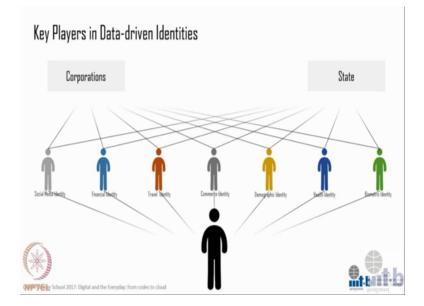
## Digital And The Everyday: From Codes To Cloud Prof. Bidisha Chaudhuri Department of Multidisciplinary International Institute of Information Technology, Bangalore

## Lecture – 11 Data-driven Identities Part 03

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So, let say something like Adhar like the data is created everybody is interested in data; not just the state, but also the cooperates right. So, that is were the grace on sort of manifest very clearly. So, these are. So, I am just going to talk about few of these in bit of a detail. So, social media identity of course, your face book identity right when you create a Face book page or profile, you have a certain identity, Linked in, Twitter, your blogings you have your own block post.

When you have a you know contributing crowd sourcing platforms right. So, all these would be a social media identity; financial identity would be let us say when you pay through Paytm, you when you paying for your Uber through Paytm right. So, that is financial identity.

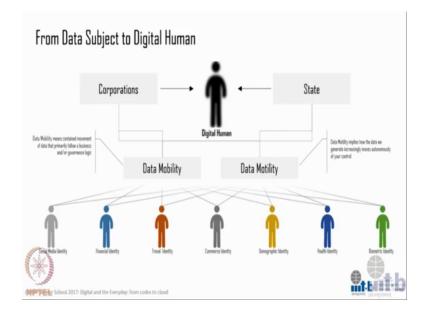
Now, that is a very you know when you pay for Uber through Paytm, Uber is your travel identity right. So, all these identities existing itself, but they are related they are not in a isolation right, but they exist the strip of your identity that is why we are calling them

identities. So, now, you have multiple; stripes of your identity in the digital space by the way you consuming the data on a daily basis right.

So, now, if I look at this key players who are coming into this identities. So, they are not just interested. So, let us say why they are running these algorithms right and this whole connected devices are we talking about. So, Uber is just not interested in my travel identity, they are interested to understand how my travel identity connects to my financial identity and it also connect to my demographic identity right.

So, that is where the profit lies, that is where the inside lies. So, I am not interested just what for what purpose you coming to my platform, I am trying to understand what else you do and how I can improve your experience on my platform by understanding what else you do in the digital space right. So, this is the connection that both the cooperates or both the motivations that I am talking about are interested in. And you are able to understand the how this and why are the interested technically speaking we have reach the stage, where we are able to draw this inside we are able to make this connections and this is how we are drawing insides from that that is the first part of the session that we are talking about right.

How these connections are build, how this connections are technically enabled right now right. So, this is the reason how this mix both profit making and policy making bodies interested in the data. So, they are not just interested in one part of your identity, they are interested in making their connections.



So, here I am going to introduce two concepts, one is data mobility. So, data mobility basically means when you have a content flow movement of the data. So, let us say when I am linking my Adhar to my bank account, to my phone, number or to my subsidy my p d s cart right. So, I know the way the government or the state is making this connections about me right.

So, this is the sort of structured movement of data. So, they are relations the links are made, but you sort have a sense how the relations are made. Now what and both corporate and state both the profit and the policiciser interested in this data mobility right that is what we just described in the previous line. Now here I want to introduce this concept data motility. Motility is basically in English means as autonomous movement, it is a self directed movement. So, the data moves on a zone right and why have to think about identity, we need to understand this concept of self directed autonomous movement of data.

Because when you are creating this data, when you are generating and consuming data in the digital space, you do not know how these are going to be linked, that trajectory is not clear to you at the movement. With machine learning algorithms that trajectory will manifest itself, that you are not aware of and you cannot predict right and what sort of insides will be drawn from this kind of data motility, this autonomous movement of the data and what algorithms because algorithms as Shreesha was talking about is mostly proprieted it is a black box nobody knows right.

So, let us just think that if your data is moving without you knowing in the directions it is moving and you have proprietary algorithms which are pretty much black box you do not know which identity of yours is going to be created. So, that is why I am moving from this concept of data subject to digital human. So, a digital human who has multiple identities, but the human itself does not have any idea, how these identities sort of connect to each other or will connect to each other right. And this is where your question what are the political implications right yes you have a question.

Student: Yeah let me clarify. So, we saying that what you do not really have control over on (Refer Time: 06:37) is the kind of things that I have been inferred about it if you say that.

Student: That everything is trying to draw certain conclusions about who you are and either demographically or in terms these (Refer Time: 07:02) that, but unknowingly (Refer Time: 07:03) is this going to kind I mean the conclusions narrates drawing.

Its both. So, you do not know what. So, if I go back to this or we can just stay in this slides. So, the we see that there are connection which are being made right. So, let your health identity is sort of connected to your demographic identity, and it is also connected to your finance data right. So, when you are doing that in a content environment right you know how this connections are made. So, let us see if you go and fill up a form you know what all informations you are giving right because your objective is to give information here when you are feeling up a form. When you opening a Facebook account if you know what all information you are given to Facebook right Facebook does not ask for you real age; you can just write anything I can write my age is born in somewhere else right.

So, what I am saying. So, you have certain sense of I have some data about my health out there, I have some data about my demographics, I have some data about my finance out there right and you can sort of the experience for recommending recommendation systems weight operate, your son sense of the way their kind of connected right to use you book a flight on Google from the next you go to Facebook, you suddenly see all the travel sites are on the you know right hand side of your Facebook feed right. So, you have a sense that this is the weight is connected now this is the connection part. Now if you add on the inside part that we looked at in the previous slides right that the kind of insides that are analytical tools are able to generate on the volume of the on the volume of the data the their able to mine at the moment, that inside is something you do not know right.

So, of course, there can be different connections which would be made. So, both are beyond your understanding at the moment, that what connections would be made and on the basis of that connection what insights will be drawn. This two something I am talking about as motility because it is autonomous the data itself and as wise we are talking about if you move into an artificial intelligence platform, in humans are not doing it anymore. So, you have just created the algorithms and lefted their right, algorithms in doing it by itself. So, what connections this algorithms can create and what insights they can draw you will not know.

Student: But in the sense of microspective or (Refer Time: 09:42) algorithm or human making (Refer Time: 09:47)

Yes it is irrelevant.

Student: (Refer Time: 09:49)

It is irrelevant, but it is relevant for you to understand that when you move this to algorithm which is black box. Let see if I know if you know let say you are my regular students and I am going to grade you at the end of the course right. If you are not happy if you think I am discriminating against you, you can always come back and ask me what is criteria of evaluation right and I have to tell you. Now you cannot you do if the algorithm if my criteria of evaluating you is black boxed, you cannot challenge me. So, it does not matter whether I am a human or am an algorithm.

Student: So, is the name making nominization pointed, we are just this is certain eligible like opacity to the system right.

Yes.

Student: (Refer Time: 10:40).

So, what you trying to say here, I think what would be something for you to extrapolate from here that of course, humans were making discretions these decisions are made by humans this inside the drawn by human. So, there are biases that worked with the human not when we are moving to the algorithm that is what Shreesha was talking about algorithm in biases right. So, you definitely embedding your algorithms with similar or more biases or less biases. But the point is the moment you move it on to algorithms you cannot challenge it anymore because your black box. I cannot challenge you on something that I do not know if you have done it.

Student: (Refer Time: 11:21) my only point is organizations are behaved like this forever

Yes.

Student: (Refer Time: 11:27).

But the take; so, you what we need to understand the implications of putting it into an algorithm. So, first of all you cannot challenge and second what happens, I think this is also he talked touched upon is that the moment you move this inside generation, the responsibility of inside generation onto algorithm, it is immediately acquire an objective status that humans never could achieve right.

So, you could always say nobody discriminated against you with the computer which is telling me right. So, that is the implication which makes it of course, the logic is same as you are saying, but the implications are different, because they are different right materially they are different hence the social implications are different right ok.

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History of Identity	
Identity as a product of modernity	
Identity as a performance: from a given into a task	
Is Identity a private matter or public concern?	
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Now, coming back putting things into perspective. So, if I go back to this just to summarize, what I am saying there are of course, this part we have described so far, that how data moves from consumption from you know production to the consumption which is sort of own parameter how do you say it is own box right, it is the box within which it moves and it runs through the algorithms, and then it creates new data and then your consuming and generating for the data that is pretty much the loop.

The data motility is autonomous movement of the data, and that is something which also the implications that we need to understand in terms of when not just profit making organization, when state have all these data. So, let us say first one that we have so far talked about, that people having access to a data and also people generating insights from a data what is the implications for this for privacy, people having access to my personal data and the other one is surveillance that if there able to make such connections, what it what does it mean can we create a surveillance state out of this whole process right.

If you are looking a data mortality, what we are saying that what sort of identities are going to be created right that is becoming fluid we do not know right. So, which part of your data will be connected let us see if you connect my religion, my gender, and my consumption pattern, and the new draw insides these are the people who are supposed to be more rebellious right or these are the people who was supposed to be more you know anti establishment right, because of these data strips are exist there. So, there is data has implications for both privacy and surveillance.

Now, for motility, what are the implications that something we do not know yet right because we cannot predict. So, one of the things that I am touching upon here, that it is making this identity that we have very fuzzy it is fluid and fuzzy, we do not know in what form we may appear to either the corporates or the state right. Now putting things in perspective, what is identity. Do not look at the slides what is identity?

Student: Completing (Refer Time: 14:59) something which I know which I have of myself and what the other people around perceives of these are the two basics of you know what is an identity, and within that frame like how others are perceiving and how the relation with society by identity is working. It can keep on differentiating depending upon the socio economic political or any kind of space that I am belonging to; like for example, right now I can be a student and outside I can be a just you know someone login to a privileged background knowns car or something like that. So, it depending upon the space my identity keeps on you know shifting from one position to another.

Another yeah. So, thanks for this precise answer. So, identities has two vector one is the self and other is the society right; and how this two are connected at different point in time depending on that you change your identity or you use different kind of identity right. So, via use the word use is that is the second point right identity is always a performance right, you perform your identity to others.

So, when this other change you use different identities right and you decide depending on who the others you are performing it to, you change which role you are going to take right. So, sometimes I put my gender identity forward sometimes I would put my parental identity forward sometimes I will put my religious identity forward right and sometimes I will also put them in combination. So, it is not that it is their purely like the gender or purely my class there is of course, a cross cutting notions of identity.

Now, the first point that I am wrote here is that identity as a product of modernity. Some of you might know what I mean by modernity, but some of you might not. So, here I want to just very just the way I tried to simplify relational database management for social science people, and trying to simplify what modernity and identity I mean by people who do not have social science background. What I mean by modernity is with the advent of industrial revolution and enlightenment, that takes place in Europe in you know 500 years back, there is a certain kind of social fabric that emerged right, before that societies which war of a certain kind had a very strong sense of community. So, as you changed as modernization takes place, industrialization take place, this fabrics us sort of loosening right and when it does use need different kinds of line to cover sense of belonging for you right.

Because you do not belong to a very small community where everybody knows everybody, you are endlessly mobile right and as you become endlessly mobile, this people that you are talking to this other you are performing yourself to your presenting yourself to changes right there not uniform. In a single day is this group of people that you are performing to changes already maybe for me 4-5 times right. And depending on this four five times of the people that I am talking to I change my identity when I am traveling in a BMTC bus, I use my gender identity I go and use a ladies seat right. I do not think about it maybe when I walk into this classroom I do not think so much about my gender identity maybe my professional identity sort of takes over depending on the crowd that I am talking to right.

So, this is what I mean by identity as a product of modernity, see if you think of our modern lives it is extremely complex and it is extremely heterogenous. So, this heterogeneity makes us look for an identity and then identity itself becomes a performance in itself, which you play out depending on who your audience is now is identity than a private matter or a public concern both right.

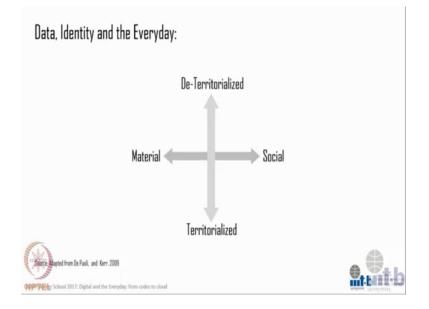
So, if I look at it in this way that it is a relationship between the individual and society, which will keep changing and I am talking about changing in a day right and they exist all at the same time is just what you perform changes. So, if that changes. So, it is my responsibility to decide which identity I am going to put forward, but the authority is not completely on me.

Now just wrapping up this slide quickly is you are looking at how the social fabrics changing makes us rely more on a identity as a surrogate for community, that your sense of community is very broad now, it is not homogenous anymore and hence you need to rely more on identity. But identity in itself it is a performative artifact. So, depending on who is your audience you have to wear multiple hats multiple identities or different

identities at the different times. And that makes this complex relationship between the self and the society makes identity not only your responsibility, but it also it is you do not have the competence to authenticate your own identity, that goes that becomes a public concern right. So, that is why we have all this massive id project where state is trying to say that one person cannot the identity theft, identity fraud all this things we need to stop, because people are trying to create identity is that they do not have right.

So, they are performing different roles, that we want to stop, which is beyond the script if you look at it is a performance. Now coming back to what I said yesterday right.

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That how does this data identity and everyday sort of it into this. So, what I try to do first try to look at how material aspect of data makes possible things that we are doing now right and all the bus was that we are operating with. So, of course, the bus was something that only the people who are the programmers or the you know people who are in the design side need to be worried about, but what you need to understand that the social implications at it has, and how you are also part of that material environment that is being created right.

So, you as a data subject is producing and consuming this data in a certain way that makes this whole flow of the mobility or the mortality of the data that we talked about possible, and the implications of this material aspects of data on your social life which we looked at through the lens of identity right.

How it is sort of makes. So, as it is as a product of modernity, we were wearing multiple identities, that we are operating or performing, now in the digital space it becomes even more fluid right. First it is fluid and. Secondly, what we are not sure how height are identities are going to be forms, and what forms it is going to take right. And this is happening this entire process is taking place on this y axis that you are moving that is what I said the territorialization to de territorialization basically means, that your destabilizing your network, your the specially and temporally there much more fragile, that much more distributed, there much more hetrozenous right.

And because of this process what happens the relationship between the material and the social, has become lot more complex. When you cannot say that you are not part of the material world or the material world is not part of your social world right. And the entire framework I try to look at through you know the notion of identity and how digital identity is making this entire thing manifest in a certain way right.

So, that is pretty much my presentation.

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And the conclusion that I just wanted to have you guys read this novel called White Noise. So, White Noise has this you know famous quote, that we are you are the sum total of your data. So, if you do not have enough data about you, your identity sort of incomplete in the digital space right and the. So, one of my friend forward me this you know Whatsapp video, which I could not find I thought I will plug it in, is that this the

video is about a girl who started dating a guy and these are know each other for a week and that guy does not have any digital you know identity. So, he does not have any social media profile, he does not have Google id or something of that sort.

So, the girl really freaked out because she could not stock him on the digital space at all, she could not find any information about the guy she is dating. So, she went and talked to her friends and her friend said are you sure you dating human being or is it a ghost maybe we should figure that out. So, that somehow sort of some up I thought know you know lighter note that are we do we even exist if you do not exist on the digital space anymore. So, are we headed towards that sort of an experience. So, I will just end with that.

Thank you for you know patiently listening to a very long morning lecture.