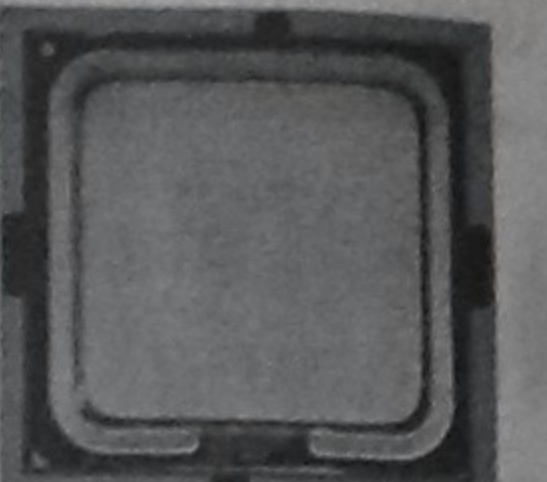


The Core 2 brand refers to a range of Intel's consumer 64-bit dual-core and MCM quad-core CPUs with the x86-64 instruction set, and based on the Intel Core microarchitecture, which derived from the 32-bit dual-core Yonah laptop processor. The 2x2 MCM dual-core quad-core CPU had two separate dual-core dies (CPUs) - next to each other - in one quad-core MCM package. The Core 2 relegated the Pentium brand to a lower-end market, and reunified the laptop and desktop CPU lines that had been divided into the Pentium 4, D, and M brands. The Core microarchitecture returned to lower clock speeds and improved processors' usage. The Core 2 brand was introduced on July 27, 2006.



TECHFOCUS

Mobile Content Development Untapped potential for local companies

EDWARD APURBA SINGHA

AROUND the world, there are almost 3 billion mobile phone users and in some cases, the mobile craze endangers PC proliferation. The secret of cell phone's popularity is its broad-spectrum applications. Today mobile phone use is not limited to voice calls only. It now incorporates many intuitive features that have a deep impact on human psyche.

The breakthrough in cell-phone technology has spiked the demand for relevant applications, for which reason the term "mobile content" has come in the limelight. Mobile content basically encompasses different exciting stuffs such as music, video, games etc.

Mobile content is an emerging source of revenue for network operators. Moreover, the widespread availability of mobile internet paves the way for developing and distributing more innovative contents to the subscribers.

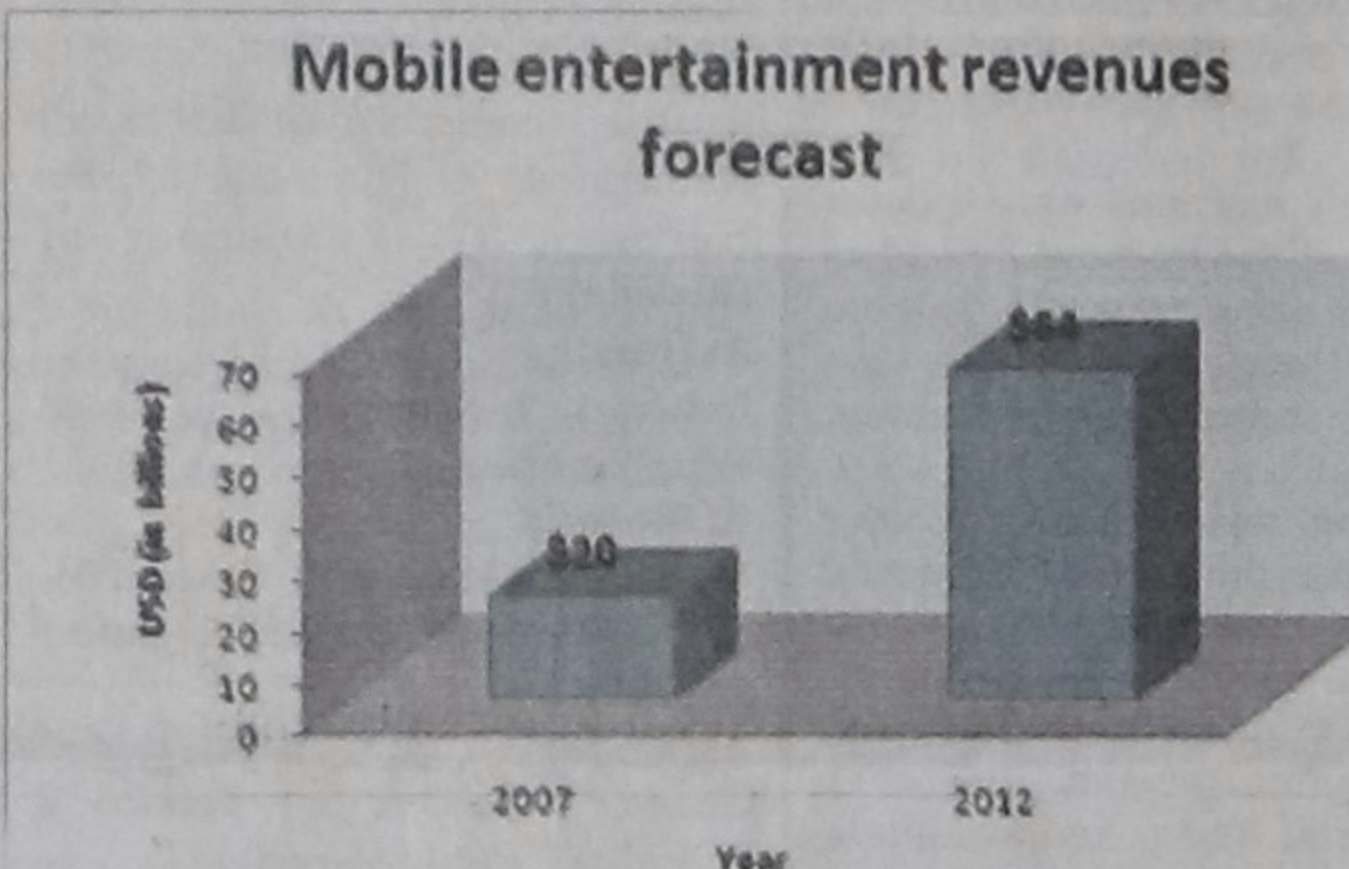
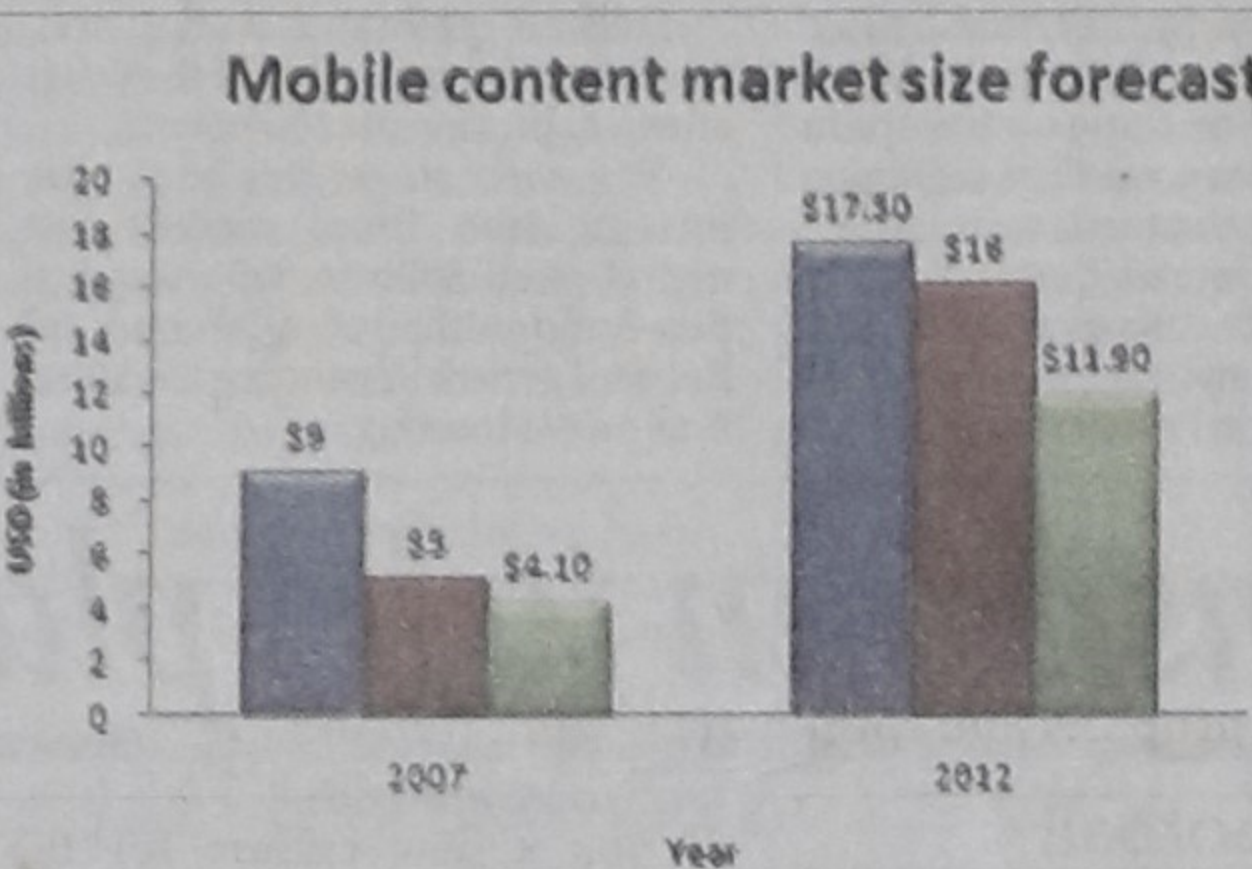
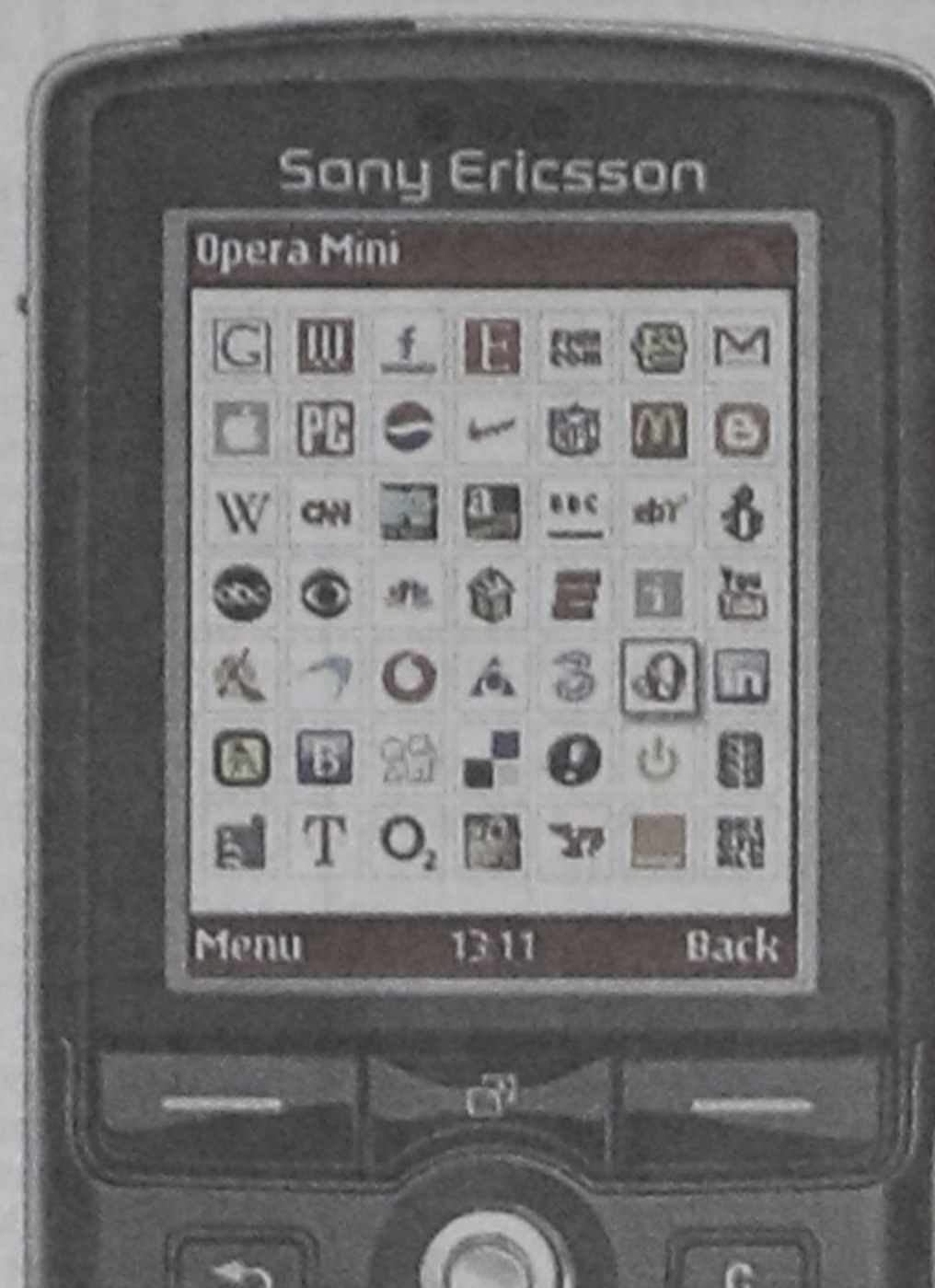
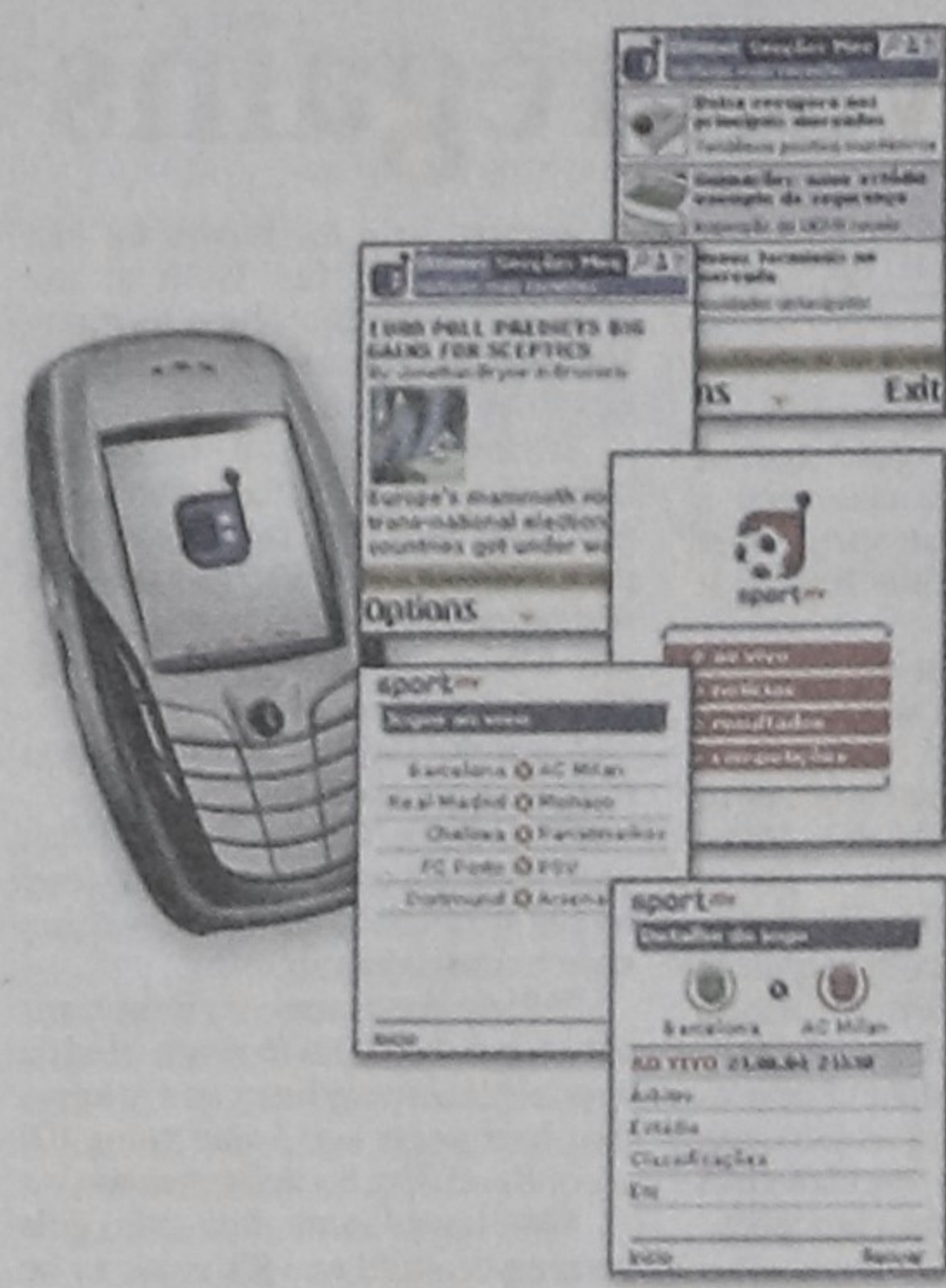
Market analysis firm Juniper Research predicts that mobile entertainment revenues will rise from just over \$20 billion worldwide in 2007 to more than \$64 billion by 2012. Juniper said the upward revenue trend would be reflected in different areas of mobile content.

For instance, music content will rise from \$9 billion in 2007 to \$17.5 billion by 2012, games from \$5 billion to \$16 billion and mobile TV from \$4.1 billion to \$11.9 billion.

China's mobile market is the world's largest. BDA China, a Beijing consulting firm, estimates that subscribers spend an average of about six yuan (about 75 US cents) on mobile content downloads. Ring-back tones alone take in as much as \$430 million a year, BDA says.

Berg Insight, a research firm, predicts that the market for mobile content and entertainment services in Western Europe could grow to around GBP 32 billion by 2012. It estimates that over 50 percent of the mobile subscribers in Western Europe will regularly access some kind of mobile content and entertainment by 2012. Juniper also predicts a huge surge in the mobile games market in North America by 2012 and that will be up to \$3 billion by 2012.

Recent forecast by ABI Research, a technology research firm, stated that due to the expansion of 3G networks and cheap tariff plan, the mobile TV subscriber base will increase up



SOURCE: JUNIPER RESEARCH

to 462 million worldwide by 2012. Projecting on the Asia-Pacific region, ABI predicts the increment of subscribers from 24 million in 2007 to 260 million by 2012 where South Korea and Japan will lead the trend.

Bangladesh, however, has not been able to achieve much success in mobile content business. In Bangladesh, mobile content business started in 2002. Since then this sector has seen sluggish growth, due to the lack of policy and proper strategy.

The situation, however, is improving day by day. But piracy is still the major problem, hindering the growth of this industry. The total size of mobile content market in Bangladesh is around 50 crore. The market witnessed healthy growth during 2004-06. The growth slightly dropped in 2007. Experts, however, project a double-digit growth in 2008.

People in the 14-32 age bracket are the main subscribers of mobile content. Bangla folk songs, wallpaper of Hindi cinemas and differ-

ent games are in high demand in the local market. Genuine contents are developed from the source file. For frontend application, .Net and PHP are widely used while Oracle and MySQL are the best solutions for database.

The six carriers are the main content distributors. Content development firms develop their contents and then provide them for the operators. Based on the agreement, a content developer can only sell their contents through the network of particular operators.

Mobile network technology has a great influence on the mobile content business. For example, if 3G system becomes a commonplace in Bangladesh in the near future, the content business will get a boost as the new age system will provide high-speed data transmission facilities, effectively accelerating the growth of rich audio-video content.

The big advantage in mobile content business is that it does not require a huge start-up capital. It just requires a small invest-

ment and, most importantly, imagination. Experience in music is expected in audio content development, a degree in art is preferred in graphical content development and experience in Java is a must for developing game content.

Several companies such as ICE Technologies, TTBC, TBS, Wintrade and VU Mobile are leading way in content business in the local market. Rubaiyat Jamil, chief executive officer (CEO) of ICE Technologies, told StarTech that they "need active support from the cell phone operators to raise awareness of content piracy because they are the physical distribution channels." At this moment only two percent contents are legal, he said.

He said, "We need BTRC (Bangladesh Telecommunication and Regulatory Commission) to come forward and back this emerging industry. Very soon we'll be going to set up Content Providers' Association in order to expedite the growth of the business and protect the IPR (Intel-

lectual Property Rights) as well."

"We're glad to know about the BTRC's new initiative regarding mobile content business. I have several suggestions -- recognise mobile content development as an industry, create partnership between content providers, BTRC and operators, and create a proper framework for financial activities."

"Mobile content business is still operator-centric. We need freedom to distribute content from our own platform in order to create more opportunity and ensure sustainable growth", said Jamil.

In Bangladesh content development opportunity is rapidly increasing and many companies are now working in different areas, including entertainment content (ring tones, logos, wallpapers, karaoke, mobile comics, picture message, animations etc), advertising and promotion,

TECHVIEWS

Bangladesh making progress in global e-government readiness

AHMED IMRAN

THE United Nations E-Government Survey 2008, published by the Department of Economic and Social Affairs, brings some good news for Bangladesh. Ranked 142nd this time, the country has done well on 2004 and 2005.

However, the ranking is not still satisfactory as other Saarc countries, except for Nepal, averages well than Bangladesh (see bar graph).

This e-government readiness index is based on a weighted average composite figure calculated from website assessment, telecommunications infrastructure and human resource endowment. E-government in its simplest term implies the use of information and communication technologies (ICTs) to improve the activities of government organisations. This index is, however, not a complete measure as it does not take into account some deeper qualitative measures, but still gives an indication of the relative position of a country's e-readiness in the region and the world.

This year Sweden surpassed the United States and secured the top position, while two other Scandinavian countries - Denmark and Norway -- were ranked second and third respectively. The USA was placed fourth, followed by the Netherlands, Republic of Korea, Canada, Australia, France and the UK.

Within the Saarc, the Maldives continues to dominate with an index close to the world average followed by Sri Lanka. Though India slipped from 87 to 131, it made a significant drive in developing a large national portal, the value of which will be evident in the coming years. According to Indian specialists, India's e-government initiative came a bit late but its present efforts would soon be realised on a much bigger scale.

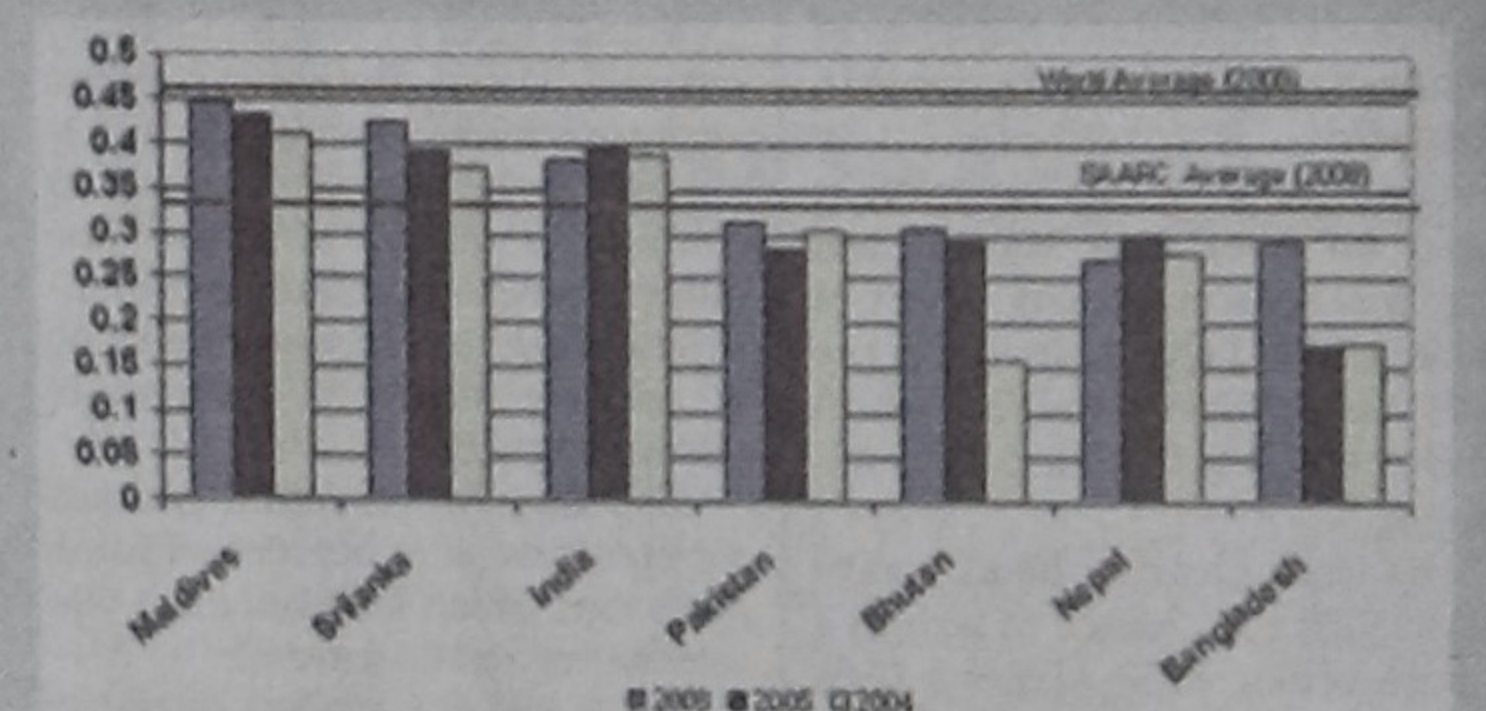
In 2004 and 2005 reports,

Bangladesh was shown falling behind even the neighbouring Saarc countries (2006 and 2007 reports were not published). Despite some initiatives, such as the formation of the ICT Task Force with the prime minister in the chair, the formulation of the National Information and Communication Technology Policy 2002 and Support to ICT Task Force (SICT) projects, only a few government ministries and agencies have attained limited e-government capability and adopted ICT in their work processes effectively.

Bangladesh's improvement this time was attributed to its progress in web measurement index, where the country's various government sites made their presence in large number in the last couple of years. This presence is, however, in the enhanced and

an effective tool to address many of its deep-rooted problems like transparency, corruption, accountability and efficiency. In this modern Information age, use of ICT in the government could be a key driver for national productivity growth. To successfully promote the e-governance- and ICT-based business process in Bangladesh, it is necessary to create a knowledge-based society and a skilled workforce that is capable of reengineering the existing government system into a modern automated system.

People's readiness is also important as new innovation like e-government warrants a philosophical shift of our mindset from the traditional way of life and inherited official business process. The mass media and education institutions in this regard can



interactive stages only and not in more advanced transactional and connected stages of e-government service delivery. Various initiatives from government and non-government organisations to create awareness also contributed to this improvement. But without a compatible administrative reform and enactment of cyber-law, it would be difficult to step into those advanced stages and derive the real benefit.

Advantages and necessity of e-government for a country like Bangladesh has already been emphasised in many forums, which could serve as

play a significant role in educating people and preparing them for this societal change and for the new way of life. But without strong collaboration and communication amongst various government and non-government agencies, e-governance simply cannot take off as participation of and support from all corners are essential in this regard. Most importantly, a firm commitment and political will is needed to drive this forward to reap its ultimate and actual benefit for the country.

The author is a PhD researcher on e-governance in Australian National University.

BCS IT Expo 2008 begins Mar 30

STARTECH DESK

ONE of the largest computer expositions of the country, 'BCS IT Expo 2008', kicks off from March 30 at the ECS Computer City, located at Multiplan Centre in New Elephant Road, Dhaka.

Bangladesh Computer Samity (BCS) will organise the seven-day fair, which was announced at a press briefing on March 27 at the BCS office.

Commerce and Education

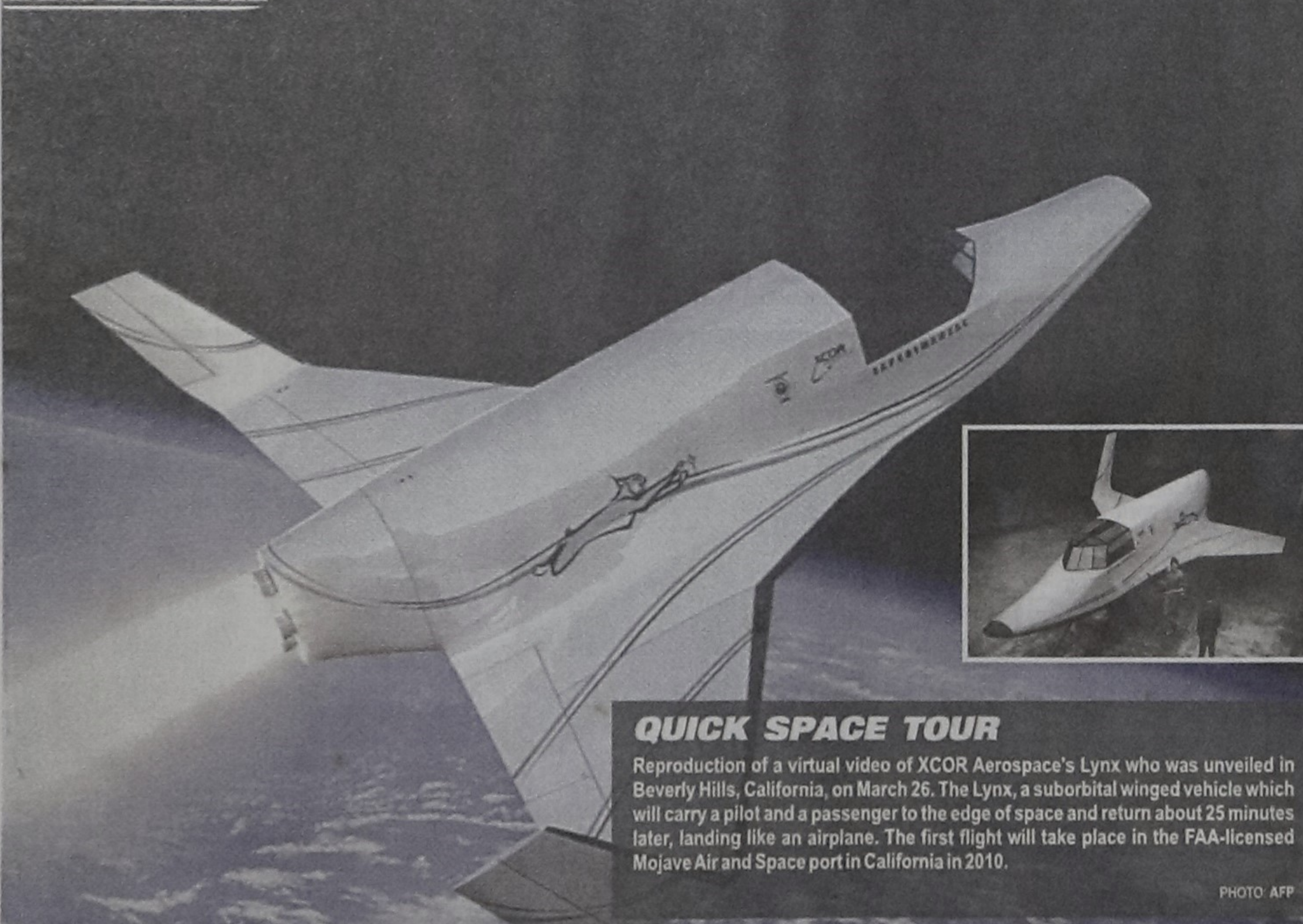


Adviser Dr Hossain Zillur Rahman is scheduled to inaugurate the event as chief guest, while Sheikh Md Wahiduzzaman, secretary, Ministry of Science and ICT and Post and Telecommunications Secretary, Iqbal Mahmud will be present as special guests.

This year BCS has planned the exposition at a different venue in order to attract the IT buffs to the newly built computer mall.

The expo will continue till April 5.

PHOTO FOCUS



QUICK SPACE TOUR

Reproduction of a virtual video of XCOR Aerospace's Lynx who was unveiled in Beverly Hills, California, on March 26. The Lynx, a suborbital winged vehicle which will carry a pilot and a passenger to the edge of space and return about 25 minutes later, landing like an airplane. The first flight will take place in the FAA-licensed Mojave Air and Space port in California in 2010.

PHOTO: AFP

TECHNEWS

Acer offers desktop PCs at lower price

STARTECH DESK

EXECUTIVE Technologies Ltd (ETL), the local business partner of computer and accessories maker Acer, has introduced a new desktop in the local market -- the Aspire E2140. ETL announced the availability of this low priced desktop at a press briefing at a local hotel on March 18.

This desktop includes the latest Pentium E2140 dual core processor from Intel having a speed of 1.60 GHz, and 1MB L2 cache. Also included in this desktop is Intel's 946GZ chipset, 1 GB DDR2 RAM, 80 GB SATA Hard Disk Drive and a DVD/CD-RW Combo Drive.

The Intel 950 Graphics Media Accelerator with up to 224 MB of DVMT provides sparkling graphics. Built-in Gigabit LAN card and 7.1 chan-

nel audio support makes this desktop at home, in work or entertainment.

This desktop also comes with 8 USB 2.0 ports and a Firewire port. The price of this desktop is Taka 32,800, including Acer 17" CRT monitor and 3



years' warranty.

The customer can upgrade to Acer 17" Widescreen TFT LCD by adding 5,700 taka only. This user-friendly and ready-to-go desktop is available at all Acer Showrooms and at all Acer resellers.

HP Pavilion dv6743tx Digital entertainment notebook PC

STARTECH DESK

COMPUTER Source Ltd. (CSL), one of the leading IT vendors of the country, recently unveiled the HP Pavilion dv6743tx notebook in the local market.

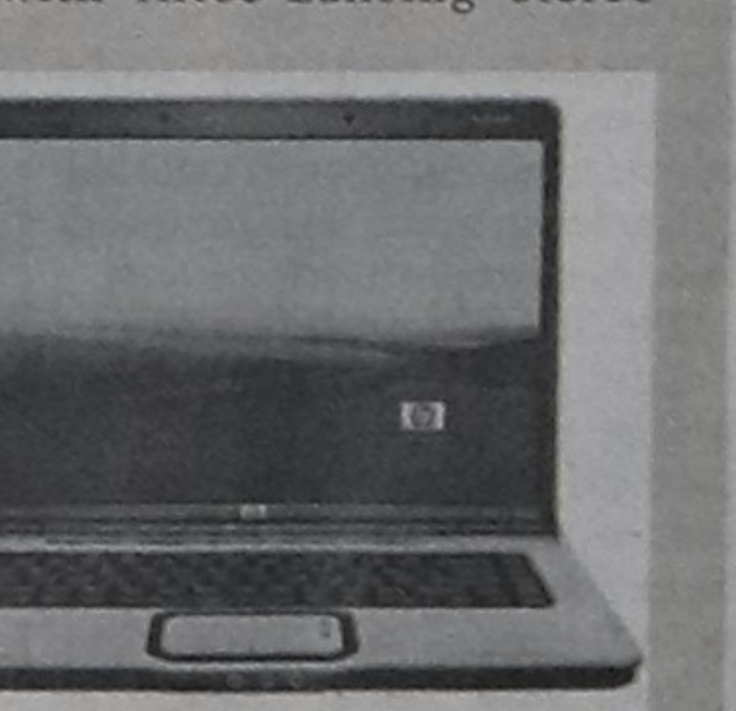
If you want advanced digital entertainment coupled with leading-edge mobile performance and communication features, HP Pavilion dv6743tx Entertainment Notebook PC is ready to deliver, says a press release.

The notebook is equipped with Intel Core 2 Duo processor technology with a processing speed of 2.2GHz with 2GB DDR2 RAM and also has a 250GB hard drive.

The 15.4" high-definition widescreen facilitates viewing while the BrightView option provides a higher contrast ratio and better viewing with DVD movies and games. The Nvidia GeForce graphics card with 256MB dedicated video mem-

ory delivers best-in-class video for games and multimedia. It also comes with an integrated HDMI port for viewing high-definition contents on HDTV.

Other features including high definition audio codec with Altec-Lansing stereo



speakers, wireless LAN, Bluetooth, 1.3MP webcam, finger print identification technology and HP quick play remote control.

The notebook has a price-tag of Tk.1,15,000 with one-year warranty.