

Inclusion and Technology Design
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Lecture - 04
ICTs and Gender: Field Concerns and Project Management Critical for
Technology Design

Hello good afternoon. I will start a lot of long chain information and I have find that is very useful to what I propose to share with you now. So, before I do that let me tell you what my real issues are. A, I am a woman who has experienced put gender injustice through a large part of her career and her life; I used to fight my way going to reach where I am ok, with some support (Refer Time: 00:49). Number 2, I am hearing impairment which takes it much more sensitive to the kind of issues that disabilities with that disable people face.

These are not issues that we speak about it is sense as on par with all the other men who may be your colleagues and your peers in the room, and I am talking actually about a career graph going over many many years. You know when I am ok now I am at the stage where everybody calls me ma'am, ma'am, ma'am, but there were times where if you spoke up and you insisted on voices of women be incurred right, then you were aggressive, you were pushy. If you kept quiet, these voices would not be heard. On one issue, on one day when I was doing a meeting those were the times when I was doing in the long before internet when we did television for education.

We were reviewing programs made by UG centres all over the country and it was just one program from Pune about management and the program across 2 or 3 episodes that we saw always showed the man at the desk in a managerial position and the woman bringing the tea ok. I had a 2 hour argument with the producer of that program saying that as educators, we cannot afford to show these kind of stereotypes which are prolonged. I said I am a director of a center. A woman does not bring me tea, a man brings me tea.

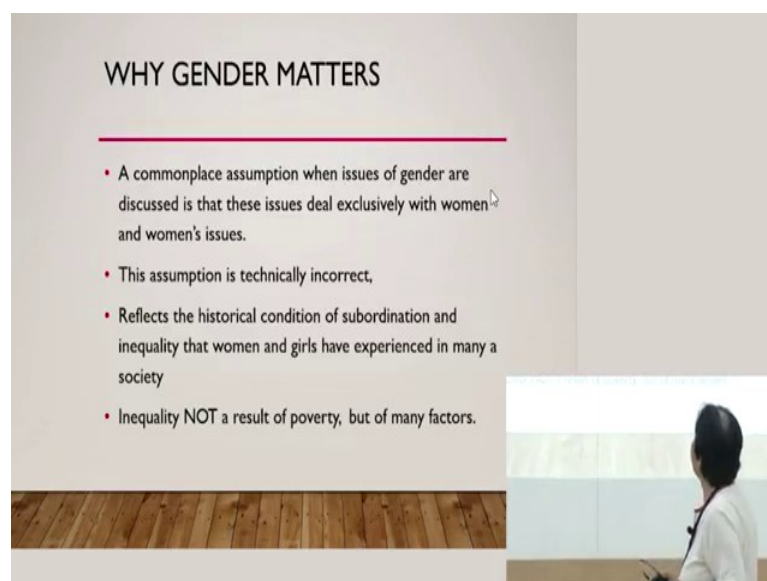
Right. So, what is this that we were trying to teach and after this 2 hour fight, the result was that Pune University withdrew that program and redid to show a more equitable relationship between men and women.

The point I am trying to drive at is that we are very often not conscious of what we are doing, and it takes a truly sensitive person to not be gender blind, right. To not be gender blind because either we have experienced the inequity or we have witnessed somebody else experiencing or we have been the perpetrator. Because, ultimately these relationships when we talk about gender or disability are relationships of power, of those who have, who have the power to shape and those who are at the receiving end, who are receiving, but do not have the agency or the voice to speak out.

But that could paint a very very negative picture. I do not want to do that. What I want to share with you today is actually that from my experience in the last few years particularly writing about development goals and working with development goals, working with issues like gender and entrepreneurship among women, promoting women's economic empowerment. Or, more recently looking at how to incorporate gender into a disaster management effort that I am going to share with you as to what I have found, and the ways of doing it.

So, I am going to share with you what is it that we try to do long before when it is only an idea in our mind. What do we try to do long before, we actually sit down with a team of programmers and designers and say we are going to design this website or this application. It is not about the technology, it is about something quite different. So, that really is what I am going to share with you.

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WHY GENDER MATTERS

- A commonplace assumption when issues of gender are discussed is that these issues deal exclusively with women and women's issues.
- This assumption is technically incorrect,
- Reflects the historical condition of subordination and inequality that women and girls have experienced in many a society
- Inequality NOT a result of poverty, but of many factors.

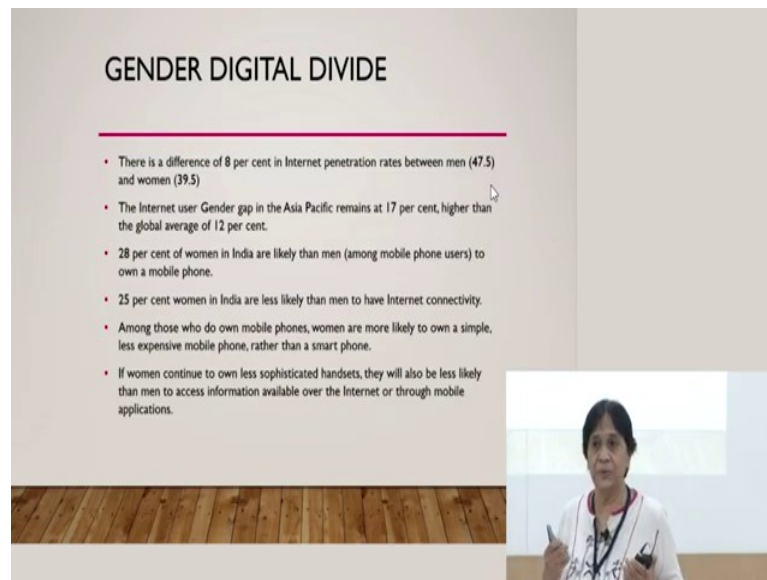
So, common place assumption when we talk about the issue of gender and in most government offices prevails almost or everywhere is that we think it is about women and girls and that it is exclusively something needs with women and girls that is technically incorrect. What it deals with is the relationships between men and women, boys and girls. And it is the relationships, it could be relationships of equality, it could be relationships where the women are ahead and you have a problem of male underachievement or it could be the situation where men are ahead and women and girls face under achievement, right.

So, it is not an issue only exclusively for women, but unfortunately that is how it is looked at partly because it reflects worldwide the historical reality of subordination and inequality that women employees have faced ok. It is like strike a reality coming to us that was thousands of years, maybe we do not know.

So, it coming to us across several hundreds of years, well this is warning for women who were always the carer, the nurturer etcetera whereas, a man went out to work and this is a reality that we are trying to address if not to reverse and I would like basically to say that this inequality is not the result part. Poverty is one issue, lack of economic resources is one issue, but this inequality it should be found among the poor, among the rich, among the educated, among the uneducated.

So, do not equate necessarily any inequality with poverty because this inequality exists. You may have the richest of homes and still have domestic violence and you may have the poorest of homes, but where men hitting women sit and talk. So, it is not about rich, it is not about poverty, it is about something else.

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GENDER DIGITAL DIVIDE

- There is a difference of 8 per cent in Internet penetration rates between men (47.5) and women (39.5)
- The Internet user Gender gap in the Asia Pacific remains at 17 per cent, higher than the global average of 12 per cent.
- 28 per cent of women in India are likely than men (among mobile phone users) to own a mobile phone.
- 25 per cent women in India are less likely than men to have Internet connectivity.
- Among those who do own mobile phones, women are more likely to own a simple, less expensive mobile phone, rather than a smart phone.
- If women continue to own less sophisticated handsets, they will also be less likely than men to access information available over the Internet or through mobile applications.

The slide features a light beige background with a dark red horizontal line under the title. A small inset video in the bottom right corner shows a woman with dark hair, wearing a white top and a lanyard, speaking and gesturing with her hands. The bottom of the slide has a wooden floor texture.

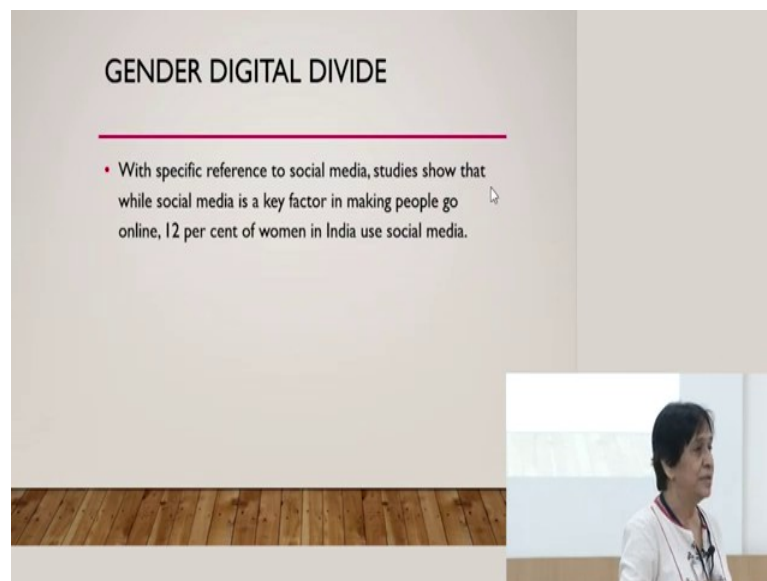
It is about relationships between the two and what we call gender roles which come up as we try to disagree. Let me just look at what we call this gender digital divide. We all talk about the digital divide as being the divide between those who have access to and therefore, benefit from the information revolution and those who do not have access to and therefore, do not benefit from the information revolution.

We got the digital divide, but there is also a gender digital divide within that broad digital divide and this consists there is a difference of 8 percent internet penetration rates between men and women in the issues ok. Then there is an internet user gap in terms of men and women's use remains at 17 percent higher at the global average of 12 percent ok.

28 percent of women in India, these are from the internet societies a bureaus statistics on gender. A 28 percent of women in India are likely only 28 percent of women in India are likely to own a mobile phone. 25 percent of women in India are less likely to have internet access ok. Among those who do mobile own mobile phones, women are more likely to own a simple less expensive feature phone. And, I surely tempted the other day to go out and pick up and buy a little feature phone and put it on the table and some design something for women to use you know, but I think that was election day in Telangana everything was stopped. So, I could not get it.

Anyway so long among those who do own mobile phones, women are more likely to own a simple less expensive mobile phone rather than a smart phone which automatically means a, that it may or may not have internet access and b, certainly it will not have an access to the apps, to internet. So, if women continue to own less sophisticated handsets, they will also be less likely than men to access information available over the internet.

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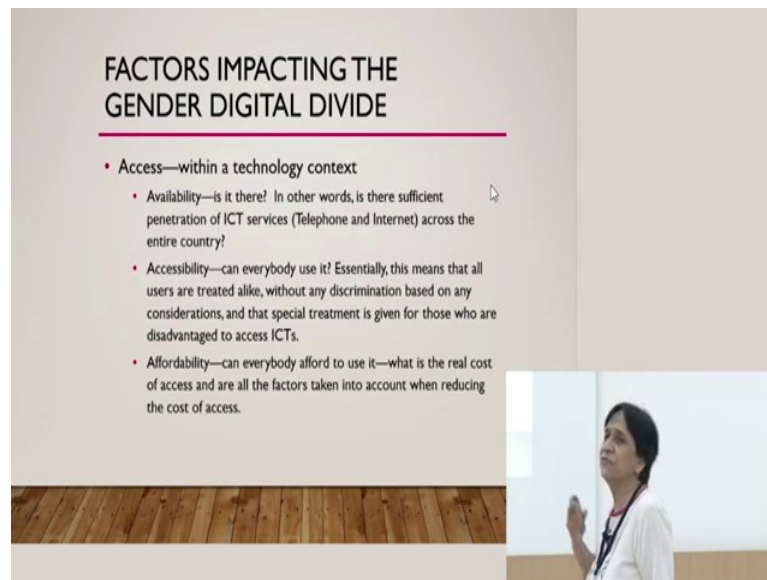


Now, you may say that they can access it through their brothers, through their husbands, through their children, but this women has to ask her brother, husband can I use your phone. He says what for? Why do you need it? Why do you have to go? What do you need the information for? Of what use is it? Who are you talking to? So, what does she do? She does not ask, ok. So, that is what I am trying to say.

The very lack of esteem, the lack of you know that they do not want to which specific reference to social media studies show, then why we say that social media is a key factor in making people go online in India specific. Only 12 percent of Indian women around use social media.

What does this mean? This means that when we talk about acts penetration and access ok, what we were talking about is using tools. For example, in disaster that if you have these kind of figures, can you use social media to reach these women? That is an open question right now.

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Student: So, in the previous slide the 1st and 5th points what is the scope of the statistic the last, but one and the first one India.

What that?

Student: The scope of the statistic is India or global?

In India, 28 percent of women are likely to own a mobile phone.

Student: No, the 1st point.

The first one 8 percent penetration rates difference.

Student: Is that in India?

No Asia-Pacific.

Student: And, the 5th point last, but one.

Which one?

Student: Ok, that is what is (Refer Time: 11:46).

I went from Asia, by the way Asia-Pacific when you look at the figures, because this is where I was working what we find is that all the growth that they talk about is driven by

China, South Korea, Japan and Singapore and to a less extent Malaysia, right. We are not among those top 5 ok. So, when we begin to talk about designing things and (Refer time: 12:16).

First question we begin to ask is what are the factors that impact perform this digital device. First of those as I have also spoken is access. So, what is access mean within the technology context? First of all, it means availability. Is it there? In other words is there sufficient penetration of ICT services, telephone and internet across the entire country.

When I say sufficient ok, I mean that if I go into a village and I look at my mobile phone what is the signal strength or if they say there is internet connectivity and I connect how long does it take me, what is the bandwidth, what is the speed, how long is it going to take me to download a simple document, right. So, I am talking about availability. We still have areas where the penetration does exist and it is coupled again with other infrastructures like lack of electricity.

The second is when we look at within the technology accessibility, can everybody use it? Does it mean that all users are treated alike or without any discrimination based on any consideration and that special treatment is given for those who are at disadvantage. Preethi spoke to you about here Rajasthan data. Can everybody use it in Rajasthan? No right. She was very clear in that.

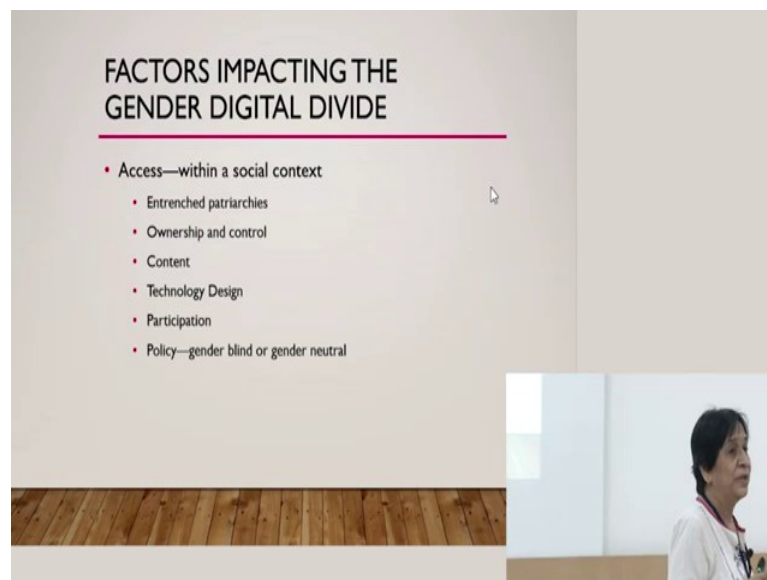
So, in putting any you know the little kiosk Wi-Fi, free Wi-Fi or putting in at tele center common service center is everybody you put it in on the assumption, then everybody can use it. This is where I talked about being gender blind or gender neutral. You put it in on the assumption that everybody can use it, but the actual fact is that even though it does, it is designed in a way that it is going to allow the disadvantage.

Third affordability. Can everybody afford to use it? What is the real cost of access and what and are all these factors taken into account when reducing the costs? Let us look at it a little [FL] phone costs somewhere around 1200 you can get one of those Chinese made phones little (Refer Time: 14:55) for about 1200 rupees ok. But, that is your simple feature phone in which green button, red button maybe you can get voicemail and you can get access to radio's (Refer time: 15:05), ok.

Now, even the 1000 rupee phone can everybody afford? Now what I am talking about is universal access, ok. I am not talking about community access. I am talking about each woman being able to own their own phone. We are still not able to provide that universal access.

So, affordability can everybody afford it? What is the real cost of access? So, I buying an iPhone, right. The cheapest smart phone I think is around 4000 something rupees when we look around, it has some features. The Jio of course was offering free basics which when a limited range of services, but you cannot go beyond those limited range. Fortunately we have shut that down.

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Access should also be considered within social context which is what Preethi was talking about. Entrenched patriarchies where women can go, where women cannot go, whom they can talk to, whom they cannot, whether they are even allowed to own a mobile phone. They should not be given a mobile phone because they talk to boys, but then who are the boys talking to on their mobile phones, right.

I mean the reverses (Refer time: 16:40) that is not true, ok. Ownership and control ok, who owns the phone in the backwards, in the backwards of Orissa let us say Kalahandi or Gwalior, every family they may not have real clothes, but there is one mobile phone in the home, small feature phone. That mobile phone is in the pocket of the male head of household, right.

So, while we may talk about you know reaching out right if that mobile phone is in his pocket, who controls it, right. So, ownership we do not look at ownership because all of us own our phones. It is not important for us. But there are people for whom the benefit of ownership of a phone changes their self-esteem, their relationships. Again in Orissa where I did some studies and then I went to Tamil Nadu and Madhya Pradesh. Two villages, before in one village the self help group, you know the self help groups in all villages, right. One each self help group member had a phone. Village number 2, only phone in the house, no one allows to own a phone.

The difference in empowerment in the ability to access information ok, the difference in the ability for them to seek out to communicate even for economic betterment, to sell their you know handlooms on it was substantial. So, this relates to who owns the phone and who controls it ok.

Sometimes when I gone into homes in order to try to research what are patterns of usage, the woman will be in the kitchen and he says [FL] you answer the questions. So, even within the home what are the patriarchies that determine whether the women access the information or not. Why I am saying all these? I am not saying it in negative way. I am saying these are realities that we have to build into whatever our designs are.

A content, content language of the internet, the language is English. Content is not readily available in local languages, content is expensive to make. Therefore, even if I make a content in Hindi, in Hindi may be (Refer Time: 19:23) Hindi for Bihar, I cannot take into account for instance the Bhojpuri and the other dialects, right. So, first of all there has to be timely relevant and problem specific content, ok.

It has to be timely. You cannot give planting information at the time of harvesting, right. So, it has to be timely, it has to be relevant, relevant not to your and my experience, but relevant to their experience. And, it has to be in the local language which means that you and I are trying to design an app for the people of Bihar, in our design itself we have to factor in designing it in multiple languages, right.

Sensitive enough to pick up what the language is and respond in that. Now, there is another way sometimes you know we use IVR. So, you can choose the language and then press the button. Even if you are designing that whether it is for your gas or

whatever, you still have to design it in multiple languages. Number 1 for English, number 2 for Hindi, number 3 for Telugu, number 4 for Tamil, number 5 for Kannada, number 6 for Konkani and number 7 for Gujarati, Marathi whatever, whatever, whatever and you forget your language by the time you get to select, alright.

Then the technology design, ok. This we have already talked about technology design that because of the that very often and again I looked a passing gentle and saying the technology is designed and the whole thing is you do not design a technology for one person, you design it for crores. So, when you design something for crores, you automatically dump it down to what is the lowest common element. You can, you do not take into account all the permutations and combinations.

So, you assume therefore then it works for majority of the people, that it will work for all, and you assume in a general usual way that it is good for him, it is good for her right yeah, but there are differential needs and that is what makes the whole issue of design of technology a designing important. Participation, to what extent did the people who are going to use that particular app or that particular website, to what extent did they have a say in what should go into it ok, to what extent did they participate in the creation of their own materials?

Look at it from simple example. If you hear that your father is going to come on the television program right, all of you will sit before the television and watch it, right. My father is coming on it right. That is the sense of belonging of participation, right.

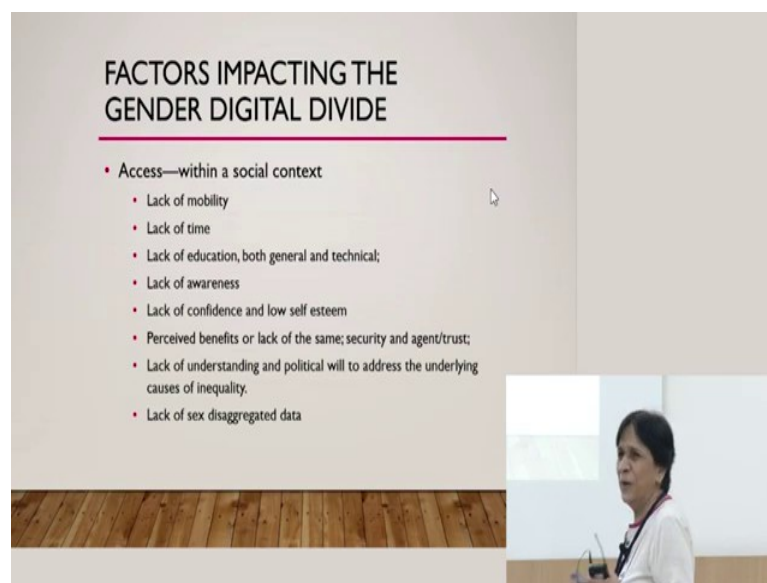
So, what is the sense if you do not have the sense of participating in something that is supposed to be for you, then what kind of ownership of that product will you take right. So, you have to include participation and then we look at policy, policy which is gender blind, gender neutral already we talked about the bad quality infrastructure policies. You know we also there is other dimension for exam particularly with disability.

Now, the global standards are that all websites should be disability compliant correct which meant that you have to put in the feature for visually impaired, you also have to put in the feature at least to the hearing impaired. When it came to budgeting content development for ease for to include these accessibility options; I remember when the project that I have submitted to UNESCO the cost was not; the cost was not I had submitted a budget of 200,000 US dollar, at that time in 2004. When I added the

accessibility options, the cost was not 250,000. The cost actually came up to somewhere around 350,000 dollars, right.

Now, this meant that if the budget was high ok, then what would I cut out, I may cut out these accessibility options, right. So, when I say when a policy is created and say you must make available all options, then the policy can be blind to the actual costs, right. So, that is enough now I do not want to, I have kept an exercise for you so, I am not going to.

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So, what do women say that, what do women say when you ask them why do not you [FL] why do not you use the internet? Why don't you? Number 1 lack of mobility. The Rajasthan example talked about how mobility among women is a serious issue, ok. In Bangladesh knowing that mobility among women in the village was serious issue, a program was started. It is called the Kalyani program in which young girls are trained and what they call inter info-mediums.

And, these young girls ride a bicycle with a briefcase, with a laptop, some CD's, a mobile phone with internet connection, and they go house to house to find out the needs, the information need to provide that information to the woman in the home itself on the assumption that this women cannot go out. She has issues of mobility, she cannot leave the house with the children left unattended or she has to look after the household work. So, she cannot leave. So, they have address this way, but lack of mobility is one.

Lack of time; global figures indicate across the world that a time that woman spends on unpaid work even if she is she is employed is at least two and half hours more than the man. This is globally data. Now, if in the condition like India just to fetch water, fetch firewood or even if she is in a learn middle class and she is working, she has to get her children off, get them to school, come back do the another work, prepare dinner, do this do that.

So, she is still putting in two and half of hours extra and if you ask her why do not you do this? She say I do not have the time, I do not have the time to do this; its all what nice what you are saying, but I do not have the time, so which is time factor.

Lack of education; both and when I talk about education; I am not talking about reading, writing. I am talking about lack of awareness, not so much about specific information relating to help, but at least an awareness of how to get that information you know. So, these women in Bangladesh at least they know that I do not know it you know, but I will ask this Kalyani when she comes what I need. Lack of information whether it is about diarrhea, you know the ORS or whether its (Refer Time: 27:05) lack of information.

So, I am not talking about reading, writing, lip reading and I am not talking about sophisticated post graduates and graduates. I am talking about basic fundamental adult education and lack of something technical education. All the green button, red button, they function very well but some help in negotiating apps, with all this (Refer Time: 27:31) I still have problem negotiating apps specially when you have to respond so quickly, (Refer Time: 27:37) you make mistakes.

Lack of awareness; not knowing where to go because, you are constrained by mobility; you are constrained by them. With low on confidence and self-esteem, ok; even in urban households where the woman is homemaker, she is low on confidence and self esteem. She does not believe that she is capable of so much more thing happen, she does not believe in herself, she does not have confidence in herself.

Then I have also said they have they cannot see the benefits of what you are saying, what is the use for me, my life is over, you teach it to my daughter, cannot see the and perceive benefits of the same. And, that serious issues of trust and security across the South-Asia region, in country across country, women do not like to go to information kiosks. They do not like to go to a public space where it is available because first of all

the hundred eyes, number 2 the eve teasing, number 3 if it gets dark and I have to go for a kilometer, what is my physical safety ok. So, they cite concerns of safety and security.

Then also in Sri Lanka said something else which I think is useful here, they say even if I go to the cyber cafe and I sit down at the computer, I do not know whether the cyber cafe you know the manager of that he can see what I am doing, ok. He can monitor but I want to do something in private. So, I do not trust him, lack of trust. There are women who have gone through this E-Mitra of State Bank of India and they have reported that the Mitra is supposed to help them do the things online.

But, particularly during demonetization, there was a charge. I want to change 500 rupees, I can buy only 450 rupees for the product. I want my son is sending me money via Western Union, ok. So, I go over there and in relation to the commission that is their bridging to Western Union; the agent asked me for his or her cut. So, I do not want things like that. I do not want things that way.

Now, there also say for example right after demonetization we began going to study them, then you know the Jan Dhan Yojana with a zero balance; lots of people open their accounts. Then what did they find? Government pushing for digital payments, ok. What did they find in order to have a card ok, the cash card you have to have a minimum balance of at least a 1000 or 1500 in your account number 1 and number 2, you have to be able to sign your name, ok.

So, if you do not you open the account, but if you do not have a 1000 rupees, the bank will not give you the card. So, you get the card somehow, you go home, you do not know how to operate the ATM, you give it to your husband, the money is gone and this is what they said. So, they said I prefer to keep my money in cash in my [FL].

So, what I am trying basically to say is that when you look at designs, you have to address the concerns; lack of understand, lack of understanding and political will to address the underlying causes of inequality. You doing polishing on the top digital payments this that apps access, but you are not understanding. This is the discussion that we talked about in terms of temples, going to temples or not, (Refer Time: 31:35) the underlying causes of inequality. It is not even those underlying causes are at rest that you begin to see better way.

And finally, most important is the lack of sex disaggregated data. The lack of data which tells you specifically what is called sex disaggregated. I do not know how many women are heads of households, how many women for instance have the title of the property in their name, ok. Now, when I was doing this disaster management scenario and you talk about compensation. Compensation is given to the person whose name the title deed is and the women does not do not normally have it in their name. But, you do not even know how many women have them and how many women do not, and it does not take much to take the databases that you have and to tweak them.

You do not have to fashion a whole new you know program. You tweak it, you on to pull this gender sex disaggregated data out, right like from your mobile number detail and which set you have, how many of those mobiles are in the name of women, you do not have that sex disaggregated data. You have data, but if you do not have the sex disaggregated data how do you know what information, how do you know and sex disaggregated data not just in terms of technology, but in terms of a variety of issues it is missing.

Student: Ma'am actually one point.

Yeah.

Student: So, in Kerala last 2 years back, there was one effort from government side to bring you know ladies as a head of the family and in fact, in the old ration cards. So, government decided that the eldest women should be the head of the family and they send that they already made the changes across the state. That is very good. Who owns the property?

Student: Property I do not know. [laughter]

So, the head of household it may be very nice, but if she does not own, have the title deed.

Student: But of course there was.

Then in the floods in the recent floods compensations given ok, it is given to the owner of the property and it does not account for her.

Student: Yeah (Refer Time: 34:02).

On paper right. In Maharashtra.

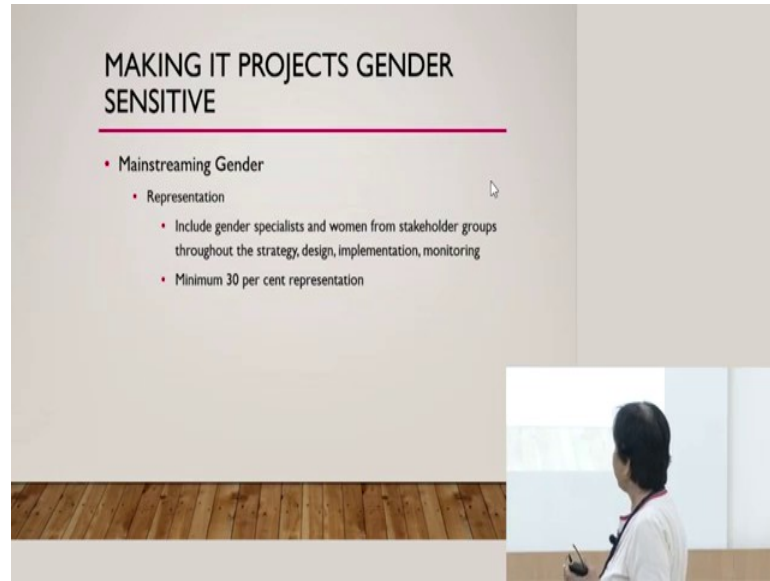
Student: (Refer Time: 34:03).

Let me finish. In Maharashtra what they did was they did something similar. They said that the house must be in the joint name. This is in order to ensure the inclusion, but the land on which the house is built, is in the man's name correct. So, when they did this, what happens is that compensation is not given for the structure, it is given for the land right.

Then Maharashtra did something else which when you read it very carefully is laughable. What they said was a woman has a right to inherit property from her maternal home. That means, from her father right. So, the man says to his wife you go, you ask your father for your share of the property, alright ok. He said something, so very quickly right he catches hold of somebody who comes and tells this man's sister now you ask for your share of the property.

So, this is stalemate, right. This is stalemate because now both of the family might I do not know how to get; so very peculiar situation as a wait a minute wait a minute. You can ask from your father's house, but not from your husbands, right and when you ask from your husbands, what happens somebody comes asking for their share. So, it is a same way now. So, why laws and policies are very tension sometimes reflect or mirror power relationships.

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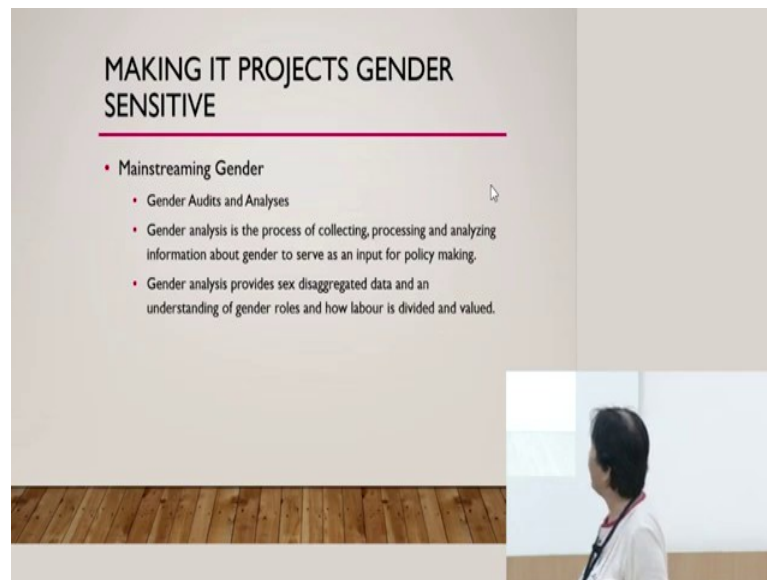


Student: Excuse me ma'am.

It is alright. What do we do about mainstream in general I may only take 15 minutes talk in the time. First thing is long before you think of designing these solution ok, long before that there is a procedure of gender sensitizing, gender mainstream and it is called gender mainstream. And, it is not very complex procedure, although there are volumes and volumes written out, very simply ensure representation, ensure representation of gender specialists and women from stakeholder groups throughout the strategy design and implementation, right.

So, a group of 15 men ok, no a group of 15 that is thrashing through what is going to be done should have ideally a 30 percent representation. Why 30 percent? If you are 15-14 men and 1 woman, she will not speak up. If you are 14 women and 1 man, he will not speak up, right. It is also imbalance. So, you look for at least 30 percent of this. So, when you build a team, your faculty, when you build it 30 percent representation is recommended worldwide where I could ask for 50, but this is world-wide accepted norm.

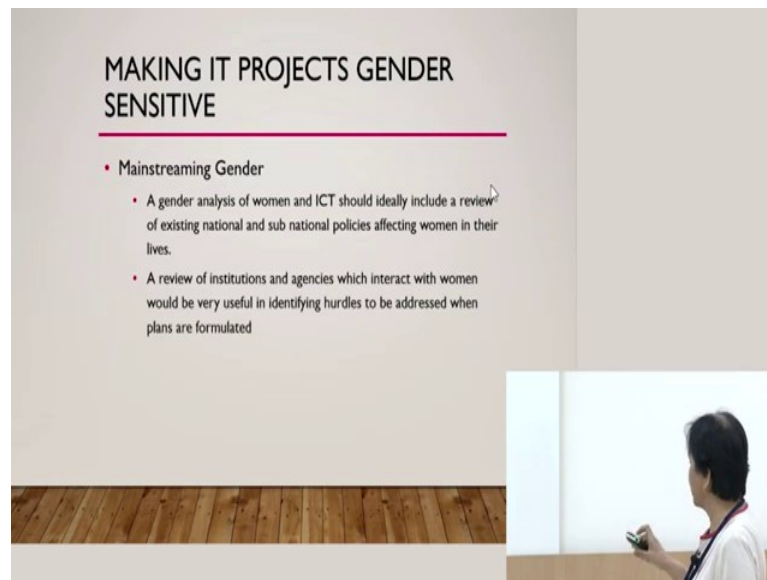
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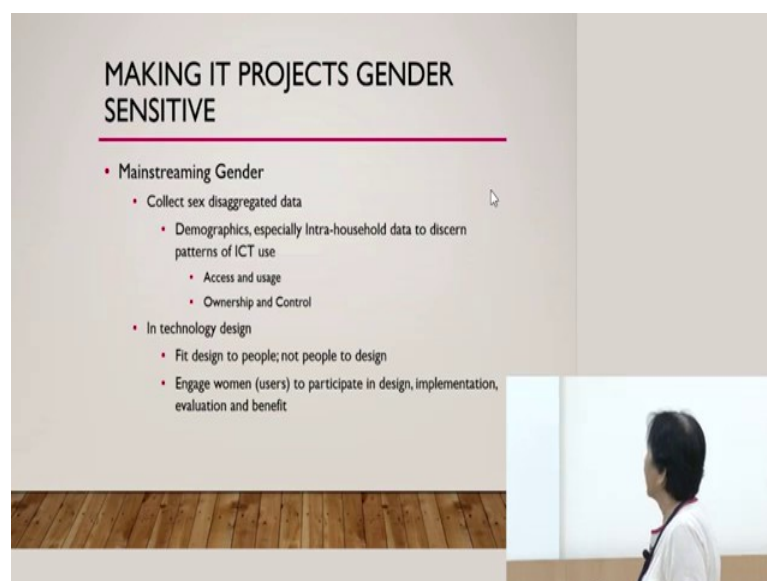
Then you have to do a gender audit and analysis; gender audit is basically the process of collecting and processing information about gender and how it impacts up on what you are going to do. It is an input for policy making, it is an input for designing a proposal, it is an input for designing a plan of action. And what does this gender analysis do? First it provides you sex disaggregated data and second it provides you an understanding of how the roles are.

And, 3 of how the labour is divided and valued and 4, it also tells you that in an organization how many you know not only how many men and women, but what is the level of gender sex equality, ok. If the organization the NGO that is talking about gender equality does not itself believe it, right. So, the first stage is a gender analysis. Now you say do we have money for this? Do we have the resources?

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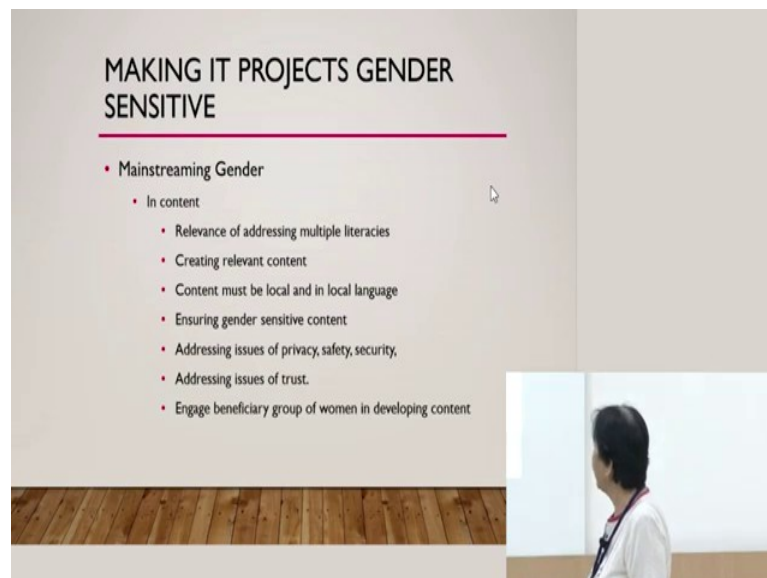
So, general analysis includes a review and a variety review institutions, collects sex disaggregated data, demographics on access and use, ownership and control then in the technology design fit projects to people, not people to projects, ok. Fit projects to people, not people to projects.

I mean reverse what we do today, engage women or users in the participation design. Please do not make the assumption that because a woman is poor, living in a village and illiterate that she does not know what she wants. She knows what she wants. The very

fact that she is able to survive is proof of her resilience because you and I cannot survive in those circumstances, right. So, respect her need, her knowledge, get that need, get her involved and she will tell this is what I want and then you factor that into your design, ok.

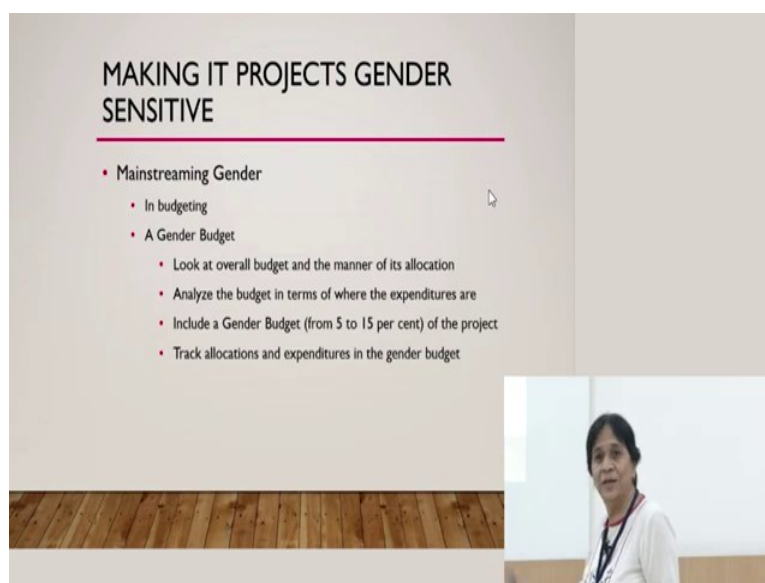
So, include women you know in developing the content and there are examples in this country not just in community radio by the (Refer Time: 39:38) area in Madhya Pradesh. Then there are Kutch Mahila Vikas that have gone from just small groups to developing you know internet websites, unimportant untrained that I want you to talk about the (Refer Time: 39:58) ok. So, they know what they want. Somebody has to ask them and they will tell you.

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Again mainstreaming, content, relevance, address, privacy, address trust.

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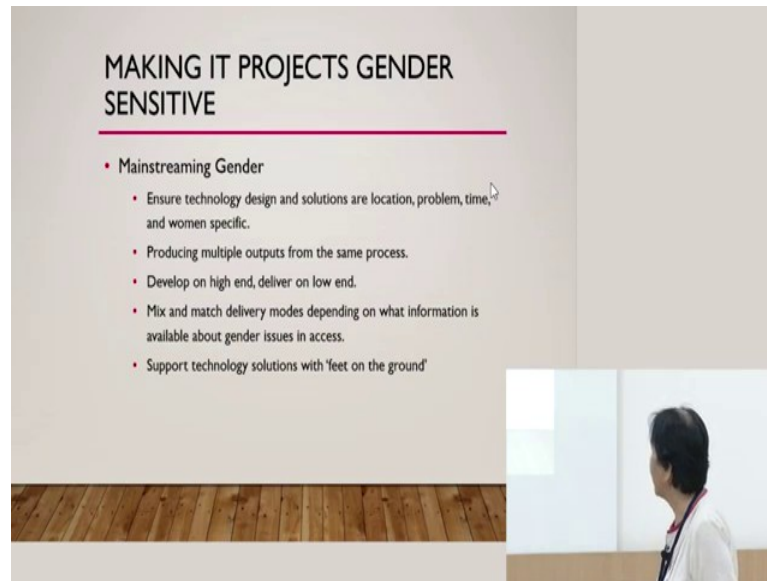
Now, here is you know gender budget it is not, it is nice to say I am gender sensitive. Everything I do is going to be gender sensitive, but if I do not put my money where my mouth is, then it is nothing but hot air excuse my language I am not a blunt unless you put an allocation and our money that is designed to address that need ok. So, what you do is look at a gender budget, look at the way in which an overall project budget is designed and then look at how it is allocated, alright.

So, if you say that a budget has a 100 rupees, but 90 rupees is spent on salary, what do you have? Nothing to develop, ok; so, you have to look at the budget, look at how it is allocated and look for instance is there a gender budget, is there budget set aside for gender issues.

So, it is nice to say I am gender sensitive, but not include gender budget. Philippines has a policy of 5 percent of all projects, all ministries must have a gender budgets of 5 percent. How much is India's? 30 percent. 30 percent of every ministry's budget, every government agency's budget has to be allocated for woman specific programs, otherwise the budget does not get the approval of the Finance Ministry ok, but what we have a huge unspent balances right.

So, what you have to do is, you can track; you can track the allocations and you can track the expenditures to see indeed whether there is financial backing to the policy, to the program in plan. Without the gender budget, it is very important nothing is possible.

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I have already talked to you about ensuring technology designs, and solutions are location, problem, time and women specific. Produce multiple outputs from the same process, you know the process of developing you have lot of things in it, you not only have text, you have audio, you have video, you have graphics, you have animations, you have IVR, you have this, you have that. You have designing when your product when you in the product cycle you design you program for variety of outputs, ok.

So, when you probably design itself look at language, look at all these different things. So, from the start because once the original is done, then putting something in later is difficult. So, from start itself plan that you get multiple outputs from the same process and mix and match delivery modes depending on what information is available, ok. So, alright so, we find that in Rajasthan public spaces are out; I do not see any reason why you know a public (Refer Time: 43:30) system cannot be used to announce schemes. It is a very (Refer Time: 43:36) uses it all the time.

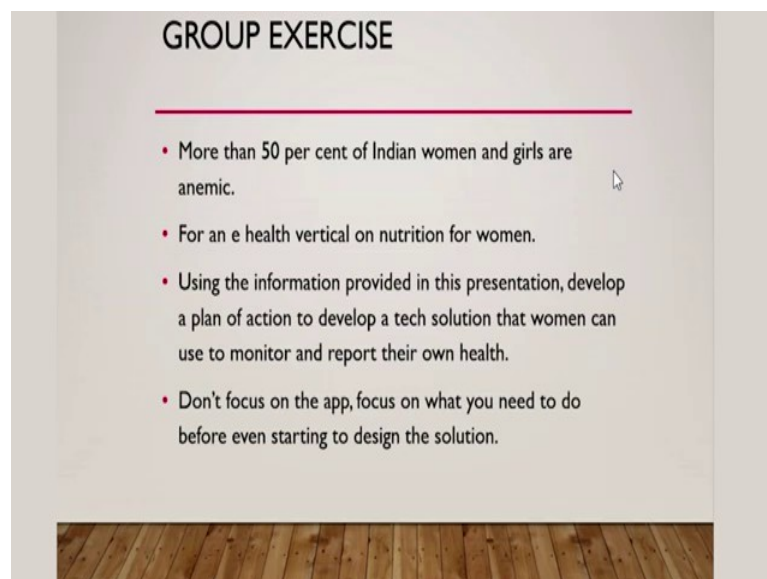
But combined note is very high end, as you develop on very high end, but deliver on your end assuming a feature phone. So, deliver on voicemail, not by text, you can deliver on voicemail in the language of that particular region, deliver a (Refer Time: 43:55) voicemail, not on text. Then finally support technology with 'feet on the ground' which is what the Kalyani's in Bangladesh do, ok.

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Put the women first and at the center of the process, ok. It is not you design a product [FL] we have not asked women ok, no put the women first at and at the heart of the process. Don't look for short term results, they don't exist; not in entrenched hierarchies and patriarchies, short term results do not exist. Look at the process, look at results over 2-3 years. You will not get results in 6 months, 8 months, 7 months. Look at results for period of time, create test, revise, review, test, revise, deliver, review, test, revise, deliver as fast forward information ok. It is a contiguous segmental process, ok.

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A simple thing that I will end this part of the presentation, ok by saying is that there is no quick fix solution, no Fevicol solution ok. There is no short term solution, there is no one size fits all solution ok. It is a slow process, it has to be a systematic process and you have to look at the hidden inequalities rather than what is visible on the surface, alright. And, when I say use feet on the ground, there are Asha workers in villages ok, there are self help groups in villages right. Locate your work in the self help groups, locate what you are doing among the Asha workers who are already a little ahead of the other villages, ok.

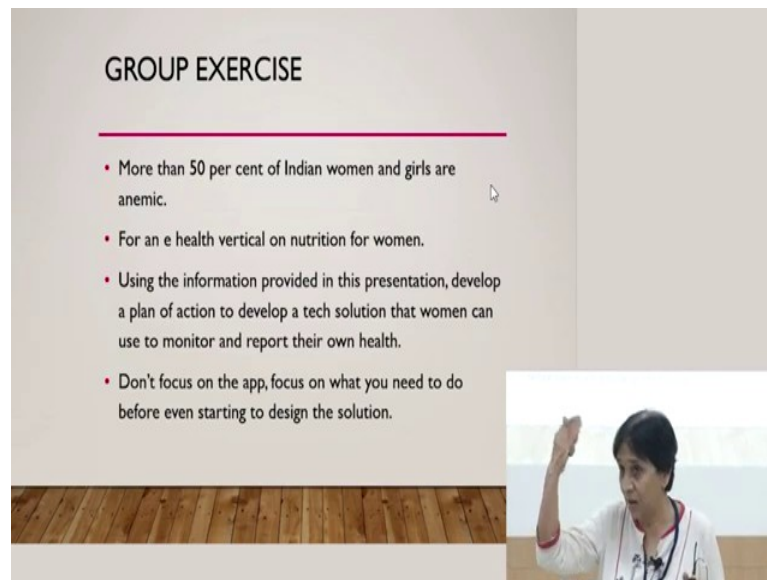
If you empower the Asha worker by giving her a little training and that is not for whom she can do half your work for you and she will be very happy to own that smart phone because in addition to doing your work, she probably will surf Facebook and social networking sites. Now, surfing social networking sites is not bad as long as you get your work done so, what right. Now, what I left is (Refer Time: 46:27) next is I just want you to think. So, I design I may have nearly 35 minutes for this, I design now can we break them into some forms, some groups.

Student: Can we please ask questions? A few question.

Let me break into group, then ask question alright. If you quite exists more actually I have given a conservative figure.

Student: (Refer Time: 46:52).

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GROUP EXERCISE

- More than 50 per cent of Indian women and girls are anemic.
- For an e health vertical on nutrition for women.
- Using the information provided in this presentation, develop a plan of action to develop a tech solution that women can use to monitor and report their own health.
- Don't focus on the app, focus on what you need to do before even starting to design the solution.

50 or 50 percent, but around 75 percent of our Indian girls are anaemic. You have looked agree and this has nothing to do with rural India or poverty. This is across the world, rich, poor, middle class more than 50 percent of our girls are anaemic, alright that is they have no little higher in their blood. Therefore, they become weak and in a series of nutritional problems.

Imagine that you are working in a company that decides to have a E-Health vertical, ok. They want to focus on E-Health and now I do not want to plan a solution, I do not want you to plan the app, I do not want anything. I want you to please using the information that I have tried to provide to you in brief. What is the kind of plan of action can you develop to the plan of action for a tech solution which women can use to monitor their own health?

So, already they are having diabetes and some other things, right. As very annoying the diabetes solution (Refer Time: 48:14) I have taken my medicine or not. I do not want to talk to them, ok. So, we want to remember solution that is long age that is yeah, but this is your preliminary meeting, right. Your first meeting you sit together to try to say what is our plan of action. What kind of plan of action have we made, so using the information that I have given you so far and you can come up and scroll up and down as you want ok. Focus on what you need to do before even planning the solution. What do you need to do? Up front right at the starting.

Student: (Refer Time: 48:54).

Problem I have given you ok, ultimately we are looking for a tech solution. Problem I have given you ok anaemia addressing anaemia. So, we are looking at nutrition, we are looking at E-Health, ok. What do you need to do from the start?