

POWERLINE

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PEOPLE



Innovative Approach

Manoj Kumar Upadhyay, founder, chairman and managing director, ACME, is still lean, hungry and restless because he wants his company to leave an imprint on society...

Abrilliantly inventive mind can often be glimpsed in childhood. At that time, though, it can be more “madcap inventor” than real genius. As he sits in the ACME office in Gurgaon, Manoj Kumar Upadhyay chuckles on recalling his and his friends’ first hare-brained idea: stopping the heavy rain in Meghalaya falling mid-way and channeling it into producing electricity. He and his friends went to the dean’s room at the Shahjahanpur Polytechnic in Uttar Pradesh where they were studying. “How can you stop rain mid-air?” he asked and kicked them out. Undeterred, they mentioned the idea to a professor. “We told him there were three mountain ranges in Meghalaya and we could build a channel on top of them to catch the water and take it to a turbine.

He listened to us with interest,” he recalls amusedly.

Encouraged, the 19-year-old Manoj and team produced reams of paper with designs, soil analysis, channel specifications and costing for a region they had never even visited. This document went back to the dean who, probably anxious to get rid of it, sent it to the chief secretary of the Uttar Pradesh government. The latter invited the boys to make a presentation. Scientists from the Maharashtra Energy Development Agency and IIT were also present. Later, the chief secretary sent them to sites in Uttarakhand to see dams being constructed so that they could gain more information and fine-tune their idea. And so the “project” rumbled on.

“It was all on paper,” he laughs. “The obvious question that comes to mind now is that if you put up a 400 km long channel on the mountains and it cracks or gets damaged, you could see not just Meghalaya crashing but two or three other states getting washed away. Eventually, someone junked it and it ended up collecting dust in a filing cabinet.”

Manoj’s early education was in Kolkata. On graduating, he joined German telecom power company, Benning, based at Bocholt, close to Dusseldorf, in 1995. Its recruitment officials were boggled when they posed a real-life question they had been struggling with to him during the interview and Manoj offered them a solution that seemed feasible and indeed proved to be so later. He worked in Germany with them. Not surprisingly, he was made technical head of the company for India operations very quickly. “What I learnt from Benning was the need for innovation, reliability and context to the local environment,” he says.

In 1997, eager to set up his own company, he returned to India. It was in 1999, while on a holiday near Rishikesh that Manoj got his first break as an entrepreneur. To his chagrin, he found that for a few hours nearly every day, the telephone exchange would switch off services because of the fear of lightning hitting the installation. “It was absurd. There we were on the brink of the 21st century and something as basic as a telephone wasn’t working because of thunder clouds,” he says. On returning to Delhi, he got together with some friends to develop lightning surge protection systems for telecom sites. They worked. He went back to Rishikesh and gave them to the telecom department as a present.

This first entrepreneurial venture, Adhunik Power Systems (APS), provided power protection and management services to a host of companies across various sectors. By 2002, the company’s turnover was Rs 300 million.

By now, he was aware of the telecom industry’s pressing need for energy sav-

ing solutions. In January 2003, Manoj gave his stake in APS to his two collaborators and launched ACME because he was hugely ambitious and restless and wanted to shake up the world and make an impact.

When ACME was just about three months old, someone from Ericsson approached him for help with the problem of irregular and fluctuating power supply to its towers, especially those in rural areas, for its customer Bharti Airtel. Manoj came up with an ingenious power interface unit that helped solve the problem. "Unlike imported European equipment, this technology was designed to operate in our environment," he says.

For ACME and Manoj thereon, it was a whirl of continuous activity and virtually no sleep. "We were tying our laces while running. It was absolute chaos. The telecom industry was building a network the size of the European countries every month in those days and demand for our product was crazy. The consumer would be sitting in our office waiting for it and we had to ration it," he says. "Today, almost half the telecom network of this country is based on that product and it has been deployed in half of Asia and half of Africa."

Over the next few years, a slew of energy saving products for telecom sites followed: nano cool shelters, thermal management systems, telecom air-conditioners, and fuel cells. The ACME Group is a leader in the field of energy management and innovative solutions for the wireless telecommunications and alternative energy sector. It prides itself as a pioneer in the development of green technology solutions that are environment friendly, energy efficient, and cost effective, and also capable of delivering a quick return on investment.

Among this wide range of products, the one common link is that they are all to do with energy: either saving, or storage, or generation. "We are a company that works to reduce energy consumption at any site that consumes energy," he says.

In 2010, the company forayed into solar power by setting up India's first concentrating solar power plant of 2.5 MW at Bikaner, Rajasthan. Right now, it has a portfolio of 1,650 MW and the target is to achieve 7,500 MW by 2019.

Manoj says there are two major challenges with the scale-up of solar power plants. One is land acquisition because the data of most rural landholdings have not been updated in the revenue records for 80 years. The second is the availability of lenders. "Most of the lenders in this sector are public sector lenders, who are attuned to lending to large thermal power projects. Financial closure of conventional power projects, where the gestation period is three to four years, can be achieved over a horizon of 12-14 months and disbursement thereafter. However, financial closing of solar projects needs to be achieved within a few months to enable the project to be commissioned within 12-15 months as per the power purchase agreement," he says. The government is working on both problems, he adds. At the moment, the loans often come late or sometimes after the project commissioning date, he says.

Manoj's business philosophy is simple. Making money does not motivate him at all. If an idea isn't "disruptive", he is not interested in it; let someone else do it. Whatever he pursues must have "meaning beyond business expectations and profits, it must have a larger purpose".

As to management, he is hands-on when it comes to technical and execution aspects while in other areas, he works with professionals and takes their inputs in decision-making. He empowers his team to manage their job and focus on their core competencies. "I am happy to build an inclusive, passionate, multi-generational team. One of the biggest competitive differentiators in our business is engaging people well. I believe in creating a corporate culture that actively demonstrates respect and inclusion for its multi-generational workforce," he says.

What of the future? Manoj says that, just as we went from landline services to mobile services and then to branded mobile services where consumers could choose their service provider, so in the energy sector, what will come to pass, sooner than we expect, is a scenario where consumers first choose who their power supplier is going to be and second, what kind of power they get. Power will be sold as a branded commodity. "The third thing we can't choose at the moment, but will be able to, is whether we want to create our own power generation at home and be independent of the grid so that, if you happen to have surplus power, you can sell it back to the grid, turning the consumer into a sophisticated producer of power," he says.

Manoj says utilities across the developed world are losing their market capitalisation month by month. In Germany, most of the consumers have become producers. Germany has been transformed with almost 10 million producers of power feeding into the grid. "Where does that leave the utilities, which are already struggling? What role will be there for them? They will go the way of the old landline phone," he predicts.

Manoj is still a very driven man, though he has slowed down from the days when he used to work seven days a week and expect his staff to do so too. "They hated me," he laughs. He introduced one day off eventually, much to their relief. Even now, when at home with his wife Mamta and their son and daughter in Gurgaon, he cannot sleep until he has spent about an hour reading about technology globally.

With the money he has made, Manoj could have retired five years ago when his company was valued at \$3 billion. But what satisfaction can more money give you when your needs are already met? "Making my first million was great. After that, the next million feels normal. The real satisfaction comes from helping people, helping society in whatever small form we can," he says. ■