

Technological factors affecting tata nano



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Content Sl. No. | Content| Page No. | 1| Acknowledgement| | 2| Introduction| | 3| 1. Situation analysis of TATA NANO 2. 1. (PESTELC) 2. 2. Understanding the Competitive Environment- Porter's five forces 2. 3. Competitive advantage(Potter's Generic strategy)| | 4| | | Acknowledgement Introduction

TATA Group is more than 150 years old. In terms of market capitalization and revenues, Tata Group is the largest private corporate group in India and has been recognized as one of the most respected groups in the world.

It has interests in steel, automobiles, information technology, communication, power, tea and hospitality. The Tata Group has operations in more than 85 countries across six continents and its companies export products and services to 80 nations. In the past few years, the TATA group has led the growing appetite among Indian companies to acquire businesses overseas in Europe, the United States, Australia and Africa some even several times larger in a bid to consolidate operations and emerge as the new age multinationals. The TATA group is 11th most reputable company in the world according to Forbes (A, Masud. & K, Kumar. (n. d. .) Tata Motors created several breakthrough products in the past which changed the market dynamics and helped in providing a new customer experience such as 407 platforms in 1980s, TATA INDICA in the late 90s, ACE and TATA NANO. Tata Nano is a car which has breathed into life due to one man and that is Mr. Ratan Tata. Tata Nano, pet project of the chairman of the Tata Group Mr. Ratan Tata was a car which was expected to change the face of automobile sector in India. In the highly competitive small-car market of India, Tata Nano promised to set the bar so high that it would become extremely difficult for the competitors to match.

The dream of owning a car for as little as Rupees 1 lakh s(Rs. 100, 000 - roughly USD2500) was too tempting for millions of Indians who cannot afford even a small car. The kind of extensive media coverage Tata Nano received right from the day it was announced through the entire period until the first units were handed over to the owners was something that its competitors dreamed of. However, after two years of launch, the Tata Nano manufacturing plant at Sanand in Gujrat, India is running at around 20% utilization (Kumar, P. (2012, January 8)).

Tata Nano today introduced an industry first offer. Customers can now swipe their credit card and drive out in a Tata Nano, on the same day. With the introduction of Tata Nano, it has made the life of the middle class family easy, safe and faster. Situational analysis of Tata Nano in India Political factors and Economic factors The land acquisition for one of the Tata Nano factories was not a smooth process. Initially, in 2006, the Tata Motors Company had decided to set up a Nano car-manufacturing factory in Singur (West Bengal).

But the Communist Party of India (Marxist)-led Left Front government of West Bengal (WB) was unable to acquire land for that project, because land was to be acquired from farmers, and several unwilling Singur peasants (in alliance with opposition political parties, non-governmental organizations, and middle-class urban intellectuals) opposed this " farmland grab. " As a result of strong opposition from Singur peasants, Tata Motors Company relocated its project to Sanand (Gujarat) in 2008. The Bharatiya Janata Party (BJP) government of Gujarat was able to acquire land for the Nano project without generating much opposition from the people.

The first Nano car rolled out of the Sanand factory in June 2010 (Roy, D. (2011, 6th April)). Technological factor Value Chain Analysis Operations: Tata nano was world's economic car in the world and Nano has been known by the world. Nano is part of new breed of 21st century cars. The world's cheapest car Tata nano was manufactured by Tata Motors the largest automobiles industry in India. Before starting the project, the company's design team has made deep research on how to go about constructing the cars. The design team has looked into various alternatives ways of constructing a car.

The team tried different technologies but the focused was always on the cost factor. And they were focused on consistent driving factor that is " what is the bare minimum that a customer will accept? " (Agrawal. S & Wadia. J, (2008)) It was made in such a way that it will achieve the cost targeted by implementing an innovative design and reducing the cost in each and every components of the car. Starting from engine, steering, wheels and tires to the windshield washing system, gear shifter and central console, every component was given special emphasis in an effort to cut down cost.

In 2005, they started working on new engine for Tata nano after they have considered the suitable engine and decided to create an engine on their own. While to reduce cost they have used steel tube in place of steel rod which actually helps to reduce the weight of the cars. The wheels for Tata Nano were supplied by the Wheels of India and they used lighter wheels as compared to other vehicles. And in order to reduce the weight of the car and save cost, the engine induction system was made of plastic instead of

aluminium. Tata Motors has manufactured Tata Nano cars by reducing all the cost incurred to lowest to make the 1 lakh car.

The interior structures of the car were designed in more interesting ways with maximum scope for innovation but again their main focus was on the reduction of the cost. The car was made comfortable to the customers and in order to attract more customers the style of Nano cars were made with comfort and functionality. And also the inside volume was made quite large and they were facing challenges that with space if they reduce components, which will look with less things. They tried to integrate functionally in components. They think that it may costs more but they can get two functionalities at the cost of one.

During the production of the Nano cars, to cut down the cost they even attempted to reduce the number of tools to make the components and at the same time they increase the life of the dies used by three times the norm. It made the design and manufacture of the dies more complicated. They tried special materials and received a lot of help from the product design team in meeting the target. (Agrawal. S & Wadia. J, (2008))

Sameer, Sohail, Sankar, Himanshu, Arun TATA GROUP <http://www.scribd.com/doc/22283817/Tata-Motors-Analysis> Arif Masud - 918Avinash Kumar

INTERNATIONAL BUSINESSANALYSIS ON TATA MOTORS PREPARED & SUBMITTED BY: SAMEER (ROLL#7)SOHAIL (ROLL#18)SANKAR

(ROLL#30)HIMANSHU (ROLL#42)ARUN V M (ROLL#54) Innovative 2 cylinder

Indica engine ? Semi-monocoque body to withstand abuse ? Rigid front axle and rear wheel drive for low cost ? Flat face vs. semi-forward face to enhance the loading space. NANO The target price itself became the source

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of innovation, as you all must have read that the big names in the industry just rubbished it as false claims and commented that it was impossible to make a ? CAR? t that price. However, you all know that the promise was kept. This was made possible through series of innovative ideas which led to acquisition of 37 patents by Tata Motors. ? Engine was packaged on the rear side. ? 2 cylinder engine (conventionally there are 3-4 cylinder engines) ? Identical handles and mechanisms for left and right side doors ? Instrument cluster in the middle of the dashboard ? Unconventional seats ? Interior space was maximized by pushing wheels to the corners and powertrain below the rear seat. Product created was very contemporary and ?

It has sufficient Space inside to accommodate 4 persons comfortably. ? Highly fuel efficient ? Exceeds the current Safety requirements ? Complies with the current emission requirements. Source of inspiration/ Purpose from which the concept emanated, which stresses upon the fact that agility and understanding the unstated/ unfulfilled need of customers is the most important source of innovation. Tata Nano: In this case the idea struck in the mind of our Chairman when he saw a family of four (a man, his wife and two kids) riding on a scooter on a rainy day.

He felt that there was an unfulfilled need of safe, affordable and an all weather alternative <http://www.scribd.com/doc/29462444/Report-on-TATA-NANO> <http://www.tatanano.com/news.htm> Unknown(06 Mar, 2013)| Back| | Just swipe and drive out in a Tata Nano * Fastest way to own a car * Hassle free buying procedure * Swipe your credit card and save on the monthly 0% interest payment * Credit period options - 3 months to 12 months * EMI of only Rs. 8, 333 per lakh Tata Nano today introduced an industry first offer.

Customers can now swipe their credit card and drive out in a Tata Nano, on the same day.

Making the offer irresistible, customers can also convert the entire amount in monthly installments at 0% interest, over a period of 12 months, at an EMI of Rs. 8, 333 per lakh. According to Mr. Ranjit Yadav, President, Passenger Vehicles Business Unit, Tata Motors, " We are proud to offer this industry first phenomenon to our customers. This offer will enable customers to own a car in the fastest and hassle free manner. With the introduction of this offer, consumers get the benefit of converting the entire amount on the credit card into interest free installment, spread over a period of 12 months and manage monthly cash flow better.

We would like to thank all our partner banks who have supported this special offer, exclusively for the Tata Nano. " Our customer-centred cars are being backed with customer-engaging purchase experience at our dealerships. We realise that we can become a leader when the after-market experience levels are excellent, not only in pockets, but across our chain. We are bringing in enhancements with equipment, manpower and processes for fast service. " Tata Nano has partnered with five banks for this special scheme -- Axis Bank, HSBC Bank, ICICI Bank, Kotak Mahindra Bank and Standard Chartered Bank.

Customers in India, who have credit cards belonging to these banks can avail of this special scheme in 26 cities, across 75 Tata Motors Dealership| <http://www.tatacars.com/products/tata-nano.aspx> <http://www.nanosight.com/applications/eu-definition-of-nanomaterials?gclid=ClrsgljYmrcCFUJqMgodYVMAXg> <http://piyusharunkumar.wordpress.com> <https://assignbuster.com/technological-factors-affecting-tata-nano/>

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