

**C.N. Raghupati**

India have huge power loss. We Generate around 100 megawatts of power and we lose 33% of it. Losses in places like Meghalaya and North East are as high as 86% and it means we will make more profit without running utility. And translating that into numerically into financial numbers we have 26 states out of which there are 9 union territories which is 72 distribution companies and 9 other smaller distribution companies. We lose Rs. 100,000 crores every year. So along with Nandan in Infosys when Nandan was our co-chair we wrote out report for IT and the power sector. So we are setting up a system for the APDRP which is about weekly internet connection and curtailing our aggregate technical losses and commercial driving transparency and driving accountability.

The step 2 we did was managing assets. If any of you would go to the distribution companies in the villages you will find that the transformer has blown off where the farmer just opens out his transformer, brings it in a tractor to the nearest electric office. He is quiet stressed out or whatever it is. Nobody knows where the transformers are there, nobody has done and investigated. Now this is the second one and the step 3 is the market.

So what we have done and what we are going to show you today is possibly we are going to get it converted into a platform. What we did was we created a solution which maps out the entire city using GR AS platform which has a mutual billing connection module. It helps you do an energy audit using modems. We have designed modems which sit on distribution transformers and on each distribution transformers what you see at the end of your street which they supply the entire street or your locality. So if you are at Karnataka if you walk out you can see an Infosys designed and Infosys manufactured modems which are attached to the high tension meters on top of the transformer. This reserves the data which says that input data in that particular street was so many units of power and it also gives you the output data so at any point in time you know where the transformer is. The beauty of this is we have just about signed up with what is going to happen, the other thing which is happening in the utility spaces most of these are going to go as franchisees. Torrent power was the first one which is famous. Now for those of you who are coming from Bombay, Nagpur, Jalgaon and I think Pune have been given to franchisees.

We have signed up with Crompton Greaves which has taken the Jalgaon franchisee. We have been hosting this as a platform for them charging them per consumer per month. So the revenue model is going to be again a Opex model so any franchisee who is going to take the franchisee for a particular area for example if you take what's happening in Madhya Pradesh where I think Sagar and Ujjain have gone to the Aircel. They will be on the platform and our platform is there available. Our smart grid platform is there. We will just look out to that and start the operation.

**Debopriya**

So basically what we have built up as part of this program is mainly three things. One is the revenue management system. Second is we have digitized and put all the assets and the consumers of Karnataka on the digital map. So what we see today is sub station. This is the 56 kv and then it goes on the way to the feeders and then the distribution transformers. These are the LT consumers and it also goes to the HP consumers. So what we are going to demonstrate today is small news case which is running in the system where we can look up at a particular asset on the digital map so we have taken a place called Mandya which is in Chamundeshwari Electricity Company. We will look up an asset and then we will match it downstream to a distribution point which is in the event of because of electric pole and then we will show a upstream mapping to a sub station.

**C.N. Raghupati**

We wanted to show you three to four things. The first is we have moved away from providing only software to providing total services like from modems to the communication to hardware by doing the survey. So it is a total systemic integration market and we intend getting system integration-product and India is example in this project. We had 27 partners including partners like NIIT like for surveys, partners like Reliance Telecom. It is essentially a software the way we see India moving it is going to be 3 things ,for example if you take an Electrical technology, it is an Electrical technology advancing into an electrical automation as a sub station, in telecom technology which is 4G, plus software, all three are going to come together in this market. So that is the system integration.

The second is the IP that is generated. We are commercializing it by creating as a product for any franchisee that comes and we already got first franchisee which is permanent use of turbine.

And the third thing that we are trying to demonstrate here is the entire concept of smart grids for example we are quite leaders in this market movement. We have won consultant engagement to write out this market for the city of Delhi for Delhi Municipal Corporation area. We are doing a lot of work to this market task force and that is going to be one of our areas in the future.

The other thing which we are looking at in India is the use of mobility for money transfer. Now the mobility for money transfer, all of you come from a banking background so I did not tell you about it. But if you look at what is happening in the mobility space there are lot of people who are coming in. In fact one of the very senior people of the Government of India, there are far too many pilot project in the mobility space. But if you look at what we are going to demonstrate to you is Airtel Money. Airtel Money already has 1.5 million customers. We already do lakhs of billing a day. We have done close to about 50 to 100 crores worth of transaction on that. We have signed a contract and we have gone further.

Couple of things here. We have taken a competition in a different way. My competition is no longer a traditional software company. So where we see ourselves going at this space is may be bank on mobile or whatever it is into the future but somehow let us see what we have to offer. Many of you might have subscribed with Airtel Money, if you have not please do so.

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**Gautam**

My name is Gautam. I head the Finacle Digital Commerce Platform and this is what the heart of the Wallet Edge software. Wallet edge is about mobile wallet on mobile money about which everybody is talking about.

When I come to talk about this opportunity what excites me is the fact that this is an initiative, this is the product, this is the innovation that we have brought to the market place which is going to transform the way payments are done in India to begin with and obviously many more markets which are of similar nature so one of the markets told us.

Not just India whether it is in Africa, South East Asia, Latin America and everything outside of let's say the US, Europe, may be Singapore and things like that is where cash is still king. We are talking about ranging from 95% to 99% of the transaction that still happens on cash because of the various reasons and there are risks associated things that we may know about. So that is one of the factor that struck us and obviously what we opt to look around is that some of that there are opportunities on two spectrum for the consumers that we are talking about.

On one spectrum it is the new customer that is the next generation that is very savvy with their mobile phones and they want to do mobile transactions or mobile as a transaction instrument for the sake of convenience and on the other side there is a very large section of the population which is really outside the banking reach, they are the unbanked and the under banked people. So these two segments are still the digital consumers and they have their own needs for getting in terms of what, how the applications or how mobile money will make a difference to them. So that is the paradigm with which we started. The two segments in the market were happening solution meeting their requirements. So with that context I will be taking you through a brief overview in terms of the capability that we are seeing in.

So what we are doing here today and we expect 90% of the retail transaction which is retail store that's happening. This is about \$550 billion or 2 million crores, 90% of that happens in cash. We expect a shift to happen in the form of digitized money and even if that shift happens in 20% of the large range but even if 5% shift happens, that is the huge market that we are talking about and what we do with this number of applications is that we can lower it, we can send it and spend it. We basically feel very simple thing how do your put your money into your wallet, how you will send it to somebody whether your friend or for a migrant labor, you may be sending the money to his mother along with in let's say remote point from Bihar and how do you spend it that at different opportunity whether it is a WAS purchase or physical merchant payment will cater like that.

From use case perspective we are looking at essentially five different pillars of use case pillars that we talked about. So, you will see a consumer to consumer payment and then there is which is like I sending money to you and things like that. Then there is business to the consumer and consumer to business payment which is essentially I paying a bill or our small business making salary disbursement and kind of things like that. Then government to government and consumer to government it is that we are seeing a lot of opportunities in terms of automatic disbursement of NREGA payments or the pension payouts or even what Nandan is talking about which may happen in terms of all the subsidies moving into a value from rather than in terms of a discount at the store that you get in terms of making more on the distribution. Financial inclusion is a typical bank use case is coming where someone can get a micro loan, micro deposit, micro insurance and repayment and all these cases and there is the last one is the mobile based cash management. It is again a very large segment. It is where we bring in the capabilities of multiple platforms that we have in Trand Edge and Wallet Edge all of it put together to make the cash movement from companies like CPG like let's say P&G. Now they want to move goods down and want to reach a much larger base of stores and they want to connect it in a safe and secured manner. So those are kind of case that we are talking about. It is something that we believe is very important from changing the payment landscape in India itself. We are seeing a great uptake on the product. It is about as Raghu mentioned that within about 8 weeks of the launch we have a million customers who subscribed into the services. So we have a viral effect. We are 1.5 million today as we have done and we believe in terms of many features and functions and many news cases as they will slowly get enabled the payment landscape is going to be changed. And this product obviously is built in the cusp of when two players interact. So there is a telecom partner who brings in let's say more than 1.6 million customers when one user can pay cash and talk on top of the top time vis-à-vis 40,000 branches after so many years of banking nationalization. So obviously the touchpoints, the distribution business the telecom guys understand that better. So the banks understand better in terms of transfer and managing money and other risk managements. So when these two players come together this is where we see magic happening in the market place. So that's all about our solution as well.

And finally I mentioned simplicity is the key. On face of it is very simple and then I have money transfer, make payment, my account top up ,various such functionalities and there are of course other use cases which is NFC which is affordable of these products and many of these cases will come in. We can see master wallet, grocery wallet, transfer wallet, entertainment policy which will create multiple volatility. It can be used as a pseudo kind of funds manager and personal financial

management. That is tool. You can see details of the transactions that you have done, you can load money into this, you can make a transfer and so on. The time is very short but in short this solution we believe has got a potential of transforming of how payments are done not only in India but any other market place where there is a cash dominated economy and we are also moving on to convenience in banking using various modes of digital count.

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### **C.N. Raghupati**

One of the other things that we demonstrated was in our Infy 3.0. We are going to be handling to partner. IT has reached a matured stage where we need to partner with the right partner and create an ecosystem. The technology is something which my competition can't really, may be it can but then the point is can you choose a right partner to have so many touch points? Can you choose a partner with the same chemistry and same beliefs, goal, visions saying that we need to make it successful and demonstrated here.

I will move on to the last one. We have the department of post undergoing a transformation, they are going to be spending almost about 10,000 crores. We have won huge contracts there totaling to about 800 to 900 crores. Now there are two questions to that. One is apart from the numbers. The first one is what we call a rural system integrator. I will not take much of your time here because we are going to demonstrate it in and we are going to show you what it is and demonstration will take a little bit of time. So we will just run through what it is.

But essentially it is about having any mobile devices. It could be an IOS, it could be Android, it could be Symbian, it could be Win Apps, you can attach itself to any of the applications of the banking and then work. How is this going to help? You are friendly with postman who used to come to your house to give you a Rs. 10 money order. He is now going to come may be still on the bicycle but he is going to use a tablet like device to give you that Rs. 10 money order. So e-money order is the first app. There could be a series of apps and there could be apps which you could have to make any sort of transaction. Why is this so? The second position of the program, it is very interesting is we are used two of our IPs Finacle and Mccamish which we bought to create the solution for financial and insurance which has been rolled out in about 155,000 post offices in 22 circles in the country arguably the biggest ever network. So the good old lady sitting somewhere in Bihar or UP is going to be able to get Rs. 100 insurance using Infosys' intellectual property. Here the value however is shown because whatever we had, we are able to best competition because it is of my intellectual property. Including the rural system integrator which is the mConnectplatform which is developed and patented and I will speak to you a little bit about that and so it is the value of our IP . If we create this platform with India post 150,000 post offices with Finacle and MccaMish and with a mobile device look at the enormity of the solution which you can take in the emerging economy.

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### **Speaker**

We have built this technology platform called mConnect that includes over 35 different patents that we have filed over a period of year and what it does, it has totally transformed the way we look at mobility. As opposed to the traditional model where somebody requires a mobile experience you will have developer who is fully experienced in that and will go about building an application, we have shifted the job to a machine. So it is an era of software generating software. So you can look at any enterprise application and we can transform it for it to be executed on any kind of mobile device in a method which takes 10 to 20% of traditional effort that it takes. So you don't need to deal with the complexity of the technology, how you will do it and Android, iPhone, Windows Mobile, Linux, Phone 7, etc., it is this intelligent piece of software a black box which will connect to

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the existing application and figures out how I create this experience. So you can rule out mobility applications faster and you can give the flexibility of an organization to choose what right infrastructure is available today at the right price point to deliver the value I want to deliver to my customers.

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## **Sanjay**

One of the key things is that we had to deploy these applications across a huge variety of devices across a huge bunch of operating systems and we had to provide for all kinds of emergencies. If we go into the rural environment, my take on the post office before I joined this program and what you think about it, may be a Bangalore GPO is a good example but if you go to a village post office is essentially a branch post master who is operating may be 4 hours a day out of his own box that essentially is. The connectivity options are not very good. You can even have a post master who is travelling to another village with the some kind of a USB stake trying to transfer the data. So in this kind of an environment you want to be able to operate on all different types of foot prints, all different types of devices. You want to maintain the security and you want to do that online, offline kind of products and you want to provide all different types of services. What we are doing is essentially providing the first two which is NREGA payments, the National Rural Employment Guarantee Scheme and we are developing the e-money orders. In addition there are another eight vendors for whom we will build another 22 applications. So what we had to do is provide a software developing platform to all of these other vendors to convert applications on this mobile device and when all of these apps have start to scale up to over 136,000 device. We have platform. We are able to generate that application and at the backend we will provide the seamless connectivity. It does that transformation, text to speech so on and so forth. It does all of these things and handles multiple languages. You can also get into all kinds of social connectors, and apps store and so on.

The other key piece of IT was the FI solution which is for financial inclusion. So again if you are handling out something like a billion dollars in unemployment guarantee payments if you want to make sure that if you have very strong cash management solutions so you will be able to utilize that without having to build in the cash.

And lastly what I want to mention is that this solution can get extended to anything possibly. It can go up to any kind of field force automation as it can deduct that. You can extend it to all different kinds of programs. And of course these kind of use all different tracks as an API. So we had to use external vendors. We had to use our own internal resources set labs and so on to really come up with the solutions. So I think from a program and management perspective we have learnt how to manage this kind of a cloud operation.

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## **Participant**

I just wanted to on your mobile Edge, how the credit has come on the mobile App of the bank which does most of these functions as case of payments, transfers what difference would that be, is it more connected to more vendors and that makes it different.

## **C. N. Raghupati**

Most of the banks apps today are not connected to your cash ecosystem because while RBI states that there are certain security restrictions. Yes you can do cheque scan and put it there, you can do a whole lot of good stuff but ultimately in the cash ecosystem there has to be a business correspondence within the system because first and foremost RBI has to approve the security regulation, etc., and then finally it has to be a business corresponding vendor. So mobile money

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whichever technology you choose where it differs from the App a) it is first of all not going to bank specific. Today Airtel has tied up with Axis bank but once that stabilizes it could tied up with another 10 banks that does not matter. Finally our platform is not going to be Airtel specific. We will do a platform, Airtel can come in, Vodafone can come in, anybody can come in, or a bank can come and I am going to be only a technology provider. Whereas what app you are talking about let's say ICICI Bank it allows you to do certain amount of transactions at the high end. It does not allow you to transfer money more than may be some amount, whereas here we can transfer money up to Rs. 50,000 if you have bank connection.

### **Sanjay Purohit**

The big point is the cash and looking at the unbanked economy which is, we are talking about economy which is run by people who don't have bank accounts so this apps does not make any sense anyway because the app only make sense if I have an account with a bank. If I am a worker in Mumbai and family needs and if I earn money on a daily basis I need to transfer cash, what do I do? Money orders, it is instantaneous. So I can go to region office which sells Airtel prepaid cards give them Rs. 100 ask him to charge my phone for Rs 100 and transfer Rs. 100 to my wife on a Rs. 500 basic Nokia phone. So while apps on one hand allows you to operate the bank on your mobile phone, this is build on the premise that this huge economy outside the bank which is non-operated by the bank almost rural areas the person who receives the money order.

He goes to Airtel, there are 7000 Airtel outlets, retailers who sell sim cards he goes there, he becomes a banking correspondent, whereas in your App you do not have a banking correspondent .So for example when Gautam was talking, I think banks all put together we are talking about like 40,000 branches? Whereas in Airtel we are talking of 1.8 million outlets. If you can see the reach of the whole thing ,it is phenomenal.

Most of your people are from financial bankers so you don't get any permissions from RBI or working on RBI permission is itself a big play for us.

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### **Participant**

What's your revenue model?

### **Speaker**

Right now we are taking percentage of the revenue on the Airtel gets.

### **Participant**

And how much Airtel gets?

### **Speaker**

That depends when we started off we had a 10-15% but then it depends upon the slabs and how much. So anywhere between I would say today the growing rate is between 5-7% but once mobile money grows. It also have other variants are what kind of charge we have if we do a transaction, if it is merchant to citizen or government to citizen so it is a variant set.

### **Participant**

So the transaction that you said about rural money transfer was B2B

### **Speaker**

Yes, It is B2B.

**Participant**

But that guy has to pay more?

**Speaker**

For lesser amounts he pays more.

**Participant**

You said you made 1.5 million customers now signed up can you throw some color on what kind of volume or transaction ?

**Speaker**

In a day about 20,000 transactions take place. The average size of the transaction is about Rs. 150.

**Participant**

Have you spoken to any other operator as well or is there a tie up?

**Speaker**

No there is no exclusivity to Airtel but we respect them as they choose us. We would like them to be successful for six months before we move out obviously somebody has chosen you, you need to make his business successful.

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