

**INFOSYS TECHNOLOGIES LTD  
INDIA ANALYST MEET****AUG 27, 2008  
CHENNAI****RETAIL VERTICAL****Mr. Dinesh Rao**

We were the first business units to be set up way back in January 2003 when we really verticalized this industry segment. Well in a way, there is a small typo there. We closed the last year with \$ 493 m. In retail, CPG, and logistics, we grew at a compounded rate of about 47%, close to about 5,500 associates are there. We are very proud to be associated with 69 of our clients and some of them are who's who of the retail industry. We serve across primarily all the segments in the retail vertical be it apparels, footwear, drugs, discount retailing, specialty distributions and what not. Very similarly in the CPG as well in terms of food and beverage, health and beauty care and what not. Over the last few years, we have seen that some of the things are coming our way are primarily in terms of some of the large outsourcing deals as well as some of the transformational programs that we have been engaged in quite a few of our clients. Some of those case studies that we will talk about during the course of our discussion today. This gives you a snapshot across the entire value chain that today we are working in. If you look at, we are pretty much engaged from the product development across the merchandize management and supply chain and we have logistics and what not. And this slide shows you a snapshot of some of the strategic process and programs that we are engaged with some of our existing customers today.

Now, as you all know, the retail and the CPG is kind of going through a difficult time with increased fuel cost, commodity prices and etc. So it has had its toll on some of our customer base as well as in the retail and the CPG as a group but across the board, some of the key trends that we are picking up and signs that we are really looking at from the industry point of view, one is that some of our customers and primarily the retailers are looking at investing heavily into their online channel. If you look at traditionally the brick and mortar is growing anywhere between 3%-4% or 5% but the online retailing is growing anywhere between 18%-20%, so consumers are also a lot more accustomed to going through the multiple levels, multi-channels, be it in the sense of shopping in the brick and mortar or a catalogue or in terms of an online shopping, so in a way that they are also getting more comfortable. So what we have done looking at this is we have a multi-channel commerce practice that got incubated about a couple of years back within the retail group. We have industry benchmarks in terms of the best processes that we do and we have currently executed at least 3-4 such large engagements and 3 or 4 currently are underway.

The other trends that we really pick up is retail and CPG companies are eager to look at the shoppers' insights and trying to understand, basically do lot more analysis, insights in to the shopping trends, insights into what the consumers need and what not and etc. Towards that just like Kris mentioned today morning, we just recently launched the Shopping Trip 360, a very unique solution we feel which does not exist today anywhere in the market, does bring in this kind of a real world interaction between the retail, the CPG, as well as the shoppers to make sure that the shopping trip is as well very insightful. We are going to talk a little bit more during the course of the discussion today.

The other part that we are really looking at in terms of the trends are primarily that the companies are struggling with managing their master data over the last 2-3 years as well as a strong enough business intelligence. They have their operational and practical and what not data stores today available, but the ability to mine the data and make any sense on the consumer pattern behaviors, demographics and what not has been a challenge. Towards that, we have master data management, perhaps one of the most successful practices today. We have gone through

multiple such implementations as well as gone through multiple transformations in the last 2 years in terms of laying out the roadmap, in terms of what it really means for a retailer to ensure that, in developing a very robust foundation data to enable them to mine the data well. The other key trend that we look at primarily here is one is retailers are focusing on bringing technology and innovation into the store's area. Primarily one is to look at improving the store level efficiencies, the labor productivity improvement, as well as introduction of new ways of attracting the customers giving them the part information and what not. Towards this, we have established a Center of Excellence for point of sales which would do most of the system implementation in terms of management upgrades. So we have currently completed quite a few implementations and one of the transformation stories that we are going to talk about is how a mobility technology solution could enhance the labor productivity in one of the large international retailer that we were engaged in transformational process.

The other trend is CPG companies want to make their trade promotions and sales effectiveness spend more efficient. See the sales and marketing dollars that the CPG folks spend, it is approximately about 18% or so. It is normally in collaboration with a retailer. So, what happens is they figure out a new product or a brand that they are going to launch, collaborate with them and say that this is what the promotions that we are going to give. Beyond that, none of the CPG, in Indian terms we call them as FMCG, has very visibility into the effectiveness of anyone of these trade promotions. So in a way, if things stop there, beyond that in terms of whether we need to continue the same amount of investment in a particular brand, how effective was this promotion in terms of upliftment of that particular brand or particular product that they introduced in the market. Today the CPG companies do not have any particular disability on this. Towards this, what we have done is we have created a new category analytics framework and a solution. What this does is essentially it takes out the syndicated data that comes from AC. Nielsen and IRI and etc., looks at the data that is there internally in terms of the planning, in terms of the shipment date and what not and create an information repository. So, using this information repository, there are few statistical models that we have done, some of the bench-markings that we have done, and the reports that we have provided which the CPG companies could do a much thorough analysis in terms of really measuring the effectiveness of how the sales or the trade promotions dollars have really been spent has been very effective in trying to push this particular brand. So this we feel is a very unique value proposition in front of the CPG companies and which is not there in the market today.

Now, as I said earlier that, some of the increase in our revenues that we are seeing is on some of the transformational things and I thought that I will discuss a few case studies out here on how some of the transformational programs we are involved in and what impact it had on the customer. One was on an e-commerce implementation as well as on global information management and how the store business process we would effectively be able to bring in with a leading international retailer. Now, here is a case study on an e-commerce transformation case, a customer for a broad-line retailer, he had multiple e-commerce sites which were on different platforms primarily all on the legacy technologies. They did not have one uniform user experience and basically this platform was so legacy that none of the new innovations on the online e-commerce could not have been implemented on this. So, there was a risk of one of the sites which was managed by a third party vendor would go out of business as well. So this was the client's situation when we really got in. The customer had chosen a platform and the way they are going to implement the e-commerce. So when we got in, we were the primary partner trying to drive the whole program end-to-end from the whole program management to the business process rationalization across these three different websites that they were currently working with and then what we did was, we took the same platform but created multiple storefronts because we acknowledge that there are uniqueness in the way there were multiple of such storefronts that were available for this particular retailer. We did the gap analysis, rationalize the business processes across the board, brought in industry-best practices to make sure that the processes are updated as well and we made sure that even though the broad-based same platform was rolled out across the board but ensured that

the right customizations are done to make sure that the uniqueness is maintained across multiple storefronts that we developed. So in a way, the challenges we addressed were uniform processes, uniform user experiences across the board but in this very specific case, normally an implementation of this nature takes anywhere typically between 26 months to about 36 months but we were able to do it in about 16 person months time. So it reduced this whole time to market as well. So some of the benefits that the customer is seeing is 20% increase in the online revenue which has enhanced user experience as well and reduction in the operational cost because we rationalized the website, rationalized the processes and reduced the transactional cost as well.

The second case study is about a global information management for a leading CPG company. This leading CPG company had grown through multiple acquisitions in multiple different countries and what not. They had a legacy of different processes, having acquired multiple different clients and what had happened along with that is it was purely an excel driven decision based system and primarily all the data that was getting off was really not accurate, it was coming some multiple different data sources. So, the problem statement for us was to really define, one enterprise performance workbench that will really look at strategic, operational as well as tactical decision points as well as look at the different matrix, look at the different score cards and what not. So, we went about creating a very quick prototype with a very flexible SOA-based architecture because this had to continue to go across all the different various roles in the organization. So, this flexible architecture would enable a person to really subscribe to a particular set of information and the data was stored at a very accounts level that any kind of data would have been able to be build by some of these people and create their own dashboard and metrics and what not in a very quick time. So, we have just finished the prototype of this in the six months and it has been extremely successful. The processes they liked, the matrix definition they have liked and we are looking at really 3 to 6 years roadmap in terms of really rolling up this whole decision support systems across the organization.

The last transformation case study I though I will talk about is on the leading international retailer. As I said that one of the things that is happening is to try and improve the labor productivity between the stores. So the situation was they had some existing mobile infrastructure but not completely leveraged. See, in any retailer, about I think 16%-18% of the money they spend in terms of labor, another 15% to 18% of the time, the store associates spend more time in the back office rather than really being in the storefront in terms of really addressing the customers' queries and what not. So the proposition here was to ensure that we have these associates spend more time in front of the customer and have less time spent in terms of the back office work. So what we did was we looked at this whole mobile solution on a PDA base, and then architected on a SmartClient principle so that the most of the operations like marking down, price changes, re-labeling, trying to find out if there are any product which is not on the shelf that used to be reordered and etc could be done on a wireless PDA device, really working around in the shop floor as on really having had to go to the back office. So this is in a kind of enterprise given on a small PDA for the store associates to really work through. So this technology innovation and the mobility kind of helped them actually save up to \$ 12 to 15 million per annum on a store basis because of the operational efficiencies that we got and obviously there are other things like crunching the store opening times and etc but this was a complex technology piece that we were able to incorporate which was extended back into some of their warehouse management systems as well in later on.

We continue to innovate, invest in our domain industry capabilities, solutions and what not. So through the years, what we have done we have got endorsements from some of our clients as well as we have got endorsements from industry analysts as well as in terms of areas where we are investing as well as where we are innovating. Very recently, we won the Sears partners in program award. This award we won for 2 years in a row. This award is given to less than 1% of the 40,000 suppliers the Sears came out really and it is an extremely privileged award and we are the only IT vendors who got awarded this particular partners in progress and in the last 6 to 8

months or 10 months, some of the core technologies that AMR talked about which are made for the consumer product area, two of them were primarily the solutions and innovations that we were working at Infosys. One of them, the first one was purely looking at unstructured data structures and the second one was the new product implementation using the SAP as well as looking at category analytics space. The last one was, we were ranked No.2 among the strategic consulting partners in sales and operations projects. This was an independent survey conducted by AMR including 50 of our customers and we were ranked second in terms of doing this strategic consulting. We were perhaps the only offshore player who was ranked in the RIS LeaderBoard Survey looking at the length, the breadth and the quality of services that we were providing in terms of having the most customer satisfaction in the retail industry. We continue to give thought leadership and be participative in lot of activities that happen at the industry level, industry journals and what not and we continue to ensure that we are there in terms of any new solutions and any innovations that we really do.

With a group that is formed about 4 to 5 years, what we have done over the years is we have looked at what are the industry trends that are emerging, what are some of the problems that the customers are really facing and finally try and innovate into some of the solutions. One of them was this multi-channel that we were able to pick this trend up and really create a practice. Similarly the master data management is another example but here is another innovation that I think we believe is very unique that we have to offer. This is the Shopping Trip 360 that we recently launched 3 weeks back or early part of August. What this does is essentially it creates a real-world awareness between the retailer, brick and mortar, CPG manufacturing company as well as the shopper to ensure that the shopping experience is real and as well as is nice and insightful and so as to maximize the sales for the retailer as well as CPG. Now, this is kind of an information ecosystem that these 3 parties would share to ensure that they have a much better sales uptake within the retailer and CPG. How is this done, essentially, if you look at an online retailer versus a brick and mortar retailer, typically for both of them, they would know what was purchased and who purchased but in some cases where we have retailers who have lot of loyalty program and some of them they would also know little bit more of the demographics of the customer and how they bought and what and etc. but the important element that is missing from a brick and mortar store is how did the shopper intend to buy that translate into really what he bought. That is something which was missing in the brick and mortar store. If you look at an online environment which is extremely interactive, you go and pick a particular product, you give a comparison of the like products across the websites. You do a product comparison, you do the customer reviews etc, through which you will ultimately make a decision that I need to buy a product a or b. This trail of clicks online retailer does have but if you look at the brick and mortar, when a person walks in and a lot goes along the aisles in the retail, he has an intent to buy but none of this information today is available with the brick and mortar retailer. So the online retailer could effectively use this path of migration and how this intent really started to make sure that he maximizes on his merchandizing, he maximizes on his assortment, he could really look at his pricing and promotion which today is not available for a brick and mortar retailer. So this solution very specifically tries to address some of this being in this real world kind of a scenario for a brick and mortar retailer as well. What it does is it has a meshed network or small sensors that are sitting in the stores. As and when the shopper really walks through, as you say that knowing the Shopping Trip. So basically this would mean that you would know the concentration of the shoppers via heat maps, try and figure out where is the concentration of my shoppers within the store. So this would enable multiple things. One to make sure that there are too many shoppers, they could really look at increasing more check out lines, operating efficiencies you could look at this trend and ensure that your heating, lighting or what not can also be trended depending upon where the concentrations of the people are. Thirdly, if you look at purely from a CPG manufacturing folks, they would know that these are the areas where the shoppers concentration are to ensure that they promote the products which have to be in the shelves where these particular shoppers are walking so that the brand does get sold and the trade promotions and etc that they are giving is there is an uptake in some of these things, right. That is knowing the shopping. The second is aiding. What we call the first one is the

heat map which we really do. The second part is this Smart Shelf that we call which is what helps the retailer to find the velocity at which my items are selling so they would know that high items which are going, in case if there are stock-outs that are happening and how some of these data does get back fed into their whole planogramming, their replenishment and what not to make sure that there is effective merchandizing that happens within the store to ensure that there are no stock-outs that are happening as well. So, in a sense they would also be in a position that a shopper comes in, he has an intent to buy but he does not have really the product which is there but this Smart Shelf just with the mobile and the wireless technology will enable the retailers to ensure that that the stocks are there as well. The third part is influencing a shopper. Basically, if you are a shopper walking in through the aisle and you have an intent of buying something and it could be a small applications based on shoppers' intent that he would download on his mobile cellphone and he walks through and then you are trying to influence with him in a sense that you would want to buy a particular product but you would give him an option of what are the like products which are available of the similar nature. What are all the promotions that are going on, on a very similar product in a particular range. What are the uptake and upsells and downsells that you could do. So you are making this whole shopping trip extremely interactive with the shopper and helping him influence not only buy that, but also make sure that he also does buying the products as well. So, in a way, you are trying to influence the shopper's behavior as well when you really look at it. So, ultimately, we are really looking at shaping this whole shopping experience in a way that if a customer really decides that he has a shopping list, he downloads that into his mobile, walks through the aisles of the store, he has a recipe that he has downloaded, now we aid them, the items that he needs on his particular recipe that he has really taken and similarly, we can online give them coupons, online give them promotions and what not. So in a sense if you look at, we are really making this whole shopping trip very insightful for all the parties here and it helps in a way for the retailer to make sure that his stocks are there and he is making sure that he is making the investment in terms of buying the right things bringing the right assortment. The CPG brands do have insights into what are the products that are going and how effective there whole trade promotions are and what they need to do differently. As a shopper, you are benefited in understanding how to go about shopping and what not. So in a nutshell we feel that this provides a very unique, real-world experience like what an online retailer would have in a brick-and-mortar store experience and we believe that this kind of solutions today does not exist in the market and this is something that we have recently launched. We had some interest in some of our existing retailers wanting to do pilots in some of their stores which we have really started on this pilot journey very recently and with that I conclude my presentation.

### **Puranik**

How do you capture offline efficiency the way you do online. In online like you said, there are series of trials of transactions, so you can capture the behavior. In an offline, you can do to some extent. You would not be able to know what price this guy wanted to buy, finally why did he buy this and is it a price issue, quality, availability, why did he buy at all. So, it is not as effective as an online tool.

### **Dinesh Rao**

Right, I agree to an extent that some of this but today, there is nothing that is available for a brick and mortar, if you notice the data says that a consumer gets in. In 20 minutes, nobody would know that he did existed in the store at all till somebody comes out, then they have to really check out. So you are right in a sense that he might not know but in a way by influencing by giving this promotional and coupons and what not, there is a way you could track what are the other products that he was really looking at but we don't do that he has compared one website with another and trying to really look at the price point on what he bought, but there is a good sense of what product that he was looking at because when he walks through in front of a Smart Shelf, there we have. That heat map would clearly tell you that what are the times that he spent in front of which all competitive products which are there and eventually, what did he buy. So when you really map

this whole heat-map data along with the point-of-sale data that comes up, you could perhaps construe saying this is what really made him buy some of the things, may not be extremely direct like what you said in an online.

**Puranik**

So, how do you price this?

**Dinesh Rao**

It is managed services. So, we would go by a subscription model. The whole infrastructure, the technology, everything is owned by us because one of the factors was with my shop change, the store format change, do I need to do investments in terms of what not. Some of the initial adoption related things that come from our customers. So what we do is, we pretty much layout the whole hardware, the whole technology because we own the IP and lot of these things and we really go by the subscription model. That is what we are really thinking at this time.

**Male Speaker**

What is your sense on how much incremental is on the topline will be that the retailer gets?

**Dinesh Rao**

In terms of the retailer gets?

**Male Speaker**

Yes.

**Dinesh Rao**

See, actually, it is really at a very initial stages, where we are really running 4 or 5 pilots with some of our customers. I think that once we go through another 5 to 10 stores in terms of how this really comes, I think maybe we will be in a much better position to really say how it would really impact, but there is lot of excitement that is there in the market, wanting to adopt to this thing. So I will be able to quantify the percentage increase in the topline.

**Male Speaker**

This is more on the front-end side. Do you have an integrated back-end data from the loyalty program\_\_\_\_\_?

**Dinesh Rao**

See, if you look at the way this whole thing is structured is each one of these, there is no aid, influence and shape. This is kind of a platform or a framework on which this whole thing is. So you could adopt and plug and play even on the existing applications on top of these things to really mine the data that you need. So ultimately, the data that comes out of this will definitely be looked at along with the loyalty to make any sense of this. So this is an application that can be plugged into any one of your existing applications.