

**Product and Brand Management**  
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**Indian Institute of Technology, Roorkee**

**Lecture: 35**  
**Reflexivity, Design Thinking, Insight and Value Co-Creation**

Hello friends. Welcome back to Product and Brand Management. In the last session, we focused on our discussions on Product Management at large. I would be focusing on an association of reflexivity, design thinking, insight, innovation and Value Co-creation. We have talked about almost everything separately and in consonance with each other also, but here, I would try to make this relationship explicit with the perspective of especially new product development. But then you would find several other elements, which we have discussed in due course of time. This session is primarily based on the fundamentals of these concepts given by eminent authors of their own fields.

For example, I have referred to Professor Mats Alvesson for reflexivity primarily. Other prominent authors of design thinking have already been explained and Thomas Lockwood is one of the most eminent. He was one of the most eminent thinkers and his thought process is alive forever.

Then, in case of insight I am referring to Professor Gary Klein and in case of innovation and about value co-creation also, we have strong references and then I will be using excerpts from specific papers apart from this to make this relationship explicit and strengthen the conceptual build-up around these concepts in coherence with each other.

I would be referring to one of our own experiments, in which we have done pivotal experimental research, should I say. Now, it is moving towards expansion and commercialization. So, I will be talking about that and would be explaining it in detail. So, here we go and let us see, what do we have in store.

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**Reflexivity**

*'Reflexivity means interpreting one's own interpretations, looking at one's own perspective from other's perspective, and turning a self-critical eye onto one's own authority as an interpreter and author'*

~Alvesson and Skoldberg, Reflexive Methodology(2000)

Source: Alvesson, M., & Kaj Skoldberg, K. (2018). Reflexive methodology: New vistas for qualitative research. Johannesburg: MTM  
Alvesson, M., & Skoldberg, K. (2017). Reflexive methodology: New vistas for qualitative research. sage.

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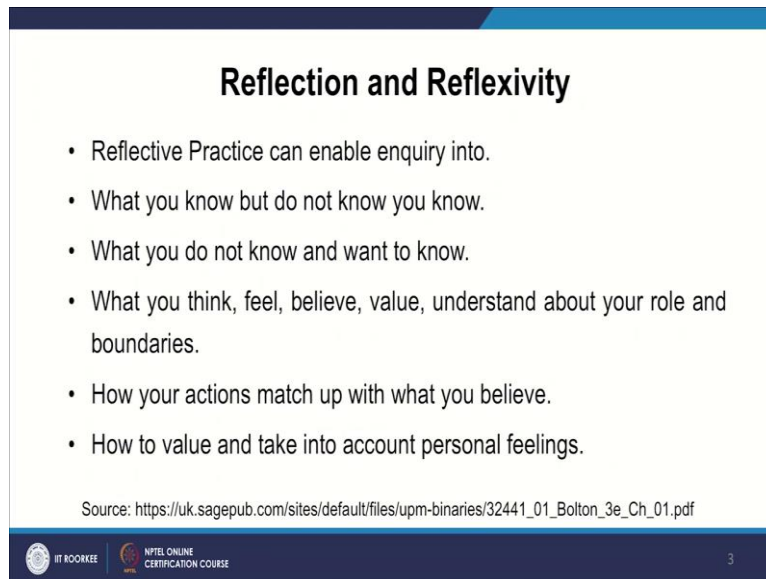
Let me start with the prospect associated with reflexivity, which means, interpreting one's own interpretations. Interpreting one's own interpretations, I will not say inferences. The interpretation of interpretations is how we have to see this perspective, it is not complicated. It is thinking and rethinking things which we are structuring in our thought process.

Reflexivity means interpreting one's own interpretations by looking at one's own perspective from others' perspectives. So, standing this side and standing at that side and you would remember I have already mentioned that; entering into the hearts of the customers or feeling that you are their part actually.

That is how looking at one's own perspective with others' perspective and turning a self-critical eye to one's own authority as an interpreter and an author. I will just reiterate this together. Reflexivity means interpreting one's own interpretations and looking at one's own perspective from the other's perspective and turning a self-critical eye onto one's own authority as an interpreter and an author.

Generating reflection from all the sides. If, I may conclude or interpret from this definitional framework, in a wonderful text and one of the best books, I have read on reflexive methodology that is new vistas for qualitative research, which you may also refer to.

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**Reflection and Reflexivity**

- Reflective Practice can enable enquiry into.
- What you know but do not know you know.
- What you do not know and want to know.
- What you think, feel, believe, value, understand about your role and boundaries.
- How your actions match up with what you believe.
- How to value and take into account personal feelings.

Source: [https://uk.sagepub.com/sites/default/files/upm-binaries/32441\\_01\\_Bolton\\_3e\\_Ch\\_01.pdf](https://uk.sagepub.com/sites/default/files/upm-binaries/32441_01_Bolton_3e_Ch_01.pdf)

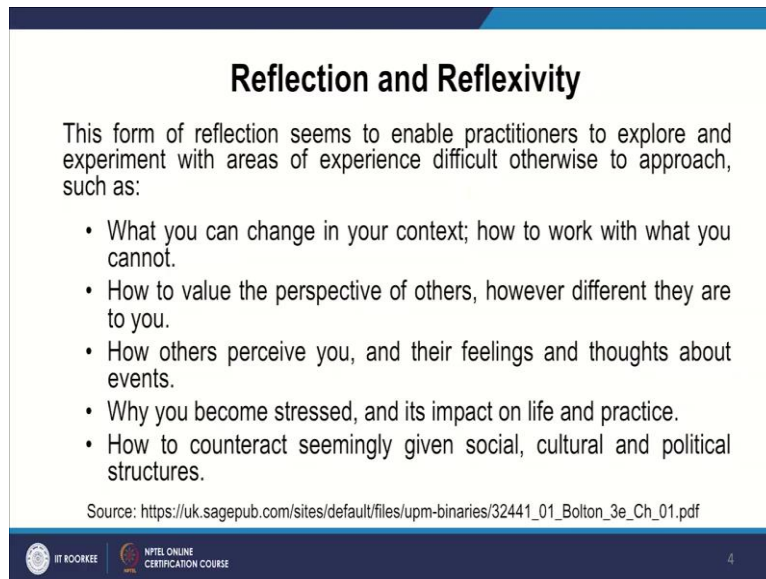
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Now, there is another element (and references are given there) of reflection and reflexivity is related to that. Reflective practice can enable inquiry into what you know, but do not know, that you know. Very simple, then, further what you do not know and want to know, that means, you have to enter into your own mind and visualize things and actually revisit your own understanding and then your desire for further understanding.

Then further what you think, feel, believe, value, and understand about your role and boundaries. Then next how do your actions match up with what you believe? There are several quotes on these kinds of things in all languages. If you will just go to any detailed ancient literature of your own culture, or language, whichever way you want to look at it, you will find that there are, descriptions of these kinds of things over there.

So, you can take a chord from there as well, although I am referring to contemporary research given by contemporary authors and especially in terms of business, business literature and research literature. Then comes, how to value and take into account personal feelings. How to collate everything and be a part of it, and still be outside of that.

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**Reflection and Reflexivity**

This form of reflection seems to enable practitioners to explore and experiment with areas of experience difficult otherwise to approach, such as:

- What you can change in your context; how to work with what you cannot.
- How to value the perspective of others, however different they are to you.
- How others perceive you, and their feelings and thoughts about events.
- Why you become stressed, and its impact on life and practice.
- How to counteract seemingly given social, cultural and political structures.

Source: [https://uk.sagepub.com/sites/default/files/upm-binaries/32441\\_01\\_Bolton\\_3e\\_Ch\\_01.pdf](https://uk.sagepub.com/sites/default/files/upm-binaries/32441_01_Bolton_3e_Ch_01.pdf)

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This form of reflection seems to enable practitioners to explore and experiment with areas of experience, which are difficult otherwise to approach as such. What you can change in your context; how to work with what you cannot? How to value the perspective of others, however different they are to you? How do others perceive you and their feelings and thoughts about events? Why you become stressed and its impact on life and practice? How to counteract seemingly given social, cultural and political structures?

So, these are just, as I said, forms of reflection we just talked about. It enables practitioners to explore and experiment with areas of experience. Otherwise, we would not be able to reach there.

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**Thinking....Design Thinking**

Thinking of...

Thinking about...

Thinking through...

**Design thinking seems to encompass all three of these qualities.**

Source: Lockwood, T. (2009). Design thinking: Integrating innovation, customer experience and brand value. NY: Allworth Press

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Then taking you back to design thinking, we have talked about it, but just wanted to reiterate that. Reiterating thinking of, thinking about, and thinking through, design thinking seems to encompass all three of these qualities. Now, whatever I have talked about reflexivity and reflection, seem to have a connection with this definitional framework as such. So, thinking of, thinking about, and thinking through is connected to reflection and reflexivity. It is very simple. Just imagine that you are part of everything and that is all.

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**Design Thinking**

Businesses need to be ambidextrous, so to speak, and to think from both sides (Creative and Analytical).

Design thinking is essentially a human-centered innovation process that emphasizes observation, collaboration, fast learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis, which ultimately influences innovation and business strategy.

- Thomas Lockwood

Source: Lockwood, T. (2009). Design thinking: Integrating innovation, customer experience and brand value. NY: Allworth Press

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Then again, just to reiterate, the definition by Thomas Lockwood, businesses need to be ambidextrous, so to speak and to think from both sides (creative and analytical). Again, the reflexivity perspective is evident there. Then the definition once again, I have talked about

this in detail earlier as well, but just to reiterate this in a few words, design thinking is essentially a human-centered innovation process that emphasizes observation, collaboration, fast learning, visualization of ideas, rapid concept, prototyping and concurrent business analysis, which ultimately influences innovation and business strategy.

You will find that the whole context is alive in front of us with relevance to the preceding discussion on reflexivity, which we have had just now. And now, you may think of writing these all together in parallel and then see the connection. You will find that; it may seem like two sides of the same coin.

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**Insight**

- Connections,
- Contradictions,
- Coincidences,
- Curiosity and
- Creative Desperation.

Source: Klein, G. (2013). *Seeing what others don't: The remarkable ways we gain insights*. Public Affairs.

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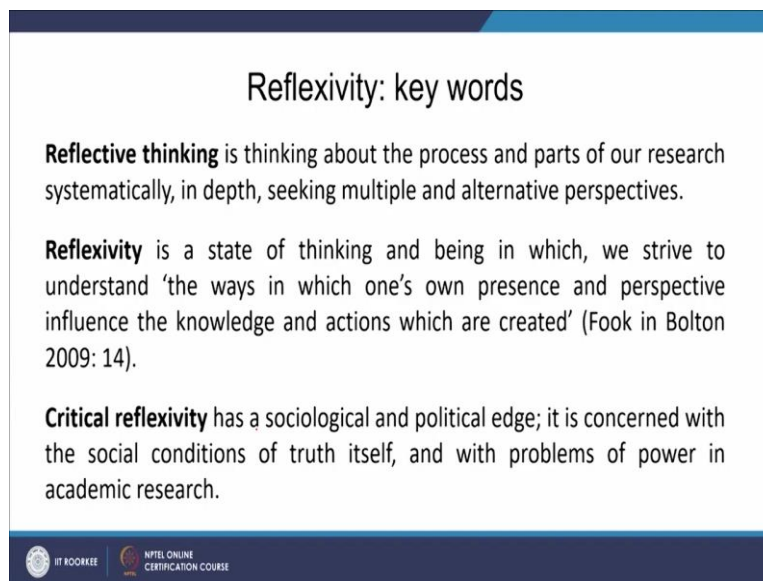
Then comes Insight. Here, I am referring to one of the great thinkers of our times. Gary Klien, who talks about connections, contradictions, coincidences, curiosity and creative desperation. So, what is the connectedness between the different elements which we are observing around? It is a very interesting read, ‘Seeing what others don’t’. So, it is a wonderful book and I would definitely recommend you to read that. Connectedness, and contradictions, and he has explained several case studies around these elements.

But just keep this in mind that this is how he has presented a framework on how to look at insight which comes to us as in how we think. So, that is the perspective around as far as insight goes. Hence, reflexivity, design thinking, insight now, all these things, you would find that they have a coherent chord, which is connecting them conceptually also. And if you will look at the new products, which we have talked about in due course of time, the services and

in several examples, which we have discussed, you will find that all of these seem to be connected in a visible form in the form of those products.

Quite a presentable form in the form of even in the intangibility of the services, which are being provided to us. I have fondly talked about health care services as well and referred to Narayan Hrudyalaya as well in Integrated Marketing Communication and also about Max hospital for example, and so, on.

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**Reflexivity: key words**

**Reflective thinking** is thinking about the process and parts of our research systematically, in depth, seeking multiple and alternative perspectives.

**Reflexivity** is a state of thinking and being in which, we strive to understand 'the ways in which one's own presence and perspective influence the knowledge and actions which are created' (Fook in Bolton 2009: 14).

**Critical reflexivity** has a sociological and political edge; it is concerned with the social conditions of truth itself, and with problems of power in academic research.

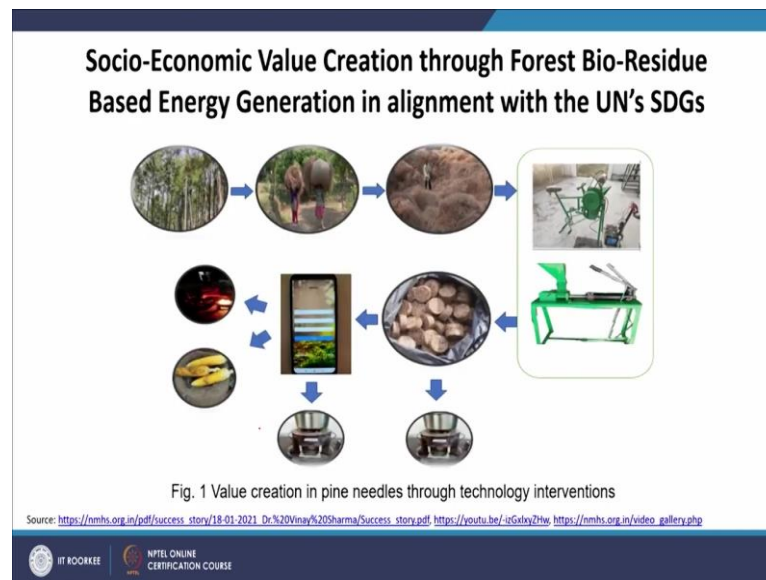
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Then, come in some keywords around reflexivity. Reflective thinking is thinking about the process and parts of our research systematically and in-depth, seeking multiple and alternative perspectives. Another element is reflexivity, which is a state of thinking and being in that, we strive to understand the ways in which one's own presence and perspective influence the knowledge and actions which are created. Again almost, the similar kind of perspective which we have just mentioned. So, just you will do this exercise that whatever is being discussed, you can write it on a sheet and then find the common chord and then start putting up the names of products, where you find these things visible around you. Those elements can be, alive somewhere, which is happening around you as well in the form of some development or some new thing which is being developed by one of your friends and colleagues and so on.

Critical reflexivity has a sociological and political edge. It is concerned with the social conditions of truth itself and with problems of power in the academic research.

I have mentioned this just to give you a composite overview for discussion on product and service. You may think of separating this element as of now, within this discussion framework.

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Now, look at this picture of socio-economic value creation through forest bio-residue-based energy generation in alignment with the United Nations SDGs. The point is that this line is actually the name of the project which we did. I will be talking about this as an example and you would find reflexivity, design thinking, insight, innovation and value co creation, all of these elements alive together in coherence with each other in this experiment, which we did. I will keep giving you the narrative around it, but just look at this value chain. In the first picture on the left side you can find pine trees, which shed pine needles and you will find a stack of pine needles around. Those are shredded by the cutters, then processed by a machine and converted into briquettes.

Then a mobile application is used for the distribution of these briquettes for selling these briquettes. And then these briquettes are also utilized for household consumption like when to cook food and for heating purposes, which is through customized stoves and heaters and those kinds of devices which we have developed. This whole value chain was developed by us, me and my colleagues and the members of the group which was constituted.

This group worked on this for number of years, which would be explicit in the subsequent discussions. You will be introduced to the names of the people as well, but just keep this



value chain in mind and I will tell you in due course of time along with this discussion that how all those elements came alive when we visited the problem. Just to give you a glimpse, Dr Kapil Joshi, an IFS officer who did his PhD with me, discussed this with me in the pre-PhD stages, that, what should be done in terms of forest fires?

That is how the story started. We came up with a research proposal and all through the years when he did his PhD with me and then we got this project supported by the National Mission for Himalayan Studies, Ministry of Environment, Forest and Climate Change, Government of India, while Indian Institute of Technology, Roorkee rendered its support in this project and University of Petroleum and Energy Studies, Dehradun, along with their team members was associated in this project. All of us, went along and then Dr Kapil Joshi pursued his postdoctoral research on this subject as well.

This is how the story came on, and it took almost 10 years, though the project execution was confined to two years or so. It is now alive and going ahead and we are expanding that. It is just a quick narrative on this and let us see what came next to us. So, I will be playing a short video for you just to give you a glimpse.

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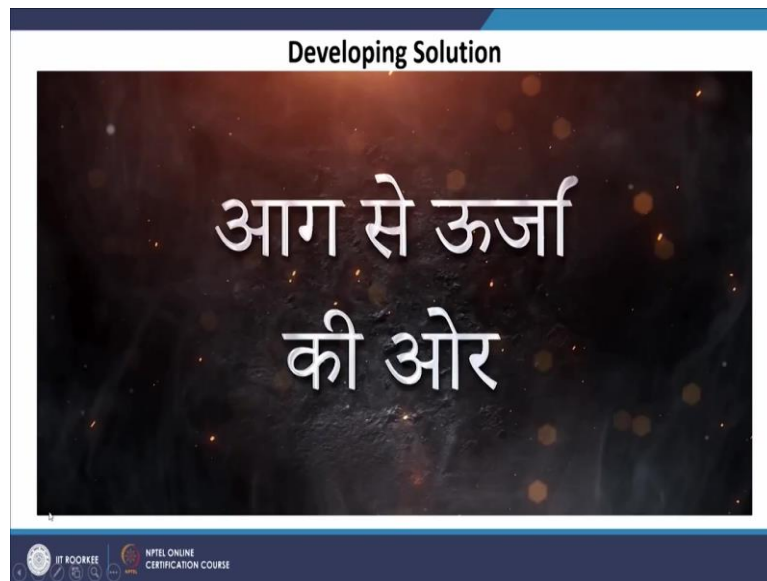






Now, watch the next clipping as well.

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**NMHS** **National Mission on Himalayan Studies**

Title: Socio-Economic Value Creation through Forest Bio-Residue Based Energy Generation in alignment with the UN's SDGs.

Dr. Vinay Sharma, Indian Institute of Technology, Roorkee (Strategic Marketing Expert)

Dr. Rajat Agrawal, Indian Institute of Technology, Roorkee (Finance and Logistics Expert)

Dr. Gaurav Dixit, Indian Institute of Technology, Roorkee (IT Expert)

Dr. Prasoon Dwivedi, UPES, Dehradun (Energy Economics Expert)

Dr. Alka Dwivedi, UPES, Dehradun (Community Development Expert)

Dr. Pankaj Sharma, UPES, Dehradun (RET Expert)

Dr. Anita Sengar, UPES, Dehradun (Marketing Expert)

Dr. Kapil Joshi, IFS (Technical Advisor)







## Implemented By



Indian Institute Of  
Technology - Roorkee



Universal Of Petroleum &  
Energy Studies - Dehradun

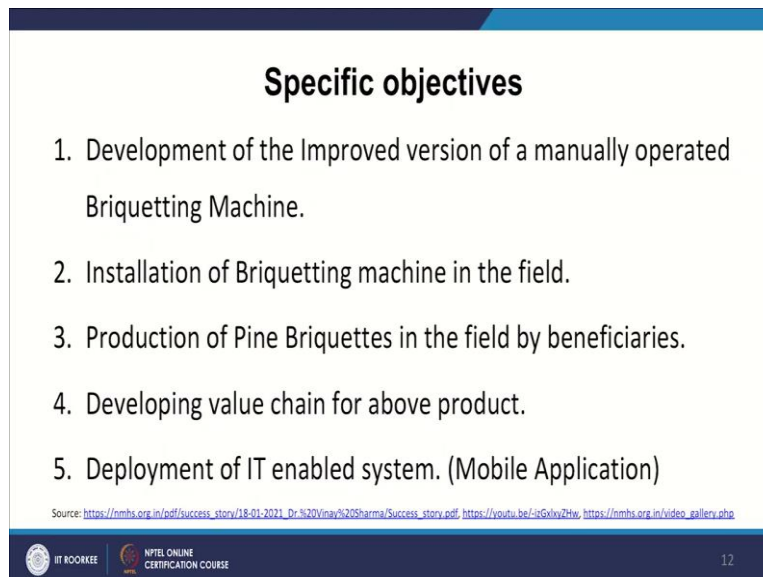
As I said, pine needles have a high capability in terms of energy, and are highly inflammable. They are shed by the pine trees every year in very large quantities, which is millions of tons. They can remain on the forest floor for a long period. They are so light that collecting all the pine needles from the Himalayan region and bringing those down, is just not feasible. So, there are several kinds of issues associated with that and it has been going on for a long period. Then they get fire. The fire breaks and it destroys the habitat around basically, which happens almost every year more or less.

Although, this project has been done in its pilot form, but now holds all the capacity of being expanded. But again, the point is that, this was focused on solving this problem, generating livelihood, converting pine into a product and then generating new processes as well. Remember we talked about innovation in terms of product processes and marketing.

All three elements were utilized. Reflexivity, how does it come in? Because we had to know what are the main causes of fire and how to remove those causes while including everything and everyone in the process, all the stakeholders and you have to become part of the problem first and then part of the people who are associated with that. So, that is where reflexivity and design thinking come in.

Because, there you do not have to go for high-end high technology designs, you have to go with very simple manual machines. Those had to be developed and customized in terms of as far as whatever technology is available. So, all these elements of reflexivity, design thinking, insight, and innovation, came together to generate value, justifying value co-creation.

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**Specific objectives**

1. Development of the Improved version of a manually operated Briquetting Machine.
2. Installation of Briquetting machine in the field.
3. Production of Pine Briquettes in the field by beneficiaries.
4. Developing value chain for above product.
5. Deployment of IT enabled system. (Mobile Application)

Source: [https://nmhs.org.in/pdf/success\\_story/18-01-2021\\_Dr.%20Vinay%20Sharma/Success\\_story.pdf](https://nmhs.org.in/pdf/success_story/18-01-2021_Dr.%20Vinay%20Sharma/Success_story.pdf), <https://youtu.be/-iGvayZhw>, [https://nmhs.org.in/video\\_gallery.php](https://nmhs.org.in/video_gallery.php)

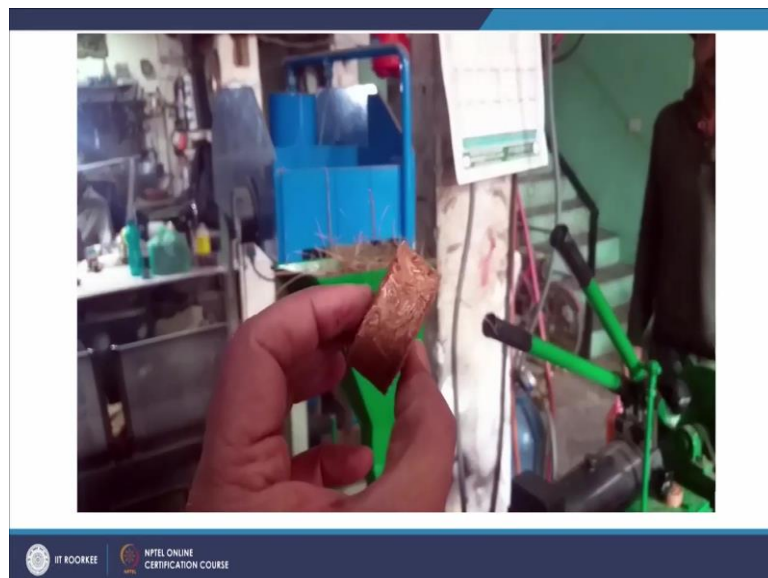
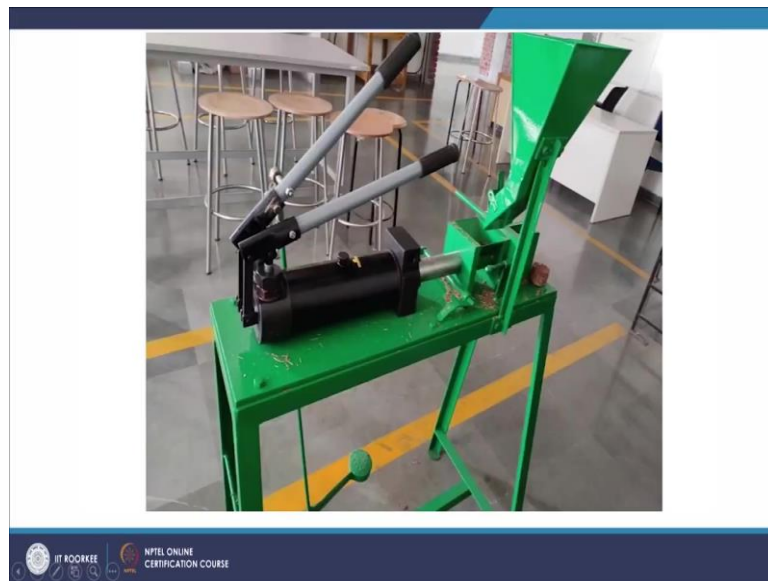
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The specific objectives of this project were the development of the improved version of a manually operated briquetting machine, which we were working on and it was a heavy version. Another objective was, installation of the briquette machine in the field, and production of pine briquettes in the field by beneficiaries of the community, so that they can earn money all throughout the year. It is a tough life in the Himalayas.

Next was developing value chain for a given product that is pine briquettes and development of IT-enabled system based mobile application related to the market development of these products. Now again, just watch a clip and you would realize how things were.



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Briquetting Machine In Operation



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Briquetting Machine In Operation



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Briquetting Machine In Operation



Briquetting Machine In Operation



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JAM CUTTER



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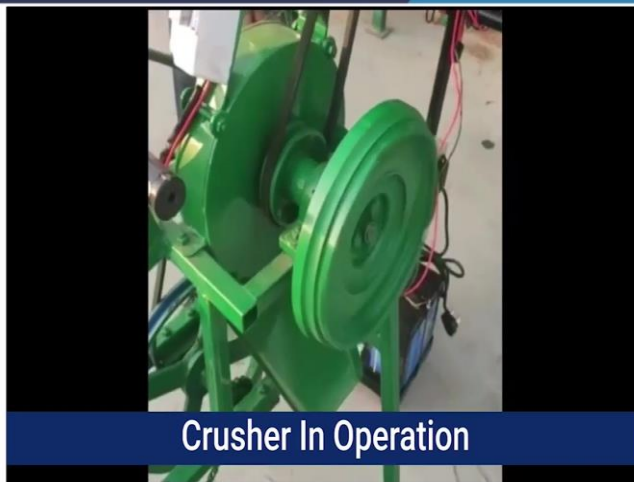
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CRUSHER



Crusher In Operation



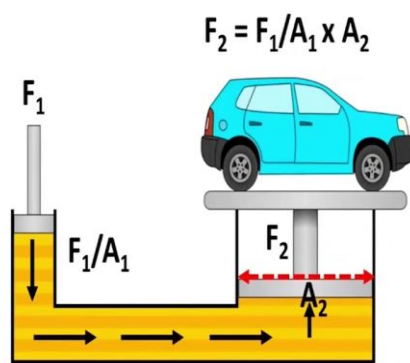
Crusher In Operation

## PRINCIPLE OF HYRAULICS

# PASCALS LAW



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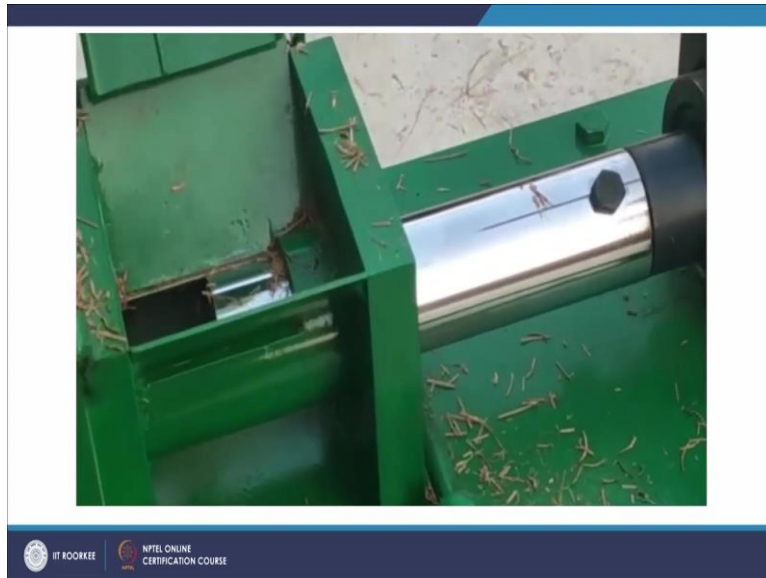


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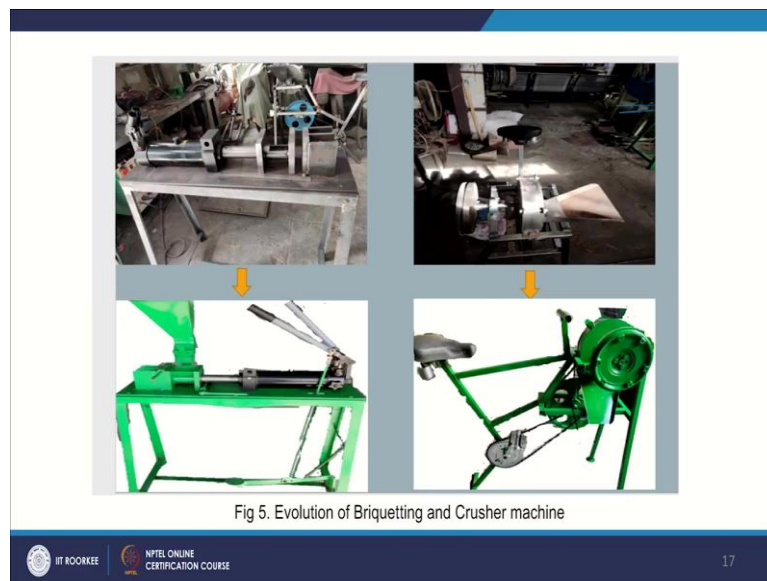


This brief clipping altogether suggests how the problem was conceived and what elements were considered primarily with an outlook of providing benefit to all the stakeholders by preventing fires, utilizing the pine needles within time with low-cost technology which can be easily adaptable and bringing in a socio-economic change altogether.

And for this one had to become part of the whole system, the people and their thought processes and have had to enter into the hearts of the stakeholders. Then design thinking perspective was utilized to imagine the complete value chain. The changes, which this small change might potentially bring all together like the life of women engaged in different kinds of tasks for collecting firewood, so that their time would be spared, that also was conceived because this requires particular kind of man hours which are not so large as compared to those kinds of tasks, which they have already been doing.

Getting them free out of that, plus household income generation or enhancement levels and several other things and carbon emissions are also considered and the capacity of this product as a household fuel and then as a saleable product was thought of. How saleable it can be was also considered and just I will be showing you a few pictures of how these pine needles are collected, then, they are processed through choppers and we can do that through manual choppers or otherwise solar-powered choppers. There are several reasons why we did not go for so much of automation. There are evident costs that had to be curtailed, low maintenance had to be kept in mind and this whole process has also already been demonstrated to you through the video clippings.

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These are the pictures of the cutters and the machines and there are several reiterations on the model which is shown to you. There are several other improved versions which are being developed now. The adaptability level of people is very high. One more thing which is very important for me to share with you is that people have started using this machine for processing different kinds of raw material as well as for developing different types of briquettes to be sold for different purposes.

For example, nowadays people are processing various kinds of grasses, let us say lantana to produce mosquito repellent briquettes and they are pricing it at a higher price, earning a higher cumulative income. Here, reflexivity, design thinking, and insight are propelling

innovation. And then market innovation is coming to fore because you have mobile application with you.

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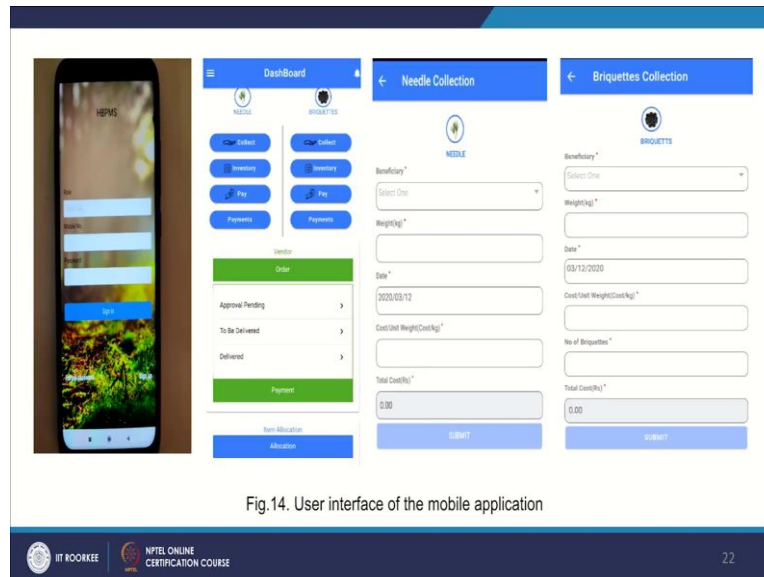


Fig. 6 Purchase and distribution of items to the beneficiaries for collection and storage of pine needles in village Chopra.



Fig.7 Community sensitization regarding project & its significance in village Chopra





Fig.8 Initiation of Product development in the laboratory



Fig.9 Technology adoption by the locals



Fig. 12 Demonstration of the Stove with pine briquettes as fuel



Fig.13 Stacked Briquettes



Fig.15 Demonstration of forced draft stove by the expert



Fig.16. Eco Stove Designed and Developed for being distributed in the villages for household purposes



This is how communities were involved and then the mobile application is enabling further propulsion of the whole system. We assume that in due course of time, these briquettes can be utilized for industrial purposes as well. On the other side, several improved versions of different kinds of products would come to the fore and several other products would be developed with the same technology.


This is how we conceived the project. This is how the whole system was going ahead. A new product has been developed and value co-creation is coming to the fore. I will not go into much of the detail about what value co-creation is, or how the briquettes are manufactured. You can see the bundles of briquettes in front of you and how the mobile application works. So, a simple application and larger change.

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### Value Co-Creation



1. Identify all stakeholders touched by the process (employees, customers, suppliers, distributors, communities).
2. Understand and map out current interactions among stakeholders.
3. Organize workshops in which stakeholders share experiences and imagine ways to improve them.
4. Build platforms to implement ideas for new interactions and to continue the dialogue among stakeholders to generate further ideas.

Source: Venkat, Ramaswamy, and Francis Gouliart. (2014). Building the co-creative enterprise. Harvard Business Review. Retrieved November 27, 2021 <https://hbr.org/2010/10/building-the-co-creative-enterprise> .

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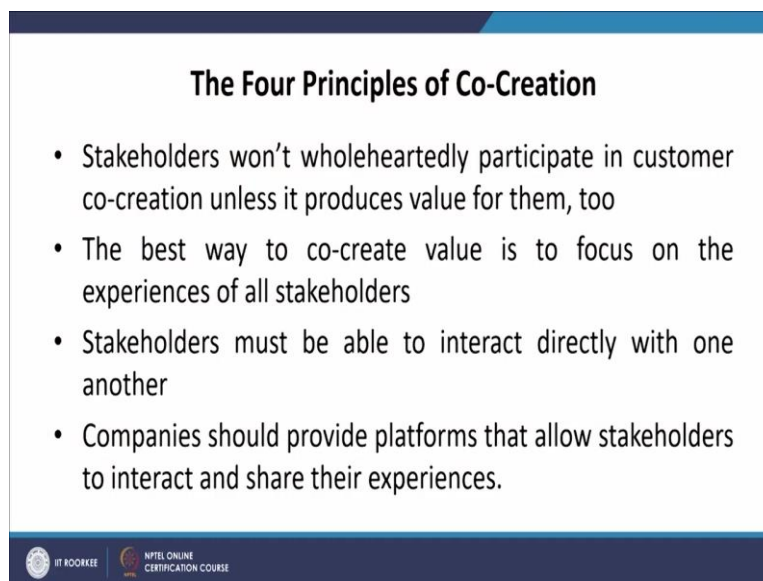
### How co-creation approach differs..?

Traditional Strategy	Co-Creative Strategy
<ul style="list-style-type: none"> <li>• <b>Value:</b> Creates value by delivering defined customer experience to targeted customer set</li> <li>• <b>Goals:</b> Establishes strategic goals at the outset and doesn't significantly change them</li> <li>• <b>Key focus:</b> Focuses on the interests of the firm: that is, how the firm can maximize its share of the created value relative to the shares of its industry competitors and the other members of its value chain</li> <li>• <b>Advantage:</b> Achieves advantage through realizing economies of scale before competitors do and making big, bold moves (such as acquisitions and investments in proprietary assets)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Value:</b> Creates value by constantly enhancing experiences for all stakeholders</li> <li>• <b>Goals:</b> Uses the initial strategic goal as a starting point and lets the full strategy emerge over time</li> <li>• <b>Key focus:</b> Focuses on the interests of all stakeholders and how the ecosystem can maximize the size of the pie; maximizing the share of value captured by the firm is secondary</li> <li>• <b>Advantage:</b> Achieves advantage through the increased engagement of stakeholders and by continually building new interactions and experiences, which lead to higher productivity, higher creativity, and lower costs and risks</li> </ul>

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This is where value co-creation comes in wherein, identifying all the stakeholders touched by the process, understanding and mapping out current interactions among stakeholders, and organizing workshops in which stakeholders share experiences and imagine ways to improve them, along with building platforms to implement ideas for new interactions and to continue the dialogue among stakeholders to generate further ideas is a larger framework of value co-creation. The advantage is that it achieves an increased engagement of stakeholders by continually building new interactions and experiences which lead to higher productivity, higher creativity and lower costs and risks.

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**The Four Principles of Co-Creation**

- Stakeholders won't wholeheartedly participate in customer co-creation unless it produces value for them, too
- The best way to co-create value is to focus on the experiences of all stakeholders
- Stakeholders must be able to interact directly with one another
- Companies should provide platforms that allow stakeholders to interact and share their experiences.

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The larger principles which, I have already mentioned in brief are that the stakeholders would not wholeheartedly participate in customer co-creation unless it produces value for them. So, be assured that the best way to co-create value is to focus on the experiences of all stakeholders. We went all in for that kind of an insight given to us by them by becoming part of their thought process. Stakeholders must be able to interact directly with one another, companies should provide platforms that allow stakeholders to interact with each other for sharing their experiences.

This is where I end my discussion on new product development in coherence with reflexivity, design thinking, insight, innovation and value co-creation. That reflexivity and design thinking come all together if we start thinking that way and we would be generating or developing wonderful products, which can instigate a percolative change as well as a further thought process in due course of time. I hope you have enjoyed this course till this stage. I will be taking you towards brand, branding and brand management from now onwards, and I



will be joining you with lots of insight on the subject. Just keep pace with me. Just keep following what we have discussed. Go deeper into the references which I have used and let us make the best out of it. I will be coming back to you. Till then, goodbye.