

## Doom

Doom is a 1993 computer game by id Software that is a landmark title in the first-person shooter genre. It is widely recognised for its pioneering use of immersive 3D graphics, networked multiplayer gaming on the PC platform, and the support for players to create custom expansions (WADs). Distributed as shareware, Doom was downloaded by an estimated 10 million people within two years, popularising the mode of gameplay and spawning a gaming subculture; as a sign of its impact on the industry, games from the mid-1990s boom of first-person shooters are often known simply as 'Doom clones'. According to GameSpy, Doom was voted by industry insiders to be the #1 game of all time.



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## TECHSPOTLIGHT

CommunicAsia 2007

# Opportunities for digital convergence

HANA SHAMS AHMED and  
NAFID IMRAN AHMED, back from  
Singapore

LIKE everything disciplined in Singapore, the thousands of attendees at CommunicAsia 2007, the 18th instalment of the region's information technology exhibition and conference, had a clear idea about the enormous business opportunities available there.

The exhibition took place from the June 19 to 22 at the Singapore Expo, a 10-minute drive from Changi Airport with a total area of 69,000 square metres, and participated by over 2,400 exhibiting companies from 65 countries or regions.

The display of new technology was indeed a feast for the eyes. Some of the key technology highlights were the following 3G/HSDPA; broadband wireless; DMB/DVB; embedded technology; RFID; enterprise networks and technologies; infrastructure solutions; IP technology; IPTV; Fixed-Mobile-Convergence (FMC); mobile and fixed wireless technologies; mobile communications, content and applications; Next Generation Networks (NGN); network equipment; satellite communications and technologies; security; smart cards; VoIP; Wi-Fi/WiMAX; and wireless devices.

### IPTV and IP Phone

IPTVs and IP Phones were the biggest consumer technology 'wow's at the expo because of the enormous possibilities and cost savings in case of IP phones for big corporations. Although IPTVs are yet to reach the mainstream market, multinational corporations and banks are already licking their lips at the prospect of the myriad of interactive services that would enable television to offer a lot more than just pure entertainment.

More than just delivering content, IPTV is about enabling users to access all kinds of services at the click of a button sitting right in front of their televisions from monitoring their office CCTV, to gaming, to buying products and availing services, to video conferencing and availing banking services, the possibilities are endless. While only a handful of service providers are offering IPTV services across Asia, there are not many fully-scalable, advanced IPTV operations yet.

### Mobile Gaming

According to Informa Telecoms and Media, the worldwide market for mobile games will grow from \$2.41 billion in 2006 to \$7.22 billion by 2011. Other industry experts are more ambitious. Whoever maybe right about their projection, it is needless to say mobile gaming is a big market and with more and more



young people latching on to advanced 3G handsets which provide new levels of quality and gaming experience for these huge groups of young people. And exhibitors in CommunicAsia 2007 were showing off all that is new and happening in this sector.

### VoIP

While in the rest of the world, VoIP technology has already moved into the telecom mainstream with broadband and other types of IP telephony, the Bangladesh government's indifference to open up this gold mine of a technology is nothing but a step back in time.

CommunicAsia 2007 reveals how the revenue and profit opportunities within the VoIP wholesale market are boundless. A number of companies have developed VoIP strategies to take advantage of the business opportunities that this fantastic technology provides.

According to CommunicAsia sources VoIP services have been growing in triple digits, both in terms of revenue and traffic. According to TeleGeography Research, international VoIP traffic grew from less than 10 million minutes in 1997 to 61.8 billion minutes in 2006.

For a developing country like Bangladesh, a big percentage of whose GDP is generated from remittances sent by migrant workers, using cost effective VoIP services over standard PSTN is the only rational option to take.

GSM providers in Singapore and most other countries already offer VoIP call options from their handsets. It's fast and reliable and licence costs are set at a bare minimum. Telecom experts believe

that all voice will ultimately be carried through IP, completely replacing traditional PSTN/TDM switches.

India and Sri Lanka are already bearing the fruits of this technology to the fullest earning a huge amount of revenue for their countries making use of the great number of enthusiastic young people willing to work at minimum per hour rates, outsourcing taking place from countries like the US and UK where such rates are enormous.

Call centres have thus become the next big thing after the readymade garments industry. Bangladesh has a pool of young, enthusiastic people just fit for this purpose.

### Mobile Entertainment

CommunicAsia 2007 has huge respect for the needs of the young cell-phone dependent generation and thus mobile entertainment was of great value to many exhibiting companies there. Many industry experts believe that mobile entertainment is the next wave of growth in the Asia-Pacific mobile industry.

The Bangladesh market is no less different. Besides gaming services, messages, multimedia messages, wallpapers, photos, music, ringtones, callerback tones have all become extremely popular with the new generation.

### WiMax

WiMax, rumoured to be the newest big thing in wireless broadband technology, has finally come out of its planning box and is now operational. Since this is a backend technology consumers will not be able to directly see its advantages,

although business corporations are fast latching onto this technology.

Countries like Sri Lanka and Pakistan are pinning their hopes on WiMAX to provide service to underserved areas and Malaysia and Thailand hope this technology will help them provide broadband connectivity to rural and remote areas.

### NSN@CommunicAsia 2007

Following the big merger just a year back, for the first time, communication services provider Nokia Siemens Networks (NSN) participated at the CommunicAsia and showcased their latest solutions and technologies.

NSN's key highlight at the event was their solution, Village Connection, which will help build rural connectivity village by village, enabling operators to extend their reach to remote villages and NSN are already in talks with major telecom operators in this region for implementation of this new solution.

"We have had lots of discussions with operators as well as regulators. The product will be made available in the second half of 2008 and the trials will start in the beginning of next year," Michael Murphy, head of technology, Asia Pacific, said in an exclusive interview during CommunicAsia.

This new low-cost wireless communication solution could enable operators to provide mobile services for as low as \$3 a month and offers to build rural connectivity on a franchise-based business model between an operator and local village entrepreneurs.

The solution is likely to comprise GSM access points located in

villages and regional access centres. A village would typically host one access point module comprising GSM radio, power and IT hardware and software components.

"Our vision is to connect 5 billion people by the year 2015," said Rajeev Suri, head of APAC, NSN, mentioning that India, Indonesia and Bangladesh are among the top three markets with enormous growth potentials in this region.

When asked whether Bangladesh should move to 3G or WiMax, the officials mentioned that it's a decision that has to be taken by Bangladesh, but they are ready to deliver every kind of solution. They also mentioned that Spectrum allocation is a major issue in the Bangladesh market and has to be resolved in order to have a smooth mobile phone service.

Suri also mentioned that as device evolution brings the mobile internet experience to the consumer mass market, total data traffic in mobile networks will rise remarkably.

To offer these services efficiently, a continuous development of cellular networks, cost saving and enhanced user experience by simplified network architecture, such as I-HSPA and LTE (long term evolution) are required.

NSN's HSPA (high speed packet access) solution and LTE were demonstrated at the event.

To understand the capacity and importance of the show one only has to look at the names of the companies. Singtel, Star Hub, Telecom Malaysia, British Telecom, Equinix, IDA, CNET etc. are just tips of the digital icebergs that made this show THE place to showcase the advancement and potential of the field.

All the big players were there discussing and competitors are not seen as competitors, but potential for expansion and diversification. What was blatantly obvious was the almost non-attendance of any representation of Bangladeshi companies in CommunicAsia 2007. Despite big names in the telecom sector and an ever-increasing consumer base combined with overseas companies looking for investment opportunities in such consumer-concentrated market, this absence is distressing indeed.

ITEL Billing, a billing company with customers all over the world was the sole representation of Bangladesh at the expo, which was a very encouraging mark. It is hoped that other companies will follow suit in the next such event and Bangladesh telecom companies will take advantage of the huge opportunity CommunicAsia provides.

## TECHNEWS

Banglalink enterprise GPRS

# A potential solution for subscribers

EDWARD APURBA SINGHA

IN this competitive world people always look for all-in-one solution to make their lives easier. The introduction of cellphones has added a new dimension to this trend as it enables us to enjoy different functionalities. At the same time, this palm-held device has brought the entire world into our hands through the mobile internet technology. Cellphone penetration in Bangladesh is quite impressive and recently all operators have incorporated mobile internet service in their regular services. As a result, people can now easily surf the internet with GPRS/EDGE-enabled handsets.

Banglalink, one of the leading mobile phone operators in the country, has unveiled cutting edge GPRS service for their subscribers. At present, this service is available to the postpaid subscribers only, but the operator is planning to extend it to its prepaid subscribers by the end of the year.

GPRS service enables the Banglalink subscribers to use their handset to browse the web, send and receive emails with attachments and share MMS (Multimedia Messaging

Service). They can download free software like opera mini for faster browsing. They can also use various messenger services after downloading free software such as mig 33, agile messenger and ultraIM.

Subscribers can also use their handset as a modem by



connecting it to a laptop or PC. This set-up requires relevant accessories, such as data cable, infrared, bluetooth and driver software. PCMCIA card or USB device can, however, substitute for the handset to establish connectivity. For this, subscribers need to insert the SIM (Subscribers Identity Module) into the particular device to get the service. Presently, Banglalink offers two packages for its postpaid subscribers. Package 1 is pay-

as-you go and charges TK 0.015/KB. Package 2 offers unlimited use at a monthly charge of TK 650, excluding VAT. A subscriber can personally configure this service or may contact the call centre for relevant information.

Besides the GPRS facility, Banglalink has also introduced some exciting services such as enterprise SMS broadcast, enterprise short code, missed call alert service etc in its enterprise solution. Enterprise SMS broadcast enables business personnel to send SMS to hundreds of people of any operator within few seconds. Enterprise short code service frees the subscribers from the hassle of memorising long phone numbers. They just need to dial a short number, which will then be automatically routed to the desired mobile or PSTN number.

Missed call alert service let the subscribers know about the calls that were missed when the phone was switched off or unreachable. This service keeps the record of those calls and sends SMS with details about them.

## TECHNEWS

# Virtual reality meets virtual feeling



AFP, Tokyo

EVER dreamed of being drawn close to a smiling Marilyn Monroe or feeling the muscles of fitness guru Billy Blanks? A Japanese firm on Wednesday unveiled a system that enables you to feel "the shape and softness" of three-dimensional images

using a sensor-loaded glove.

The "tangible 3D" system creates graphics that seem to burst out of a screen and has a glove that allows users to "feel" them, according to NTT Comware, the software development unit of telecom giant Nippon Telegraph and Telephone.

Without any need for awk-

ward 3D glasses, users could feel a far-away object as if it were right in front of them, NTT said at a virtual reality exhibition.

The developer was exploring commercial applications which could include video phones, said engineer Shiro Ozawa.

"You would be able to take the hand, or gently pat the head, of your beloved grandchild who lives away from you," he said.

If a person linked to the system moves in another place, his or her three-dimensional image also moves in real-time. The user would feel as if they were being pulled along if the image moves while grasping your hand.

The dead could also be "resurrected" by the system and museum visitors could "touch" precious exhibits sealed in showcases, the firm said.

## PHOTO TECH



### DIGITAL AQUARIUM

A girl extends her hand to touch a spotted eagle ray, whose image is projected from Sony's ultra-high resolution digital movie (4,096 x 2,160-pixel) projector 4K SRX during a press preview at the company's showroom in Tokyo on June 27. Sony will display ultra-high resolution movie of Okinawa's aquarium for the summer vacationers from next month.

PHOTO: AFP

## TECHNEWS

# Artificial hand with 'muscles'

AFP, Tokyo

A Japanese robot maker on Tuesday unveiled what it called the world's first prototype of an artificial hand with "air muscles" that can do even delicate work like picking up a raw egg.

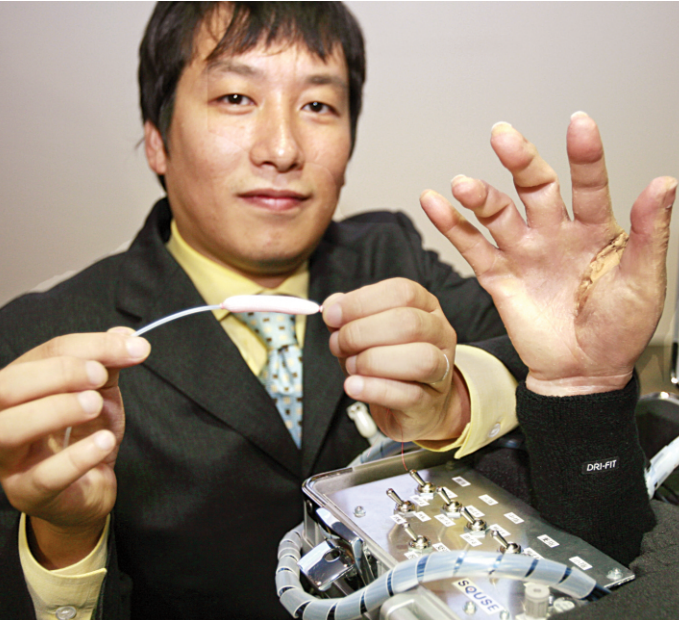
Squase, a Kyoto-based robot and factory automation manufacturer, said it has developed a 400-gramme (14 ounce) hand with five human-sized fingers with artificial fibres that can be controlled by air pressure.

"So far, robots have an image of helping people do heavy lifting, but we aim at delicate work as a human hand can do," company president Mikio Shimizu said.

During a demonstration, the prototype hand grasped a pen and picked up a raw egg without breaking it.

The firm plans to ship some 50 prototypes to research institutes and firms, with plans to market them overseas in the near future, Shimizu said.

Air muscles may be key tech-



nology for developing new types of artificial hands in the future, said Hiroshi Yokoi, associate professor of precision engineering at the University of Tokyo.

"Compared to motor-driven

ones, air muscle hands are extremely light and less noisy," Yokoi said, adding that they may be in practical use in about five years' time.