traditional classroom setting.
• Provide students with the opportunity to understand how a real startup monitors and measures its performance and progress, why its investors emphasize the metrics that they do, how approaches vary across different companies, gain hands-on experience analyzing both synthetic and real versions of data that is used to construct these metrics, and understand how metrics are tied to the strategic management of the company by its executives and investors.

• Give students an experiential understanding of what it takes to get things done in a hi-tech startup environment, how to assess the feasibility of an intervention, and the right approaches to getting the data and resources needed to initiate and complete a project.

• Using a process of immersion and reflection, provide students with a context in which they understand what business and societal needs startups like theirs aim to solve, how these needs map to specific business models, and what determines success with financing and growth.

• Provide students with real-world experience identifying gaps in a company’s main product and the needs of its existing and potential customers, recognizing and documenting customer needs that are currently unmet, situated within a general framework that can be applied to other situations.

• Provide students with an understanding into why specific high-tech startups are able to raise capital from influential investors, and the challenges associated with successful financing.

• Provide a forum for students to refine their thinking in a risk-free and supportive environment.

**Course Application**

This course is offered in partnership with the Office of Student Engagement. More information about the application requirements and timelines will be available on the Experiential Learning Programs website in October 2016. Please contact Jamie Tobias ([jamie.tobias@stern.nyu.edu](mailto:jamie.tobias@stern.nyu.edu)) in the Office of Student Engagement for additional information.

**Applications for the Spring 2017 semester are due November 2016.**

**Course Structure**

The class will be grouped into small teams of about 3 students apiece. Each student team is assigned to one company. Each team will spend six to eight hours a week out of class with their company during the first half of the course, and a comparable amount of time out of class with their company and its customers in the second half of the course. Students will also participate in one 75-minute weekly classroom session that will combine professor and external expert lectures with in-class critical reflection activities and student presentations. Teams will also be expected to log regular journal entries during selected weeks of the semester.

The portfolio of NYC companies that will participate in the course will include a subset of those funded by Union Square Ventures, a leading NYC-based venture capital firm, as well as those from other flagship investors. The exact companies will be finalized by early January. They will all be at roughly the same stage of evolution and funding. Last year’s cohort had raised an average of $35 million each.
Grading
Students will be graded based on the following activities, described in more detail in what follows.

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<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Journal entries</td>
<td>15%</td>
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<tr>
<td>Short assignments</td>
<td>20%</td>
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<tr>
<td>Main company project</td>
<td>35%</td>
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<tr>
<td>In-class participation</td>
<td>20%</td>
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<td>Group assessment by company founders</td>
<td>10%</td>
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<td><strong>Total</strong></td>
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Course Requirements

- **Journals**
  Each student will have a page on a private blogging platform accessible only to the direct participants in the class (the students and the professors). Students will post their entry as short blog posts (300-500 words). The entries will be about the experiential component of the course. This process of journaling is an important part of the critical reflection process that makes one’s experiential learning more effective. Specific guidelines for each week’s post will be provided before the semester begins.

- **Assignments**
  Structured assignments that prepare the students for their main company project and include:
  - An “introduction to the company” analysis by the student team that provides a quick overview of their company; analysis of its market, competitive landscape, key stakeholders, customer relationships, key partners, activities and resources.
  - A “listening” exercise by the student team that uses short in-person customer interviews to identify gaps in product-market fit for a well-known technology product.
  - A “metrics” analysis by the student team that uses an internal data set to understand what each of four categories of metrics are measuring, how to interpret specific measures, how to spot and get beyond some of the techniques that startups use to create the most favorable picture of their performance, and how to avoid certain common pitfalls that might inadvertently mask future problems.

- **Project**
  Each student team will spend a significant portion of the course conducting an in-depth analysis of the gaps between their company’s product(s) and the current and potential needs of the company’s existing customers (and/or desired/projected future customer segments). This analysis will be framed as a project the students define with their company, and grounded in a specific framework of investigation that we will introduce in class. The path each team takes will be unique, depending on the market their company is in, the nature of the product, and the culture of the company. The deliverable will be (a) a short written analysis that highlights preliminary findings and makes recommendations to the company for further investigation; (b) an archive of data gathered (including video recordings, audio recordings, screen recordings, survey responses, interview transcripts), (c) an in-class presentation of preliminary findings, and (d) a presentation of findings to the executive team of the company.
**Readings**
Since this is primarily an experiential course, and students will be spending six to eight hours a week working with their companies, the reading load will be much lighter than a typical lecture or case-based course. We will draw periodically from a series of blog posts, notes, and the following books:

1. *Customers Included*, Mark Hurst
2. *Crossing the Chasm*, Geoffrey Moore
3. *Technological Revolutions and Financial Capital*, Carlota Perez

**Schedule**
A week-by-week session guide will be available before the course begins. If you want to understand the week-by-week activities in more detail, please contact Sharon Kim (skim2@stern.nyu.edu) to schedule a meeting with Professor Sundararajan. The first three weeks of the course will emphasize classroom learning more heavily, towards “tooling up” for the company immersion that follows. In subsequent weeks, we will conduct periodic structured discussion in the classroom towards having teams learn from each other’s ongoing experience. Some classroom sessions will cover some specific topics (understanding digital industries, the anatomy of a startup investment, succeeding as a VC), as well as featuring guest sessions from NYC venture capital firms, and mid-course status report presentations from student teams. There will also be three in-depth team meetings with Wenger and Sundararajan over the semester that will shape, focus and guide each team’s project on an individual basis; during weeks that these meetings are scheduled, there will often not be regular classroom meetings.