

Social Innovation in Industry 4.0
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Lecture 11
Process of creating Social Innovation

Welcome to the next lecture on Process of Creating Social Innovation.

Complex Nature of Social Innovation

Social innovation is a complex undertaking that requires the collective effort of various

- stakeholders
- including individuals
- organizations
- communities

Social Innovation involves

- extensive research
- collaboration
- continuous learning

Implementing social innovations requires

- significant time
- resources
- perseverance to bring about sustainable change.

The diagram includes logos for IIT Kanpur and MedTech IIT Kanpur, and text such as 'ideas to products IMAGINER LAB IIT KANPUR', 'Social Innovation in Industry 4.0', 'Dr. J. Ramkumar', 'Dr. Amandeep Singh', 'MedTech IIT KANPUR', and 'Empathy'. Handwritten notes in blue ink include 'Time', 'resources', and 'perseverance'.

The Complex Nature of Social Innovation is undertaking that requires a collective effort of various stakeholders, individuals, organization and communities, it is very complex. So, Social Innovation involves extensive research, collaboration and continuous learning.

The implementing Social Innovation requires sufficient time, resources and perseverance to bring about sustainable change. So, Social Innovation is a complex undertaking that requires a collaborative effort between various stakeholders. So, various stakeholders participate, and all of them try to participate and create solutions. They share resources, and they try to generate new knowledge, such that they can try to solve a social issue.

So, in extensive research, it does that is what I said. It is an Empathy Study, you have to do an Empathy Study. If you do not do an Empathy Study, you will not be able to acquire whatever it is.

So, empathy collaboration and continuous learning. I have told you collaboration, continuous learning is upskilling, reskilling. All these things are continuous learning where Social Innovation has to happen, a person has to undergo continuous learning.

The implementation of a Social Innovation requires sufficient time, underline this. It does not mean that within 1 month time you will be able to understand the situation and try to develop a solution where in which it can be a product or a service. You will try to implement and upscale, not possible. You have to give sufficient time.

Empathy study you spend more and more time, you are sure that you are going closer to your answer very fast, but time here has to be spent more and more. What is Empathy Study? You become the customer.

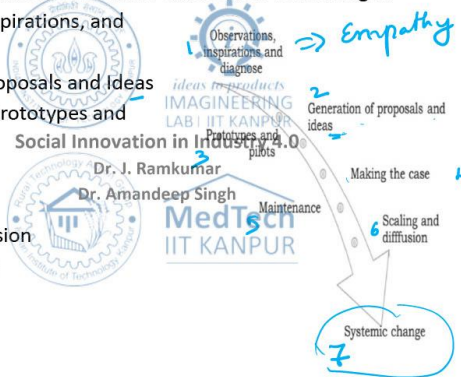
Suppose you are trying to develop a solution for a customer who is not able to get medicine, who is not able to have drinking water. So, you live with them, how one understand, what struggle they do to get drinking water. You stay with a group of people, under marginalized people, stay with them without any resources, what you enjoy, stay with them understand what their plight is, look at their daily time how do they spend, look at the uncertainty which weather gives it, and see how you can do a technological intervention, such that the entire society upliftment can happen. So, significant time, resources, and perseverance to bring about sustainable change are very much required. So, these points are very important. Time, resource and perseverance, all the three are very important to develop towards a solution.

Stages of the Social Innovation Process



The process of social innovation can be divided into seven stages:

- Observations, Inspirations, and Diagnoses
- Generation of Proposals and Ideas
- Construction of Prototypes and Pilots
- Making the Case
- Maintenance
- Scaling and Diffusion
- Systemic Change



Source: Luis Portales, Social Innovation and Social Entrepreneurship, 2019

When we look into different Stages of Social Innovation Process, the process of Social Innovation can be divided into Observation, then Inspiration and Diagnosis.

So, you observe and observe, you observed through an interview, you observe through without speaking, you observe through your camera, you note it down, you should have some inspiration for your observation.

The inspiration should be driving you. So, Inspiration and Diagnosis is the Stage One. The Next Stage of study is going to be Generation of Proposal and Ideas. So, that means to say, you are trying to define clearly what is the unmet need.

So, when you define it clearly an unmet need, then from there starts your ideation. You do lot of brainstorming sessions with your colleagues, with the society and do co-innovation. So, work with them, try to develop small ideas and no idea is good, no idea is bad, all ideas have to be listed down and then you start doing it.

The third one is Construction of Prototypes and Pilots. So, whatever you develop an idea, it is a good idea to develop it. Develop a physical or a virtual product, either in terms of product, or in terms of service.

So, Construction of a Prototype and Pilot is very important, then what we do is? We try to Make the Case, then look for Maintenance, then look for Scalability and Diffusion, and finally, what we do is a Systematic Change.

Stage 1 - Observations, Inspirations, and Diagnoses



Importance of Problem Diagnosis:

- Identifying root causes
- Moving beyond surface-level symptoms

Methods for Gathering Observations and Inspiration:

- Research and data analysis
- Interviews with stakeholders
- Community engagement

Example:

- In-depth problem understanding
- Research, data analysis, interviews, and community engagement
- Uncovering root causes and hidden dimensions

So, Stage 1 is Observation, Inspiration and Diagnosis. The importance of problem Diagnosis is going to be identifying the root cause. Moving beyond surface-level symptoms are problem Diagnosis, problem identification.

The methods for gathering Observations and Inspiration can be research and data analysis, as I told you there is a primary data, secondary data. Primary data is you go to the spot, interact with the stakeholders and get some data start working.

The secondary data is going through research, going through interviews, understand talking to experts etcetera. So, research and data analytics, interviews with the stakeholder and community engagement. So, all these things are way you gather information and you get Inspiration.

For example, in-depth problem understanding is very very important. Why do a marginalized group of people do not send their children to school? The root cause is, they do not have money for sending them to education.

Second thing, the home has so many other requirements where in which by doing it, the sustenance of the family can be enhanced, or the livelihood can be enhanced. So, because of that, the children are not allowed to go to school, but start working with the family in increasing their livelihood, families livelihood. So, here what you can do is? You can start educating the people.

The education can be given to the students in the evening and they work during the day, and the work whatever they do, where they will try to help you to integrate technology, such that you can start producing the required output in a more efficient way. So, in-depth problem understanding is very important.

Research, data analysis, interviews and community engagement are very important. Then, uncovering the root cause and hidden dimensions. These are some of the ways which people are trying to generate Observation, Inspiration and Diagnosis.

Stage 2 - Generation of Proposals and Ideas

Once the problem is diagnosed, the next stage involves generating

- Proposals
- Ideas

Design Thinking and Creativity:

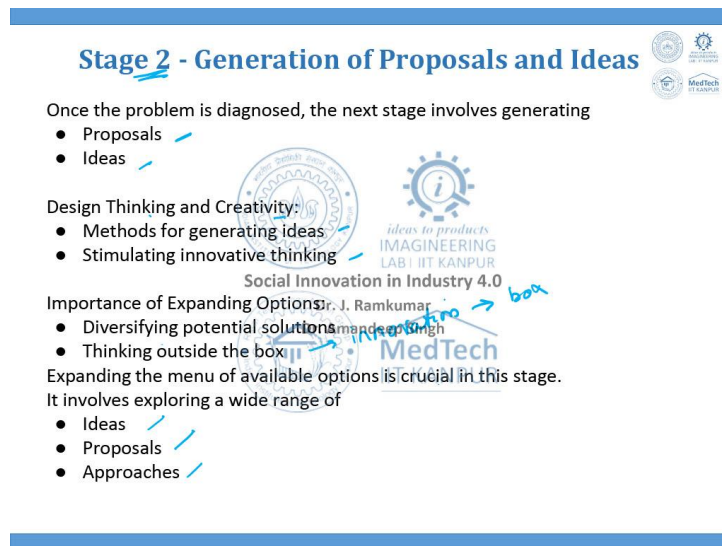
- Methods for generating ideas
- Stimulating innovative thinking

Importance of Expanding Options:

- Diversifying potential solutions
- Thinking outside the box

Expanding the menu of available options is crucial in this stage. It involves exploring a wide range of

- Ideas
- Proposals
- Approaches



Generation of Proposal and Ideas. Once the problem is diagnosed previously which is not so easy, diagnosed. The Next Stage involves Generating Proposals and Ideas. So, you have to make a clear statement from the root cause, you have to now make a clear statement, that is nothing but a title, and for that title you are trying to make a proposal, and you will try to make ideas. Design thinking and creativity are used very heavily here.

There are several creativity tools which are available today. So, using those tools to generate idea is very important. Brainstorming is one. Then, they have other thing is write whatever comes to your mind, and then start pasting it in a postcard, or in a stick paper on a wall. And then, you try to see what is the similarity, how do you rearrange the ideas, how do you generate ideas.

So, method of generating ideas, and stimulating innovative thinking are parts of design thinking, and creativity. The importance of expanding options is diversifying potential solutions and thinking out of the box are very important.

When we look for innovative solutions, we always are expected to think out of the box. The expanding the menu of available options is crucial in this Stage. It involves exploring a wide range of ideas, proposals and approaches. So, Generation of a Proposal and Idea is a very important Stage in the Social Innovation cycle.

Stage 3 - Construction of Prototypes and Pilots



In the third stage, ideas are translated into action through

- Construction of prototypes
- Conducting pilots
- Controlled trials

for testing viability and effectiveness.

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This stage involves an iterative process of refining ideas through:

- Cycle of trial and error
- Learning and making adjustments

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Then, Construction of Prototype and Pilots. In the Third Stage the ideas are translated into actionable points or action through construction prototypes, conducting pilot experiments and controlled trials for testing viability and effectiveness.

This Stage involves an iterative process of refining ideas through cycle of trial and error and learning and making adjustments. These are the two techniques which are used to convert the ideas into prototypes and pilots.

Today, we have several rapid manufacturing techniques. So, using those techniques trying to develop prototypes and demonstrate their prototypes in front of customers. The

Stage 4 - Making the Case



Making the case for social innovation involves

- Gathering Strong Evidence
- Demonstrating Superiority

For demonstrating superiority of the proposed innovation some strategies can help, like

- Comparative analysis
- Cost-benefit analysis
- Impact assessments

Collecting success stories and real-life examples showcasing the positive impact of the innovation can also be effective in making the case

Fourth Stage is Making the Case. Making the case of Social Innovation involves gathering of strong evidence and demonstrating superiority. So, this is basically you try to do a state of the art, you do a state of art search and then you come out with what is missing, and you come up what is missing. From the missing entity, you try to develop something novel and presented.

So, gathering strong evidence and demonstrating superiority is very important in the in this Stage of Making a Case. For demonstrating superiority of the proposed innovation some strategies can be like comparative analysis, cost benefit analysis and impact assessment. So, what we are trying to say is already there is a solution, you have developed your solution, how do you compare your solution is much better than them. So, it is comparative analysis, cost-benefit analysis and impact assessment.

So, these are the three things which are proposed innovation some strategies which will help you to develop. So, collecting success stories and real life examples showcasing the positive impact of the innovation can be effective in Making the Case.

Stage 5 - Maintenance



The maintenance stage focuses on ensuring the long-term sustainability of the implemented social innovation.

This stage includes:

- Refining and Sharpening Ideas:
- Identifying Revenue Streams:
- Securing Funding:
- Establishing Partnerships:



Stage 5 is Maintenance. So, the Maintenance Stage focuses on ensuring the long term sustainability of implemented Social Innovation. So, this Stage includes refining the sharpened ideas, identifying revenue stream, securing fund and establishing partnership. These things are all part of Maintenance.

So, refining and sharpening idea depending upon the customers, depending upon mass customization concept. you are trying to improvise the idea and sharpen your idea, such that your delivery is very good.

Revenue stream. So, you have developed a wonderful product now how do you sustain that product. So, it is nothing, but identifying revenue streams, then ensuring funding and the last one is establishing partnerships. Scaling and Diffusion is one of the biggest challenge.

Stage 6 - Scaling and Diffusion



In the sixth stage of the social innovation process, scaling and diffusion are crucial to

- expanding the reach
- impact of the innovation

This can be achieved through strategies such as

- Organizational Growth
- Licensing and Franchising
- Partnerships and Collaborations
- Flexible Diffusion Methods



The Sixth Stage of Social Innovation Process is Scaling and Diffusion. Many solutions work in a small confined community scale. Moment we try to scale it up, we fail miserably.

So, this Stage is more focused towards the Scaling and Diffusion, where in which in diffusion you try to spread the information, spread the technology, seep the technology into the society, are crucial to expand the reach, and impact the innovation.

This can be achieved through strategies like organizational growth, licensing and franchising, partnership and collaboration and flexible diffusion methods. So, that will help us to do Scaling and Diffusion.

Stage 7 - Systemic Change



In the seventh and final stage of the social innovation process, the focus shifts towards

- achieving systemic change
- creating lasting social impact.

Systemic change involves transforming

- existing systems
- structures
- institutions to address root causes of social issues.

It goes beyond surface-level solutions and aims to create

- sustainable
- long-lasting impact.

It involves

- addressing root causes
- influencing policies
- collaborating across sectors.




The Last Stage is Systemic Change. In the seventh and Final Stage of Social Innovation, the focus is towards achieving Systemic Change, creating lasting social impact. So, these two are very important. The Systemic Change involves transforming existing system,

structure, and institution to address root cause of social issues. It goes beyond surface-level solution and aims at sustainability and long lasting impact. It involves addressing root cause, influencing policies and collaborating across sectors.

The seven Stages which we saw in this lecture are very important. Observation, Inspiration and Diagnosis. Next you try to Generate a Proposal or Ideas, then you try to Make Prototypes, then you try to Make Case, then you try to Maintain it, then you try to do Scaling and Diffusion and finally, what you do is Systematic Change.

Summary



Importance of Understanding the Process:

- Effective implementation of social innovations
- Addressing complex societal challenges
- Leveraging systematic approaches and strategies

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By adopting a systematic approach and leveraging the strategies discussed, we can make a meaningful and sustainable impact in our communities

Assignment → Try to do a brain-storming session amongst u friends on a topic "Safe & Drinking water" for marginalized society

To Conclude in this lecture, we have studied the importance of various Stages in developing social innovative solutions. The Effective Implementation of Social Innovation, Addressing Complex Societal Challenges and Systemic Approaches and Strategies. By adopting a systematic approach and leveraging the strategies discussed, we make a meaningful and a sustainable impact in our society.

So, here I would request you friends, to start understanding what is brain-storming session. Try to do a brain-storming session amongst your friends on a topic 'Safe and drinking water'. 'Safe and Drinking Water' is the title. Try for marginalized society. 'Safe and Drinking Water' is the title. For that you try to figure out how do you get safe and drinking water in an economical way, such that you will be able to meet out to customer needs. Here, I am only asking you to do a brain-storming session.

What is a brain-storming session? Brain-storming session comes in Generation of Proposal and Ideas. So, it comes here. So, we have understood the different Stages of Social Innovation Process. With this, we will come to an end to this lecture.

Thank you very much.