



Built to last

SOMEWHERE ON THE DUBAI DESERT LANDSCAPE, the region's first sustainable building stands proud. **Shalaka Paradkar** meets the creator, Dilip Rahulan, who believes in energy conservation through technology

Dilip Rahulan, the founder and CEO of Pacific Controls Systems (PCS), has built the region's first LEED (The Leadership in Energy and Environmental Design) certified sustainable building – the Pacific Controls HQ Green Building.

The five-storey building features solar thermal air-conditioning, photovoltaic cells for lighting, water-efficient equipment, captive water treatment plant and a totally converged single IP backbone, which integrates the building's control systems.

Since its inauguration last year, it has won the Build Award for Best Intelligent Building in the World in Chicago, and the Realcomm Digie Award for the most Extreme Building in the World in Boston.

The building, which is located at Dubai Technopark, is the 16th platinum-certified LEED building in the world.

Rahulan's journey has taken him from India to Dubai, via Tanzania, Zambia, Botswana, Australia and Kuwait. He started out as an intern in the family air-conditioning business in Kochi, but soon realised his hometown was too small to contain his ambitions.

So he left for a professional adventure with some of the biggest projects in southern Africa.

Foreseeing the need for sustainable buildings, this father of two established a business specialising in technology with the aim of optimising function and minimising energy consumption.

He says, "Becoming rich hasn't been a significant component of the journey. I've believed that if you do the right thing, money will follow. In leveraging the growth of my organisation it can become even bigger."

I'm very worried that it will be too late when we realise the extent of damage to the planet. It's a question of time. I think about this every day.

I have a passion to see the world. On business trips, I try to go sightseeing, especially when visiting new places.

I don't take very good care of myself! Everyone complains I don't give enough time to myself or due thought to diet and exercise.

I, ME, MYSELF

What was the journey like in building the region's first sustainable and intelligent building?

Our headquarters were designed by London-based architect Kersey Modi, whom we brought out of near retirement. At the time, there was no concept of making it a green building. But I was continuously driving my team to develop automation so that it was a totally converged, IP enabled building, and the most

energy-efficient in the whole region (if not the world). I realised there was an opportunity to make the building a benchmark for sustainability.

The biggest brand in benchmarking green buildings was the US Green Building Council (USGBC). A few days before laying the foundation stone for the building, we decided to go for the USGBC LEED-NC certification. It was a learning curve. We were building the first platinum-rated

green building in the Middle East with the Confederation of Indian Industry (CII) as our Green Building consultants. Achieving platinum started off with intense training programmes for all contractors, consultants and vendors. The project took a year to complete. The building showcased what we preached in terms of technology: migrating the concept of automation from grassroots all the way to the enterprise level.

I decided to make an earnest effort and carve my own career path. In 1982 I got a job offer in Tanzania and decided to move overseas. My family thought I'd come back soon enough, and wouldn't be able to survive without their support. This only motivated me.

Me and Tanzania

I was lucky to be offered a job in the second office I visited. As the workshop manager, my biggest challenge was coping with thefts. I was on call 24/7 and had the local police and warehouse security guards watching my warehouse. Often, I had to drive by at 3 or 4am to check if everything was OK.

I worked there for six months, but they found it difficult to get me the work permit as I was too young for the job. Then I decided to visit Zambia with a colleague. We flew down to Lusaka and met friends there. It was different. Zambia was a rich country.

I'm passionate about new technology.

I'm trying to create a gadget, a universal device that will connect work and home, and serve as a credit card and phone!

I feel frustrated when I'm not able to get things done in time. I demand instant results, even when it's not possible.

Me and the family business

After graduating in 1981, I was absorbed into the family business – a dealership for the Voltas air conditioning company. Working with the family came with its own set of constraints. The potential to exploit my knowledge base and expand my outlook was limited.

ME

Me and growing up in Cochin

I was born in Cochin in 1955. It was a bustling port, but I remember it as a tranquil, small town. We used the waterways to get from one part of town to the other. The boats of Cochin make for some of my fondest memories.

I grew up in a big family. My grandfather had 10 children, and most of them lived under the same roof. During my high school days I moved to Bangalore to study at the Frank Anthony Public School. They had a different attitude to education, which put me in a positive frame of mind. I then moved back to Cochin for my undergraduate studies.

I've always been fascinated by technology. I wanted to be a mechanical engineer like my grandfather. But I struggled to gain admission to an engineering college. Eventually I got a management seat at the TKM College of Engineering in Quilon, and had to work very hard to get good grades.

Sustainability has been
a concern since
Rahulan was an
engineering student.



I, ME, MYSELF

There I approached a consulting engineering firm about a post, but it was taken. I headed back to Tanzania only to be informed that the post I was enquiring after was now available. I joined as the head of the mechanical engineering division.

Me and Zambia

This is where I really started my career. I was driven and passionate. The company was assigned to build a huge, World Bank-funded cold storage facility on the banks of Lake Tanganyika. My boss asked me to represent the company at one of the meetings with World Bank officials. When asked whether I could prepare the pricing and project implementation report within the next 24 hours, I said I could. They didn't believe me. I delivered the report, and earned my boss's trust.

The first break matters a lot. Within six months I was given the task of managing and running the whole company because my boss, the firm's owner, decided to go to Greece to build a home. In six months I was able to double the company's turnover. My boss was thrilled, and decided to extend his stay for another six months. He also made me a partner.

At the time of his return, Zambia's economy was in tatters. Debts were spiralling out of control and economic crisis loomed. My boss and I had an honest chat. He said he couldn't afford to employ me anymore. So we parted ways, safe in the conviction that I would have never left had he not asked me to. On my way out of the premises, I met Patel, good friend and architect.

Me and setting up my business

Patel needed an MEP (mechanical, electrical and plumbing) consultant for a project that was going to be the biggest residential one in Zambia, worth \$30 million. He made me an offer, and gave me three days to start my new MEP consultancy firm. (At the end of three days, we were scheduled to meet the clients – the Zambian telecom authority.)

So North Atlantic Engineering Consultants was formed. We got the Zambian residential project. It took almost a year to get paid. One of the most touching moments during this difficult period was when W. Lisulo, an architect I knew, signed a cheque for a substantial amount to keep me



The Pacific Controls HQ Green Building ...
Located at Dubai Technopark, it is the 16th platinum-certified LEED building in the world.



SUPPLIED PHOTOS

afloat. I hoped I would get a chance to return this favour someday.

As the business flourished, we expanded into Botswana, which had been one of the poorest countries. It was slowly developing, and there was a need for consultants. In the early days, we ran our office out of a car. I would fly into Botswana, rent a car, put drawings and documents in the boot and drive to meet clients. We quickly picked up several government jobs. In Botswana, we were one of the first offices to install a fax machine in 1984. The following year we bought the first plotting machine. North Atlantic Engineering Consultants is still one of the largest electro-mechanical consultancies in Botswana. We are proud to have been a part of Botswana's growth.

Me and leaving Africa

In the early 1990s, I decided to emigrate to Australia and set up an office in Sydney. In 1992, we decided to go to Kuwait to explore possibilities. Just after the Kuwait invasion, there was a fascination for setting up base there in anticipation of a boom after its "liberation". But the industry was

saturated with consultants. Despite this, we found a niche in the area of home automation and security.

I used to visit Dubai regularly, and in 2000 we decided to establish a control systems company, Pacific Controls. We were one of 20 traditional automation companies. We decided to re-engineer the company's focus and create niche solutions that brought value to the customer. We pioneered machine-to-machine communications. Dubai is now at the core of our business activities for the region.

MYSELF

How was your interest in sustainability sparked off?

Sustainability has been a concern since I was an engineering student. I always believed in alternative sources of energy. Buckminster Fuller's *Small is Beautiful*, which I read in university, had an indelible impact on my life. The primary objective behind us developing our own range of home automation products was that it would conserve energy. **E**

Shalaka Paradkar is a Dubai-based writer