Understanding Design Thinking and People Centered Design Prof. Jhumkee Sengupta Iyengar Department of Humanities and Social Sciences Indian Institute of Technology, Kanpur

Lecture – 12 Concepting and Building Top Five Ideas

We are now on to sub part 2 of the section 3 which was Concepting and Building. We will be speaking now about top 5 ideas.

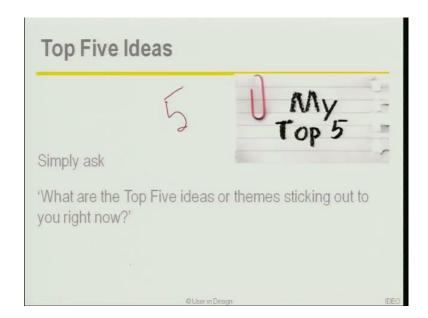
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We earlier saw how we generate ideas, we learned about the way brain storming is done and what are the different you know benefits and drawbacks of brain storming, we learned how there is a more effective way to do brain storming.

So, those are few an organizations that typically a set up to do brain storming you can try a slightly different way. We also spoke about other methods of ideating that helps unlock some of those clocks that happen in our mind when we are trying to come up with creative ideas. And so now, we are going to speak about top 5 ideas which is 1 technique 1 simple tool that can be quite effective in ideating in teams. So, it is you know something that is used not just during ideating, but it can be used in different situations.

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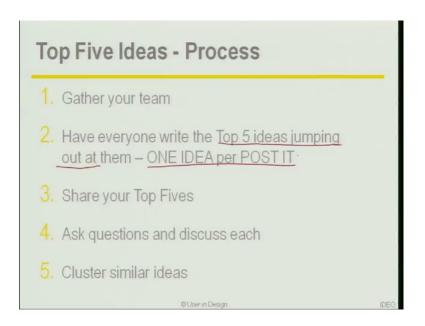
So, it is essentially called top 5 ideas and what is it simply ask what are the top 5 ideas or themes sticking out to you right now. So, what are the top 5 ideas or themes sticking out to you right now? Why does that make sense? Why is it powerful technique? Because 5 is a comfortable number you know when you ask people to ideate say come up with ideas and if it is like an open ended thing it almost seems so intimidating that it gets difficult to come up with ideas. When you tell someone that I want you to come up with 5 ideas it is seems very achievable it is seems very doable that it is within my ability come up 5 ideas I can do that right.

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So, that is what top 5 ideas is all about and as I mentioned it can be used at various stages in the process ideally used during the ideation phase and you can use it progressively as well as repeatedly during a ideation phase. So, you use the top 5 ideas initially to generate 5 concepts and then you kind of refine it, revise it and then come up with an different idea and then you use top 5 ideas to again ideate on it to say how do you make it better. So, it is a pretty powerful way to do this right and 5 again is a nice comfortable limited number and it can spark new thinking on anything right.

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So, we look at some examples after this, what is the generate process of working with top 5 ideas right. Gather your team; again this is a very powerful technique for working with a team right. So, gather your team have everyone write the top 5 ideas jumping out of them again 1 idea per post it I think you gotten comfortable with this concept now. So, top 5 ideas jumping out at them and also limit the time you know 15 minutes 10 minutes whatever seems comfortable, but it should not be 2 hours it needs to be a very defined finite kind of time.

So, top 5 ideas that are jumping out at you. Then once everyone comes up with 5 ideas let us say you are a team of a 5 people very quickly you generate 25 ideas. So, that is the power of the top 5. And let us say even 10 of them are no good they something that you would discard right away even then you have 15 ideas right of the bat who in a period of 15 or 10 minutes right.

So, you share those top 5 ideas with each other you discuss it ask questions have people clarify their ideas have them explain to you what they meant by the idea what was in their thought what is the angle of the problem they were taking to solve and that kind of thing. So, it generates a bunch of discussion and that itself is very inspirational often times from 1 persons idea you get inspired to create something else. And then you would cluster similar ideas you will find people have ideas that are aligned you know similar kind of thoughts you would put them together and together they become something bigger than that 1 idea.

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So, this is how it works and the rational for it why does it work because everyone of us has innate abilities to invent and solve problems this is the belief this is what I believe in this is what a lot of people believe in. And the fact that if we believe that everyone has this innate ability to solve problems then we are able to hand this tool and put it in the hands of anybody on the project team and say come up with ideas it is not that the ideation has to happen only by a select few people, alright.

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If you remember I introduce this quote to you earlier from doctor Herbert Simon who says everyone designs who devises courses of action aimed at changing existing situations into preferred ones. Existing situations into preferred ones if you think about it for a moment you are all involved in changing existing situations into preferred ones you are all involved in the desire to change existing situations into preferred ones and that is the rationale behind the top 5 ideas.

Everyone can ideate it does not have to be one person with a pen or it does not have to go to just the ideation department it is something that we as a team can come up together and the power is in the teams ideas in the it is not the teams ideas, but individual ideas of the team that add up to much bigger than some of the parts.

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So, what are some of the benefits of top 5 ideas? It helps you reveal opportunities for design and again very quickly because it is a limited number 5 you can come up with them pretty quickly and it quickly reveals opportunities for design.

It helps you select from multiples you know if you sitting with 25 it makes it very easy to consider them reconsider discuss thing prioritize rate and then select ideas right. It helps isolate key ideas. And then as it teen when you are trying to evaluate these you would you know allocate criteria for selection and then as a team you would select and define isolate the key ideas and it helps then uncover themes and helps you to strategize.

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So, those are the benefits of these top 5 ideas. So, this is how it looks like an action you have the team everyone sitting with a stack of posted notes, everyone is writing, no one speaking to each other, everyone is writing their own top 5 ideas. So, gather your teams have everyone write the top 5 ideas and one idea per post it.

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So, that is the first step then you share your top 5 ideas everyone puts them up on the board and you know it is all upped there for everyone to take a look at every things up on the board for people to look at. And step back put everything up and step back take a couple of moments to look at it read it try and understand it before you then start asking what did you mean by that does this connect with so and so, thought you expressed earlier and things like that right.

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So, put up all your ideas on the wall and then ask questions and discuss each. So, you know each person would explain the idea that they came up with an elaborate it articulate it speak about how they envisioned it. And very important points draw your ideas even though it is a post it, note it is not too small to draw. So, draw on them it helps articulate the ideas even better. So, ask questions discuss ask for clarification.

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And then start to cluster similar ideas look at all the different ideas and say maybe this and this and this go together and these go together. So, start put them in groups then you will start to see patterns emerging. So, this was part of an activity and which we are trying to understand ideate on the breathing difficulties at people face in urban living.

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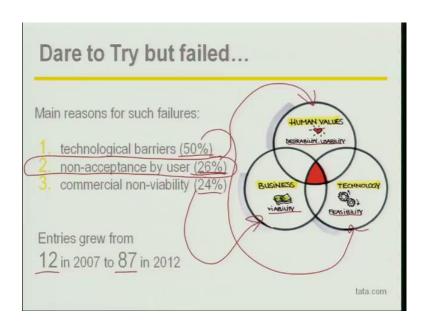
So, what I would like to speak to you now about this notion of just like many of us say I do not know how to draw. Many of us say I am not creative at all. I do not know how to come up with ideas. So, I wanted to introduce you to TATA. TATA has an annual innovation award right they have and they introduce this over the last several years in order to recognize people who are trying to come up with new ideas, new innovations and that as a way to inspire others as a way to create amputees for more innovation in the organization.

So, they have introduced these annual innovation awards and they have them in 3 categories right. The first one is innovation of a commercial success something that you know went through the innovation process, went through the production and has gone out on the market and it is become a commercial success right. So, innovation of a commercial success is the first category the second category is innovation in the leading edge innovation in something that is you know perhaps like a breakthrough design something very leading edge very new trail blazing kind of thing that is the second category.

Now, the third category is very interesting it is called innovative projects in which team members did their best, but failed a dare to try award right. Dare to try and this is a brilliant idea that it you worked on it. It did not worked, but it still being awarded it is still being recognized for the fact that you dared to try that you were willing to take a risk

you were willing to sort of put your neck out and try this is what when we say that you know creative confidence when we say that be prepare to fail and do not treat it as failure. So, all of those things it involves a kind of risk taking mentality and what happens when you have a risk taking mentality is you are ready to go and push beyond those boundaries and ideate beyond the borders where some bullion solutions might lie.

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So, this is what TATA'S are recognizing in dare to try. So, interesting statistics is they analyzed the reasons for these failures the reasons why these the ones that failed why they had failed and they found that 50 percent of them are because of technological barriers 26 percent of because of non acceptance by the user.

Now you understand you know what that means, right non acceptance by the user and 24 percent was because of commercial non viability. And initially people were very hesitance they were shy, they were uncomfortable to come out and say that you know this is the idea I tried and it failed. But gradually the numbers have started rising it rose from 12 in 2007 to 87 in 2012 and I am sure the numbers are bigger and bigger right. Now couple of things I would like to point out to you, remember, this diagram where we spoke about desirability, usability we spoke about viability and we spoke about feasibility.

So, you can see that you know this was this number non acceptance by user was this number and commercial viability was this number. We are trying to work on how do you

make products that innovative and people centric. People centric and therefore, innovative, innovative because they are people centric. So, it is interesting to give a moment in thinking that perhaps this number can come down a lot this part of it which was non acceptance by user possibly because when we design we do not think of all the things that the users considerations might be and therefore, there is a mismatch there is a gap right.

So, this was a nice interesting sort of connect back to a lot of the design thinking related people centered related ideas that we are talking about.