**11.s951 FCIC China Connector Workshop: Urbanization, Technology and the Innovation Market**

Time: Second Half of 2019 Spring Semester, Thursday 9:00-12:00 (April 4- May 9), 9-255

Instructors: Zhengzhen Tan (DUSP), John Grant (Sloan), Yasheng Huang (Sloan),
Teaching Assistant: Jamie Wong

Office Hours: Zhengzhen Tan’s office hour is 2pm-4pm, Thursday
John Grant’s office hour is by appointment
Yasheng Huang’s office hour is by appointment
Jamie Wong’s office hour is 2pm-4pm, Thursday

Level: Undergraduate/Graduate
Graded: Pass/Fail

“Urbanization in China and high-tech development in the United States are the two primary factors shaping the world of the 21st century.”

- Joseph Stiglitz

China’s urbanization is at the core of its economic development engine. Urbanization represents some of the most significant business opportunities of the century. Meanwhile, the rapid and profound changes in urban development and management are being driven by technological innovation - i.e. pervasive sensing, the growth and availability of continuous data streams, advanced analytics, interactive communications and social networks, and machines. Technological innovation and the Chinese urbanization are converging to enable new solutions, business models and entrepreneurial participation to address urban challenges. Capturing these opportunities, however, will require significant innovation and comprehensive knowledge of China’s innovation market, policy context and industry eco-system. What does it take to bring urban technology innovations to China and to scale?

**Course Objectives:**
The FCIC Workshop is designed to prepare urban innovators to find paths to the world’s biggest urbanization market: China. It prepares these teams with the most relevant knowledge and develops tools and strategies to leverage that knowledge into growth. We use a combination of lectures, cases, industry speakers, and workshop sessions to convey key concepts and tools. We explore the opportunities, challenges, tradeoffs, and issues associated with ventures entering China. We will connect students with visitors and advisors who are founders of cross-border enterprises and have significant experience in the Chinese market. Most importantly, we connect teams with abundant business resources to establish key connections with partners, customers, and stakeholders. Student startup teams will apply key strategies to their own venture’s development and work towards launching pilots in Chinese cities, and subsequent venture development.

**Course Design:**
The course is a collaboration between the MIT China Future City Lab (CFC Lab) and the Sloan China Lab.
CFC Lab’s research is specialized in urban and environmental economics, urban development, and the real estate market, with a special focus on China’s sustainable urbanization. CFC Lab has launched a new program with Tsinghua University: the Future City Innovation Connector (FCIC). FCIC aims to support city innovation startup teams to make our cities better. FCIC connects researchers and entrepreneurs with Chinese policymakers and industrial leaders.

Sloan China Lab was founded to help entrepreneurs improve their management skills. It focuses on critical issues of entrepreneurship in China, i.e. internationalization strategies, new market entry analysis, capital-raising (domestic and foreign) strategies, marketing analysis, pricing research, product development, commercialization of technology, competitive landscape assessment, customer relationship strategies, and a number of other concerns. The China Lab is part of MIT Sloan’s Action Learning Labs which take the idea of learning-by-doing to a whole new level. China lab provides expert advice on international business, political economy, and international management in China.

Target Audience
The course learning is project/team based. The students should have an interest in BOTH urban challenges AND innovation commercialization. The key is to tackle urban issues through venture creation. On one hand, there are startups who have been admitted into the Future City Innovation Connector (FCIC) program. Application to FCIC program is team based and is highly selective. On the other hand, Individual applicants who are not selected into the FCIC program, but have strong interest in working with startup teams entering China are also welcome to take this course. According to the background, skill sets and interests of individual students, we will match them with FCIC startups to work on startup projects together.

It would be helpful for students to take some basic entrepreneurship courses to get acquainted with basic concepts of value proposition, business models, market analysis, customer acquisition, etc. However, this is not a requirement.

Grading Policy:
The final grade is computed on Fail/Pass base.

- **Class Participation (35%)**: Each participant is expected to prepare for and attend every class session. We expect you will contribute to the exchange of ideas. Your active participation in the discussion in class is integral to your success in the course. Projects will depend on peer input and feedback. Discussions of cases and conceptual material will depend on everyone bringing their insight and experience to the table. We expect you to be fully prepared, to bring your work and life experiences into class discussions and to participate fully in the discussion.
- **Assignment (65%)**: The assignment is to be completed in a team-based manner. Each team will need to submit the assignment on time.

**Detailed Syllabus: Session Topics**

**Week 1 (4/4):**
Week 1 is about understanding the fundamentals of Chinese market and economy. While sharing the universal venture process as other tech sectors, urban tech venture has unique constraints that require its own success framework.

**Lecture 1: Course Introduction: Venture Process and Plan Your Roadmap**
- Purpose of course & what make it unique
- Venture Process
- Economic viability of your venture
- Urban Tech Innovation: main drivers and success framework
- FCIC platform resources for the urban tech venture process
- Introduction of teams (1min each)

**Lecture 2: Fundamentals of China’s market and its economy: opportunities for entrepreneurs** Prof. Yasheng Huang is the author of the *Capitalism with Chinese Characteristics* and also an expert on entrepreneurship in China. He will lay solid foundation for the Chinese market and political economy system, from which all the subsequent strategies and tools sessions draws upon. Topics include:
- Competitive landscape
- Policy Shocks
- Entrepreneurial opportunities and challenges
- HBS Case: *China: The New Normal*

12:30-13:30 Guest Lecture: Social Entrepreneurship in China, James Shen, CFC-Leping Visiting Fellow
- Understand the social innovation, impact landscape, ecosystem in China
- Organizational Forms and vehicles: BCorp in China

Reading before the class:
*China: The New Normal (HBS case, 9-716-080)*
*Case Interview: Vthree*

Before the class Assignment 1: Intake Survey by 4/4
Assignment 2: Policy Research and Problem Formation
Academic Advisor connect: teams arrange time to talk to academic advisor to finish assignment 2

**Week 2 (4/11):**
How can policy, as the most critical market shaping force, influence market sizing analysis, value proposition, positioning strategy, and sometimes act as the biggest barrier? Urban tech ventures with "place-based" products and services should keenly watch policy at all levels. The session is the first part of the positioning.

**Lecture 3: Two critical strategy issues: IP and Speed,** Yasheng Huang
- HBS case: *Viagra: A prolonged battle over intellectual property rights*

**Lecture 4: Policy as critical market force**
- Cities as dynamic complex social-technical systems
- Policy as Opportunities: value proposition, market analysis, market sizing
• Policy as Challenges
• Working with government: as customer; as influencer; as regulator

12:30-13:30  Guest lecture: Legal issues in venture incorporation in China (legal counsel)
Teams sign up for law firm visits during the first week of the May.

Reading before the class:
Viagra: A prolonged battle over intellectual property rights, Hong Kong University, 902
Case interview: Zhongyang Parking, Plug-in House, Imapcloud

Optional reading:
Know your customers “Jobs to Be Done”.
Unlocking Capital for Sustainability-Oriented Ventures: 7 Key Lessons for Entrepreneurs

Assignment 3: Problem Statement and Value Proposition
Industrial Advisor Connect:

Week 3 (4/18):
This session is the second part of positioning. It provides an overview of the government-led, system-level innovation market of Chinese smart cities. The key takeaway is the market ecosystem and segments with great entrepreneurial opportunities.

Lecture 5: China’s Smart Cities Innovation Market, Positioning and Customer Validation
• Smart cities
• Market overview and ecosystem
• Entrepreneurial Opportunities and Positioning: customer segmentation, competitive positioning, Business model
• Customer validation
• Using the FCIC platform for customer validation

Lecture 6: Stakeholder Engagement and Data Issues

https://mp.weixin.qq.com/s/M2Z2CBmSQctDPvGyHX4EDw

Before class Reading:
Case interview: Entrobus, EvaVisdom, Xkool
The Rise of “Urban Tech” by Ricard Florida

China Is Racing Ahead in 5G. Here’s What That Means.
https://medium.com/mit-technology-review/china-is-racing-ahead-in-5g-heres-what-that-means-7d41c2a6c4c4

Assignment 4: Stakeholder mapping
Assignment 5: Position Strategy and economic model validation. Team should analyze their markets and ecosystems with laser-like accuracy, clearly articulating the exact problem you will solve and how your solution differs from the competition.

Arrange a conversation with industrial advisors.

Week 4 (4/25):

After figuring out the what problem, week 4 will look into the ‘who’ problem. The ‘who’ issue can impact all aspects of the venture development. This includes your own in-house team and partners.

Lecture 7: Partner & Team Building

- Function and structure of the startup team
- Resources and capabilities, What resources and activities are needed to deliver the value propositions? What new capabilities will you need to learn, hire, or partner for?
- Partnership as the most cost-effective business strategy
- Sales channels partnerships. example: Streamax
- Technical partners
- Hiring resources

Workshop 1: Positioning and economic model (5 team presentation and feedback session): 10m presentation + 5 mins feedback;

Reading:
Case interview: Streamax
Whitepaper: Bootstrap your business for success
Why I don’t want funding for my company (https://www.theglobeandmail.com/report-on-business/small-business/startups/why-i-dont-want-funding-for-my-company/article27459833/)

Assignment 6: Customer connect: prepare customer pitch for pilot, test site connect; TeleWeb conference with customer

Week 5 (5/2):

What is a pilot? Why is it critical for urban tech ventures to launch pilots? Pilot embodies several key business value creation processes. Pilots as a critical venture development milestone; how to launch, manage, and close pilots?

Lecture 8: Pilot and Customer acquisition

- Importance of pilots for urban tech startups
- What’s the goal of a pilot? Customer validation and customer acquisition
- Pilots through the lens of sales funnel
- Managing your pilot
- Good customer pitches
- Difference between Sales and Marketing
- Prepare sales kit. (Prepare them during your China trip!) example of Biobot
- Cases: Vthree

Workshop 2: Positioning and economic model (5 team presentation and feedback session) 10m presentation + 5 mins feedback
12:30-13:30  Guest lecture: Charleston Sin, Executive Director, MIT Hongkong Innovation Node
arrange legal firm 1 hour complimentary appointment

Reading:
Case interview: Vthree

Assignment 7: identify channels, resources, partners.
Assignment 8: China Venture Plan

Week 6 (5/9):
Given the problem/solution you have defined, what is the relevant scale of production one should plan? Are you planning to produce internally, via-partner, or through out-sourcing? What are core decisions in production and scaling to move ideas to impact?

Lecture 9: Production Readiness
- Solutions vs. production
- Mapping and meeting production milestones through the scale-up process
- Core decisions in production
- Understand the software and hardware startup's production progression
- What China eco-system resources exist to support production at different stages
- Cases: Rokid, plug-in house, huipai
- Visitor: Weiqi Zhao, lead engineer of Rokid

Workshop 3
10:45-12:00  China Venture Plan I (5 teams). 10mins presentation + 5 min Comment & feedback
12:00-12:15  Lunch break
12:15-13:30  China Venture Plan II (5 team presentations & feedback)

Guest: Weiqi Zhao, Jing Wang, James Shen, Charleston Sin, Gilad

Reading:
Case interview: EvaVisdom, CitoryTech

Assignment 9: FCIC China brochure (in English & Chinese): logo, name, weblink, Problem, Product, Competitive Positioning due May 30th. (Template will be provided)

May 20th: Industry Partner Roundtable and Demo Pitch