

Infosys Technologies Limited

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Session 2 by Subhash Dhar**Subhash**

_____ Communication Service Provider unit at Infosys. I am based out of Fremont, California in the US. I just wanted to give you a brief about the role and how it plays in the overall telecom segment for Infosys. So I look at Communication Service Providers and basically by service providers you mean telecom operators, cable operators, both wireline wireless telecom operators and my area of operations is mostly in North America and Europe. When we report telecom numbers in Infosys, we include two major segments. One of them is Communication Service Providers and the other is OEM segment. The equipment manufacturers, the work that we do in terms of outsource R&D for them. I will be talking a little bit about overall telecom as well as we go forward but I will focusing more on the CSP and the reason we have chosen CSP within the telecom segment is because we feel that is the faster growing business for us and it is also primary spender. In a way the OEM segment is actually a vendor to the CSP segment. So it is the primary driver for the industry. So I have called it the industry in transformation. Truly if there is one industry today that very well fits what Nandan was talking about in terms of transformation industry and of course he says all industries are transforming, but the way communication industry is transforming, it is rather quick, fast and also sometimes reckless and we have seen that in terms how the industry fortunes have gone over the last 10 years.

So let us focus on the Safe Harbor statement which has the usual disclaimers. I will just talk about 3 important courses which are more defining in terms of how the communication industry is transforming and there are many other events which are happening but I think for the purpose of discussions, these are the three big ones.

Number one, over the last 10 years, as the internet acceptance and boom started, what really happened was the telecom companies jumped into the fray and created and basically laid a lot more network fiber across the world. This is basically the core what we call the backbone of the global network. So they created an over capacity in this whole space and that we saw in 2001, when the industry really tanked largely due to that no.1 reason because there was just overcapacity and then there was not enough demand. That still is the case. There is more capacity even today compared to the demand but that might change very quickly.

No. 2, again around the same time, late 90s, when the web became a big thing, the internet protocol got commercial acceptance. Not that it was not there, it was there since the 50s, but it got commercial acceptance and this is a fundamental technology shift in how networks are created and how communication is carried out on networks. To give you a very high level understanding of what is so fundamental about it, the good example is in a traditional network, which is the lot of the network that we use today. When two people talk or they do a file exchange or whatever else, there is a dedicated line created between the two. So through the network, a dedicated path is created between two people and that dedicated path cannot be shared for the duration it is on. What this basically means is that you need to have millions of dedicated paths possible in your network to create millions of simultaneous calls. That is voice. There is also transfer of files happening. Again you need millions of those connections and if tomorrow video wants to go on this, then you need to hit millions of very broadband connections. Essentially, you will be creating billions of connections to sustain a true multimedia communication. This is a very expensive way of running a network but this is the only way of running a network that the industry knew for 100 years. The internet has actually changed that. It has changed that long time back but it was not understood until the late 90s and it could be applied because the technology was not very robust actually until recently in the last couple of years when the technologies have matured where operators are saying, hey this is mature enough for me to build my network on this technology, the internet protocol technology. Essentially, what it does to the operator is that theoretically the operator can have only one network and do all its business on that one network. All it has to do is to keep increasing the band width and do not create a new network. Traditionally they have created one network for every service, if it is voice local, one network, it is long distance another network, international a third network and if it is broadband fourth network and that the way it is today by the way. Nobody has created one network for all its services yet. There are all on the path, it means a lot of sense to them to do that because running a network is 50% of the operational cost and the other 50% is billing, customer care and those kind of systems. So their operational cost theoretically comes down by 50% theoretically but practically speaking, a

little lot less, but if they are really adopt this technology and create their network. So that is the promise but essentially a lot of that got created in small ways in all operators and that is the other big impact that is happening.

The third one which I think is a really well known one is since communication is an infrastructure business, government plays a big role in this. Depending on which country we are talking about, you will see a very different flavor of how the communication value chain is created. So de-regulation as it started in the 90s has played a big impact in creation of competitors for our telecom operators and that has kind of changed the behavior in terms of investments they make and all that. But if you really look at the abundance of core network fibers, the emergence of the internet protocol and de-regulation, there is one thing in common. They all are pro-consumers because they create more capacity for us and therefore they reduce the cost of operations for the operator. They bring in more competitors and they ultimately bring down the price for me and that is what all of us have seen that the price of telecom as we knew, price per minute has been constantly falling in the last 5 to 6 years. There is good news for us, not so good news for operators because revenues are declining and it has been declining even today. Yesterday you saw the AT&T year results and quarter results which came out and said the decline in voice continued for 1 more quarter. It will continue until a point I think where it will get arrested because the mergers and acquisitions is going on in the American market and this is by the way not an American phenomenon. It is happened in all countries including emerging economies like India and China.

However, there are positive effects on consumers as I talked about. Because the prices went down, a lot of the emerging economies actually got into the game of communication. I mean the Indian communication revolution has a lot to do with what those three forces that we talked about in the first one. Unless the core network fiber would not have been created the way it was created by those countries, the business that Infosys does would have been a large more expensive and all the Rs 7 a minute that we call to the US from here would not have been possible without that. It also created a lot of global collaboration because it has become cheaper. It has been easier to create real global collaboration. It is also increasing the network load which means the overcapacity may not be a long-term thing which is good news because someday when the capacity gets utilized, I think the realization and the prices will get firmer. But overall, it is not a great situation for the operator even today, the telecom operator today. When I talk about telecom operator I am talking about the classic incumbent wireline telecom operator. There are other places which are slightly better. Essentially where is the growth coming from? Right now the growth is coming in the wireless and the broadband segment and of course the incumbents are in the wireless business and then there are pure play companies like Vodafone, T-Mobile and all that. T-Mobile is not exactly pure-play because it is Deutsche Telecom but Vodafone is the great example of the pure-play wireless company. O2 is another example. Not too many such examples in the world. Most of the wireless operators are somehow associated with their wireline parent and they are actually helping them stem the revenue decline which they are facing on the wireline side. Broadband which is more on the internet side is definitely a new market and therefore it is expanding. Another market which is expanding for them is Enterprise Managed Network Services. How enterprises need for a network is becoming more and more complex. So they are buying more and more network bandwidth and they are also giving outsourced contracts. Some of them are going to operators to manage their network. One of the things that these guys are doing a lot is to debate this whole thing about the internet neutrality which is the big debate going on in the US right now and I think the whole world is watching how that debate goes, because based on that, I think that debate will be used everywhere else. Essentially telecom incumbents are arguing that the internet cannot be free. This is called the neutrality part of it but basically they are saying it cannot be free because the way the internet was when it started, it was created by Universities and state government and union government, but now it is not run by them. It is run by us which is the operators because we are the ones who are making the investments in fiber to home, creating this broadband connections and taking it to everybody's home and everybody's home when they get a broadband connection becomes a node on the internet. So they become the internet and that part of the internet is the bigger part of the internet than what it was earlier and therefore we are spending the money. You cannot call it free, we own the network and therefore we own the internet. Now that sounds like a very jarring statement to most companies which have build their business models around free internet namely Google, EBay. So in a way there is a big argument between the pro and against arguments on the net neutrality and actually very interestingly, the argument is not settled at this point in time and there are very good reasons why it might get settled in the favor of the telecom companies because ultimately they are investing and Google is not investing and creating that network to my home, right? So but if they do win the debate the way it is today, it will mean that the internet will become a very different place from what we know today. It will become like the phone network we knew in some ways. It will be controlled but the phone is the same. We do not want to control that. We just want to make sure that it is getting paid for. They have a point we are making investments they need to get the returns.

They are also doing a lot of merges and acquisitions because that is what happens when the price decline happens. You have to firm up the pricing in the market. If it is too fragmented, everybody will start undercutting each other. So merges and acquisitions are happening and it will continue to happen I think even more that what

you have seen so far. Essentially what incumbents are really doing is they are buying time. All of this stuff, is the not the real stuff because they all know they have to adopt the internet protocol and get into that integrated multimedia area. These are all interim measures because the wireless and broadband is going to peak. If you look at what has happened in Finland or some parts of the Europe, it has gone the same way. There again it is coming down, per minute calls, the times are coming down, average revenue per user is declining because everybody has three phones or whatever. So wireless and broadband is growing right now because of the penetration issue. It is not going to grow forever. Enterprise manage network business is a very competitive business. It is a low margin business for operators. The operators normally work at double the margin of what enterprise business is at and so this is really a defensive strategy, besides they will put them against the big IBMs and EDSs of the world. Net neutrality is an argument, mergers and acquisition is the strategy, it can only take you that far. So essentially they are trying to buy time and what they really have to do long term is they have to transform their networks, to internet protocol which will bring down their operational cost as we said in a big way. However, the capital cost that it takes to build that internet protocol is not trivial. No. 2, they have to build services which are integrated – voice, video, data integrated to run on those internet protocols. So essentially why would I buy anything from them just it is IP, I mean unless it is any different and that is what integrated multimedia services are all about. An example of that is that you are seeing your television over and IP and then suddenly a call comes and you get a caller ID right on the television and it mutes your TV and it freezes the picture. Live television get frozen and your call comes on if you want to say yes. You talk to the person, you go back exactly to the point where you were watching the television, it starts going on. It is all integrated. It is not that you stop your television because of phonecall, phone is ringing somewhere else. So that is one example. It is a very crude example of what integrated multimedia can achieve, but basically you have been giving many other example, for example you are discussing one of the things to one of the hotels where they can completely change their infrastructure to IP which means if I am a VOIP customer of ____ in my office, when I go into that hotel, I will take my number with me into that hotel. So when I check in, its like my frequent stayer card, my room get allocated with a phone which is my phone, my voice greeting everything comes into that. The television become my television, my favorites everything is just like my home or my office. These are the possibilities if you have internet protocol or network or for an enterprise thing when I look at my blackberry and I send E-mail to 5 people and say send to your outlook, instead of saying send, you can say call and suddenly the conference call is set up right there just for you and it calls 5 people and when you talk it is gone. It does not take the network away from you, it is just many such calls can be set up. These are some of the early applications that can be used if you do all of these.

The third one is also very important the point is you can do all of these things, but how do you charge, unless you change the way you charge, you are going to face the same problem sooner or later. Today the only way the operators know how to charge is dollars per minutes, rupees per minute. They can give you all the enhanced multimedia services but finally they will charge you per minute and that is very counterproductive for them because the value they are giving you is a lot more than what they are charging you and therefore they will always be in this problem. That is the where a lot of the work is going right now and I know a very early example is Apple I-tunes where they are actually charging for the content instead of the connection. If you learn from Apple, from Google and EBays of the world, they are charging for transaction and content because they do not own the network. These guys own the network and not the content so they know only to charge by minute. Somehow these two have to come together and that is where money will be made. Alright, so what is Infosys doing in all this? I think I have just put them in five buckets, broadly speaking in the area that we engage with CSPs.

No. 1, we are helping them build some new services. Now this not the integrated service that I talked about, this is just new services which are IT based, old services also exist, new services are also investing. VoIP is Voice over IP, another broadband, these are the services that some of these guys are rolling out and essentially our value proposition is quick time to market because of the some of the skills and knowledge expertise that we bring and not just building it but testing and rolling out some of these services which are very competitive in the market place. The second bucket is really, the integrated multimedia service that I talked about. Very few companies are at a stage where they are actually thinking proactively in this area but there we are helping in a more consultative way, capacities where we help them build business skills and I will be taking examples of that very shortly. Legacy system and processes, those are next two buckets which is the really the big part of our business continues to be a big part of the business. So as we build the new service, some of them replace the old service especially in this case. So there we also need to also take the old service and do a maintain and retire on them as we build the new one. Same with the processes, many of them are not retirement things they will probably continue even as the new services get build. So actually you will really have both. So their we are trying to see how we can make them more agile and then as they go and sell to their enterprise customers, they are partnering because they think that we know a lot more about the enterprise customers like retail, banking, financial services and insurance. We are helping them and hotel was a good example, hospitality is another industry where we are going jointly to market with them. They talk about the managed network service, we talk about the application development which will basically the reason why we will do the managed network services and the IT service.

Broadly this is where it falls. Here is one example of, I talked about the regulation and this is an example of a European national operator which had been mandated to unbundle its last mile network for competitors. So basically open it up so that anybody can provide the network communication service for customers. Now this is the classic case of the regulation and this not exactly the way it is happening in every country but this is the way more and more countries are going to have these mandates. There are very strict compliance service levels, which basically means if America Online which is a competitor wants to offer a broadband connection to the consumer and they go through this national operators network, because they do not have their own network, once they have given an order, within two days the order should be serviced just the way the national operators broadband service gets the order process, the order processing time for its own orders and for its competitors orders should be the same. Now this is the kind of thing which the regulator wants and in the past, the national operator with all its good intention has not been able to achieve that because when the competitor comes in with its order, the order is in a different format. It has to be changed into their format so that they can process it and there is an extra time which they have. Now that is what they say. The competitors say no, that is not the case. They do it because we are their competitors and so therefore they process our order slower and there is a lot of mistrust within the competitors and the incumbents and that is only to be expected. They contracted us and they told the regulator what if they take a third party like Infosys which basically does a validation of what we are doing and who is right and who is wrong. Then regulator said that sounds like a good idea and so basically we got this contract to create a validation harness for all the service orders and orders that go through the incumbents network and we built the concept of a virtual competitor customer which the incumbent is using to test all its services, before it launches because once it launches and it is not compliant, the penalties are very high. So that is the advantage for the incumbent which is our client but also the competitors are seeing that as a great thing. They are saying okay for the first time, we are able to get the same service level that the incumbent gives to its own arm. So this looks like it is working. There are inviting us to say, hey you know what, we want to make it even faster but that means the changes have to be made not on the incumbent side but on our side. So why don't you come and take some of our stuff so that the orders can go in even faster. That is the really opening up a lot of other businesses for us. It is an interesting way of how the deregulation can create new opportunities.

The second case which I wanted to take here was a US cable provider. Now cable companies are really video but thanks to the internet protocol and the regulation, they can be a voice provider. They can get into the telecom business very easily and rather cheaply but this guy has done it. They have launched Voice over IP, they have also launched broadband which is data. So there are into voice, video data all of that and the thing now is, how to really make it integrated? The examples that I talked about that TV and all that stuff, which is working in a very seamless way. They are into that next level. They invited us against a lot of competition here because this is pure blue-blood consulting kind of work where we walk in, we build a business case for them, we do stakeholder expectation management, we work with the top management, we work with the finance group and the marketing group and all of that to convince them of the business case. So we have done the first part of it which is building the business case in terms of what is the capex and what is the opex it would take for the customer to get into this integrated multimedia service development and rollout and what is the right pragmatic phased approach that they should be taking. Now we are in the second phase of evangelizing it within the company because everybody has a different view on how they should be getting into this. This is a very consulting assignment. It is really going on for several weeks now and I think it will take another few months for us to get completed with the business case acceptance and then the actual deployment will start. So this is where we get really upstream and we become trusted advisors for the clients and that is the area we want to be in. When it comes to integrated services, nobody has done this, this is an opportunity for us to be as good as if not better than anybody else, including our customers and then if you can make those investments fast enough, you should be able to dominate this space as we go forward and this is where the future is.

Alright so what are we doing in terms of Infosys capability building in this area, really into three buckets- solutions, training and consulting. We talk about solutions as a couple of solutions that we are building. One is that first one which I talked about, a very agile way of taking somebody from concept to launch to complete integrated multimedia service, and that starts from business case development to rest of the stuff. The second one is a more twist on how in the new world of IT, customers can have their customer service operations made in a very different way, in a shared way. We talked about the network being shared. It was all one network or one service. Now they can get into one network for all services, it is a shared network. You can also get into a shared customer service model which means instead of having a 1000 people call centre and a 500 people level 1, level 2, level 3 support center for every service, they can create a shared customer service organization and this is not just about people. It is also about systems and processes which need to change for that and that is an area where we are. We build our own intellectual property on how to do that. This is called the scenario based approach or managing service faults. So we are building up a whole tower of flat customer service network operations management using the scenario based approach. And of course there is a lot of training in the technology on the domain area which we

are imparting to all our people because we have to do that as we go forward. A lot of our people need to get converted to the new technology areas. So that is a massive training program that is going on in our unit and the other related units and the consulting team where we have to go work in a very integrated fashion with the Infosys Consulting and in fact the engagement that I thought about, is not done by just my unit. This is done by Infosys Consulting. My units which has deep expertise in CSP and then we have put system integration unit which has got certain expertise in certain area. So it is multiple units which get together to do any one engagement in these areas. Consulting is a big piece of how do we dominate in the future. Based on the figures of how we have grown, the figure up there gives you the total telecom revenues and this includes OEM and CSP and by the way OEM is also growing for us. It is only that the CSP is growing slightly faster which is given in this blue line tell which is that they increase the share of CSP of telecom is increasing over a period of time and this is where I think a lot of Indian players have probably not seen, it is probably on their blind spot as they are going. This is where the investments needs to be made and not doing more of the old stuff because the old stuff also has a pricing problem because when you work with the OEMs, they are themselves vendors to the CSPs. They are at the second level and so they are squeezed by the CSPs. When they get squeezed, they squeeze you. Whereas CSP themselves, they are all about new revenue and all that. They have a lot of pressure themselves but there is a whole lot of new stuff they are doing and there is lot of pricing leverage that you can get from those lines and if that is the growing part of your business, your future is more secured.

On the geographical side, Europe has really gained very fast for us. This is one reason here with because there is revenue concentration issue which was a question in the previous session which I want to address is that there will always be a higher revenue concentration if you slice the business into just CSP segment because there are not too many operators and we focus only on tier one. Because it is infrastructure business, not everybody gets licenses to do this, this is a licenced business everywhere in the world. So for example in the US today, there are just with all the mergers and acquisition, there is two major players, AT&T and Verizon. Everybody else is like a fourth of their size or smaller and we are focusing on tier one, we have got those two to go after. Most of the countries it will be just one. So the revenue concentration per costumer will be very high. The idea is, that is enough because these guys have \$ 2 to \$ 3 billion of IT spend and above and that is just IT and we are not even talking process because when we will do this, there is a lot of processing change that is going to happen. If you really look at, we talked about 50% of their operations spending is on the network and 50% of which is really here in the process side. So the addressable spend is huge but the number of players are fewer. So it can be argued there could be pricing pressure on that but basically you have to understand that they are more geographically separated. They are not in the same country except in the US. And they have this new stuff to build and old stuff to maintain and there will be pricing pressure on the old stuff to maintain but on the new stuff to build, if we can get our capabilities the way we are going, you should be able to get and we are able to see those pricing advantages.

Last line here, the overall outlook. Basically taken 3 points. No. 1 is, CSP is continuing to drive the spend in the industry. So they are the ones who are spending more than the other segment which is the OEM segment. We expect continued strong growth in the years to come. Primarily because of these two areas – transformation related work where we have to take the old and change it and you have to build the new stuff and the third area is something which is very interesting is that the addressable market itself might be contracting on one side and expanding on the other side. While number of operators might be getting fewer and fewer because the traditional voice business is a shrinking business but the new business is really throwing up new competitors including some of the traditional other companies which are now called the virtual network operators. Why is this happening? Why is TESCO wanting to become a phone company, not that they ever want to become a dominant phone company but they wanted to have the phone company capability. The reason for that is that banks, retailers, insurance companies, these guys are saying that for the last four five years, increasing number of their customers are coming to them through online channels. Online or phone and their ability to service them better and to do price bundling and be them and do the upselling and all that depends on the capability, the telecom capability that they have of connecting their organizations to the consumers or the customer. Now they would like to control that wire, so that they can do more innovative selling and customer service to their customer for better CRM. And thanks to the internet protocol, it has divided the industry into layers where you do not really need to own the network to provide a service. You can always take it wholesale and buy it from a wholesaler and you can provide your service. So what these guys are saying, so what TESCO is saying to for eg the British Telecom, why don't you give me your wholesale, I will buy wholesale from you but I will provide the mobile service on that wholesale network that you have which mean as you are checking out of TESCO, you can buy a telephone service that is TESCO service which will not be Airtel or O2, or T mobile, it will say TESCO on it and just put that sim card in and you are a TESCO customer. Now TESCO can based on their CRM that they have of how you behave, they can start interacting with you in a more creative way, giving you alerts on your shopping on the next one which is coming up, may be your bread is running out, gods knows, what they want to do. But it is lot of those stuff that they want to do directly instead for waiting for the telecom operator to make it more flexible for them. Telecom operators are not complaining because they know that they will not understand the consumers retailing habits, they think go

ahead, it is all business for them, they are okay with that. But what will TESCO need to do? It will need a billing system. If not a billing system, at least a customer care system, which is more sophisticated and it is more telecom oriented and network oriented customer care system. They need that. Either we build it for them or we run it for them. They are okay with that but that is the other business which is opening up. Imagine every Fortune 100 or Fortune 200 company wanting to do that. It is going to be a huge area, if you build our billing and customer care practice. So that is the big one coming up. Of course the first one we talked about it is that every element of telecom is becoming software including the switch. The switch is now a software and more and more become software, it comes into our area. Right, as opposed to loosened services or somebody else's services.

Third one is the media and entertainment guys. They are saying okay so you do not want to charge for connectivity, what you want to charge for? You want to charge for transaction, you want to charge for content, that is what we want, they are saying we can become telephone operators too or may be just go buy a telephone company and start selling content on it. I mean if Apple buys a telephone company tomorrow, I won't be very surprised because they are selling the I-tunes at a dollar a song and they have to pay these guys some money but if net neutrality happens, they also have to also start paying the phone company. If that happens, I am sure they can have the market cap they can go and buy a phone company and become an operator also. That is likely to happen as well. So basically that media entertainment, telecommunication and basically every other industry is colliding. The communication space is there to becoming very very interesting for the technology players. Thanks. I will take questions

Participant

Subhash

No, I do not really have the break up but we will be the big ones. Probably we will be the biggest. This and the first would be the biggest. This is the fastest growing one, probably 1 year from now this would be bigger, the process one. Legacy system and the new service, VoIP and broadband are the biggest right now but I do not know how much. The concept to launch is always will be small unless, the companies mature but I think in the next 2 or 3 years that will become very big. This is very interesting. Actually this can become very big very quickly, because these deals are very very big deals for the operators. It could be like a \$ 2 billion deal. On an average I have seen for eg, BT got that NHS deal which is \$ 2 billion, then they got the Reuters deal which is about \$ 1.5 billion. And these are very big deals for them and if we participate we could easily get a \$ 100 million into these if you are really playing it right but this is about partnership and creating joint solutions. This is slow to uptake but huge potential and this is also a very interesting part. Your operators will not partner with you if they think you are their competitors because if you ask BT today who is their competitor, they will say IBM and Accenture. I said look they were my competitors. BY said no you are not my competitor, so I said why, they said because we have decided that we will do managed network services together. That is not what they are hearing from many other players even smaller than IBM and Accenture. Everybody is saying we will do it ourselves. The moment you say you are going to do it by yourself, that means you are a competitor for these guys. So that last part will probably not happen and if this does not happen, the rest of the stuff will also get interesting. So it is very strategic for us to say what we should do and what we will not do in this space.

Participant

Subhash

Domestic market? There are a couple of reasons. One of course, this is a very nascent practice. CSP is about 3 years old as opposed to banking and financial services which has been there for a long time and also the OEM which we have done for a long time but CSP is only 3 years old. So we first need to get the volume from and there is not much volume in the Indian market. All said and done, nobody has a \$ 3 billion dollar IT spend. So from a higher chance of success it makes sense for us to work in the market where we know how to work. So there are a couple of reasons right there. One is the size, the second is our experience of working in this market, it is probably much lower, than working in the Western market. So we might just happen to be here but I think I would agree with you that going forward, I do not know how much forward, it is impossible to ignore the market, that is what I can say at this point in time. But right now it does not make sense from the volume or price perspective. Over a period of time as you build those solutions may be yes.

Participant

Subhash

It is affecting our business. Ya decisions get arrested for a quarter or two sometimes because there was a merger happening. Luckily we have always been with the acquirer. So we have not lost business but decisions get slower. We felt that last year when the decisions got slower. Once the merger got connected then, we got more business out of it but everytime there is merger, there is decision slowdown and god forbid, if we are on the acquiree side, then we could even lose business but so long our strategy have been to focus on tier1 and the blue blood tier 1 all the time. Most of time we think that might help us but you never know.

Participant

Subhash

No I said last year we faced the decision slow down. Right now, actually we are facing the other side because once they decided now they are throwing stuff at us but the next merger happens, it can again affect.

There is some question at the back.

Participant

Subhash

Ok. Well the first one of course that is the thing which I told and talked about. We have seen this happens in about every half, there is something that has changed but we have taken only 3 years. So may be it is not something I can talk about. Basically when there is a merger, there is a decision slowdown and arrest on anything which is happening for a quarter. Sometimes this was 2 quarter and then it starts flowing again. In fact if you look at this quarter, we had a 17.7%. Basically, after the fiscal year ended, we again saw an upsurge. So I don't know whether it is every alternate year they are going to see the growth, we have been only 3 years, but that being the major reason, when there is merger, there is an arrest of projects flowing ____ You don't know which one will go and which one will not. So we have seen that cycle and everytime a merger happens you see that.

Any other question

Participant

Subhash

I do not have any explanation for that, but we feel that the OEM spend will start later as they get more and ____, the CSPs are spending with us they are also spending with them. Unfortunately only the smartest ones are getting it because the Huawei of China and all those guys are eating everybody's lunch. So but Cisco is growing, Cisco is growing a lot. There will be a phase lag, these guys overspend on products. So they are saying we do not need any help right now and as CSPs start spending more and more, I think there will be 1 or 2 years phase lag and then OEM will have to start spending more as well.

Participant

Subhash

The major thing that is here is that traditionally the Indian IT industry was focused on OEM and we faced that music in 2001 when the spend went down but we should have seen this in 1999 if we were working with CSP because they had stopped spending around that time on OSS and ____work because they were just saying they have seen that there was over capacity, they were buying some boxes but not a whole lot of boxes, that the technology was not mature for IT multimedia services. So there was not much action happening there and could have given us some warning that this is going to happen 2 years from now but since none of us were there at that

point in time, we will faced the music. At that time when I was leading that practice at that time, the OEM practice and I said oh my God. We got to move into the CSP segment because they are closer to the market. There we will get the early warning signal. So we have to be at the top layer of the value chain. Then we get into the OEM and now there is another third layer merging which is at the top, which is the content layer and that is where we need to focus, the media and entertainment basis. Probably not in the next 1 year, but definitely after that you will start seeing this layer emerging and if you are not in that layer again we will be 1 layer lower and we will get late warning signals and therefore and also more trickle down in terms of spend. So the whole strategy is to keep scaling the value chain as the value chain emerges and the value chain is changing.

Alright. Thank you, very much.