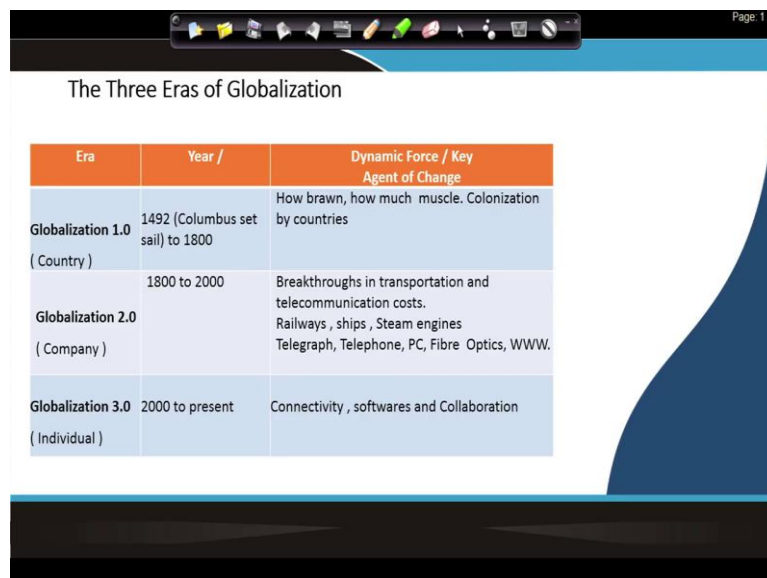**Management Information System**
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Week – 12
Managing Global Organizations and Global Projects
Lecture – 60
Globalization of Corporates in a Flat World

Hello everybody! In the last section, in this chapter of "Managing Global Organizations and Global Projects", so we will talk about 'Globalization of Corporates in a Flat World'. So, it started with this flat world, there is a famous book: 'The World is Flat' by Thomas Friedman and that was a case study of Infosys.

And this entire off shoring outsourcing of IT business, which happened in a big way in India, so that was the study of that as a case study and it came up with this very interesting book. I think which all of you should read, and that will give you lot of you know information about this area altogether this about the entire off shoring outsourcing, and how everything is the, we saying the world is becoming flat.

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The Three Eras of Globalization

Era	Year /	Dynamic Force / Key Agent of Change
Globalization 1.0 (Country)	1492 (Columbus set sail) to 1800	How brawn, how much muscle. Colonization by countries
Globalization 2.0 (Company)	1800 to 2000	Breakthroughs in transportation and telecommunication costs. Railways , ships , Steam engines Telegraph, Telephone, PC, Fibre Optics, WWW.
Globalization 3.0 (Individual)	2000 to present	Connectivity , softwares and Collaboration

So, three eras of globalization, this is a history globalization 1.0 is 1492 Columbus set sail to US. And that from 1492 to 1800 that is all the colonizations were taking place. How brawn, how much muscle, Colonization by countries you know the whole history, the Spanish

conquest of Americas, the Indians, Red Indians etcetera, then our of course, our India itself our country itself all the British, the Dutch, the Portuguese, the Spaniards I mean the Africa, Asia, so that was globalization of a kind, this is globalization 1.0.

Then globalization 2.0 – it is 1800 to 2000 where company level, breakthroughs in transportation and telecommunication costs, railway, ships, steam engines, telegraphs, telephone, PC – computer, fiber optics, internet. Since it is up to 2000, it ticks a big range from 1800 to 2000, so that is where now organizations are spreading out. So, we are having multinational companies; that is a sort of globalization that I am having my presence in so many countries.

Then globalization 3.0 is at the individual level which is from 2000 and beyond to the present; its connectivity allowed connectivity software and collaboration. So, why MIS is getting into it here is because of connectivity, software and collaboration. The whole subject is our information technology related.

In the previous, in the company level also, we are talking about PC, fiber optics, world WWW – World Wide Web, etcetera. So, you can see how information technology, information system is an essential ingredient of globalization. Without this, globalization would not have been possible, you could have it have made it flat flatness, so that is the significance of IT and IS and why we are talking about this flattening the world. We need to understand this.

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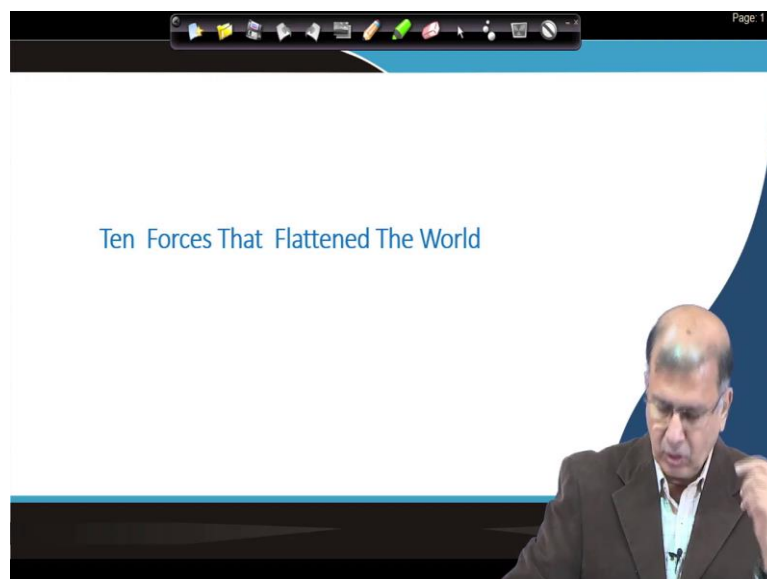
So, ten forces he says this is all as per from this book this a, this chapter whole section is referring to that book heavily Friedman's book. So, according to him, there are ten forces that flattened the world.

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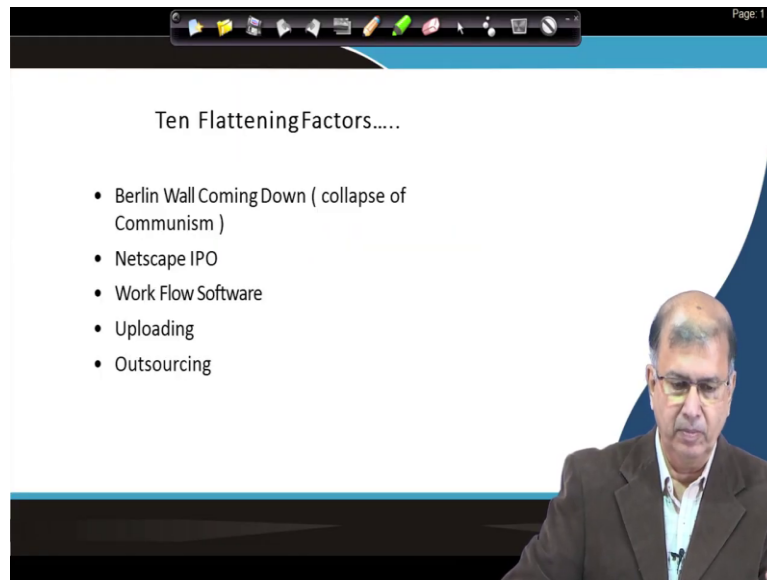
So, ten flattening factors are number 1 Berlin Wall Coming Down 1989 – collapse of communism. So, East Germany West Germany unified, and then the whole Eastern Bloc collapse, the whole Russian, the Soviet Union etcetera, etcetera.

And it you know that is happened and helped since companies come together with the capitalist system. So, we have economic change, etc. It was the Iron Curtain, we say countries basically there were nothing were visible they were not transparent, we were not aware what was happening there, but now things opened up. So, that was one major flattening factor.

Netscape IPO, Netscape the famous browser, so that is how you know the browser the first browser we came up with, so that also opened up a world for us, because now we could browse through our computer and get lot of information.

Work Flow Software, again similarly this Work Flow software's also helped collaboration, because then we could interchange exchange ideas with one another, so flattening. Uploading because now you could upload things we could access things uploaded by somebody, we could upload the information exchange share, etc.; because now we have the cloud, we have the whole internet domain.

Outsourcing; very obvious that is how it started expanding; we do some core functions; rest, I outsourced to another function. And then when we outsource to a party, it can be here, there, anywhere else in the world, etc. So, I am spreading out across the geography.

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Offshoring, so from Americas now my operation shifted to India, Philippines, China, Vietnam wherever things are happening there from my job, they are doing my job, but I am my organization is in US or UK.

Supply-chaining, the whole apparel industry for example, the entire supply chain it is happening from say the Southeast Asian countries. This the entire Levi's material for the denim jeans the denim cloth comes from Arvind Mills supplied mostly by Arvind Mills of India. There could be many other supplies, but they are the major one of the major ones.

Bangladesh is supplying the entire readymade garments to so many organizations, so many famous brands in Europe and US. So, they have mega factories. We have it in India too, but they are in a big larger scale. Similarly, Indonesia, Malaysia, everybody is doing, Philippines, so that is supply chaining. So, people are sourcing material from those countries.
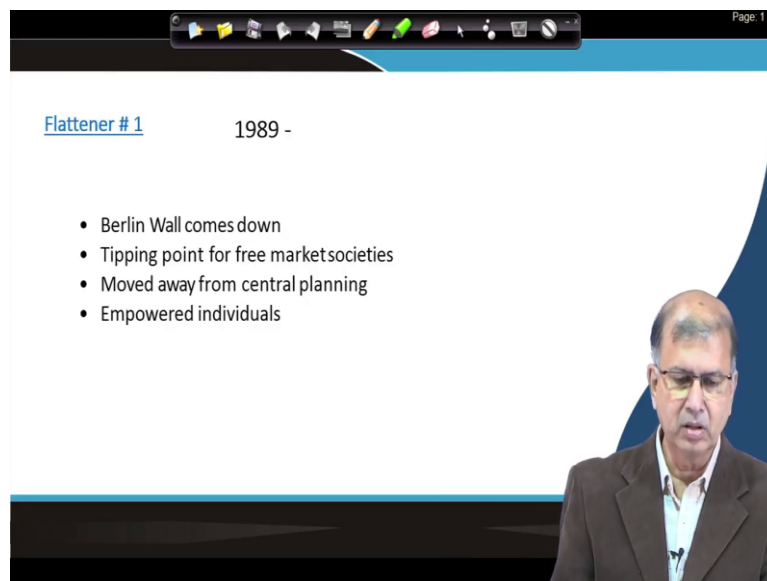
The shoes – the Nikes inside the world, they are sourcing their materials from these various countries, and then getting it assembled wherever maybe in China or all those or maybe in those countries itself, and then sending it to customers across the world. See you are buying that shoe from New York, but it was probably you know made in Cambodia.

In sourcing is the other one. Sometimes nowadays it is also is happening you are taking it back from outsourcing, you are given in sourcing. It is a reverse operation, it is also happening in a many places we will discuss it later. In-forming that is information, information sharing of course, that is a very basis of this flattening thing.

So, unless you share information you cannot flatten, you cannot work. And then there is something called the steroids, the boosters what enabled this flattening or accelerated this flattening. We will discuss it later. So, some of these examples the World Wide Web symbol, and then the COVID-19 now, it is everywhere.

COVID-19 we are talking about the response, how this is been its completely global. So, everybody in the world, we are talking about the same thing everywhere, each country for Africa, Asia, Europe, America, everybody is talking the same language, use mask, its social distancing, blah, blah. So, everywhere we are using the same language that is flattening. The information is flowing seamlessly across instantaneously.
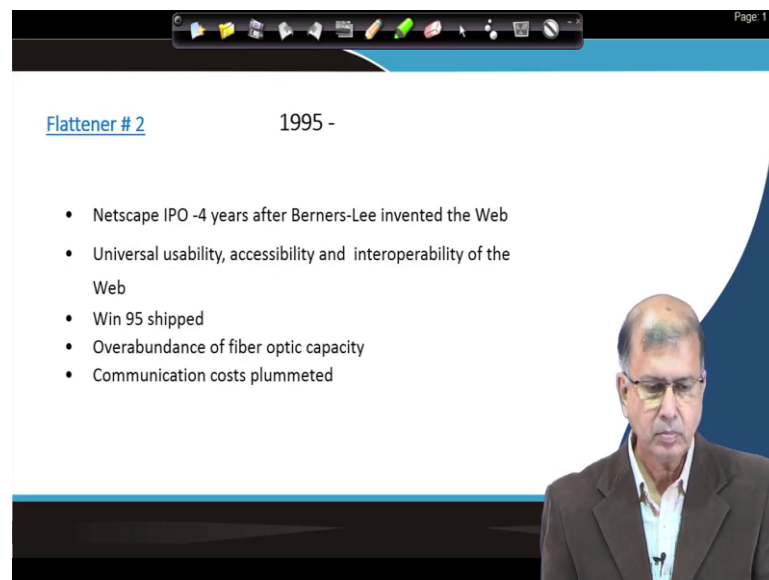
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So, flattener 1 the first one we will quickly run through all these ten items flattening factors 1989 as I said, Berlin Wall comes down. Tipping point for free market societies, so that was the difference between the communist economy and the capitalist economy.

Capitalist economy; we call as a free market, free trade agreements, etc. So, there was a tipping point where free market became the thing for everybody, communism was almost practically not there – dead.

Moved away from central planning, because communism again these are you know the central planning economies like China for example, today it is a communist country and everything is planned at the party level, central party level. And the government is only it is a single party government. So, you cannot have difference. So, the communist party dictates everything. So, whatever is planned there, centrally is being executed throughout the country all policies everything.

Empowered individuals, so now, you are empowering individuals, it is not central planning. So, now, people you can empowering people. So, people can run their own businesses in these countries. Previously seen East Germany, it is all public sector government owned. But now you are once that is broken credits, also you can have independent peoples small company is coming up individually own.
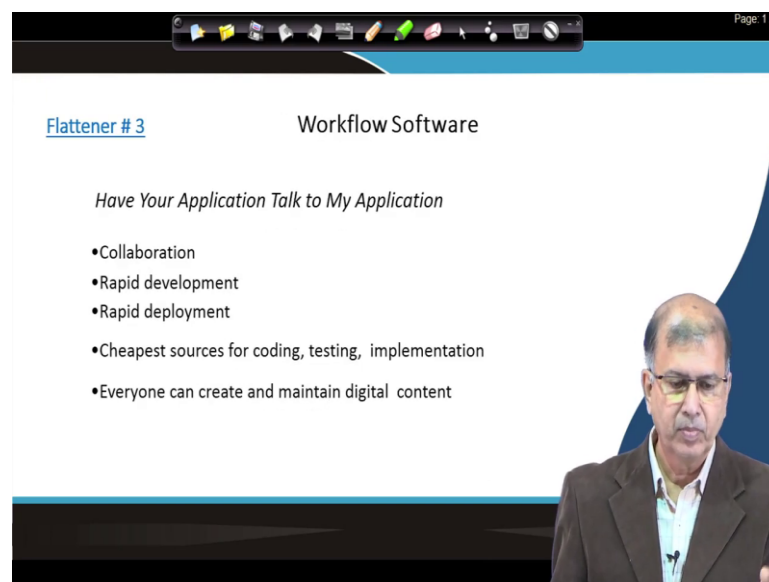
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1995 Netscape IPO 4 years after Berners-Lee Tim Berners-Lee invented the Web: 'www'. And now the Netscape thing came up in a big way. So, people started browsing and accessing information in other available into computers it came it become available to everyone. If you have your Netscape browser, you can start accessing. Prior to that it was limited to the users in a different group by group wise, but now it becomes public.

Universal usability, accessibility and interoperability of the Web, so now, it is all commonality. Web based systems you can access. So, you do not need to have some very specific software to access. So, the browser became software independent, technology independent. See your document or information can be in any format, PDF Acrobat, Word - MS Word, whatever Excel, if you have a browser you can access these documents technology agnostic.

Win 95 shift; it is Windows 95 – the graphic user interface; very famous; Guvi. So, that is also it was gradually changing the way you we use PCs a personal computer systems. Overabundance of fiber optic capacity, so say the fiber optic capacity became very high. So, again network and internet and communication becomes becoming faster and easier, so bandwidths are increasing.

Communication costs are coming down, so all communication cost, the internet cost, the bandwidth costs are coming down. So, obviously, when this cost come down, it encourages technology. Here the rapid or more use of more and more use of technology by more people.

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Flattener 3, the workflow software. Have your applications talk to my application. How the applications talk to each other? Collaboration, rapid deployment, rapid development, cheapest sources for coding, test, implementation, everyone can create and maintain digital contents. Since I can interact with other people, I can share, I can collaborate, I can get so many advantages. Everyone can create and maintain digital content.

Cheapest source; I can find out who can, who is the best person to do the development for me and I can contact that person; he can do it for me – coding, testing, implementation. So, I can get softwares developed at countries like Poland, Romania, etc.; very good programmers, etc.; and they do not charge much. So, and things can be done more rapidly because now I can spread out with the help of the internet.
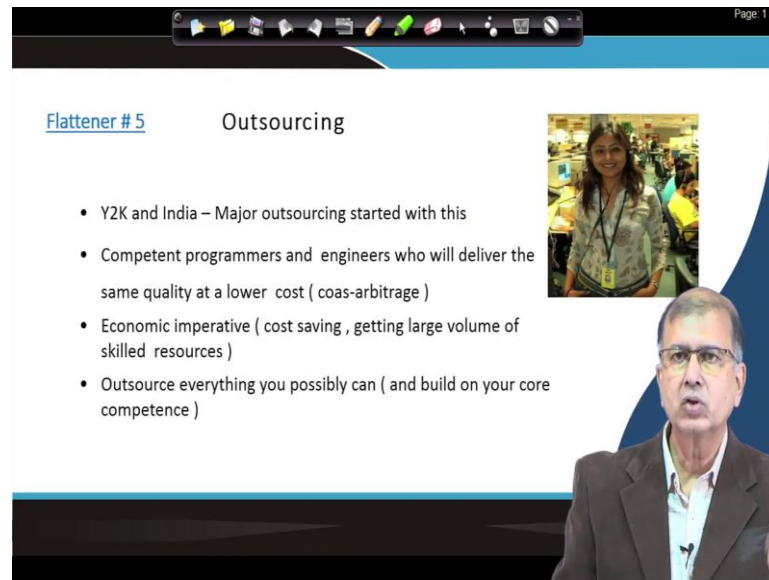
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Uploading open source movement that is where something which started open source movement. Self-organizing collaborative communities; like the Linux Operating System or the Firefox browser or the Wikipedia for example. So, you can search for any information, it is a free encyclopedia and it is been continuously developed. It is a crowd sourced, or crowd developed information system.

So, anybody can you know join and contribute something, or you can edit or you can add information to Wikipedia that is how it was built up. So, it was not built up by created by 1, 2, 3, 4, 5, 10 people; it was built up by thousands and thousands of people. So, everybody contribute it. So, that is how it grew so fast, so big, so fast.

So, nowadays you do not talk about Encyclopedia Britannica nobody will go there. See you go to your computer Wikipedia search keyword some word and you get your information whatever you want to know. Blogs, for example, so you can whatever exchange ideas discussions, you can write anything, publish in blogs, somebody can give comments, feedback and a discussion thread or forum can be started on a block platform.

So that is why where you are using all these open source movement by and you are using the internet for uploading your, whatever thoughts or ideas are. And it is not controlled by corporations; there is no control; it is yours, on your own.

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Outsourcing, yes of course, we are very familiar with that Y2K, it started with Y2K in 1999, 98, 99. An Indian major outsourcing started with this. The when that major change happened, probably you may not remember Y2K when the we switched over from 1999 to your the new century 2000.

There was because the previous thing it was all and the date for field was had to be changed; because the year was two digits; so, 99 so 98, 99 not 1999. So, if it is 98 and 99, and then suddenly the after 99, we will have 00. So, how will be the computers resistance react? Nobody knew, nobody could guess also. So, from 99, when it changes out to 00, it will not understand actually, had it been 1999, and then we changed to 2000, then you know it is that following year.

But when 99 become 00, the computer will not understand. So, all those date fields had to be changed for every program. So, from two characters it was made into four character, so that was known as Y2K, Y2 stands for year 2000, Y2, the year 2000 so.

And it was a huge work, needed plenty of people and almost of that people were supplied from India. So, plenty of people who have this software developers etcetera got recruited, hired, sent abroad, sent to the client space, and they did on these change day after day.

But all these had to be completed before there is a target date 31st December, 999; 1999 because after that 2000 is started. So, all programs will start giving errors whichever has the date fields of 99, two characters.

So, competent programmers and engineers who will deliver same quality at a lower cost, cost arbitrage, this is about outsourcing. So, if you have high qualified good quality programmers and engineers who can deliver develop software at a lower cost because salaries in India lower compared to salaries in Europe and US.

So, economic imperative, cost saving getting large volume of skilled resource, so that is the economy requirement. So, you save cost, and you get large volume of skilled resource if you need more people.

So, we have lot of people. And we have lot of skilled people trained people, not just people we have lot of people. We know we are the second highest populated country in the world with 1.3 billion population. But you we also produce a large number of almost produce almost 1 million or 10 lakh engineers every year.

So, this is a large volume of skilled manpower which others are now using utilizing as out sourced resource to save their costs. Outsources everything you possibly you can and build on your core. So, the idea was developing gradually try to outsource all your non-core activity, so that you focus really on your core activities.

Let us say for example, Apple, core activity is designing iPhone, not manufacturing, they are not interested, they do not want to do manufacture. They just want to focus on designing, because they know our product is value is all from the design what we put all the innovation goes into the design. Let the manufacturers take care of the manufacturing.

They are smarter people, they will learn, manage their machines better than us. They have the knowledge how to manage the efficiencies. So, they can produce things faster, better, maybe at cheaper. So, why do we need to do that? So, I outsource the manufacturing entirely.

Offshoring, just an extension outsourcing. See instead of just outsourcing, I mean to say third party I am send it out to another country that is where all the cost and all these advantage will come. Send the whole factory to India or China or Indonesian or Malaysia. So, entire manufacturing virtually disappeared from US, all the steel plants closed down, most of the automobile factories closed down.

They tried to close that all the polluting industry, send all the polluting industry to here India, China, but now they are in a problem of course, it does not now it this kicked back. If you stop manufacturing everything and everything comes from outside, then there is a it was a problem which is happening now. So, there is lot of trade deficit.

It not just manufacturing but also and not limited to, outsourcing was not only to manufacturing, but legal processing, medical transcription, consulting service, accounting back office. So, all of these domains also were subject for outsourcing. Legal processing is been done in a big way KPO knowledge it is LPO, it is called LPO, Legal Process Outsourcing. Another thing is we it is called instead of BPO we business process, now we KPO – the Knowledge Process Outsourcing. So, very anything can be outsource which can be done remotely.

Consulting service, medical transcriptions, so, the doctors when they write something by hand it cannot be read it has to be in a computerized. So, here somebody is sitting and you know they get audio or CDs etcetera listen to it, type it in computer put it in the typed format,

and then it goes into the digital database. So, finally, everything has to go into digital format, so that you know it can be shared that is the whole idea of this medical transcription.

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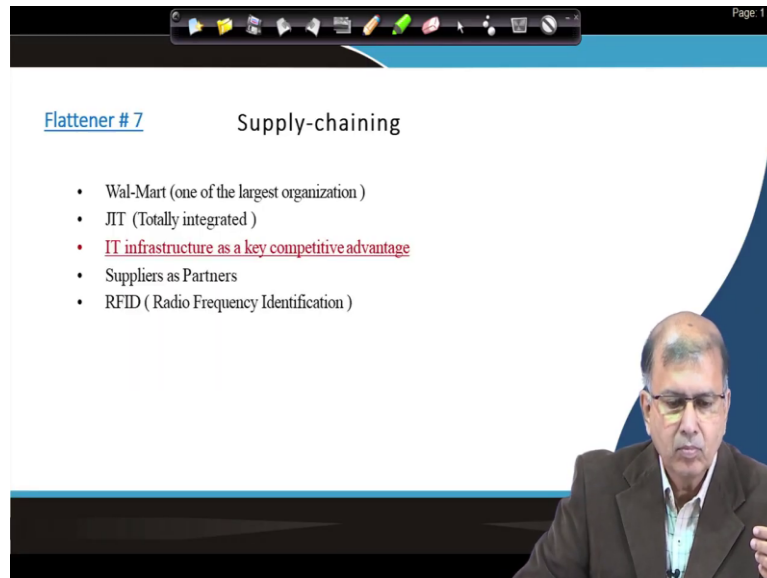
Supply chain; Wal-Mart, one of the largest organization. Just in time totally integrated. IT infrastructure is a key competitive advantage. Suppliers as Partners. So, I discussed in the previous chapter about supply chain management, the supply relationship management. So, these are the two things supply chain management and supplier relationship management is what is being referred to here as supply planning.

RFID, Radio Frequency Identification, these are the tools or technologies which are used in order to manage the whole thing much faster way. So, if you have a RFID tag, it can be you know just like you do I mean when you go to a supermarket, you buy something they do just you know there is a RFID scanner, scans and the entire cost etcetera everything comes into the machine and so things can be done very fast.

So, the same thing can be applied in the business environment that was a consumer environment this was a business environment. Where RFIDs can be used to track your inventory, how it is moving.

So, when it moves and it gets distract, it is generating information. So, other sitting somewhere else remote will know where is my material, what is the status, when will it move

next, etcetera, etcetera, so all the information is getting because it is getting automatically tracked through RFID.

Like when we move pay toll in highway nowadays it is everything is RFID. The car there is a toll tax we pay its automatic, we do not pay cash nowadays it stopped. So, it is RFID. So, my number is captured, registration number and then my account is getting debited with that amount, toll tax. At the same time, it is also create capturing a data that this particular car passed at this point, at this particular date, this particular time, so that is also a data recorded.

Suppose, there is an incident of, you know dacoity, robbery, or a terrorist attack or whatever and that if that gets recorded through RFID or whatever means; so, we can now track that car, utilize a data for something else whatever basically toll gates are for collecting money for the toll tax. But that same data can be used for something else by the government agencies, by police, etc. to do some other purpose.
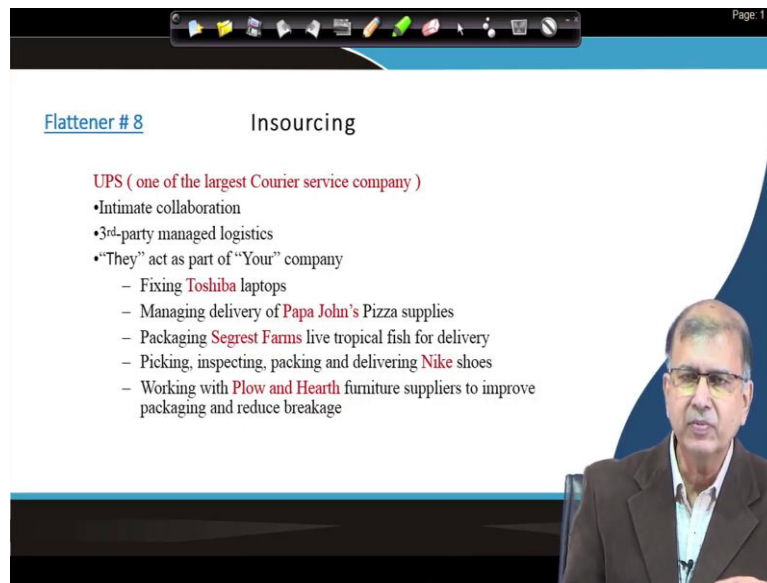
So, this is how all the whole thing is working supply chaining. And Wal-Mart when we refer to was they have got such a huge since it is one of the largest supermarkets in the world. And they have got thousands and thousands of vendors and suppliers, and thousands and thousands of types of materials have been supplied every day to various Wal-Mart stores.

So, all that thing has to be coordinated, supplied and monitored, and managed through information system and that again is verily heavily technology department. It is not a human being see ok, so much material came etcetera, etcetera, something is recorded, no, it is automatically being recorded; through RFIDs and such devices.

And then it is getting into your this information is getting a system, and then there is a central planning which takes a look and finds out ok, this was whether each store how it is stacked up, what is the quantity, what is the pipeline, whether it will get running shorter material or there is too much of material, does not have store space, cannot keep it, etc.

So, all that has to be optimized and that entire thing is done through information system, various information system, various technologies, or ERP is one of them and other some supply chain management tools.

Insourcing. UPS one of the largest courier service company has an intimate collaboration relationship as and a third party management logistics, they sometimes act as a part of your company. An example is flexing fixing a Toshiba laptop.

Toshiba that an understanding with UPS because UPS is supplying you know things to their local customers everywhere you know, but Toshiba does not do that, I mean this is service part. So, what it does is an agreement that if there is a complaint about my laptop at a particular officer place, UPS will go and service that because they are any case going to various places after distributing the material.

So, as an extension part, they will do this service. So, this is not a something called insourcing. So, you are not really outsourcing your supply business to UPS; from a Toshiba perspective, it is more of UPS in sourcing some activities from the other part. So, they are spreading out diversifying their business, it is not just parcel delivery, but when I am delivering a parcel I might I will do a service work and get some more money.

Swiggy; for example, Swiggy was all for delivering food. But in this Corona crisis etcetera, they are started delivering grocery as well. So, they just extending, that is called insourcing, fine, I mean grocery was not part of their idea any time when they started Swiggy, it was all for delivery of food, cooked food.
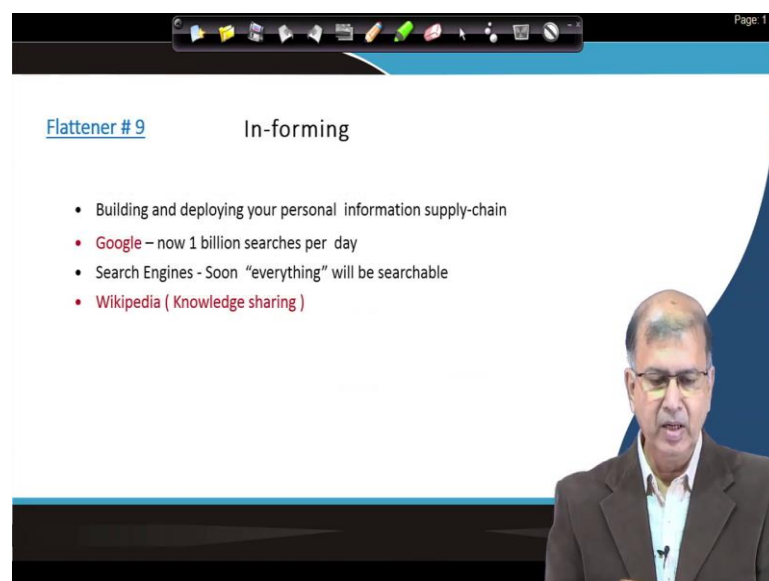
Because now they are now they are extending to other things also might as well start a courier service, whether the person is moving around on a bike from place to place might as well deliver material so I can they can local courier. Swiggy say I will come and pick up your letter and deliver it some place maybe I will charge you whatever.

So that will become some kind of in sourcing when any organization can contact Swiggy say can you deliver or parcels for us. You are delivering food, your people are traveling all other place. So, why not pick up my parcel and deliver it as well, so food plus parcel or whatever. So, then it becomes a case of insourcing.

So, here UPS does so many things managing delivery of Papa John's Pizza supplies, so from packet to letters to its pizza. Packaging Segrest Farms live tropical fish for delivery; picking, inspecting, packing and delivery Nokia shoes, Nike shoes. So, they pick, inspect, pack and deliver Nike shoes. Working with Plow and Hearth furniture suppliers to improve packaging and reduce breakage etcetera.

So, the various type of value added services they are extending these but ultimately through basically UPS was always you know courier company for delivering; the letters and packets or parcels, but they are extending into various types of activities to increase their revenue of course, and that is it is a change in their business model.

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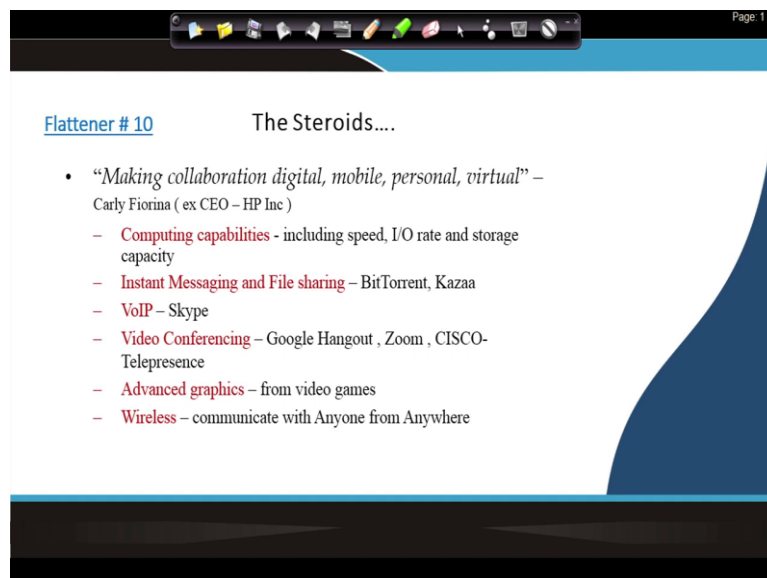
In-forming. Building and deploying your personal information supply-chain, so, it is very important information. Google, it is just the example now 1 billion searches per day. Search engines will soon everything will be searchable. Wikipedia, I was talking about knowledge sharing.

So, now, anything you want you can type something and you will get some information. So, Google is, so we anything we say we want to ask something check with Google why do not you Google it? So, Google has become a verb; it is not only a noun, but it is also used to be the verb, so Google it means, do it, Google it – search for it, it will tell. You find out even in our classes we tell our students Google it, you will get the answer.

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The steroids; that is the last flattener. Making collaboration digital, mobile, personal, virtual, how it helped flattening the world, what things helped; making collaboration digital, mobile, personal, virtual, this statement is made by Carly Fiorina who was HP's Hewlett Packard CEO about 5 years back. She after that, she left, retired. But she was a very famous from as a woman CEO. She was one of those time rated as one of the most powerful women CEOs in the world.

And so lot of things, and she even she wanted to stand for the US president ship in some those days, but anyway. This is what very important sentence statements she made that making collaboration digital. So, when we made collaboration into digital, mobile, personal, virtual, then it really the world became flat.

Computing capabilities, including speed, input output rate, and storage capacity. So, these are the steroids, because computing capability is became more powerful and cheaper and faster and things like that, so we could flatten out the world. So, these are the enablers the flattener number 10 steroids. Instant messaging and file sharing – BitTorrent, Kazaa or whatever.

So, these helped communication you know we could share anything across the world very fast, so that is how the flattening got encouraged because we can share anything from anywhere to anywhere. So, there is nowhere a restriction geographical restriction, so that is the geographic bar has completely collapsed. So, I can send a file from here to my friend in US in just few seconds and at practically free.

Then, VoIP same thing Skype and nowadays, all these Zooms and Google Meet and all that these thing, which has come up extensively. So, we can talk to people do video calling just like that. If I just have internet that is all, I do not have to pay for anything else. I can immediately get into a video call in a team, with individually, in a group, do business, do personal chat or whatever anything, but here since we talking about on business things let us talk about into business.

So, any business discussion or meeting can be also now held easily free of cost, and instantly, and it is very good quality. And the performance will actually depend on your network quality bandwidth. So, if you have got adequate bandwidth just no problem, you can do many things on these. And we are been using it here day in and day out, last few months.

So, video conferencing – Google Hangout, Zoom, CISCO-Telepresence etcetera, so some examples of video conferencing tools. Advanced graphics, from video games. Wireless – communicate with anyone from anywhere. So, these are the steroid elements, some of the steroid elements which actually boosted development of the flat world.

So, some pictorial examples on the steroids. Here you have the satellite network. Again that connectivity we talking about WWW – World Wide Web. Telepresence the video conference first made popular by CISCO.

Telepresence of high quality video conferencing where you literally feel as if the you are together in the same place that is why they gave the name telepresence. So, we are all present together, but you know not physically, but virtual, but that it is to give that feel.
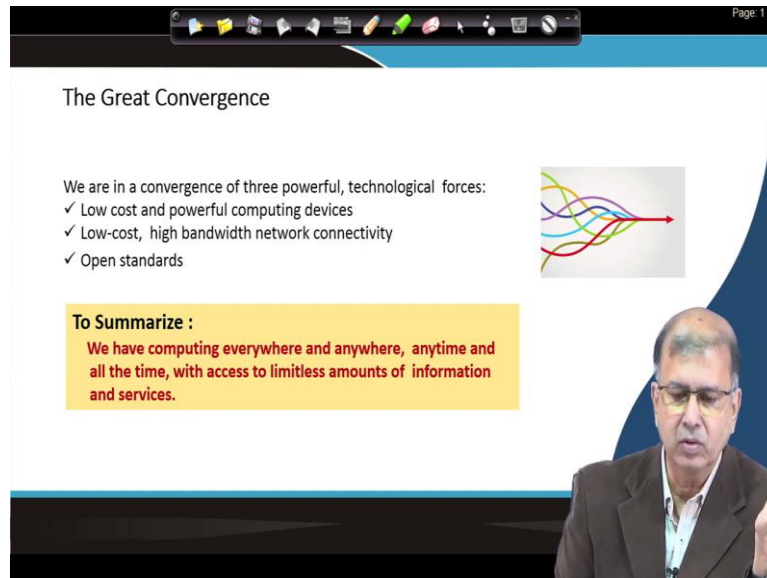
Then your mobile phone the great mobile phone which we have referred to several times which is the iPhone really started the transformation of a from a phone handled phone to a handled device which can do several things including accessing the internet.

So, the wide area network that is the connectivity, simple connectivity. So, you have your LANs and the WANs. So, in the country level LAN and the across country of wide area network, so, it can be in a dedicated secured network environment for your own organization for example.

So, when we talk about security, so you can have your own. So, it is not public network. So, public is cannot access your network. It is all dedicated for your registered employees, for example, or whomsoever you permit, your employees may be your some suppliers or vendors. So, you can have that only question of cost. If you want to have very secured

dedicated network, obviously you have to pay more. And if you are using the public network, it is almost free. Skype, we know video calling.

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The great convergence; we are in a convergence of three powerful technological forces. Low cost and powerful computing device; low-cost, high bandwidth network connectivity; open standards very obvious things we have been discussing. So, it is a high powerful computing device at a low-cost, high bandwidth and network connectivity at a low cost that is become very cheap, and open standards.

So, I do not have to buy anything. So, these are all free, many software's, many technologies, many apps, all the apps we get most of them are free. So, we can use it; you do not have to pay for it. So, this has helped in this convergence. The basic three major powerful technological forces, which has helped into this convergence and made the world, a one world, one flat world.

So, let us summarize we are computing everywhere and anywhere, anytime and all the time with access to limitless amount of information and services. So, we are commuting computing everywhere and anywhere, anytime and all the time, with access to limitless amount of information and service. And if you go to the internet it is just ocean, you get lost so much of information. But it is there, so you can selectively use to your advantage.

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So, the emerging region like a BRIC countries for example, like we say BRIC is let us say Brazil, Russia, India, China again part of the flattening. So, they are relate, clubbed together. So, where is, Brazil at one corner, Russia is in another corner, in between your China and India.

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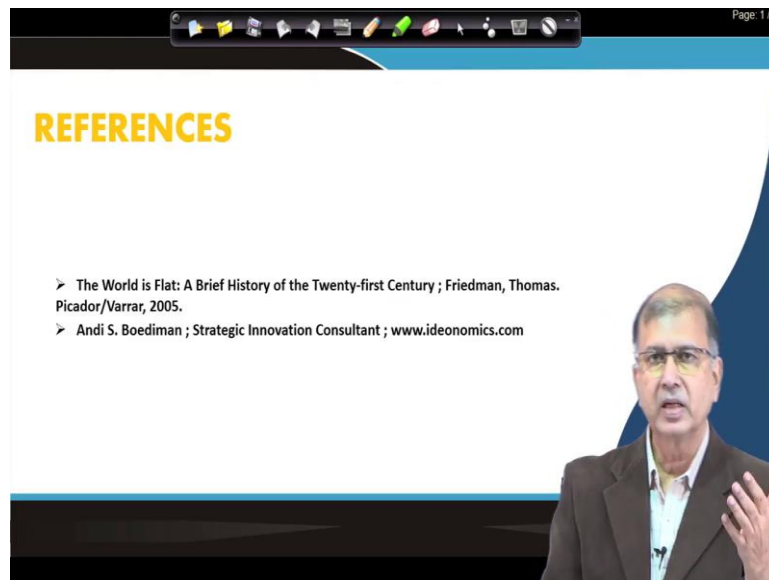
But just an example we say talk about BRIC countries. So, they have the similar very similar economic situation status. And they are all expected to come up and be at the level of the

developed countries the G7 group etcetera like US, France, UK, Germany, Spain, Italy, Japan and all of these four also will come up, I mean China is already there I mean it is very fast.

India is also following very closely; China just behind, and then Russia and Brazil are slightly behind. But few years down the line, all those equations probably change and this is all because of this flattening. So, everything is happening because you can do business from anyplace, anytime, anywhere.

Thank you very much!