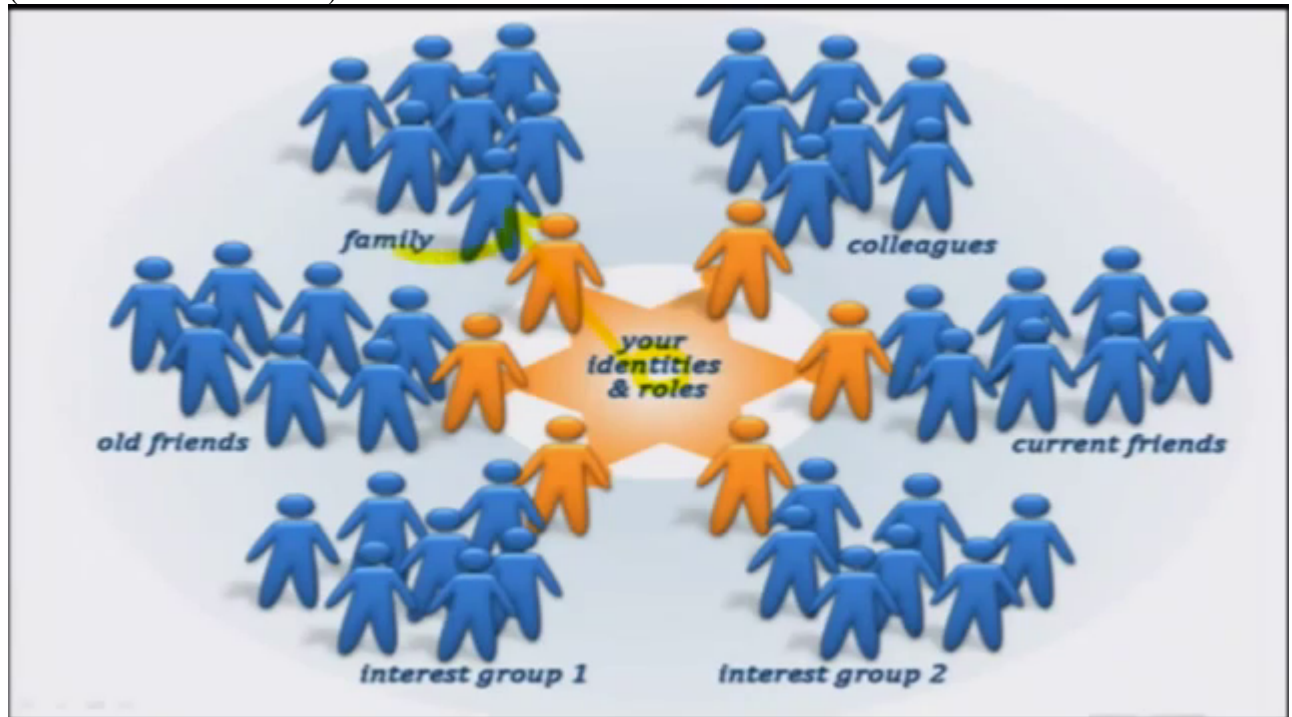


## Social Networking Part 1

Runa Sarkar

Hello everyone. Welcome back to this new session. It's a little different from what you've done so far, because so far you focused on the technical aspects of what is ICT. How do I use a mobile phone? How do I figure out its IMEI number? And then lots of exciting technical type exercises. What we do today is a more human, A. And second you know I'm going to be talking about social networking and that in reality has no real ICT element to it. So I'm going to start out by explaining to you what social networking is and then talk about why online social networking is so important. And give you some examples of social networking online. Brief introduction; I am Runa Sarkar. I teach economics at the Indian Institute of Management Calcutta. And I have an interest in sustainability and interest in sustainability in agriculture in a very big way hence my involvement in this agMOOCs. And I do believe that ICT especially through the powerful social media can make a huge difference to agriculture and development in India. So, that's why I am here and let us go ahead and learn something more on social networking.

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What do I mean when I say social networks? Now consider yourself you are here at the center, what is your identity at home in your family? You may be a parent. You may be a brother. You may be a sister. Maybe we have a grandfather or a grandmother among us. You have a particular role in your family. You may be somebody who takes care of the dog. You may be the person involved in buying all the provisions. You may be the main bread earner. So you have different identities and roles in your family not only just your own immediate family also your relatives; *kisika mama, kisika chacha, kisike mausi* and the process goes on and on, right?

So you interact with different members in your family. You may do something by calling. You may call somebody and talk. You may write a letter for somebody else and the levels of

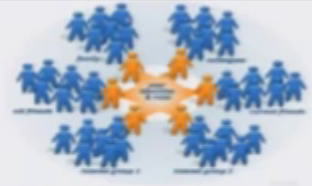
conversation, the topics of conversation can be quite different. At your workplace you have a set of colleagues; with these people you sometimes sit and discuss how terrible your boss is. At other times you discuss how to improve the efficiency of work. You may do this either by sending emails across to each other or chatting in the lunchroom or talking over the phone and often by nonverbal signals, your boss might pass by and you might just look at the other person signalling something good or bad about your boss's demeanour for that particular day.

All of this is very much an aspect of social networking. It's about building these ties and bonds with different people. Obviously the way you react between family and colleagues can be quite different. So we've got to keep that aspect in mind. Similarly in the evening you might decide to go watch a movie with a bunch of friends. So you would then be interacting with this group who are your current friends. You might decide to go and hang out in the bar with them or go to a restaurant together. Again the level of interaction is quite different. Let us consider that you have a huge interest in music in which case in addition to just your regular friends you might have another group that you interact with who I'm calling interest group to here who are related to your music buddies. You might you know meet up every let's say Saturday and jam till 3 o'clock at night.

Another aspect of yourself which is I have an interest I enjoy music and I enjoy sharing it with like-minded people is then evoked and that's a very human need. Sometimes you might bump into an old friend at the train station and then two old friends may say you know you are now in Infosys, wow, that's good to know. You know I am now teaching at a school. Oh, and do you remember other Radha. Radha is now a real real big shot. You know they profiled her on CNN IBM the other day, but guess what why don't all of us meet up. And you talk about the past and you talk about what has gone on and so on. Now that's a complete different set of people that you are going to be interacting with.

So, now you understand when I'm talking about a network, I'm talking about the fact that you interact with all these different sets of people when Radha comes and tells you, you know I'm really looking for somebody who's going to teach my son the guitar, you are going to say, I know what to do I just need to go to my music buddies and ask them. So that's how you start using your social network. Can you see now that a social network essentially is something that all us human beings are born with and we cultivate as we keep growing because this is what keeps us alive, having this ability to link with people, talk with people and enjoy their company, build our own interests, share our own interest and so on.  
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# Social Network

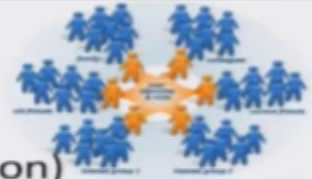


- Wikipedia definition-A **social network** is a social structure made of individuals (or organizations) called "nodes," which are tied (connected) by one or more specific types of interdependency, such as friendship, kinship, financial exchange, dislike or relationships of beliefs, knowledge or prestige
- Social networking is the grouping of individuals into specific groups, like small rural communities or a neighborhood subdivision, if you will.

So let's come to a more technical definition than off a social network. It is a social structure made of individuals or organizations, okay, when it's individuals it's you or me. When it's companies that we call them organizations or NGOs and so on and these units are referred to as nodes, okay, and these nodes are tied together or connected to each other because of a specific type of interdependency. What kind of inter dependencies are we talking about? We're talking about friendships, kinships, Kinships means relatives. Sometimes the relationship is purely a financial exchange or you are linked together by a dislike. I don't want Australia to win, that's the kind of dislike we are talking about.

Relationships or beliefs, knowledge, we have a group of people getting together, discussing agricultural issues. Sometimes prestige; I am a member of the Bengal Club. I belong to the Delhi Gymkhana and so on. Social networking then is the grouping of individuals into these specific groups, small rural communities who may talk together who all grow potatoes, work together, they go for a satsang together, so based on your religious belief you have a separate group and so on and different neighbourhood subdivisions are different social networks. The interesting thing of course is that one of the people in the satsang is also a member of the potato group and that's how the links keep growing.

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- Not a new concept, (6 degrees of separation)
- Ramsey theorem-At any party with at least six people, there are three people who are all either mutual acquaintances or mutual strangers
- People typically maintain 10-20 close relationships among thousands of acquaintances
- Metcalf's Law – value of a network increases  $n^2$  to # of participants
  - Not exactly, but in theory.
  - Dependent upon interaction model

Obviously, this is not a new concept. Social networking has existed as long as human civilization has. There is a common concept called the six degrees of separation. Now what that says is that between me and a completely unknown entity at best there are six degrees of separation or six with six connections I can reach you at best, at most, it could be bit less. So I'm interacting with one of you and you would say you know I have a teacher and this teacher has married a Bengali from Calcutta, and that Bengali from Calcutta knows Mr. Bihani who also lives in south city garden complex. And then I'll say, oh, he does guess what. I know Mr. Bihani as well because he lives in my complex. The connections are made and it's been made in just two degrees or three degrees. So similarly the idea is that anyone in the world can be connected by six degrees.

So I would know the Prime Minister Narendra Modi across six degrees. I do not know him directly, but I know Professor Saibal Chattopadhyay know the Honorable Education Minister. The Honourable Education Minister of course knows the Prime Minister. Bingo connection made. So that's the idea of social networks and the Ramsey theorem therefore says that at any party where there are at least six people there would be three people who either know each other or completely are unaware of each other, again using this idea of the six degrees. It's important to realize that while I may know lots and lots and lots of people usually we maintain about 10 to 20 close relationships at a time, okay. So although there are thousands of acquaintances 10 to 20 is the close relationships I can maintain.

And the important thing is the more people I know the more important my network begins. More and more today it's impossible for me to know everything about everything in the world, but if I know different experts in different areas that becomes much much more important and therefore the value of a network will increase  $n^2$  square when number of participants increase. Theoretically that's the case. In practice while it's not  $n^2$ , it's still a very

very high number, the minute you add one more node to your network your network becomes stronger.