

**Understanding Design Thinking and People Centered Design**  
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**Lecture - 10**  
**Research and Analysis**  
**Insight Statement, 'How Might We Questions', Design Strategy Statement**

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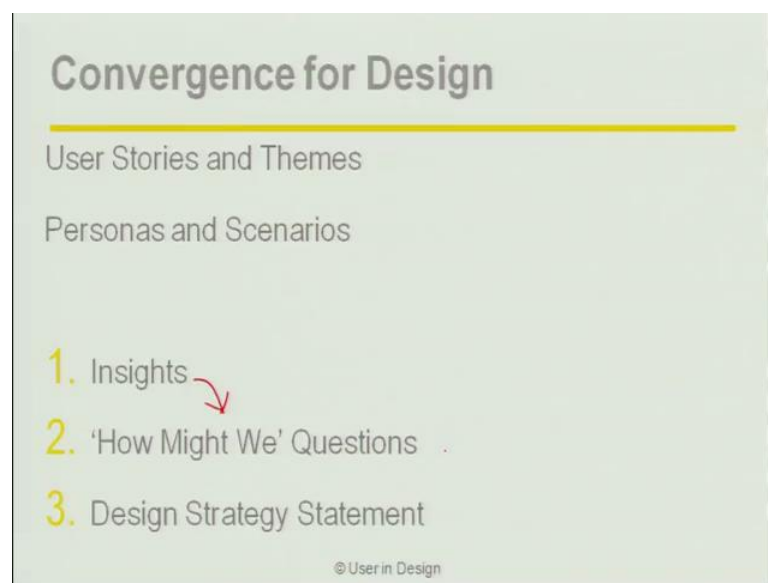
Now, we come to the last sub part of section two researches and analysis and this is about insight statements, how we questions might and design strategy statements this is an area. So, insight statements how might we questions and design strategy statements. Now remember we have been diverging right we went out we got a lot of information and as we did our research even before that, if you think back to the problem framing you know when we were working on the problem framing, we started with one problem right we started with one problem and then said what are the different ways to think about it. We diverged we brought all our thoughts together and then we converged and came up with a better statement a better problem statement.

Then we said let us go and interview users let us go and find information we diverged again we went out and you know we found out a lot of information and came back and then we tried to make a sense of all of it and we converged into our persona scenarios. Now we are converging into finally, a design strategy statement that is defining for us

what is it that we are designing what is that object or a service or system or experience or product service system, that we are designing we define that and then we are going to diverge again when we start to ideate I will show you a diagram of this again.

But this is the process, but also remember what we have been doing is we start with a single point and then we work sometimes individually that is also part of the diverging converging which is what makes this method and this approach. So, powerful there are many views many, many ways and then we bring it all together into one. So, that collaborative comes into a single point then again we go and you know we research and all that and come back and a lot of different ideas and thoughts as far as bringing, it back from the field to the users and then we converge all that into one and again during ideation we will work individually and then we converge all our thoughts together. So, that is the power of the system. So, insight statements let us try and understand what are insight statements.

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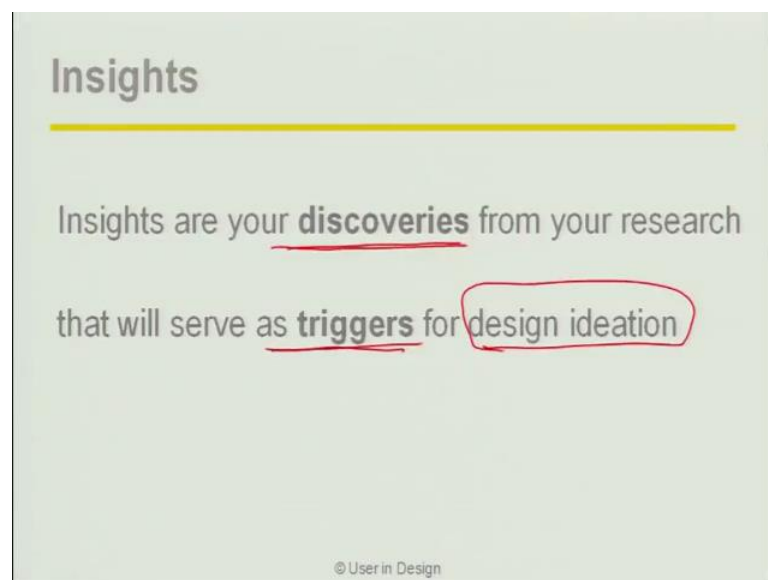


So, we started as I said in the earlier section with user stories and themes we you know we understood the stories of our user's lives right it is like a script of a play this is the story of their lives and from that we formed all these themes and then, we created personas and scenarios we said of the entire population of people who are going to use our this particular product or service these are the 3 or 4 broad types of people right. There is a generous Rahul there is a stingy Sapna, there is you know whatever it is not so

aware. So, and. So, the different types that we talked about and their context and their scenario now based on these we are going to draw insights.

Now we are going to say that this is my realization insight is like a realization that is then going to become our launch pad and then how might we questions from the insight we would derive how might we questions where we ask ourselves the questions ask ourselves a question in order to be to asking ourselves the question. So, that we can answer it through a design solution and then the design strategy statement so, these are the things we are going to cover in this section.

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What are insights? As I said are your discoveries from your research they are your realization and what is the purpose of them they will serve as triggers they, will serve as the launching pad from which design ideation will happen. So, your discoveries pool together and to become these triggers let us look at some examples of the insights that were drawn.

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**Insights – Adventure Travel Service**

1. Looking for something beyond typical tourism
2. Fear/Ignorance about Adventure Activities
3. Indecisive
4. Discomfort about reliability of information
5. Look for single point of information for all adventure

**ADVENTURE TRIP**

*Risks*

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The slide features a list of five insights. A red bracket on the left groups items 2 through 5. A red arrow points from 'Indecisive' to the word 'Risks' written in red. The words 'ADVENTURE TRIP' are written in large, bold, black letters. There are three small images: a man's face next to item 1, a man's face next to item 4, and a woman's face next to item 5.

So, there was this service we were working on which was a service for adventure travel you know people who do not want to do your standard tourist kind of travelling. They are interested in some kind of new adventure some something fun something more exciting right and this also happened at the time when that movie was released [FL]. So, an adventure trip based service right. So, what were some of the insights that came up I am not sharing with you the details of the research or anything. But at the end of it team came back with this is what our people need the insights are that people are looking for something beyond typical tourism, that standard tourism is not as exciting for people anymore right they have a lot of fear, they also have a lot of ignorance about adventure activities they want the adventure there is the excitement the thrill of adventure and they would love to try it and also having seen other people and other like the movies and all showing it.

But there is a lot of fear they are very scared about it and then there is also a lot of ignorance they do not know details or exactly what it involves exactly what it means etcetera they are indecisive because part of this issue of the fear and ignorance and of course, people are you know going for a vacation is a big thing. So, having the family agree to something is always a challenge and you know zoning in and agreeing a place where we can all go for a vacation and all feel excited about it and all agree upon is always a challenge, but it becomes doubly. So, in the case of this adventure trip right when it becomes an adventure you know will all of us be able to participate or do parents

have to sit back and only the kids can do it and all of those factors come into the picture will we all enjoy it or should we choose something that is less adventure things like that discomfort about the reliability of information why because of the risks right.

We know that there would be risks associated with adventure there would be you know lot of unknowns and things like that. So, that discomfort about the reliability of information how authentic is this information who is giving me this information. Who is giving me this assurance and what kind of assurance are they giving me that do not worry you can enjoy your adventure you can also enjoy your vacation and you can also come back safe and people are looking for a single point of information for all adventure they were not interested in going to different, different places; for different, different kinds adventure. So, single point of adventure now if you read these insights I am sure it puts in your mind a picture about what are the key components of our design what are the key things that our design needs to do in order to satisfy our user.

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**Insights** *TouriStory*

1. Information at tourist locations (historical sites) needs to be presented in a more interesting and engaging manner.
2. We need to incorporate the stories revolving around a place to make the information more interesting
3. Static information is not always read
4. Guides can give good information, but they are not trusted or considered to be too expensive at times.
5. We need to aid the guides while they are providing information to tourists.
6. We need to cater to the enthusiastic tourist (for whom, there is currently no provision).
7. We need to give freedom to the tourist about choosing the level of detail in information.
8. Audio and visual inputs are essential.
9. Some level of interactivity might interest the user.

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Now, we looked at that TouriStory example right where it was a service to perhaps supplement or instead of the information that is currently available when people go to historic sites that is historic travel right. So, let us look at the insights they came back with information at tourist locations needs to be presented in a more interesting and engaging manner because history many people would view it as, it is all boring stuff right. So, it needs to be made more interesting and engaging we need to incorporate the

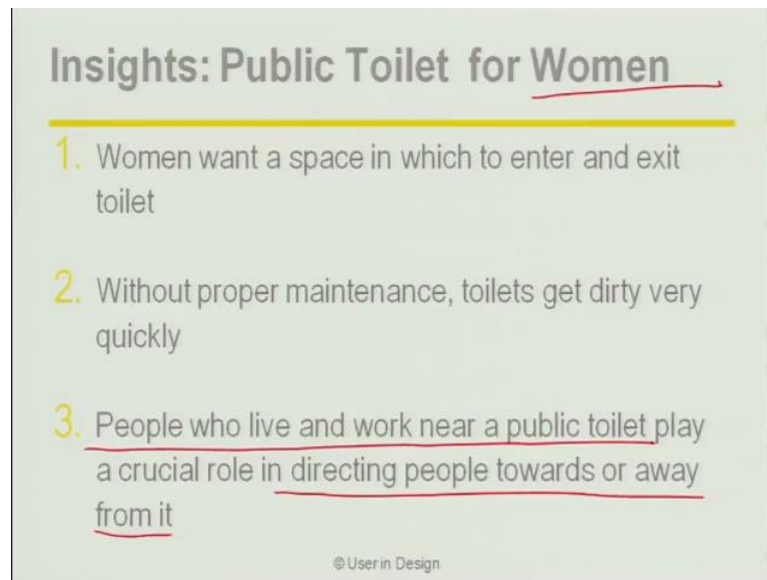
stories revolving around the place to make the information more interesting. All this you know history is in the past. So, what can we do to make a story out of what happened in the past as if it is happening right now?

So, the stories around the place when you are standing in the place the story should be presented as if it is happening in front of me today to make it more interesting static information is not always liked people find it very boring right guides can give good information, but they are often, not trusted or they are considered to be very expensive. So, there are guides there are government you know the government what is it called government licensed guides, but people do not trust them sometimes we need to aid the guides while they are providing information to tourists. So, this is a very, very important point that came to bear very strongly on the final design that perhaps we need to look at it as not as something to replace the guide because guides have a wealth of information in their heads.

But something to help the guides because the guides also get very tired they are doing a lots of groups in a day and they are you know walking around the place all the time etcetera we need to cater the enthusiastic tourists for whom there is currently no provision you know people, who really want to know more they are just that board that gives a little bit of brief information about the place is not enough. I want to know more in depth who were the people of that period what happened in this palace what happened in this castle or whatever, it is that you are going to see the historic location right we need to give freedom to the tourist about choosing the level of detail and information see this is a very important point. Because, we know that people have different levels of interest different levels of requirement audio and visual inputs are essential and some level of interactivity these two might make it much more interesting it would be a way to make this come alive.

So, you can see at the end of all these insights we have a very clear picture what this service needs to be.

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Let us look at this other example right insights for the design of public toilet for women right. So, what were the issues around this number one was women want the space in which to enter and exit the toilet. They were not comfortable if you know there is a door right on the road or right wherever the toilet is and straight they are entering the door they would like a little bit of a private space and also while coming out it was found through the research that you know to adjust their saris or whatever it is. They want that little bit of private space before they exit or enter the toilet, toilet get dirty very quickly and this was a big issue with the women.

Because you know they felt very uncomfortable with the lack of hygiene in the toilet us and third insight was that it is not about the women only right. It is about the people who live and work near a public toilet remembers the stakeholder map and the list of stakeholders, we created who are the different people who are involved in this problem who impact this problem and who are impacted by this problem. So, people who live and work near a public toilet they have a crucial role to play, what is the role they have a role to play in directing people towards or away from the toilet they can play a very crucial role alright. So, these were the important insights that came out through this study.

Now, from insights we launch into how might we questions now how might we is a very, very important phrase right.

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The slide is divided into two main sections. The left section, titled 'Create How Might We Questions', contains a template with three rows. Each row starts with 'Insight:' followed by a blank line, then 'How might we' followed by another blank line. Red handwritten numbers 1, 2, and 3 are placed next to the first, second, and third 'Insight:' labels respectively. A red arrow points from the first 'Insight:' label to the first 'How might we' line. The right section, titled 'How Might We Questions', features a yellow box with the text: 'Reframe your Key Insight Statements as How Might We Questions to turn those challenges into opportunities for Design'. Red handwritten annotations include '2' next to 'Key Insight', '1' next to 'How Might We', and '3' next to 'turn those challenges'. Red arrows point from these numbers to their respective parts in the yellow box. The bottom of the slide has the text '© User in Design' and the 'IDEO' logo.

Let us look at each of these words how we in creating these how might might we questions. We are as I said putting a question to ourselves posing a question to ourselves that how can we solve this how can you solve this how can you come up with excellent solution based on these insights. How is a very important word in saying that there may be different ways right how would we do it, we can do it this way or that way or that way or that way or that way or that way. So, this is encouraging us to look in different directions not just one right how might be it is not how will we how can we? But it is how might we, how we might do it which implies again more possibilities right more different openings it opens up to more opportunities and we is about doing it as a collaboration it is not I it is not you know he it is we how might we.

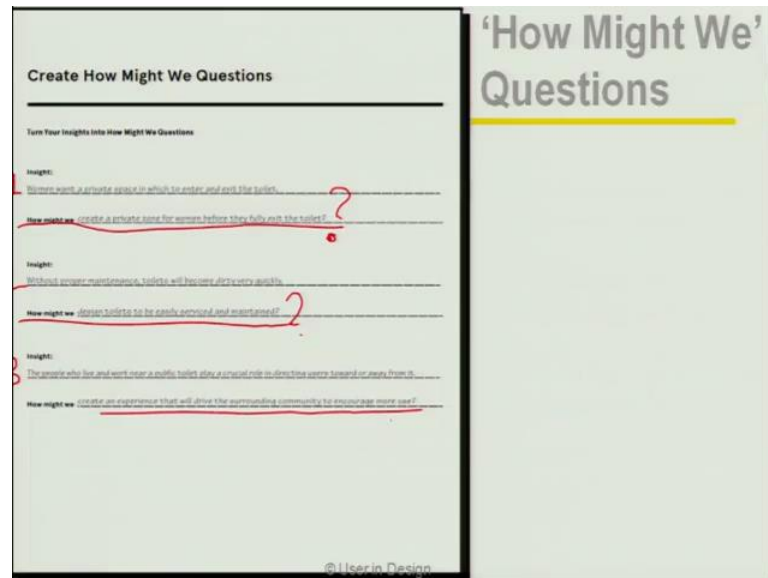
So, this is the phrase an important phrase that is also you know there is a business magazine I believe Harvard business review has covered this where they talk about this how might we as a way to launch into innovation. So, turning your insights into how might we questions again this is a template that we would share with you and it comes from IDEO.

So, we have our different insights first second and third insight and we would take insight and rephrase it into a question. So, reframe your key insight statements as how might we questions to turn those challenges into opportunities for design how might we



turns our challenges into opportunities for design this is very, very important to keep in mind.

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Now, let us look at that public toilet for women example again right remember we had one insight that said women want a private space in which to enter and exit the toilet. What is the how might we question how might we create a private zone for women, before they fully exit the toilet how might we do this we might do it in this way we might do it in that way we might do it in this and the other. So, many other ways without proper maintenance the toilet us will become dirty right very quickly how might we design toilet us to be easily serviced and maintained right perhaps at a later point, we might even say how might we design toilet us that would be self maintaining perhaps.

So, how might we design toilet us to be easily serviced and maintained third insight was the people who live and work near a public toilet play a crucial role in directing users towards or away from the toilet. How might we create an experience that will drive the surrounding community to encourage more use the surrounding community we realize is very, very important in this right. So, how might we bring them into this fold where they become an important stakeholder to this context and situation that we are looking at and they would become a partner in this process they would also participate and help driving people towards the public toilet encourage more use? So, how might we questions?

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**Your Design Strategy Statement**

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Our Project is a \_\_\_\_\_

that does \_\_\_\_\_ for

*Whom* \_\_\_\_\_.

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Now we come to the design strategy statement this is where we try and converge into one point where we try to in one sentence be able to describe, what is our project I have unfortunately lost who is the originator of this, but it is. So, powerful it is very, very powerful and every project that I have worked on it really helps to bring back to converge into the point about what is it that we are designing. So, our project is a dash what is it that does dash what does it do for whom right that is it? It is that simple our project is a dash that does dash for dash. So, this is the design strategy statement and believe me it is extremely difficult to come up with the design strategy statement every team we worked in its a struggle, but it is a very revealing and a very you know enlightening process enlightening end outcome when, we are able to finally, crack this and say this is our design strategy statement. So, invariably you go through several revisions and you are just not happy with it.

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### Example Design Strategy Statement

"We are creating/designing an educational aid for the illiterate and semi-literate women of India at/near the Bottom of the Pyramid, that helps them to learn the English and Hindi alphabets, and be able to recognise and read basic simple words in English that they come across in their day to day lives."

We aim to help them overcome the difficulties they face in their lives presently due to the inability to read necessary information written in English around them, and thus empower them to be able to lead their lives independently"

"We are designing an application for illiterate / semi-illiterate Indian women that enables them to be able to read basic English words from every day life"

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Here is an example I will show you where we moved from one to another I will first give you the context this was a project in which, we were looking at again it started like the first five years of life project I described to you yesterday right where the it started with the big goal about children's education. So, this one likewise started with the big goal of educating children about you know the environment and all sanitation and thing like that.

So, educating children a bit further along after going through this process it was realized that a very big key person in the child's life is their parent is their mother in particular the mother who can instill a lot of these things and the mother who can help this child become a bigger person than they may be. However, a lot of mothers are not literate. So, then the design strategy statement turned I am sorry the project turned around into how do we give how do we equip these women with very low literacy. How do we equip them to have working literacy? So, they can go around and do some basic things like you know traveling in bus banking and things like that working literacy. So, it was called working literacy and in order to be able to do basic everyday tasks right.

So, let us look at this first design strategy statement that the team cannot do right. So, this they said we are creating design or designing an educational aid for this illiterate and semi literate women of India at slash near the bottom of the pyramid that helps them to learn the English and Hindi alphabets and be able to recognize and read basic simple words in English. That they come across in their day to day lives we aim to help them

overcome the difficulties they face in their lives presently due to the inability to read to read necessary information written in English around them and thus empower them to be able to lead their lives independently right. So, again this was the project where the focus shifted from the child to the parent. So, the team struggled to come up with this it was not an easy exercise and after that we realized this is way too long.

This cannot be a design strategy statement. So, went back and went through revisions and iterating and all the time breaking our heads to say what is it that we are designing, what is it that we are trying to design and then this was the final statement that the team came up with we are designing an application for illiterates semi literate Indian women, that enables them to be able to read basic English words from everyday life you can see that its crisp it is very clear there is no ambiguity here what we are designing and it is also a very sharp and focused. So, this is a brilliant tool that I would suggest you try to use and while it looks deceptively simple when we say we are creating a dash that does dash for dash right it is not that simple to actually do it.

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Let us look at another statement our project this was a shopping platform that the team was creating our project is an online platform dedicated to clothing which enables people to buy new clothes gift clothes to near and dear ones and donate their old clothes to those in need specifically in the Indian context. So, this happened after many revisions it happened after revision after revision of the design strategy statement and this is what

came out and as you can see once you read it is quite crystal clear there is no ambiguity about what these people are designing.

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### Example Design Strategy Statement

We are designing a new technique of spraying pesticide which is low cost and easy to understand by uneducated farmers to improve affordability in their work



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Here is another one; we are designing a new technique of spraying pesticide which is low cost and easy to understand by uneducated farmers in order to improve affordability in their work, again crisp clear unambiguous that is what your design strategy statement needs to be and you know like they say to make things simple is not. So, simple and this is an example of that as well.

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### Example *TouriStory*

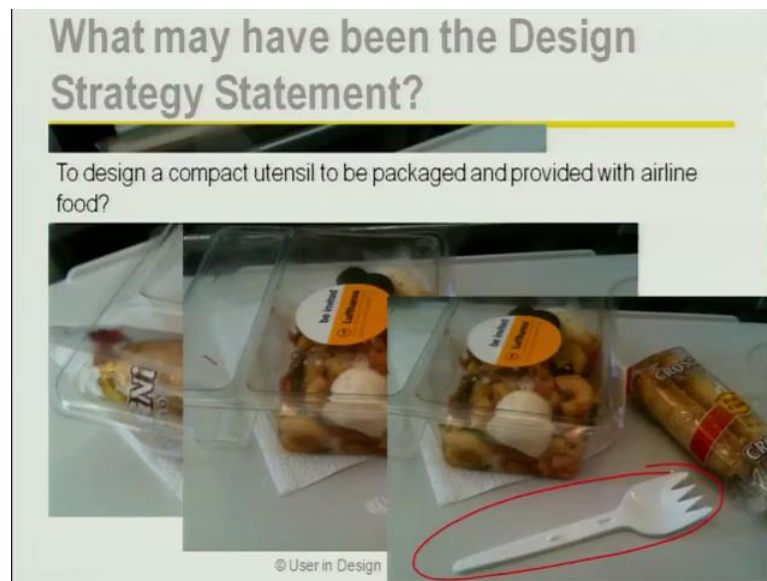
## Design Strategy Statement

*Touristory is a system which delivers a wholesome, educational and enlightening experience at a historical site via engaging content and media for every type of tourist.*

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Remember TouriStory, let us look at their design strategy statement Touristory is a system which delivers a wholesome educational and enlightening experience at a historical site via engaging content and media for every type of tourist right. So, you can see how every word has been carefully chosen it is a system which delivers a wholesome educational and enlightening experience it is an experience, we delivering at a historical site historical site; how via engaging content and media for whom for every type of tourist. So, that is the design strategy statement for Touristory.

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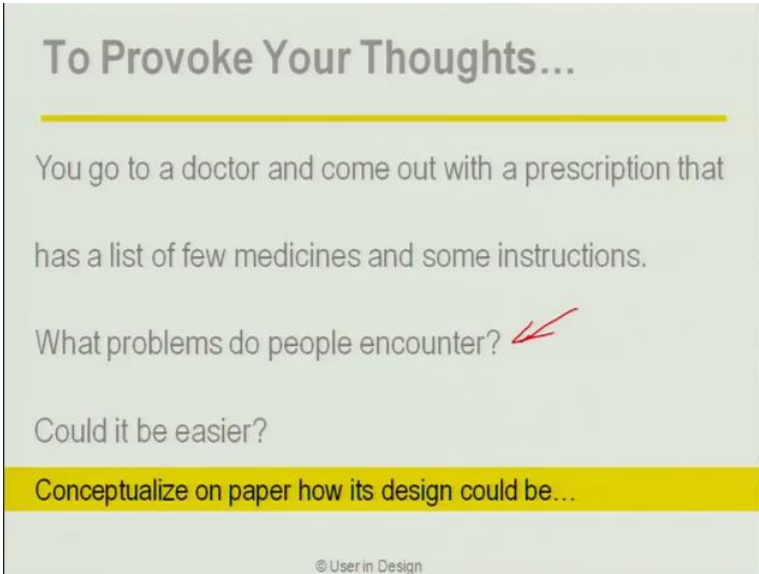


Now, I am going to show you a product and it just for fun try to think about what the design strategy? Strategy could have been I do not know the answer, but it is important for you to just try and. So, this is a you know Lufthansa airline this is the package of food that they come and put at your seat this the food and when, you open it these are the three components you pull out of it right this and these two sat in this box over here right you take this out and then you look at this and say interesting what is this and then when you open the packet this is what you see right.

So, just a little teaser for you what may have been the design strategy statement for this I do not know the answer, but it was fun to try and think about it this is an interesting product that we will speak about some more later? So, you can pause the video over here and then try and come up with a design strategy statement one possible could be to design a compact utensil to be packaged and provided with airline food is that, what

could have generated this kind of a product. So, that is bringing us to the end of this part two and as I said like in the end of part one in the end of part two also I am throwing at you a thought provoking problem and this is just for you to try and work out. This is not part of assignments, not part of grading not part of anything it is part it is for you to just provoke your thoughts and say how do I apply all that I am learning to try and come up with a solution for this.

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**To Provoke Your Thoughts...**

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You go to a doctor and come out with a prescription that has a list of few medicines and some instructions.

What problems do people encounter? ↖

Could it be easier?

**Conceptualize on paper how its design could be...**

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Let us look at it to provoke your thoughts what do we have you go to a doctor and you come out with a prescription that typically has a list of medicines and some instructions what kind of problems do people encounter they walk out of the doctor's office with that prescription, which says you know things are scribbled names of medicine the details about how frequently they should take it and then details perhaps about the fore food after food details about morning or night all kinds of details. Then may some other instructions as well along with it that says you know do not take it on an empty stomach or additional instructions. So, when you know when you go to a doctor you come out with these kinds of things.

So, could this be easier right when you come out people face all kinds of different problems right what problems are those and could this be easier. Try and conceptualize on paper how its design could be and as I told you in the last section as well have fun

doing it, enjoy the whole activity because this is your way to slowly get oriented into the world of design thinking and bringing people into the fold enjoy.