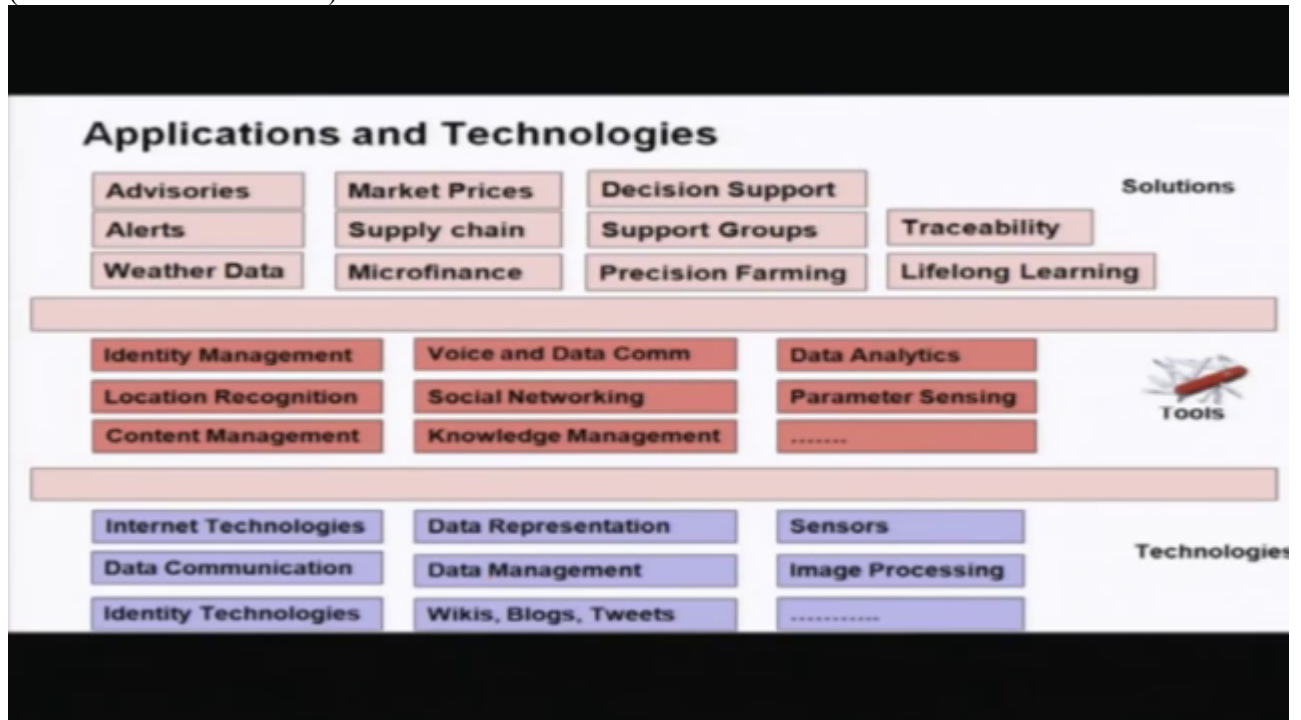Namaskar and welcome to this first course on the agMOOC series. This course is about basics of information and communication technology. My name is Prabhakar. I am with IIT Kanpur.

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If you look at any ICT application we can see that there are three levels of abstraction. At the top level of course is the application itself which the user interacts with. And this application is actually built using some tools which are constructed out of some technologies. So if you look at the market prices application it's probably built using the identity management tool. We need to figure out who has called. We need to figure out where the person has called from. And we need to figure out how the data is to be delivered and where the data is stored. So there may be voice and communication technology tools used and then there maybe content management technologies tools used, so one application at the top layer is basically handled, served through multiple tools at the second layer.

Now, in order to do identity management I may use several technologies. I am calling them identity technologies and data communication technologies. For example location recognition probably happens using data comm technologies, internet technologies and identity technologies. Similarly content management happens using data representation issues and data management issues. So a solution is built out of multiple tools and the tool is handled through multiple technologies. So in this course we are going to talk about this layer and a little bit of this layer. So I call this the ICT basics. So once we know the basics we can actually in the subsequent courses explore the higher-level layers in greater detail.
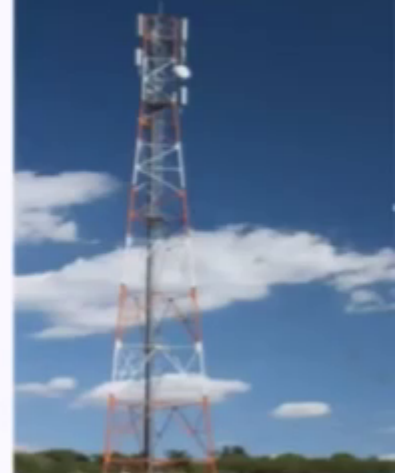
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So what are we doing in this course? We will talk about internet technologies basically what are websites and web applications, what happens on the server side and on the client side, how they talk to each other, what is cloud. Everybody is talking of cloud these days, we should know so what this cloud is all about.

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We will do communication technologies; 2G, 3G and GSM and CDMA and how does data move over the phone and so on.
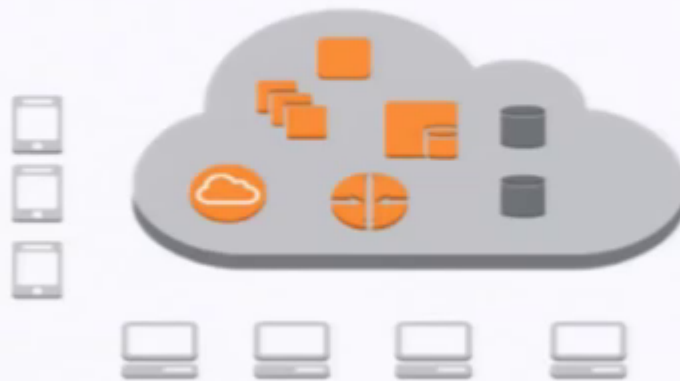
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Then there is a set of lectures on identity management and location, you know how do I know who is calling and where the person is calling from.
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And talk about cloud computing.
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Access Devices

Desktop, Laptop, Tablet, Smartphone

And access devices. You can access the service through a mobile phone or a tablet or a laptop or a desktop and each one has its own advantages and restrictions that come. We will talk about those issues.
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Data Storage

- DBMS
- Content Management
- Knowledge Representation and Storage

We'll talk about data storage. We'll talk about how is data represented inside the computer and how it is accessed to, give you an example, let's say you're talking about a particular pest damages a particular crop and is controlled by some chemical. So how do I store this complex relationship inside the machine, that's the topic of this discussion.
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Collaboration Technologies
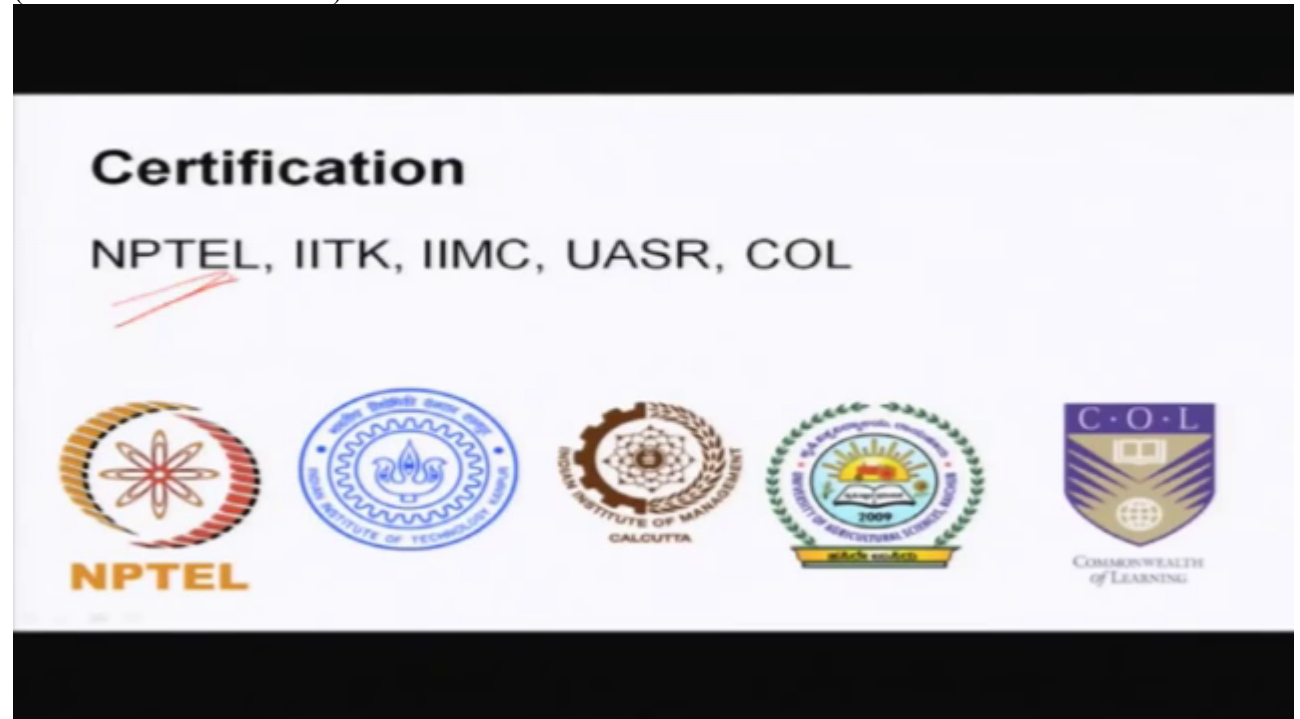
- Social Technologies
- Wikis
- Blogs

We'll talk about collaboration technologies. How do people work together and try to solve a problem, technology is an enabler. Finally we solve problems with the help of other people. So these are called social technologies. We will talk about these issues. So who should attend this course? This is a basic course in ICT. So it's -- anybody who is interested in knowing what happens behind the scenes when I make a phone call or when I access the website or when I actually get a service based on ICT should attend this course.

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Who should attend?

Students of Agriculture Universities
Faculty of SAU
Agriculture Scientists in ARS
NGOs in agriculture
..
To understand technology

So for example, students of agricultural universities I think is a must, they should all know what happens here. Faculty of the universities, scientists in the agriculture research system, NGOs and anybody who wants to know what ICT is all about.

So this is a course run by NPTEL. So the certification process is driven by NPTEL lumps more of this is on the website IIT Kanpur. IIM Calcutta, UAS Raichur and COL are also participating in this course. So see you at agMOOCs.in.