

Tata Nano – A giant leap for a small car?

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"I would like to announce that the standard car will have a dealer price of Rs.1 lakh only. I just want to say that because a promise is a promise."

- Ratan Tata on releasing Tata Nano to the world¹

"We cannot make a Rs. 1 lakh car. Our engineers have said they cannot do it."

- Shinzo Nakanishi, MD Maruti Suzuki India²

"It is a proud moment for India. It demonstrates India's technological and entrepreneurial ability. The car will help people move from a two-wheeler to a four-wheeler and will leap-frog the two-wheeler. It fulfils the need of the common Indian who aspires to move from a two-wheeler to a four-wheeler"

- Kamal Nath, Minister of Commerce (May 2004 – April 2009), Govt of India³

"I believe that a setback of fires and other technical problems can happen with any new car. There are vested interests that have been quick to use that against us and we have to be quick to counter them and not just view it as being a great negative or base our lack of performance on this issue. We have to deal appropriately with the fall-out and re-instate public confidence. We need to be pro-active and not defensive."

- Ratan Tata in an interview with Autocar India Magazine, September 2011

"The People's Car", Mr. Ratan Tata called the Tata Nano when it was unveiled in the Delhi Auto Expo in January 2008. And it was meant to be so. Coming at a price tag of Rs.1 lakh, many had presumed the success of Nano and had already started making audacious predictions of how the Nano would dramatically transform the Indian automobile industry and virtually pulverize the used-car market. Just the thought of hundreds of Tata Nanos going around in the cities of India had given nightmares⁴ to environmental activist and Nobel Laureate Mr. R.K. Pachauri. Tata had estimated sales of 1 million units a year.

¹ Source: IBN Live News Network– "Tata unveils `1 lakh People's Car 'Nano'", Jan 10, 2008

² Source: IBN Live News Network– "Maruti can't make a `1 lakh car", Jan 09, 2008

³ Source: Economic Times – "Tata's Nano fulfills common man's dream", Jan 10, 2008

⁴ Source: Financial Times – "Green activists concerned over People's Car", Jan 9, 2008

Indian Automobile Industry – from ‘Bail-Gaadis’ to BMWs & Audis

India had its first tryst with the ‘motorized carriage’ in 1897. And since then it has been sort of a Shakespearean love story. The Indian automobile industry was in its embryonic stage till the 1940s. Bullock carts or ‘Bail-gaadis’ characterized pre-independence transport infrastructure. After independence in 1947, the growth of the industry was slow owing to the License Raj. Cars were considered a major luxury and it was only after the economic liberalization of 1991 that the industry demonstrated a sustained and steady growth. Currently the seventh largest automobile industry in the world, the Indian automobile industry has grown significantly over the last ten years. Industry volumes have jumped by a factor of 3.2, from a level of 47 lakh units to 149 lakh units, according to the Society of Indian Automobile Manufacturers⁵ (SIAM). In 2010-11, the total turnover of the automotive industry in India reached a new high of Rs.3.285 thousand crores (USD 73 billion) the exports stood at Rs. 495 crores (USD 11 billion). The automobile industry currently contributes 22 per cent to the manufacturing GDP.

The growth story of the industry has been remarkable. And of late, the rise has been nothing less than stunning. India achieved the position of the fastest growing passenger car market in the world during the January-June period in 2011, overtaking the US, which grew at 14.40 per cent, according to SIAM. In passenger vehicles, India was the fastest growing market at 18.20 per cent during the six month period.

So is the case of luxury car market. Experts estimate the market for luxury cars will increase 32 percent over the coming years⁶. By 2020, the luxury car market is expected to be around 150,000 cars per annum. That would mean the industry would have grown 10 times in just a decade⁷.

India’s automobile industry is growing fast, but the Indian consumer has been partial to the two-wheeler.

More than 76 percent of motor vehicles on the road are two-wheelers, their popularity driven by low price, high mileage, and an ability to drive efficiently through dense traffic. As represented in Figure 1, a major share of the pie (76%) was taken by the two-wheelers with passenger vehicles coming in next at 16%.

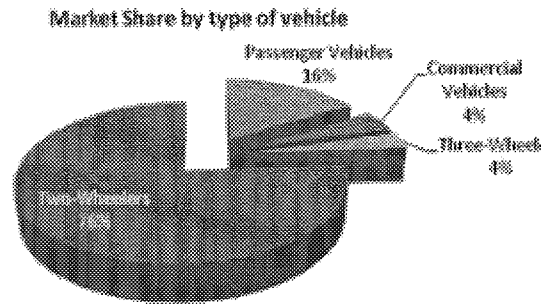


Figure 1:

Market Share of different types of automobiles

The long-term potential for growth of the auto industry is very favourable, on account of low vehicle penetration in the country. As income levels rise and financing gets easier, the industry will continue to see a healthy growth rate. India’s automobile industry is expected to grow by 11 to 13 per cent in the fiscal year ending March 2012, according to SIAM. The forecasted size of the Indian Passenger Vehicle Segment by 2020 is nearly 90 lakh units and that of two-wheelers is close to 3 crore units. It is a very strong outlook but there is a possibility that the veracity of the forecasts could be affected by rising fuel prices and increasing prices of cars due to growing input costs.

The Automotive Economic Ladder⁸ depicts the percentage increase in price from one segment to the next. We can see that before Tata’s 1-lakh car Nano entered the market, the Indian consumer had to take a giant financial leap (Alto was 333% more expensive than the Splendor NXG) to upgrade from a two-wheeler to a four-wheeler. With such pricing, until Nano’s launch, only 7 Indians out of a 1000

⁵ SIAM is the apex industry body representing all the vehicle manufacturers, home-grown and international, in India.

⁶ Source: Divanee – “Lamborghini and Ferrari rev up India’s Luxury car market”, October 20th, 2011

⁷ Source: Hindustan Times – “Charge of the luxury brigade”, October 22, 2011

⁸ This Automotive Economic Ladder was adapted from Booz & Co.’s report on the Indian Automobile Industry, “Revving the Growth Engine – India’s Automotive Industry is on a fast-track” published in 2008. The prices have been updated.

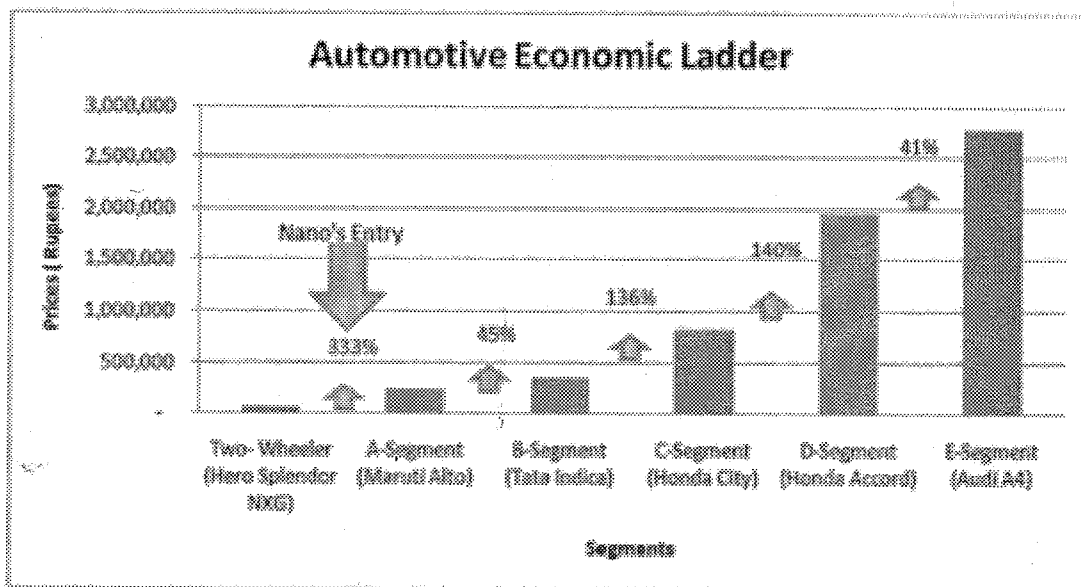


Figure 2: Automotive Economic Ladder: From 2-Wheelers to Cars

had a car⁹ and 1 out of every 13 automobile-owners were car-owners. Forbes said, "A billion Indians buy about the same number of cars in a year as 300 million Americans do in a month". With the introduction of the 1-lakh car, the price increase from the two-wheeler segment to the A-segment is just about 110% thus opening up new vistas for the Indian middle class to upgrade from a two-wheeler to a car.

Tata Motors - the Volkswagen of the East?

Tata Motors, established in 1945, was originally a locomotive manufacturer. They later expanded their operations into the commercial vehicle segment after entering into a JV with Daimler-Benz AG in 1954. Although the JV ended in 1969, Tata Motors continued manufacturing trucks. Today it is India's largest automobile company, with consolidated revenues of Rs. 1,23,133 crores (USD 27 billion) in 2010-11, the fourth largest truck manufacturer¹⁰ in the world, the world's second largest bus manufacturer¹¹ behind Volvo and employs over 50,000 workers. It is the leader in commercial vehicles in each segment, and among the top three in passenger vehicles with winning products in the compact, midsize car and utility vehicle

segments¹². Over 5.9 million Tata vehicles ply on Indian roads today.

This has been realized by its enviable distribution channel across the country. The Company's manufacturing base in India is spread across Jamshedpur (Jharkhand), Pune (Maharashtra), Lucknow (Uttar Pradesh), Pantnagar (Uttarakhand), Sanand (Gujarat) and Dharwad (Karnataka). Following a strategic alliance with Fiat in 2005, it has set up an industrial joint venture with Fiat Group Automobiles at Ranjangaon (Maharashtra) to produce both Fiat and Tata cars and Fiat power trains. The Company's dealership, sales, services and spare parts network comprises over 3500 touch points.

Tata Motors has operations in the UK, South Korea, Thailand and Spain through subsidiaries and associate companies. Among them is Jaguar Land Rover, a business comprising the two iconic British brands that was acquired by Tata in 2008. In 2004, it acquired the Daewoo Commercial Vehicles Company, South Korea's second largest truck maker. The rechristened Tata Daewoo Commercial Vehicles Company has launched several new products in the Korean market, while also exporting these products to several international markets.

⁹ Source: The Guardian – "India launches 'world's cheapest car'", March 23, 2009

¹⁰ Source: Tata Motors Official Website

¹¹ Source: Tata Motors Website

¹² Source: Tata Motors Website

Today two-thirds of heavy commercial vehicle exports out of South Korea are from Tata Daewoo¹³. The company today has R&D centres in Pune, Jamshedpur, Lucknow, Dharwad in India, and in South Korea, Spain, and the UK.

In January 2008, Tata Motors unveiled the Tata Nano, for which India and the world were waiting for with bated breath. A development, which signified a first for the global automobile industry, the Nano brought the comfort and safety of a car within the reach of thousands of Indian families.

An enviable repertoire of vehicles

Its current product portfolio is a commendable range of vehicles in the segments of passenger cars, commercial vehicles, utility vehicles and even military vehicles. They have three hatchback models-Nano, Indica (India's first fully indigenous passenger car) and Indica Vista.

In 2002, Tata introduced India's competitive indigenous sedan: the Indigo. It was an in-house designed, sedan version of the Indica. The existing models of Indigo are Indigo CS and Indigo XL. Indigo Manza – the luxurious version was launched when the Indigo Sedan model was phased out.

In the utility vehicle segment, they have Tata Safari (India's first SUV), in LCVs – Sumo Victa, and Grande MK-II, and minivans Tata Venture, Tata Magic (considered a micro-van) and Tata Winger. In 2005, Tata Motors created a new segment by launching the Tata Ace, India's first indigenously developed mini-truck. They also have a pick-up truck called the Xenon XT. Recently, they added a crossover MUV to their portfolio called the Tata Aria.

The acquisition of JLR gave Tata Motors a strong foothold in the European and American markets. Jaguar India's models are – Jaguar XJ, Jaguar XF and Jaguar XK. Land Rover India's models are

Freelander 2, Discovery 4, Range Rover, Range Rover Sport and Armoured Range Rover. With such a diverse product portfolio, Tata Motors is all set to become the Volkswagen of the east.

Nano – from conception to inception

Ratan Tata envisioned a low cost, small car while doodling in a corporate meeting. He observed families riding on two-wheelers — the father driving the scooter, his young kid standing in front of him, his wife seated behind him holding a little baby. It led him to wonder whether one could conceive of a safe, affordable, all-weather form of transport for such a family. Seeing an opportunity in the great number of Indian families with two-wheeled rather than four-wheeled vehicles, Tata Motors began development of an affordable car with a price tag of Rs. 1 lakh in 2003. The initial suggestion from his team was a car without doors, with soft shutters for doors and safety bars. These designs revolved around developing a motorized quadri-cycle. He turned down the proposals and advised them to upgrade a three-wheeler rather than downgrade a four-wheeler. The purchase price of this no frills auto was brought down by dispensing with most nonessential features, reducing the amount of steel used in its construction, and relying on low-cost Indian labour.

Tata Motors focused on that part of the Indian population which still travelled using two-wheelers (motorcycles, scooters) and three - wheelers, at a price point of about Rs. 65,000. The expectation was that these 135 cc & 150 cc bike owners will migrate to the Nano.

Towards the Rs. 1 lakh mark

A team of 500 engineers worked on the car, to be produced at a plant in West Bengal. The aim was to make a cost-effective car, not a cheap car. To make Nano a proper car and not an excuse for one, the team of engineers led by Girish Wagh had to think out of the box, or rather, out of the conventional 'box-on-wheels' design¹⁴. And they obliged with many

¹³ Source: Tata Motors Website

¹⁴ Source: Autoblogs India – "Tata Nano wins international design award", Dec 30, 2010

award winning ideas to deliver value incurring the lowest cost.

- The dashboard design, with the instrument console in the middle, was such that it was ready for both left and right hand drive countries.
- Instrument console without anti-glare coating or screws.
- The Nano's trunk is only accessible from inside the car, as the rear hatch does not open.
- Seats are fixed to the steel bars that runs across the cabin, provide a safety anchor and some degree of side-impact protection
- One windscreen wiper instead of the usual pair.
- Combination control switches – one control stalk on steering column for lights, signals and wiper.
- Plastic bumpers, unpainted in the standard version.
- Three lug nuts on the wheels instead of the usual four.
- An anchored, single piece steel tube steering that performs equivalently to a collapsible one.
- No fuel slot in the side to reduce one extra part, under the front hood instead.
- 623cc engine has only 2 cylinders.
- No power steering, unnecessary due to its light weight.

As is evident, in spite of the target-pricing strategy, cost cutting was never the overriding consideration, customer was supreme. On March 23, 2009, Tata Motors launched the world's cheapest car, simultaneously revolutionizing the rules of automobile manufacturing and creating a massive new market where none had existed before. "I hope this changes the way people travel in rural India. We are a country of a billion and most are denied connectivity," Ratan Tata said after the launch. "This is a car that is affordable and provides all-weather transport for the family." In an effort to allay fears that something so low-cost could not be safe, Mr Tata clarified that it had passed a full-frontal crash test in India and was designed to sustain further impact testing under European standards.

The Singur Fiasco

For Tata Motors, which had its plants in Pune, the ideal location for the Nano plant would have been somewhere near Pune. But on the behest of the then West Bengal Chief Minister, Mr. Buddhadeb Bhattacharya, Mr. Ratan Tata chose Singur to be the land where the Nanos were going to roll out from. The CM was committed to bringing industry back to the region, and Tata Motors wanted to lead the industrialization effort there. They asked the state government for 1000 acres of land. By June 06, 2007 the financial benefits of setting up a plant in Singur were determined, suppliers were in place and the right people were inducted.

The land had a history of industrial disputes, but after many rounds of talks and negotiations, Tata Motors pushed for the land, trusting the political leadership. They received the requested land after a period of six months. The most significant advantages of setting up a plant in Singur, apart from the Rs. 135 crores in incentives such as power and water, was that the land was right on the highway and hence had an excellent frontage.

But as the famous saying goes, "Just because all the swans you have ever seen are white, doesn't mean there are no 'black swans'". Tata wouldn't have even dreamt of what was in store for them in the coming months. Disgruntled by the loss of precious land and agitated by the meagre compensation given by the State government, many farmers around the area started protesting against the operation of the plant. Their argument was that some of the land was on rich farming land. When the agitations went out of hand, Tata Motors decided to pull out of Singur. By August 23, 2008 work at the plant had ceased. They had to dismantle the entire plant, relocate everything to Sanand in Gujarat without producing a single unit. The reasons for this whole event were summarized by Phillip Chacko in his book, "Small Wonder" as a confluence of politics and industry, conflicting ideas regarding development and cussed realities of contemporary India. On October 3rd, Mr. Ratan Tata in a press conference said, "It (the decision to pull out of Singur) was a lonely one".

Mr. Prakash Telang, Tata Motors MD for India operations, recently said, "Because of the Singur episode, the momentum was lost – all the hype that had been built up around the product backfired on the company because it was simply unable to meet the initial demand".

The 'burning' issue

Seven months after its launch, Tata Nano, whose name had until then spread like wild-fire, caught fire – literally¹⁵. Three cases of fire were reported from three cities – Delhi, Lucknow and Ahmedabad. The problem seemed to be in the combination switch area behind the steering wheel. After that, there have been five reported cases of fire with the total number of fire cases being eight¹⁶. Five cars have completely gone up in flames, while others reported smoke caused by short circuit after a drive. The causes quoted by the company have been ruptured fuel lines in the cases of the whole car catching fire to faulty wiring in the combination switch area. According to company reports, 93,581 Nanos have been sold to the public as on October 01, 2011. This means that the proportion of the cars which have caught fire is less than 0.01% of the total cars sold. Contrast that to auto giant and quality conscious Toyota, whose cars have resulted in 89 deaths so far, resulting in millions of cars being recalled¹⁷. This raises a few questions - Was the ensuing consumer 'overreaction' warranted? Did the media play a role in blowing this issue out of proportion?

Tailoring it to the customers' needs

While the 'people's car' was being designed, one would imagine that the customer support division, which spoke on the behalf of the potential buyer, would be involved right from the conception stage,

but with Nano it was different. The car was conceptualized by Mr. Ratan Tata as early as 2003, but Vikram Sinha, head of customer support, joined the project in early 2007 forming a four man cell. He drove the car for the first time in 2008 and came up with issues in air conditioning, pick up and suspension.

Tata Nano was always targeted at the proverbial 'bottom of the pyramid'. It was only after few months after the launch that its marketability in the foreign countries came to the fore. The focus of Tata Motors was on making the visit to the customer showroom a pleasant one. S. Krishnan, a marketing maven and Senior VP (commercial), responsible for sales, marketing and customer support, had stated, "Just because our customers are buying a less expensive car, does not mean they have to be dealt with any differently from somebody who's purchasing a costlier vehicle." In fact, Tata had asked its 190-odd dealers nationally to 'upgrade' their showrooms to create an ambience¹⁸ suitable for the Nano.

Sales performance – a bumpy ride

The Nano was a household name even before its launch. According to CRISIL, Tata Nano's launch expanded the Indian car market by 65%. Invest India Market Solutions predicted that as many as 1,28,00,000 households can be potential buyers of this engineering marvel. Two months after the launch, Tata received 2,03,000 pre-orders¹⁹, representing 17% of the Indian car market. They were not able to satisfy the demand, so they had to choose the first 1,00,000 to get the Nano via a lottery. One might think this would have boosted sales and driven up volumes, but this wasn't the case. Since 2010, Nano's sales figures have seen vicissitudes comparable to any roller coaster track in Disneyland.

¹⁵ Source: Bloomberg Businessweek – "A fire scare for Tata Motor's low-cost Nano", October 23, 2009

¹⁶ The eight cases of Nanos catching fire or reporting short-circuit and smoke from various cities: Ahmedabad (September 13, 2009), Lucknow (October 20, 2009), New Delhi (October 22, 2009), Mumbai (March 21, 2010), Anand (April 7, 2010) and New Delhi (Aug 27, 2010), Ahmedabad (September 29, 2010 & March 02, 2011), Source: Carazoo.com, IndianAutosBlog.com

¹⁷ Source: US News and Reviews, "NHTSA: 89 Deaths Caused by Unintended Acceleration in Toyota Vehicles", May 26, 2010

¹⁸ Source: Gaadi.com – "Tata to market Nano online", July 10, 2008

¹⁹ Source: Bloomberg – "Tata Nano's sales on fire", May 5, 2009

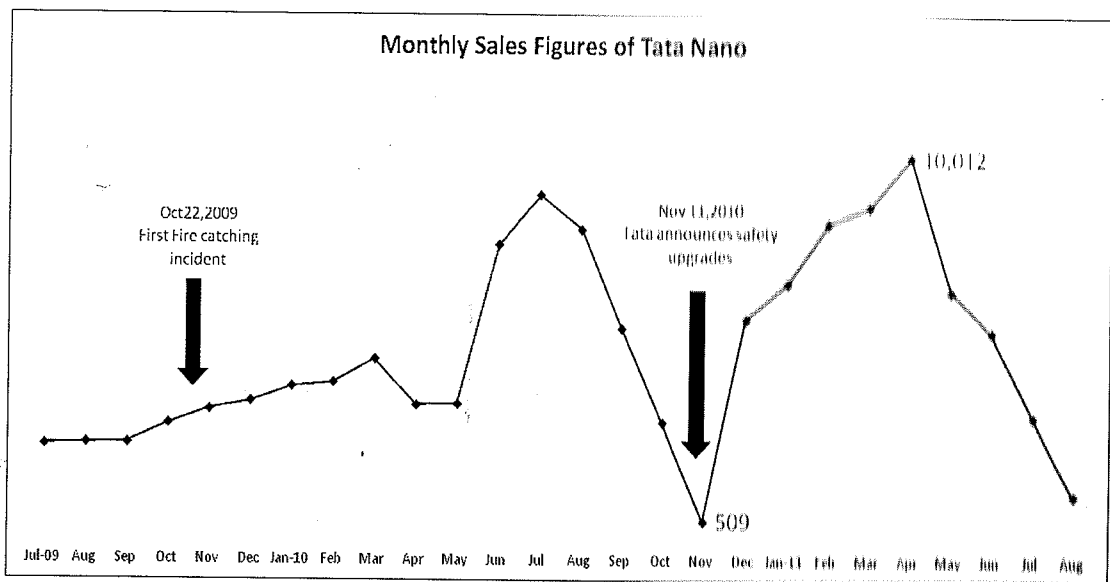


Figure 3: Monthly Sales Figures of Tata Nano²¹

Tata Motors designed the project expecting²⁰ to sell 3,50,000 cars a year, twice that of the largest selling car in India then. The vendors – who were forced to deliver at the lowest of prices and who were promised that the sales would touch a million every year and upwards - are now finding it difficult to cover their costs.

Figure 3, shows the sales figures of Tata Nano from July 2009 to Aug 2011. For a company which had planned to sell a million units a year i.e. selling approximately 83,333 units per month at the time of conception, the performance is anything other than spectacular. The highest sales figure in a single month was in April 2010, when it sold 10,012 units. The lowest was 509 units in November 2010, the festive season in India, when car sales are expected to be high. This number included 68 units bought by the company employees themselves. In this month, Tata motors officially announced safety upgrades for the Nano because of the rising cases of the car catching fire. The low sales figure was in spite of the fact that the car was available off-the-shelf in 10 major states across the country.

Regardless of the mild response that Tata Nano has received, many Indian automobile manufacturers have announced their low cost alternatives to Tata Nano, with Bajaj's Lite, created in collaboration with Nissan and Renault being the most notable.

An enticing value proposition

Currently, the Nano comes with a 4 years/60,000 kms warranty whichever comes first, at no extra cost. One of its competitors, Chevrolet Spark, offers a 3 years/1,00,000 kms warranty. Maruti Alto K10, on the other hand, offers 2 years/40,000 kms warranty. If this offer doesn't look tempting enough, there's more. The base model of the Nano is now available at Rs. 15,000 down at an EMI of Rs. 3,400²². This has made it extremely easy for the two-wheeler owner to upgrade to a passenger car. Although immediately after the launch, the lead time of delivery of a Tata Nano was as high as 6 months, but since August 2010, Tata had announced that the delivery would be instant²³.

Inside the mind of the Indian consumer

The cheapest car in the world came with all the 'bells and whistles' attached. In spite of that, why it was unable to meet the company's and customers'

²⁰ Source: "Small Wonder – the making of Nano" by Phillip Chacko, Christabelle Noronha, Sujata Aggarwal

²¹ Source: Tata Motors Website

²² Source: One India Automobile – "Pay `15,000, Drive Home A Tata Nano", October 24, 2011

²³ Source: Motor Beam – "Tata Nano – readily available from August", June 10, 2010

expectations remains an enigma. Experts say the answer lies in analyzing the buying behaviour of the target segment. But getting into the head of an Indian consumer is a task which many contemporary marketing geniuses have failed at.

It was a much debated issue – as to how Tata had stuck to and would stick to its promise of delivering the base model of the Nano at Rs. 1 lakh. Although the launch price was Rs. 1 lakh as promised, eventually Tata could not live up to it. The mounting inflation forced Tata to raise prices in course of time and today the base price stands at Rs. 1.53 lakhs²⁴. Is it possible, that this price is foiling two-wheeler owners' plans of upgrading to the four-wheeler?

The fire catching incidents haven't helped. Consumers would rather wait to take a bigger loan and go for a slightly more expensive car rather than being worried about leaving their kids in the car with the fear of it catching fire always on the back of their minds. Dealing with peak-hour city traffic was another major concern for the families living in metropolitan cities. Two-wheelers provide a reasonable commuting solution to this problem because of their greater maneuverability.

The idea of owning a proper car for a little more than Rs.1 lakh seemed unbelievable to the common man. Because of this, Tata's grandiose plans were faced with a lot of derision by the common man. This was evident from the mails and blogs doing rounds before the launch about the Nano being two scooters tied together, a half car and so on. In spite of Tata's best efforts, unfortunately, this sentiment lingered even after its launch. Some owners do believe that the Nano is real and in fact delivers more value than a few other cars in its league. But some are still faced with ridicule about the sturdiness of a car which has been assembled with industrial 'glue' instead of nuts and bolts.

The rear mounted engine has led some to opine that it cannot handle the full frontal impact. Moreover, Indian customers, in their relentless pursuit of value in whatever purchase they make, do not want a good car; they want the best car at the lowest price.

One reason for the consumer 'overreaction' is often cited as Ratan Tata's seemingly adamant claims of delivering the car at the promised price of `1 lakh. A common response to the quality and safety issues with the Nano is that Ratan Tata brought this car into the market at the promised price just to keep his word. And for this reason, consumers don't believe he has made sure that the best parts are installed. Not everyone was convinced by the constant denial of Tata that there are no safety issues with the Nano²⁵. The additional safety features as announced by Tata were probably insufficient to address their concerns.

"Your trumpet sounds twice as loud when others blow it instead of you." Tata was probably hoping that the media rumpus and the word of mouth publicity that the Nano had generated on its own would help it sail through the first year of its launch. But it seems like the press was playing the wrong note. People were never able to see the fun element in the Nano for quite a while after its launch, as the media coverage focussed on the frugal engineering and the cost cutting issues all through. Many reckon Tata brought in the commercials focussed on the specific benefits a little late in the day.

It is likely that Tata Nano appealed to a rung of the consumer-ladder above the intended one. Instead of being bought by nuclear families of size 4 or 5, which normally travel dangerously perched on scooters and bikes even during inclement weather, the Nano has been bought largely by people who already have a car but liked the idea of having a smaller one for running local errands²⁶.

Considered a game-changer once, Nano was expected to turn the Indian automobile industry upside down. But in the three years since its commercial launch in March 2009, "The People's Car" is far from seeing the success that was expected of it. What went wrong? Was it the "first-mover's curse"? Can we completely write off a car which many believe is a miracle of 'Homegrown Engineering'?

²⁴ Source: Tata Nano official website – ex showroom price for Mumbai as on October 19, 2011

²⁵ Source: YouTube video – Tata Nano: Consumers' post purchase behavior, uploaded on March 8, 2010

²⁶ Source: Stuff.co.nz article – "World's cheapest car a flop", January 1, 2011