

## **Citi Global Technology Conference**

September 10, 2015

## **CORPORATE PARTICIPANTS**

**Pravin Rao**Chief Operating Officer

Sandeep Mahindroo Assistant Financial controller

## **CORPORATE PARTICIPANTS**

**Surendra Goyal** Citi Group



Surendra:

Infosys, they are represented by Mr. Pravin Rao on my left. He is the Chief Operating Officer of Infosys and an Infosys veteran. He has been with the company for over 25 years. And on my right I have Sandeep, who many of you know. He is the Assistant Financial Controller and also heads Investor Relations for Infosys.

So the format we'll have here is maybe I will kick off with a few questions, and then we will open it. So Pravin, thanks for coming here today. So I think the first question, which everybody wants to know and it comes up in investor meetings very frequently – is first on the demand environment per se, and you could maybe break it up by geographies, verticals, discretionary, non-discretionary – whichever way you want to really look at it. And secondly, in terms of market share trends. Like Infosys clearly had a few tough years. And there is a sense that the company is kind of coming back, the growth is kind of starting to catch up with the industry. So your thoughts on both those things, I think that's what we'll start with

Pravin:

Sure. Overall, from a demand perspective, the demand is decent and it is across industries and across geographies. In North America we have seen much more positivity and much more confidence. Europe, barring a couple of countries, I think by and large we have seen much better optimism than we have seen in the past. So net-net, I think that's not too much of a difference between Americas or Europe. So by and large, I think we're seeing a fairly positive demand momentum.

Now, if I look at it from an industry perspective, we are seeing good traction in financial services, and this includes capital markets, payments and credit cards and other things. Insurance is a little bit tough, a laggard and primarily from our perspective, we have challenge in one or two points where things are fairly flat. And our presence in insurance sector is also limited to that extent. But other than that, I think the overall financial services is looking very positive.

Manufacturing, again, is fairly moderate. We are seeing good traction in hi-tech and auto, but in terms of aerospace, we have seen some amount of challenges. And when I talk about challenges, it's more relative and compared with others, it's not that it's from a negative perspective. Retail and CPG, we have seen better traction than we have seen in the past. We have seen some good wins in the last quarter. We continue to see some good traction this quarter. And so we are seeing a nice momentum, but from a winning perspective we may start seeing it scaling up over the next few quarters, on the back of some of the wins we have had in the last quarter and this quarter. In terms of healthcare and life sciences, again, healthcare is a very small percentage of our business, but we have seen decent traction. Life sciences, also we had a very good growth in Q1 and we continue to see good – we are very optimistic about that space.

Coming back to energy, I think one of the sectors, which is fairly challenging is energy, we continue to see volatility given the oil prices and other things. So there continues to be a lot of pricing pressure. So we continue to see project cancellations, project postponements, rebids happening in this space. So this – I think we will expect this to continue, probably rest of this year and maybe even early parts of next year. We may see some stability only in calendar year 2017.

Telecom is another space, again, we expect to see some volatility. Most of the telecom players are today challenged on top-line and that's severe pressure on the bottom-line as well, so we have seen a fair amount of cost pressures and other things. So we will expect to see some volatility in this space.



So net-net, I think barring energy and to some extent telecom, where we see some volatility and insurance, to some extent, we are seeing a lot of positivity across the board in all the other sectors. And geography-wise, as I said earlier, it's fairly uniform across both Americas as well as Europe.

Surendra:

Sure, and in terms of the business, maybe you could talk about run the business versus change the business, the trends that you are seeing in the market.

Pravin:

Yeah. On the business side, I think I don't cover the second part of your question. So overall, as you are all aware, we had a very good Q1 and we have seen that momentum carry forward in Q2 as well. We had at the beginning of the year given a guidance of 10 to 12% growth. So today we are confident that we will be in that range. And obviously for us, the challenge is going to be H2 because historically H2 has been relatively weak quarter for us, and to most of the players in the industry. So we are hoping that some of the wins we have had in H1 will carry forward in to H2 as well from a momentum perspective. But net-net, I think we are fairly comfortable about meeting our guidance, 10 to 12%. And we are much more optimistic than we were at the beginning of the year.

And from a business mix perspective about 60% of our business comes from what we call business and IT operations, which is the run part of the business. This includes application development, maintenance, infrastructure management, quality assurance and so on. And 33% of all the revenues come from consulting and system integration. This includes big data analytics, digital, package implementation and so on. And about 4 to 5% comes from our product and platforms. So we have seen good traction, both on the consulting system integration, as well as on the run side of the business and IT. We have seen good uptick in the ADM space, and then cloud and infrastructure services has done extremely well for us. In Q1, we grew 7%. In this space we are playing catch-up, but I think over the last couple of years we have done a good job in terms of stitching together partnership, increasing our credentials in this space and increasing the mind share, not only amongst the client, but amongst the analysts and deal consultants as well. And this is reflected in some good wins in the last two quarters in this space, so we continue to be optimistic about this. The quality assurance and testing piece is doing extremely well. We are seeing a lot of good traction in business intelligence, analytics space. We are also seeing good growth in the digital space.

The only area where we have probably not seen – where we are seeing some amount of softness is in the package implementation space, because as we have seen, the product vendors like SAP and Oracle transition into cloud-based products, the transition in the client organization from the on-premises to a hosted model, to a cloud-based model is taking some time. And so we are seeing some amount of softness there. But barring this space, we are seeing good traction across all service lines.

Surendra:

Sure. And on infrastructure services, we get this question quite often that with the cloud coming in, do you really see a big disruption in terms of spending? And will it really be a big growth driver over the next two to three years? Based on pipeline, based on your conversations, what do you see is the potential from a growth perspective?

Pravin:

Yeah, I think definitely there is a lot of potential on the infrastructure side and most of, I mean when you look at what's happening in the infrastructure, it's not only about consolidating. I mean today, many of the clients have operations in multiple



datacenters and so on. So one part of the infrastructure business we see is about datacenter consolidation, virtualization, making things more simpler and so on. So that's one part of it. Then the second part of the infrastructure management, infrastructure deals that we see is also about, once we have consolidated, once we have simplified and created, then trying to migrate that to cloud. So we see both elements of it and in some sense, the deal includes, any infrastructure deal of a three five years, includes both aspects of it. Part of simplifying their existing infrastructure and then migrating it to cloud. So it's a good, it's a big opportunity. Almost 60% of the large deals that are out there, with large deals I classify any deals, multiyear, more than \$50 million TCV. About 60% will have some infrastructure component of that there. And that's growing – for this industry, at least for the next three to five years, that will be a big growth driver.

Surendra:

Sure. Another issue which investors debate a lot is competitive intensity and pricing. Because there seems to be a view that it's getting more competitive. One of your large competitors was here a couple of days back and they also alluded to increasing pricing intensity in certain deals. So – and again, Infosys historically maybe was not as aggressive as possibly you are now, over the last few quarters. So any thoughts on how you see the competitive intensity change and what it really means in for pricing in this space?

Pravin:

I think one part of the business, which is on the run side of the business, which includes maintenance, application development and maintenance, infrastructure management. That space clearly has commoditized over the years and so there is tremendous competitive intensity there. And typically, whenever any deal of that nature comes for rebid, there's a clear expectation from the client that they would require about 20 to 40% upfront productivity improvement commitments. So historically in the past, as a company, we were a bit reluctant to get so aggressive on the pricing, but in the last year or so we have recognized that that is a new normal. It's important for us – if we have to win our fair share in this space, we have to be aggressive on pricing. And that's the correction we have done in the last year also, and that's reflected in some of the growth and wins we have had in this space.

So at least our philosophy is, we have to price to win and then we have to figure out internally how to deliver to margin, our own margin requirements. So towards that, I think there is a lot of focus on automation, there is a lot of focus on productivity improvement and so on. And while there is a lot of talk about automation and productivity improvement, the reality is some of the early wins on automation or some of the basic things around automation is already in play and has been deployed over the years not only by Infosys, but by other competitors as well. The real benefit of automation comes in when you're getting into, when you are being able to introduce cognitive intelligence and so on, as part of the automation thing. And that's something where all of us are working on and while we have had some early successes, it's early days and it will take a few more quarters or a couple of years before it matures.

But the reality is, I mean most of these deals when we win, it's for a three-to-five year time period. So the belief is, over a period of time we'll be able to figure that out and we will be able to recover some of the aggressive pricing that we have done up front.

So barring this, if we ignore this large deal where there's a lot of competitive pressure, in the rest of the businesses, we are not seeing too much pressure on pricing per se. In fact, when you open a new account with a new MSA or a price



thing, we are not seeing any undue pressure to lower the pricing. We are able to get the kind of pricing, at least from a MSA perspective, we are able to get the pricing we like. But when it comes to an individual deal, depending on the size of the deal and the competitive intensity, sometimes you have to go aggressive to win and that probably puts pressure on the pricing.

Surendra:

And so Pravin, you have been with the company for a long period of time and there have been a lot of changes over the past few years. So any thoughts on what are the key changes post Dr. Sikka coming in? So like we have seen attrition trending down. He's a lot more visible with employees, all of that. So maybe two or three key things which you think are making a difference to the way Infosys works.

Pravin:

I think the first and the most fundamental one is the confidence level of people within Infosys has improved considerably over the last 9 to 12 months. And that in my mind is a big thing. Because as a company we had the potential, we have been an iconic brand, we have had many firsts in the industry and so on. But in the last few years, last 2-3 years, we had lost our way and that has translated into fairly low employee morale, high attrition and so on. The most fundamental, I mean one of the biggest thing, the achievement that has happened over the last 9 to 12 months after Vishal came on board is a good deal of confidence in people, about our own abilities, about the future and so on. So that's all pervasive. And that's reflected in the attrition coming down dramatically. And today attrition is at the level where it was historically and we're very comfortable at where we are. So that was probably one big thing.

And the second thing is more about a clear articulation of strategy. Because the renew and new strategy that we are talking about, in some sense it's similar to what many people are talking about, our competitors, and it's similar to what we were talking about earlier, prior to Vishal coming in. But the difference is, now there is much more meat behind the strategy, we are very clear about what we need to do on the renew side of business, what we need to do on the new things. There's a very clear articulation of the strategy, what it means to each one, which perhaps was not well articulated by us in the past. So now people are very clear what the strategy of the company is and so on.

And the third thing is, we have done a fair amount of things over the last 9 to 12 months to improve the experience of people internally, our own internal customers, by doing a lot of improvements over HR practices, the processes, the policies and so on. So that has also automatically translated into better experience of people. People are now able to do things much more productive in the company and so on. But these are probably three or four things that have happened in the last year, which has really translated into much more optimism and the company being much more confident about its fortune and future than it was in the previous two, three years.

Surendra:

The other question I had was on automation. Like I think you mentioned that it's been there for awhile, but then again, what we also heard from the company earlier was that some of the benefits of the new things we are doing on automation should kick in towards the later part of this year, or should start kicking in towards the later part of this year. So what are you doing differently on automation, versus what you have traditionally done? And from a margin growth standpoint, what does it really mean?



Pravin:

See, when you look at automation, for instance, some of the basic things about automation is when you get a ticket, the ticket is about a problem, let's say in the infrastructure space. Sometimes you get a ticket saying that the disk has run out of space, so the application is aborting or whatever. So the solution is very evident, you need to create more disk space and so on. Or sometimes some of the tickets are around user lockout. Someone has typed the password wrongly, so you have to reset the password. So there the problem is well known, the solution is same, so it's very easy to automate. So that level of automation, to a large extent, has been done in the past and people continue to focus on that. So that's not a big thing, that's an easy thing to do.

But there are many more problems where the answer to resolving the issue, there may not be a direct answer. You have to do, there would be maybe three or four different approaches or different things and you have to follow it in an iterative manner. So there you have to use a cognitive intelligence stuff and you have to build systems which will learn on itself and over a period of time it will become much more intelligent and much more predictable in terms of solving. So almost all the effort in the industry is towards that part of automation.

So when Infosys or anyone talks about automation, people are now talking about the next level of automation. And this will typically take over two, three, four years kind of thing to really bear fruit. Because what we are doing is the initial stages and then you have to deploy the system better, the system will become much better when more and more deployment, more and more adoption happens, it will become much more intelligent and so on. And it will take over a period of time.

And again, when we look at it from an infrastructure management services, if I take a look at, for instance, testing or a quality assurance space, there, one level of automation has already happened over the years. It's in the test execution. Today it's very common for people to create regression test suites. So whenever you make any changes, it's easy for you to run the regression test suites to do the automation piece. But the test execution is only 40% of your whole testing cycle. The opportunities is in can we automate the remaining 60%, or big chunk of the 60%. This includes test data generation, test case preparation and so on. So there is a fair amount of effort going in that batch. Again, these are early days, so over a period of time you will start doing differently.

Similarly, when you look at the ERP space, I think the challenges will be much different from an automation perspective. Again, part of – if you look at a typical ERP, only 30% - 40% around ERP maintenance and upgrades, land itself for automation. But about 60% or more is in terms of implementation and so on, so there again, I have to look at the automation in a different way.

So if you look at each service line, the potential for automation varies from service line to service line and the extent to which automation is today prevalent also varies. So there is still a lot of headroom, a lot of runway. So while there is lot of talk about it, my belief is, it's still early days for us to get real benefit and it will take years. And the other aspect when we look at automation, again, to get the benefit from automation is – today when I talk about large deals, we are already talking about the fact that we have committed 20% to 40% productivity improvement. And this we have done, even though you may not have an automation story in play to do that. So if eventually we achieve it over the lifetime of the contract, then at best, we will meet whatever we have committed.



So it is a very complex thing with various moving parts and other thing. But it's inevitable that as an industry we need to do beyond the pricing pressure and the commoditization. And also when you compare IT industry with some of the other industries, the level of automation here is still not very good. So there is a lot of headroom for automation play in this industry.

Surendra: Sure. So we can open up for questions.

Pravin:

Participant:

Pravin:

Participant: You mentioned that some of the large deals you won, the pricing has been aggressive up front with 20 to 40 percent benefits to the client. Can you talk about the margin cadence that you are expecting over the three to five year contract and then you talked about these deals are generally, so year one, two, three, four and when you expect sort of the contract to reach your corporate average profitability or

even higher. Can you walk us through that?

For large deals, by their very nature it's very competitive, so your margin profiles of this large deal, initially when you bid out will be very aggressive and much lower than the corporate average profile. And the expectation is that over a period, I mean you have three to five years to plan your productivity improvement and other thing, so the clear expectation is, initially it will be very margin decretive and you will have to take a hit on the margin in maybe the first few months or first few quarters kind of thing. But over a period of time by virtue of better understanding of the system, by virtue of better traction from your automation, better automation story and so on, there is an expectation that towards the later part of the deal, you'll be able to recoup some of the margin decretion that happened in the early part of the lifecycle. And over the period of the lifetime of the contract, we should still be able to, if not improve on the margin that we up front do it, at least meet the margin profile. So that is the expectation.

So year one is maybe single digit margins and then you reach sort of double digits

year two, three? I mean any like...

Yeah, I think the first 12 to 18 months I would say will be very aggressive on margin, margin decretive. Can't comment because it varies from deal to deal, difficult to say single digit. But any margin improvement you would expect will

happen in the second half of this...

Participant: So year three to five. So given that since you've won a lot of large deals recently

and that showed up in revenue growth, how should we think about the margins currently? Because you said automation we haven't yet completely figured out. So should we expect a hit to margins in this fiscal year as these deals are ramping up?

Pravin: No, the margin guidance that we have given 25% plus or minus 1%, that 24% to

26%, already bakes in assumptions around some of the aggressive deals that we have won and some of the aggressive deals we will likely to win in the remaining part of this year. So it already takes into factor that thing. So it's a mix, and again, from a margin perspective, pricing is one element, then there are many other levers. It's about your utilization play that you have, it's the onsite/offshoring and the pyramid that you deploy. So there are many other levers that we can deploy. But we have considered all these factors into play when we gave that guidance. So at

least for this year, we are fairly comfortable with the guidance we have given.

Participant: And your utilization is at 80%, where do you think you can take it by the end of this

year, fiscal year?



Pravin:

I think there is a play from upto 85% is where we can probably take it up, but anything beyond 85% may be a challenge. Because about 8% to 10% are not really available because people take leave, they take vacation, they are in training and so on. So you will need that 3% to 5% cushion for any quick rapid ramp-up and so on. So we have a play and obviously this 85% can become 88% for some service line, which lends itself to more utilization like testing or an ADM. But some of the things like a package implementation is probably much more fragmented. It may be not that easy to redeploy people across different packages overnight, without some training and so on. So there the utilization may be lower. But on an average, I think anywhere from 83 to 85% we are comfortable. Today we are at 80% and that's what we are actually pushing towards more becoming closer to 80% - 83%, 85%.

Participant:

So you have 200 basis points in margin just for increasing utilization to 85% I quess...

Sandeep:

So we were at about 80.2% last quarter and the sensitivity is about 35-40 basis points. If you are able to take it up to let's say 84%, 85%, then we do believe basically there is some margin leverage that we have in the short term. It depends upon how the volumes come and how the growth comes in over the next two or three quarters. But we do believe that the utilization can be higher in the short term, compared to where we are as of now.

Participant:

For these large contracts you've just signed, how long should it be until we start seeing that decretive margin?

Pravin:

I think from a deal perspective, as I said earlier, for the first one or two years of a deal, you will see some margin decretion from an overall, if for instance, a deal we have signed at say 15% margin. In the first one or two years, the margin you can expect from the deal will be lower than the 15%, from a deal perspective. But in the subsequent years it will be higher and on an average, we expect to meet the 15% or better that margin. So that is the philosophy. Not sure whether I answer, but...

Sandeep:

Just to add, so the impact on margins is fairly immediate in the large deals. The hit on margins is fairly immediate because there's a higher onsite component, there's some transition costs, etc, that are involved. So that shows up fairly immediately.

Participant:

Your Q1 was very solid from a revenue growth standpoint. Normally, typically Q2 tends to be your seasonally strongest quarter. Any reason why Q2, that this year the Q2 shouldn't follow that trend of the strongest seasonal quarter for the fiscal year?

Pravin:

In general you are right, Q2 is normally much higher, but Q2 has also been a little bit of unusually high quarter for us from a growth perspective. So to that extent, it would probably not be a wise thing to extrapolate and say, okay, in Q1 you did 4.5%, so Q2 should be X percentage more. That may not be the right way to look at it and at least, from overall pipeline and momentum, based on where we were in the beginning of the quarter to where we are today, we don't now give a quarterly guidance and so we can't comment on that, but all I can say is overall we are fairly comfortably. The momentum of quarter 1 is carrying through to quarter 2. But it is highly unlikely to follow the earlier pattern of quarter 1, so consequently, quarter 2 will be significantly higher may not hold true.

Participant: That is because Q1 was so strong.



Pravin: So strong, yeah.

Surendra:

So maybe I'll just squeeze in one question on margins. So rather on revenue productivity and margins together, right? While the sector has seen revenue productivity as well as margins coming off over the last few years, your 2020 guidance or aspiration talks of a significant improvement in both revenue productivity and margins, compared to where we are today. And then I have got this question from many investors, how does one really reconcile the two? Given that competitive intensity is going up, you are talking of large deals which are margin dilutive. So both these things don't seem to be really tying up. Any thoughts on that?

Pravin:

I think at least from our perspective, there are three elements to the 2020. Number one, I mean it's more aspirational thing, it's not carved in stone or anything. But when you look at the revenue element that probably in my mind is the most easily achievable thing. Because if you break down the \$20 billion into what is inorganic, organic; what will come from existing and new. So when we break that down, I think for the current services business, if you are able to grow it about 13% to 14% CAGR, which is in line with the industry growth over the next 3 to 5 years, we should be able to do that.

So if you are able to achieve the top line and the biggest challenge probably, margin also from a 26 to 30%, I think, with some of the automation and other things kicking, it is still probably doable with more efficiencies and other things, with technology improvements and so on.

The biggest challenge, perhaps, will be the revenue productivity, because today we are at \$52,700 or something. Taking it to \$80,000 is going to be a big thing. It will not come just by repurposing the service mix. It has to come from significant benefits coming out of automation and other things. So that is where we are challenging ourself and this is where we have put the stake on the ground saying that there is an opportunity of leveraging technology which we have not done well, the IT industry in general, and there's a belief that the only way you can get that 80,000 is to make sure that some of the automation and other things you are talking about kicks in in a big way.

And if the \$80,000 revenue productivity happens, then margin becomes achievable, I think. But for me, achieving that is a critical element if it, it's not the revenue, it's not the margin, but the \$80,000 revenue productivity and on the back of automation and technology driven productivity improvement is the critical thing. That only time will tell whether we'll be at and where we land, whether it's \$80,000 or whether it will be lower than that.

Surendra:

So next question was on deal flows. So if one looks at what you share quantitatively, the deal flows in the first quarter, the large deals were \$700 million, approximately, which is the same as last year same quarter. But obviously your confidence is a lot higher. So is it based on the successes that you see in client mining, which is driving the confidence on a better outlook moving forward?

Pravin:

It's a combination of both. There are three elements. One is opening new logos, which we have done reasonably well. Even though as a company we have not performed well, but on opening new logos, we have done consistently well quarter on quarter.



The second element is mining your existing accounts. Those are, the impact of that will probably be felt over a period of time. I mean it's not something that in a quarter you will get a big jump or anything. So that's something we have started doing well and our success in quarter 1 tells us that we are in the right direction and that gives us the confidence. And this is important because the environment will continue to be volatile, you will always get some surprises. So sometimes the surprises may mean that in one account you will get a few project cancellations or something and suddenly you will see some \$10 million going away. But if you are able to offset that \$10 million drop by maybe doing \$1 million more in 10 different accounts, then you are able to recover that short. So mining becomes very critical. It's not only about your revenue thing, but it's also ability to absorb shocks, becomes much better. So we have a lot of activities in place to do mining better and we have started seeing some positive results. And so that gives us some confidence.

Then the third element is, of course, the large deals. That is probably in my mind the most critical element. Because you may do your mining, you may win new logos better, but unless you win your fair share of large deals, which will give you the huge incremental revenues, you will always lag behind the industry. And that again, while the number of wins may be consistent, but the fact that the quantity, the quality of those wins, the fact that about four of the six wins have been in the infrastructure space where we were struggling in the past, and the fact that 60% of the new deals still have an infrastructure component, many of those elements go into giving us the confidence that are in the right track and we are fairly comfortable and confident that over a period of time, going forward we should be able to win our fair share of deals and get the growth momentum back.

Surendra:

So following up on client mining. So till four or five years back, Infosys used to be quite strong on the client mining side because that was a big driver of growth, till that period. Then you struggled for a few years and as you've said, you have taken initiatives. So what went wrong and what are you trying to change now from a client mining perspective?

Pravin:

One is, we didn't invest enough in sales, I mean at the hygiene level, I think we did not do a good job in investing enough number of people on the ground. And also I think the nature of, sometimes you need a mix of people with delivery background and people with selling or consulting background in your sales force. But at one point in time, we moved purely to get getting more a consultative kind of sales force, so we didn't encourage too many people from delivery into the sales. But one of the thing that we did about a year, year and a half back is to create a role, which was there earlier and we resurrected the role called 'account manager'. These are people with delivery background, who will move to sales role within that account. They have been in the account for three to five years, they have the confidence of clients, they understand the account context and they will do a much better job in mining the account than someone new coming in. It's a mix, it's not one or the other. So changing the profile of people, increasing the number of headcounts, that helped us in doing mining better

And the second one is the discipline of doing things. I mean focusing on each account, looking at each account, is it growing or not? What are the opportunities in pipeline? What do we need to do to convert differently? What will convert this quarter? What are things that are likely to happen two quarters down the line? What do we need to do to get the mind share and get into a winnable position? So all those, I mean the whole discipline of doing your operations, executing, which we



used to do very well in the past, which probably we had lost out over the last few years, that's started coming back. That's a combination of those things.

Surendra: Any last question?

Participant: In terms of wage hikes, I think some of your competitors talked about increasing

salaries by about 10%. Are you planning to do the same? What's going on in the

competitive landscape there in the war for talent?

Pravin: I think you are referring to the wage hike for freshers. For new entrants, it remains

static for the last 8 to 10 years and some of the competition have increased. One thing is people are talking about giving 3.3 lakhs as a starting salary for new entrants. But today we are not very far behind. We are already at 3.25 lakhs or something. So we were already ahead of some of our competitors and to some extent, they have caught up and have marginally increased. So we have actually taken a look at it, but we are taking a different approach, we want to focus lot more on trying to give internship opportunity to people in their final years, increasing, paying more stipend or whatever during that period because that has a very strong correlation to those people joining us. So we are taking a slightly different approach. We are not increasing the compensation broad based, but we are trying to put similar kind of money or more money on our internship program, so that we are able to convert better and the quality of people coming in will also be better. So we

are trying to take slightly different tactic.

Participant: And a quick follow-up there. But overall, is there a scarcity of talent in campuses or

what's going on there?

Pravin: No, overall I don't think there's any scarcity of talent per se, because more than a

million people graduate from technology industries and, I think over a period of time probably you may land up with a surplus because if some of the automation and other thing kick in, your need for the kind of talent we recruit today may also go down over a period of time. But today I think we are fairly comfortable and also you have to recognize that industry is today growing at 13% to 15%, as compared to 25% - 30% in the past. So you really don't need that kind of thing, so there is enough talent and obviously with the scale, there's a dilution of the quality, but that's something through our training program we are able to address and bring the

quality up.

Surendra: We have run out of time. Thanks everyone. Thank you for attending and thanks

Pravin.

Pravin: Thank you.