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

Week of 23 August – 29 August, 2004

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International

Information Technology

- **Small and medium-sized businesses are beginning to step up information technology spending as an improving economy encourages companies to invest.** It is a market IT vendors can hardly afford to ignore. IDC estimates SMBs in the Asia-Pacific region excluding Japan will spend US$29.7 billion this year, up 14.4 percent. Most of this year's spending will be on hardware, but IT services are expected to overtake hardware and software expenditure, growing 15 percent annually through 2008. IDC analysis forecasts the segment will outpace overall market growth through 2008.

Internet

- **The United States was the largest global source of unsolicited email-ads known as spam, producing more than two of every five messages, according to a report by security firm Sophos.** The Sophos report found 42.5 percent of all spam originated in the United States. The next largest source was South Korea, with 15.4 percent, and China and Hong Kong, accounting for a combined 11.6 percent. The report has suggested that a U.S. law known as CAN-SPAM that took effect in January has done little to curb the flood on unwanted messages that some see as threat to the Internet. Sophos notes that the most broadband-connected country in the world, South Korea, has consolidated its position as a leading producer of spam---almost tripling the percentage of spam originating from its shores since February. Canada, however, has managed to significantly decrease their contribution to the junk e-mail by more than half---from 6.8 percent six months ago to 2.9 percent.

Japan

Mobile/Wireless

- **Japan's anti-monopoly agency raided several top record companies on suspicion they illegally blocked other firms from offering music ringtone services to mobile phone users.** Fair Trade Commission said investigators suspected more than 10 companies violated Japan's fair trade laws by preventing the Japanese mobile phone operators from offering the service. Sony Music Entertainment, Universal Music, EMI-Toshiba, Avex, Victor Entertainment and Label Mobile were among those raided. The allegations center around the lucrative business of letting mobile phones users download a hit song to play as the ringer. Record companies now hold a dominant share of the industry, estimated at US$91 million a year. They charge about 90 cents per song, which includes royalty fees.
- **Japan's top cell phone operator NTT DoCoMo and U.S. telecommunications giant Motorola said that they would develop a third-generation (3G) mobile phone handset intended for business users.** Under the widely anticipated deal, the companies plan to introduce the new handset in spring 2005. The handset would be the first for DoCoMo's 'FOMA' 3G service and be suitable for use outside Japan, the companies said in a statement. The handset would enable access to the Internet through any available connection service and its browser would be able to display standard web pages. The handset would be able to show email-attachments created in formats for software programs such as Microsoft Word, Microsoft Excel, and Powerpoint. The new phone is also designed to support

Bluetooth --- a short-range wireless communications system---and connect to public high-speed wireless local area networks to browse the Internet.

Internet

- **Yahoo Japan Corp, together with more than 130 Japanese companies, have decided to carry out stock splits in an effort to expand the number of individual shareholders and promote liquidity.** As of Sept. 30, Yahoo Japan's shareholders will receive a 2-for-1 stock split, the firm's tenth since listing on JASDAQ in 1997. To focus on business expansion, the company has not paid out dividends, instead rewarding its shareholders with stock splits and rising share prices. A minimum investment in Yahoo Japan shares comes to about 1.1 million yen (US$10,000), given their current prices, but the coming split will reduce the figure to around 500,000 yen (US$4,500).

Software

- **IBM Japan Ltd. will join Cisco Systems KK to start selling IP (Internet Protocol) telephone systems to small and midsize firms in September.** The package will include Cisco's IP phones and communications equipment, in addition to wireless devices necessary for LAN (local area network) configuration. It will also contain two core IP-PBX (private branch exchange) units so that users can make calls even if one unit malfunctions. The Japanese unit of U.S. computer giant IBM Corp. will lease the systems, taking into consideration the tremendous speed of innovations in IP telephone technology. IBM Japan will also link the system to its Lotus Notes and Domino messaging and collaboration software to make possible phone calls on personal computers as well. IBM Japan expects to sell 300 packages in the first year.

Hardware

- **A Japanese government-industry consortium that includes NEC Corp., Toshiba Corp. and Hitachi Corp will join the global race to develop the world's fastest supercomputer.** The consortium is looking to develop around 2010 a machine capable of 1,000 trillion calculations per second. This speed is about 25 times faster than today's fastest supercomputer, the Earth Simulator at Japan's Earth Simulator Center. As it is impossible to develop to achieve the targeted speed with existing technology, the consortium plans to develop a new power-efficient processor and a new operating system along with optical data transmission technology. China has also entered the race, developing the world 's 10th-fastest supercomputer.

Telecommunications

- **Softbank's ratings are upgraded following its acquisition of Japan Telecom earlier this year.** The rating agency, Moody's Investors Service, said in a statement it revised Softbank's long-term debt rating and issuer rating to Ba3 from B1, adding that the rating outlook is stable. The rating action reflects Moody's view that the acquisition will expand Softbank's strategic options for expansion of its broadband businesses. Moody's also attributed the upgrading to Japan Telecom's ability to generate stable operating cash flow. The present situation shows that the Softbank group can now provide comprehensive telecommunicating services, which should help it be better prepared for shifts in consumer demand for broadband services.

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Korea

Internet

- **Yahoo! Korea is spearheading the creation of a business model capable of snaring players worldwide**. When Yahoo! Korea talks about investing in online games, it is talking not just about the Korean market but the global market as well. Currently, the world's major Internet companies are re-engaged in a heated battle to gain supremacy in traffic and revenue. Most of the competition surrounds search technologies, with portals racing to roll out advanced and personalized products to tap a growing search-related advertisement market. However, Yahoo! Inc. is promoting online games, hoping to gain a competitive edge over rival companies such as Google Inc. and Microsoft Corp. Since last year, Yahoo! Korea has been talking with seven of Yahoo! portals in the United States, Japan and several European countries regarding the export of online games developed here. In June, Yahoo! Korea reached an agreement with Samsung Electronics Co. to jointly develop and market games focusing mainly on massive multiplayer online role-playing games. Online games will be critical to Yahoo! Korea alone: last year, the company reported net income of 11 billion won (US$9.5 million).

Information Technology

- **KT Corp., Korea's largest fixed line and broadband Internet carrier is struggling to find new revenue sources amid diminishing fixed-line sales.** This is happening two years after its privatization. The former state fixed –line monopoly said it plans to increase its revenue to 27 trillion won (US$23 billion) by 2010, up from 11.6 trillion won (US$10.1 billion) in 2003, by enhancing next-generation mobile telephony, home networking, information-based services and digital contents development. KT controls more than 95 percent of Korea's fixed-line market and 51 percent of the broadband Internet market. Korea's fixed line customers totaled 22.8 million in 2003, down from 2002's 23.4 million. On the other hand, mobile phone customers reached the 35 million mark in June this year.
- **The government plans to construct a software center in Seoul to help lure foreign investment in Korea's high-tech industry, according to the Ministry of Information and Communication.** The Ministry of Planning and Budget approved a 430 billion won (US$372 million) proposal to build a research center at the Seoul Digital Media City complex in the western part of the capital. The center will have facilities designed for comprehensive support on research activities, product development, performance testing and marketing. It will also give software developers a joint manufacturing facility that is designed to cut down companies' spending on equipment. The government is also seeking to establish an international software center in the coastal city of Inchon, called the New Songdo City. It is currently attempting to gather foreign high-tech investments.

Semiconductor

- **South Korea's Hynix Semiconductor said that it would go ahead with the planned sale of its non-memory business to Citigroup despite difficulties in its bid to buy back shares from shareholders.** The Financial Security Service rejected Hynix's appeal to lower the stock repurchase price to 9,561 won (US$8.2), a share from a previous offer price of 11,376 won to buy back shares from stockholders who are opposed to the asset sale. The stock buy back plan is necessary to complete the sale of Hynix's non-memory unit to a venture capital unit of the U.S.-based financial services giant. The world's third-largest memory chipmaker has signed a deal with Citigroup Venture Capital to sell its non-memory operations for 954 billion won (US$822 million).

China

Software

- **Sinocom Software group plans to expand its mainland network of customer support centers to 30 from 17 as the software outsourcing firm attempts to lure more business from western companies**. Signing up more western companies would help Sinocom to diversify geographically its revenue. In the first half, outsourcing contracts from Japanese clients accounted for 94 percent of the US$81.1 million in sales. According to its CFO, companies such as IBM or Oracle have established many software development centers in China for development, localization and testing. These companies need engineers but for them to hire Chinese ones would entail a lot of work in human resources management. Sinocom sends its engineers to their place and work for them, thus accomplishing 'on-site outsourcing'. The company recognizes on-site outsourcing as a low-margin business but hopes it will lead to more lucrative software contracts.
- **The packaged software market in China is predicted to more than double in the next five years to 48.1 billion yuan (US$5.8 billion), according to International Data Corp (IDC).** The global information technology market research house said that the growth will be at an average annual rate of 22.4 percent from 2004 to 2008. Packaged software, as defined by the U.S.-based research house, includes software vendors who sell licenses, but does not include embedded and tailored software. The company said the sales of packaged software were 17.5 billion yuan (US$2.1 billion) in 2003 with a 15.4 percent year-on-year growth. The report says that although many IT spenders used to like tailored software developed especially for their own purposes, more and more choose packaged software now, as their information systems need to communicate with other IT systems, both internal and external. In the light of that trend, application software will continue to be the biggest segment in the market with an average annual growth rate of 24.8 percent.

Mobile/Wireless

- **China Unicom, the smaller of the nation's two mobile phone companies, says its first-half profit rose about 18 percent from year earlier after buying networks from its parent.** Net income was 2.8 billion yuan (US$340 million). Earning benefited from China Unicom's decision to buy networks in China's poorer provinces from its parent, China United Telecommunications Group. But the company says profit earned from each of Unicom's subscribers of either CDMA or GSM service was falling and that the government will step in to stop a price war with its larger rival, China Mobile. China Mobile, which only offers GSM service, controls about two-thirds of the nation's cell-phone market, leaving Unicom with most of the rest.
- **China Mobile has punished a total of 22 service providers (SPs) for regulatory violations, according to Kongzhong.com.** In what appears to be a China Mobile internal document appearing on several Chinese bulletin boards, 22 companies were listed. These companies include Sohu, Shanghai Mtone Wireless, Shanghai Sifang, Inc, Guangzhou Rui Shi Communication, Beijing Guodo Group, Go2joy, HL95, Kongzhong, Beijing Hongxun, Beijing Xilu, Beijing Linkrich, Shanghai Etonenet, CIS, Shenzen Hao Tian, Westsms, Geijing Xingguo Ronghe, Zhongtian Communication, Beijing Boxun Rongtong, Tianjin Century Communication, Shanghai Eastday, Shanghai eefoo and Beijing Ray network. The first group companies were suspended from providing MMS services and applying for new services for a year. Go2joy is a subsidiary of Hongkong.com which is controlled by chinadotcom.

- **China Mobile announced that that the multimedia messaging services (MMS) licenses of Sohu, Mtone Wireless (Shanghai), Shanghai Sifang and Guangzhou Rui Shi Communications (V5009.com) will be suspended for a year.** According to China Mobile, the four SPs were suspected of providing MMS services to mobile users without their permission and secretly charging the users for those services. Sohu and Mtone Wireless were also accused of sending unsolicited WAP PUSH advertisements to mobile users. According to the agreements between China Mobile and four SPs, China Mobile will suspend the four SPs' national and regional MMS service licenses for a year. The four companies will also be unable to apply for any new VASs which are currently available from China Mobile for a year. The suspension and penalties will begin September 1st.
- **Chinese web portals are facing a crackdown by mobile operators over irregularities in their IVR (interactive voice response) offerings.** IVR service allows mobile phone users to dial a number and then listen to pre-recorded voice content, such as songs and jokes or chat with friends online. Sina Corp has become the target of tighter supervision. The NASDAQ-listed firm last week said its IVR service with China Mobile was temporarily suspended due to its violations involving some of China Mobile's operating policies relating to IVR services. In a statement, Sina warned how its revenues from mobile value-added service and net income for September quarter and future quarters would be negatively affected by the crackdown. Industry observers believe the crackdown largely resulted from adult (pornographic) offerings in Sina's IVR services. Sina Corp and its rival, Sohu.com, have witnessed revenues from SMS drop in the last quarter due to the government and operators' tighter regulations on SMS content and billing schemes. NetEase.com has also warned its revenues from SMS will fall. Tom Online Inc. managed to increase its SMS revenues by a slight 3 percent in the second quarter, compared with the previous quarter. Tom Online relies less on SMS than does its peers.
- **China Unicom remains bullish on the prospects for its future third-generation (3G) operations.** Once the 3G license is granted, the company says it can roll out its CDMA 3G network in six months. By contrast, GSM operators will need about 18 months to build a WCDMA network capable of handling 3G from scratch. Unicom also owns a GSM network but intends to reserve it for 2G use. The No. 2 mainland mobile carrier has built up its CDMA network capacity in three phases to 52.8 million lines and plans to add 20 million by the first half of next year. The network is now capable of handling 2.75G traffic.
- **Mainland mobile phone makers face a painful period of consolidation over the next two years as the domestic market slows, according to consumer electronics maker TCL International Holdings.** TCL International's share of the mainland handset market dropped to about 8 percent in the first half from 9.7 percent a year earlier as sales decreased 7 percent to 4.4 million units. To tap more advanced foreign technology and achieve larger economies of scale, the firm's own mobile-phone unit and Alcatel of France struck a deal to form a handset joint venture in April.

Ventures/Investment

- **Yahu Information, a Chonqging-based venture capital firm, is planning to list its online payment platform www.pay88.com on NASDAQ, according to a report by Shanghai Securities.** The online payment platform pay88.com is similar to NASDAQ-listed company PayPal. According to the report, Yahu hired the U.S.'s Carry Van Service as the company's consultant at the end of the March. Carry Van Service targeted OTCBB-listed company QORUS.COM, and then to list QORUS.com on NASDAQ, in order to pull off a backdoor listing, said Shanghai Securities. The acquisition is scheduled to be finalized in 2005, with the company going public on NASDAQ in 2006.

Taiwan

Mobile/Wireless

- **The production of Bluetooth-enabled devices by mainland and Taiwanese manufacturers is expected to rise 78.6 percent this year, largely because of demand for wireless mobile phone headsets.** According to a survey of 49 companies released last week by Global Sources, mainland and Taiwanese producers are forecast to ship 25 million units this year, compared with 14 million last year. About 90 percent of production will come from Taiwanese manufacturers, although assembly will be in the lower-cost mainland. Mobile phone headsets are the most common product, with 80 percent of manufacturers producing them. A Bluetooth-enabled headset cost about the same as a mobile phone. Big-name mobile phone makers are helping to fuel renewed optimism about the technology by finally getting products to market.

Hong Kong

Mobile/Wireless

- **Mobile phone operator China Resources Peoples Telephone demonstrated last week its highs-speed data transfer service, Mobile TV, and said it was holding preliminary discussions on the feasibility of Nokia's push-to-talk technology**. Mobile TV, which operates on the Enhanced Data rates for the Global Evolution (Edge) standard, will include local and international news courtesy of cable-television provider, I-Cable Communications, as well as language classes and adult entertainment. The firm had not yet decided on tariff plan for the service. The news came as Peoples announced profits of US$119 million for the first half of the year, down 27.5 percent year on year, representing earnings per share of 20 cents. People's stock closed at US$3.30 for the fourth consecutive day, the company's lowest price since the initial public offering in April.

Telecommunications

- **Hong Kong PCCW Limited is in an advanced stage of discussions with China Network Communications Group Corporation (China Netcom) regarding strategic and business opportunities.** PCCW Limited, the largest communications provider in Hong Kong, reported stable consolidated revenue and a higher attributable profit for the firsts six months of 2004. Net profit attributable to shareholders for the first six months of 2004 was HK$805 million (US$103 million), a 15 percent increase from the same period last year. Revenue was maintained at HK$10.73 billion (US$1.4 billion).
- **The market for internet telephony is described to be heating up, with No. 3 fixed line provider Wharf T&T preparing to launch services with sister company I-Cable Communications next month.** The pair will take advantage of I-Cable's extensive network, which passes 1.8 million homes in Hong Kong. Last week, the Office of the Telecommunications Authority declared I-Cable a "non-dominant player in the fixed-line market," meaning it has free rein to set prices and bundle voice, data and pay-TV. According to a company insider, the two companies will select a non-Wharf residential district to soft-launch the new service, which has been in trial for the past few years. With Wharf offering its new service, attention now turns whether dominant fixed-line PCCW will do the same.

- **PCCW, Hong Kong's largest fixed-line phone company, will pay its first dividends in four years after reporting a 15 percent rise in net profit for the first half of the year.** The company, formed by the merger of an Internet-start-up and Cable & Wireless Hong Kong Telecom in 2000, said first-half profit stood at HK$805 million (US$177 million) as its broadband Internet access business grew and it sold more apartments at its Bel-Air property development in Cyberport. The company's NOW broadband television, which started last September, helped increase the number of broadband access lines by a fifth to 753,000. Consumer broadband climbed to 558,000 lines from 460,000 lines a year ago.

Singapore/Malaysia/Philippines/Indonesia

Mobile/Wireless

- **Singapore's third-largest mobile phone operator, StarHub, is expected to launch the country's largest initial public offering of the year in October, raising S$600 million (US$350.1 million), after filing a prospectus at the weekend.** The IPO will allow shareholders such as Britain's BT Group, Japan's Nippon Telegraph and Telephone and Singapore Press Holdings, to sell part of their stakes. State-controlled Singapore Technologies Telemedia is the largest shareholder. StarHub, which competes with Singapore Telecommunications and MobileOne, said its mobile market share rose to 28.2 percent as of June 30, from 22.4 percent a year earlier. That compares with 31 percent for MobileOne and SingTel's 41 percent. The IPO is likely to be launched in October and values the company at up to S$2.5 billion (US$1.5 billion).
- **SingTel's Optus unit announced a deal with the Australian operations of mobile operator Vodafone to share the costs of building a 3G mobile phone network spanning Australia.** The deal is expected to be finalized in October, with both Optus and Vodafone working with network equipment maker Nokia. The nationwide network, scheduled to live by next year, would focus on six cities and cost an estimated A$35 million (US$25 million). The capital costs of building a mobile phone network on a continent the size of Australia are prohibitive, with analysts putting a price of between A$1 billion and A$3 billion (US$700 million to US$2.1 billion) on the infrastructure. Each company would continue to use its own spectrum, but would share base stations to carry traffic across country.

Telecommunications

- **Singapore Telecommunications said it had signed an agreement with Spanish telecommunications giant Telefonica to extend its presence in Latin America.** The agreement with Telefonica International Wholesale Services, a member of the Telefonica Group, would allow the SingTel to ride on Telefonica's network in Latin America. The agreement would enable Telefonica to expand in Asia.

Ventures/Investment

- **Singapore companies are believed to have set aside more than S$1 billion (US$583 million) so far this year to snap up assets in Malaysia.** This is part of the second wave of cross-border deals after Temasek Holdings' landmark acquisition of part of Telekom Malaysia this year. Four years ago, Malaysia barred Temasek unit Singapore Telecommunications from entering Malaysia. The latest amount is about four times the estimated value of Singapore assets acquired by Malaysian companies in the same period. But Singapore's shopping bill across the Causeway has been inflated by Temasek's purchase of 5 percent of Telekom Malaysia in March. Other Singapore companies have probably taken a cue from Temasek after Malaysia gave the green light for the Telekom purchase.

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United States / Canada

Internet

- **Google, the highly touted internet search firm that offered shares to the public this month, has weak corporate governance policies, according to a report by Institutional Shareholder Services (ISS).** The report said that Google's overall ranking on corporate governance is just 0.2 percent in comparison with Standard and Poor's 500 firms. ISS, which rates some 7,500 companies on issues of responsibility to shareholders, cited in its report "lingering questions about the company's substandard governance structure". Of particular concern was the IPO, which gave company founders and their associates a different class of shares, with unequal voting shares. ISS also noted other issues, such as the fact that less than two-thirds of Google's board members are "independent" by ISS definition.

Hardware

- **Hewlett-Packard (HP), the world's No. 2 personal computer maker, will offer high definition televisions and a "media hub" that connects to consumer electronics as part of an effort to boost sales to home users.** For the hub device, content will flow through from any service one can imagine, including cable, satellite, internet and telephone. According to the company spokesperson, there will be storage complexes, interfaces to the PC, music appliances and new PCS that are media-capable. Earlier, this month, HP posted third-quarter earnings it described as "unacceptable" and cut its forecast, triggering the biggest one-day share decline in 18 months. HP declared a year ago its heightened interest in consumer electronics. This fall's inventory also includes printers, but they will work with a new generation of cartridges featuring HP's new sub-brand of Vivera ink---designed to help HP better compete against generic cartridge refillers. The HP Photosmart 8450 Photo Printer even connects to the internet so users can send pictures to each other's machines.

Semiconductors

- **Intel unveiled an update to its wireless networking technology, adding simpler software, improved security and support for a more robust, less interference-prone radio standard.** Notebooks based on the latest version of Intel's Centrino mobile technology would be able to connect to Wi-Fi networks that use the 802.11a standard as well as the more popular 802.11b and 802.11g standards, the chip-making giant said. Intel also has updated the software that controls the radio and connects Centrino-based laptops to networks.

Media, Entertainment and Gaming

- **The music industry announced lawsuits on Wednesday against another 744 suspected internet pirates using peer-to-peer services, including eDonkey, Limewire, Grokster and Kazaa.** The announcement marked the last wave of legal action by the Recording Industry Association of America (RIAA), which over the past year has been targeting individual users because it has been unable to shut down peer-to-peer swapping services. The industry blames online piracy and file-swapping for billions of dollars in lost sales, and is encouraging internet users to switch to legal sites that require payment for downloading of songs. The 'legal alternatives' continue to gain new traction and expand into new marketplaces.

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Europe

Media, Entertainment and Gaming

- **Copy protection technologies used to prevent CDs from being pirated online are facing a legal challenge in France, where a judge began a formal investigation of record label EMI group for using them.** The lawsuit accuses EMI and Fnac of "deception over the material qualities of a product." Filed on behalf of several individual consumers, it alleges that the copy protection system used on certain EMI discs makes it impossible to play them on many car stereos, hi-fi's and personal computers. French consumer association UFC-Que Choisir is seeking damages in the legal action, which also claims that EMI's copy protection stops customers from making personal copies of their CDs---a privilege granted to French consumers by a 1985 law.

Information Technology

- **At the end of July, Alvarion announced it was buying the U.S. company Interwave for US$56 million**. A long negotiation ensued before the deal was done with other potential buyers participating in the activity. Alvarion specializes in broadband technology, and Interwave supplies equipment and services to compact cellular networks based on GSM and CDMA technologies, meant mostly for low population areas and developing markets. Alvarion say that the effects on their third quarter in 2004 are likely to be minimal despite the expenses accompanying the purchase.