

## Interview with Ratan Tata: Making of Nano 10 Jan, 2008, 0000 hrs IST, Indrajit Gupta & R Sriram, TNN

Nearly 72 hours before the launch of his dream car, Tata Group chairman **Ratan Tata** spent 90 minutes with **ET** for a one-on-one on the making of the people's car. He shares the trials and tribulations he faced during the journey. Here is the full text of the interview.

### **Q: Are you nervous? Is this much bigger than the launch of Indica?**

I think I was much more nervous during the launch of Indica because we had never been in car manufacturing before. We were venturing into a new segment. We are again venturing into a new segment but in a product line in which we have 10 years of experience now.

At the time of the Indica launch, you did not know whether the market would accept you becoming a car manufacturer from a truck manufacturer. We took some widely publicised goals at that time that we would be as big as the Ambassador, or we would have the same size of the Maruti or we would have a diesel engine. We made those statements. We didn't know those would be the kind of things the market would go for. So, I think at that time we were much more apprehensive and nervous than we are today.

### **Q: If one would really start at the very beginning, what really was the trigger for the idea?**

Basically, just as an Indian, you know, I would be as concerned of my-self as one of the rickshaw pullers in Calcutta running with a rickshaw behind with two people sitting back. It bothered me. My mind will start thinking: Can we put a bicycle there? The same thing bothers me when I visit a plant also. The workers are bending over when the work piece should be raised or maybe they should sit in a pit or what-ever. Because I think human fatigue is something that affects safety.

So in this particular case, you could not help but notice that there were three or four family members on a scooter, the kid standing in the front, the guy driving the scooter and the wife sitting side saddle holding a little kid. And when you're driving a car, you certainly say, Oh my god, be careful, they may slip. Add to that slippery roads and night time too. Any of these reasons can be dangerous for transport. That does not mean that the scooter should not exist because scooters are an evolution of bicycles and it is all the path of prosperity.

And this seemed like a dangerous form of transport. So, I, to be frank if I might go through the process, I asked myself, what if you put two wheels on the back that will give greater stability? If you build a bar over the top could you save the occupant? I will stop there and come back.

Last year, to my surprise I found that BMW had produced a scooter with the same bars that I had thought about with rubber bumpers on the side so that if they (the riders) fell they wouldn't hurt themselves and the seat there had a seatbelt. And I thought, that's exactly what I had thought about. The fact was that BMW had put this out though it was not successful and they had withdrawn it. But, someone else had also thought of the same thing. It had only two wheels not three.

So, I set about thinking, can we make a four wheel vehicle from scooter parts initially and I, in fact, addressed an Automotive Component Manufacturers' Association (ACMA) meeting saying that can we all get together produce an Asian peoples' car. To this I never got very much response. The idea was a really low cost car that Malaysia, Indonesia and India could come together to produce jointly.

We could produce one part, they could produce another part, and each one would exchange and have the rights. In fact, even for the Indica, I went to ACMA. I said can we have an Indian car because no car has been designed in India. That time I was actually criticised. This time I had no response. So, in this particular case I had no response. In fact, the person who showed some encouragement was Brij Mohan Munjal, but we never really took it further.

And then we found that scooter parts were probably a real limitation. So we changed tack and we said let's take a clean sheet of paper and start thinking and conceiving a car. Why a clean sheet of paper? Because we thought that if we had to do something that was different, then we probably didn't want to have a legacy in any way or form and so we thought we should look at everything from scratch. And, initially I thought we could even have a car made from engineering plastics.

But we found that several of these concepts do not lend themselves to either cost or volume manufacturing and have had to move away from that to a more conventional kind of car. So, that led us to configure a small car which would be not a three wheeler but four wheels. It would be a car, a full-fledged car and we started again in an evolutionary manner and we thought, and if I might say so, it really started with being a four wheel rural car.

Do we have rolled up plastic curtains instead of windows? Do we have openings like auto rickshaws have instead of doors or do we have a safety bar? As we went on, we had many early concepts that went that kind of way till we finally decided that the market does not want a half car. The market wants a car.

And if we want to build a peoples' car, it should be a car and not something that people would say, Ah! That's just a scooter with four wheels or an auto rickshaw with four wheels or not really a car and I was reminded of a very interesting concept that Chrysler did many years ago when they developed an Asian car. It was a plastic car and for those who may not know or remember, it was one piece, the whole car from front bumper to back bumper, moulded in one piece of plastic, half of it and the other half. And it was welded together to make the whole car.

The most expensive part of any manufacturing unit is the paint shop. So this car with pigmentation with plastic parts, you didn't have to paint it, but no one liked the car because, in my view (I drove the car) it was very nice, but people wanted a real car and not something that someone would say was not a car, this is half-a-car or three-fourths of a car.

So, with that kind of experience in mind, we decided we would do a car that would really pare the cost of a fair car. It has obviously been a long journey. It has been a longer journey than it should have been. I think we have easily taken two years or 18 months more than it should have been.

**Q: What were the most challenging moments to your mind?**

They all relate to costs. Perhaps the bigger, more visible issue is that somewhere we needed to benchmark ourselves against something. And we took the Maruti 800 as a benchmark. In terms of acceleration and driveability, it should at least equal the Maruti and in some areas it should exceed the Maruti.

So, somewhere along the line we had to increase the size of the engine to give us the kind of performance which we have now and the rest have been issues, you know, relating to costs. It meant just doing the same thing again and again to bring the cost down, and where to put the fuel tank and all those kind of is-sues.

**Q: People are used to thinking within a certain framework. So how did you achieve breakthroughs in shaving off costs?**

We haven't changed when you see the car. It is a four-door car, five-seat, rear engine and in many ways conventionally constructed. What has been done is like (in the case of) door locks, we have the same lock on all four doors, both left hand and right hand. We have some parts that are wing locked from inside.

To remove the engine you can work at from the top, it is in the rear. Probably when you see the car, we have really packaged it rather tightly and I think most of the benefit we got on cost was that we used less steel and we just made the car smaller outside yet big inside.

**Q: You think that this car is going to some way change the DNA of the group?**

That is not what it was conceived for. Well, the fact that you are doing it to address the market, that's huge. It gives you an expectation of, you know, if we produce 50,000 of such cars then we are ready to undertake that exercise. From the time we are thinking that we could follow on with this, could be different fuels can be produced, an electric version of the car can be produced or hybrid version of this car or can we make this car the platform for a new set of personal transport.

The one thing that I think we have established is that we have created an affordable, personal form of transport. Some may like it, some may not. Some may think it has things that it shouldn't have, while some may think it is coarser than it should be. But we have an affordable form of transport that will take four or five people in all weather conditions to where they want to go, running on regular fuel and not some exotic fuel.

**Q: There has been some criticism that this car is going to choke the already congested roads in cities. Do you think that is an elitist criticism?**

Yeah, I asked myself. We produced about 7 million two wheelers earlier. Today, we almost have about 60-70 million two to three wheelers in the country. We produced about 1.4 million cars and at some point we will exceed 2 million. Nobody said anything about that. It only happens to be this car that is being targeted. You may say well OK the two wheeler takes lesser space.

Our car pollutes if not less, then certainly not more than a two wheeler and I am not talking per passenger but as a vehicle. We conform to Euro IV in terms of our engine. Today Bharat III is required, we conform to Bharat III. All scooters and two wheelers are Bharat II today, not that they are not conforming, but that's what their standard is. So, all I want to say is that yes you may take a view that this small car will take less space than a large car.

Yes, you may say that this car will carry four people instead of the normal two on a scooter and therefore you will have if, filled in with four people, you will have less on the road than two scooters. More of immediate concern, for anyone that drives a car, is that today two or three wheelers have become a little more of a menace on the road than a car has become because of their ability to weave in and out.

And it makes an assumption that a small car will not replace a bigger car. It just looks at it as an increment. You produce two million cars, you produce half-a-million Tata cars, you produce 2.5 million cars. That's not quite the way it is going to work. We will cannibalise some of the existing low-end cars or cannibalise some of the existing two wheelers. Some of the cannibalisation will be of our own product and Indica is also going to feel the effects of this. So, it will not be that it will just sit on top of everything and there won't be a square inch of space on the road or anything of this nature.

Secondly, we are looking at congestion in major cities. Have we drafted a form of affordable form of family transport for people in tier II or tier III cities. Is it their lot not to have it? Is it a sin to try to give it to them? Does it necessarily mean that the small car is only congesting the city roads in the major cities and that nothing is being done in the urban areas. Yes, we have high teledensity in the urban areas, we

haven't done enough in the rural areas, but there is huge potential if rural India gets connected and the same is going to be true with transport.

**Q: Who are your potential customers for this car? Are you really looking at tier II and tier III towns and cities?**

I think I would rather not look at it geographically. I would say: who might be the buyer of this small car? Let's start at the top. If I were to look in the United States or in Europe, in some of the garages you would have a Bentley or two Bentleys' or a high-end Mercedes, and you may find a Smart also in that same garage because that person thinks it's a fun extra car to have. He may have four cars, but also have a Smart because he thinks it is cute. Doesn't need it, but he may have it.

Then you may have a person who needs a utilitarian form of transport. He is not looking for a lot of creature comforts; he wants to get around in a sensible way. Then you think of a person who is perhaps thinking of or owns an existing small car. And to him it makes sense to get it because it is more fuel efficient or its lower cost or whatever it may be. And then on the other side you have someone who aspires for a car which is beyond his reach. He doesn't have a car or he has a two wheeler or a three wheeler and this fills his needs. And then, this can come from anywhere in the country.

**Q: Over the years as I have observed you, the thing that comes to my mind is the loneliness of the long-distance runner. Has it been lonely for you because you have dug in, in the face of considerable criticism, especially in the first eight to ten years?**

Yes, it is interesting for you to say that because that really says a lot. But look at this particular project. You know, when I looked at the Indica, all my friends overseas said that you can't do it; it's not the time and you will have to go through an agonising phase. My friends here said when it was under production that you would produce a lemon. They would beg me to distance myself from the Indica project. If things get OK, then of course, everybody is your friend again.

But it can get, just as you said, fairly lonely. On this car, I think, there was a fair amount of ridicule when the project started that it is a pipe dream and in honesty that would have extended into the company also in certain quarters. That it can't be done and then I was caught in the web. And as one went along, it became clear that something was happening and we were going forward. Suddenly everybody is against the small car, it will pollute, it is going to congest, it is going to impair safety.

But we decided that we will make a car that will meet all those criteria. We decided we will not compromise. We designed the car with a full frontal crash test and to also offset a side crash impact. It will meet all international standards of safety. It will meet emission standards, not only today's Indian standards, but also Euro IV, today as it stands. So, on safety and emissions we spared nothing.

On fuel efficiency, we have a very fuel efficient engine which is no big deal because we have a very small engine. So, a 33 horse power engine will give around 50 miles per gallon. It is not too bad for a car. So, through this period of time, these have been the attacks. Fortunately, we have not sought any crutches in terms of concessions.

So we have done more in fact in many ways than the so-called small cars have done or the micro cars have done in Europe which don't meet many of these criteria. We feel quite pleased and right now I am in a very lonely phase that on the one hand it is attracting a lot of attention positively, but it is also attracting a lot of attention negatively like everybody is taking potshots at in the form that this is not something that we needed to have.

**Q: Would you also have a lot of people emulating your example in the sense of wanting to build a**

### **\$ 3000 car?**

I think, my friend Carlos Ghosn has been the only person in the automotive area who has not scoffed at this. He has from day one said that this is a possibility that could only be done in a place like India. And he has not ridiculed anything. From day one he just said that it is possible in a place like India, but not possible anywhere else.

### **Q: When other car makers enter the same space, how do you reckon the belly of the market will get segmented?**

I think the best way to answer that is to again go back in time. Maruti was the only manufacturer in the low-end car space. At that time, I felt that it needed to be challenged so we started on the small car in that space. I knew at that time the European manufacturers and the other Japanese manufacturers would never be able to produce a comfortable car. The Koreans could, and they did.

By the time the Indica came out, so did Santro, so did Matiz. And they came out all about the same time. Theoretically, I thought I was the only one. May be they thought they were too. But then we realised that we were all coming out at the same time, and we had three offerings of the new price dimension and a more modern car than the Maruti. That probably added considerably to the growth of the car industry and it probably should have had the same reaction as this one is because it is exactly the same thing.

Maruti was producing about 150,000 cars at that time. The 800 was the only one and I think by the time the Esteem had come, 180,000 cars or may be 200,000 cars were being produced. A few years later, Indica was itself over 200,000 cars per year. So the same kind of paradigm change that took place at that time could happen within just the small cars. So, if Bajaj and Mahindras and whoever produce small cars, then 3 or 4 brands of small cars will be available to choose from. I don't believe that Tata Motors can fulfill the entire demand of the country.

### **Q: But how would you signal differentiation to the customer?**

I don't know because I don't know what they would have. All I would say is that probably of the players that we are talking of, I couldn't say that, because I was going to say that the outlets or the distribution networks might be an important thing. But I take that back because the two wheeler distribution outlets may serve well to do this and a tractor distribution outlet may also work well. So, I don't know what would differentiate this from the others.

The product itself would have to be differentiated. The one thing I wish to do, is I want to have several follow-on products, following this. Moving up market because we have a great advantage, we start with a very low base so we add content to this. We are very competitive as we move up. Today for example, the Smart is an expensive car. If it started at a very low base and you added content, it would be a very competitive car when you loaded it.

I feel that there is probably a market, maybe outside India more than India for a fully loaded power steering, automatic transmission, power windows, air conditioned kind of car with a bigger engine at a very affordable price, which is far lower than what is available elsewhere and we should be able to address that kind of market also.

### **Q: In terms of the various things that you have done in your life, like this small car and Indica, would you consider this as more interesting?**

I think so, because more new ground has been broken here than on Indica.

**Q: Is it bigger than the Corus deal?**

Corus is a transaction. It got us a lot of visibility, but Corus is a trans-action. We didn't build anything. There is a different level of excitement when you are building something.

**Q: You have been quoted in the media the last couple of weeks saying that this would be an ideal time after the launch of the small car to step down. How serious are you about it?**

All I said, you know, I think in everybody's life there is a certain amount of moments of satisfaction. You feel, that after that has been achieved it is a nice time to step away or change gears and that's why I said that in an ideal world this would be a good time to step away. I didn't say that this is what I would. You've achieved something, it is successful, it is a nice time to leave because you may not have the luxury of being able to do that, but it is a nice time to leave.

And you don't want ever to have a situation where somebody sort of whispers, when is he going to leave? You know, recently I had an occasion to meet Michael Schumacher and I asked him, are you sorry you retired? And he said, No. I retired at the peak of my career. How much more could I have done? I may have gone down.

I am now a test driver for Ferrari and I am enjoying what I am doing. And he said that I am enjoying my new life and I really am enjoying myself. And I think there is a lot there to what he said. You don't like to fade away because of hanging in there for too long, you love to be on the back of something that is exciting. So it is a true statement and not hypocritical.

**Q: In the last few years things have started to come together. Don't you think it is a good time that you should concentrate on consolidation considering the last few years?**

I would prefer to just say that I wish I was 10 or 15 years younger, not to do what you have said, but because today the country is really on the move which it could have been five years earlier, but it wasn't. And hopefully it will keep on moving in that direction. May be it will taper off, may be something will happen in the region that may make it happen. You can't say that just by staying you can make things happen better and that should not therefore be the reason to stay.

You know, let us just take a hypothetical case. Suppose I had spent the last four years in this dream project and it didn't happen. There is tremendous disappointment, but it could happen. I think when it comes to time or point when you have to leave if it doesn't happen, then you could go out in disgrace. So you know there are times when you feel that in an ideal world this would be a nice time. That might be a nice time, and just by staying doesn't make it better.

**Q: Didn't you find a successor that fitted the bill 100%?**

No I didn't. I needed more time. And the reason that Mr A or Mr B or Miss or Mrs C is not named or in place because I think to do that too early is also bad because that person is then asking that question, when I am going to leave? And secondly, those who didn't want to unseat that person would be hard at work trying to make sure that happens three years or eighteen months before they think it should be announced and the person should be anointed and one should start to give that person a chance to operate.

**Q: Do you have somebody in mind?**

I have several people in mind and have a problem finding the right person.

**Q: Are you doing this search yourself or is there a committee at Tata Sons?**

No, there is no committee at Tata Sons, maybe there should be.

**Q: Would you like someone from within or outside?**

I don't think I would like to answer that because it would be prejudging an issue. It should be an open issue, an issue where the person could come from anywhere.

**Q: Would the person have to be an Indian?**

That's putting lots of words in my mouth. Theoretically, it need not be an Indian, but I think, it would be a good thing if it was an Indian as we are an Indian company, but we are attractively international so to a degree it could be a person from anywhere. But since almost 200,000 people are in India, he should have a keen understanding of India.

**Q: You have made the point earlier how you would like to see more IPR being created within the group. What to your mind are really the barriers that are coming in the way? What does it take for industrial corporations like Tata Motors to innovate in a knowledge era?**

I think the one thing that needs to happen is that challenges need to be given to the organisation. Let's discuss about Tata Motors. In developing the small car, we have filed 40 patents in relation to the small car. Tata Motors since last year has filed some 200 patents; the year before we filed 30. And probably if I go back, then for three years we didn't file any.

The truth is I think that if there are challenges thrown across and those challenges are difficult then some interesting, innovative solutions will come. If you don't have those challenges then, I think, the tendency is go on to say that whatever will happen, will take place in small deltas. In a way, this is my hypothesis: we have a history in India of being licensed manufacturers.

Know-how came from somewhere, we produced the product, we badged it ourselves or we put the foreign badges, put it into the market and in some cases, Indian companies were free to enhance that product, while in other cases they had no right to touch that product from what it was. I think that reduced challenges to just meeting cost challenges in manufacturing etc.

And therefore in manufacturing, we learnt from systems that foreign partners brought, we learnt from techniques that existed and we added some in India. We never really, except in the pharma area, tried to venture out on our own. And I think, many of our companies changed that. You know normally, if you want to do something, the normal reaction from the Indian manufacturer is who are the people doing this? See if I can get a JV with them and come to India.

There are some who think I can do everything myself and there are some who make use of reverse engineering and come into the market. In either of those challenges, the real challenge is when you have some strength and you really choose to throw out the gauntlet that you can do X. And it ought to be the kind of challenge which somebody says that can't be done because then that really becomes the engine of innovation.

So Kennedy said can you send a man to the moon? I think at that time, they certainly wouldn't have believed that it could be done. It was tough. Since then we haven't had those kinds of challenges. We haven't said we will send a man to Mars, we may put landers on Mars, but we have not done those kinds of things. It is those areas which really create the innovation that we need.

**Q: In terms of your global aspirations for the small car, how do you propose to sequence it?**

I think the first thing I would like to do is get a mature product in the Indian market and seed this market effectively. My aim was that I would produce a certain volume of cars and then I would create a very low-cost, low break-even plant that a young entrepreneur could buy and that a bunch of young entrepreneurs could establish an assembly operation. Then Tata Motors would train their people who would oversee quality assurance and they would become a satellite assembly operation for us.

So we would create entrepreneurs across the country over time that would produce the same car. We would produce all the mass items and ship it to them as kits so its similar to an SKD or CKD operation. The assemblers would also be the dealers for the car and thus we would eliminate one level.

First, I would like to do that in India and it will be very satisfying if the small car created 10 or 15 satellite groups of young engineers who thought they could get together and do a business, but which they would never be able to get, normally, like in the assembly of cars or be involved in an industry of that nature. That will be a very satisfying thing for me. What we do outside India will probably be a more conventional distribution system. An assembly plant where we can assemble the product in a more conventional form.

**Q: But would you look at largely India-like markets?**

Well, the obvious markets overseas for us would be the African markets, the Latin American markets like Brazil, Argentina and some of the Far East countries like Malaysia, Indonesia, etc. Those would be the markets. There are people who say that this product could be quite acceptable in Europe, but that is not the market that excites me so much.

**Q: Is Fiat going to play a role in the overseas distribution and marketing of this product?**

There is no agreement to play a role. But I think we both have a view that wherever one is stronger than the other we will seek to leverage that strength. Fiat has assembly plants in Brazil and Argentina. In other markets like South Africa, we have a better market presence than they do. So it varies, but we have not made any decision or even discussed this.

**Q: Has someone from China been interested to associate with you for this car?**

No.

**Q: Are you concerned about the IPR issues there or would you venture into that market?**

I wouldn't venture into that market because it would be a matter of time before we would be out in that market.

**Q: Recently, you suggested that it's easier to do business abroad and in this kind of an environment you have opportunistic companies coming to India whereas the more established companies from India are looking abroad. What is the single biggest change that you think business needs in the country to function optimally?**

Yeah, I said that with a particular context. We have three greenfield steel sites just going around in circles, mining rights not being given, they are being given to X but not to Y, captive coal mines are not being settled. You want to build a car plant in West Bengal because you want the state to industrialise, for

no other reason than that you want to industrialise that part of the country.

You get caught in a political crossfire and you find yourself facing the gamble between here and building there sort of syndrome. So, then you ask yourself, this seldom happens in other countries. If you went out to build a small car plant in South Africa, it might be out and running by now. And I said this in the context of Corus. When I have acquired 18 to 20 million tonnes of additional capacity, I wanted to do it in India.

I would still and I hope we can do it in India, but it would take another 5 years or 6 years, if everything gets settled. So for one reason or other, particularly now when land is involved or natural resources are involved it seems to be taking much more time to get something done in India than it would if I were to go to Brazil and buy an iron ore mine and set up a steel plant assuming that that were possible.

**Q: Were the initial years in this project a low point when the costs were increasing in 2005? Did you think that it may not be possible?**

Yeah, it put additional pressure and that was also part of the reason why the project took longer than it did because it would have been very easy to say that let's scrap the Rs 1-lakh goal that we had set for ourselves and make it 2 or something, which also would have been different. So it would have been easy to say that let's go on in that sense. But, the view we took was that we should continue to operate towards the same goals.

**Q: Was it a deliberate tack: the Rs 1-lakh figure?**

No. I said quite openly that it was at Geneva Motorshow that the FT reporter asked me about the car and what it would cost and I said about a 100,000 rupees. It got flashed, that's how it happened.

**Q: For a project of this kind to succeed, suppliers also have to respond differently. How easy or difficult was it to drive innovation across the extended enterprise?**

I think more than anything else the vendors disbelieved that the project was real. That's been a bigger issue, you know, because it has not been that they have not been able to respond. They did not expend their energies to respond to the same criteria we did, they didn't respond because they thought it was a hypothetical project.

The real interest has come after they have seen us invest in the site in Singur. I think that the amount of vendor interest that we have created, the kind of inputs, the kind of aggression that we see from the vendors now has gone up exponentially because they now realise that this is a real project, there will be volumes and they have the chance to address that kind of demand.

**Q: Didn't any of the vendors have the pragmatism to really figure out that this was a big opportunity?**

I think of those who would have to make an investment as against those who would have to provide components out of their existing facility, it is the first lot that would have had the disbelief. If you take a company like Bharat Forge, it will be really happy to forge front ends for a small car or crank shafts or something.

But someone who would like to go and set up a new tail light factory for the small car or produce a part that would take a considerable amount of investment from him and you are not willing to give him the guarantee that you will off-take X, it's that kind that would not spend the money to try to kind of put

together a proposal for that project as he doesn't think that project is really going to happen. It is that kind of situation. So, I should say that more of this car has been made under rapid prototyping by us than you would find in standard cars.

**Q: How have you changed as a person over the years?**

I have become older. (laughs)

**Q: With the small car project and the Jaguar likely to co-exist inside Tata Motors how will the organisation structure look like?**

I don't think the two have to be looked at in continuity. I think it is possible that you can have high-end brands because the SUV part of it, Land Rover, can sit squarely on top of our business. The other side, I think is a luxury car we don't have and it would be a great mistake to try and integrate it. It should be nurtured as a brand and hopefully come back to its previous image which was a great image at one time.

**Q: You were initially frustrated with the resistance that you met from colleagues. Is that resistance over now?**

Yes I do.

**Q: What kind of resistance was it, to new ideas, to new ways of doing things?**

I think, we were a group that would not work in a particular way for many years and we weren't fully sensitive to the changing environment around us. So anything that was new, we felt it was better to be where we were, tested and tried, I think, that's changed.