



◀ WITH TWO PCs
AND A VIDEO
CAMERA, MUMINUR
RAHMAN HAS PUT
GLOBAL COMMS TO
TRULY GOOD USE

Family man

Twenty-four-year-old Muminur Rahman has set up a videocall system whereby Bangladeshis in London can **meet and greet family members half way around the world** in their native country. Here, he tells Christopher Rye about his idea that turned a lifestyle novelty into a lifesaver.

Nick Dawe

A lot of hot air is talked about the 'global village', but Muminur Rahman is one man with a very real perspective on it. While you're leafing through the pages of *PCW*, marvelling at the glossy world of opportunities at your fingertips, it's worth bearing in mind that 3.1 billion people earn less than one pound a day. And the fact that many of these people, throughout the world, earn that pound churning out goods for your friendly, high-street multinational, might make you bag your beans with less of a smile.

So why, then, should 'developing economies', as we label them in the West, be interested in those gadgets that populate our desks and the pages of certain magazines? What would they want with PCs? Muminur Rahman, a talkative 24-year-old graduate, has one of the answers — and there are many of them. You might not have heard of him, but you might be hearing a lot more of him soon, a man who had his big idea while hunched over his Psychology and Management finals paper. Clearly, he was doing the right degree, as his idea, like many 'Eureka!' moments, contained more than a dash of psychology and a generous helping of sound business sense.

'I was born in Bangladesh and came to Britain in 1983,' he explains. 'There are 100,000 Bangladeshis in London alone, and large communities in Manchester, Birmingham and Newcastle too.'

'Of course, a lot of us still have families in Bangladesh. And chances are we don't see each other for years at a time. Say you had a nephew who was five when you left. Next time you see him he might be a married man with a young family of his own. It's a real problem for many of us.'

Which is how a studio in one of the richest parts of the world, the City of London, became half of a two-way videoconference-cum-cinema link, with one of the poorest — the town of Sylhet, in Bangladesh.

After university, in 1995 Muminur was granted a year's industrial placement with Xerox at the company's headquarters in Marlow, Buckinghamshire, liaising with sites in the US. Part of his job as an intern was marketing videoconferencing systems.

'I was amazed at what they could do,' he says. 'I didn't give it much thought at the time, but later on I started thinking about the two days it takes to get to Bangladesh. Many people can't get enough time off work to make a trip to the other side of the world worthwhile. Two weeks goes very quickly when you're with family, so sometimes people stay for six or seven weeks and either lose their job or get into serious trouble. Or else they leave their job and try to find another when they get back.'

And so it is that, thanks to Muminur, Bangladeshi families in London aren't just able to chat with their (very distant) relatives in Sylhet, but can laugh or cry along with a life-sized video projection of them. In fact, as he found out, they are able to do just about everything families do when they get together, except touch.

'When it comes to business, it's best to keep it in the family,' smiles Muminur. 'My father backed me up and gave me the encouragement. He was my market research, if you like, and coming from the community, obviously he could see the possibilities.'

'My brother — he's the technical one — checked the whole thing to see if it was viable, and he came in as a partner. We got funding from the banks, worked on it for a year, then my company, Liton Communications, went live in August 1998. I put together a package that satisfied my needs.'

The package, like the idea, is simple. At each end of the link is a 450MHz PC with a video card, along with a tripod-mounted video camera and (the most original touch) a video projector, bringing some of the scope and magic of cinema to those inanimate, grey boxes we rely on so much. In a darkened room in London, the faces and voices of Sylhet come to life.

So, what's the software behind the project? NetMeeting, perhaps? Very much the industry standard for today's global, business-to-business videoconferencing. 'No. I spent a lot of time researching, and using my contacts at Xerox. In the end, they provided me with bespoke software for the venture. It's a modified one-on-one system, so we can use a state-of-the-art video camera and get the whole family in the picture, rather than just doing a person-to-person headshot.'

Obviously, the link itself must be state of the art? ISDN-based, at least, or perhaps an Inmarsat (satellite-based) system? Muminur dismisses the suggestion.

'Not at all,' he says. 'My bottom line was I needed something that worked in Bangladesh with what was already there — a fluctuating, unreliable electricity supply and bad phone lines. Just as importantly, I needed something my customers could afford to pay for.'

'So, we have either a 36in (quarter-screen) projection on the wall, with the modem running at 14-15Kbps. Or, with the faster modem speed of 33.6Kbps, we get a full-screen projection, but the projected image is of much lower quality: just 30 frames a second.'

'It's up to the customer to choose whether they want the small, fluid image or the larger, jerkier one. The PC adjusts the modem to suit what the families want.'

Another technical problem was that the ➤



cameras had to work in sometimes difficult lighting conditions. The result was two TV studios — each dark one side, light the other, so the customers would be illuminated, but the far end of each studio would be dark enough to allow the projections to be seen. Muminur has employed an operator at both ends, zooming or panning the camera as the family wishes.

With everything in place, the Rahman mini broadcasting empire was ready for its first foreign correspondents, some of whom didn't always bring news they wanted everyone to hear. 'Of course, we can offer a private service,' laughs Muminur, embarrassed. 'The operator leaves the room if it gets too intimate or personal.'

As a predominantly Moslem people, arranged marriages remain an important part of Bangladeshi life. Among many things, Muminur's video link provides a welcome opportunity for prospective brides and grooms to 'test each other out' (in Muminur's words) from

But all that is changing fast. Fibre-optic technology means the network can run, literally, at the speed of light, and ISDN, satellite and GSM networks ease the burden still further onto competing systems. Soon, the digital TV networks, whether satellite, cable or terrestrial, could finally bring far-flung relatives and friends back into your living room. Businesses worldwide are starting to adopt videoconferencing technology, as the network finally catches up with their corporate aspirations and offers an opportunity to slash escalating travel budgets.

Peter Cochrane, BT's head of research, believes that the Star Trek-style holodeck, a virtual environment, could soon be commonplace in our homes. One day, BT claims, we won't just be able to see and hear our loved ones over the network, but interact with them in an immersive, 3D, virtual environment.

However, what is certain today is that new satellite networks are circling the globe. Hundreds more communications satellites will be in orbit and dodging comets soon after the Millennium. What this means, in the short term, is that those 'developing economies' we talk about will develop fast, and could easily leapfrog the US and Europe by giving their people access to cheap, truly mobile communications from a standing start. Lifestyle accessories, in other words, become lifesavers.

And it's people like Muminur Rahman, with the imagination and business acumen to seize these opportunities, who have already identified the need and the application.

Muminur's ambitions are taking shape. 'There are a lot of Bangladeshis in New York and the Middle East, SO WE COULD EASILY EXPAND ... I just want people to talk'

opposite sides of the world. If all goes according to plan, the proud parents of bride and groom could later be catching their first glimpse of their grandchildren online. But while a birth would certainly be an event too intimate and sacred to put in front of the cameras, Muminur has had to cope with a video funeral, as the coffin was wheeled into the Sylhet studio while the relatives mourned in East London's Cannon Street.

Of course, the videoconference and videophone concepts have been around since the 1950s, but Muminur's innovative take on the idea is closest in spirit to those times' often fanciful vision of what the 21st century would look like. But what has prevented the idea from catching on more in our own century? The answer is a complex one. The first issue is bandwidth, as anyone who has tried to stream video over anything less than leading-edge equipment will agree. The telephone network — not just in Bangladesh, but here — was simply never designed to carry video data or such high volumes of traffic.

So where now for Muminur's big idea? Liton Communications is establishing new premises near Brick

Lane. 'It's like a high-street premises, rather than a big City studio,' he explains. 'But the problem is, a lot of people seem to compare my service with the cheap, bucket-shop, international call businesses you find on some street corners.'

'We charge £1 a minute, with a £10 charge to hire the studio. It sounds expensive, but it's much cheaper than flying to Bangladesh!'

As for the long term, Muminur's ambitions are taking shape. 'There are a lot of Bangladeshis in New York and the Middle East, so we could easily expand. And I'm speaking to a Somalian in Canada, where there's a large Somalian community.' The global village is taking shape around us, and Muminur Rahman is laying some of the foundations. If affordable technology such as the internet really is as democratic and egalitarian as its proponents claim, then it is examples like his that have made it so.

As Muminur says: 'I just want people to talk.'

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