

Featured Article

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BITSCONNECT: THE \$1.5 MILLION ALUMNI PROJECT TO MAKE BITS #1

Around 8:30 am on a Sunday morning, 10 cars drive into the empty parking lot of Building #6 at Cisco's offices in San Jose. While the residents of this northern California city are still under covers, a conference room in Building #6 is filling up, buzzing with talk and activity. At the same time, people in other cities and time zones around the US are pulling off roads, excusing themselves from brunches, returning from the gym, dialing in one by one to a conference call.

All these people have two things in common. A degree from BITS and a mission called BITSConnect.

This is the 25-strong BITSConnect core group consisting of Marketing, Finance, Fundraising and Project Execution teams; a remarkably cohesive group consisting of three generations of BITSians disbursed around the US. The group is in pursuit of one goal – to design, fund and maintain one of the finest networks of any university campus in India.

TECHNICAL DETAILS

- ✓ Connects the Institute, hostel rooms, library, staff quarters and guest house
- ✓ More than 20 kilometers of cables
- ✓ 2-4 Mbps WAN connectivity
- ✓ 4000 voice-grade 10/100 access points over a Gigabit backbone
- ✓ Staff House connectivity through LRE (Long Range Ethernet) & Wireless
- ✓ Wireless Access (802.11b) at SKY and the Reference Library
- ✓ NMS, Router & Hardware Firewall
- ✓ VoIP Phones
- ✓ Voice-management Software

State-of-the-art elsewhere is the new status quo at BITS

In 2003, life without the internet is unimaginable on university campuses. A major university website describes its network:

“The campus-wide network, including (all) University Halls of Residence, provides the backbone of its service, with high-speed access, not only to University information, but also to national and international networks. All students have unlimited access to email and the Internet. With more than

6,000 PCs distributed across campus, including libraries and Halls of Residence, there is no difficulty in global communication and research; and for the really enthusiastic, some of the facilities are available 24 hours a day. A wealth of application software is available for use on these machines. For those with demanding computer requirements, there are a number of specialist facilities, the flagship being the local visualization supercomputer, which is used for compute intensive and data intensive tasks....”

This sort of infrastructure is *de rigueur* for universities in the developed world, but at Pilani, you have to line up to sit in front of a PC to send an email. With the completion of BITSConnect, BITS will soon be able to cut-and-paste the paragraph above in its own brochure.



The story in fast forward >>>

How did it all happen? Here is the story in fast forward. BITS Director, Dr. Venkateswaran visited the US in late summer last year. At the offices of Cradle Technologies, on the morning of September 7, he presented a small gathering of 22 BITSian movers and shakers with his wish-list for Pilani. At the top of this list was connectivity. BITS wanted state-of-the-art, and nothing less would do. It had some funds that it was saving, but these funds would not be enough.

Prem Jain galvanized the team into action. Pulling in two BITSians at Cisco, Deepu Rathi and Mukul Chawla, the team started brainstorming how Cisco and the BITS alumni could

help implement the network. All the 22 movers and shakers jumped on the bandwagon.

By November, a project team was formed, and activity shifted into high gear. Prof. JP Misra of BITS scoped out the requirements. Mukul spent two weeks in Pilani and at the Cisco offices, surveying the campus and putting together the network design. The cost, a daunting \$1.5 million. With vendor subsidies and Pilani's savings, the alumni target was \$750,000. And BITSAA had 9 months to raise the money.

By January 2003, the RFP process was launched. Bids from vendors were evaluated by Prof. Misra and his team in a marathon overnight session. The core team picked Cisco, Wipro and Amp (Tyco) as the leading vendors.

The entire network was finalized in one 9-hour sitting by BITS professors, JP Misra and Rahul Banerjee, working with Wipro and Cisco engineers. Naagarji's kept a constant supply of tea and samosas going through the day. At the end of the day, the BITS Deputy Directors hosted a dinner for the team. Mukul convinced the Cisco and Wipro teams that the dress code for dinner was business casual, and was shocked when the hosts showed up looking resplendent in their 3-piece suits. BITS obviously took the project very seriously!

Timing is everything

In sync, BITSAA International obtained its 501c3 tax-exempt status in February. BITSAA International had gained considerable traction, opening up new chapters and galvanizing alumni around the country. BITSConnect fell as a perfect mission for enthusiastic alums. It was a call to arms. Passions were high, and the iron was hot. BITSConnect fundraising teams were pulled together from all over the US. Fundraising shifted to overdrive as the top 100 BITSians were identified. The goal was to raise enough money to make the first payment within 30 days. The target was easily reached and crossed, thanks to the superb efforts of the fund-raising team leaders, Roop Jain and Karthik Krishna. Alumni pledges totaled \$430,000 by the beginning of May. The Finance team of Jayan Ramankutty, Sandeep Arora and Anita Agarwal tightly monitored the budgets and the funds coming in.

With the launch of Phase I, BITS has become the hub of activity. After a brief delay due to the truckers strike in India, work is in full swing. Workers are digging up the campus, and vendor engineers are crawling all over campus. The excitement is palpable. The personal involvement of Prem Jain at Cisco and Vivek Paul at Wipro assures us of senior management attention to this project.

BITSConnect marketing, led by Satish Gupta and Venu Palaparathi, kicked off a big PR campaign globally, and soon big media started to pay attention. Times of India and Economic Times picked up the story. India Post ran a TV

program, interviewing Vivek Paul, Satish Gupta and Prem Jain about BITSConnect. A number of stories are expected to follow.

They say the first million is always the hardest

Although the first \$400,000 came easily, collecting the next \$300,000 will be a lot harder. The larger donors are all tapped out. It is time for grassroots giving to kick in. There are over 3,000 BITSians in the US, and approximately 7,000 alums are now connected online to BITSAA yahoo groups around the world. Most major chapters have been organized. Our goal: To get each and every one of these alums to contribute something, however small. The fundraising focus has shifted to the rest of the world. Ajay Madhok and Rohit Sah (Delhi), Subodh Mittal and Vikram Sah (Bangalore), Dinesh Mirchandani and Aashish Bhide (Mumbai) and Ashok Agarwal are coordinating fund-raising efforts in India. Coordinators have been pulled in for chapters around the world. BITSConnect has become a global agenda.

With our high per capita incomes and a 30,000-strong alumni body, the BITS alumni body represents the purchasing power of a small country. But most BITSians have never given to their alma mater, since BITS, like most Indian universities, has never asked its alums for anything. It's not a unique situation to BITS. When former IIT Mumbai students first started raising funds for their Institute five years ago, they had to go through a process of educating their alums, getting them used to the idea of donating money on a regular basis. It was a process of ushering in a change in attitude. We've experienced first-hand the generosity of BITSian giving, and believe that this transformation to pro-active donations is already happening amongst our alumni community.

A Message From The Director

Dear BITSian around the world,



We have jointly embarked on a mission to give BITS the most advanced network infrastructure of any educational institute in India. This is one of many steps BITS is taking to make us not just the leading engineering school in the country, but in all of Asia. I urge all of you to demonstrate the energy, enthusiasm, creativity and team spirit that makes BITSians so unique, and BITS such a special place, in making BITSConnect an outstanding success. We look forward to your support.

Regards

Dr. S Venkateswaran
Director, BITS Pilani

Why does BITS need this network?

We can think of four reasons.

Firstly, our students. We are ushering in the beginning of an information revolution at Pilani. That favorite line “couldn’t get a computer at IPC!” will no longer be a valid excuse for late submission of computer based assignments. Old test papers and solutions will no longer be the privilege of the “ghotus.” Lecture notes will be on the net. BITSConnect will provide connectivity to Institute servers from all hostel rooms, faculty and staff quarters, faculty offices, and classrooms via a gigabit backbone. This will result in greater access to academic coursework, ubiquitous computing access on campus, wireless access at many campus locations, web-based learning, tele-teaching, IP telephony (in all hostel rooms – go figure!) and IP video conferencing. The students will be free to communicate with and learn from the world outside Pilani. With 163 BITS alum professors, 30,000 alums. The classroom will be so much bigger.

Secondly, India Today’s 2002 rankings rated BITS rated 1st for curriculum and academic input but only 4th in infrastructure. Overall, we ranked 3rd, but who wants third! BITS’ ratio of users to computers is 12:1. BITS is among the select few schools in India that has a supercomputing facility but access to these resources is very limited. Besides, according to an AsiaWeek survey done in 2000, BITS was ranked only 19th in Asia amongst engineering schools. We can certainly do better than that! IIT Mumbai and IIT Kharagpur have completed or are in the process of completing their network upgrades. We’ve designed something more cutting-edge. This is our peer group and we have to stay competitive.

Thirdly, Distance Learning. A little known fact amongst alumni is that BITS is India’s # 1 school in distance learning both in terms of quality and market share. Through the Distance Learning Program Division (DLPD), BITS confers degrees to hundreds of engineers at Wipro, Infosys and other top-tier Indian IT companies. This brings in a significant chunk of revenues at BITS, helping us subsidize the education for the students residing at BITS and allowing us to compete with comparable schools that have budgets are over Rs 100 crores a year. It’s an executive education model that is very successful at US universities. To significantly improve the product offerings, BITS recently started Virtual University, a program to create and deliver high-quality digital audio, audio-visual and video programs to the DLPD. The new network will allow us to deliver media-rich content to the 7,500 students, maintain that competitive edge, and stay ahead of the pack.

There is a fourth reason. We BITSian alums need a mission. A BITSian (Sabeer Bhatia) invented e-mail as we know it (Hotmail). Another BITSian (Ajay Chopra) revolutionized

real-time video broadcasts. A third (Vivek Paul) made India into an IT outsourcing powerhouse. From semiconductor design to plasma screens, BITSians are running some of the most successful technology companies in the world. These BITSians feel strongly that their alma mater played a key role in their much-publicized success stories. They understand and recognize the power of the network. So even as BITSians dream high-tech, BITSConnect is really a dream-come-true for alumni who have waited very long to give back to BITS and their beloved professors.

TIMELINE

July 2003: Completion of Phase I

Complete Campus backbone, Staff Quarters, Institute and Guesthouse network

Dec 2003 : Completion of Phase-II

Complete wiring of all Bhawans

Today’s leaders are training the next generation

The vision shared by the alumni is that BITS needs to prepare its students to be leaders tomorrow. Leaders need to be connected to the outside world, to alumni, to each other. Communications will allow communities to learn together, faster and make future generations of BITSians more savvy and worldly-wise. BITSConnect bring us a step closer to achieving our collective vision.

The back of this magazine contains a pledge form. If you fill it out and send it in, you’d be guaranteeing that not only will BITS have a future; it will become a brand that you will always be proud to be associated with in your lifetime.

We’ve got to go now. Its 8:00 am on Sunday morning in the Valley, and some of us have a conference call to attend. 😊

Excerpts from BITSConnect In The Media

THE ECONOMIC TIMES Powered by Indiatimes

May 17, 2003: Alumni get back on the rolls. Over the past few months, BITS alumni world-wide have come together to work on funding a [\$1.5 million] project at their alma mater...

THE TIMES OF INDIA Powered by Indiatimes

March 27, 2003. Its payback time for the alumni of BITS Pilani. The IITs have long being nurtured by alumni funding. Now it’s the turn of BITS to lean on its students. In short its payback time...