

Infosys Technologies Limited

2005 ANALYST MEET

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Speaker: Girish Vaidya

Girish Vaidya

Good afternoon and welcome to this session. I will start off with a little bit of self-introduction. My name is Girish Vaidya. I am basically a banker. I started my career with the erstwhile Grindlays Bank and I spent 24 years with them, joined them in 1975 and quit in end of 1998. I joined Infosys in January 1999 and I have been with Infosys. I joined as the head of the unit and now I have been with Infosys for the last 6-1/2 years or so.

So let me start with this. This is just to give you a perspective on where you are with respect to the growth. If you go by 2005 to 2004, we have grown by something like 61% which is more than the software services industry and the picture is even better if you compare the last 12 months. We have grown by a whopping 111%. If you take the revenue of Q1 06 over Q1 05, then the growth rate again is in the vicinity of I think maybe 170-180%. Exports have gone up 36-53%. Now having said that, let me caution you that the way we recognize revenue, the export percentages could change. So really a very short-term trend would not really indicate it but the fact of the matter is that the banking product is very much an international market. You cannot really operate in the national market. So regardless of where you are with the national market, you have to go international and so on, and in any case we believe that in a product range you cannot really have success in the international market and no success in local market because you cannot think of Microsoft being successful only in the outside US, Toyota being only successful outside Japan, I mean both have to be successful in the local market. So employees has gone up geographic footprint from 37 countries to 47 countries. So if you take that as the 12 month span, I think it is pretty remarkable growth that we have achieved. I think these are the issues which the core banking replacement is catching up globally, it's finally happening. It's no longer one of those things where people said that, yeah it will happen one of these days, yeah one of these days we need to change the system, it's gone. I think people are now saying, yeah we need to change the system. Having said that, it doesn't really mean that they are ready to change system from next Monday. I think it will take them a while to really figure out what the issues are, but what is driving is the sheer cost of legacy, need for agility in the market place and regulatory compliance. These are the 3 drivers which are driving this change. The interesting thing is the tier one and tier two banks are also joining the replacement race. It is expected that they will be the last ones to really come in and they have not started coming in. Why the last ones to come in because the cost of legacy, the large banks they are able to bear, need for agility and regulatory compliance are there but there are other ways of building that. There are other ways of building that, by getting service providers like Wipro and Infosys people which help improve their efficiency and so on. I think these people can afford it. But very clearly you cannot run a legacy system because the legacy system by its very definition, is something which is going to be the complex to run, it is not going to be easy to run, it is going to be expensive and so on. So given this particular scenario, I think the banks have now come to a stage, having exhausted all other cards, they have come to a stage where they need to actually start making the change in terms of their core banking system. Open system, the other important part is that open systems are making their presence felt in the mainframe legacy world. You see the mainframes _ immediate commitment that 5-10 years ago, banks used to have, may be 10 years ago. Today that is not the case because the open systems have scaled up. Banks have developed considerable confidence in the open systems. So that's the place where we are in and therefore we are seeing a lot of action and a lot of movement with open systems. This is cluttered vendor space, no clear global leaders are there. If you really wanted the final, if I had to sum it up in one sentence, I would just refer to the Oracle investments, stock acquisition of I-Flex which clearly shows that even the biggie like Oracle have seen core banking replacement as a business opportunity for the next 5-10 years. So I think that really sums up all that I have said here.

There are challenges. This market place is there, that does not mean that it is there for the taking. It is not again an easy plucking that's going to happen. Its an crowded market place, more importantly a fragmented market place. If you go across the globe, each country has some different regulation relating to banking. Each country has



its own traditional way of doing things which are different. So it really is not possible to have a very good product fit across the market. What it means practically is that you go to the market and you have to either add some features which means there is a cost of getting the product ready for the market or you have to add some customization which again is the cost of product getting ready for the market.

Consolidation of the industry has begun, Oracle I-flex is the case in point. That's an important development. There the biggies are now seeing sufficient incentive to get into this market space by paying a fairly top dollar to acquire or invest in the company, acquire is a wrong word at this stage. There is space for large players, it is a global market. Core baking replacement alone is going to be \$34 billion market by 2010. Now this really includes the total cost, it is only the cost of software alone. Indian vendors with size and scale continue to have an edge. Like in services, challenges of yesterday are emerging as leaders of today. This is an important point. When I was in banking, the Indian product vendor was as rare as dew on a summer morning and I mean you never really had Indian vendors giving products. It was all dominated especially the Asian landscape and the African landscape were all dominated by the European vendors especially from UK. Today those vendors are not winning any deals. These vendors are just not winning any deals. The deals are coming to the new challengers, okay, like I-flex, Infosys, _______. These are the other guys who are winning the deals.

The other key challenge is to meet the customer expectations, the banks, I was a banker myself for 24 years, so let me tell you banks are very inward looking or tended to be inward Indian looking because there is a saying in India and probably anywhere else in the world that the hand which gives will always be above the hand which receives and since the banker is always used to giving money, he always used to see that his way of doing things is kind of superior. I am sure people who have dealt with banks will agree with me about this sense of superiority that the banks at least in the past tended to have. Perhaps I was also guilty of that at one stage but not I have changed the side of the table have also changed. But the point I am trying to make is this that they believe that there way of doing things was the best and they built systems to perpetuate their way of doing things. If you went back to 70s or 80s, they truly believed that their key competitive advantage was in the processes they had built. Its only after a period of time that they realized that was not the truth, that there were better process which other people had come out with or rather banks had come out of it, that they could improve their processes and so on. But as a result what has happened is it is a bit of mindset change for these banks or their employees more importantly, to look at a system which may not exactly process a transaction the way they are used to. So I think that's a challenge. Spaghetti of systems - can the onion be unraveled? I do not want to mention the name of bank, it is in one of the developed country. It is a very large tier one bank. It has got close to a 100 systems running in its bank, 100 systems, close to 100 systems, when Finacle goes in, about 30 will be de-commissioned. But imagine that chaos that 100 systems running and taking care of it. Now its an outsourced operation, so it is all handled by another service provider and he will do an extremely good job of managing that spaghetti but that's about the challenge. There seemed high risk of the placement. There was always a joke in the banking industry. They said that every CIO will always go out saying I have prepared the foundation for replacing the core banking. So that the successor takes the challenge of replacing it and the outgoing CIO of course would have hedged his bets because if it succeeded he could say that he laid the foundation. If it failed, obviously he will not be found anywhere near. The point I am trying to make it is very simple, very simple to change the system but in reality very complex because we are trying to bring that change in some 5,000 and in some cases 30,000 people. And getting the mindset changed and getting everything processes to change and getting everything to fall in line in a smooth and efficient manner is not easy. Remember till Friday or Saturday, a bank will be working in the old system. On Monday, they will shift to a new system. It is not an easy challenge. There is a perceived high risk of replacement. Reference for SI led approach because of these complexities they want an SI, system integrator to come in who can take care of all these complexities. Heavily increased by consultants and analysts. These people because of some major they will do a lot of research before they come to you, they will do a lot of research. Even to difference get an RFP, believe me, is itself is an honour in some respects. There are vendors, not us, because we have crossed that stage. But there are smaller vendors who will just actually come and say I received an RFP from XYZ bank, DBS bank or something because just to get an RFP. They will not give out an RFP to any and everybody who wants it, they would have done a lot of research and would have zeroed it and then give the RFP to those people. So it is a pre-qualification that happens without you realizing it. India factor, now this is not such a big disadvantage but it is one of those things which will be up to a point the disadvantage beyond a point also an advantage. The fact is that when you talk India the first reaction of people in that it is a services hub. There was a bank from Chile which was talking to us and as it happened I-flex and us were in the final round and the executive director who has come to India said that when he told his chairman that he is going to India to buy a banking software product, the chairman couldn't believe it because in his mind the bank won't get a software product. The right place to buy was from US because US is the most developed market. So the product there will be most developed, so go to US and buy and why would you go to India. He was of course aware of us but he said India is really about services and we are not looking at services, we are looking at product right. He said yes, but today's situation has changed. There is a little bit of that, declining not a big issue and bit of an aspect there. So what is



that we will attack this market with, what is it that we will access this market with. We believe in Infosys edge. It is end-to-end capability, predictability, delivery depth and the configurative solution stack. I think what is extremely important. These might just appear words but I think there is a lot of behind it because as I said the challenge is not trivial, the challenge is perceived to be high risk and they would really like to go with people who have more than just one skill set of delivery, and I think Infosys together provides that skill set. Converting adversity to an opportunity, India factor has a silver lining in the sense, we definitely have a _ extremely attractive value proposition, not only just at the time of selling but subsequent support, etc. The sheer flexibility that we bring to the table. We are not price warriors but what I am saying we show flexibility, exactly the total advantage that India has had in the services sector same thing is repeatable in the product sector. Unique value proposition, so what are our value propositions that we are going with, maximize opportunity, minimize risk. We did a little bit of research and with our own experience we came to the conclusion that basically what the customer is looking for the bank is looking for, is minimization of risk. They want to make sure that things move from one platform to another in an efficient manner. That's the kind of necessary condition. That's not sufficient. Next stage is they want to see the product, bring certain value and that value is in terms of business agility, that value is in terms of growth, in the sense that the product should be scalable and process efficient, all three are very very extremely key. So they are looking for these three which are clearly on the opportunity side and they are looking at risk which is on the product and technology, is the product scalable, is the product robust, is the product architected well, is the technology future proof, is it vendor viable in the long term, is the implementation and support strategy good and actually does it work on the ground. Focus on investment in the right hot buttons is what we have already done to use these things. Clearly our products have come out, the core banking I am talking about, as the most scalable core banking solution. Flexible beyond parameter; see when the product vendors talk about flexibility what they say effectively is that you can parameterize the way you like but I think in today's competitive edge we need to go beyond parameterization. We need to go to a stage where we can have scripting which can bring out all kinds of features, build all kind of features into the product and differentiate yourself in the market place. I mean we have supplied products to the core banks, to so many banks in India and each bank is able to position it differently. So that in itself shows the ability to be able to differentiate the product when actually deployed is a very key factor in this game because if the product is too rigid and therefore each bank is going to look like the other bank then we have lost the game. What is important in that you must give a lot of freedom or the ability to the bank to actually be able to go and change it, not change the product but to deploy it in a way which makes it unique. The opening of the service based integration, that's _ investment we are putting in, BPM integration, business process management. Now this is something again which has become very important because what the banks want to see, coming from the process efficiency part because they want to see a very quick and very efficient way of improving the processes. Processes improvement is not easy and if the software process improvement then half your work is done. So, they actually want to see a software which process with process improvements. Front-end and banking separation we have done which again will provide a lot of flexibility, web base to the client which allows you to deploy at a fairly low cost.

We have an impeccable delivery track record. We really believe that ultimately delivery would be the moment of truth, we can fix your time here, give you all kinds of presentation but ultimately it is on the ground and I really feel satisfied when the customer say it is our system because then I know that they have accepted it. As long as it is your product or your system, I know there are still some hurdle to cross and again it is not trivial, it takes a lot of brains, it takes a lot of mindset change. You know there is a famous saying maybe you would have heard of it about this IT system implementation. There are five stages of IT system implementation of a typical IT project or typical IT system implementation. The first stage is excitement because people are completely excited about something new coming in and so on and so forth but if there is no proper communication, if there is no proper chain management in place, then that stage of excitement is followed by a stage called confusion. People get confused about what exactly is happening. Human nature is such that when the project starts, the negative information starts flowing and since people cannot live in a negative state of information, they start to search for the guilty. Who is the one who brought me into this project and which is followed by punishment of the innocent, people who had nothing to do with it get punished in an organization and it ends by the distinction of the uninvolved. People who had no decision, no involvement in the decision will get promoted. So many people manage their career without taking any important decision in their life's time, so there are many stories in IT implementation which have gone wrong. It started off with an innovative system public sector bank, change was not easy. Suddenly we started finding a lot of resistance, we could not on it. When we started this thing called executive appreciation program, we started getting the general managers into worry. It has nothing to do with technology, its all HR. We started getting to them there and we didn't even show them anything to do with the screens and all the gory details about how you navigate from one menu to another, they were general managers. We said look this is what the product is. This is how you can deploy it. This is how your bank has chosen to deploy it. Because many times the product gets a bad name because the bank has chosen to deploy it in a particular way. _ There is a process integration right. One of your office will have a certain process to follow. How many of us actually follow the process, very few of us, right;



but when you are considering the product, they decided to follow the process as written down. Certainly, at the branch level there was confusion because they are not used to following this process. They had to manage with shortcuts, all of us do that, right, and banks are no different. So there was a lot of resistance from the people down the line to this change and the people at the head office level were saying no no this is the manual and the manual needs to be followed. Now, the net result was they agreed to change certain things in the manual which had become kind of dated, which were relevant 20 years ago but no longer relevant. So what I am trying to just say is you have to take the view of a product implementation which was much wider than single technology implementation. You have to look at it as a far bigger thing. So we really believe in that and we pay a lot of attention and we do not believe in the saying that, oh. it is your problem, _ _, we are doing it right way. We partner with the banks and also let's have this executive appreciation program and we have made this a standard practice. It is not again, I am trying to say that this didn't come across only in a particular bank, as you go into every large bank, there is an inherent resistance to change and we have to manage that. Strategic segmentation we have in place, focused on tier one and large regional banks. We build in alliances and partners to extend reach, delivery. We could not have achieved all this without the partner's help, focus on achieving brand leadership. Again, you have seen Finacle being mentioned more commonly, more regularly. So definitely the brand has made an impact.

I will just quickly in the next five minutes cover the Finacle ICICI study. Why ICICI, because you see it is a very good example of a bank which started in 1994 and has reached leadership position. When they started the business, they looked at the market and realized there were two segments. One segment was being serviced by the public sector banks the other segment was being serviced by private sector banks. Each had its strength and each had its weakness. They decided to come out with a technology platform and the technology approach which could help them attack both the segments and I think that was the vision. We were the technology partners, so its an excellent example of how they could use technology to really access the market and emerge as the second largest bank with no more than maybe 500 branches, right. I mean, they don't have more than 500 branches. They just have 500 branches or thereabouts. They have become the second largest bank in the country overtaking so many other banks.

So they deployed our Finacle Core Banking, including retail and corporate banking, branch solution, consumer ebanking, corporate e-banking, that is the internet banking, mobile and CRM solutions. Of the solutions that I showed you in the earlier slide or a few slides ago, we were the ones that they went with. Integration of Finacle with multiple applications to provide seamless straight through processing of transactions. I am sure many of you, if not all of you, would have experienced that when you do a transaction on ICICIdirect.com. Ultimately the backend is Finacle, everything is into Finacle. Creation of central regional processing units because Finacle allows you to do part processing now and other parts at a later time. You could actually divide the work more efficiently to make sure that you give customer service in a quicker manner. Use of branch network was therefore was largely for aggressive customer acquisition. Use of powerful CRM features to improve customer simplicity and focus on cross selling. So, the entire game that they played was not a banking game but a selling game supported by very strong technology platform and of course with a lot of imaginative marketing and sales strategy. Ms. Kochhar this is what she had to say, "Our objective of creating a universal bank providing end-to-end financial services clearly required solutions, which were based on new generation technology, offered end-to-end functionality and were highly flexible and scalable. Finacle offered all those and much more". This was from Ms. Kochhar. What are the results, tremendous saving in TCO, no comparison at all. People go there ask for the cost figure and when the cost figure is given, cost figure of technology they just can't believe it. Back office operational efficiency, customer centric banking with centralized operations account opening, cheque processing, etc. which does not need to happen in the front-end, leveraging capabilities of multichannel delivery. They went in for internet banking, cost efficient operations by shifting routine transactions from branches to other channels. I have got a slide on that, so I will just come to that.

PK Vohra had just to say, Finacle has enabled ICICI Bank Limited to achieve competitive advantage by enabling rapid roll out of new products, faster customer service and reduced time to market. This is an interesting slide, if you see the transactions, 94% of the transactions in 2000, just about four years ago because this data is for 2004 not for 2005. 94% of the transactions were through branches, 3% through ATMs, 2% through the internet and call center was 1%. And look at what they achieved in four years. 25% of transactions only through branches, so at one stage they were acquiring three lakh customers. I am sorry to say at one stage, probably they are doing it even now. Probably, they are acquiring three lakhs customers a month and I do not for how long they have been acquiring but just think of it this way that you are a current three lakh customers, imagine the additional branch space that you will need to invest in. But by pushing a lot of transactions in percentage terms out of the branches, they have really very economized on a very important resource which is the branch areas. ATMs have gone up from 3 to 43%, internet from 2 to 21%, call center transactions from 1 to 11%. So again it is a fantastic story where technology was used effectively to go on a _____ acquisition mode and achieve that kind of growth with minimal



investments as the main new investment and pushing it forward. These are the accolades they have won, Best Multichannel Strategy, Best Consumer and Corporate/ Institutional Internet Bank in India, Best Retail Bank in India, Second Best Retail Bank in Asia. So you know, very much something which is to be proud and something of great significance. I do not think any other bank has achieved so many accolades. That really brings me to the end of the presentation. I hope I have been able to give you a perspective of banking domain where it is headed and what are the opportunities, how are we are equipped to benefit from these opportunities and why we believe that we had a good opportunity to benefit from that ______. That is now clearly validated by the recent development of investment of Oracle in i-Flex. Thank you. I would like to throw the floor open for discussion, questions and answers because I am told that at 3:30 we have a hard stop so we need to stop at 3:30. I think we have 10 minutes. Any questions? I think somebody had a question about Oracles investment in i-Flex right?

Can I take that question, because before the thing started, he asked me and I said, look it would be definitely a question that will come up. Let me just make a few statements and string them together and come to a some sort of a conclusion.

A, it was not a surprise. It was expected. Rumors were there. Oracle's strategy was very clear. Last year, 2004 actually, I attended their conference, Oracle conference in Shanghai and I came back and immediately sent out a mail saying that we can expect an acquisition from Oracle because it was very clear interacting with the senior people, Mark Gibbs and so on, that they were looking for something. So it happened. That is point number one. Point number two is that what has changed actually. Today if you really see what has changed is that i-Flex is now part of a big company and the way we see it, we were always part of a big company. So to an extent i-Flex has removed some disadvantage that they would have had in the market place. The third point that has happened is that this clearly validates that the opportunities for core banking are there in a big way because otherwise you won't pay close to a billion dollars just to acquire some 61% and if you extrapolate that with the remaining stake we are probably talking about \$1.4 billion or somewhere there. It is a large amount, so the opportunities are there. So that I think is another good news. The other thing that Oracle will do is that, as I said the banks need to do it but there is a lot of reluctance to do it because of this perceived risk. The way I would like to explain this that there is a business pain which the banks are undergoing, that pain is because of inflexible systems, the pain is in terms of cost of managing the system, that pain is in terms of managing that sheer complexity, so all that pain is there. So, when we really look for a cure, particularly from the bank's perspective, the cure is also not painless. There is a lot pain involved in that cure. AT least that is what they perceive. The reality is that is what they perceive. Because there is of course that pain if you put a large amount of money on table to change everything and a whole a lot of other challenges, training the people, changing the processes, getting used to a new system. How do you integrate all this spaghetti of system that is around; it is a huge challenge. Now a player like Oracle coming will I think activate the market. So I think we could see a little bit of fast-paced action and I think we could benefit from that. The other point that I would like to make is that we had received assurance from the highest level from Oracle that because we support Oracle database, so to that extent we are very much Oracle is also a partner and a competitor because of a very peculiar situation but we have received assurances from the very top level that they consider our partnership, our relationship to be extremely valuable and they have actually demonstrated that to their credit. We were trying in a deal in Hong Kong and after this happened and the Oracle local manager or the Director or whatever they call him actually sent out a mail to the bank saying though it has happened and now we are aligned the i-Flex and we have invested in i-Flex, our commitment to Infosys continues and as far as this deal is concerned we are partners with Infosys and we will continue with Infosys. So I think that commitment they have shown. The other related point that I would just like to make in this is that having said all that, at the end of the day market really decides who is the winner, but let me just give you one illustrative example, SAP got into banking solution or banking products some four years ago. They put in some more than 2,000 people into that development of the product and they haven't had as much success as they would expected, they haven't had. They have won some deals in Germany but the feedback that we get from people like Gartner is that the product, SAPs product is very much a Germanized banking solution, to internationalize it, they need to work on it. So, clearly what we are saying is that the size or the fact that you have been successful in the past and in your industry you say past success is no guarantee of future performance, so it is a bit like that. SAP is there, they are the kings, they have the product. Who else can have that experience of enterprise products, they are the kings. But in banking they have not been able to get there, not yet at least. So the reality is we see the development, overall we see it as a positive development. It will bring in pricing discipline as Nandan mentioned in the morning, it will probably push up the price points but more importantly it will I think activate the markets in a bigger way.

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Girish Vaidya

we haven't somehow because are more active in Europe and we haven't been all that active
in Europe. So we have not had a head-to-head fight much with Where we had head-to-head fight some
deals we have won and some deals we have lost. So I do not think in terms of implementation track records,
overall we definitely have a better implementation track record. We have worked in more difficult countries in that
sense. So, I think at some stage we will meet in the market place, in a more direct and more common
way. But I think in some respect if I have to be very honest, I-Flex was an interesting competitor because they
brought the same value proposition as us, a lot of value proposition is common and I think they probably are going
to be a more interesting competitor to work with Oracle connection because for the first time we are trying to
combine an India capability with an international marketing capability that Oracle gives. So is there, but
overall we feel that our product can easily stand up to them.

Participant

Girish Vaidya

In theory, absolutely yes but at the end of the day, it will depend on the capabilities of the product, capabilities of the implementation and you know, yeah Oracle will definitely open there or earlier than maybe it would have opened if it were just i-Flex, but apart from that, the product has to have required features, the implementation track record has to be good, the support track record has to be good. So as long as you get these fundamental rights, I do not think and remember the US market for tier one banks is yet to start opening up, is yet to start opening. They have not really started investing in a big way, because this thing that I talked about the business pain and pain of re-org, the ability of US large banks to bear this business pain is higher, so they don't need to change immediately. They can keep on doing outsourcing this that and the others. So that is a slightly different ball game. But when it happens, I do not think other than vendors like us will get any disadvantage whatsoever. If we keep up the kind of work we are doing because (A) we already a large well-established company. If we can get our team up, we can deliver properly, if we can have a product which meets all their requirements, overall value proposition is good and combining with our SI skills, we can prove to them all these spaghetti systems, we can put back without a problem. I don't think that we will have a disadvantage.

Participant

Girish Vaidya

Well, I think a couple of these, one is the perceived risk of change. Secondly, they had a number of cards to play and please remember when I was in ANZ in Melbourne in 1996-97, we used to have 4,000 people in the technology departments. So these banks have large number of technology department in terms of people. The first thing they did was outsource all that. Now imagine if you get rid of 4,000 staff, you save a lot of money outsource. So they had a number of cards to play and they kept on playing these cards because change was so fundamental, such a basic change. Now please remember that if you look at the technology side, you are running a mainframe, you are a legacy bank in US and Europe, you are running a mainframe. So your skill sets are what, COBOL___ etc. Now open system guy comes in. Everybody feels threatened because you have C, C++ it is a completely technology and if you are 45, the last thing you want to do is to study at night what you have done for the last 20 years and you don't _____. So, there is a huge amount of resistance that is there at the top level and if you are sitting at the top you see all this and say let me play as many cards as possible to avoid taking that big . My hypothesis is there is a time that comes, its like any other human activity, the activity if you consider very complex, very difficult, and not ____ ____, you will put it up in the last minute you will start looking at it. My submission is that I think the last minute is important. Can you consider the time has come that the big banks have started considering it as urgent. It will take them for a while to actually actionize from the time a bank says, I want to now change to the time they actually make a decision, it could be too late but the process has started.

Participant



Girish Vaidya

Oracle will make it move faster because with their greater skills. So the market will get more excited and if we you are smart could benefit from that.

Participant

Girish Vaidya

Market developments part, perhaps better and we could benefit from that. I think it is 3:30, so, I am sorry we need to stop here. You have my contact details and so on and many of you, I know you personally. So please feel free to either call me and send me an e-mail and I will be delighted to provide you with whatever information. Thank you. Nice having you here.