

IRG WMR



IRG Technology, Media and Telecommunications And Life Sciences Weekly Market Review

Week of 18 December - 24 December 2005

For more information on IRG, please email communications@irg.biz or visit www.irg.biz.

Hong Kong (HQ)

No.1-2A, 17/F, The Centrium,
60 Wyndham Street, Central,
Hong Kong

Tel: (852) 2237 6000
Fax: (852) 2237 6100

Singapore

5 Rhu Cross, #04-16
Olivia Block, Singapore
437434 Singapore

Tel: (65) 6325 1191
Fax: (65) 6348 9583

Japan

JT Building 15Fl, 2-2-1
Toranomom, Minato-ku,
Tokyo, Japan 105-0001

Tel: (813) 5114 8395
Fax: (813) 5114 8396

Korea

37/F, Asem Tower, Samsung-
dong, 158-1, Kangnam-gu,
Seoul, Korea

Tel: (822) 6001 3840 ext. 3841
Fax: (822) 6001 3711

Philippines

2/F, State Condominium Bldg.,
186 Sacledo St. Legazpi Village,
Makati, Philippines

Tel: (632) 728 5307
Fax: (632) 728 5307

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Weekly Highlights

International

Mobile/Wireless

- **Asia Pacific consumers are shelling out more money in wireless contents, according to IDC. The forecast noted that the combined wireless content industry that comprises games, music, ring tones, video and TV will grow further next year.** IDC said service providers will offer those low-cost services bundled with broadband access and feature-rich contents and applications in the entertainment space. It also predicted that consumer VoIP market would keep growing. IDC said that non-service providers who entered into the market would back up the trend. For instance, eBay bought Skype, Yahoo and Microsoft purchased VoIP service providers and Google introduced VoIP software called Google Talk. Not only that, increasing number of enterprises would adopt VoIP as integrated voice and data and video conferencing solutions at work become available at low cost. IDC also predicted that 15 million converged devices would be shipped in Asia Pacific region in 2006, a 24 percent growth from 2005.

Japan

Internet

- **Nifty Corp.'s @Nifty ranked as Japan's best fiber-optic Internet connection service provider, while NEC Corp.'s Biglobe is ranked at the top ranking for ADSL services in a customer satisfaction survey released, according to JD Power Asia Pacific Inc.** @Nifty received top honors as users rated its range of services and homepage above the industry average. Biglobe received the highest scores among all providers for range of services, connection quality and customer support. Plala Networks Inc.'s Plala ranked second among both fiber-optic and ADSL Internet connection service providers after receiving high marks in the area of subscription costs. The survey also found that 36 percent of ADSL users are considering switching to other types of online connection services within the next year. Most are eyeing fiber-optic services and say they do not mind changing providers. The survey was conducted between September and October over the Internet, targeting a total of 7,328 male and female customers between the ages of 18-59.
- **Softbank Corp. and Yahoo Japan Corp. announced their joint formation of a company to broadcast television programs via the Internet, taking advantage of the growing number of Japanese users on advanced, high-speed Internet connections.** The two companies said the joint venture, TV Bank Corp., would operate a new streaming video service called "Yahoo!Doga", which aims to be a portal site for about 100,000 different programs including movies, sports and music shows as well as drama series from Japan, Taiwan and South Korea. Doga means "moving image" in Japanese. The service is expected to increase the pressure on Japanese broadcasters to change their business models to integrate the Internet in the broadband era. Japan is one of the world's most advanced broadband markets and offers the cheapest Internet access in the world. TV Asahi Corp. has signed on as a content partner. Softbank is in discussions with other television networks, including Fuji Television Network Inc. Softbank needs to sign on the television networks because they control much of both the television and movie businesses in Japan, unlike in the U.S., where Hollywood studios control the lion's share of desirable content.

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- **Gravity Co., Ltd. (Gravity) announced that it has decided to invest 1 billion yen (US\$8.6 million) in "Online Game Revolution Vol. 1," an investment fund organized in Japan.** "Online Game Revolution Vol.1" ("Online Game Fund"), with a total proposed investment size of 10 billion yen (US\$86 million), has an investment objective of investing in companies that develop online games in Japan. Movida Investment Inc., an affiliate of Softbank Group (Movida), will operate the fund as the general partner of the fund. Several Japanese and Korean developers of online games, including CJ Internet Corp. have agreed to invest in Online Game Fund. Based in Korea, Gravity is a developer and distributor of online games.

Mobile/Wireless

- **KDDI Corp. revealed the expansion of its digital content distribution service for cellular phones by setting up a joint venture with Qualcomm Inc., a deal that will obtain for the company frequency bands for its mobile TV broadcasting service.** The new firm to be set up by year-end is expected to apply with the Ministry of Internal Affairs and Communications next year to receive frequency bands to provide such broadcasting services, with a view to starting the business as early as 2007. KDDI will own 80 percent of the joint venture and allow it to deploy the executive to serve as president. For the new service, the telecom carrier will adopt "media flow" mobile TV broadcasting technology developed for cell phones by Qualcomm, a U.S. communications equipment maker. Japan is slated to launch "One Seg," a land-based digital TV broadcast service for cellular phones, in April 2006, with existing TV broadcasters providing their programs for such broadcasting. KDDI envisions that the new firm will set up its own broadcasting stations and ask TV broadcast/production firms to provide their programs for its service. The new service allows cellular phone users to watch real-time programs as well as save their favorite videos in their handsets. The service will also be compatible with music broadcasting.
- **NTT DoCoMo Inc. said it would take a 2.6 percent stake in Fuji Television Network Inc, a move that is part of its preparations for a new digital broadcasting service for cell phone users.** Acquiring 77,000 Fuji TV shares will cost NTT DoCoMo 20.7 billion yen (US\$178.1 million), or 269,000 (US\$2,315) per share. A partnership with a strong commercial TV station such as Fuji TV is expected to help in the development of technology and services for the newly launched "one-segment" terrestrial digital broadcasting service for cell phone users. The new service is slated to start April 1. DoCoMo said in a statement that it and Fuji TV would team up more closely by sharing respective resources and expertise to create a new market and develop services in the field of mobile communications and broadcasting. NEC Corp. and Motorola Inc. revealed that they each plan in summer 2006 to introduce handsets compatible with the broadband cellular service NTT DoCoMo Inc. will introduce. The handsets that NEC will deliver to DoCoMo can handle both voice and data communications and are intended for users who want to enjoy music and videos on their phones. Motorola plans to ship new handsets to DoCoMo about the same time. These units will incorporate data communication cards that can also be inserted into personal computers and will primarily target business users. By developing handsets compatible with the new service early, NEC and Motorola aim to use their technology and marketing prowess to differentiate themselves from competitors. DoCoMo hopes to attract customers to the new handsets and services in anticipation of phone number portability, which starts this fall. Portability enables customers to keep their cell number when switching providers.

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Media, Entertainment and Gaming

- **Tokyo Broadcasting System Inc. (TBS) said it is joining a filmmaking project through a limited liability partnership (LLP).** The TV broadcaster said it looks to the partnership as helping in extending its content line-up and aiding for an earlier recouping of its investment. An LLP is a type of joint business in which the partners are liable only to the extent of their investments and are allowed to have flexible management control. Although a law designed to permit the establishment of an LLP took effect in Japan in August, it will be the first time the partnership has been used to make a movie. As a first step, TBS, together with investment fund Cinema Investment and movie distributor Asmik Ace Entertainment Inc. will organize an LLP that will invest in a U.S. limited liability company planning to make a horror movie. The U.S. limited liability company will take charge of making various contracts for distributing the movie, distributing profits from the film to the Japanese partnership.
- **An official of Nippon Television Network Corp. said that current debate on reform of state-backed broadcaster NHK "will likely move in the direction of asking it to spin off and privatize part of its operations."** Clarifying that his remarks reflect only his personal view, the official said that it would be inevitable for NHK to undergo some type of reform in the way it operates. The reform when made would aid in facilitating competition in the broadcasting market even as it may face resistance from private broadcasters. Private broadcasters have consistently opposed the prospect of changing NHK's current structure, because even a partial privatization would spell the emergence of a powerful rival in the TV advertising market.
- **The Ministry of Communication is teaming with a consortium of broadcasters, communications firms and consumer electronics manufacturers to push standardization of business models, technical specifications and copyright protection for video-on-demand services.** The consortium is considering business models related to online distribution of TV programs and related issues. It is also looking at standardizing technology and distribution rules, such as data processing and compression, transmission over Internet Protocol networks, and special receivers. Field-testing is slated to begin early next year, with the goal of having standards in place in fiscal 2008. Participants in the consortium include Japan Broadcasting Corp., or NHK; Nippon Telegraph and Telephone Corp.; KDDI Corp.; Matsushita Electric Industrial Co.; Sony Corp. and Sharp Corp.

Hardware

- **Sun Microsystems KK said that it would begin selling three thin client terminal sets, which lack hard disk drives and use software as well as data provided over networks.** One set makes use of a customer's existing monitor, keeping the cost per terminal at 64,000 yen. The set will be priced at 1.2 million yen (US\$10,000). Another set, priced at 3.1 million yen (US\$26,400), has terminals built into LCD monitors. Both sets come with 25 smart cards for user authentication, 20 terminals, server software and a server. Intended for evaluation purposes, another set comes with two terminals and will cost just 198,000 yen (US\$1,600) so as not to be considered a capital asset. The low price was reached by restricting simultaneous use to two people.
- **Showa Denko KK disclosed its plans to mass-produce 80GB 2.5-inch disks for hard drives used in notebook computers starting in the summer of 2006.** The company said it would first launch production at its plant in Chiba Prefecture. As orders rise, production will be shifted to a plant in Singapore and expanded. The company is also looking at utilizing vertical magnetic recording, a technology for increasing hard disk capacity. At present, 60GB is the largest capacity the company makes in 2.5-inch disks for notebook PCs hard drives. With an increasing number of consumers

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recording television programming and music on their notebook PCs, demand for larger-capacity hard disk drives is growing. Showa Denko has not announced pricing for the disks.

Telecommunications

- **Significant foreign funds went to Japan's leading telecommunications companies during the first six months of the fiscal year, with overseas investors holding record-high percentages in Nippon Telegraph and Telephone Corp., KDDI Corp. and NTT DoCoMo Inc. as of Sept. 30.** The move of foreign investors flocking to these firms month period to 31.7 percent. Foreign funds that invest in undervalued stocks placed money into NTT and DoCoMo.

Information Technology

- **NTT Data Corp. said it is ready to launch a system that can determine the amount and type of drugs each patient should take based on their genes and medicines they are currently taking.** The system is designed to prevent a rise in medical treatment costs stemming from drug side effects and overdoses. Developed jointly by NTT Data and the University of Tokyo, the system contains data on the relations between genes and drugs' effects gathered by Order Made Soyaku Co., a medical start-up firm. The system has not yet been priced, but is expected to sell for 3-4 million yen (US\$25,500-34,000) including the necessary terminals and software. The company will start selling the product by year-end, mainly to small- to midsize medical institutions in a tie-up with Order Made, targeting sales totaling 2 billion yen (US\$17 million) in five years.

Ventures/Investments

- **Usen Corp., NIF SMBC Ventures Co. and stock listing solutions firm esnetworks Co. will form a fund to assist start-up companies at the end of January 2006.** Initially, the fund will have assets of 3 billion yen (US\$25.5 million), with plans to raise this figure to 10 billion yen (US\$85.1 million). It will target mainly start-ups aiming to launch initial public offerings, spending between 100 million yen (US\$852,000) and 1 billion yen (US\$8.5 million) per investment. The investments will have a maturity of seven years. Usen will contribute 50 percent of the capital, while NIF SMBC Ventures and esnetworks will put in 25 percent each. The fund will oversee management, while chartered accountants from esnetworks will be sent to administration divisions and Usen personnel will be dispatched to marketing operations.

Korea

Internet

- **The Ministry of Information and Communication revealed its plan for a restrictive real-name system for the Internet will take effect as early as the first half of next year.** The system will be applied only to major portal sites, and Internet service operators will be given the legal right to remove defamatory content without receiving agreement from the posting writer. Following the measure, large portal operators will require users to reveal their identities before registering initially. Once their identities are confirmed, users can make web postings under bogus names. The government will also allow portals to delete content at the request of a third party when messages have potential for libel or defamation. Even when the people who actually made the postings disagree, portal operators will be able to evade legal charges under the new law.
- **Hanarotelecom said it has received preliminary approval from the government to merge with smaller rival Thrunet.** The approval came three months after Hanaro applied for government backing

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for the merger in September. The ministry said it held a policy meeting and decided to give the go signal to the deal. The meeting was attended by experts from the information and telecommunications sector. A final decision will be made after the government finishes preparing measures designed to protect customers from the impact of the merger, the ministry said.

Mobile/Wireless

- **Experts are said to be strongly positive about the deal between KTF and NTT DoCoMo, which is expected to give a chance to both companies to gain a stronghold in the rapidly growing WCDMA and HSDPA market.** Korea Investment and Securities said that the alliance enabled KTF to form a "giant global mobile telecom block" that may pose a challenge to Vodafone. KTF could expand to Japan and China through roaming services, save equipment cost and share contents with DoCoMo. U.S. investment bank Lehman Brothers sees the tie-up as creating a huge synergy effect in developing WCDMA technologies and strategies. Local brokerage firm Hyundai Securities said that KTF could improve corporate image among Asian nations, which has been somewhat shadowed by the dominant provider, SKT. However, it said that it would take some time before KTF can actually derive the benefit from the alliance. Market observers noted their impression that KT would buy more stocks in next year.
- **Samsung Electronics Co. said it is in talks to supply high-speed mobile phones to Vodafone Group Plc's Japanese unit, a move that will signal the company's joining the nation's US\$3.9 billion handset market for the first time.** Samsung said it plans to sell phones to Vodafone K.K., Japan's smallest wireless operator behind NTT DoCoMo Inc. and KDDI Corp., by next summer. The Korean company lost global market share last quarter to Nokia and Motorola Inc., companies that have inked agreements to supply handsets to DoCoMo. Vodafone may get access to Samsung's top handsets, including the world's slimmest model and a phone equipped with a hard drive that can store up to 750 songs. Vodafone Group already buys Samsung phones for markets outside of Japan. Japanese operators and handset makers said they are expecting more competition when subscribers will be allowed to switch carriers while keeping the same numbers from next year. In a separate report, Samsung Electronics said it would add a digital multimedia broadcasting (DMB) function to its bestselling Blue Black Phone II when it is released in Korea. The Blue Black II phone was named cell phone of the year in Britain. Business magazine Fortune introduced the model in a special edition. LG Electronics, meanwhile, is focusing on sales of its so-called Chocolate phones. The firm is selling some 2,500 of the phones a day four weeks after release. The domestic debut of Samsung's Blue Black II is expected to present stiff competition.
- **SK Telecom, the nation's dominant mobile operator said that more than four million people had subscribed to its music service portal, Melon, adding that those who pay monthly fee for downloading and using streaming music exceeded 600,000.** SKT announced the strengthening of its alliance with MP3 player manufacturers including Reigoncom, Cowon and Samsung to promote the service. It said that the service would also be available on PDA and PMP. In a separate report, the company announced the signing of a Memorandum of Understanding with Irdeto, a leading firm in content security for digital TV, IPTV and mobile. The agreement covers the strategic relationship between the two companies and for the joint development of content security solutions in support of South Korea's rapidly growing mobile TV market. Another report disclosed that Posco, South Korea's biggest steelmaker said it would sell some of its stockholdings in SK Telecom Co. citing unidentified financial industry officials, with the shares to be sold at a 3.9 percent discount to yesterday's closing price of 186,000 won. Deutsche Bank AG, Morgan Stanley, UBS AG will manage the block sale.

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Hardware

- **Leading equipment vendors such as Comtech Korea, Acetel, Mirae Online and CIS Technology estimate that results for this year will be stronger than expected in terms of both sales and profitability on a series of large projects including DMB stations and digital media centers.** Comtech Korea is expected to post sales of 33 billion won (US\$33 million dollars) and net profit of 1.4 billion won (US\$1.3 million) compared to sales of 30.7 billion won (US\$30.1 million) last year. Acetel is expected to post sales of 13 billion won (US\$12.7 million) this year on deals with KDMC and DMB. The company targets sales of 15 billion won (US\$14.7 million) for next year, boosted by wider adoption of digital cable broadcasting systems and growth of IPTV. It also plans to expand into overseas markets in league with overseas partners. Digital broadcasting solution firm CIS Technology expects sales to double this year to 8 billion won (US\$7.8 million) compared to 4.2 billion won (US\$4.1 million) last year. The company said it has closed such major project deals including KT IPTV, Arirang Broadcasting and YTN Media digital newsrooms. Mirae Online provided digital broadcasting systems valued at 9 billion won (US\$8.8 million) and transmission service for Sukyung Broadcasting. The company expects sales of transmission service to increase next year, with a total of 18 channels.

Media, Entertainment and Gaming

- **Vivendi-owned Blizzard Entertainment Inc. announced that its popular PC MMO World of Warcraft has gone beyond 5 million customers worldwide.** The subscription-based MMORPG was launched approximately one year ago in North America, Australia, and New Zealand, and has since been released in multiple countries throughout Europe and Asia. The game was launched most recently in the regions of Taiwan, Macau, and Hong Kong on Nov. 8, 2005. The company most recently announced a 4.5 million-subscriber number on November 9, and 3.5 million subscribers back on July 21. The subscriber number includes those who have paid a subscription fee to play the game or bought the retail game box bundled with one free month access, as well as those players who have accessed the game via a rent-to-play game room over the last seven days.
- **IHQ said it is looking to acquire YTN Media, a Multiple Program Provider (MPP).** YTN Media owns two channels, Comedy TV and YTN Star. Its major shareholders include YTN (42%) and Koron Group (40%). SK Telecom is the second-largest shareholder of IHQ.
- **South Korea's booming online games industry generated half a billion dollars in exports this year, and continues to expand rapidly, according to Korea Culture & Content Agency (KCCA).** Games account for over 40 percent of Korea's exports of entertainment and cultural products, according to data from KCCA. The majority of this revenue is generated by MMORPGs, which typically involve thousands of players competing and cooperating in an online fantasy domain. Korea's games industry has benefited from an aggressive government and industry driven campaign that provided broadband Internet access to almost all of the country's urban residents in the late 1990s, eventually reaching over 70 percent of the population. Analysts saw these factors as one that has given the most opportunity for online game developers. The industry has expanded almost 40 per cent per year since 2000.
- **Leading online games developer and operator NCSoft is forecast to earn about US\$38 million in foreign royalties this year, according to Hyundai Securities.** NCsoft reported net profit of US\$76 million in 2004, on total operating revenue of US\$243 million. The company's Lineage and Lineage 2 are the world's most popular online games, with up to four million players worldwide, according to the KCCA. NCsoft's portfolio of popular games includes City of Heroes and City of Villains in the U.S. and Europe; and two versions of Lineage, played mainly in Asia. Hyundai Securities

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predicts that in the second quarter of 2006, NCsoft's overseas sales "will get a boost from the commercial launches of Guild Wars 2 and Auto Assault. The highest earning Korean game export, Gravity Co's Ragnarok Online, earned posted US\$37.3 million overseas from mid-2004 to mid-2005, the KCCA said. NCSoft's best performer, Lineage 2, earned U\$22 million in royalties overseas in 2005. The two MMORPGs are extremely popular in several Asian nations. About 88 per cent of Korea's overseas game earnings are generated in Asia, two thirds of that in China and Taiwan.

- **SK Telecom and KTF announced their plan to expand their mobile game business by launching more game phone models and introducing online games on that work on wireless Internet.** SK Telecom said they plan to ship 2 million game phones next year and 5 million units in 2007. Currently, SKT only has downloadable games but next year they expect to expand their product line-up to include 3D network games. If handset-based network games prove to be successful, mobile operators will be able to charge a monthly subscription as opposed to the charging on a per download basis. Item sales and character sales may also be available. KTF disclosed that it has sold around 70,000 game phones so far and expects to sell much more next year. KTF plans to launch 7 online games in 1H06 including the hit golf game, Pangya, and the online game version of the Korean movie, Typhoon.

Telecommunications

- **Hanaro Telecom said it looks to boosting its sales division, a move aimed at bringing crucial corporate changes.** The firm said it finalized 197 workers who are leaving company based on an early retirement program, approximately 14 percent of total 1,500 headcount, a move aimed at strengthening its competitiveness in the domestic high-speed Internet market. Hanaro's affiliate Thrunet also fixed 68 employees to leave under the program. Hanaro said it would revamp the company on Jan. 1, coinciding with the envisioned merger with Thrunet, to firm up its ability to sign up new customers and retain old ones. As of the end of last month, Hanaro's subscriber pool stood at 2.7 million, which accounts for a 22.7 percent market share. Starting next year, it expects its customer base to climb to 3.6 million after the merger with Thrunet, which currently retains 889,000 subscribers.
- **MSA Communication, Korea's messenger phone service provider announced the launch of "imTEL version 2.1", a service that provides call forwarding service.** This marks the first time that the call forwarding service is offered by messenger phone. When PC is turned off, calls are forwarded to fixed line telephones or mobile phones. Also provided are selective reception of calls on certain dates or days and call screening to reject certain calls. Users can record their conversation and send both voice and text messages to friends at the same time.

Information Technology

- **AhnLab, the nation's largest IT security firm, said that it has developed an anti-virus vaccine for mobile phones.** Dubbed Symbian OS V3, the vaccine program will be loaded onto smart phones powered by the Symbian mobile operating system. Symbian was developed by a company of the same name jointly founded by Nokia, Motorola, Ericsson and Psion and holding over 70 percent of the mobile OS market. Ahnlab says the new program will allow it to grab a good lead in the global anti-virus program market for mobile phones.
- **The Ministry of Culture and Tourism said that it would complete installation of the cultural content object identifier system by the end of this month.** The content object identifier system enables the effective tracing and management of the flow of all cultural content products such as comics, animations, characters, games, music, films, and publications. The ministry plans to conduct pilot operation of the system by February next year and then launch its official operation in the subsequent months. For implementation of this new system, the government will select identifier

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registration agencies by segments to give identification codes to individual cultural content like personal ID numbers or bar codes. The culture ministry expects to establish transparent cultural content distribution channels in digital environment when the content object identifier system is adopted. It plans to host a public hearing on the project.

- **South Korea's leading information-technology companies announced their readiness to enter into a joint project to transform part of Daejeon, southeast of Seoul, into a futuristic "intelligent" town.** Officials from KT Corp., Samsung SDS Co., LG Electronics Inc., and LG CNS signed a memorandum of understanding for collaboration on a "Future-X U (Ubiquitous)-City" project, to be commenced next year. According to the consortium, the new town will be characterized by the latest network infrastructures like Broadband Convergence Network or BcN and a unified payment method for goods and services. The plan includes giving residents electronic identification through which their whereabouts, upon approval, can be located. Under the program, Residents and visitors will be given a terminal from which they can access various services.
- **Telecommunications Technology Association (TTA), Korea's non-governmental IT standards organization announced its adoption of seven collective standards.** The standards ratified by TTA include mobile RFID code system, search service structure, application data format, general application requirements and suitability of protocol tests. They also define service models such as movie promotion; cultural heritage information and relating application requirement, service management protocol and message send protocol.

China

Mobile/Wireless

- **Analysys International, an Internet-based business information service provider, forecasts that China's smart phone market will continue growing in the coming years, with shipment reaching 20 million sets in 2008.** Analysys International's report indicates that the smart phone market enjoyed an annual growth rate of 221 percent in 2004 and an annual growth rate of 207 percent in 2005. The shipment of smart phones is expected to reach seven million sets by the end of 2005.
- **KongZhong Corp., a leading provider of advanced second-generation wireless value-added services in China, announced that it has received five awards at the 2005 China Annual Game Industry Conference.** KongZhong Corp. and KongZhong Mammoth, KongZhong's wireless game subsidiary, received the following awards: Outstanding Game Enterprise Award, Best Mobile Game Developer Award and Best Mobile Game Operator Award. KongZhong's mobile game "KungFu Hustle" received the Best Mobile Game Award and for its Chairman and CEO the Outstanding Entrepreneur Award. The 2005 China Annual Game Industry Conference was organized by the China Software Association and jointly sponsored by the Ministry of Information Industry, the Ministry of Culture, and the Ministry of Science and Technology.
- **Comtech Group, Inc., a leading provider of customized module design solutions for product manufacturing companies, announced the completion by its subsidiary Comtech Wireless Ltd. of the model design and production of a location-based children's phone.** The phone is to be delivered to its partner China Telecom. Under the Comloca brand name, the phones are designed for children of ages between six and 12, with bright colors and a streamlined interface, including buttons programmed to call each parent, the home phone and two other programmable buttons. Parents can use the location-based search service to locate their children's geographic position to within

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approximately 90m. The device will allow them to access the service by using their own cell phone, by calling an 800-number or by logging onto the Internet. Comtech said it is currently in the final stages of negotiating an agreement with a second partner, China Netcom, who will offer location-based wireless search to multiple cities in Northern China. Specifically, it is anticipated that this relationship will focus on expanding the offering into Jilin Province, which has nine target cities with an estimated 1.6 million subscribers.

Software

- **Pollex, a leading independent Chinese mobile phone software solution provider, announced its cooperation with Zi Corp., a leading intelligent interface solutions provider.** Under the agreement, Pollex is tasked with the pre-integrating of Zi's eZiText predictive text solution for multiple languages into its mobile phone software platform, Opna. Pollex has embedded eZiText on the Opna-enabled mobile phones for distribution in Europe and Asia. The eZiText predictive text solution complements text input applications such as short messaging (SMS), email, wireless Internet browsing, and in telephone directories. The service will free the user in typing out whole words as eZiText is designed to predict the entire character, word and even whole phrases.
- **Bank of China (BOC) has purchased from Diebold 642 Opteva automated teller machines (ATMs) that are powered by Diebold's Agilis(R) software.** The deal will provide retail-banking consumers in a number of developed cities along the Eastern coast of China with access to the world's most advanced ATMs. BOC is currently undergoing reform to raise the efficiency and profitability of its bank branches. The bank aims to transfer about 40 percent of its traditional teller transactions to its self-service delivery channel by 2008, while increasing surcharge revenue through self-service transactions. Diebold is a global provider of integrated self-service delivery systems, security and services with reported revenue of US\$2.4 billion in 2004.

Hardware

- **Samsung Techwin said it has expanded its manufacturing facilities in China with a new digital camera factory in Tianjin Economic-Technological Development Area (TEDA).** Samsung disclosed its adoption of a new concept in logistics to facilitate its production of digital cameras and related components in the new factory. It is estimated that with the new logistic concept, time taken for the whole production process of digital cameras will take only about one day. The new factory is valued at of 240 million yuan (US\$29.7 million), and will occupy 47,000 sq m.

Information Technology

- **Asia Netcom, a wholly owned subsidiary of China Netcom, has been selected as the recipient of Frost & Sullivan's 2005 Best Overall Performance Award in the Asia Pacific Data Services Market.** The award was based on the results of a Frost & Sullivan study entitled conducted between Sept. and Oct. 2005. The study benchmarked 11 carriers operating in the Asia Pacific region on five performance categories: Service Offering Portfolio, Network Infrastructure/Coverage, Financial Performance, Pricing Levels and Others for the period July 2004 to June 2005. Asia Netcom attained the highest overall weighted score of 4.29 out of a possible total of 5 in the study. Asia Netcom said it would extend its regional sub-sea cable system into the northern Chinese city of Qingdao in the first quarter of 2006, a move that is seen as further enhancing its ability to deliver networking solutions into China.
- **T-Bay Holdings, Inc. disclosed that a report published by the Organization for Economic Cooperation and Development (OECD) shows China surpassing the U.S. as the world's**

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largest exporter of high-tech communications and information products. The OECD consists of 30-member countries counting among its members the U.S., Canada, Mexico, Japan, Korea, UK, France and Germany. According to the report, China exported US\$180 billion of global information and communications technology products while the U.S. exported US\$149 billion during the same period. For the first nine months of 2005, there was a 30 percent growth in Chinese imports of such products as compared to the first nine months of 2004. T-Bay conducts its mobile phone design business through its 95 percent owned subsidiary, Shanghai Sunplus Communication Technology Co. Ltd., a Sino-foreign joint venture providing solution and design services to leading mobile handset brand owners in China.

Telecommunications

- **Alcatel announced that it has been selected by Zhejiang Telecom, a provincial subsidiary of China Telecom, to upgrade and expand its customer service center across the province.** Under the contract, Alcatel's Business/Operation Support System solution will be responsible for integrating its Genesys contact center software with access switching and other equipment and will upgrade its recording system, database/application server system and digital switching system. Zhejiang Telecom aims to extend its customer service to rural areas in the province through this service. The subsidiary expects to deliver a series of value-added services like business customer hotline, voice mail, secretary service, traveling inquiry hotline to meet end-users' demands, a program set for completion in July 2006.

Taiwan

Media, Entertainment and Gaming

- **Macquarie Media Group, Australia's biggest commercial radio operator, agreed to buy Taiwan Broadband Communications in an A\$1.19 billion (US\$890 million) deal that will give it 12 percent of Asia's third-largest cable television market.** Macquarie Media will buy the cable-TV network from U.S. buyout firm Carlyle Group, which acquired the company in July 1999. Macquarie Bank Ltd, Australia's biggest investment bank, will take a 40 percent equity stake in Taiwan Broadband. Taiwan Broadband can increase its share of the nation's A\$2.1 billion (US\$1.5 billion) cable-TV market to 33 percent under local rules. Macquarie Media owns 85 radio stations in regional Australia, making it the nation's largest operator of commercial radio licenses. The company raised A\$937 million (US\$682.2 million) selling shares, with Macquarie Bank retaining a 20 percent stake in Macquarie Media after the IPO. Carlyle paid about US\$200 million for Taiwan Broadband. Macquarie Media will pay A\$411 million (US\$299.2 million) for 60 percent of Carlyle's stake and Macquarie Bank will pay A\$274 million (US\$199.4 million) for the rest, according to the statement. The companies also arranged debt of A\$576 million (US\$419.3 million) for Taiwan Broadband.

Internet

- **GigaMedia Limited (GigaMedia) said it entered into a definitive agreement to acquire FunTown, a leading Asian online casual game portal and operator of the world's largest online Mahjong game site in terms of revenue.** FunTown operates the world's largest online Mahjong site in terms of revenue. GigaMedia will leverage FunTown's number one Mahjong position by licensing FunTown's software to operators around the world and in particular, to the international markets currently served by Giga's subsidiary Cambridge Entertainment Software. According to the PricewaterhouseCoopers report, the online gaming market in the Asia/Pacific region is expected grow

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by 45 percent on a compound annual rate to the year 2009, increasing from US\$1.1 billion in 2004 to US\$7 billion in 2009, as online game subscribers grow from 10 million in 2004 to an expected 75 million in 2009. GigaMedia Limited is a diversified provider of broadband and entertainment services, with headquarters in Taipei, Taiwan. Through its subsidiary Cambridge Entertainment Software, the Company develops software for online entertainment services, including the global online gaming market. GigaMedia also operates a major Taiwanese broadband ISP, which provides Internet access service with multiple delivery technologies to consumers.

Hardware

- **Acer said it has set next year's net profit forecast at NT\$10 billion (US\$301.4 million), a 39 percent growth on this year's estimate.** Acer forecasts NT\$7.2 billion (US\$217 million) for this year's net profit. It estimates sales next year at NT\$400 billion (US\$12 billion). The company disclosed its aim to take the place of Toshiba as the world's third-largest notebook computer vendor next year with sales of 11 million units, up about 50 percent from this year. The company posted a 66.6 percent increase in net profit of NT\$6.3 billion (US\$189.8 million) for all products in the first nine months of this year. Acer's products, other than notebook computers, include desktop computers, servers and storage, displays, peripherals and e-business solutions for business, government, education and home users.

Hong Kong

Telecommunications

- **Orascom Telecom Holding will acquire 19.3 percent of Hutchison Telecommunications International Ltd (HTIL) for US\$1.3 billion.** The sale also removed US\$2.5 billion of HTIL debt from the parent company's balance sheet for this year. The announcement came less than a month after the planned listing of Hutchison's Italian mobile unit 3 Italia was delayed until next year. The deal with Orascom is seen as providing the company opportunities in fast-growing markets with low mobile penetration in the Middle East and North Africa, according to Macquarie analyst. Orascom operates in seven countries including Algeria, Pakistan, Zimbabwe and Bangladesh. The move appears to go well with HTIL's expanding reach in emerging markets such as India, Indonesia and Vietnam. Hutchison indicated that the tie-up with Orascom was entirely consistent with the group's recent expansion strategy. Observers say that Hutchison's investment in telecoms shows that the company clearly sees the Middle East as an area of growth potential.
- **A technology developed by the Hong Kong University of Science and Technology is seen as paving the way for the development of system that will allow parents to use mobile phones to watch their children at home.** The new, affordable video-streaming system even works on second-generation phones. The director of the university's Multimedia Technology Research Centre said Hong Kong phone networks had expressed interest in using the system and he expected it to be on the market as early as next year, making Hong Kong the first city in the world to be able to offer this kind of technology. The telephones will pick up images transmitted from a camera in the owner's home. Subscribers also will be able to watch DVDs playing at home, check traffic reports or watch TV shows live on the phone. The video-streaming system uses the Audio Video coding Standard (AVS) technology that enables the delivery of sharper pictures than other systems. It works on older 2G phones because the software compresses large video files into slide-show images. The software does not have the expensive licensing fees of other products and the center believed networks might even offer to upload it free. The problem with other types of streaming technology was their high fees.

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Singapore/Malaysia/Philippines/Indonesia

Internet

- **Optus said it has started offering users the chance to download music to both mobile phones and PCs with a single click and single charge.** The service, available to all 3G and some 2G customers, is based on a platform developed by Singapore-based online music company Soundbuzz and is offered through the carrier's web and mobile Internet sites. When users decide to buy a track, they are offered the option of purchasing it for their mobile phone only, PC only or both. Music is delivered into the respective web or mobile account for download and the charge is added to their monthly mobile phone bill or deducted from their prepaid balance.

United States/Canada

Internet

- **Google and Yahoo announced their own version of NHN's Knowledge Search in the US. Google recently launched Google Answers.** The service Yahoo! Answers are more similar to NHN's Knowledge Search, where users' questions are answered by other users for free. In particular, Yahoo seems to have gotten the idea from its Korean search portal peers. The CEO of Yahoo Korea said that engineers at Yahoo headquarters had been interested in Korea's Knowledge Search and that they had visited Korea before launching the service. NHN disclosed that Google might try to penetrate the Korean market with Google Answers.
- **Microsoft announced its settlement with rival Google and former employee Lee Kai-fu, an action that ends a legal battle between the companies.** Microsoft said the three parties had entered into a "private agreement that resolves all issues to their mutual satisfaction". Google confirmed the settlement even when Microsoft would not say when the settlement was reached and would not provide the details of the settlement, calling it confidential. Google also declined to comment further. Lee had worked at Microsoft since 2000 and helped develop its MSN Internet search technology, including desktop search software rivaling Google's.
- **America line confirmed that Google had agreed to invest US\$1 billion to take a 5 percent stake in AOL, as part of an agreement where Google will move beyond text-based advertising to allow AOL to sell graphical ads to Google's fast-growing ad network.** The stake effectively values AOL at US\$20 billion, a key benchmark should Time Warner elect to spinoff or sell a part of its Internet unit in response to dissident shareholder Carl Icahn's proxy campaign to break up the company. Terms of the deal call for AOL's Advertising.com unit to sell display and banner advertising via Google's network of partner sites. Roughly half of Google's advertising revenue comes from text ads on its own site, while the other half comes from ads sold through partners such as AOL. In addition, AOL agreed to make more of its content-rich web pages searchable via Google search, including plans to feature AOL's premium video services within Google Video, a way for users to find and view video programmes over the internet.
- **Enpocket, global mobile media company, and Internet Broadcasting, an online news innovator, announced a relationship that will create the largest source of local news on the mobile Internet.** The new partnership gives consumers of Internet enabled wireless devices access to 32 of Internet Broadcasting's partner TV stations in major markets such as New York and Los Angeles.

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The service utilizes Enpocket's Mobile Content Engine to provide consumers with continuously updated local news from Internet Broadcasting on their mobile phones via the mobile Internet. Internet Broadcasting is the first-ever national platform of TV station web sites. The company manages 73 sites for America's premiere broadcasters: NBC, Cox Broadcasting, Hearst-Argyle, The McGraw Hill Companies, Post-Newsweek, Scripps Howard and Capitol Broadcasting Company, with over 12 million monthly visitors and over 500 million monthly page view. Enpocket is a leading global mobile media company serving organizations looking to leverage mobile technology to foster and maintain individual relationships with consumers. Enpocket clients include Vodafone, Cingular, Sprint, Verizon, Orange, Telefonica, Singtel, Nokia, Sony, BBC, Fox, Time Warner, Universal Pictures, Time Out, Match.com, Snapple, Levi's, Hallmark, and Nike.

Media, Entertainment, and Gaming

- **Amaru Inc. and its subsidiary M2B Commerce Ltd. announced today the launch of a global, on-demand broadband beauty, health, wellness and shopping channel.** The channel will offer viewers around the world the ability to access a vast array of current lifestyle content and purchase popular beauty products at a single destination. With the commencement of RoyalHive, the M2B brand will not only access the U.S. consumer market for beauty/fashion, but will have the ability to meet the rapidly increasing Asian demand for products and content in this category. In China alone, the Hong Kong Trade Development Council announced that the growth rate of cosmetics sales has exceeded that of the overall economy over 12 out of the past 14 years. Globally, Forrester Research recently predicted that e-commerce in the health and beauty categories will grow at an annual rate of 22 percent.

Mobile/Wireless

- **Cingular Wireless, according to industry sources, inked contracts with Samsung Electronics and LG Electronics to supply WCDMA phones.** Cingular plans to launch 3G WCDMA wireless communication service in January next year for the first time in the United States. LG Electronics has already provided some 2,000 units of its WCDMA handsets to Cingular for linkage tests, and the two mobile phone makers will reportedly supply more than 1 million units to North American market combined next year. Industry observers anticipate that Samsung Electronics and LG Electronics will have to face a stiff battle with Nokia and Motorola to take leading position in the burgeoning WCDMA phone market in North America, which is predicted to grow to 3 million to 4 million units next year. With subscriber base of 52 million, Cingular Wireless has entered a partnership agreement with HBO, a cable TV service firm, for 3G wireless communication service. And it plans to roll out the new service in January in large cities, including Chicago, Houston, and Washington D.C. Meanwhile, Verizon Communications and Sprint introduced 3G EVDO wireless communication service early this year. The world WCDMA handset market is predicted to increase from 40 million units this year to up to 120 million units next year.
- **Research in Motion, the maker of the BlackBerry wireless messaging device, said its net income climbed to US\$120.1 million from US\$90.4 million.** Its revenue posted a 53 percent increase to US\$560.5 million from US\$365.9 million, a result that was above analysts' forecasts of US\$549 million. The result, according to analysts, may dispel some fears that an ongoing patent might shut down the service in the U.S. RIM said it added 645,000 new subscriber accounts - about 25,000 less than projected after the company released its second quarter results - during the third quarter and at the end of the quarter. BlackBerry registered a total of 4.3 million subscribers - more than double than last year. RIM maintained its forecast for earnings of 76 cents to 81 cents per share for the fourth quarter on revenue of US\$590 million to US\$620 million but lowered its forecast for subscriber

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additions to a range of 700,000 to 750,000. RIM's stock has been battered by litigation that put it against NTP, a firm claiming ownership of the patent technology behind BlackBerry.

- **Palm said its profit surged with a tax-related gain in its fiscal second quarter, as the handheld maker added new carriers and increased shipments of its web-enabled Treo smart-phones.** Palm said it would have earned US\$24.4 million in the latest quarter if certain items were excluded; the largest being a US\$224.2 million tax benefit. The quarter's results reflected a continuing decline in sales of personal digital assistants and corresponding rise in smartphones, a device that serves as a mobile phone and digital organiser. The company said it shipped 602,000 Treos to carriers in the second fiscal quarter, up from nearly 332,000 the year-earlier period, which brings the shipment total of Treos for the first half of the fiscal year to more than one million units. The company said it would introduce a new Treo smartphone that would be based for the first time on Microsoft's Windows operating system for mobile devices. Palm will also introduce three additional smartphones, based on either Windows or its own Palm platform.

Media, Entertainment and Gaming

- **Video game publishing giant Electronic Arts, a video game publishing firm, downgraded its outlook for the third and fourth fiscal quarters, attributing such decision to slow Christmas sales.** The world's largest video game publisher offered no further details. In November, Electronic Arts had offered a cautious outlook for the third quarter, saying it expected revenue between US\$1.4 billion and US\$1.5 billion. For the year, the company had forecast revenues between US\$3.3 billion and US\$3.4 billion. Weaker sales hit the entire video game industry in November as the launch of Microsoft's Xbox 360 console late in the month helped diminish demand for existing titles. U.S. video-game sales plunged 18 percent from last year to about US\$700 million in November, according to market research firm NPD Group. Consumers are also delaying game purchases in anticipation of next spring's release of Sony's PlayStation 3, according to observers.

Hardware

- **Seagate Technology's US\$1.9 billion purchase of smaller rival Maxtor might bring about the diminishing of its supply chain, with Singapore firms providing electronic parts to Maxtor likely to be hardest hit, according to analysts.** Seagate, a global leader in hard-disk drives, and its acquisition is expected to have a huge impact in both its own and Maxtor's supply chains. Other analysts said the financial impact would probably only be felt by suppliers after the deal had closed in the second half of next year as Seagate and Maxtor would operate separately until then. A supplier such as MMI would have better prospects as it made base plates and motor parts for Seagate, which account for 65 to 70 percent of its sales, according to a Westcomb Financial Group analyst. Another beneficiary is suspension assembly maker Magnecomp International, which derives 60 to 70 percent of its sales from Seagate. But prospects for Jurong Tech, a maker of printed circuit board assemblies for Maxtor's disk-drive controller cards and handsets for Motorola, are less clear. Jurong Tech derives about 20 percent of its sales from Maxtor. Firms servicing both companies, such as Unisteel Technology and First Engineering, are expected to be relatively unaffected.
- **IBM said it agreed to acquire Micromuse, a manufacturer of software that manages video and voice traffic on computer networks.** The acquisition is valued at about US\$865 million in cash. Under the agreement, IBM is paying shareholders US\$10 for each Micromuse share. Micromuse's software is used to monitor and manage network traffic by about 1,800 clients such as Time Warner's America Online, E-Trade Financial, Verizon Communications and other corporate and government customers. The acquisition is expected to strengthen IBM's software portfolio as the company

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increasingly turns its focus to business services. Revenue from Micromuse's customers registered a 10 percent growth to US\$160.8 million in the last financial year. Upon completion of the transaction, Micromuse will operate within IBM's Tivoli software division, and its products will be incorporated into IBM's software and hardware offerings. Pending regulation and the approval of the shareholder, the deal is expected to close in the first quarter of next year.

Europe

Software

- **The European Union said it might fine Microsoft as much as €2 million (US\$2.3 million) a day for failing to obey last year's antitrust ruling.** Microsoft responded by calling the threat of the EU Commission as an attempt to undermine its Windows operating system with ever-more-drastic demands for technological transparency. The software giant said that it would contest the measure under EU law. The EU head office took new legal steps against Microsoft aimed at forcing Microsoft to provide better documentation so its software programs could be used with competitors' products. Microsoft has until January 25 to answer the complaint. The EU said it was also investigating the royalties Microsoft would charge for using its software information and said another legal challenge might be issued if it was unhappy with the financial demands.

Information Technology

- **Siemens announced the selling to Fujitsu Siemens Computer BV of a part of its unprofitable information technology services arm.** Siemens said the sale of Siemens Business Services' product related services unit would take effect from April 1. The unit has some 5,000 employees worldwide and had sales of about €1.3 billion (US\$1.5 billion) in the fiscal year to September 30. SBS said it would focus fully on IT services in the outsourcing market and those for innovative IT projects. The deal is subject to approval by antitrust authorities. The sum was not disclosed.

Telecommunications

- **The European Union's executive commission gave the permission to the acquisition by Swedish telecommunications giant Ericsson of most of British firm Marconi's telecom equipment businesses.** The commission, which concerns itself with antitrust issues in the 25-nation EU, commented how the deal would not significantly block effective competition in Europe. Marconi, a British telecom equipment maker, agreed in late October to sell most of its assets to Ericsson for about £1.2 billion pounds (US\$1.4 billion) in cash.

Internet

- **Cultuzz, based in Germany, announced its selection of ICE Portal as their preferred provider of rich media content for hotels in Europe and Australia.** Cultuzz is the worldwide leader in selling hotel rooms on eBay and specialises in web-based software development for the travel industry. Clients include international hotel chains and private managed hotels. Under the new agreement ICE will provide customised content delivery of rich media, in multiple languages, for participating hotels. CultBay is a service of Cultuzz for hoteliers that allow them to sell room nights quickly and efficiently using the online auction platform eBay, the world's largest online marketplace which attracts approximately 160 million users a month. With more than 2,000 hotel partners auctioning more than

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10,000 successful auctions per month, Cultuzz seeks to help the hoteliers and consumer with additional rich media content like virtual tours and streaming videos, from ICE Portal, with the aim of increasing sales. ICE Portal is a U.S.-based provider of rich media and marketing content.

Mobile/Wireless

- **Carphone Warehouse Group, Europe's largest mobile-phone retailer, announced that it agreed to acquire of Centrica's Onetel telecommunications unit and assets from Sweden's Tele2.** The move puts Carphone ahead of its rival, with former monopoly BT Group. Carphone Warehouse will pay as much as £154 million (US\$266.8 million) for Onetel and £8.7 million (US\$15 million) for the Tele2 unit. The acquisitions add about 1.8 million customers in Britain and Ireland, expanding the residential customer base of Carphone Warehouse's TalkTalk fixed-line service to about 2.4 million subscribers. TalkTalk has signed up more than a million customers since the service was started in 2003. Onetel has about 1.1 million "carrier preselect" customers who use its services without first having to predial numbers. The business also has 250,000 indirect users, 60,000 broadband customers and 50,000 business users. Operating profit last year was £3 million (US\$5.1 million) on revenue of about £280 million (US\$485.2 million).

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