THE ANALYST

SUPPLY CHAIN & BUSINESS OVERVIEW





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Editor: Prerna Lodaya

Cover Story Photo Courtesy: Bharat Forge Ltd.



A true disciplinarian by nature yet an extremely amiable & hands-on person at the shop floor, Baba N Kalyani, Chairman & MD, Bharat Forge, is a charismatic personality par excellence for GenX youths. Always ready to latch on to an opportunity and quick to spot a trend, Mr. Kalyani strongly advocates the mantra of 'Make in India'. A firm believer in leading by example, this Padma Bhushan awardee has surely set the standards high for young entrepreneurs to follow suit. His son, Amit Kalyani, is steadily matching up to his growth calibre, writes Prerna Lodaya.

Il the iconic companies have an inspiring story behind their success... a thorough determination & dedication towards achieving a certain goal, eyeing opportunities amid uncertainties, passion & hard work, and a fighter spirit are all the ingredients that make up for a successful conglomerate. One such company that has surely made mark not only in the Indian market but also globally, Bharat Forge, prides itself as being the world's number one forging company in the world. The pillar of its foundation and the man of the mettle, Mr. Baba Kalyani, exudes charm and believes in leading by example. While on the shop floor, he behaves as one among the many employees of the company to bridge the gap. This has been one of the setting stones of the company to achieve such a milestone.

Our meeting with such an inspiring personality was a dream come true. Not only did we witness the magnificence of

his persona but also the world-class shop floor built with top-notch workforce and world-class technology. As they say... the picture perfect present has a very interesting story behind its success... Let's get a glimpse into the past to understand the glorious present.

THE BUILD-UP

The high-tech forging plants at Bharat Forge today are a far cry from the dark, dimly lit shed from where the company

rolled out the first forged metal part in 1966. The new plants are airy, sunny, spread-out and busy, with very few people inside. Robots, straight out of a science-fiction film, man the presses and computer-generated diagrams define just how much pressure at what angle needs to be applied to forge raw metal into an ancillary with the right density and specifications. It is a testimony to the company's success that in a business where you have to compete in markets where precision is measured in .001 mm, Bharat Forge is as good as the best. A lot has gone into this transformation. There was a time when Mr. Kalvani was at crossroads and had to choose between concentrating on India without expanding and spreading his wings into new markets even if it meant transforming the way his company and factory worked.

Mr. Kalyani chose to follow his heart. "We realised that we had to strengthen our core. Tough action was needed. We had to improve. Be the best in the world!" Decision taken, there was no time to lose. "We got down to work and launched a massive reorganisation and refocussing exercise. We dubbed it the 'Modernisation Programme' internally. At the heart of this plan was his belief that knowledge and high-end innovation were the keys for the transformation he had in mind. Already exposed to the best at MIT and at the plants he had visited, Mr. Kalyani could easily lay out a strategy that would inject the muchneeded dose of adrenaline across the shop floor. "If you create excitement and provide leadership, people will run with the challenges you throw at them." But to succeed, the plan needed more than just the vision and passion. "The first step in the programme was to create a forge modernisation division. We brought in a bunch of young, aggressive and ambitious engineers who were asked to draw up a plan to change the shop floor with the latest cutting-edge technology. "We didn't want a linear growth in technology; marginal improvements weren't going to be enough. We wanted to leap into the highest league and be as good, if not better, than the best in the world."

THE MODERNISATION ACT

The forge modernisation exercise was big and costly and the reason it worked was the young engineers. "I didn't want any old guys. We started putting new ideas in place and that's how we came up with our first forge plant, fully automated with robotics and high-tech machines. At that time, no one had even heard of robotics and we had to develop all the processes necessary to run this fully automated facility," he says. In 1989, at the height of the export crisis, Mr. Kalyani and his team shocked everyone, not just within

We believe a sense of ownership is essential in every member of the staff to make them feel proud of the organisation they have helped build. They are the transformers and we will continue to empower our employees with a vision to create process managers rather than process followers.



the plant but also across the automotive industry and the financial community, by coming out with details of a business upgradation plan, which would cost a whopping Rs150 crore. This sum was much larger than the entire sales figure of Bharat Forge at that time.

"After a lot of arguments and counterarguments, the bankers agreed. We had to make numerous presentations to them. The financial community was quick to write me off." They said, "Baba Kalvani is creating a white elephant which will take the company down"! He agrees that there may have been some justification for the scepticism. "We were taking quite

Bharat Forge depended on a large number of unskilled labour to run the shop. For example, at the time he was looking at changing the dynamics of the company, in 1989, 2,000 labourers comprised 85% of the company's workforce. With the new high-tech machines and revamp at the plant, over the next few years, he would have to focus on reversing this ratio, ensuring that the bulk of the workforce was highly trained engineers. "If we had to take the high technology route, we would have to change the balance on the shop floor from muscle to brain power."

Consciously, the company upped the hiring of young engineering graduates

"An India-led operation has two things going for it: one, by nature Indians are people focused and two, Indians have a tremendous sense of dealing with diversity. We deal with it on a daily basis."

a major leap in technology, and no one really believed we could do it on our own. Everyone thought one would have to tie up with someone for any venture to be a success. There was little faith in our own capabilities."

"Having a young, confident and ambitious team of freshers not dulled by cynicism and self-doubt was the biggest help." No wonder then that more than two decades after being formed, the modernisation department remains the core of the company. The technology and innovation leap was just one part of the plan. Mr. Kalyani knew he would have to change the entire character of the workforce at Bharat Forge.

But there was one serious problem. Like most manufacturing units of the time, who could run the new machines being ordered. In a nutshell, the two-pronged strategy—to go up the technology chain and ensure that the company had the bench strength or the engineers to do so-worked. By 1990, Bharat Forge's brand new plant was up and running.

GOING GLOBAL

Interestingly, alongside this plant-building exercise, another plan was assiduously being worked upon-getting into the US market for exports. Probably because of his earlier experience in Europe and the fact that US automobile companies or original equipment companies (OEMs) were the first to start global outsourcing (Europe, the Mecca of automobiles, began outsourcing only seven or eight years

later), Mr. Kalyani turned his attention to North America. For two years, 1989 to 91, Mr. Kalyani and his team embarked on a massive roadshow across the US, zeroing in on a single product, front axles for trucks. "We used to make this product for the domestic truck companies. We knew the product well and, of course, had added the most modern technology to it so we were confident "

The first breakthrough came after months when US conglomerate Rockwell International came to the market to find a supplier for its automobile parts. Bharat Forge hit two birds with one stone. He says, "They gave us an order for the front axle beam and they were so happy with what we did that they gave us a large part of their business. That was our big breakthrough and it was a crucial one, given that the company

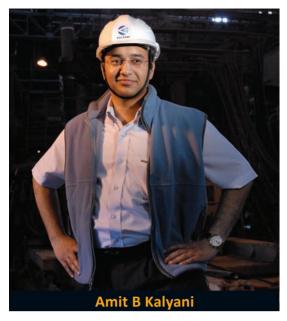
was investing such a lot in changing its entire production paradigm. We never looked back after this. We just grew and grew and grew. Today, Bharat Forge is still a leading player in the US for the products it began exporting then."

With a brand new facility and a big order from the US, Mr. Kalyani was ready to march ahead. The timing of Bharat Forge's modernisation exercise couldn't have been better as this was the era of liberalisation. More and more foreign players started coming to India to set up shop. "We were lucky to drive the kind of technology innovations that we did ourselves and at the time we did it. If we hadn't, the company would have gone down." He adds, "Look at where it has taken the company. In business, there is no reward without risk."

THE CHARISMATIC PERSONA

The reasons behind his phenomenal success are quite obvious. His factory in Pune is the world's largest and most technologically advanced forging facility, with a capacity of 365,000 tonnes. As a clear departure from the Indian norm, Mr. Kalyani employs mostly white-collar staff at every level of the business. He has been instrumental in reversing the trend of unskilled manual labour slogging behind technologically challenged machinery, instead employing skilled graduate staff trained in the world's most advanced processes. In the unpredictable world of manufacturing, where demand for components varies on a year-to-year basis, BFL's figures speak for themselves. When most of his competitors were suffering the blows of a dip in domestic demand in the early 1990s, he boldly multiplied his production levels in anticipation of a surge in global demand.

It is this uncanny knack for business



that sets him apart from others in his field. That is the reason he remains unshattered by the economic downturn and falling demand for components from struggling car manufacturers across the globe. He says, "Every automotive supplier is dealing with this cyclical downturn. Our strategy is to diversify into the non-automotive business and expand into supplying for large infrastructure projects in the field of railways, shipping and aircraft."

It is this same lesson of working your way up that he expects his son and heir apparent, Amit Kalyani, to follow. Amit will have to work his way to move up the ladder to step into his father's shoes. Amit Kalyani took to the shop floor in 2000. He is now Executive Director, a board-level position. In his current position, Amit Kalyani helped his father nearly triple sales. He is involved in Bharat Forge's strategic planning and global business development initiatives. He contributes significantly across functions such as

TRIVIA

The strong belief in the power of education spills over into every aspect of Baba Kalyani's life. He devotes considerable time to Pratham Pune Education Foundation, an educational charity that he founded and chairs. Pratham's aim is to provide primary education to needy children in the local community. This responsibility extends further into a green strategy that Mr. Kalyani unveiled in 2008. Bharat Forge is one of the few companies that can claim to be all green in its energy usage in the near future, largely due to the Chairman's plan to set up windmills for energy production.

manufacturing, marketing, exports technology up-gradation. "Amit's role is changing and expanding," acknowledges Kalyani Sr. "But my activity level hasn't come down, simply because the business is also getting bigger and more complex."

The dynamic duo's confidence in their enterprise and in each other echoes a lasting partnership between the two. Both of them share a passion for cars and the business and are unable to switch off from manufacturing even at the dinner table. It is these strong family ties that set an Indian businessman apart from the world and Mr. Kalyani counts this as one of his biggest strengths.

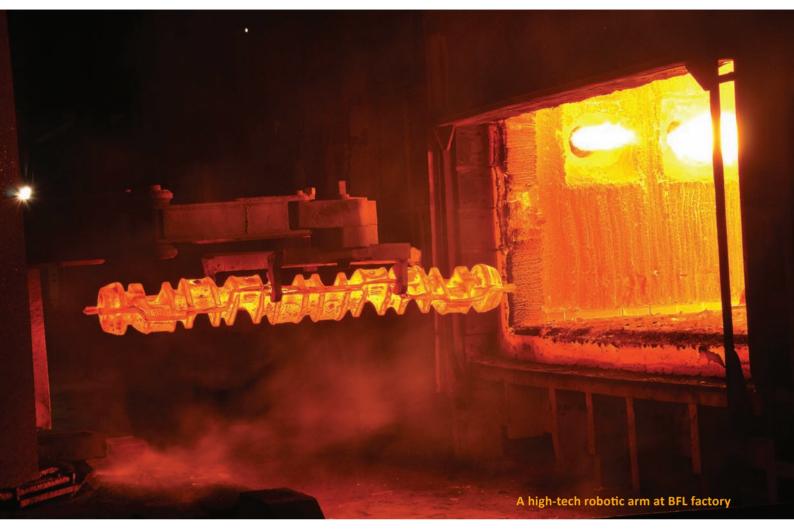
At 66, for Mr. Kalyani, age is just a number. He is as active a part of the organisation as he

was 3 decades back. Travelling almost 20 days a month, he is hands-on in day-to-day business activities and keeps himself abreast of the latest technology. Agrees Amit and says this is one of the qualities I admire the most about my father. "He is very technology-oriented, rather I should say he is obsessed with technology. His ability to see both - the bigger picture and the details is what sets him apart. His extremely clear & focussed vision has made Kalyani Group one of the most trusted brands to reckon with globally."

Reminiscing old days, Amit shares childhood incidences. He says, "We used to live just five minutes from here. I would just hang around, have lunch with my dad and leave." With Mr. Kalyani being workaholic, this was the only way, Amit could spend some time with his father. Amit was Jesuitschooled in Pune and got a mechanical engineering degree from Bucknell in Pennsylvania. After that, he worked in steel with Carpenter for a year, coming back to join the family business in 1999 as its chief technology officer, handling everything from axle beams to enterprise software.

Talk about the entrepreneurial streaks and pat comes the reply, "Being an entrepreneur is all about being able to handle pressure," says Amit. "Ups and downs are going to come. If you get emotional you'll never be able to take risks."

Having a penchant for cooking, Amit loves trying new recipes for his kids in his free time. While he loves food, he also makes sure that he keeps a watch on what he eats as he is a fitness freak at the same time. He informs, "I exercise every day for about 45-60 minutes on the treadmill and cross-trainer. I do it without a trainer. No matter whether I am in the country or not, I have to remove time for exercise.



Even in the busiest of my schedules, I will make sure that I wake up early to finish my routine workout. It's this discipline that even reflects in his professional life as well"

His ultimate dream is to put up more educational ventures such as the Industrial Training Institute run by the group near Pune. It takes about 400 students and is rated one of the best.

NURTURING TALENT

Mr. Kalyani's open-door policy at the swish factory just outside Pune keeps him in the loop of day-to-day operations. The strong work ethic among his staff is palpable as one takes the long-winded drive up to the gates of what is very much an Indian factory with an international edge. It brings to mind an army cantonment, harking back to Mr. Kalyani's military school upbringing. It is clear that the place has benefited from globally benchmarked practices, but combines these with the Indian value of fairness and an emphasis on human

This is the unique Indian approach that Baba Kalyani brings to his global operations. He takes great pride in his Indian roots and explains, "Indians tend to work with very people-led sensibilities. I am pretty sure a

very structured and formal business set-up does not have the right effect. An India-led operation has two things going for it: one, by nature Indians are people focused and two, Indians have a tremendous sense of dealing with diversity. We deal with it on a daily basis." He has often spoken of his faith in the capability of young Indians to make their mark in the world. His biggest

waste during manufacturing – our research and development team is continuously working on newer solutions. We undertake employee-exchange programmes, where employees share the challenges faced in several verticals and brainstorm solutions." The company is into innovative learning initiatives with reputed institutes such as BITS Pilani, Warwick University, UK and IIT

Our capability to innovate and develop indigenous technologies is an asset that has put us on the growth path much before others. Innovation is also another name for success at Bharat Forge.

thrust has been on education, which he considers as key to the country's future. He set up his own engineering school in Pune to develop human capital.

Bharat Forge nurtures its strong workforce and believes they are the key growth drivers of the company. Professional staff, delivering excellent service, is what sets them apart from all others. Mr. Kalyani informs, "We are focussing on and building a highly skilled and competitive talent pool who will nurture our innovation and research needs through various education programmes - from the graduate to the doctoral level. To develop a cost effective product and process, to minimise industrial

Mumbai (M.Tech.).

The young scion, Amit Kalyani, also makes sure that he creates a sense of ownership among his employees. He says, "Like my father, I like to be on the shopfloor and talk to the employee on their day-today activities. I meet them once a month and ask them to note down the hours of non-value added work (repetitive tasks) they did that week or month. If someone says he's doing 20 hours of non-value added work in a week, he needs a job change. He's stagnating there. I give such people new work to do. This improves our productivity. People were reserved initially. Now, they come to me regularly and ask for new challenges." This way the employees get motivated and they keep learning new things on the job. Creating mini leaders is his mantra towards nurturing talent.

'MAKE IN INDIA' – THE BUZZWORD

According to Mr. Kalyani, innovation can only pave the way for exponential growth as opposed to small incremental growth. Bharat Forge is driven by the capability to innovate and develop indigenous technologies. In pursuit of this endeavour. the company will be increasing expenses on R&D over the next few years to create value & provide innovative solutions to its

According to Mr. Kalyani, the more complex the challenges are, the more innovative we get. We chart new journeys. To create a strong in-house innovation capability & IPR repository through R&D, the group has taken various initiatives within the BFL group. "We have created a process to encourage engineers & technologists to bring about innovative ideas," he opines.

The Kalyani Group has formed a 'Make In India' project team pulling in senior executives to work on an import substitution strategy. Using available government data, the team is targeting \$30-40 billion worth of iron and steel products that are imported into India. These products are mainly imported for the defence, energy, automotive, construction and mining equipment industries.

"These are the low hanging fruit, but in 5-7 years, we want to build an industry that is globally competitive, and then you Make in India for other parts of the world. If a company honestly starts working on the Make in India concept, it should be able to quadruple its business by 2020-2025," he informs

Contributing tremendously towards this ambitious campaign, Mr. Kalyani says, "Bharat Forge is a very good example of Make in India. We make products in India with Indian technology and Indian talent for the global markets. We have phenomenal market share around the world and we are growing. India is a highly competitive place today for manufacturing. I think people don't realise the potential of our country. I am pretty sure that this 'Make in India' campaign is going to take the process of competitiveness and technology intensive manufacturing to the next level and this is what we really need. It will also certainly create jobs going ahead."

FORGING AHEAD THE GROWTH MOMFNTUM

BFL has won 14 new orders in FY 2013-14 across automotive and non-automotive sectors. On the automotive front, BFL has added one new customer on the passenger vehicle front while the rest of the orders

Lauding Historic Moments

Baba Kalyani's decision to get into mechanical engineering was taken during his summer vacations, when he would spend days demolishing and rebuilding his cycle, or later, when the Bharat Forge plant was being built. He says, "I was fascinated by all the big machines being set up and the work they were doing." In 1966, he headed to BITS Pilani for an engineering degree, but the big trigger that fired his imagination and ambition seems to have come when he was at the Massachusetts Institute of Technology (MIT) in Boston. Kalyani thanks SL Kirloskar (SLK) for convincing his father to allow him to go to the US.

I had never been outside India and it took me two to three months to get over it. What hits you is the competition when you get to an institute like MIT," Mr. Kalyani recalls. "After going through MIT, I came out with the belief that nothing was impossible.'

As was expected of him, he joined the family enterprise as an engineer on the shop floor in 1972 for a princely pay of Rs500. What he saw there shocked him. "People were just not organised. There was no discipline, no organisation, no leadership. There were no systems, no processes, none of the essential things. When you live in the US for even two years, you learn to follow a process, be

disciplined. You quickly learn that you can't go anywhere without that," he explains. This bothered him so much that he complained about it to his father. One day, tired of his cribbing, his father simply marched him to SLK, who was the chairman of the company, and someone the family obviously looked up to. SLK said, "If he has such a problem, let him fix it. Throw the kid into the water.

So, within months of joining Bharat Forge, Mr. Kalyani was given the job of a sales manager because he believed that the company's sales team wasn't pushing the products and getting new business. But when he started interacting with the clients, the companies that Bharat Forge was supplying to, it didn't take much time for him to realise that the problems here were similar to those on the shop floor. "Within three months, I dramatically increased the sales. It was done by putting basic systems in place, simple things like making sure delivery was done on time and ensuring that we were in constant touch with our buyers," Kalyani remarks. In just a couple of years, Bharat Forge was supplying material to two companies based around Pune, Bajaj Auto and Tata Engineering & Locomotive Company (TELCO, later Tata Motors).

have come from the traditional clients on the commercial vehicle side

The non-automotive order wins have come from a variety of sectors such as power generation, tractors and construction and mining space. These orders wins are a result of not only BFL's strong relations with its customers but also its ability to provide solutions to OEM with respect to performance improvement and focus on Total Cost of Ownership (TCO). "We believe that growth in the non-auto space will only accelerate with time as we gain experience and customers in various segments," says Mr. Kalyani.

With a revival in the economic growth of the country and the anticipated pickup in industrial activity aided by the policies of the new government, BFL is optimistic of the growth coming in the CV side and an improvement in the industrial capex by the end of the current fiscal year. This would provide a big driver for growth in the Indian revenues. BFL's focus going forward is to increase the content per vehicle by developing new products for the commercial vehicle sector and new customer wins on the passenger vehicles front. This should result in the domestic sales growing faster than the underlying market growth.

Bharat Forge continues to win new

orders with newer clients or increase market share with existing clients. These order wins have become possible based on the company's ability to provide solutions in terms of light weighting of products which helped address the OEM needs for better fuel efficiency. Focus on improving performance of the products through value addition and fatigue life improvement projects helped to reduce Total Cost of Ownership (TCO).

Going forward, challenges are expected to surface given the volatility of markets, increasing competition and greater demand for superior products from OEMs. In order to address these challenges, Bharat Forge intends to strengthen its focus on innovation, which will enhance value perception of its products on a global scale. Additionally, it will seek newer opportunities in key geographies while continuing to support existing customers through a range of value-added, technologically superior product portfolio.

With clear vision and goals set to move up the ladder, there's no stopping the growth momentum for Bharat Forge. Capturing newer avenues of growth in terms of markets as well as sectors, the company is poised to script another success story in India's route to becoming a global manufacturing superpower.