Session 1 by Subhash Dhar

Subhash

_____ tele basically means voice and it is not about voice any more. We all know that. So it is really we call it communications industry because it is about voice, video and data. So I have just taken three big forces which are transforming this industry and if you really want to see an industry in transformation, I think there are very few examples which are better than this industry. What happened in the late 90s was abundance of poor network fiber, which used to be created by all the voice majors. They just put of lot of dark fiber, under the ground across the seas, satellite bandwidth, all of that, so the core network, which was basically the backbone of the worlds communication network. Thanks to the internet, there was the core capacity built up at that time, you must have heard about this and that's why we had a downturn in 2001 in this industry, which in a way, the industry is still trying to recover from. Second again this is well known, but I just wanted to give a slight highlight on what this internet protocol is, but basically what the internet revolution, the web revolution gave also was that there was a new way of transporting the same voice that we were using for 100 years before. Essentially what it does, that instead of creating a dedicated line between 2 people when the talk, it actually sends packets of information of data which is voice packets between these two people in a very fast way. So essentially you are not creating any dedicated line between two people, which basically means that line is available for other two people to talk. So that can be multiple conversation which happen on that one line and not only conversations you could be passing data files, transactions, and videos packets. That is that big, big revolution technology revolution that internet gave to this industry. That is how you can use the same network for multimedia communication and multi-model communication, but that also in a way, since the internet was free and still continuous to be free at least for now, it has a downward pressure on the cost of communication between, if you use the internet. So that is the one theme which goes across which you really see _____. The third thing that I want to talk about is the deregulation, now this of course is the more related to the governments of the land and it has had a different impact in different parts of the world, for e.g. US started deregulating first, Europe started later, there are some other countries who are actually doing a very different de- regulation, as they are controlling more, but making it more democratic like Korea, but essentially since this is an infrastructure industry, regulation plays a very important role and we know that in India as well, of how it is not yet completely 100% legal to have data and voice coexist on the same network. So deregulation in industries has basically resulted in opening of the industry of the network for along the other competitors and that has also had a downward pressure on prices. S if you feel the theme that goes through this is a downward pressure on prices and that why you see that industry worldwide is said to be in trouble and this is what I am talking about and what is the effect of the price drop and while it has spelt a lot of problems for the incumbents in terms of revenue, it has had some very good impact of taking the communication to countries like India. You would not have this communication revolution that we are having in this country, that would not had happened, in those countries, because that is what really made the network and the availability of network and when I was growing up, I never thought that I would see a day when it will be cheaper to call from here to the US and the other way round because the tariffs, of cross country tariffs are really based on GATT agreement, which is Geneva convention and that basically says that the country which originates more call will get a bigger share of the revenue. Now this is a cycle. If you generate more calls you would get bigger share of the revenue so you can make it cheaper, so you generate more calls, so it gets cheap. So there is no way that you would not get any call coming out cheaper other than US. But internet change that, it just completely change that and those three things that I talk about really change the whole dynamic of the economics of making a call. So anyway there are some, except the first point out there, really, if you look at the other three points there have been more positive for the developing world and Infosys is the child of this revolution.

So what are the majors doing, what are the communication majors incumbents doing. I mean they are not sitting and watching the revenue decline. Right now they are making most of the revenues and profits out of the wireless and broadband businesses. So the traditional voice play in old telephone system part is really declining quarter on quarter for the last 12 quarters if not longer and it will continue to decline but since wireless and broadband adoption is still not complete, you are still making a lot of money on that. The second area where some of them are making lot money and that requires a lot of transformation in their own business models is really, working with enterprise which is the businesses and largely managing their network needs. Third one, they are working on the

Capitol Hill**.** They are working of the equivalent of that in New Delhi. You really see all telecom operators worldwide have their headquarters in the capital, in and around the capital city in every country. The reason is because regulation plays a big role. They play lobbing, today there is a big debate in the US on net neutrality. Now this is a very, very major debate. What really these guys are arguing is, is the internet free and should it be free and it means a lot to a lot of countries which are developing because what they are really saying is, internet when it started was basically a bunch of computers connected with each other most of them were hosted by the universities and the department of defense or whatever but today every home which has a broadband connection and a perpetual IT address it is actually a node on the internet. Who has made that possible, the phone company is saying that I have made that possible or the cable company in some cases, but mostly phone company are saying that we have made that possible and we are not going to keep it free. So it is not free, we own the internet and we want to take a toll on that internet but that is the big debate because what they are saying is, for you to watch Google and for you to go on EBay. EBay and Google will have to pay a toll, now obviously we know where this argument is going but basically this is the kind of argument that phone companies have always thrived on and the same argument happens in this country but there is a lot of merit in that argument, because they do have to make those investments to get that internet to our homes. Who is going to pay for that, if it is not going to be toll kind of a system? So there a huge debate going on at this point and from what we are hearing that debate is finding a lot of supporters in the Capitol Hill. That is the big big difference of how the future will look like for communications as you know. The other thing which is happening, thanks to the price pressure coming, the price downer pressure on price, there is obviously mergers and acquisitions because when the industry revenue models are declining, you have to merge to that the prices get firm and essentially with all those, they are really buying time because ultimately they have to build an integrated multimedia IT base network and that will take sometime and lot of money. So all of this is really the interim what they are doing.

This is what they are planning long-term. They have to transform their network to internet protocol because that is the cheapest way of operating a network in the future. Instead of having five networks or five services they can have one, but to build that one ground-up is going to cost them billions, but they have to. They are just buying time because capital is not that easily available. No. 2, building integrated multimedia services which can brought on this network. So you cannot be using the normal voice or videos or broadband as we know today, on this very agile network that you are going to build underneath. Instead you will be able to do a lot of integrated multimedia work and that is the way you will takeaway the costumers from your competitors. No. 3, this is the big one. They have to find a new way of charging us. It cannot be on minutes, I mean with all the industrial revolution that you see in India and China and I was in the World Economic Forum recently in Tokyo and Korea was there. With all their revolution that we are seeing here, there is no revolution around pricing. Even today when you go for a premium, which is giving a cricket score or anything on your mobile phone, ultimately you are getting charged per minute, instead of Rs. 1 rupee you can get charged Rs. 6 per minute, but it is the rupees per minute. Nobody is charging you for the score for the value of the content that you are downloading. Some companies have proven that. Apple has been able to charge for song on their I-tunes. No telephone companies have been able to achieve that, no cable company has been able to achieve that. But that is the big barrier, it is not an easy problem to solve. The day they can charge for the value you extract from the network rather than the connectivity that you get on the network, that will be the day they will be able to completely change, their revenue futures, because that is the whole idea, because the connectivity is going down and down in terms of cost and therefore price, but the value of the network is becoming higher and higher because it is connecting people in many ways in multimedia ways and they have to be able to charge for that value they are delivering to us. So that is the other challenge which they are working on.

So how is Infosys involved in some of those initiatives and some of them are old initiatives and some of them are new initiatives. I have tried to club them into these five boxes and may be some of our projects do no fall in these boxes, but by and large this is where there are. No. 1 is in creation of new services. Now these are not integrated multimedia services mind you, this is still individual services which are not integrated, but they are the interim, this is voice over IP, voice over IP is not an integrated multimedia service, it is just the same voice that we knew, except going on an IP network and therefore it is a lower cost of running that all and therefore it is cheaper for the costumer and since the competitor is doing it everybody has to do it. VoIP and broadband, these are the areas where we are helping some of our costumers build those service, in some cases we are not building them but we are helping them roll out, the testing and roll out because that is the 80% problem is in the testing and roll out and 20% is really in the building so that is the part where we are helping them with. Second, the future integrated multimedia services and the couple of companies were really ahead of the curve and they are actually building integrated multimedia services, but they are still not at the point where they have those services being built, right now we are building business case for them. We are convincing the management how to get their capital expenditure, operation expenditures lined up for these kind of services. This is more consultative work that we are doing in this area. Legacy systems is probably 40% of our business where we are maintaining and retiring the old system to make room for the new networks and new systems. Same thing with the legacy processes. Some of them we are taking over and we running them by making them more efficient, some of them are getting mute or

redesign for the new services as they are getting built. And then the Enterprise managed network services, this is the part where our CSP costumers are going to the enterprise costumers and they want our help because we understand the enterprises much better than they do because that is only business we have right, enterprise businesses. There we are helping going jointly to the market, there are couple of cases that we are jointly going to the market with our costumers.

Case study, there are couple of case study. No. 1, I talked about the regulation, this is the case of a leading European player where the government has mandated that the local loop which is basically the network the last mile network that they at homes which is owned by this company needs to be made available for their competitors. Now for doing that, there are strict compliance course of what is the service level that all the comparators can expect from the incumbent and so that he contracted us as the third trusted third party to build a system so the regulator can get satisfied and the comparators can get satisfied that there is no hanky panky going on here by the incumbent and making that is available for them. He came up with the stimulated virtual customer model where all processes and systems are tested before they are released because once they are released and if they are not compliant with the service levels that the regulator has set up, then there are huge penalties to be paid. So this has been used a lot by our costumer in terms of ensuring before release that everything is right and once it is released the competitors who come in and use this system deal with us in terms of how they want their processes to be changed on their back end to make or take advantage of this access. In a way, it is truly a trusted third party kind of a play. This is another case of a cable company in the US where we are helping them build a business case for an integrated multimedia services that we are talking about. They have already launched their VoIP, there are obviously into video. They are giving internet access to their costumers. All that is happening, voice video data, but that is not the nirvana. The nirvana is really how you can do this all in one network and one service and the costumer can be able to use one device to access all of this system, this is really the holy grail and they have contracted us against some very tough competition from the incumbents like IBM and Accenture, to actually do a consultive study around building the business case for the top management, convincing their management. So we have done the first business case now we are doing workshops for their different departments to educate them on the and why they should go this way and these are all paid exercises and the end result is that we are the trusted advisor position for them because this definitely the way they have to go today or tomorrow and we are giving them a very phased approach of not making too much of capital expenditure of fund but to be able to be just ahead of competition. It has been very well received. We have sold the investment that we have to make, as we start getting into whole IP area. Subbu earlier about the Agile ITM that is really at the core of the lot of the work that we have to do and the value that we have to offer to our customers in the whole new service creation area because they want very fast time to market when it comes to new services because the competitive situation is getting just very serious. The second one is in the area of customer service and network operation and this is what Nandan referred to yesterday of what we are calling the flat world. This is the part where we are telling them that you could use the three stage approach of eliminate, automate and globalize your entire costumer service and network operations. The eliminate part is really eliminate all the inefficiencies and there are some very specific algorithms that we have where when you are launching a new IP base service, you can trap the faults much faster in the order of magnitude faster than what normal products help you do that. So you have to reengineer your processes, it is not easy, it is just not a piece of code which you can put it in and then everything becomes okay, but you have to also change your business process for that. So that is the elimination part, then you have to automate. You have to automate a lot of the stuff that you do around this scenario-based approach. And the third part is where you create the new customer service organizations which are more agile in learning because things will change every 6 months and if you think that you current customer service organization in not geared up for that, you will have to probably think of partnering with us in terms of creating global customer service centres and as we say that there are a couple of candidates where we have done that as well.

We are obviously investing a lot in training because our own people many of them are coming from the legacy telecom technology way, so they are getting trained regularly on all levels on IT technology and there are domain specific training for a lot of people who are very familiar with IT technology but they may not be familiar with the new IP based business processes and then we have an integrated consulting team today working with the solution team that we have in the business unit which is dedicated, the vertical expertise and Infosys Consulting which has got more horizontal and vertical flavors in the areas of like Customer Relationship Management or even areas like sales force automation and those kind of things. In fact the example which I told you about building a business case was done together with Infosys Consulting, our people and then system integration practice. So these are all cross-functional, cross unit projects that we are ending up getting into.

Some numbers here, telecoms as of this last quarter, this is now 17.7% of our overall revenues and this includes Communication Service Providers and the OEM business that we have in terms of R&D. The point I want to make here is that CSP which is the Communication Service Provider part of the business has definitely got the bigger share for overall telecom revenues. This is also faster growing, not to say that our OEM business is not growing, it

is growing but this one is growing faster because of this whole transformational thing that we saw and we actually anticipate that the OEM business will also gain when the cascading effect of this transformation starts getting into our customers like Cisco and Nortel because the layer which is closes to the consumers starts spending first and the layers underneath starts spending later. So I think right now we are just seeing that may be in a couple of years we can start seeing the uptake on the other side as well. This is the geographical breakup over the last 3 years. Obviously Europe is gaining over America which is the way we wanted to be. I think we will end up somewhere, this is probably a stable number, will not be changed much further from this because I think a lot of the work that we are doing today in Europe will start stabilizing a little bit, but you have to remember there is a reason for this also. This industry does not have too many players. Typically in traditional old world, there used to be one _____ country in terms of wireline and there are more wireless players. If you look at the US today the whole consolidation happening, there are just two majors players left and there are couple of small ones which is Verizon and AT&A and one of the reasons they are going to consolidate, it is also on the cost but there will be a huge substitution effect that we are going to count on ___. We are a small part of the overall IT standard at this point in time and I am sure that it is going come more and more in our way. So we are getting more and more work in the American market by substitution effect of substituting their vendor to Infosys. Where in Europe it is country by country. You can go and get one operator each and may over a period of time there will be some consolidation.

So finally market outlook, CSPs will continue to drive this spend in the industry. That is what we feel over the next few years at least and they are likely to grow faster in terms of our business than OEM. Second, to continue strong growth in the years to come because of the transformational need and the need to create the integrated multimedia services. Third we think the addressable market itself is going to expand. On one hand it is contracting because of the merges and acquisition, on the other hand it is expanding because the new players are coming into this business. In fact if you have seen the virtual network operator thing which is happening in UK and some parts of the Europe and now it is spreading into the US, where basically anybody can become a telecom operator. I mean Infosys can become a telecom operator tomorrow if you want to in the US but there has got to be good reason to do that and Nandan actually referred to that in his speech yesterday of electronification, the mammoth electronification. What is this doing is that all industries are finding that their customers are touching them not directly, they do not walk into our branch anymore but there are more coming on the wire. So either they are coming over a telephone like calling your call centres, or they are coming online or they are using mobile portals to talk to you. Essentially the interface that they have with the costumers is more and more the wire but that wire is managed by some operator and that operator is giving them only so many ways to interact with their costumers. So TESCO in this case to get example, why should I have this operator be in middle in me and my costumer, let him get out and I will be the operator for all my costumers which is very easy now. All you do is white label and that is where a lot of the operators are being pushed at the back saying, you take care of the wholesale part of, you take the backbone, but give me the front part of it and I will be with my costumer. So Tesco becomes an operator so you can buy a Tesco mobile phone as you check out of the Tesco check stand and you monthly bill is coming from Tesco or Virgin started this all thing, but now Tesco, Lloyd Bank, Disney, Wal Mart, they are talking about these kind of things and Tesco and Lloyd bank have already taken the plunge in the UK but in the US it is still been thought. Essentially all big guys are considering creating a telecom or a communication interface with the customers, basically making them a communication spirit. That means they will need billing software, they will need customer care software, they will need network management, they will need the kind of example I talked about that European operator where that he has to make the network available to them so that they can come in and use his network. So that market is getting expanded. Third way it is getting expanded as the media entertainment guys, again a good example is Viacom and Disney who really have the content, they can charge for it now and as the pricing models are moving more and more charging for content, these guys are staying hey wait a minute I am the guy who has the content so why do not I become an operator and so that is the cheap part now because internet protocol you can become an operator like this and it does not take too much of capital any more to become an operator. So why do not I become an operator and I sell my content on it. So I mean if tomorrow Apple wants to become an operator, it wont be surprising. So that is how the addressable market is going to expand. Those were the points really I wanted to make here. Thank you very much making and open for questions as we have time here.

Participant

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Subhash

Can you please use this microphone, ya, we are just recording.

Participant

Incase of this VNOs, actually worked with those people or to ___and what is the actual service which you provide to them.

Subhash

We are not focusing a lot on the VNOs at this point in time because we are servicing them otherwise the big guys. Actually we are building a strategy, many of these VNOs are second-tier enterprises, they are not Fortune 100 companies. So we need a whole different strategy to go after them because as a company, Infosys does not work with less than Fortune 1000 in a big way because of several other business model constraints, but actually the way to go after the second tier and third tier kind of company would really be creating a platform-based share services model and that is the part we are contemplating, But examples like Disney which are big companies. Right now they are really talking, they are not really building it out in US. In Europe yes, they are started to build out and I talked about that local loop on bundling example. That is how we are interfacing with them. But the way we want to go there is the solution-based approach rather than Time and Material services approach.

Mitali Ghosh

Within your space how do your services really breakdown between more of development kind work, maintenance and may be network management kind of services and where you have seen more growth. Also in your space keeping this in mind, how do margin sort of compare with overall Infosys kind of level.

Subhash

I will answer the last one first. I think the margins are very healthy in this space. We are in the grater than 30% margins and most of our projects are operating margins. In terms of the breakup of the development versus network kind of work, development, basically application development maintenance is the bigger portion at this point in time. I would argue about 70%. I do not have the number right now off hand but it will be somewhere in that region. A lot of the development work also happens on the network side. See the interesting thing is more and more stuff is becoming software, even the network is becoming software. Services are becoming software, in fact the switch, is soft switch now. I think if you add everything, more and more stuff will get soft and you will see more and more development happening even on the network side so and then that is just on the product side, when you will talk about management of that network, it is all software. So what we want to improve a lot more I think that is going to happen very soon it is really the process what is going to come in more and more because you have to remember the segment started using offshore only 4 or 5 years ago in a small way and only in the last two years in a major way. So they are not getting comfortable of working in this model and they are saying okay so it work for IT can we take ___, So this is really a phase-lag from the financially services business. So I think we are going to see more and more process work coming in every day.

Participant

Ya. You shared in presentation that the pricing power of your clients are vanishing. How do you see you pricing go up.

Subhash

Well actually it is interesting that when clients are in trouble we get into business and when they are doing well, we get into business again. So that has been very interesting for us, because when they are doing well we are doing well, when they are not doing well, they want to do more business with us. So there is an inverse proportionality. In fact the first reason why telecom started looking at offshore is because their pricing started creating trouble for them. Now after having tasted our services, they are saying, hey these guys are good. So why do not you come and build my multimedia services. So that is we have always grown that way in the most industries where companies come to us because they have cost pressures and then they work with us because they want to market faster. So I think you have been on the both side advantages position. When budgets go down for our customers we rarely see a budget causing a dip in direct proportionality spend on us.

Participant

Two practices actually the budget which are ___70% of your work relates to maintenance and application development which is quite a competitive business. So that would have some pricing pressure. The other part is that ___to pricing of the clients are reducing and they might forced into reduce the billing.

Subhash

Ok that is a good point. Ya if you are talking about competition that we face for our business from our competitors yes there is intense competition. But you have to remember that we are playing in tier one right now, not playing much lower than that. Tier one are big spenders and so they want scale players. So is basically brings down the competition to a small set of companies. Now among this set, the way we are differentiating our services, that we are trying to play more and more on the new services and less and less on others but a lot of the work that we are doing in maintenance it is really to retire an old system as quickly as possible so that they can replace the new system because they cannot maintain more, right. So when we take up a development work, we also take a downstream maintenance of the old system work. So we will kill that and we will put her in there. That is the strategy we are taking more and more. But yes when we are not doing that, we are facing the pricing pressure. Your ___impression.

Participant

Any change ____.

Subhash

They are of the same rates on an average that the company charges. We are not going any lower than that. I mean we have floor rates for the company so we don't ___. Any questions.

Participant

Out of the tier 1 CSP, how many according to you have a agile network offering into an multimedia and what is the scope of___.

Subhash

Oh, to really first or all it is a holygrill. So hopefully nobody will reach there because otherwise we are out of business but I think there are couple of customers who have gone ahead of others in terms of their embracing the IP network and it is probably because of that unique situation, for e.g. British telecom is a customer of us which I think has gone way ahead in terms of building multimedia services and IP. They completely changed their network underneath to IP and one of the reasons they had to start on this very aggressive program is because they did not have the growth, the interim plan. I had showed you the interim plan of wireless and broadband. They do not have a wireless property. So they could not find another way to stem their growth. They do have broadband, but then broadband has got some competition or it is a small foot print of the UK customer. It is not really the US market. The domestic market is not that big. So the only market that could go after in a big way was the enterprise market and that enterprise market does not even talk to you it you do not have IP underneath because the biggest need that the enterprise have his data and not voice. And data cannot be done without IP and once you have IP you might as well do voice on it. So I think in a way there were in a situation where they had no choice but to invest, they have done that, but they have really taken advantage of that but if you really look at what the other companies in the world what they have done is they have acquired companies, which have core IP network. So instead of building it, they just acquired it. But in terms of services it would say BT is one of the companies which has done a lot in the IP.

Participant

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Subhash

It is pretty high concentration as I said because there are only about 40 customers worldwide that I would like to have. I would say, out of those must haves, a quarter of them are already my customers. There are other 20 which we are not going to get because we are not in those countries. As we get into the country penetration will get in

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some of those. So really in terms of my addressable customers, I probably got 50% of them already. Ya about 50 to 51% in North America and Europe. So have to expand ourselves geographically a little bit more. That's the other challenge we have today. We have to get into new countries with language and business skills of those countries. The English speaking countries we have taken care of both US and UK. Germany we have penetrated in the last 6 to 8 months. France is the big one which is waiting out there and Italy. France, Italy and I think Spain in Europe.

Participant

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Subhash

I would say top four customers would be a little over 70% but the client concentration will always be higher in this. We are just going after Tier ones which is a very small set and we do not want it to be top 4. May be top 7 which should be 70% and it would not get any better than that.

Participant

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Subhash

That is the other reason why. They want to be more efficient as they merge but fortuitously we were with the acquires in all the cases because were only with the tier one leaders. So we have only seen gain. We have seen slow down in the middle, like two quarters of slowdown in one case and another case another two quarters. But basically when that is over, you get more business because our clients are basically acquiring those systems. So they are replacing these systems with those, so you see upside, after the cooling off period. Alright.

Thank you very much.