

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



Week of 5 September - 11 September, 2004

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International

Hardware

- **Fueled by demand in the Asia-Pacific region and Japan, external disk storage systems revenues grew 8 percent year over year to US\$3.5 billion in the second quarter of 2004, according to IDC.** The research firm, which defines a disk storage system as a set of controllers, cables, and host bus adapters associated with three or more disks, said total disk storage systems market grew 5 percent. Vendors shipped 275 petabytes of storage in the second quarter. Noting that the Asia/Pacific region and Japan experienced the first signs of growing since the market downturn began, regional spending for disk storage systems is on the rise. Despite recent struggles in its storage business, HP maintained its lead in total disk storage systems, including internal and external storage, with 23 percent of the market. IBM is No. 2 with 20.3 percent and EMC follows with 14.4 percent. EMC led the external disk storage systems market with a 20.7 percent revenue share, good for a 19.5 percent year-over-year revenue growth for the second quarter. HP came in a solid second with 18.2 percent, but the company's revenue was down 8.3 percent from the year-ago period after suffering a 15-percent decline in storage systems sales. IBM held the No. 3 slot with 13.5 percent.
- **Computer server sales in the Asia-Pacific region, excluding Japan, grew by a brisk 12.4 percent to US\$1.4 billion in the second quarter after a gain of 9.6 percent in the three months to March, an industry monitor said.** U.S.-based industry research group Gartner said competition was intense in the June quarter, marked by an aggressive push from mainly U.S. computer makers in the region. The server market in Asia-Pacific remains intensely competitive and price sensitive as multinational vendors compete with local vendors in markets such as China, according to the research group. This competition among vendors has created a buyer's market for companies. China remained the biggest market with US\$488.3 million worth of servers sold in the June quarter, an increase of 23.7 percent from a year ago. Of the 13 markets monitored in the quarterly report, only South Korea and Vietnam registered declines in sales. In Singapore, sales were up 12 percent to almost US\$60 million.

Information Technology

- **To get the most out of e-government initiatives, authorities should stop trying to move every function online without any real co-ordination, according to an industry expert.** The advice runs counter to many government strategies, which aims to offer as many public sector services online as possible. These strategies had led much to repetition in e-government processes. Instead, governments should take a cross-departmental view and focus their resources on projects in just a handful of areas that would most benefit the public. Governments need to start thinking about what customer wants and making it easier for the customer to interact with them.

Software

- **A number of relatively young firms are using three-dimensional computer graphics to promote animated films and TV programs both at home and abroad, industry observers say.** Such computer techniques are more commonly used by U.S. and European producers. Polygon Pictures Inc., which has produced TV commercials for such companies as Shiseido Co., says it will work with U.K. firm Aardman Animations Ltd. to produce an animation film. They have already secured 600 million yen (US\$5.5 million) in funding from European and U.S. stations belonging to the Cartoon Network cable

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TV channel, which is dedicated to animated programs. The firms also aim to raise about the same amount of money from Japanese TV stations in order to broadcast the program in Japan. Shiogumi Inc. aims to hone its computer graphics techniques to create natural facial expressions for the characters in its animation program based on the cartoon "Cobra", which is popular overseas.

Telecommunications

- **The Asia-Pacific Region has progressed as the global trendsetter in telecommunications, but it must overcome the significant disparity in development between the countries, according to business leaders and policymakers at the ITU (International Telecommunications Union) Telecom Asia 2004 convention.** The region has emerged as the largest telecommunication market in the world, increasing its size more than five-fold over the past decade and passing the 1 billion mark in combined mobile and fixed-line users last year, while averaging an annual growth rate of 22 percent over the past decade. In 2003, more than 172 million new users were added to Asian telecom networks last year, equivalent to five every second, with the number of mobile-phone users exceeding fixed line users for the first time. China has already overtaken the United States as the world's largest market for mobile phones, in 2001, and fixed-line, in 2002. The number of Internet users has also been increasing significantly in the region. Asia now accounts for around 43 percent of the world's broadband subscribers, with China expecting to overtake the U.S. as the nation with the most broadband users before the end of this year. However, the disparity in telecommunications development is becoming increasingly evident in the region. In advanced nations such as Korea, Japan, Singapore and Australia, mobile-phone services are estimated to cover more than 95 percent of the population with the penetration rate reaching more than 60 percent. According to the report, telecom carriers need to adopt different strategies depending on their country's circumstances as to guarantee growth in the next phase of market development.

Japan

Hardware

- **Materials and Energy Research Institute Tokyo Ltd. has developed one of the smallest fuel cells ever created for a notebook computer, company sources said.** The fuel cell can operate twice as long as lithium ion batteries of comparable storage capacity at room temperature. The institute needs to transfer the technology to overseas companies for commercialization. The fuel cell measures 3 x 2 x 0.1 cm and weighs 5 grams. Fifty cells are used to produce the 25 watts of power required by a notebook computer. In addition, peripheral equipment such as a device to supply fuel to the cells will also be needed. Casio Computer Co. and other firms have been trying to commercialize, for use in cellular phones, fuel cells that do not require recharging and which use methanol for fuel. The fuel cell developed by the institute uses sodium borohydride as fuel and does not require a mechanism to extract hydrogen. Even at room temperature, it can produce four times as much power per unit area as methanol-driven fuel cells. Because it requires no precious metals, such as platinum, for its electrodes, its retail price, including peripheral equipment, can be held below 10,000 yen (US\$91) after commercialization, according to the institute.
- **Hitachi Data Systems will launch a powerful data-storage machine that it says is the fastest device at the high end of the market, providing a fresh challenge to industry leaders International Business Machines Corp. and EMC Corp.** HDS, as the company is known, is trying

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to make a broader push into the high-end storage area, involving massive machines used by businesses to store trillions of pieces of information. HDS runs well behind EMC and IBM in the overall storage-systems market. Pricing for the new line, dubbed TagmaStore Universal Storage Platform, will start around US\$700,000 and run into millions of dollars. TagmaStore – the name comes from a Greek word that roughly means “something put in order” – will make use of “virtualization”. The concept is not entirely new. IBM, EMC and others also make virtualization products of different stripes. HDS, however, says its solution is the most advanced due to very fast processing units.

Internet

- **So-net M3 Inc., a subsidiary of Sony Communication Network Corp., goes public in the Tokyo Stock Exchange's Mothers market.** Established in 2000, the company provides 15 pharmaceutical firms with its “MR-kun” Net-based service that supports the sales activities of their salespeople, called medical representatives, or MRs. Medical representatives visit doctors to give them product information, with each trip estimated to cost 10,000 to 15,000 yen (US\$91-137). By using the MR-kun service to provide doctors with daily access to product information and the latest reports published by academic societies, So-net said drug companies can reduce the number of MR visits to each doctor, which allows them to visit a large number of physicians. M3.com, a portal site that includes MR-kun, has 80,000 doctors as subscribers, or almost one-third of all physicians nationwide. The company's U.S. subsidiary has already started a similar MR support service, and So-net M3 also plans to tie up with South Korean and Taiwanese firms to launch the business there.

Telecommunications

- **Nippon Telegraph and Telephone Corp and NTT-Resonant Inc. plan to begin this year a service offering cellular phone users a fast way to identify songs.** NTT has developed a database of song samples and a way to search that database to quickly match the song with the music captured by a user holding a cell phone near a radio or another sound source. The phone can be as far as 2 meters from the speakers. To use the service, the user first calls the search screen up on the phone and then holds the phone toward the speaker. Information about the song title and artist is e-mailed back on the phone. The entire song match process takes around 30 seconds. The plan is to charge less than 100 yen (US\$0.91) per song search. Later on, the user may also be able to download ring tone melodies based on the searches. The two NTT companies plan to offer the service on an experimental basis in October in collaboration with the Federation of Music Producers. In the future, the NTT firms may also use the technology to provide searches of movies and other non-music content.

Korea

Internet

- **Shares of Auction Co., the largest online auctioneer in Korea, rose by the 12 percent limit to a record after parent eBay agreed to spend 374 billion won (US\$325 million) to increase its stake in the unit.** The world's biggest Internet auctioneer will buy 3 million shares in Auction from investment funds such as Tiger Technology, Lone Pine Capital LLC and Viking Global Investors, at 125,000 won a share (US\$109). Auction shares surged to 115,100 won. eBay is turning to markets such as Korea and Japan for growth after pulling out of Japan. According to eBay official, they have been expanding around the globe with a lot of focus on Asia this year. eBay will increase its stake in Auction to 86 percent from 62 percent with the purchase. eBay may buy the remaining shares within the next

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few weeks. eBay shares gained US\$1.03 to US\$86.54 in NASDAQ trading this week. The stock has gained 34 percent this year.

- **Iran and South Korea signed a US\$40 million deal for the provision of 100,000 broadband Internet lines to the Islamic republic.** The accord, signed in the presence of the telecommunication ministers of the two countries, involves the Iranian companies Asia-Tak and Arsh, and Korea Telecom. Reports said the lines would be provided to some 20 Iranian cities, with Asia-Tak designated as the private access provider. Iran began to offer asymmetric digital subscriber line (ADSL) Internet access earlier this year, but lines are still limited in number and geographical placement. The Islamic republic has an estimated three million Internet users.

Mobile / Wireless

- **The economic recession has polarized the sales of cellular phones, with consumers purchasing either low-priced or high-end phones.** Samsung Electronics Co.'s SPH-V4400 model, released in June and featuring a two-megapixel camera, has sold more than 140,000 units as of the end of August, with monthly sales of 50,000. Despite a hefty price tag of 700,000 won (US\$611.2), this model has been called the only "jackpot phone" for Samsung this year. Pantech and Curitel's high-end PG-K6500 model priced at about 500,000 won (US\$436.6) set a company record, selling an average 1,000 phones a day to total more than 120,000 over the last three months. LG Electronics Inc. managed to sell 60,000 of its two-megapixel camera phone priced at 570,000 won since June and 15,000 of its three-megapixel model going for a steep 720,000 won (US\$628.7) in less than a month. The handset makers are focusing on the high-end products to offset the sluggish sales volume of mobile phones amid a slumping economy. The declining market shares of the major manufacturers indicate they are leaning toward top-tier units with lower sales volume. The niche market for low priced phones has also been riding the wave of hard times and number portability implemented this year. Number portability allows mobile phone users to switch carriers without changing their phone numbers, but people making the switch must buy a new phone. Frugal and economy-minded consumers have flocked to the affordable models.

Semiconductors

- **Samsung Electronics Co., the world's second-largest semiconductor maker, expects computer-memory chip prices to rise in the fourth quarter because of the typical pickup in demand over the year-end holidays.** Dynamic random access memory, or DRAM, prices will probably rise in the fourth quarter. Earlier, the president of Samsung said that they expect the Samsung chips to increase without saying how much. Semiconductor prices have fallen since April amid concern that higher interest rates and oil prices will hamper computer and chip sales. After peaking this year at US\$6.55 on April 12, prices of the benchmark 256 megabit, 400-megahertz double-data rate DRAM chip tumbled 59 percent to US\$4.14 on Aug. 17. Prices have since risen to US\$4.47.
- **Samsung Electronics Co., the world's largest memory chipmaker, released a new memory chip for third-generation mobile phones with the highest capacity yet to be released globally.** The multichip package with the density of 2.5 gigabytes was produced using the two 256-megabyte mobile DDR, or double data rate, and two 1-gigabyte NAND flash memory chips. A 1.5-gigabyte multi-chip package released by Samsung Electronics last year had been the highest-capacity chip for cellular phones prior to the launch of the new chip. The 2.5-gigabyte chip can save and process up to four hours of high-quality video footage, allowing users to download and view two full movies on their mobile phones, Samsung said. The company said it will start mass producing the new multichip package by year's end and finish developing a chip with a density of over 4 gigabytes within the year.

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- **Chip major Intel Corp. is confident of penetrating the Korean market with its WiMAX products, now that the government has approved the IEEE 802.16 standard as the base technology for portable wireless broadband access.** According to an official of Intel during the Asia Telecom fair in Busan, the company has already started sending sample products of the wireless component, codenamed “Rosedale,” to key customers worldwide, including some in Korea. High speed DSL and cable broadband are only available to a fraction of computer users globally. WiMAX will make it possible to build cost-effective, high-speed wireless connections to homes and businesses, be they in urban or rural environments. Intel has focused its WiMAX development efforts on making it easier and more cost effective for the next generation of computer users to wirelessly access the high-speed Internet. IEEE 802.16 is among a number of complementary wireless standards created by the Institute of Electric and Electronics Engineers, Inc., for developing wireless broadband technologies such as WiMAX or WiFi, designed to allow long-range and high-speed mobile Internet access on portable equipment.

China

Information Technology

- **A global industry effort promoting the adoption of grid computing in enterprises is expected to push up demand for more advanced storage infrastructure in China.** According to storage systems maker Network Appliance, this initiative could also open more opportunities for the company to expand across the mainland. Grid computing is the ability to harness computing and data resources in a network or connected networks to create a single, virtual system, which grants users seamless, low-cost access to vast information technology capabilities. Network Appliance executives noted that grid computing was already being established in the academic, research and technical sectors of China and other parts of the world. The mainland government pledged last year to invest up to 100 million yuan (US\$12.2 million) to build the China National Grid Project. This will link its main academic computer network sites in Beijing and Shanghai to other locations, including Xian Jiaotong University and the University of Hong Kong, and integrate them into one system. Network Appliance, along with some of the world’s leading IT suppliers, sees plenty of room in the enterprise sector for grid computing and “grid storage” to grow. The Silicon Valley-based company known widely as NetApp, is one of the founding members of the Enterprise Grid Alliance (EGA), an independent, vendor-neutral consortium created in April to develop open and interoperable enterprise grid systems and drive the deployment of grid computing worldwide.

Internet

- **China shut down a popular Internet site that helped members of the public report complaints to government authorities, local media reports said.** China Reporting Net was notified by authorities in that its website would be shut because it breached “relevant laws” by passing on complaint e-mail letters to government departments. The Shenyang-based www.jubao007.com website-the first of its kind in China- had received more than 400 e-mails during its brief 38 days of operation.

Media, Entertainment and Gaming

- **Shanda Interactive Entertainment Limited, the largest operator of online games in China, announced that it has signed an agreement to purchase the remaining interest that it did not already own in Beijing Digital-Red Mobile Software Co., Ltd., or Digital Red.** Founded in 2000, Digital-Red has developed more than 200 game applications, including pre-loaded games for mainstream

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mobile phone manufacturers, as well as K-Java games for China Mobile's game-download portal. Its pre-loaded games are deployed by Nokia, Motorola, Sharp and Sony Ericsson, etc. and are played by users all around the world. Digital-Red has won many awards for its games popularity and creativity from China mobile and various mobile phone manufacturers. Shanda offers a portfolio of massively multi-player and casual online games that users play over the Internet. Shanda's game platform attracts a large and loyal user base, each member of which can interact with thousands of others, which creates a strong community among users. According to Shanda, the addition of Digital-Red places Shanda at the forefront of another emerging market opportunity---wireless games.

- **Japanese gaming company CAPCOM has secretly entered China's online market, according to a report.** CAPCOM's 3D online first person shooter (FPS) Steelfang is looking for partners in China. According to CAPCOM's strategic cooperator Shanghai Crealent Technologies, CAPCOM hopes to establish long-term cooperation with Chinese game companies in game development, operation and technology exchange. Shanghai Crealent Technologies, said that CAPCOM's PS2 game Monster Hunter's online version will be released in China, though no date was given. Steelfang was jointly developed by CAPCOM, SEGA and NEXTECK, and is now public testing in Japan.
- **Top Chinese online game firm Shanda Networking expects to boost the number of employees by three-quarters next year as it tries to re-invent itself as a diversified media company.** The Shanghai-based company would bump its headcount about 75 percent to between 1,500 and 2,000 next year, from about 1,100 at present. Fueling that growth is a mainland online gaming industry worth an estimated US\$409 million this year, and expected to grow at an annual rate of about 46 percent between 2003 and 2006, according to DBS. Shanda will expand its business both organically and through acquisitions, according to one top official, adding that long-term goals could include forays in such far-flung industries as movies and music. The firm has also not ruled out bringing in an outside equity partner with technology or content specialization to complement Shanda's core game designing and operating businesses. Such strategic partnerships have gained recent popularity in the mainland's fast-growing - and increasingly lucrative - online sector: the world's second largest with more than 100 million Internet users. Shanda itself has been on a buying spree, acquiring online board game developer Hangzhou Bianfeng Software Technology, and a minority stake in Shanghai Haofang Online Information Technology in the past two months. Shanda, according to one official, was also now in talks with a number of major media players, including Vivendi's Universal Music and Time Warner's Warner Bros Division, about licensing content or other forms of partnerships. The company which launched a scaled-down US\$150 million initial public offering in May still had a war chest of US\$250 million in cash for future purchases, the official added.

Semiconductor

- **Semiconductor Manufacturing International Corp (SMIC) announced ambition production targets and its aim to increase sales in the mainland, dismissing fears of global slowdown.** According to the company, it was working at 99 percent capacity and targeted capacity of 125,000 wafers a month by the end of December and 185,000 by the end of next year. Its monthly capacity at the end of last year was 58,000 wafers. The firm is in a period of breakneck expansion, In January, it acquired a Motorola plant in Tianjin ---which it renamed Fab 7 --- that is expected to produce 15,000 wafers a month by the end of this year. In July, it announced a joint venture with ToppanPrinting to make on-chip color filters and micro lenses, and a separate joint venture for assembling and testing in Chengdu with an investment of US\$175 million. It is also building Fabs 4, 5 and 6 in Beijing, which will produce more than 3,000 12-inch wafers by the end of this year. Such ambitious and costly expansion

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depends on strong demand at home and abroad. But global chipmakers plan to increase capital spending by 38 percent this year, raising concerns that a possible capacity glut could spark the next downturn in the cyclical semiconductor industry. The risk for SMIC is that, if there is a glut in the global market, demand from mainland companies will not rise fast enough to compensate.

Telecommunications

- **The debt levels of the mainland's second-largest fixed-line operator, which is pursuing a stock-market listing in Hong Kong and New York, were more than twice the size of its bigger rival at the end of the last year, according to analysts.** Some analysts who attended a meeting with the company said Netcom's financial and operating situation did not seem too rosy and expressed concern that the public offering might follow in the footsteps of the dismal listing of China Telecommunications Corp. two years ago. One analyst said Netcom was carrying massive debts of 70 billion yuan (US\$8.5 billion) in December last year against shareholder's equity of 43 billion yuan (US\$5.2 billion). The revelation has reinforced market expectations that China Network Communications Group Corp will have to rely on an attractive valuation to drum up demand for its forthcoming initial public offering. Some analysts estimate Netcom might only be able to raise about US\$1 billion based on a discount to China Telecom, which trades at a prospective price-earnings multiple of 8.2 times. Other said Netcom would need to cut its asset valuations further or write off more assets to make the valuation more attractive. Netcom is planning to list eight of its business units and provincial networks in Hong Kong and the United States to raise between US\$1 billion and US\$1.5 billion.
- **International cable network operator Flag Telecom is planning to make a big push to supply more bandwidth to mainland carriers as they prepare for the 2008 Olympics in Beijing.** The company believes its optimistic market strategy is justified by the multimillion-dollar contract it signed last month with China Telecom. It is to provide China's largest communications service provider with a full-circuit, 30-gigabits per second cable connection to the United States west coast. According to Flag Telecom, the demand was being driven by the rapid growth of communications traffic worldwide. Also, the mainland was steadily expanding its use of bandwidth-hungry applications that carry large volumes of voice, video and other data over the Internet. Flag Telecom manages an extensive optical fibre network spanning four continents that connects business markets in Asia, Europe and North America. It also owns and operates a global multiprotocol label-switching (MPLS) network, which connects most of the world's principal international Internet exchanges. MPLS technology allows for interoperability and faster data traffic between networks based on Internet, asynchronous transport mode and frame relay protocols. According to Beijing-based consultancy firm BDA China, there is a growing demand for advanced data communications services from Chinese firms within the mainland and their international operations. The firm considers it an attractive growth area.

Ventures/Investment

- **IDG, with an average annual return in China of 55 percent, is establishing a new VC Fund in China, according to its top official.** In Europe and US, IDG's average annual return is between 10 to 20 percent and 20 to 35 percent, respectively. The company said IDG would establish a new US\$150 million fund in China in the first quarter of 2005. IDG plans to invest around 30 percent in wireless communication including handset and communication technology, 20 percent in PC and software services, 10 to 15 percent in e-businesses, including B2B and B2C, 10 percent on biotech, and the remaining on new materials. IDG will invest another US\$50 million in China's media industry, but the money will come from other sources. Since the Shenzhen SME board does not allow early stage venture

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capital investors to cash out, IDG will only invest in companies that will go public on NASDAQ or the Hong Kong stock market. IDG has exited from over 30 projects in China, of which 80 percent were via stake transfers and 20 percent via IPO.

Taiwan

Semiconductors

- **United Microelectronics Corp., the world's second largest made-to-order microchip maker, said its sales in August surged 64.3 percent year-on-year to NT\$11.5 billion (US\$338.5 million).** Sales in the eight months to August rose to NT\$77.2 billion (US\$2.3 billion) from NT\$53.6 billion (US\$1.6 billion) a year ago. At a July investor conference, the company said it expected wafer shipments to grow 15 percent, 16 percent from the second quarter, coupled with a 3 percent to 4 percent increase in prices.
- **Taiwan Semiconductor Manufacturing Company (TSMC), the world's largest made-to-order chipmaker, said its sales hit a fresh all-time high in August.** The firm said sales reached NT\$23.4 billion (US\$688.5 million), up 1.2 percent. Year-on-year sales were up 27.8 percent, while in the eight months to August, sales grew 34.9 percent from a year ago. According to the company, TSMC expected its wafer shipments in the third quarter to September to increase 4 percent to 6 percent quarter-on-quarter. It also forecasts a third-quarter gross margin of approximately 45 percent, up from 43.4 percent in the second.

Telecommunications

- **Taiwan's leading telecommunications operator, Chungwa Telecom said that its net profit for eight months to August rose 7.9 percent year-on-year to NT\$35.4 billion (US\$1.0 billion).** The growth in profit was attributable to a rise in sales for the eight months period. The January-August earnings represented 85 percent of the company's full-year forecast. Chungwa previously projected 2004 net profit of NT\$41.6 billion (US\$1.2 billion). Sales in the eight months to August rose to NT\$121.3 billion (US\$3.6 billion) from NT\$118.5 billion (US\$3.5 billion) a year ago; but for August alone, sales dipped slightly to NT\$15.3 billion (US\$0.5 billion) due to reduced prices for asymmetric digital subscriber lines (ADSL). The company's ADSL subscriber numbers stood at more than 2.9 million.

Hong Kong

Hardware

- **AV Concept Holdings is pursuing a major expansion drive for its MP3 business, with a view to penetrating new markets in Asia and Europe.** The Hong Kong-listed firm, through subsidiary AV Concept Technology, is the developer of the iRiver and Sign MP3 player, as well as other digital audio devices made for various consumer electronic brands. Apart from the millions of MP3 players that it is slated to make for other consumer brands, AV Concept plans to sell about 50,000 of its new Sign MP3 products across China and Europe this year. MP3 stands for Moving Pictures Expert Group 1, audio layer 3. It is a standard for technology and format for compressing a sound sequence into a very small file to about a twelfth of the size of the original file. The MP3 business accounted for 15 percent of the company's HK\$1.8 billion (US\$227 million) in annual revenue for the 12 months to March 31. Its factories in Southern China produced almost 4 million MP3 players last year. But the company's main

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business remains the distribution of semiconductors, which represents about 70 percent of its total revenue.

Information Technology

- **The Hong Kong government is to adopt a stringent new policy to streamline public sector information technology investments.** This move should sharpen the focus of the bureaus and departments on the return of investment of e-government activities, according to one government official. The proposed policy statement is to be drawn up by a new e-government steering committee and supported by the Office of the GCIO (Government Chief Information Officer). The new approach calls for looking at IT as a cost-saving device or something that would enhance productivity.

Internet

- **The fledgling alliance between rivals Symantec and MessageLabs in Hong Kong has developed into a larger collaboration that will offer spam-filtering services to enterprises worldwide.** The two companies, competitors in managed network security services announced their plan to offer a joint global programme against junk e-mail early this fourth quarter. British firm MessageLabs will integrate technology from Brightmail, a spam-filtering specialist acquired by Symantec this year, into its proprietary Skeptic system, used to track and block spam from entering the networks of client organizations. MessageLabs' managed anti-virus service employs multiple third-party anti-virus software products, except Symantec's. Businesses of all sizes are expected to invest in stronger security software, hardware and services infrastructure over the next few years to combat e-mail security threats. The Asia-Pacific market (excluding Japan) for those security systems will surpass US\$4.1 billion in 2007 from about US\$1.7 billion last year, according to research firm International Data Corp. Symantec announced its purchase of Brightmail for US\$370 million in May. The acquisition was completed in July.

Mobile / Wireless

- **Fund managers have reacted cautiously to Hutchison Whampoa's planned spin-off of its telecommunications assets, questioning prospects for its Indian mobile business and grumbling about a stated zero-dividend policy.** The conglomerate is bundling most of its global 2G assets, along with its Hong Kong 3G and fixed line businesses, into Hutchison Telecommunications International (HTIL) for dual initial public offering in Hong Kong and the United States next month. Hutchison would value HTIL at about US\$5.9 billion, sources said. Hutchison shareholders would be allowed to subscribe on a preferential basis to one HTIL share for every 75 Hutchison shares they own, according to a public filing with the U.S. Securities and Exchange Commission. But some fund managers questioned the benefits of investing in HTIL while holding Hutchison shares, as the conglomerate will retain a major stake in the spin-off.
- **Hutchison Whampoa was planning to order up to 12 million third-generation (3G) mobile phones in anticipation of a surge in subscriber numbers next year, according to equipment vendors.** The company had ordered an estimated eight million 3G handsets from LG Electronics, NEC and Motorola for this year, for which it has a subscriber target of six million users. Analysts say the planned new orders could mean Hutchison is targeting eight million to ten million new 3G users next year, almost double this year's target. Hutchison will be eager to avoid a repeat of its handset debacles late last year and early this year, when poor unit quality and shipment delays slowed 3G subscriber rates. The group's global operations posted a HK\$12.2 billion (US\$1.6 billion) loss for the first half of this year, mostly due to handset subsidies. Performance began improving in May, when South Korean phone

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maker LG Electronics began shipping its U8110 handsets. Hutchison boosted global 3G subscriptions by an average of 22,500 users per day to 3.2 million last month, from about 1.7 million in May.

Telecommunications

- **PCCW's planned sale of a significant stake in Hong Kong telecommunications business to China Netcom has suffered a setback, with disagreements over price forcing the companies to halt detailed talks on the deal.** People close to the situation said the Hong Kong group, the state-owned Chinese company and their advisers had not held formal talks over Hong Kong Telecom, the territory's largest-fixed line operator, for the past two weeks. The said situation highlights the price gap between what Netcom is willing to pay and what PCCW wants, according to one source. People close to PCCW, however, have said the talks were at an "advanced stage". Observers said although the freezing of formal talks could be a negotiating ploy, it suggested the deal was becoming increasingly difficult. The absence of investment bankers from talks also indicated that PCCW and Netcom were not ready to negotiate details of the sale and were still discussing the outline of the deal. A purchase of a large stake in HKT, which has an estimated enterprise value of HK\$50 billion (US\$6.4 billion), would give Netcom a significant presence outside China and provide the company with funds to launch new ventures.

Singapore/Malaysia/Philippines/Indonesia

Information Technology

- **Malaysia has entered the second phase of its ambitious drive to become a global technology player, with the government outlining a more focused strategy for its high-tech hub to compete with Asian rivals.** The Multimedia Super Corridor (MSC), launched from scratch eight years ago as Malaysia's answer to California's Silicon Valley, has encountered problems along the way but succeeded in positioning Malaysia as an offshore support center for U.S. and other companies' technology needs. The government now plans to build on the gains made by the outsourcing industry and focus on developing creative multimedia content and mobile applications, as well as promoting biotechnology to set the MSC apart from its competitors in Asia's information technology (IT) race. The target is to have 250 world-class companies and revenues of 69 billion ringgit (US\$18.2 billion) in the special zone south of Kuala Lumpur by 2010, with exports constituting 41 percent of that amount. But industry experts warn that a weak intellectual property environment and legal framework, a lack of private capital and shortage of skilled labor could hamper growth in the MSC.

United States / Canada

Hardware

- **Lower electrical power consumption, not just greater data processing capability, would help a new class of desktop supercomputers.** Orion Multisystems – led by two co-founders of low-power chip designer Transmeta – is looking to create "personal supercomputers" aimed at researchers, designers and other users of high-performance computers. Orion said the firm could capitalize on a vast performance gap that had developed between supercomputers and PCs. Fast PCs run at two billion to three billion cycles per second while supercomputers clock around one trillion cycles. Orion hopes to revive demand for custom-built workstations that combine widely available chips with innovative architecture. It is aiming to carve out an alternative market for its computers running Linux software on

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cluster of chips that are stitched together to act a single unit of computer brainpower, using a technique called parallel processing. A key innovation is to control the power consumption of every component so that the whole system can be run from a standard electrical socket, according to academic researchers who have been early customers of Orion.

Software

- **Flash, the technology behind web graphics and animation, is now being promoted as a solution to companies looking to share information both internally and with customers.** Macromedia, the company behind Flash, is trying to convince corporations to use Flash and its other tools to develop applications for both internal use and for access by customers through their websites. Earlier this year, Macromedia launched Flex, a system for developers to create interfaces based on Flash that allow access to critical business applications. According to the company, any application that combined data and design elements would benefit from using Flex. Macromedia hopes its technology will be deployed in corporate training. The company has partnered with Oracle to integrate its products with the database giant's learning management system. To help developers in the region, Macromedia will hold its first MAX Conference in Greater China in November. The company recently announced the launch of Contribute 3, part of its new web publishing system. Contribute allows non-technical users to update pages on websites or corporate intranets, without the need for complicated programming skills.
- **AMD announced software support from Novell, Red Hat and Sun for AMD64 multi-core technology and recommended ISVs license software applications by socket.** The upcoming dual-core AMD64 processors are designed to run with current versions of Linux, Solaris and Windows ® as well as existing x86- and AMD-64-based applications without requiring any software modifications. This follows the AMD customer-centric approach of safeguarding software investments while delivering industry-leading processor innovation. Based on feedback from customers and partners, AMD is providing industry-thought leadership by recommending software developers consider licensing their software by socket and schedule threads by available cores. This recommendation mirrors the software-licensing model that the industry has established for simultaneous multi-threaded (SMT) processors and will allow existing x86 software to run on dual-core processors without having to make changes.

Semiconductors

- **Freescall Semiconductor plans to triple the number of its design engineers in China as the company seeks to increase sales to mainland handset manufacturers.** The spin-off of United States mobile phone maker Motorola has 100 chip designers in Suzhou. It intends to increase the number to 300 by 2006. Freescall floated shares on the New York Exchange in July. Its separate listing status brings with it the ability to sell mobile-phone chips to other customers. The company recently signed new contracts with Siemens and TCL. Freescall is a major customer of contract chipmaker Semiconductor Manufacturing International (SMIC). About 17 percent of chip production was outsourced to SMIC and Taiwan Semiconductor Manufacturing. Although Freescall has closed plants in recent years, it will continue to invest in its own manufacturing facilities, plowing about 10 percent of revenue into chip plants annually. It forecasts about US\$6 billion in sales this year. The company also expected to sell more automotive chips in China, especially as mainland carmakers move from working with knock-down kits to genuine homegrown manufacturing.

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Europe

Mobile / Wireless

- **Nokia, the world's largest mobile phone maker said its results for the third quarter would be better than earlier forecast due to higher-than-expected handset sales.** As a result, Nokia now sees its earnings per share for the three-month period to be in the range of €0.11 to €0.13 (US\$0.13 to US\$0.16). At the same time the Finnish giant adjusted upwards its sales expectations from between €6.6 billion and €6.8 billion (US\$8.1-8.3 billion) range. Nokia has seen its earnings slip over the past eight months as it failed to pick up on new trends, most notably the popularity of fold-out clamshell phones in Europe, and has, as a result, lost market share to its competitors. In a bid to regain back lost territory, it slashed the prices of several models and rushed to launch a number of new handsets, including clamshell phones, a strategy now starting to pay off, according to market observers.

Telecommunications

- **Deutsche Telekom, the German telecommunications giant, indicated for the first time that it was considering reintegrating its publicly listed Internet arm, T-Online.** The comments came a few days after its chairman announced he was quitting at the end of September. T-Online shares soared on the announcement of his departure amid speculation the parent company would seek to reintegrate the subsidiary in the same way that rival France Telecom did with Wanadoo. Deutsche Telekom holds 73.9 percent of T-Online, the French group Lagardere holds 5.7 percent and the rest is in free float. Deutsche Telekom conceded that it was not ruling out reintegrating T-Online but insisted it had no plans to do so at present.

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