Film director Shekhar Kapur has joined the board of Above Solutions Inc.

Google's new OS will offer Remote Desktop capabilities.

Oracle is being sued by the US government for allegedly overcharging it.

ConsumerScope

BWA promises big Net effect

DEEPAK KUMAR

Could BWA do to broadband what mobile services did to telephony? Telecom developments last week threw up two huge surprises: Infotel, a lesser known telecom player won all the 22 Broadband Wireless Access (BWA) licence bids, and Mukesh Ambani-led Reliance stumped many by announcing a controlling stake in Infotel and thus re-entering the telecom area with a thud.

For the consumer, this could mean setting up of the country's first pan-India wireless network designed for data from grounds up. Other networks have primarily been set up for voice while data has so far come as an overlay. Two competing network technologies are being debated in the context of a higher-speed wireless broadband network--Worldwide Interoperability for Microwave Access (WiMAX) and Long Term Evolution (LTE).

Going by various reports, there is a fair possibility that Intel-promoted WiMAX will have a play, even though Qualcomm-backed LTE technology is being discussed as a preferred choice. One of the major carriers in the US, Sprint, has already deployed a WiMAX network and much has been talked in the US media about the carrier's WiMAX-ready smart phone HTC EVO 4G. The device has been compared even with Apple's iPhone 4. Also, WiBro, a close cousin of WiMAX, has been successfully deployed in South Korea for long now.

On the other hand, LTE is seen as a natural evolution path for moving GSM subscribers towards 4G. Globally, major wireless carriers such as AT&T Mobility and Verizon Wireless have announced their LTE plans.

LTE is expected to see substantial deployments by 2012, though Scandinavian operator TeliaSonera has already done commercial launch of its LTE operation in cities of Stockholm and Oslo.

Both LTE and WiMAX are mature technologies in their own rights and can be used to provide cutting-edge data services to an emerging Indian consumer.

That also brings up the question if it makes sense for Indian operators to use a common technology at the core of their networks even as they use different technologies for air interfaces. Technologically, that's feasible and in fact, can bring down the overall upfront cost of network deployment, a benefit that can be shared with consumers in terms of lower tariffs.

Is it possible that a player chooses to deploy WiMAX for air interface and uses an all-IP network at the core? That would also further strengthen the already strong case for sharing of infrastructure by telecom players.

Possibly yes, as indicated by the standards long released by the 3G Partnership Project, of which both Qualcomm and Intel are members. Of course, there can be other permutations and combinations of technologies as well.

Deploying either an LTE- or a WiMAX-only network from ground zero can be costlier, because of various market-related factors.

It took TeliaSonera around two years to announce the commercial launch of LTE after it was awarded the licenses, so a similar timeline can be expected for BWA rollout in India as well.

And even though it has not been discussed much, it's only a matter of time that BWA networks will also be able to support voice, just as today's voice networks support data. Already, Voice over LTE is a much talked about topic in technology circles.

BWA-related developments will likely happen more in other parts of the world before they happen here, and that will come handy for India from a learning point of view.

It is also only a matter of time that devices with native support for BWA technologies start becoming commonplace, while USB modems are anyways going to serve well for notebook users.

BWA rollouts, supported by various access devices including the tablets and notebooks will most certainly give a big push to broadband density in the country, just as mobile services has made the country aspire to achieve a tele-density of 70 or so over the next few years.

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A patient tries to cure the healthcare system with tech

SANGEETHA CHENGAPPA

DC | BENGALURU

June 16: Having made over 30 visits to different hospitals after being diagnosed with a rare condition - auto immune arthritis, Vijaya Verma realised that the healthcare system in India is not patient-friendly at all.

"While many hospitals have made life easier for administrators and doctors by using HMS (hospital management systems) software from international and domestic vendors, there is absolutely nothing to help patients with their health records. In many cases, hospitals do not even give patients discharge summaries. More important, doctors seldom spend time going through a patient's history of ailments, hospitalisations and drug intake, before putting them on a new course of treatment" she said.

Armed with 25 years of experience in the IT industry, Vijaya who was formerly General Manager with Wipro and founder of Alopa Networks), founded Yos Technologies in September 2006.

"The idea was to create personal healthcare systems and smart cards for patients, that would empower them to manage their own health with anytime, anywhere access to their health records via the Internet and mobile phone" said Vijaya. It took her team of 12 a whole year to come up with a beta product — a software for personal health records (PHR).

The startup went about acquiring customers directly through Google ads and approached pharmacies and clinical labs for customers.

The effort paid off and Yos Technologies acquired a database of 80,000 patients who were only too happy to use the free PHR software to store and retrieve their health records online.

Vijaya Verma, founder of Yos Technologies says her experience with the healthcare system led her to create software to empower patients.

—DC photo

To monetise their product, Vijaya's team developed additional value-added applications — reminders for patients to take medicines and buy medicines through sms; record blood pressure/sugar levels of the last few readings on users' mobile phones which doctors can see instantly as well as, online printing of ECG/EEG graphs in hospitals.

"We charged patients just Rs 100 per annum to use these value-added services, but almost immediately there was a huge dip in patients using our software.

We then decided to bundle our PHR offering with a record management system (RMS). we developed the record management system to cater to the unmet need in most hospitals. With RMS all the paper records in hospitals are scanned and digitised" said Vijaya.

Today, 35 Tier II (150-bed) hospitals in Bangalore which typically have 400-500 patients discharged every month are using Yos' RMS and PHR software.

While doctors go online and key in prescriptions on a PC screen that is built to look exactly like the paper version, they can also access earlier prescriptions online for easy reference.

Smart cards provided by Yos where patients' name, gender, blood group, allergies, chronic conditions, current medications and emergency contact numbers are stored are disbursed by these hospitals to patients at the time of registration.

"The hospital charges patients and pays us a percentage of the fee.

While it is a small amount, we are banking on volumes to make the business viable.

The good news is that we will break even by December 2010" said Vijaya.

The company is currently approaching Tier I hospitals in Bengaluru with their offerings and will soon be exanding to Mysore, Hassan and Bellary in Karnataka. Yos is opening offices in Chennai, Andhra Pradesh and Kerala next quarter.

The company has received Rs 7 crore in funding from angel investors to enable this expansion.

With a team size of 35 people, which is being ramped up every quarter, Yos Technologies is expecting to garner Rs 5 crore in revenue this fiscal.

Yos is working with the Karnataka State Police to manage their personnels' health records and with the Karnataka Road Transport Organisation to include critical health information on the smart driving license card, which is a first of its kind initiative.

"We have implemented a Personal Health Management System for schools which includes, PHR, Health Smart Cards as well as health management tools and applications which can be accessed online and through mobile devices" said Vijaya.

Nintendo, Sony showcase 3-D devices

ERIC A. TAUB

LOS ANGELES

June 16: With Microsoft and Sony looking to leap ahead of Nintendo's Wii motion-control video game technology, Nintendo took off in another direction on Tuesday with a 3-D portable game device.

The Nintendo 3DS handheld device gives the perception of depth in its 3.53-inch screen. But the real selling point is that the device provides three-dimensional images without the need for special viewing glasses or on a specially equipped 3-D television.

The device, which was demonstrated here at the Electronic Entertainment Expo, or E3, also blurs the lines dividing portable game devices, smartphones and digital cameras. Gamers will be able to shoot 3-D photos and insert them into games.

The 3DS will also include a motion sensor and a gyro sensor, similar to technologies included in the Apple iPhone 4 announced last week.

Nintendo, which is relying on developers to create games that use those new technologies, did not announce a price or release date for the 3DS.

The company also said the 3DS would be capable of playing 3-D movies. It demonstrated several feature films from Disney, DreamWorks and Warner Brothers.

To create the 3-D effect, a slightly different image is sent to each eye. The effect works as long as the device is placed directly in front of the eyes, but disappears as soon as the viewer moves to either side.

Sony also featured 3-D games at its news conference on Tuesday, but not on its portable PSP device.

Rather, the company hopes to exploit its 3-D television business by introducing a wide range of video games developed specifically for 3-D. The games will play on the PlayStation 3 console.

"This will be the year of 3-D," said Jack Tretton, president of Sony Computer Entertainment America, who said 20 3-D game titles would be available for the PS3 by March, including Killzone 3, The Sly Collection, Gran Turismo 5 and MotorStorm: Apocalypse.

Sony's new motion-sensing technology for its game consoles, the PlayStation Move controller, uses a camera, a motion controller and a navigation controller to allow a game player to manipulate both characters and objects without a traditional joystick, similar to the method employed by the Wii. As shown in several demonstrations, players need to make realistic movements — sword swipes or golf swings, for example — to move game play forward.

PlayStation Move is to be available Sept. 19. A $100 bundle will include a controller, camera, video game and demonstration disc. The stand-alone controller will be available for $50.

Sony expects to have more than 50 games for the PlayStation Move available by Christmas, including EyePet, Sports Champions and LittleBigPlanet 2.

On Monday, Microsoft introduced its own motion-control technology at E3, called Kinect. The price for the device has not yet been announced. *—NYT*

Genome project: All hype and no payoff yet

ANDREW POLLACK

NORTH WALES

June 16: At Merck's "automated biotechnology facility" here, robot arms adapted from automobile factories deftly shuttle plates containing human cells.

Assisted by the robots and other complex machinery, scientists are studying what happens to the cells as each of the roughly 22,000 human genes is turned off. They hope to find the genes involved in different diseases, the starting point for creating a drug.

It is a merger of sophisticated biology and brute force made possible only because the Human Genome Project provided the identity of all the human genes. But as with so much else that has spun off from the genome project, it is also an expensive gamble, with success far from assured.

"Can I point to a single drug right now that this has facilitated?" said Michele Cleary, Merck's senior director for automated biotechnology. "No, because we are in the early stages of this. There's information feeding into the early stages of the pipeline that we'll see the fruits of in years to come."

Ten years after President Bill Clinton announced completion of the first draft of the Human Genome Project, in June 2000, its application to drug development is still, at best, a work in progress. But while many genetics scientists outside the drug industry say the project has had few medical benefits, industry researchers urge a wait-and-see patience.

In fact, some of the first drugs based on genomic studies are now starting to reach the market. Several new "targeted" cancer drugs, for instance, block the effects of genetic abnormalities that spur tumor growth. A drug from the biotech giant Amgen, an osteoporosis treatment called Prolia, was approved two weeks ago. The company got its initial clue for the drug by making different genes in mice overactive. Mice with one particular overactive gene had unusually thick bones.

And the drug company Human Genome Sciences, founded in 1992 as the genome project was just getting under way, applied last week for approval of Benlysta, which could be the first new drug in decades for treating lupus.

That is nothing like the cornucopia of new drugs that some experts predicted the genome project would yield. A decade ago, drug companies spent billions of dollars equipping themselves to harness the newly revealed secrets of human biology. Investors bid the stocks of tiny genomics companies to stratospheric heights.

That "genome bubble" has long since popped. And not only has there been no pharmacopeia, but some experts say the Human Genome Project might have at least temporarily bogged down the drug industry with information overload.

As the head of Novartis's pharmaceutical business lamented in 2000, "Data, data everywhere, and not a drug, I think."

Indeed, even though research and development spending by major pharmaceutical companies has roughly doubled in the decade since the genome project was largely completed, reaching $46 billion last year, the number of new drugs approved each year has stayed about the same. There were 25 in 2009.

Genomics is not the only reason for the decline in the bang from the research buck. A big factor has been stiffer testing requirements by the Food and Drug Administration.

For all that, drug industry executives say it is simply a matter of time before the Human Genome Project pays off. They note that because it can take 15 years or more to go from a basic discovery to a marketed drug, it is too early to expect many drug approvals yet.

Moreover, pharmaceutical executives say that even if there are not many drugs yet, the genome project has transformed the way research is done.

"It's become a very standard part of what we do," said Peter S. Kim, the executive vice president in charge of research at Merck.

The company spent $1.1 billion in 2006 to acquire Sirna Therapeutics, which is developing the RNA interference technology that Merck uses to turn off genes. Dr. Kim said that having the genome sequence gave scientists "the ability to do science at a different level." At Bristol-Myers Squibb, two-thirds of the drugs being developed have been "touched" in some way by genomics, said Elliott Sigal, president of research and development.

At Genentech, one-third of the drugs in clinical trials and two-thirds of the newer compounds earlier in development "have been enabled in a significant way" by the genome project, said Marc Tessier-Lavigne, executive vice president for research at Genentech, a unit of Roche. One of those ways, he and others said, is allowing the potential side effects of a drug to be detected earlier. By having the genome sequence you can make better drugs, more specific drugs," Dr. Tessier-Lavigne said. Many drug companies now collect and analyze the DNA of patients in clinical trials, hoping to find genetic signatures that will allow drugs to be better tailored to specific patients. Still, some executives concede the genome project has not lived up to expectations. *—NYT*

bITs

US discusses Google's data collection

Google's headaches over its collection of private data from Wi-Fi networks are intensifying.Attorneys general from about 30 states are investigating whether Google violated any laws when vehicles used by the company to snap pictures for the Street View service also collected snippets of personal information sent over unsecured wireless networks.On Thursday, attorneys general from about 30 states participated in a conference call to discuss whether to join forces. The call was spearheaded by Richard Blumenthal, Connecticut's attorney general, who was among the first to open an investigation into the data gathering by Google. *—NYT*

AT&T stops taking orders for iPhone 4

AT&T Inc said on Wednesday that it was suspending preordering of the next iPhone while it tries to fulfill over 600,000 orders that it has already recieved for the new phone.

AT&T, the exclusive U.S. provider for iPhone, said orders of the iPhone 4 on Tuesday, the first day of online preorders, were 10 times higher than for the iPhone 3GS last year.

The company said that availability of additional inventory would determine if it can resuming taking orders.

Heavy demand caused technical problems on the AT&T and Apple websites on Tuesday, leading some consumers to instead try ordering the phones at stores. AT&T has not commented on the technology problem. *—Reuters*

San Francisco passes mobile radiation law

Imposing roughly the same cautionary standards for cellphones as for fatty food or sugary soda, San Francisco voted on Tuesday to require all retailers to display the amount of radiation each phone emits. The new law in San Francisco was hailed by Mayor Gavin Newsom as a major victory for cellphone shoppers' right to know. The law — believed to be the first of its kind in the US — came despite a lack of conclusive scientific evidence showing that the devices are dangerous. There is also opposition from the wireless telephone industry, which views the labeling ordinance as a potential business-killing precedent. *—NYT*