



TECHFOCUS

VoIP: Future of telephony and Bangladesh

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I would like to start by thanking all of them who are supporting recent movement for VoIP in Bangladesh. We know we have to embrace all the new technologies, today or tomorrow. However, we always get there late. We were late with submarine cable with VoIP.

VoIP, which stands for Voice Over Internet Protocol, is a technology that allows voice conversations to be carried over the internet. Even though it is highlighted for voice communication, it is a protocol which serves various other technologies like video, fax etc. VoIP sends voice information in digital form in discrete packets rather than by using the traditional circuit-committed protocols of the Public Switched Telephone Network (PSTN), Bangladesh's BTTB version. VoIP has become popular largely because of the cost advantages to consumers over traditional telephone networks. But how does it costless?

VoIP uses internet as transport network and thus uses a packet-switched network. As oppose to VoIP, PSTN opted for circuit switched network. In traditional telephony once a circuit is established between caller and called party, it remains connected for the duration of the session. Whereas packet switching opens a brief connection to send small chunk of data from one node to another. Moreover, in circuit switched network, links between nodes that make a path cannot be used by other nodes in the network. On the contrary, in a packet switched network the link that make a route from one node to another can be shared by other nodes. This scenario depicts, packet switching allows several calls to occupy the same amount of resources that is occupied by only one in a circuit switched network. As a result traditional telephony providers charge more than VoIP providers.

Bangladesh is on the drive towards VoIP. In Bangladesh, the government has been trying to encourage people to stick to its traditional telephone network. They have been cutting down the consumer's bill by reducing the charges. However, we have seen the traditional telephone network will never be able to allow cheaper rate compared to VoIP network. Rather the government itself can go for VoIP businesses in different form. Moreover, recently it is found by the GSM Association (GSMA) that the Bangladesh government protects the BTTB's monopoly over international phone call business. Thus foreign investors are least interested to inject fund in the country's telecom sector.

Moreover, legalisation of VoIP can benefit a country in several ways. Significant cost saving in the government, private and home telephone bills would definitely make a mark in the economy. In the world of globalisation, unlimited long distance calls are desired to take

the home businesses to the global market. VoIP is the cheapest solution to take your voice to the world business community.

It is to be noted that, a single telephone call is worth than few email exchange. Moreover, telephony is such a system that can be used not only by people from school/college/ university but also by huge illiterate portion of the society.

VoIP gives the ability to be mobile. Thus can be in contact anytime, anywhere with an internet connection. Different VoIP protocols are similar to other internet protocols. Thus it provides with a chance to intermingle different software solutions with the telephony system. One such great example is the way VoIP conferencing is done. Compare to PSTN conferences we can now simultaneously share voice, video and files in a conference. By using a single network for different purposes, it is possible to reduce overall operating costs and increase employee efficiency.

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VoIP installation and maintenance can be based on software rather than hardware. Thus the system is more robust and easy to upgrade. Beside these, VoIP promises with lots of job creation all over the world, especially for the women. For example, call centres, which is enabled via VoIP.

Furthermore, new software solutions will integrate real time voice system more and more into their system. Thus VoIP infrastructure may help country like Bangladesh which is looking for a good share from the global software outsourcing.

It is apparent that VoIP is the reality of future telephony. The cost effective VoIP solution will continue to attract more people in the year to come. However, what is happening on the other side of the coin? Can the VoIP providers achieve same amount of revenue as PSTN providers? If we look closely we will realize that voice and data network is merging. There will be one network both for data and voice. Thus it is the same organisation who will be serving both the voice and data world. As a result their will be more users with such cost effec-

tive system. This increment in user number will help the providers achieving revenue target.

BTTB's income in the year 2005-06 was 13,300 million Bangladeshi taka with only 1.07 million users. This revenue figure is the lowest compared to last few years. This drop is caused by excellent cellular network of Bangladesh and illegal VoIP businesses. However, if BTTB had 22 million VoIP users they could earn much higher with monthly low fixed charge. 22 million is the current number of users in cellular world of Bangladesh. That clearly indicates there is a high demand for telephony in Bangladesh. With such rapid growth of users BTTB should not have any concern regarding their income target and return on investment in VoIP infrastructure.

All the developed nations are embracing VoIP and its growth is exponentially high. Vonage, one of the largest VoIP providers from USA has earned 261,939 million US dollar according to the 2005

existing internet protocols, VoIP provider can come out with more and more lucrative services from the internet to the telephony.

However, VoIP is not completely flawless. The quality of voice is not as good as traditional telephony. It is mainly because it is susceptible to all the hurdles of internet connection such as latency, jitter, packet loss etc. However, in last few years the quality has gone up and it is continuously getting better. Another drawback of VoIP for the developed countries is the failure of precise user tracking in case of emergency calling. Beside that VoIP is dependent on wall power. Traditional telephony runs on power provided from the central office. Thus developing countries may face problem with their frequent power outage.

Out of these I will pick up the electricity issue for Bangladesh. Electricity is a problem in Bangladesh. I believe this is the time to explore the feasibility of Nuclear Power. Nuclear power plants

just don't know when exactly it will be done and Bangladesh will be through with VoIP.

I hope people involved in this project taking care of the future compatibility, security and reliability issue of the exchanges. Last time a tender was awarded to a company with a huge sum of money. I wonder, why it would cost that high? If we need to invest money, I strongly believe we should invest for improving the internet architecture as a whole. VoIP infrastructure is hardly any different than internet itself.

Thus to the current caretaker government the request is please complete all the procedures for VoIP implementation before you hand over the power. Just read reports that they are thinking on it and the high court ruled out the stay order on granting VoIP license to internet service providers. We all should welcome it.

VoIP or cheap telephony is no more a desire, it is a demand now. We need to embrace more and more new technology in order to create job opportunities for our youth. Just think about the Cable TV business of our country. That gave some youth a chance to work with. Open the gate for our youth, they can bring down everything, anything. They are doing some excellent works all over the world. Still why should we carry the burden of being world no.1 corrupted country?

Let me end with a story. There was a big Bangladeshi community in a foreign land, as usual they were divided with their own interest groups. Fortunately there were not too many, they were divided in two groups. Having seen that someone took the initiative to merge the groups. They sat in a meeting to resolve the problem and when the meeting ended they came out in three groups. That is what we always do.

However, even in this recent political crisis we have seen a sense of unity among all of our political groups, when Dr. Yunus was criticising them regarding corruption. May Allah give us the strength to become united on a good cause, such as VoIP.

Once again I request the caretaker government to let us have VoIP to the earliest. I would also like to ask all our political groups to include VoIP and its future possible innovation in their election manifesto. Mere implementation won't help much. We have to take VoIP to each of those small business houses all over Bangladesh so that they can take their voices to the world business community.

Finally my personal view to the future of telephony is, our future generation will laugh at us, while they will come to know that we charge people to talk over the phone! If you do not believe me, please explore the fate of telegraph system.

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calendar with total user of 2 million subscribers. However, VoIP provider such as Vonage earns not only from mere telephony but also from other sources of services that can be provided with VoIP with more ease. What are the other sources of income can be?

A VoIP provider can be an ISP. Thus the same organisation can expect revenue not only from VoIP telephony but also from other sources of ISP's profits flow.

While eyeing the uprising trend of product support and telemarketing, it is obvious that call center business is a good choice for the VoIP providers. Beside these Internet Protocol Television (IPTV) a digital television service delivered over the internet is becoming one of the most glittering sources of income for the internet community thus to the VoIP providers. One of such recent boom is Joost from Skype.

With Vonage's enhanced 411 dialing user can come to know about weather, horoscope and many others regularly appended services. Vonage charges 99cents per call. As VoIP protocols can be affable with all other

provide about 17 percent of the world's electricity especially to the developed countries. With Nuclear Power first concern is that it involves high cost in setup. However, we heard about corruption in the power sector of Bangladesh with a huge scale. I believe investing money in a costly nuclear plant will bring lots of good results instead draining that money through corruption.

Secondly, Bangladesh has signed in Nuclear Non-Proliferation Treaty (NPT). Thus having nuclear power plant should not create a negative impact in the international arena. Finally the environmental issue, I admit, to some extent it is harmful. However, most people are afraid of the word Nuclear. Renewable energy could be a solution for low powered telephony.

We have connected ourselves to the information superhighway via submarine cable. Unfortunately we are in the superhighway with a rickshaw. I personally haven't seen any real improvement after the connection. We have been hearing of 4 exchanges to be setup for VoIP in Bangladesh. However as I said we are in the superhighway with a rickshaw, I

confident that the pieces are coming together.

Nokia Corp. Chief Executive Olli-Pekka Kallasvuo used his keynote to unveil the N77, a multimedia device with a 2.4-inch screen he said would speed up the acceptance and use of mobile TV services based on DVB-H, or digital video broadcast-handheld. That platform has been embraced by a growing number of wireless operators that already use the globally dominant GSM technology standard for their phone networks.

Kallasvuo predicted the DVB-H market would reach as many as 10 million units sold by the end of 2008 and double to 20 million in 2009.

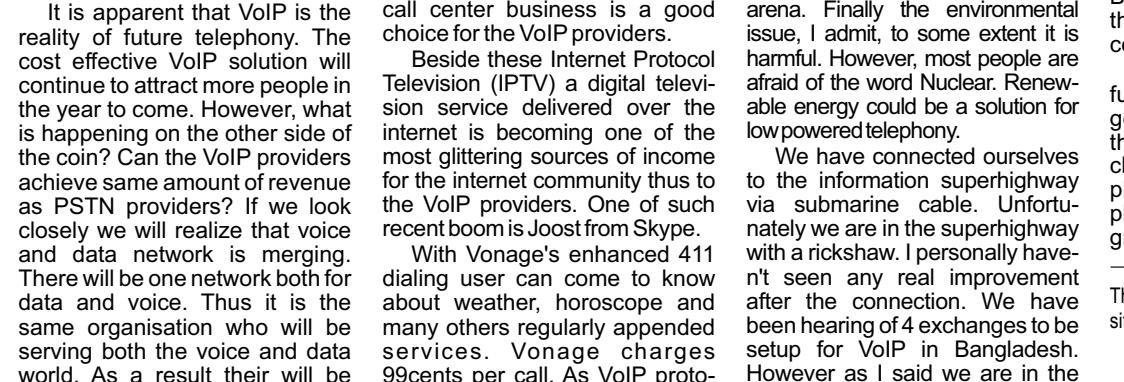
The N77's features include stereo sound, alerts that sound when a show starts, and a program guide that shows listings for up to a week.

"With the Nokia N77, we are expecting an increase in the take-up of broadcast mobile TV service in Vietnam," said Le Doan Quan, director of VTCmobile Television Co.

VTC rolled out a DVB-H service in 2006, making Vietnam the first country in Asia Pacific to roll out broadcast mobile TV services based on that standard.

But while DVB-H has the early lead, there are other standards making inroads, including one from Qualcomm Inc. a frequent nemesis to the GSM-based European wireless industry that nonetheless notched a major new customer from the GSM camp on Monday.

While that bodes well for operators, it's mobile TV and wireless Internet access that will augment stagnating voice business in more mature markets.



THE PRADA PHONE

South Korean electronics giant LG Electronics and Italian fashion brand Prada put on show the new LG Prada mobile phone at the 3GSM World Congress on February 12 in Barcelona. Leading companies in telecommunications, Internet and entertainment gathered in Barcelona on Monday for the start of one of the world's biggest trade shows for the mobile phone industry.

PHOTO: AFP



Microsoft Windows

Microsoft Windows is the name of several families of proprietary software operating systems by Microsoft. Microsoft first introduced an operating environment named Windows in November 1985 as an add-on to MS-DOS in response to the growing trend of graphical user interfaces (GUI). Microsoft Windows eventually came to dominate the world's personal computer market. At the 2004 IDC Directions conference, IDC Vice President Avneesh Saxena stated that Windows had approximately 90% of the client operating system market.

TECHNEWS

Corporate Bazaar 2007 ICT in the heart of corporate fair



EDWARD APURBA SINGHA

In this digital age information technology (IT) is indispensable to mission critical business activities.

Bangladesh entered in a new era of information technology when she connected to international backbone through SEA-ME-WE-4 submarine cable. But this recent achievement does not bring dramatic impact in the vital sectors of the country due to lack of rich IT infrastructure, expertise and regulatory policy. As a result, the country stuck to its previous position and naturally not capable to move forward.

At present the business community of the country, especially entrepreneurs from the ICT sector, are trying to overcome this ambiguous situation by taking some pragmatic initiatives.

'Corporate Bazaar', a fair for the corporate community is such an initiative taken by the Global Online Limited, a leading ISP of the country. Incepted in 2006, the aim of this fair is to attract potential persons from different industry as well as create corporate awareness that will drive the nation to shining future.

Corporate Bazaar is a unique platform where industry leaders exchange their views, exhibit products and interact with concerned visitors.

ICT companies are one of the key attraction of Corporate Bazaar 2007 that took place at the Bangladesh-China Friendship Convention Center (BCFCC) from February 10-12.



TECHNEWS

TV coming to your phone ... maybe

AFP, Barcelona

Mobile television is taking center stage at Europe's annual wireless industry show after years of largely unfulfilled hype, though differing technology standards still blur the picture.

As in past years, mobile network operators, handset makers and content providers are banding together at 3GSM to pitch TV broadcasts, video games and other entertainment as the answer to stagnant or shrinking revenue from phone calls, compounded by slowing subscriber growth in Europe.

But this time around, mobile TV broadcasts are actually available to cell phone users in a growing number of countries, from Europe to Asia. Soon they're expected to arrive in the United States, though once again a technological divide appears to be forming over the Atlantic Ocean.

While more mobile TV services and devices have been rolled out over past year, "none of them have really taken the market by storm," said Nick Lane, an analyst at the research firm Informa Telecoms & Media. For that to happen, questions about the viability of the different platforms, software and business models, need to be addressed, he said.

At the show that opened Monday, industry players were

