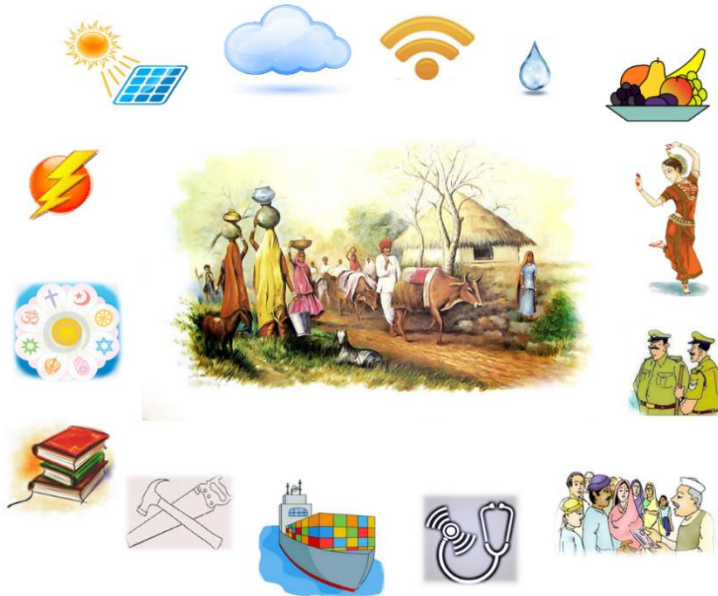# Creating Smart Villages
Leveraging Open Innovation

UGBA 196: 3-Unit Project Based Course: Summer 2017: July 3 - Aug 11

T,W,Th (10:30am-1pm) in C-325/ Office hours: T,W,Th (1pm-2pm) in F402

Contact: Professor Solomon Darwin at darwin@haas.berkeley.edu

Objective of the Course:

To learn and address one of the major global challenges through deployment of digital technology and development of open business models that will serve people, governments and business enterprises. The scope of this project-based course is applicable to many emerging economies, although we focus on Indian villages to develop a use case. Smart Village Definition developed by Garwood Center at Berkeley-Haas states: "A community empowered by Digital Technologies & Open Innovation Platforms to access Global Markets"

Background:

Over half the world's population in emerging economies lives in villages. China and India alone house over 1.65 million villages; where close to 60 -70% of their people live. There has been a great deal of work performed in recent years that explores the design, development and deployment of Smart Cities. This enables cities to become livable, offer new services to its residents, and make better use of city resources. However, people living in villages (at the bottom of the pyramid) are neglected – they suffer from having little or no access to resources, information, tools and services - they have yet to be empowered with digital technologies to better their lives.

Corporate Partners
The Solution Providers to Smart Village Prototype for Phase 1

Multinationals often serve the rich to generate better margins for themselves. It is an open question whether and how the simple and cost-effective digital technologies could create opportunities for multinationals worldwide to serve the neglected majority. New Open Business Models that are scalable are required for business enterprises to generate profits while creating value for people living at the bottom of the pyramid.

The Garwood Center for Corporate Innovation at UC Berkeley has developed a process to prototype a Smart Village in collaboration with the Government of India. Last year, over 22 technology firms from around the world participated in prototyping a smart scalable village to serve as a model for rest of the 650,000 Indian villages in India. An actual village called "Mori" was prototyped. A co-innovation area was set-up for villagers to engage with technology firms such as Google, IBM, Qualcomm, Ericsson, Cisco, Microsoft, Tyco and others.

Open innovation methods and strategies employed to connect the villagers with technology firms. The work in Mori Village Phase 1 was completed in December 30th 2016.

More Background about the Project
Smart Village project was implemented as a pilot in the Mori Village, by Garwood Center for Corporate Innovation, University of California Berkeley.

Objective of Phase 1: Perform Two Tests:
1. Global Brands interest in scaling their technologies in rural India.
2. Rural Villagers traction and readiness to accept digital technology

Objective of Phase 2: Work with Villages and Technology Firms (45 Global Brands + 25 Startups)
To Develop Scalable Business Models through Co-Innovation Process to:
1. Create Value for Rural People
2. Create Value for Global Brands
3. Create Value for the State

Results of Phase 1 passed the two performance tests and has been successfully completed and applauded by Chief Minister's visit to Mori on December 29.

Subsequent to the successful implementation of Smart Village pilot project in the Mori Village, it has been proposed to scale up the Smart Village Project to 466 Villages across 20 Mandals, 5 constituencies and 5 Districts selected by Chief Minister to represent diversity of his state.

District	Constituency	Mandals	Villages
East Godavari	Razolu	Sakinetipalli, Malkipuram, Razolu, Mamidikuduru	65
West Godavari	Undi	Undi, Akaivedu, Kalla, Palakoderu	70
Krishna	Kaikaluru	Kaikaluru, Kalidindi, Mudinepalli, Madavalli	109
Chittor	Kupam	SanthiPuram, Kupam, Ramakupam, Gudipalle	89
Srikakulum	Narasanapeta	Jalumuru, Polaki, Sarvakota, Narasanapeta	136

Objectives and Deliverables of the Project:

Develop a smart village model for a specific village in India, utilizing the case study of Mori Village Harvard Business Review: Prototyping A Scalable Smart Village Class lectures, discussions and independent research will greatly help in this effort. Each student may select his or her own village from the list provided by the instructor to do their individual project. Also provided will be some basic information and contact numbers to interview key individuals in the village. The students may work in groups to share knowledge and exchange ideas but will need to submit their work individually to the instructor and the Smart Village Director in India.

Expectations:
a. Identify pain points of the villagers based on your research, interviews and information from villagers.
b. Study the village history, culture, social issues and other factors that may affect economic development.
c. Evaluate affordable/ user-friendly technologies that may address the pain points of the villagers.
d. Mid-term: Develop and present a clearly defined challenge for an Open Innovation Hackathon for a smart village with expected outcomes. Best ones will be posted on leading Indian University websites for hackathon participation on August 20-30, 2017 to be held at the state capital - seven awards will be issued by the Chief Minister for their accomplishments.
e. Develop the following for your selected village in the pool: 1) a business ecosystem, 2) a platform for economic development, 3) a brand for the village, 4) a community platform, and 5) a business model.

Grading: Mid-term: 20%; Blogs: 20%; Final Paper Presentation: 50%; Attendance: 10% = Total: 100%

Tentative Class Schedule

	Day	Date	In-Class Activity	Action Items & Homework
1	T	7/4/2017	Holiday	
2	W	7/5/2017	Introduction to the Project - Case Discussion (Course Structure and Administration)	Prepare to discuss: The Harvard Case on Smart Villages. Do daily vblogs and upload to your B-Course folder.
3	Th	7/6/2017	Case Discussion on Smart Villages: Prepare answers for questions at the end of the case. There will be a discussion on possible implication of environment effects of technology introductions into the village.	Select a Village from the list provided and do some basic demographic research.
4	T	7/11/2017	Lecture: Frameworks for Building Stronger Economies. Study of Best Use Cases	Identify the pain points of your specific Village.
5	W	7/12/2017	Lecture: Leveraging Open Innovation Concepts & Strategies. Study of Best Use Cases and Approches	Prepare a "Village Footprint" for your Village. Create both a Social Balance Sheet & Financial Balance sheet
6	Th	7/13/2017	Lecture: Open Business Models. Study of Best Use Cases	Develop Open Innovation Platform for your Village. Do a blog
7	T	7/18/2017	Research Day 1: Setup Skype Interviews as a group with Smart Village Directors in India	Analysis of Data Collected for your Village - Skype Interviews
8	W	7/19/2017	Research Day 2: Follow-up calls with India processing information and exploring possible technologies - work in Groups	Explore and select user friendly and affordable technologies that address the pain points of villagers.
9	Th	7/20/2017	Effective ways of Presenting and Pitching your Ideas for Mid-term presentations.	Develop a Business Model for your Village. Do a blog
10	T	7/25/2017	Mid-Term: Design & Present an Open Innovation Hackathon Challenge to find solutions to village problems.	Suggest Partners for Economic Development for your Village
11	W	7/26/2017	Guest Speaker from a Technolgy Firm (TBD) - Work in groups	Develop an Ecosystem and a Brand for your Village
12	Th	7/27/2017	Guest Speaker - Public Policy Expert (TBD) - Work in groups	Develop a Open Innovation Platform for your Village. Do a blog
13	T	8/1/2017	Guest Speaker from a Technolgy Firm (TBD) - Work in groups	Develop a Community Platform for your Village
14	W	8/2/2017	Guest Speaker on Indian Culture (TBD) - Work in groups	Submit your Plan for a Community Platform for your Village
15	Th	8/3/2017	Presentations - Individual	Work on your individual presentations. Do a blog
16	T	8/8/2017	Presentations - Individual	Document Takeaways from other presentations
17	W	8/9/2017	Presentations - Individual	Document Takeaways from other presentations
18	Th	8/10/2017	Recap and Final Paper Submissions to the Instructor	Submit your final proposal to your Village President. Final blog due.

Instructions for submitting your assignments at the end of each class day: Upload your video clip with a short 2 paragraph blog on B-Courses. At the end of each class day before midnight, submit a 2 paragraph blog and a 3 min video of yourself to explain: V-Blog: Share what lessons you had learned through the lectures and class discussions. Following each class session, offer a creative solution for villagers pain points based on new information you had learned from lectures and your research. Write-Up: A two paragraph write-up about the research you had conducted relating to the project. Paragraph 1: Summarize your research findings citing sources. Paragraph 2: Explain how you can apply your findings to your project