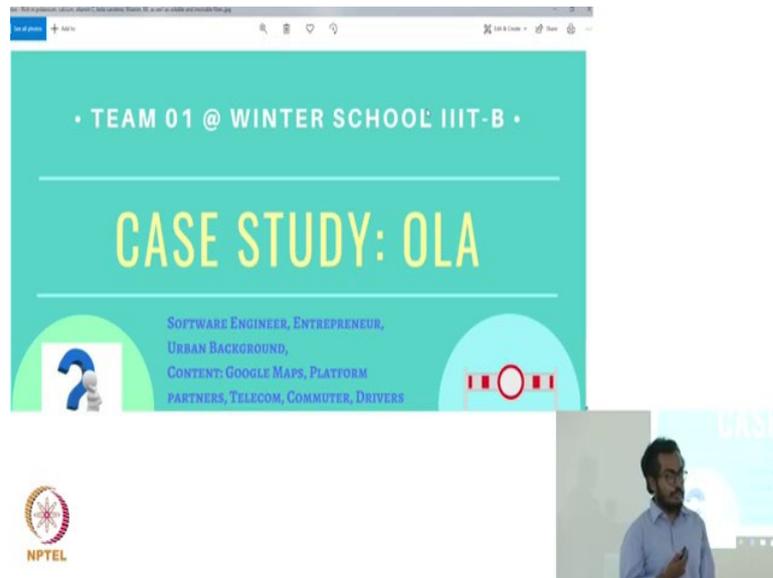


Inclusion and Technology Design
Indian Institute of Technology, Madras

Lecture - 14
Assignment Examples Video: Students Presentation

(Refer Slide Time: 00:21)



So, it is a very difficult job to present on platform economy after gym and also after lunch because many of you might feel sleepy, but anyways I will try to share some of my experiences doing a field work and also my teams inputs in this entire thing we work together. So, Ola is a platform which works as an intermediary between commuters and drivers. It allocates rides to the drivers according the demand placed by the commuter.

So, who was it designed by? It was designed by a software engineer entrepreneur and who is from urban background. The content that they get is from Google maps, platform partners. By platform partners I mean platform such as Foodpanda at least collaborative and also things like Tez and Paytm.

(Refer Slide Time: 00:51)

CASE STUDY: OLA

WHO?

SOFTWARE ENGINEER, ENTREPRENEUR,
URBAN BACKGROUND,
CONTENT: GOOGLE MAPS, PLATFORM
PARTNERS, TELECOM, COMMUTER, DRIVERS
FOR: COMMUTER: URBAN/TOURIST, CLASS:
MIDDLE >, ALL
DRIVER: (IC), URBAN/MIGRANT,
LOWER/MIDDLE, PREDOMINANTLY MALE
APP: SMS, OLA, OLA-LITE

MULTIPLE PATRIARCHIES,
MEN WORKFORCE,
WOMEN PROTECTION,

BARRIER

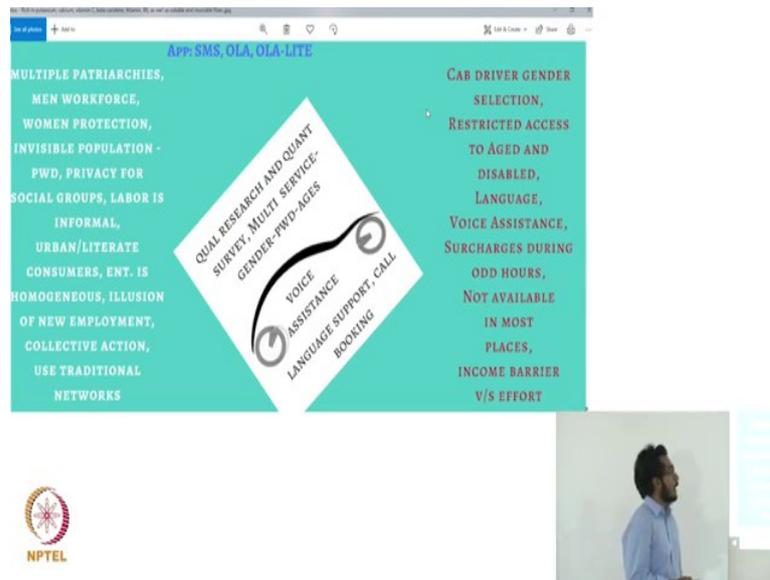
CAB DRIVER GENDER
SELECTION,
RESTRICTED ACCESS

NPTEL

The telecom providers whenever we call, so they might know, so they might get sample on the telecom company, Telecom companies. Next is a commuter data and the drivers data. For the commuters what is the social background of the commuter, it is taken that they are urban and tourists, the class ranges from middle to above and as per the driver who is also called as an independent contractor.

He is an urban or a migrant belonging to a lower or middle class, predominantly male. Ola has offers three kinds of services like [FL] ways you can actually reach them. One is SMS, the main app Ola or Ola Lite which functions little bit made for this as well.

(Refer Slide Time: 01:49)

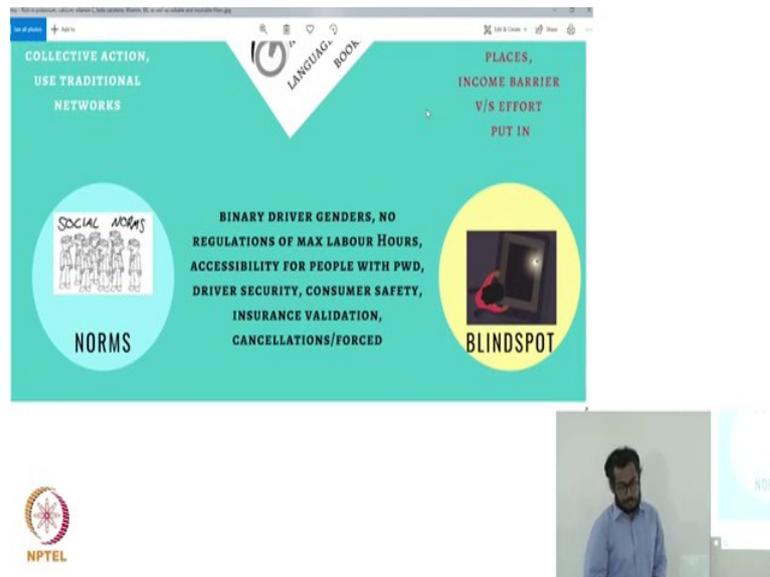


So, coming to the barriers, ok. The first barriers cab drivers gender selection. So, when we are filling a form for Ola that you want to drive for Ola, there is only two option male and female, but what about the rest gender spectrum itself? Completely mess. Restricted access to aged and disable: We do not have any kind of feature in way by which the aged or the disabled can be assisted or this entire process can be made much more accessible for them.

The second is the language barrier. Did not have anything in the local languages, Hindi and English are the two languages mostly used. The next is a non availability of any voice assistance: so people with any kind of disability. The second is surcharges during odd hours. So, for a user if you are travelling from A to B by paying 250 rupees in the morning at around 2 pm 2 am in the night, it becomes 1000. So, this kind of surcharges and not available in most places: we cannot consider India to be only the urban India. This is the best places, what happens there?

The next is income barrier versus effort. The effort put in by the driver and the type of mengele income he get from there after his loans and everything is very less.

(Refer Slide Time: 03:08)



So, with the blind spots: The first blind spot is that binary driver genders that is only male and female we have talked about, but according to data at least in Kanpur there are only two drivers female who drive for Ola that also she drives when her brother, another person's father does not drive the car. No regulation on the maximum labor hours, there is no regulation. You can drive for 24 hours. They are ok with it. Second is accessibility for people with flexible disability it is very difficult for them because interface is not that accessible and second even if the it is the manage to do it, no kind of assistance is provided.

Second the driver security. As we hear in (Refer Time: 03:50) that person had an accident, but if he goes and says I need an insurance or you should pay me something because I was working for you, you will say no it is not my fault, it is your fault and seeing for the consumer safety any kind of theft or anything happens, you go and file a complaint against the driver. The company will not provide you anything.

Second is no kind of insurance validation or the part of accidental insurance is given or at least to the driver and also the rides are not insured in anyway. The second is a cancellations so drivers they never expected that there will be so many cancellations and now what the driver strategize, they say you cancel you right. I will come to you and pick you up and drop you there, so that I do not have pay cut to the company itself.

So, the norms that gets basically manifested the social norms first is the multiple patriarchies and by mean first of all men are the workforce in this economy, is driven by men. Second is women need protection. So, there is ad which was there I think its Ola (Refer Time: 04:53) in which a women calls his boyfriend and says that I am feeling very unsafe and that man gives her this idea that you can share your location with me right so that you feel safe. So, women need protection. Second is the invisible population. In all these ads or the campaigning we have done, they never show that a person with disability can also be helped by this kind of platform or ok.

Second is privacy of the social groups in you may say what happens is in the (Refer Time: 05:23) gap, there is a barrier that divides the driver from the commuter. So, if somebody needs a private space, he or she can have it. For example, if a mother wants to feed her baby, it may be very difficult in that kind of situation. The second is another manifest is labor was always informal in India. So, we are providing a very formal accessible media that kind of a manifestation. Our consumers are urban and literate. Everybody has a basic education and other things.

The second last, the second last is entrepreneurships homogeneous. We are providing, we have making so many entrepreneurs and people self-dependant on themselves, so that it gives them flexibility, but when gives this an flexibility, but also leads to two things. First lack of social security and the second part is self exploitation. In the case of ratings, people exploit themselves in providing maximum also in the earn something.

And illusion of a new employment. We call this as the new economy of India, but these services are always accessing in India and the last is how can something subvert or protest something like that. So, it is collective action and use of traditional network that consumers can do to subvert these kind of networks. So, if we were to design something how would be do it? Now that was the question will be debated a lot and we thought that whatever we design, it will have lost.

So, a design it is cannot can never be like perfect but still I will say that we can do a qualitative research like go to the field, talk to what whom you feel can be a consumer. Make the consumer base very broad. You have a social stratification according to the class and also gender and other sections, have a discussion with them and see what are services you think you will need.

The second, whatever quality research you do supplementary to the quantitative survey of the demographics of the consumer and also drivers. The third thing is go and talk with the other stakeholders. For example, the labor you know or example the people who run the urban space itself and also other people who were not on platform, so then how can that entire space be inclusive.

Providing, so right now they provide (Refer Time: 07:34) but much better will be multiple service catering me, personalized services catering to the need of specific groups. Second is have assistant local language and have a simple feature where you can call and call just call and have a cab at your door. If somebody is not equipped to the technology or the sms is not working. So, that is all about our presentation. That is it.

Hi everyone I am here to talk about Wikipedia. So, our product is a little different from everyone else product here because its run by a non-profit organization and this is be the first Time I thought Wikipedia would be the most difficult one to find a problem, but Wikipedia help us find most of their problems. That is one good thing good thing about Wikipedia.

(Refer Slide Time: 08:36)

The slide is titled "Towards Inclusive Wikipedia" and is divided into two main sections: "Existing Challenges" and "Proposed Solutions". In the center, there is a globe icon made of puzzle pieces, with some pieces missing or highlighted. Below the slide, there is a small inset image of a person presenting and the NPTEL logo.

Existing Challenges	Proposed Solutions
<ul style="list-style-type: none">• Gender• Geography• Language• Content credibility• Community guidelines<ul style="list-style-type: none">◦ Safe space◦ Censorship	<ul style="list-style-type: none">• Local chapters to engage and motivate minority population<ul style="list-style-type: none">◦ Conduct hackathons◦ Training/Mentorship• Community guidelines<ul style="list-style-type: none">◦ Anonymity◦ Attitude towards newcomers◦ Penalizing misuse of administrative power• Address existing community biases

So, there are I mean I broadly divided by simple two sections instead of all four, but I will talk about the first three sections while going about the existing challenges and probably something about the social norms or anything, talking about the proposed solution.

So, majorly what we found is the driving factor of Wikipedia, is its community. So, to understand Wikipedia we have to understand community that comes in Wikipedia. So, you talk of the origin story of Wikipedia it started as something that is for college educated English speaking people mostly in US or in the academy. That is how it began and now it is for universal access and as is used as a source defined information maybe not most credible information if you speak for research, but as a primary place where it will go to understand about topics or pioneers.

So, there are existing challenges. Yes there is gender. I shockly find out there was only 9 percent women and 1 percent other genders in the community that creates in India, biggest of this biasing the community. If this is to be biasing production of the knowledge assets on this platform itself and geography, Africa is almost absent like things about African culture, Indian sub continent culture.

India probably more because of investigating young people who use the internet here, but wherever they do not fit into the typical image of people who have created Wikipedia otherwise English speaking internet access of you people softwares paces. Geography is a completely missing and that also brings again language. If you look by distribution of languages in which pages are available, you will see top 10 European languages and some Russian, some Chinese are there in the top 50; most of them so and it is not just about content not be available wherever pages are available, they are often incomplete. So, there was this one page we were looking at that is systemic biases in Wikipedia.

And that page had 3 long pages in English and 4 languages. So, it is not just by the number of pages, even the content, quality and the information available there vastly changes from region to region and all like that and content credibility, I already covered this and he was done any small paper or anything would have heard the advice from your high school teacher to your professors or whatever that you know how Wikipedia is credible source. So, that is always there.

So, one of the major problem in Wikipedia is how do you find credibility. There are paid PR organizations that are politically motivators or other motivations that they bring into the platform and they get paid for this. There is a whole billing paid PR that is a huge problem with communities.

And in the community itself of the people who are already there, there is lot problem with community about it being a safe space for new comers and especially people who do not already look like the people mode in the community. They are actually some course of some expletive stuff that is said to discourage, actively discourage women and abusing them or just making institutive comments of how they cannot be done in sure and all that stuff and then there is censorship.

So, there are two sides of it. One Wikipedia does not censor. It is any content can be out there. Some part of it is good, some part of it is bad. This probably here I can take one example. It is an English article about Mohammad had picture of Mohammad which is offensive for any who believes in has faith in that religion. So, it has led to ban in countries like Pakistan. So, the whole sensation part of it how the content we get is not toxic or controversial, how it impacts the Wikipedia is another (Refer Time: 13:26) in India.

And coming to the proposed solution, what we have done is we thought we get concentrate solution around what to fix in the community rather than there are interface or the software or the other parts are there. Because, from mostly what we understood from our interaction that it is fairly straightforward website that is accessible. Most audios have little transcriptions, pictures have tags and (Refer Time: 14:00).

So, the accessibility side if it beside the interaction is this (Refer Time: 14:07) and you can use the mobile phones, even it is it does not require lot of internet to load. So, accessibility it has been thought it is do not decent but what can or needs the change it is the community itself and so some of the proposed solutions are how can you have some active creation of local chapters from geography service for minority, minorities in terms of the Wikipedia current editorship. How can we help these minority groups become stronger the community can be incentivize or can (Refer Time: 14:50) training there or mentorships are there or have conduct hackathons something like that and also a change in the structure of the community guidelines itself.

I mean clearly there is some administration side effect there is clearly (Refer Time: 15:07) in terms of (Refer Time: 15:09) that is a share productive it was e-commerce or it was minorities. So, how do you take these into your guidelines, how do we make sure into a safe space for knowledge credits and there has also been concerns about

anonymity. If I as a user get (Refer Time: 15:27) and trying something, can somebody who is an (Refer Time: 15:32) figure out who I am, is there personally identify the information available, little administration Wikipedia who can misuse this kind of available information can be more made more anonymous.

At the same Time you think you get if like keeping score of privileges like your privileges and Wikipedia community are mostly regarding that on what you already (Refer Time: 15:58). We are doing the master who will get its. We are thinking of pages who have more privilege in the community.

So, can we still have this co-existed (Refer Time: 16:10) and anonymity or personally identify the information out of your home and attitudes of them can there be penalizing misuse of administrative powers. That is definitely you need for whole administration side effect, but the privileges that come as an administrator is just privileges or is there in other side effect like there will be penalize or there will be like (Refer Time: 16:37) for the company for encouraging in some sort of abuse or anything that its only is community store.

So, that was one thing which we discuss about and there should be some awareness that should be created about the existing community biases in the information, so that the end user will know that some of the content might be biased by the community that still be researched about it.

We did not know that a source can have biases in what they say because being like that there is no I am intuiting it is a I mean I thought it is just the internet talent you what is knowledge, but it makes more sense to say that is these are some systemic biases that can exists in the knowledge that is created there and especially of topic said related to minorities that do not exists at in the the creator goals like I mean for attribute culture full history. These concepts should definitely come with labels as say that because of what we are composed of, this might not be commitment or some of them can have system biases. That's it for all.

We are something upon the Whatsapp, you know the largest private messaging platform. So, the first concerns of who. So, basically it was designed by two people. One is Jan Koum and Brian Acton who tend to be you know entrepreneurs and as well as make some software engineers from. So, Jan Koum is actually from Ukraine and Brian Acton

from America. So, basically these, generally how it happened was that so they basically these people who are at Yahoo for like around that A decade.

So, then what happened was that they did not like Yahoo because what Yahoo did was like they did advertising just to make money. So, these people generally thought that we have to make a very fast and direct service which does not use advertising. So, that is how they can do you know like develop Whatsapp.

(Refer Slide Time: 18:46)



So, in the next question is like who provides the content? So, basically how Whatsapp works is that they just provide the platform and what you basically do is that you develop your own content whatever you have in your mind that you wanted like communicate with the others to basically send it through a text. That is how it was first. So, there only it on videos and not is in the pictures came in and one specialty of this is that Whatsapp actually sends our messages using Ethernet not going you know like traditional using your you know ISP system or that.

So, then when we are talking about who did they have in their mind when they first developed this? So, it was basically anyone who wants to have a very fast in the label communication. So, but what actually happened was that when they actually like started rolling on their apps, it was first observed that a lot of teenagers tend to use it very much like almost 90 percent of users are teenagers. So, for the first 3 years it did basically adopted a strategy in which that it focus more upon teenagers whatever things that will

teenagers will like. Basically in those scenario they focus more upon teenagers at least in the first 3 years. So, that is it of about the Hupa so we talking about the Hupa.

So, when we talk about that barriers so first of all we have to understand that Whatsapp is a very simple application which does not have complex systems. We just work it on. So, it is not like Facebook which does everything like which tries to rule the world, that it tries to order food, like book cab, it is like it tries to integrate with everyone. Now, Whatsapp is a very simple and incentive application.

You just have to send a message and you receive it, that is it. So, in that finding a barrier it is just it is not easy, but anyway. So, when we talk about the gender barriers, when we take the Indian kind of the scenario, so the woman's phone, a lady a housewife it has a phone is not hers. It is not a private phone. As soon as your mobile number is attached with your Whatsapp, your whole messages have been monitored, your whole family.

So, if my mom has a phone, I can take my mom's phone without her permission. So, it is just like that happening. So, my mom does not have a privacy to join her own groups or her own messages as she does not have the privacy to send the messages.

So, this must be identified as a gender barrier and we have the income barrier which is slightly reducing down because Whatsapp is only Whatsapp can be only used in the smart phones. So, it cannot be used in the normal principle direct thing, but now it is getting reduced. This first of all this Jio phones which has this 1500 rupees phone it does not have Whatsapp initially I think now they are including something.

So, this income barrier is slightly getting reduced. Next is the accessibility barrier. So, first of all I want to as a personal note I want to comment on Whatsapp that it is a very accessible application with voice assistant and screen layer softwares. It does not have even if it has a symbol, it they are labeling it.

So, as an accessibility barrier we can say that it does not have the captioning of not captioning, putting an alternative text for the status pictures that you are putting. So, you can put captions, but the captions will express your personal note like you can put if you are dancing in the picture you can put I am enjoying. So, I can take it as like you are enjoying, eating food or you are enjoying dancing or you are enjoying sitting this, just sitting in your room.

So, there is no alternate text. So, there is a one accessibility barrier right now. The second accessibility barrier that I found is that voice note that you have to press and hold. So, for the people who are tactile barriers like the person who cannot hold for a long time, so, now they achieved it by just holding it and swiping it up like when you hold it and swipe it up, it will just stay there and you can speak whatever you want and just press send. So, this is an excellent thing that they stopped the accessibility barrier like they reduced this accessibility barrier.

So, next we have blindspots. So, the blindspot contain monitoring. So, in Whatsapp you can send any message without prior verification or something. So, most of the NGOs, social activities or most of like we are using Whatsapp as a communicated device where we can just spread an information if we need a blood in some place, then just send a message to a group.

So, in that case it can be misused like you all know that we will receive a message that says this guy has an accident like if you share this message, we will get a Whatsapp is giving 50 paisa. Why the heck they are giving 50 paisa? So, it is something like we have to verify it, right. So, there is no content monitoring and if you take it is in a private note, it is good.

It is a blank for like it kept I think it has to be rectified with the different strategy because if it is monitored, it will be like Facebook or something right. It is prepared for the private end-to-end encryption. So, if you are sending a message, it should be yours. The person who is getting the message and the person who is sending the message should know what is that and the biggest benefit that we found is that consent.

So, there is no consent. When you are like if you if somebody has a number, Whatsapp number, they can add it in any group they want. So, recently we encountered a case in India that one of the women in somewhere in Madhya Pradesh I think. So, she was added in a potentially harm group like bond kind of a group like she was she has been added without her consent. So, like if you take these example like how are you going to address this like there should be an approve option like if someone is adding in the group like at least there the Whatsapp should ask her permission that you should be added or not.

So, that is a biggest problem we have as a network and yeah now like the greater thing that they are doing is forwarded messages that they are labeling it as forwarded, but still

it cannot be it can be pull it by just copying and pasting it or downloading and re-uploading it you can take that label also. Next comes the blue tick. So, when you are sending the message if the sender reads the message, we will get a blue tick that he read the message, but it again comes the privacy. So, if you want to just read the message what is there and if you are not interested to reply you have the answer the person that why you did not reply after you reading the message, right.

So, that is one of the thing. So, next Amitha will talk about the social norms and alternatives standards. Thank you.

You ok with it.

Yeah.

So, I mean which as mentioned I mean your phone number becomes a identity here like at least in other social media or platforms you are a view and here it is just your phone number. So, your phone numbers out there and even when you are it could be like anywhere and everywhere, everybody you are accessible to everybody probably unless that feature came in very good you know decide who you know who can see your display picture, it used to be you know available to like everybody and another thing we observed is with the emoticons that were used, earlier they did not have like as different races of thing and it was later introduced and then this also got certain comments for it.

So, then I think this was a good step in you know be inclusive and not just you know be representing only a white men and another thing what again the emoticons we observe is certain jobs in here where only given to boys like a probably earlier. Now it is all being updated within like probably doctor who is only a guy had the doctor dress and women did not have that and women had the nurse kind of an emoticon and that kind of you know in causing that women are confined to a certain jobs and men have been confined to certain jobs and then, I think it is been rectified right now to a certain extent and the arrangement of flags or probably certain countries flags not been mentioned earlier and now it is being rectified.

Like I think a lot of things have been updated and rectified this fine, but then initial design was not for you know like what it is right now. Like alternative strategies, like we just felt it should be available on even feature phones. You know it does work in low

speed internet as well, but then you know making it available on feature phones also could be you know everybody could be able to use it and yeah and then it is specially as it is mentioned the content monitoring like Facebook there is an option of reporting certain contents, right.

And here although there is end to end encrypted content in here I think I feel certain content has to be monitored because in Whatsapp you can forward anything and everything and recently I have been just talking and there is a matter on some guys video was eating the food has being circulated so widely, I have been getting it from every possible group, every possible family who is like stop ordering online, stop eating some Zomato, Swiggy stuff like that.

I know it might be true or false, you do not really know the authenticity of the content that is being and even during elections a lot of campaigning happens, lot of lot of campaigning happens through Whatsapp and I am not telling it is wrong, but then it needs to be monitored as what we do it me that is it. Thank you.

Anybody have questios (Refer Time: 29:03)?

I am not doesn't make sense.

Just you talk about the blue tick, it can actually be disabled you know the settings there is a privacy setting.

Yeah it can be disabled if that is most (Refer Time: 29:15).

Yeah (Refer Time: 29:18).

Wait let me answer for it. So, it can be disabled, but the thing is once you disable the blue tick, you cannot see others blue tick right.

Yeah so.

So, if you set in my privacy.

That is (Refer Time: 29:31).

(Refer Time: 29:33) why you cannot see the blue tick? That is also (Refer Time: 29:33).

As such the blue tick is there in a Whatsapp even if you disable it, you have to answer the reply. What someTimes I will disable my last seen. So, at that Time I have to answer my friends that why I am hiding this last seen. So, all these things are there. So, because it is present in that platform even if you disabled or enabled, problems.

Yes.

So the problem is social norm saying and.

But what we are saying is (Refer Time: 30:00).

It should not be there.

No, I am not saying it should not be there it is a direct.

So, the factor it is there inside somebody (Refer Time: 30:09).

Now, we talking about attitude, we talking about knowledge already (Refer Time: 30:19).

Yeah that is a privacy.

That is true. That is still. But that is true. Even I accept that, but then I think some sort of model has to be there because I do not know if you can report the content which you the video that you forward on Whatsapp or the some which is Pankaj forwarding.

What do you think? Which is knowledge about them (Refer Time: 30:45)?

Yeah that is what I said I mean it should be I mean.

You cannot just monitor the.

No I mean is it is I do not know if it is available you can report. If that is there, then I do not think.

The problem is that with end to end encryption, Whatsapp cannot at all like you know read-anything that was simple and almost ((Refer Time: 31:06)).

And if monitoring has to happen, then end to end encryption with has to go about.

No.

But If you are requesting.

It is something like offensive.

So, if you report it.

Sir with (Refer Time: 31:25).

Option to choose to make one message probably and the other way to send you to the message that your message this person has been (Refer Time: 31:45) and he has reported.

We are going to nothing.

Yeah.

(Refer Time: 31:50) and when it is sorted (s Time: 31:54).

Yes it is not monitoring. Yes I think.

So, after we reporting maybe we can have a system like after when we reporting maybe Whatsapp can see the reported message and then they can take an action.

Well it was a message not on the private yeah.

Yeah you know.

That is the point. That is the point of reporting.

What is the point?

That is the point of reporting yeah.

Any other question?

So, we talk about I just the number thing (Refer Time: 32:20).

So, we could not find everything as a solution. So, when we did like because like as we know like that I am considering and then and then we have to do a lot of research, but

even if your number is public, so now that people are doing strategically what they are doing is they are registering the Whatsapp with a number with the number they are not using, ok. So, maybe if you are using a Jio number they are registering Whatsapp in a number which is not no longer used, they just registered it and throw the SIM card and then they are using a private number for the other things. So, in that way it is a strategic thing, it is not a very formal thing to do, but still that is what people do.

So (Refer Time: 33:05) part of this.

(Refer Time: 33:07) users text that you do not have to interfere (Refer Time: 33:14) create an account with the username and to add friends you just add there. Everything that is it is called (Refer Time: 33:21).

Yeah Whatsapp is embedded with your number.

(Refer Time: 33:22).

Yeah that is the data collection path. So, the design choice is the intention of that your number is your identity.

Yes it is a very intention.

Yes it's a very (Refer Time: 33:31). So, if you non user (Refer Time: 33:34).

3 months ago.

So, I actually have some numbers (Refer Time: 33:40).

Like another problem is that you cannot use it all I mean I am not telling it should be used simultaneously with different devices, but then like option it can be sign out option and then you can.

Yeah.

Probably you do not some emergency you want to you your phone is not working, your battery is out Whatsapp or anything like that. So, it could be like you can use it on your friends phone, sign out sign in that kind of stuff could also be given in on Whatsapp that is the part.

I mean I was like whoever in Whatsapp stuff doing.

Spoke about it.

I think spoke for a little bit about.

Yeah can I extend your question little bit?

No to extend a question basically I am saying.

Yeah.

You know whole idea of Whatsapp use and what is being discussed on forwarded on Whatsapp most of.

Yeah. So, if you take the Whatsapp group thing, it is just like the re like its like very interesting to talk about groups because before Whatsapp groups, we have Facebook groups you know like, but Facebook groups are not as active as Whatsapp groups when and they are intruded, but Whatsapp group is very easy. It is like just a person is standing next to me and is talking. So, we are like when you take this college group like family is a very big problem in groups.

So, when you have a group which is intended only for this which is in the which should share only this, anyone can share anything, right. So, now they have this admin thing that only admin can send the message. So, it is not a group, it is a broadcasting. So, how they I do not know how they thought how they come into the solution that only admin can like send a message and the other person have just to watch what is happening in that.

So, it is like a broadcasting. So, this group is very dynamic it can be approaching by the way.

So, I think when you talk about being take, so that is why the thought of a content being it should be one per (Refer Time: 35:43).

So, it is one question that if you have like (Refer Time: 35:48) social norms around the world this being used in Indian flag right, Jana gana mana is the (Refer Time: 35:59).

That's right. Yeah.

Yeah. So, that see, yes.

(Refer Time: 36:05).

No I mean see that thought is when I told that should be monitored and then I mean.

We introduced it reported.

I mean Sharath said it is not only possible to have certain content of the certain content part. So, I think, then I think reporting such messages should be resolution if content monitoring it becomes difficult one being monitored and one (Refer Time: 36:46).

If you have a Whatsapp payment of this benefit (Refer Time: 36.56).

Yeah. So, yeah Whatsapp payment that Unified Payments Interface that thing. So, that UPI which is integrated in Whatsapp is it is after the Whatsapp is acquired by Facebook, these kind of things will happen, ok. So, like they are planned also planning to give acts or on the stages, right. So, they are also planning like they are introduced these stories option in Facebook and status in Whatsapp.

So, always messy things happens when this Facebook acquires Whatsapp. So, when they try to enter into everything, the whole point of this private messaging changes, the dynamics got changing. So, when you are like if you if everyone is using the same payment, you can just ask [FL] send me 50 rupees. You can just message it, right.

So, friends it is just like that. So, the dynamics is keep on changing and I do not think it will affect (Refer Time: 37:48) because if you want to use you can use it. It is optional.

Good evening. My our team's topic is Paytm.

(Refer Slide Time: 38:05)

WHO	BARRIERS
Digitally literate / tech savvy	Women don't have control over finances
Bank account holders	Women don't own a phone sometimes
People who can afford a smart phone	People can't / don't want to buy certain stuff using others' PayTM phone.
People who are privy to public spaces	Internet is not free!
Users are mostly young / not too old	Connectivity isn't ubiquitous

BLINDSPOTS	NORMS
Platform privileges the buyer	Assumptions:
Bad contrast ratio	That platform monopoly is normal



So, we have mixed match of points here. These and most of these points are quite they overlap with rest of the categories. So, I will just take them all one after the other. So, who designed Paytm and who was it designed for? From our research seems like mostly Paytm was designed for very narrow set of people who mostly digitally literate, technically savvy people who can use a smart phones and like successfully navigate through this thing and most Times Paytm was only accessible to people who have a bank account, but nowadays it is probably not the case.

And for only for people who can afford a smart phone and a data plan on the smart phone. I have tried accessing Paytm on 2G, it is not really a very nice experience and Paytm is not available for any future phones. So, smart phone is a mandatory requirement. In some places people cannot do not own a smart phone, cannot own a smart phone and someTimes they cannot use a smart phone. So, that is a really debilitating thing for people who are forced someTimes to use Paytm and the uses of Paytm are generally digitally literate. There go mostly young and not very old with good text (Refer Time: 39:25) of fingers and no loss of limbs. So, that is the who part and yeah.

So, these are the person for whom Paytm was designed for and there are some barriers general barriers as in terms of gender, women not all women in rural areas may have a phone because someTimes it is the man of the house who has a phone or a single person

in the house who has a phone and that will someTimes not even a smart phone. So, even when a household does have a phone, a woman may not have complete control over the financial statement or may not have complete control over the money in Paytm or what they can do to purchase with the with the app and someTimes I have seen it might seems that people borrow phones from other people in order to purchase things. I myself have borrowed phone. I have principles stands against Paytm.

So, I had to borrow phones someTimes where I did not have a chance to use it something I moved out of cash and internet is definitely not free and it is definitely not available all the Time everywhere. So, in India especially internet is quite a what the rare thing in some places. We take it for granted in the cities, but in rural areas it is really difficult and in rural area actually the internet, the infrastructure, the communication infrastructure itself its little rusty and unreliable and therefore, Paytm cannot be a full reliable solution for this people right and.

(Refer Slide Time: 41:19)

People who are privy to public spaces	Internet is not free:
Users are mostly young / not too old	Connectivity isn't ubiquitous

BLINDSPOTS	NORMS
Platform privileges the buyer	Assumptions:
Bad contrast ratio	That platform monopoly is normal
Poor UI / UX choices	Poor people don't care about privacy
Unfriendly to people with cognitive disabilities	Digital transactions / economy are better than cash economy
Advt. are distracting for visually impaired	



Usually in Paytm one of the problem is that the Paytm platform and any other platforms similar payments and mobile wallet platforms. Usually they support and they privilege the consumer, the buyer, the guy who goes to the shop and buys stuff, guy who pays. The person who receives the money usually a shopkeeper or a taxi driver or a or any of the business owner. They generally do not have immediate access to the money on Paytm. SomeTimes they maybe in a very sticky situation where they are not able to immediately

use the money that they have on Paytm on things that that are immediate necessities like say fuel or food or immediate money exchange.

So, if you want to give somebody money, if you want like borrow a loan or give pay somebody back and we have to expect them to also have pPaytm and also the platform is slightly designed to lock people in the sense that if you if somebody has phone pay that is it is a competing platform. You cannot they are not really inter offer able and there is a limit on an amount of money that you can hold on Paytm unlike a unlike a bank.

And for people with cognitive disabilities, Paytms are really bad application in terms of interface. The colour choices are really poor, the contrast is not up to mark and there are like really annoying ads that that might really mess up the screen readers and the app itself is forget about the or this who are consider for normal people who are considered as tech savvy, who are even programmers who might develop the applications on android phones. Paytm apps is considered re-inversed old model for how the model (Refer Time: 43:11) right.

So, for that I was speaking to Ankith yesterday. He was telling me how the same action like loading some money on to the app he needs to relearn the flow of the action every time he has to do it because it is so I mean so such convoluted ways of you use it on interface that you just have to really struggle to do stuff on Paytm and really unfriendly to people with cognitive disabilities because they have sacrificed usability in favor of beauty.

Or I do not personally feel that the app is any beautiful or in the colour choices in valid, but if that is the choice they have made and all these need a lot of worth is and there are advertisements that keep changing and there is a carousel in the middle which might be a really difficult experience for people with visual impairment and Paytm actually makes it quite difficult for you to seek support.

For example, the numbers actually for the so I tried to some of the support numbers is to try to get to speak to somebody and there were no it did not even rings or I could not reach anybody and there is no options right that would say for example if you make a wrong transaction, there is no way for you to effectively dispute the transaction or request a charge back even if the transaction amount is quite significant. So, that is a really difficult thing and Paytm does not really have that many language options. It does

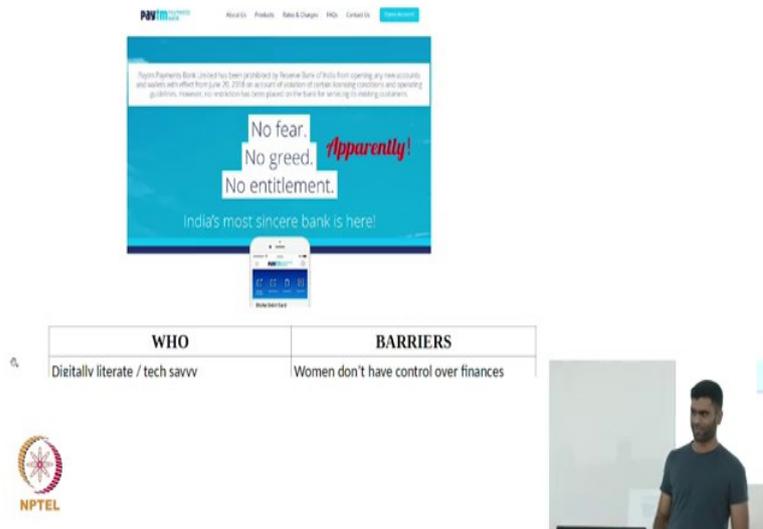
have a decent number of languages. All the major languages are available, but I will learn from one of that Assami is just not listed for example and you were quiet disappointed. So, that is it and ok.

So, Paytm perpetuates certain norms like whether willingly or unwillingly is party to the perpetuation of those norms. One of that is that digital transactions and digital economy is inherently somehow magically better than cash economy. Although I do not see any real value to a digital economy apart from the fact that the government can actually have a track on what you do with your money and how you spend, but considering that that large portion of our economy is informal. What app ended up doing is this force these informal sectors into becoming formal sector which fall under the tax racket, right.

So, what it does not take into account is that the informal sector is not without its problems, right. The app has not considered the lack of social welfare or any kind of financial scaffolding figuratively. So, for these people that they just made a tool that who just bring the whole economy, the transactions into the a fold of a ledger where the government can use to tax people with no regards to whether or not a (Refer Time: 46:33) shop guy will have to bribe (Refer Time: 46:35) pick a really that the bad example.

And other implicit not very obvious, but slightly ostensible if you look in the right places is that app considers privacy to be non-essential aspect of human life especially when it comes to people, poor people. There has been cases in the past where a sting operation by Cobrapost found the Ajay Shekar Sharma is the brother of Founder Vijay Shekar Sharma he went in proudly told the guy was stinging him that he was requested for a lot of data by the by a party. He did not seem to be having a problem complained to the request. So, that is one aspect that we need to challenge and that the platform is encouraging that the platform is trying to build a monopoly around the whole mobile wallets area.

(Refer Slide Time: 47:51)



The screenshot shows the Paytm Payments Bank website. The main banner features the text: "No fear. No greed. No entitlement. (Apparently) India's most sincere bank is here!". Below the banner is a table with two columns: "WHO" and "BARRIERS".

WHO	BARRIERS
Digitally literate / tech savvy	Women don't have control over finances

The NPTEL logo is visible in the bottom left corner of the slide. A small inset image shows a man standing in front of a whiteboard.

And in doing so, they step on a few round those I guess because this happened. Paytm payments bank was prohibited. So to speak by RBI from starting any bank accounts because they were found to be creating bank accounts for people who did not really requested and that is a direct violation of some of the RBI rules yeah.

So, finally one of the more worrying things that I found is Paytm is right now not only mobile wallet, it is a mobile wallet payments bank and it is also an e-commerce platform. So, the people that Paytm apparently supports to carry out digital transactions, Paytm has ended up actually competing with them and with really outrageous completely counter intuitive offers and discounts on products that can only be possibly if you get a few 100 million dollars from software for example. So, they were forced by earlier I think (Refer Time: 48:52) but they did not have this sensibility. So, that became a poetic statement of irony. I would stop here making an app more the intuitive for at least people who are not disabled.

And from then on I would just that include inputs from people who actually use the app, which is mostly people from poor background more seeking who are digitally illiterate. I would actually invest some money to send (Refer Time: 49:21) in places that people actually use that app. It is still that if you use the app to see how they actually use the app and then bring in took back and redesign the app base on that.