

KHOJ: Project in Social Innovation SPRING SEMESTER, 2017

Faculty

SBL – Firdos Solanki, Itee Patni, Rushit Dubal
BSc – Shilpa Papat, Vashisht Dave
BA Journalism - Vandana Talegaonkar
BArch and BDesign – Pragya Shankar
Abir Mullick (Consultant)

Class Hours

Monday 11-1pm
One more hour with the Mentor (Arranged)

Office Hours

Mullick - Monday 4-5pm
Other faculty – Will announce

Room Number

Monday presentations in Auditorium
Meetings with Mentor – Check with Mentor

INTRODUCTION

Khoj is an opportunity to work on complex real-life problems challenging the society. Through field work students will identify challenges and propose solution(s) that represent social innovation. They will work in groups - work hands-on to offer solution. Solution(s) from website or copied ideas will receive an F grade. Khoj requires: Mentor involvement, testing final solution and documenting the problem-solving process.

Introduction

Ideas behind “Social innovation” bring about a social change. They are doable, scalable, affordable, sustainable and user directed. What is social innovation in one culture may not be social innovation in another culture. Culture, economics, technology and scale are big determinants of social innovation. The cost of implementing social innovation is measured in terms of social benefit. Often mistaken, philanthropy is not same as social innovation; philanthropy is an act of charity or “feel-good” and misses out on the value creation for the society or an individual.

Prominent social innovators include Akhtar Hameed Khan (participatory rural development in Pakistan, Muhammad Yunus (for Grameen Bank founder) in Bangladesh, and Nilufer Yasmin (for Infolady – which trains women on bicycles to provide health, agricultural and IT services to villages in Bangladesh).

Assignment: There are two parts to the project and students are required to complete both parts to receive a passing grade:

Part-1: Social Innovation examples and Opportunity for Development

In groups of five identify three (no more) good examples of social innovation and provide criteria that determine why they are good examples.

In the same group, visit local communities and identify pressing problems challenging the community. Share pictures of the communality and discuss the opportunities to address challenges.

Part-B: Social Innovation Development and Testing

Work hands-on to develop ideas that solve pressing problems and create social innovation. Prepare proof of concept (prototype) and conduct feasibility test that ensures workability. Share the testing

process (involve users) and report results. (All groups will be called to present before the entire class at least once)

Class Structure and Operation

There are about 250 BBA, BSc, BArch, BDesign and BA students in this class and they will be guided by 7 faculty members. Professors Vandana Talegaonkar, Firdos Solanki, Rushit Dubal, Itee Patni, Shilpa Popat, Vashisht Dave and Pyagya Shankar will serve as Mentors and Professor Abir Mullick will serve as a Consultant to the Khoj team. In this class students will drive education and instructors will serve as Mentors. The class will meet twice every week, once on Monday 11-1pm and a one hour with individual Mentors on another day. Attendance is mandatory and students will work in a group throughout the semester.

All Mondays meetings will be held in the auditorium and consult Mentors for meetings venue. Project will be assigned on day-1, and students will work in groups of five. A close watch will be maintained to ensure that all members of the group contribute equally and work collaboratively. Mentors will take attendance at the end of every class. On Mondays, students will present work in front of the entire class, report development and ask important questions. The meetings with Mentors will serve like a Tutorial to seek clarification, bounce ideas and discuss progress. Students will need to demonstrate continuous progress in order to pass this course.

SUBMISSIONS

1. Social innovation examples, criteria for good social innovation, pictures of community visit and opportunities for social innovation. (Present these on Monday and submit a copy to your Mentor)
2. Oral presentations
3. Khoj board documenting the process.

Grading Criteria:

Part-1:

1. Examples well identified
2. Criteria for defining social innovation clear and relevant
3. Field work (community visit) done well and useful
4. Opportunities for social innovation well identified
5. Oral presentation prepared well, clear and persuasive

Part-2:

1. Process followed is clear and logical
2. Solution is new, original and has the potential to solve important problem(s)
3. Proof of concept instil confidence and demonstrate do-ability
4. Presentation board is of high quality
5. Model is well crafted
6. Oral presentations are prepared well, clear and persuasive
7. Progress is incremental and solution demonstrates newness and innovation

Schedule

Student presentations on Monday

Meeting with Mentors other day

Khoj Policies

1. This is a 3 credit graded course and students are required to attend class for 3 a week.
2. This is a student driven course, faculty serves as Mentors
3. Attendance is mandatory
4. Field visit is essential part of this course
5. Projects that are non-contextual or not connected to field experience will not be accepted

6. All presentations must start with a slide informing the feedback that was received
7. Re-exam means redoing to project
8. Re-registration means enrolling again in the course
9. There is punishment for disturbing the class, distracting others or disrespecting faculty and students
10. The course ends with a public presentation and display of Khoj boards in the library atrium

Social Innovation
Few Examples
Khoj, Fall 2017

Social Innovation

Innovation that primarily benefits the society solve a social problem.



Social Innovation

Creates more value for society than for individual.

Ideas bring about a social change.

Characteristics:

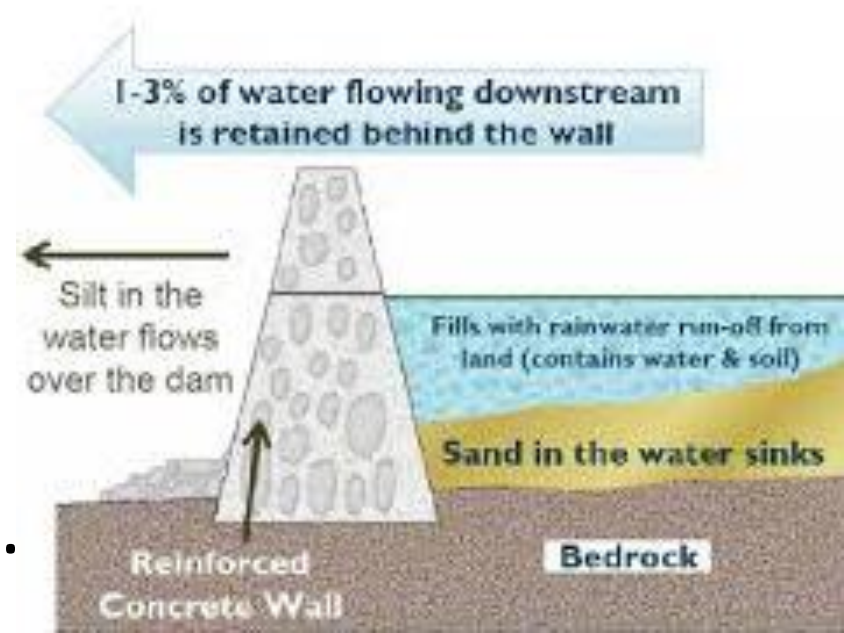
Doable

Scalable

Affordable

Sustainable

Users play a decisive role.



Social Innovation

A win-win solution that is good for individual and offers benefits to the society.

Undergoes a process

- idea generation / prototyping / \piloting
- scaling
- testing



Mobile Filtration System

Water filter made out of clay, and sawdust; catches dirt and disease-causing microbes.

<https://www.engineeringforchange.org/ten-low-cost-ways-to-treat-water/>

Social Innovation

Social innovation - new product, technology, strategy, concept, idea or organization – to help improve social conditions like education, development and health in a community .



Mobile Filtration System

Bicycle-powered water system that draws water from a river or filters water.

Aqueduct - It can do its job on the move

<https://www.youtube.com/watch?v=-U-mvfjyiao>

Social Innovation

Social innovation differs from Innovation -
original / more effective / new



Technological and economic innovation.

Social Innovation

Water vending kiosk

Helps provide pure water in railway stations



Social, technological, economic innovation.

Social Innovation

Bus tracking App in use in Mumbai

NMMC e-CONNECT

Scan the QR code to download the NMMC Econnect App

DOWNLOAD LINK
<https://goo.gl/H4r3wC>

Google play

1 Real time bus information

2 Nearby stops along with buses on route

3 Travel Information sharing through Whatsapp & SMS

4 Set a favorite route

5 Set Alarms for buses

Technology focused social innovation.

Jugad

Band-aid solution to a very complex problem.

Need to design prosthetic or assistive technology for an amputee.

Not doable

Not scalable

Not affordable

Not sustainable

An user plays a decisive role.



Examples: Solar Sterilization

Social Innovation

The cheapest way to treat water –
Leave it in clear plastic bottles in the sunlight for 4+ hours. UV radiation and heat kills the microbes that cause diarrhea and other waterborne illness.

<https://www.youtube.com/watch?v=-U-mvfjyiao>



Examples: Life Straw

Social Innovation



The **Lifestraw** - Small cigar-shaped tube packed with filter purifies water pathogens like typhoid, cholera, dysentery and diarrhea.

<http://inhabitat.com/6-water-purifying-devices-for-clean-drinking-water-in-the-developing-world/&Minor>

Examples: Ceramic Water Filter

Social Innovation



Ceramic water filters (Cambodia) made from fired clay. Tiny pores of ceramic material remove virtually all bacteria and protozoa.

Lowers 50 % diarrheal illnesses.

Flow: 1-3 liters per hour.

Examples: Life Sack

Social Innovation



Life Sack - Grain shipping container that employs SODIS (Solar Water Disinfection Process) to kill deadly bacteria and purify water.

<http://inhabitat.com/6-water-purifying-devices-for-clean-drinking-water-in-the-developing-world/>

Examples: "Pure" Water Bottle

Social Innovation



Water purification in 30 minutes using chlorine and iodine tablets. Removes impurities up to 99.9%.

<http://inhabitat.com/6-water-purifying-devices-for-clean-drinking-water-in-the-developing-world/>

Examples: Hamster Ball-Shaped Solarball

Social Innovation



The Solar Ball - Uses sunlight to purify water ; evaporate water and separate dirt. Three quarts of potable water per day.

<http://inhabitat.com/6-water-purifying-devices-for-clean-drinking-water-in-the-developing-world/>

Examples

Social Innovation

Kiva, in San Francisco, **finances small business** owners to grow and create jobs. Partners with lenders to build businesses and generate revenue.



**SAN
FRANCISCO**

Examples: Kiva

Social Innovation



Aline's Closet, a successful garment shop borrowed \$10,000 to hire an employee and compete in global market.

Examples: Kiva

Social Innovation



For Ryan a loan of \$4,000 helped him grow and create a sustainable business.

Examples: Kiva

Social Innovation



Phil Story: With \$10,000 loan, Phil developed a planter and planting technique to grow salad vegetables.

Examples: Kiva

Social Innovation



Robert's Story: With a loan of \$7,500, Robert purchased 50 beehive stacks and established strong business.

Examples- Crowdfunding

Social Innovation

Milaap, a crowd-funding agency, contributed over Rs.63.34 Cr to support 49,310 rural projects.

Repayment rate is 98.75%.

Leraben borrowed Rs.12,000 to start a vegetable-selling business.



Examples- Insurance Scheme

Social Innovation

Social Security for the unorganized sector

KHOJ 2016

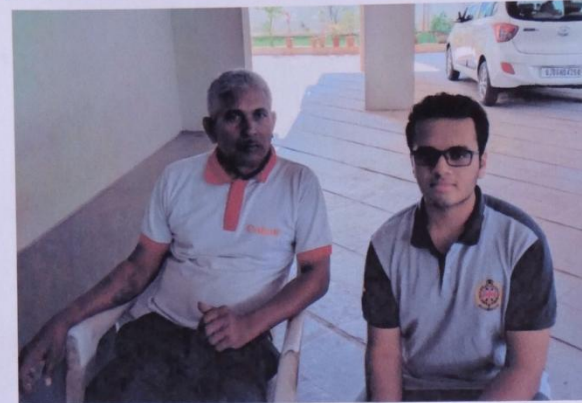
Social security for the unorganized sector – (BBA)

Naveen Parmar
14131023

Nikhil Nishkalank
14131112

Omkar Katdare
14131009

Paras Patel
14131103



CURRENT SCENARIO

- Current social security system manage small percentage of the country's workforce.
- Unorganized (mainly in agriculture) sector is not legally covered by any form of social security.
- In 2014, 94% of India's labor force worked in the informal sector.
- Indians have relied on their extended families for support in case of emergencies.
- But bonds among families are not as tight as they used to be, which leaves a huge gap for financial needs to be fulfilled.
- Major social security plans in India are the EPFO and ESIC.
- Originally aimed at factory workers, the coverage is being gradually extended to include greater parts of the population.
- Other schemes offered are NPSS, AABY and RSBY.

WEAKNESSES OF THE CURRENT SYSTEM

- Fragmented ownership reduces scope for coordination and lack of product innovation, development and learning
- Different schemes are monitored by different agencies.
- collection of usage data for individuals is not possible. To register for all 3 schemes, an individual has to register with 3 different agencies.



SOLUTION

- With the penetration of Aadhar card crossing the 93% mark (as of October 2015), it can be used as the database of beneficiaries which can be used to provide social security services.
- Single agency to handle all the schemes to ensure a streamlined approach ; a very few aspects of the entire process will be handled by the state agencies.



- The architecture can be implemented, so as to allow universal inclusion.
- The scheme will work at Rs. 10 a day, with guaranteed returns of 9%.

UNORGANISED SECTOR

The sector which is not registered with the government and whose terms of employment are not fixed and regular is considered as unorganised sector. This sector includes those small size enterprises, workshops where there are low skill and unproductive employment.



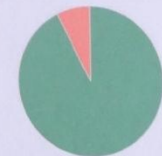
BENEFITS

- At the end of 40 years, the account holder will receive Rs. 19.1 lakhs.
- Money can be withdrawn at maturity during retirement, in case of medical emergencies, educational expenses or during terms of unemployment.
- Official age of retirement is 67.
- If the investment is withdrawn before retirement, the percentage of money received will be in accordance with the number of years remaining for retirement.

Duration	SP Invested (Rs)	Return (Rs)	SP Invested (Rs)	Return (Rs)
10 years	50	71,245	50	11,045
15 years	50	12,045	50	19,045
20 years	50	14,045	50	27,045
25 years	50	16,045	50	35,045
30 years	50	18,045	50	43,045

Expected Amount	Rs. 191,3054 (19.1 Lakhs)
Amount Invested	Rs. 144,000 (1.4 Lakhs)
Weighted Gain	Rs. 176,9054 (17.7 Lakhs)

Amount Invested vs Returns



Examples: Water

Social Innovation

Villages lack clean water though over 80% villagers own a mobile phone.

m.Paani devised a mobile-based loyalty program to earn points and buy essentials like drinking water and pay for education, energy and healthcare.



The Water Wheel - 45L capacity, about 2-5 more efficiency. Two times more water in half the time



Examples

Social Innovation

Water ATM provides 24/7 safe water from **solar powered and cloud connected technology** in remote areas.



Examples

Social Innovation



Microsoft and BigTech deliver tuberculosis medicine to patients too weak to go to local clinics.

Examples

Social Innovation

Giving a Voice
to the global workforce

Transparency &
Real-time Data
to decision makers



World Solutions and Marks and Spencer have launched a program for factory workers to anonymously report working conditions using mobile phones .

Examples: ReBoot

Social Innovation

IT ASSET DISPOSITION SERVICES



PC'S DO NOT DIE
WHERE TO DISPOSE?

1. Landfills and rivers ❌
2. Sell to unorganised dealers ❌
3. Organised disposition -> Reboot ✅



"JOIN REBOOT AND ENRICH LIVES"

Get the highest monetary and ecological value of your end-of life assets through our ITAD service

Bridges India collects and distributes old computers - address waste and digital divide

New

Refurbished



WE ARE INDIA'S LARGEST

**DESKTOPS / LAPTOPS / SMARTPHONES / TABLETS / PERIPHERALS
REFURBISHER WITH A PAN INDIA PRESENCE**



GENUINELY PROCURED
AND SOLD WITH AN
INVOICE



CHECKED, TESTED,
CERTIFIED



reboot CERTIFIED



JUST LIKE NEW



REFURBISHED
WITH A WARRANTY



NEW BOX
PACKAGING



GLOBAL
ACCREDITATION



SAVE MONEY

Examples: Cyber Volunteers

Social Innovation



Cyber-volunteers - Professionals experienced in information and communication technologies tutor children in return for community work

Examples: Cyber Volunteers

Social Innovation

World Bank and Reboot have developed system that enables citizens to offer feedback on poor public services like bad roads, internet in-access, and poor state of electricity.

ENABLING
CITIZEN-DRIVEN
IMPROVEMENT OF
PUBLIC SERVICES

Leveraging Technology to Strengthen
Accountability in Nigerian Healthcare



Examples

Social Innovation

Frosted glass panels in place of blackboard, double as a light source.



Examples: Cyber Volunteers

Social Innovation

Steel grain silo adapted as a residence.



Examples

Social Innovation

Tiny home
for \$320 in
three
months



Examples: Cyber Volunteers

Social Innovation

Zero-waste
building out
of
abandoned
materials



Examples: Cyber Volunteers

Social Innovation



Bottle lights

Examples

Social Innovation

Dew collector as a means to generate clean drinking water



Examples

Social Innovation



Fog harvester produces **17 gallons water daily**. Benefits over **400 people** who have no running water.

Social Innovation



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Invention that benefits the society:
INSIDER: Planter for urban gardening.

Social Innovation



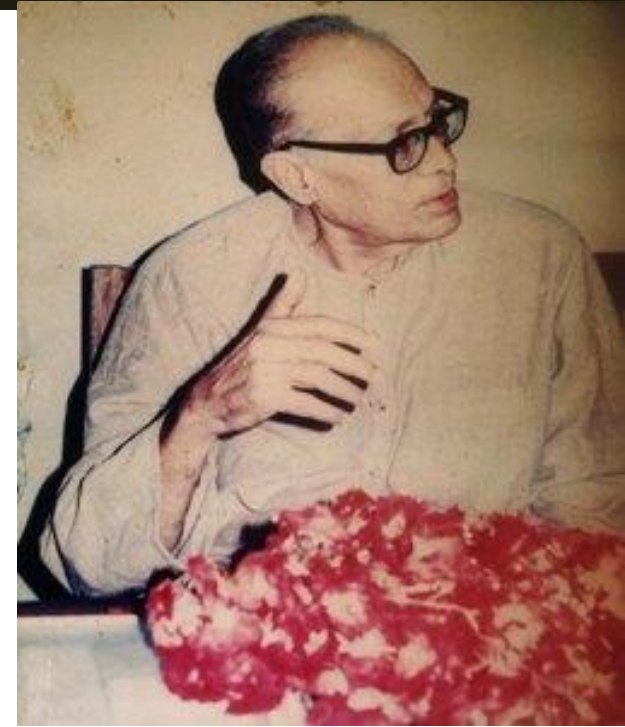
Infolady: An organization of women, by Nilufer Yasmin, to reach the country's remotest villages on bicycle to provide health, agricultural and information technology services.

<https://www.youtube.com/watch?v=hZQdw0-ApO0>

Social Innovation

Formed participatory organizations in Pakistan to offer Rural Support Programs (RSPs) like build physical infrastructure, enhance skills, transfer technologies, and link people with other service providers, (governments). RSPs have 1.90 million members; helped 1.67 million rural households through 100,700 organizations.

<https://www.youtube.com/watch?v=NWQPKyF9niw>



Social Innovation

Grameen Bank - microfinance organization founded in Bangladesh. Makes small loans to poor without requiring collateral. Started by loaning US\$27 to 42 families to make items for sale, without burdening them with high interest. Yunus believed that if small loans were made available to a larger population, it could stimulate businesses and reduce the widespread rural poverty.

<https://www.youtube.com/watch?v=MgYes4bA7oM>

