

# INFOSYS ANALYST MEET 2014

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## CORPORATE PARTICIPANT

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**Mohit Joshi**

So folks just by a way of introduction, Mohit Joshi – Head of the Financial Services business for Infosys based here in London. On Monday, I will actually complete 14 years in Infosys across North America, Europe and Latin America. Prior to joining Infosys, I used to work in banking myself with ABN and ANZ in India. I have met and spoken to many of you but I thought I would do a quick introduction.

It is quite challenging really for me to do a discussion on the state of the Financial Services industry to a room full of analyst and bankers but hopefully you will agree with most of the trends that we are seeing and our strategy to the way we are responding to the marketplace.

Having said that, Sandeep if you just go to the first slide, after the Safe Harbor. Yes. What we have tried to do over here is to list down the industry imperatives, the way we see them from a Financial Services prospective and then the industry imperatives will then lead to the key technology challenges that our clients are facing and how they are responding to them and what has been our success there.

The industry has changed dramatically I would say since the crash of 2008. The first and most important point is the laser like focus that almost everybody has on the cost to income ratio. This is true regardless of whether it is a Retail bank, whether it is an investment bank and regardless of where they are in the world. Most of CEOs and COOs and therefore CIOs are focused on making sure the cost to income ratios is in control. The interesting thing is I think this is regardless of how successful the bank has been in managing this ratio, whether the cost to income ratio is in the 70's or just last week I met with a European bank, that had a cost to income ratio of 41 but they were still focused on driving it down below 40. Obviously this is a legacy of the fact that after the crash of 2008, it was fairly clear that cost have tended to be more sticky while revenues have disappeared. This obviously has an impact on our technology spend and key imperatives for Financial Services companies.

I had spoken earlier in the Q&A about the fact that I think banking is becoming the most heavily regulated industry in the world and the penalties for non-compliance have been extremely high in terms of fine. This has meant that a significant amount of attention of the entire organization, including the technology organization has gone towards meeting this agenda. Just in the past few years the focus has moved away from supervision towards regulation. This is both an opportunity for us and a threat because obviously the fines are leading to stringent cost control in certain areas.

I did not want to focus about on the changes in consumer behavior and this I think has been a common theme in all the presentation whether it is Sanjay or it is the presentation that Surya and Abdul had made. Let me just give you one example. I was speaking with the Chief Operating Officer of a large European client of ours. He mentioned that they have more people logging into their mobile application in a day than enter their branches throughout the year. When you are talking about metrics like this, it means that the focus has very clearly moved towards more technology enabled things. The focus has moved more towards the web, towards the mobile. Even where branches are an important component of the client's landscape, so Vishal and I met with the CIO of a very large regional bank in the U.S. and the CIO and CEO spoke about the fact that historically the branch network and the relationships that they build at the branch were core to their brand identity, but now what they want to do is take what was so special in terms of experience at the branch and transfer it to their web and mobile applications. This change in consumer behavior has important technology imperatives associated with it. There is continued margin pressure as most banks work towards minimum return equity commitment, most banks are working towards

12% to 15% range. We spoke about the cost element but this also means that banks are looking to find new revenue streams. The competitive landscape has changed a little bit I would say in the past 5 or 6 years. There has been a degree of consolidation and there has been entry of new players so, whether it is an Amazon Lending or it is Apple Pay, you are seeing new technology players entering the landscape and this has really not had an impact so far from a revenue perspective but from a mind share perspective this has been very significant. You have the entire C-suite now worried about what impact will these players have on us and how do they react?

Finally the technology landscape in Financial Services historically has been extremely fragmented. I will talk a little bit about this later but the average large global bank has 6,000 plus applications. A lot of the applications were written in the 1980's and 1990's. So the challenge of legacy is very very significant. This has meant that the cost and the complexity and the importance of technology in banking has stayed center stage within these firms.

So these are the key industry imperatives. Just to sort of round it out, I think a comment I had made earlier, was we should not look at these only as challenges. The key sort of message that I want to drive over here is that in my 14 years and longer if I take my banking experience as well, I have never seen technology be as central to banks as it is today. I think most executives in banks are looking towards Silicon Valley for solutions, they are looking to technology for solutions. What we are looking to do, we are looking to bring the solutions, we are looking to bring Palo Alto to New York and London. The opportunity is very significant. Despite the revenue drops for most of our clients, their technology budgets have not dropped in absolute terms since 2008 which means that as a percentage of revenue therefore they have continued to increase. This is the key sort of message from what we are seeing in the industry.

If you will move to the next slide Sandeep. I would just like to give us a perspective on our practice. This includes Finacle which I do not manage but excludes Insurance. So Financial Services continues to be the single largest contributor to Infosys revenues. I think of more importance that that is the list of marquee customers that we have built up over the past many years. As you will see on the table to your right, this is across geographies, this is across sizes of banks in terms of their key area of operations and this is across the entire Financial Services landscape. This marquee customer list really gives us a huge degree of resilience and it gives us a huge amount of headroom for growth. If I look at our top ten clients in Financial Services, their average technology spend would be close to \$2.5 bn. if I look at our revenue on average it would be over a \$100 mn, but it still gives us a very significant room for growth.

Secondly, most of this have been relationships at least for a decade. So there is a level of trust here. There is a journey that we have covered with these clients in terms of moving up the value chain and so these I think are central to the practice that we have built up in Infosys.

So if we move to the next slide, I just want to focus on one very key element that our clients are asking for sure. I think this is a very key element of our strategic response to the market. When we speak to our clients, I think the one thing that they always ask for is what is the degree of subject matter expertise that you have built-up in business? The second question is about, what is the innovation that you can bring to us? This slide really covers the subject matter expertise piece. What we realize that I would say about maybe about ten years ago, but we have really built on that in the past two or three years is the degree of sub-vertical expertise that we need to build is very significant. This is what our clients are asking for and interestingly this is what our employee is also asking us for. So when you speak to clients, they are not really looking at what is your Financial Services expertise. Indeed they are not even looking at what is your capital markets expertise, they are looking for what is your sell-side expertise, what your buy-side expertise, what work have you done on the financial infrastructure space, what work have you done in the fixed space, what work have you done in prime brokerage in equities. If we look at the employee base this is exactly the sort of skill sets that they also want to build up as they mature as professionals.

So overtime we have built up a very strong techno-functional practice and this is something that we continue to focus on growing and I believe that this is strong differentiator for us. So now when we speak to our clients, we really do not talk about this is what we are doing in banking. When we speak to corporate banks, we talk about the trends that we have seen towards utilities, both internal and external payment space. We talk to them about key trends that we are seeing in trade finance technology, I speak to them about the refresh cycle that we are seeing in corporate banking portals across the world. So this gives us a huge amount of meat to our discussions. Like I said earlier, a strong execution capability is an absolute must, those are table stakes. But if we can tie that in with subject matter expertise and an innovation capability, I think it is an unbeatable combination. Why we are looking to build capability or while we have built capability across the board over there? I would say that in the payment space, in the capital market space and the risk and compliance space, we have built up world beating practices. In consumer banking and in commercial banking, we are also trying to leverage on everything that is happening outside the industry, whether it is in Retail or it is in the consumer product space.

So if we move to the next slide, I will now talk about the themes that we are seeing. We spoke a little bit about the key trends from an industry prospective. How do these translate to focus area from a technology prospective and these are the three key themes that are seeing in the Financial Services marketplace. The first is industrialization and despite the picture that you see over there, it is really the focus on complexity and cost reduction that I will be covering. Digital transformation is obviously a pervasive theme across industries and this is extremely true with a different flavor for Financial Services as well. When we are saying digital, I am also covering large elements of the cloud transformation that is happening within our clients, of the huge focus on analytics and big data. The third, which is probably unique to Financial Services and maybe life sciences as well, is the focus on risk compliance and information security. I will cover each of these three themes in some detail in the next few slides.

So Sandeep if you move to the next slide, this is really what industrialization is all about. Industrialization is about cost reduction, it is about complexity reduction and it is about unlocking value. This theme is largely focused on the control of the cost to income ratio that I had spoken about. This has many flavors to it. The simplest flavor is the vendor consolidation piece that we see happening across the industry. But if you were to ask me the single biggest trend from an industrialization prospective is the huge focus that our clients have on AI and automation. I believe that this has the scale to really dramatically change the cost landscape for most banks. If we look at the complexity reduction piece, we see a huge amount of focus on rationalizing the application landscape that exist in most banks. So I meant earlier most global banks have 6,000 plus applications. So there is a huge opportunity and we have done enormous amount of work to help them simplify this landscape.

Finally moving on to the business value piece. This is very interesting because this is where a lot of transformation is happening. While some transformation is happening on the digital side, there is equally transformation happening on the industrialization theme. I think utilities are a great example of this. This is where I think specially in Financial Services, most banks own the entire value chain, front to back. But there is an opportunity to strip out significant cost from the middle and back office and transfer them to multi-tenant utilities. In certain parts of the business especially in the capital markets business, there is no real way to get to the target ROE except if you strip out the middle and back office part. We have worked with several clients as they developed their client's utilities. Indeed we worked with one of the most important utilities as the sole technology partner in building out their platform along with six other banks in the KYC and client onboarding space. There is also value to be unlocked from the Agile and DevOps movement. Agile obviously is about developing software in our faster way. But the challenge that we see with many banks even if you do let's say a two or three or three way scrum cycle and you develop some functionality, it still takes three months to get into production. So the whole point of Agile is lost unless you can combine it with a DevOps mindset as well. Indeed this is one example where for a

large client of ours, a large bank as they were looking to go in DevOps, we very quickly realize that they were very few examples within the Financial Services space of this happening in a consistent way across the enterprise. So we connected with the West coast-based technology firm. This again is how we are trying to leverage the ecosystem of clients we have within Infosys. This is what we are seeing on the industrialization side. I will give you a couple of examples on the next slide.

The first example has to do with you know with application decommissioning. This is portfolio rationalization that we did for a German bank. Essentially again we looked at their Tier-3 and some of Tier-2 applications and were able to develop a roadmap and decommission something like 250 applications on a price per application basis. The second example you see is about using automation in a very significant way for support. So a part of this is our own intellectual property, part of it is a third-party tool. A dramatic reduction in cost, a dramatic improvement in mean response time. But the key message that I really want to convey over here is that in neither of these examples is labor arbitrage or labor cost a significant factor. The commissioning was done on a price per application basis and there we were able to give significant savings from automation I think it is important to note that this portfolio was already set of optimized by using offshore right. This was an offshore to offshore base transition when the savings came only from automation. This is very significant and we believe that this is replicable across many-many clients. That is on the industrialization piece.

If we move to the next slide I just want to talk a little bit about Digital. I think this has been spoken about throughout the day today but obviously very significant for banking as well. Digital for banking is really a journey. It is a journey about fixing the core. How do you make sure that a lot of the code that was written in the 80's and 90's when banks were really much-much more simple in terms of the product offering that they had, in terms of the complexity that their products they had, how do you make sure that you are able to reengineer the core to be able to provide the sort of channel experience that you need. Digital also is about making sure that you are able to run a consistent BPM process across the enterprise. We have done this for a large Dutch Bank for instance where for a number of things historically you still had to go to the branch, you still had manual processes, you had people within the bank having to touch multiple applications. Implementing a common BPM layer across the enterprise is something that we are seeing with a lot of banks as a way to speeding up the process but also as a way to reduce operations cost. There has obviously been a huge focus on channels whether it is the mobile or the internet. This continues to be a key spend area especially given the integration with social that is needed. The fourth, leg in this journey is about making sure that you are able to enable commerce using the digital technologies. Here there is a huge focus on mobile payments, things like "Next Best Offer and Next Best Action". And finally, the last and final stage right which we see banks aspiring towards is towards building a digital ecosystem where the bank really is at the heart of a customer's financial life. If you think about it, most banks have a huge amount of data on everything from a customer's spend patterns, to his propensity to spend and to the areas where he wants to spend. The ability to team up or to partner with other enterprises to cater to let's say a customer's Insurance needs or mortgage needs or even a holiday need, is something which banks are aspiring towards once they can really utilize all the data they have within the enterprise. This is how we see the digital transformation agenda working out for our Financial Services clients. Obviously we have clients at different maturity levels and clients who are working on multiple things at the same time. But we believe that this will remain a key focus area, a key imperative, and a key revenue source for us for many years to come.

If you move to the next slide Sandeep. Just want to give a couple of examples over here. These are really powerful examples. The first is about using our Edge suite of solutions more specifically the virtual assistant, to enable one of our clients to be much more responsive, for the tool to be able to suggest options to the customer. This is a case where we have been able to use our platforms to help one of our clients become more effective . The second is about simplifying a

customer's journey within the bank. If you look at something like account opening, historically for this client, it involved trips to the branch, it involved interactions with the branch, it involved 24 screens that the customer had to navigate through before they were able to open the account. There was an 80% dropout rate, that is 80% of customer would drop out without opening the account. As a result of this program that we did, we were able to reduce the number of screens to 4, we were able to have 50% of customer do open their account only using the online channel. As I had said, this was 0 earlier. The average time for activation was down to under a day from 23 days earlier because obviously it involved interactions with the branch and it involved physical movement of paper. So this is to my mind a really powerful example of how technology has been to enable significant cost savings and a significant revenue uplift from the customer, apart from the huge improvement in customer satisfaction ratings. These are two examples of where we are working with our clients on their digital agenda.

Moving from Digital to Compliance, Risk, Compliance and Information Security is a key focus area. We see for many of our clients something like 40%+ of discretionary budgets being spend on compliance programs and more if you are a capital markets focus player. There is no end to regulatory mandates in sight, all of these are time bound and all of these carry very significant penalties for non-compliance. Obviously this has everybody's attention. What I think sets us apart in the compliance space is the fact that, to give an example, we have built up a strong consulting capability using our management consulting and our Lodestone expertise. For instance we are able to work with our client to make sure that we can work with them to build a global optimized KYC process. So if you are a bank working in multiple jurisdictions, one regulator for instance may require that you have a maximum password length of eight character, another regulator may require that you have minimum password length of 14 characters. How do you make sure that you are able to harmonize and optimize your processes globally? Below this we have built up a very strong package implementation capability. So a lot of stuff that is happening in the AML space, the KYC space, is based on industry standard packages like an Actimize for instance. We have built up a lot of capability in configuration, customization, implementation, tools, test harnesses, test cases that then allow us to speed up these implementations. Obviously below it lies a very strong execution capability. So risk and compliance is a fast growing area for us. We see especially KYC, AML as key spend areas. Obviously with CCAR, Volcker, EMIR, or Dodd Frank, there is no shortage of focus areas over here. I think for the next 12 to 24 months, this will continue to be a significant spend area for our clients and a focus area for us.

Just to give you a couple of examples in the next slide, we have been working with clients globally on their compliance programs. We work with a very large and truly global bank where we are doing an AML implementation across 60 countries. This is AML for their corresponding line of business. We are doing the implementations, we are doing the program management and we are integrating it with the case management tool. There is a data lake using open source that this rests on. So it is truly a significant program for this client and we are doing this almost on an end-to-end basis. For another large Wall Street firm, we are building out reporting factory for them so that they can do reporting across multiple jurisdictions, across multiple regulatory mandates and ensure that this reporting is accurate, it is consistent and it is timely. So this should hopefully give you a flavor of the kind of work we are doing in the compliance space and the attention that it has from our client.

With this I will just sum-up in terms of our business. Hopefully I have been able to give you a perspective on the key focus areas and the key trends within the industry, a sense of where we see the key technology imperatives and the three focus area in terms of industrialization, digital and risk and compliance.

Finally, I think what we have been able to build is a very strong execution engine and top that up with deep subject matter expertise and finally build that innovation capability both from within the

Financial Services business but outside the business, as well from areas like Retail and Telecom, to build a strong and I think a very powerful practice.

Just to conclude, I think technology is just very central to the Financial Services space. I think this will not change and I am very optimistic about where Financial Services technology will be in the next year and the years beyond.

We are happy to answer any questions

### **Moderator**

Yes, any questions.

### **Ravi Menon**

Hi, Mohit this is Ravi from Centrum. I have two questions. One is the banking side you have extremely comprehensive sub-vertical domain expertise. Do you have something similar on the Insurance side as well? That is the first question.

### **Mohit Joshi**

Yes. I do not run the Insurance practice and the numbers you saw here did not include Insurance. But yes absolutely, whether its Property & Casualty or life or Annuities & Pension there is a significant capability there has been built up there as well.

### **Ravi Menon**

Second question is about the use of the Edge platform. I thought Dr. Sikka when he spoke about not creating something proprietary or not creating something industry-specific platform. Isn't this contradictory to what he was talking about, using just Open Source and trying to just rely on that?

### **Mohit Joshi**

What I was talking about was the fact that utilities are starting up all over the place in the Financial Services world. We have seen that. The example I gave of where we worked to build our KYC client onboarding utility, is work that we have done for our client. This is consortium with six banks to build a utility in the KYC and client onboarding space. We have built it. As and when we build our own utility I am absolutely sure that it will incorporate a significant Open Source component and a consortium of partners as well because building it by yourself without an anchor client, I do not think is the way to go.

### **Viju George**

Mohit recently we are hearing use of some large banks taking their operations in-house, basically more of in-sourcing. Are you seeing this is by trend or is this sort of a one-off? If that be the case do you think that the growth pie for the third-party space will be moderating than it is to a couple of years back and if so, why is this happening?

**Mohit Joshi**

Yeah, I think this is an important question. I will give you three flavors for this. The first is that this has been happening all the time. People have been talking about banks in-sourcing in the 14 years I have been in Infosys that this is a year when banks will move everything back in-house. Somehow it has never happened to the size and scale that we have feared. So I do not think that this time suddenly banks will take a huge amount of their work or almost all their work in-house and remove room for third parties. I think the second thing is actually a very interesting trend, I have actually noticed that whenever client of ours opens a captive in India, our business actually increases and that is largely because the confidence within the residual business community in the bank that high quality work can be done outside of India. I think the third piece is some of this insourcing is driven by the huge focus that regulators are placing on banks, to make sure that banks really understand the third-party relationships that they have, to make sure that banks understand that the third-parties they have may then have used fourth, fifth and sixth parties, so that they understand the entire chain which is delivering mission-critical services to them. This regulatory focus actually in an odd way is very good for us because (a) banks are consolidating to partners that they have worked with for a long time and (b) a huge amount of work which is historically been done by subcontractors, local firms and smaller firms is going away because banks realize there is huge risk to working with smaller untested partners.

Hopefully that answers your question.

**Moderator**

Thank you very much ladies and gentlemen. I think with that we come to an end.

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