atp

The Association of Telecommunications Professionals, Inc.

NEWSLETTER

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ATP February Meeting Notice

When: **Wednesday, February 14, 2007**
Registration begins 8:30 a.m.
Meeting begins at 9:00 a.m.

Where: **OCLC, Inc.**
6565 Frantz Rd.
Dublin, OH

See our website (www.atp-ohio.org) for parking options

Topic: *Public Network Projects Advancing Central and Northern Ohio*

The Association of Telecommunications Professionals, Inc. is pleased to present its February meeting at OCLC, Inc. Parking will be free.

There will be two presentations**. Gregory J. Dunn**, Partner, Schottenstein Zox & Dunn Co., LPA and Principal, Whiteboard Broadband Solutions, one of Ohio's largest law firms, is based in Columbus, OH, and has a respected telecommunications practice. The second presentation will be from **Mark T. Ansboury,** Chief Technology Officer and Chief Operating Officer for OneCommunity, which is based in Cleveland and is a community-based ultra broadband grid network meant to foster economic development.

The meeting fee is $20 for members and $30 for non-members. To pre-register by e-mail, respond to **treasurer@atp-ohio.org**, and include the company name and names of those who will attend. Or, to register by phone, call the **ATP HOTLINE at (614) 836-4318.** And don't forget, when you pre-register before the deadline (5:00 P.M. on Friday, February 9, 2007), your name is automatically entered in the drawing for a prize. Please register early so that we may have an accurate count for seating and lunch. Your pre-registration allows us to keep our member costs down. ⊗

Membership Dues Status

by **Sheila Schmitt**, *Treasurer*

The **ATP By–Laws** state that your yearly membership **dues are payable by the first meeting of the year.** To insure continued good standing in **ATP** it is necessary that the dues be brought up–to–date. **ATP Representatives who's Parent Organization has not paid its annual dues will be charged the $30 non–member meeting fee.**

If you have any questions regarding the Membership Status of your Organization, please contact **Sheila Schmitt** at (614) 628-8428 or by email at treasurer@atp–ohio.org. ⊗

Treasurer's Report

by **Sheila Schmitt**, *Treasurer*

Treasurer **Sheila Schmitt** reports that as of Dec. 31, 2006, there was $13,778.65 in savings and $2,407.07 in checking. ⊗

ATP Board Minutes
November 10, 2006
by **Lora Chappelear-Pearson**,
Secretary

2007 ATP Calendar

Jan12 (8:30a.m.)
Board Meeting
Sound Communications

Feb. 14 (8:30a.m.)
General Meeting
"Business Continuity/Convergence"
OCLC, Inc.

Meeting Attendees

Mike Patterson, Bryan Barlitt, Wendell Mumaw, Doug Ballou, Sheila Shmitt, Steve Schlichter, Gina George, John Hoag.

The meeting was called to order at the AEP Groveport office.

December Meeting

It was agreed to limit the Blue Jackets IT upgrade discussion to about 30 minute to allow John Loether a two hour block of time to give his presentation. The program committee is still waiting on Mr. Loether's summary for his presentation. A tour of the Blue Jackets facility will be offered during lunch. The summary of the subjects to be covered and the title of the meeting are still to come as of this writing. Prices and costs are still being negotiated. Arrangements for seating and presentation needs for this meting were also discussed. It was also mentioned that directions to the meeting room inside the arena were also needed. It was decided to spend some extra money to buy a Blue Jackets jersey for the raffle prize. The president's plaque will be purchased and the president's gavel will be passed. The Christmas gifts will consist of left over gifts from previous years.

Web Site

Due to the need to use SQL on the new web site, a minimal charge will be required. The board approved this and it approved the payment to Josh Wells for his work during the development of the site.

Membership

The 2007 membership invoice will one price, $150.00, and will be mailed to members and placed on the website.

Program Committee

John Hoag offered two ideas for the February meeting. One was to have a couple of vendors discuss their MPLS and metro-Ethernet offerings. The other was to discuss the affect the recent political changes will have on K through 12 telecommunications technology, and the Third Frontier Network. Several members of the board favored the MPLS discussion. John will pursue this as the topic. OCLC

2007 ATP Calendar

January12 (8:30a.m.)
Board Meeting
Sound Communications

February 14 (8:30a.m.)
General Meeting
"Public Networking Projects"
OCLC

March 9 (8:30a. m.)
Board Meeting
Sound Communications

April 11 (8:30a.m.)
General Meeting
"TBA"
TBA

May 11 (8:30a.m.)
Board Meeting
Sound Communications

June 13 (8:30a.m.)
General Meeting
"TBA"
TBA

July 13 (8:30a.m.)
Board Meeting
Sound Communications

August 8 (8:30a.m.)
General Meeting
"TBA"
TBA

September 14 (8:30a.m.)
Board Meeting
Sound Communications

October 19 (8:30a.m.)
General Meeting
"TBA"
TBA

November 9 (8:30a.m.)
Board Meeting
Sound Communications

December 12 (8:30a.m.)
General Meeting
"TBA."
TBA

ATP HOTLINE

The phone number for the **ATP HOTLINE** is **(614) 836–4318**.

(Provided as a courtesy of **American Electric Power)**

was offered as the venue.

The board agreed the initial programming planning meeting will be over lunch at the December meeting. A planning breakfast may also be scheduled.

Vendor/User By-Law Change

Wendell and Gina will work to complete the by law changes to establish the new concept of vendors and users being treated equal in terms of dues and board member status.

Name Change

The act of changing the ATP name will involve a charter change and some additional costs. The thought is to have the new name refer to the association's ties to Ohio University. This will be addressed with then nest year. A list of possible new names will be developed for approval by the board and the membership.

Other Business

Steve and Sheila need to make arrangements to change the signature on the checking account.

Sheila and Wendell will share the mail pick-up responsibilities. Mike will get George's mailbox key for Sheila.

Wendell will make arrangements to make himself the corporate statutory agent.

Gina will develop a survey about membership satisfaction.

The meeting was adjourned.

ATP Meeting Minutes

December 13, 2006
by **Lora Chappelear-Pearson**,
Secretary

The December meeting held at Nationwide Arena was called to order by Bryan. The topic for the meeting was Future Trends and Business Continuity. The first speaker was Jim Connolly, director or IT for the Columbus Blue Jackets (CBJ). Mr.

Connolly discussed Business Continuity. He joined the Blue Jackets organization when the arena was still under construction. The wiring has not even been completed. The arena was built with a 25 year life expectancy.

CBJ had established a marketing partnership with CoreComm. With this partnership, CoreComm provided all the telecom services and a Centrex switch was installed for phone service. At the time, it was probably not the best choice. CoreComm took care of all the phones. The Blue Jackets did not own any of the equipment. The operating costs for this service was $25,000 per month and extremely expensive with poor support. In 2002, CoreComm filed bankruptcy and were purchased by ATX. The Blue Jackets had to stay with the ATX contractually. The Centrex system installed had limited capacity and changes were difficult. Call center functions were not supported well either. In 2004, it was time to investigate a new solution.

At that point, Mr. Connolly had to take responsibility and ownership of the phone system. The Blue Jackets solicited server companies to help reinstall their phone system.

Mr. Connolly then described how the Blue Jackets tries to establish partnerships with organizations that will benefit both companies. The Blue Jackets talked to about 30 different companies to find a reliable vendor and product. The Blue Jackets wanted to support the phone system themselves so they could support special events and expand to 200 phones for ticketing events. With each NHL game, the media and visiting team have addition phone line requirements. The Blue Jackets will be hosting the NHL draft this year requiring 600 phones. During the 2004 presidential election, the arena hosted a speaking engagement that required additional data connections as well. After looking at various products, the Blue Jackets selected the Cisco IP solution. The Blue Jackets wanted a company that they knew would be stable and support the installation. They also needed a data network as well and installed the Cisco power over Ethernet switches. These have also worked well to support concerts at the arena.

Mr. Connolly then discussed their installation. Both the Cisco Call Manger and Intuity voice mail were installed. Their staff has been very pleased and excited about the installation. The implementation was completed during July during their slow period. Training was done on Monday after the weekend installation. It was a pleasant experience for everyone.

At this point, Mr. Connolly indicated that they are planning to expand to implement a true Call Center to enhance ticket sales. Wireless support has not been installed at this time. This will be in a later phase of the upgrade. Security has also been enhanced. The Blue Jackets staff travels during the season and coaches and players living in different parts of the country during the off season. The IP phones allow their staff to connect to Blue Jacket phone system using their cable modem. It has been a great experience and the service is at least as good as it was with CoreComm. The staff has become so comfortable with the phones they began to play practical jokes on each other.

Voice quality has not been and issue. Doug MacLean had an interview with a local radio station over the phone and you couldn't tell he wasn't in the studio. He was in his office. They encountered only one issue with the installation early in the implementation, but that has been all. The Blue Jackets plan to open a retail store at Tuttle Mall soon using a DSL link at the store with an IP phone over VPN. The store will appear as just another extension.

Question: Will you be connecting to the store over RoadRunner? How will you connect?
Answer: A Cisco 830 router will be used. The idea is to also have high speed cable at a home, install a router, and allow traveling staff to also connect. The plan is to also install the phones at the Chiller rinks.

Question: Are you moving the phones around?
Answer: Since the phone is essentially a computer with a DID in the phone, it will work wherever it is connected. Extensions can easily be changed using Call Manager.

Question: Does it track location in relationship to E-911?
Answer: With Call Manager, you as the phone system administrator put in the location of the phone as you would with a Centrex system.

Questions: Who is the Blue Jackets service provider?
Answer: First Communications provides 4 PRI lines and Internet connectivity. 180 simultaneous calls can be supported. This will be expanded to support the NCAA tournament.

John Loether, President and Senior Technology consultant with LoetherSpeaks, LLC, gave a presentation on Future Trends (see the atp web site for a complete bio www.atp-ohio.org). It's all about the data as we have become a data framed society. QoS is required and we need to determine what gets priority and the priority is always changing. In commerce, everything is just good enough. Does the blue screen of death seem okay? Generations go forward with what is acceptable. We don't fear the technology change and computing factor is getting faster.

The number one question for Chief Information Officers today is "am I getting the value and are we utilizing our servers?" The national average for server utilization is 4-11% busy. Mainframes were kept at 85-90% busy because they were so expensive. Servers today are cheap in comparison and it is not the same concern.

Mr. Loether continued his discussion about hardware. We now have dual core processors. Why do we care? Two CPUs could be twice as fast and quad core CPUs will soon be available. In IT how efficiently we use processors in now important. Databases are getting larger between two and two and half times larger per year. End users want to access data on the Internet and want it available 7x24. Users expect the data to always be available. Phones always have dial tone and now users expect data to be as available.

IP isn't guaranteed and always there. Ethernet is a standard that can support dial

tone. It was created by Digital, Intel, and Xerox. At that point in time, token ring was the enemy. Ethernet can now go gigabit and up to 60 gigabit. As opposed to token ring, Ethernet can go "either way". Gigabit Ethernet is being used over fiber, copper, wireless, satellite, all forms of communications.

Users want to access everything from everywhere. When Mr. Loether started in IT, he used punch cards – he was the personal computer. We now have changed the data types, movies, photos, etc. We've exploded the data size to be delivered anywhere quickly and cheaply. Daily PC utilization is almost immeasurable over a 24 hour period. With dual core processors now available, how will we use them? The next version of Microsoft OS, Vista, uses 1 gigabyte of memory for all applications, causing another resource drain on virus scan software. Could we prioritize processing using SMP (symmetric multi processing) having the virus scan software run in one CPU while applications run in the other?

Mr. Loether then discussed bandwidth needs. With the increase in data volume, bandwidth requirements have increased. This includes web access, MMORPG (massively mega online role playing games) users, mobile users, wikipedia, Google maps and Google earth, movie creation and viewing, podcasts, and iPod like devices. Graphic games use a high volume of bandwidth and rendering to show multidimensional games. User can do anything. This has become an escape for para- and quadriplegics and also a relief for chemotherapy patients. Games can be both good and bad, especially when your family, including Mr. Loether's wife, want a bigger, better, faster PC with a headset! Wikipedia and Google earth are examples of web version 2 applications using a distributed environment using both server and PC java applications. These applications can be both 32 and 64 bit. The AMD chip, Athlon, can support both 32 and 64 bit processing. The entire computing world has changed to handle both mode of processing, operating system and hardware. Movie creation is performed using 64 bit applications, but displays in 32 bit. iPods now support video and podcasts have become an education tool. It's changing how we learn. The Library of Congress is currently

working on a digitization project. Hot spots are now everywhere – coffee shops, restaurants, airports, libraries, eventually even in the air on the airplane.

Mr. Loether then discussed how services are being improved with technology. Police officers have face recognition software and license plates records available in their cars. The first thing all officers do is run the license plates on the car to see if any issues exist with the driver and car. Fire departments are using PDAs to determine wind speed and direction to help with fire fighting. The US military uses heat sensing technology from satellites to determine troop location to help plan attacks and has been used in Iraq for locating insurgent troops. Using pattern recognition, police offers can analyze graffiti to determine the artist and arrest the vandals. The Veterans Administrations is using barcodes to help nursing staff match bar codes of medications with patient wristband barcodes, verifying and immediately updating medical records and improving patient care. The VA has become a leader in patient safety.

Mr. Loether gave examples of how the sizes of computers have changed the landscape. Dual core processors with 512k to 1 gigabytes of memory to small servers with 4 CPUs, and large servers with 16 to 128 CPUs and 2 terabytes of main memory with peta bytes of storage. Examples of this type of large site are Google, network TV, NSA, Los Alamos, radiology, and DNA research.

Mr. Loether described the importance of 64 bit addressing, showing that PC processing with 64 bit addressing has the same processing power as a super computer. When will PC processing power utilize this fully? Hardware is already there, but most applications are 32 bit. Windows will go 64 bit with Vistas, but applications will convert slowly. Pane less or opaque windows in Vista will use 64 bit and are graphics intensive. Games will be 64 bit because of the graphics. In Bagdad, the US military used heat sensing technology from satellites to determine troop location to help plan attacks and has been used in Iraq for locating insurgent troops and eliminate possible ambushes.

Increases in processing power have also had a great impact on research. Calculations that required 6 months of processing can now be accomplish in 10 days. The example Mr. Loether presented was celestial mapping at Johns Hopkins University. Clustering is combining multiple servers to provide reliable, available and scalable services to clients. Oracle in version 10g uses cache fusion to easily add and delete nodes.

Processing has changed to include are more dense chips, consuming less electrical power but generating more heat. Chips need to go faster per watt as heat in now a concern with multiprocessor CPUs. Memory has become inexpensive. Efficient software is no longer a concern.

Mr. Loether then dicussed virtualization. Vanderpool, the latest advanced chip from Intel, makes virtualization more efficient. It can be used instead of running the virtual machine monitor as the underlying software. Hardware vendors are pushing VMM – virtual machine monitor. Any O/S can run over it and was created in 1966 booting in DOS running VM and CICS. Performance per watt is another concern. The amount of power being used is a concern. At a recent VMworld conference in California, the Pacific Gas and Electric Company offered every company a $300 credit for each server turned off up to $4 million per month. Laptops already use power saving modes for displays. Power management is also an issue for disk. A 15k rpm spin rate can't be clocked down.

Mr. Loether then asked the question "Do we know what we're consuming?" Everyone is doing more with less and needing to optimize everything without risking availability. The steps to virtualization include assessing inventory, percent utilization of load, CPU, and disk, and what can be consolidated? The next step is to design for better load, for high availability, and lower cost operation. What to do with excess? Vmware Capacity planner is an evolving journey. It's never done. Planning is the key. CPU rates are not the only concern. Disk I/O rates must also be assessed. Applications are license based on CPUs and are the cost of business. Stacking with licenses running on the same servers can be done to

Credit Card Payments

ATP accepts payments using most major credit cards. This is yet another frequently requested service to **ATP** Members being provided by the **ATP**. Credit Card payment is optional.

save money, power, and increase the return on investment.

Blade servers are being used to allow companies realign themselves to run other chips and operating systems. Significant changes in competition. Solaris is now open source. Linux Redhat and SUSE are no longer free. Longhorn, Microsoft's answer to virtualization is free. HP BladeSystem uses a virtual connect architecture making it change ready. HP has refreshed its entire product line with dual core, quad core, and eventually 8 core CPUs.

Mr. Loether then discussed thermal logic technology optimizing power consumptions and cooling concerns. We're moving back to mainframe data centers and need to be concerned about heating, cooling, and power. HP has 20 patents pending with one being the Active Cool Fans. All vendors are concerned about heat, especially with blades.

The virtual desktop environment (the consolidated client infrastructure solution) are rack mounted PCs. Are these a good thing? It depends. It could be useful for doctors and nurses as data terminals. This also provides for manageability improvements. Common hardware with a set O/S image is installed. A new image can be deployed to restore a corrupt system. A useful application for this could be in an education environment where students could corrupt the systems. Security is also improved. IP and corporate data can be secured in the data center on centralized storage and standard operating systems. An example Mr. Loether gave for using consolidated clients is Dreamworks. To create the Madagascar film, Dreamworks used 3400 AMD quad processors to render the film connecting to 2000 servers at the HP labs. Research is being done in parallel processing: SMP, CISC, RISC, EPIC, and SMT.

The war between 32/64 bit processing and 64 bit processing is on! 32/64 bit processing is ideal for compute intensive and memory-hungry 32-bit applications, HPC clusters, and data base supporting Windows and Linux. 64 bit processing is ideal for compute intensive and memory, Floating Point, HPC clusters, VL Data base, and 8 way SMP and Larger, and partitions supporting Linux and 'big' Unix. The Itanium 2 CPU is so small it requires a microscope to see it. The Montecito processor has 2 times the performance using 20% less power. It will not be used in laptops, however, because it runs extremely hot. Mr. Loether then discussed more of the HP processor direction.

Virtualization is improving resource utilization allowing colleges and universities to allow them to optimize their computer resources. It's also improving government services at a lower price. HP-UX 11i partitioning provides a new solution that can be dynamically configured. It allows users to run different operating systems with different tuning parameters in each partition.

Mr. Loether then discussed SAS 9.1. The combination of SAS 9.1 with Integrity Itanium processor based servers improves scalability (up to 64 ways) from 30% to 200% faster than similar SAS 9.0, non-Itanium processor configurations. The iCAP for processors core allows capacity changes on the fly. It provides instant capacity that can be enabled and disabled. It allows you to replaced failed core CPUS on the fly.

Storage is another challenge from changing data such as Google Earth and the need to storage vast amounts of data. Storage must be disaster tolerant and support Sarbanes Oxley and other regulations. Email and office archiving is also a legal issue. Data retention has increased. Radiology records are one example. Normal mammogram results are retained for 7 years while abnormal results must be kept for 21 years. No Child Left Behind legislation requires that academic records for children must also be retained.

Another example of a large amount of data is the genealogical records kept by the Church of Jesus Christ and the Latter Day Saints. Data of this size must not only be

backed up, it has to be restored in a timely fashion. San must be disaster tolerant and diverse in location.

It's an exciting time to be alive with the all technology changes. As a society, we just need to determine what is all is and how to use it.

Business

The drawing for a Columbus Blue Jackets jersey was won by Jim Long.

Treasurer Report

Steve gave the treasurers report. The checking account has a balance of $7266 and the savings account has $13,767.

A presentation was made to Bryan Bartlett in gratitude for his tenure as president. Wendell Mumaw, the president for 2007, discussed the goals for the up coming year. These include:

- The deployment of the new web site including online registration.
- Organization name change to include IT.
- Change membership status to allow all members to participate as officers in the organization.
- Increase membership and meeting attendance

The officers elected for 2007 are:

    President – Wendell Mumaw

    Vice President – John Hoag

    Treasurer – Shelia Schmitt

    Secretary – Lora Chappelear-Pearson

    Directors at Large – Jed Bistline & Gina George

The meeting was adjourned.

Hot Topics in Telecommunications

(Regulatory, New Offerings, New Technologies and More)
February 2007
by **Doug Ballou**

The **FCC** unanimously approved **AT&T Inc.'s** $86 billion buyout of **BellSouth Corp.** on Dec. 29, the day after the

company offered a new slate of concessions, which have many implications for consumers. Among AT&T's concessions is a promise to observe "network neutrality" principles, an offer of about $20 per month for a stand-alone digital subscriber line service and a promise to divest some wireless spectrum. The FCC's approval was the last major regulatory hurdle for the proposed deal, which is the largest telecommunications merger in U.S. history. Here's what consumers can expect in the combined company's service areas in 22 states: DSL to new customers for $10 a month, for 30 months; a free broadband modem to those who replace AT&T or Bell South dial-up services with DSL; a pledge to offer broadband wherever the new AT&T is the local phone company; DSL service without local phone service; a pledge to sell wireless broadband licenses held by BellSouth; and, a pledge to uphold "net neutrality" principles.

Forbes magazine has named phone giant **AT&T Inc.** its "Company of the Year," citing **Chief Executive Edward Whitacre Jr.'s** ambitious series of corporate takeovers, the company's expansion into the video business and a 44 percent stock increase. Playing heavily in Forbes' lengthy article is the company's $80 billion-plus takeover of sibling phone company **BellSouth Corp.** The transaction, when completed, would be one of 13 with a combined price tag of $285 billion (including assumed debt) that the company has executed with Whitacre at the helm.

Despite a move two years ago to keep wireless service providers' reliability reports gathered by the FCC under lock and key, state legislators in Massachusetts are drafting a bill that would make those reports public and give consumers more power. A bill, drafted by **Michael Morrissey,** the state Senate chairman of the **Joint Committee on Telecommunications, Utilities and Energy,** would require wireless service providers not only to provide the public with detailed reports on the quality of their networks, but also allow customers to get out of their contracts if service is poor. The network performance information should include signal strength, dead zones, and gaps in coverage and dropped calls.

The **U.S. Copyright Office** has issued rules that say carriers, for at least the next three years, will no longer be allowed to "lock" your phone to prevent the device from being used on another carrier's network. Wireless service providers reportedly have used these software locks to keep customers, who were under contract, on their network in an effort to recoup the cost of offering discounted handsets to new customers. But in many cases, these locks were not lifted even after contracts were fulfilled. The copyright Office's ruling looks to be a boon for consumers, but some vendors have a different take. Reseller **Tracfone Wireless** filed a lawsuit to reverse the decision in U.S. District Court in Florida. Tracfone, along with trade group **CTIA Wireless,** is suing the government over a rule the company says could make it harder to crack down on individuals who disable the phones' software and sell them for a profit overseas.

Microsoft Corp. has embraced **Novell Inc.'s** open-source software platform, forming a technological truce between two longtime antagonists who want to make it easier for the still-dominant Windows operating system and the increasingly popular **Linux** system to work together. The agreement has potentially important business, technical, and legal implications.

Following the lead of rivals **Yahoo** and **Microsoft, Google** released a downloadable version of its **Gmail e-mail** feature for **cell phones.** The free software, available only in the United States, is compatible with more than 300 cell phones, and can be downloaded by pointing a phone's Web browser to gmail.com/app or by text messaging the software to a phone from a personal computer.

Time Warner Inc. named a veteran television executive to head its **AOL** division at a time the online unit is evolving to become more of a media company supported by advertising dollars. **Randy Falco,** 52, president and chief operating officer of the **NBC Universal Television Group,** replaces **Jonathan Miller,** who is leaving the company. The move comes less than four months after Time Warner announced it would give away AOL.com e-mail accounts, software

and other features once reserved for paying customers in an effort to boost online advertising revenue. The strategy shift follows years of declines in AOL's core Internet access business.

After five years of development and repeated delays, **Microsoft** released its **Windows Vista** operating system for sale to corporate customers on November 30. It is expected that most businesses will proceed cautiously in testing and evaluating Microsoft's new operating system.

In January, **Emirates Airline** plans to launch **mobile phone usage** in its planes, making it the first airline to allow passengers to make cell phone calls on its flights. And Australian carrier **Qantas** plans to start evaluating technology that lets fliers use their cell phones and PDAs during flight in early 2007. But while some upscale, long-haul airlines are installing equipment onboard that will allow for cell phone use, it may be a while before the service makes its way to the U.S. U.S. carriers don't allow in-flight cell phone calls, although the FAA is reviewing the safety concerns associated with mobile calls made in the air.

Two of the world's biggest telecom-gear makers, **Lucent** and **Alcatel,** have tied the knot, creating a global force that could cash in on offering phone, TV and Internet together. Completion of the $11.6 billion stock acquisition, approved by shareholders of both companies on Sept. 7th, came after the first meeting of the new combined board in Paris. Paris is headquarters to both Alcatel and the new **Alcatel-Lucent,** which begins operating Dec. 1st. It also makes Bell Labs part of a French company but the R & D unit will remain in New Jersey because of national security concerns. With combined sales of $25 billion in 2005, excluding businesses sold, Alcatel-Lucent overtakes **LM Ericsson AB's** $21.6 billion in revenue to control about 18 percent of the fiercely competitive market for telecom gear. The shares will trade on **Euronext Paris** and the **New York Stock Exchange** under the ticker symbol **ALU.**

Google extended free payment processing for businesses by a year to win customers from **eBay Inc.** Merchants that use **Google Checkout** will get free processing for all sales until Dec. 31, 2007. Google introduced the Checkout service, which lets users pay for goods from multiple stores, in June to compete with **PayPal,** eBay's online payment unit.

Liberty Media Corp. will gain control over the satellite television broadcaster **DirecTV Group Inc.** in a deal that will settle a dispute between media figures **Rupert Murdoch** and **John Malone,** according to a person with knowledge of the discussions. Murdoch, who controls **News Corp.,** has reached a verbal agreement with Malone to swap News Corp.'s 39 percent interest in DirecTV for Liberty's 19 percent voting stake in News Corp.

U.S. consumers' **Internet spending** for the holidays rose 26 percent from a year earlier as shoppers increased purchases of electronics and books during the week leading up to Christmas, a research firm said. Online sales for the 56 days through Dec. 26th jumped to $23.1 billion, Reston, Va.-based **ComScore Networks Inc.** said in a statement. **Best Buy Co.,** the largest U.S. consumer-electronics retailer, had the biggest increase in online spending from a year earlier. Shoppers spent the most amount of money at **Amazon.com Inc.,** the world's larges Internet retailer.

Over the objections of consumer groups, the **PUCO** has streamlined its regulation of **AT&T** rates for basic local telephone service, opening the door for price increases. Earlier in 2006, the PUCO voted to allow phone companies to ask for an end to basic service price regulation. The regulators approved AT&T's request to raise basic rates in 136 of its 192 local exchanges in Ohio, which is essentially every metropolitan area. AT&T argued that it needed the pricing flexibility because of heavy competition, especially from cell pone and Internet-based companies, which are not regulated by the commission. The decision to abandon the price regulation of basic service came over the objections of **Ohio Consumers' Counsel Janine Migden-Ostrander.**

Wall Street ultimately shrugged off a report that federal prosecutors are investigating whether former **Apple Computer Inc.** officials forged documents to maximize executives' profit from stock options. The legal publication that detailed the federal probe also reported that **CEO Steve Jobs** has hired his own attorneys outside of the company's legal team to represent him in the investigation. Apple spokesman **Steve Dowling** said the company is providing the **SEC** with the results of its internal investigation into its stock options granting practices, but had no further comment.

The threat posed to computer users and companies by **hackers** is shifting from attacks on the computers to attacks on electronic transactions, according to the software vendors. **John Thompson,** chairman and CEO of **Symantec,** said "The attacks that we see today are more targeted and more silent and their objective is to create true financial harm as opposed to visibility for the attackers."

The number of commercial **Wi-Fi hot spots** will grow by 47 percent worldwide to 143,700 in 2006, according to **ABI Research.** Almost three-quarters of these sites – 74 percent - are found in North America and Europe, but the Asia Pacific region is growing very rapidly and will surpass both Europe and North America in the number of Wi-Fi hot spots by 2011. Europe is still the market leader with more than 57,000 hot spots. Major drivers behind Wi-Fi hot spots are retail and hospitality establishments.

Companies spent nearly $5 million on average, and 30 percent more, this year than in 2005, to **recover corporate data** which was lost or stolen, according to a new study from the **Poneman Institute.** The Ponemon Institute's **2006 Cost of Data Breach Study,** which was completed in September, shows that the main culprit for data loss in 49 percent of the cases is a lost or stolen laptop, desktop, PDA, or thumb drive. The study looked at 31 companies that have experienced a data breach in the past year. There have been 254 data-breach incidents in 2006 alone, according to the **Privacyrights.org** Web site. The study also concluded that companies spend $180,000 after each incident to prevent further data breaches.

The United States contributed 21 percent of the world's **spam** in the third quarter, making it the biggest generator of the pesky e-mail, according to security company **Sophos.** China was runner-up with 13.4 percent.

There is quite a bit to like about the **Windows Vista Ultimate code.** In extensive tests of this code, however, it was found that many of the Vista Ultimate default settings are dangerous. That, coupled with the fact that Microsoft now offers a variety of ways to enforce its new security controls, means enterprise administrators will have to make a significant effort to pull off a secure Vista Ultimate deployment. Vista Ultimate's much-needed hierarchical user-security model, called **User Access Control (UAC),** probably will become problematic in a widespread deployment, from the systems security and administrative points of view.

As IT executives again ramp up their use of systems integrators for help in aligning technology and business needs, the market has a new leader: **Accenture.** Accenture knocked **IBM** from the spot it has dominated since **IDC** began tracking the systems integration market in the late 1990s, the research firm says in a recent report. In that report, IDC analysts say Accenture is cashing in on a market that is on the upswing. "After years of sluggish returns and historic lows, the worldwide systems-integration services market experienced moderate growth of about 4 percent in 2005", the study says. **Stephanie Torto,** IDC program manager for systems-integration business strategies, writes in the report that improved economic conditions have let companies again spend dollars on systems integration services as they place a higher focus on service-oriented architecture, infrastructure improvements and application services.

Google may be planning to beef up its online **spreadsheet offering** by hiring the founders of **iRows,** a browser-based spreadsheet service. A posting to the iRows blog announced that Israeli service iRows will shut down on Dec. 31st and the company's founders will join Google.

AT&T is installing encryption equipment throughout its IP-based network that lets the carrier provide more-flexible **IP-Sec-based security** to business customers for their voice, video and multicasting. **Ron Howell, AT&T senior network architect,** says the services, which are based on **CipherOptics** encryption gateways, are "going to make IPSec simpler and easier, because we can now build tunnels dynamically." AT&T's traditional approach, which is providing business customers with IPSec services via routers, has turned out to be too rigid as a point-to-point service.

Avaya acquired **Traverse Networks** for $15 million and announced simplified pricing for its various VoIP software platforms. Avaya acquired Traverse for its fixed-mobile convergence software, which allows users to access corporate IP PBX features, voice mail, e-mail, and other resources over a secure cell phone data connection. Traverse, a 5-year-old start-up based in Fremont, Calif., makes mobile phone applications including Visual Voicemail, which aggregates a user's office voice mail messages and displays details about them on a cell phone in a manner similar to an e-mail in-box. Users can listen to, delete and forward messages on the office voice mail system from the cell phone interface.

Check Point plans to expand the scope of its security products by adding data encryption for mobile devices, technology it will acquire from **Pointsec Mobile Technologies** if a bid offered is accepted. Check Point has put in a $586 million bid for the company owned by **Protect Data.** If the deal is successful, Check Point will be able to encrypt data on mobile devices to prevent them from being accessed should the devices be lost or stolen.

The **Ethernet switch market** surged in the third quarter, with $4.3 billion in worldwide revenue, a 16 percent jump from the previous quarter and the comparable period in 2005, a **Dell'Oro Group** report says. Dell'Oro says increased shipments of advanced Ethernet switch technologies – such as Power over Ethernet, Layer 4 to 7 switching and 10G Ethernet – drove up worldwide LAN switch sales. The third quarter also saw **HP's ProCurve** products outsell **Nortel's**

Ethernet gear, elevating HP to the No. 2 spot in world-wide revenue. The 8.1 million PoE LAN switch ports shipped in the third quarter almost doubled the number shipped during the same period a year ago. Companies are using PoE-capable LAN switches to power IP telephones and wireless LAN access points as they continue to roll out large deployments of these technologies. Shipments of PoE gear also were up 25 percent over the second quarter, the research company adds. According to Dell'Oro, **the top five Ethernet switch vendors** by revenue were **Cisco, HP ProCurve, Nortel, Foundry,** and **3Com.**

Sprint Nextel announced it is making **Google's Gmail** application available to its wireless customers. Sprint is the first wireless service provider to make the popular Google mail application available in a new version designed for easy access and viewing on mobile devices. The application can be accessed two ways: customers can download a Java application to their device, or access Gmail through a wireless application protocol site. Gmail is available to wireless data customers with Sprint PCS Vision or Sprint Power Vision for no additional fee.

Worldwide mobile phone sales grew 21.5 percent year-to-year to 251 million units in the third quarter, with India and China driving growth, according to research from **Gartner.** Gartner predicts that sales for the year will fall just shy of 1 billion phones.

Microsoft is at the beginning of a two-year plan designed to give remote and telecommuting users the power of their desktop in handheld devices by more deeply integrating the company's mobile platform with collaboration software, online services and development tools. The plan took a significant leap forward, when Microsoft released Version 6.0 of its **Windows CE** operating system, which is the foundation of the **Windows Mobile** operating system and the launch pad for a more diverse selection of corporate mobile applications. Microsoft has two versions of Windows Mobile on the drawing board, including a major version upgrade, code-named **Photon that** incorporates CE 6.0 and is set to ship at the end of 2007 to OEMs and be available on phones and

PDAs in the first half of 2008. In December 2006, Microsoft plans to ship to OEMs **Crossbow,** the code name for an upgrade to the current Windows Mobile 5.0 operating system, which is scheduled to be available on devices in the first half of 2007. The company says Windows CE 6.0 architecture and performance upgrades will provide support for more-advanced multimedia, Web services, and wireless network tools.

Worldwide revenue for **external disk storage systems** rose to $4.3 billion in the third quarter of 2006, a 9.9 percent increase compared with the same period in 1005, according to **IDC.** This is the 14th consecutive quarter of storage revenue growth, a trend IDC attributes to more companies buying storage because of the demand to save more data, and to existing customers buying larger capacity systems. While the cost per megabyte of storage has continued to decline, the average selling price of systems has continued to rise, because enterprises are buying larger capacity storage. The market share rankings of the top storage vendors were unchanged in the latest report. **EMC** kept the No. 1 spot, with a 21.4 percent share on an 18 percent increase in revenue over the year-ago quarter to $927 million. **HP** ranked second, with a 17.6 percent share on just 1.8 percent revenue increase to $760 million.

The **Department of Commerce** has approved an agreement for **VeriSign** to continue to operate the **.com domain** for six more years, despite objections about pricing and security. The agreement was submitted by the **Internet Corporation for Assigned Names and Numbers (ICANN),** the nonprofit organization that oversees the Internet's technical infrastructure. The current .com contract expires in late 2007.

Internet2, a consortium of research and higher-education bodies working on advanced network technologies and applications, went live with the first segment of its next-generation network. The group's new network is designed to support ten 10Gbps Lambdas.

As **Nortel Networks Corp.** reported its seventh loss in the last nine quarters, **Chief**

Executive Mike Zafirovski mapped out a plan to get the company's bottom line solidly back in the black. Zafirovski says the big telecommunications-equipment vendor will slash spending on materials, cut research-and-development spending to around 15 percent of revenue from about 18 percent, and halve key administrative costs. The company moved into a scaled-down Toronto headquarters in late September. Nortel says cost-cutting will save some $1.5 billion a year by 2008. The company also expects new product offerings to boost profit margins. Zafirovski said that Nortel is on a "path to improved profitability." But it remains a rocky road. Earlier Nortel reported a third-quarter loss of $99 million, even though revenue climbed 17 percent to $2.96 billion.

Gartner said, that while **Vista** will ship on about 58 percent of all new PCs in 2007, only about 10 percent of the Windows installed base will actually be running Vista by the end of 2007. Others say **Microsoft** will ship well over 82 million Vista licenses in 2007 but that the vast majority of those licenses won't find their way into customer's hands before the third quarter.

We know that everybody is looking for some kind of break when it comes to dealing with **Sarbanes-Oxley** and in particular **Section 404,** but you may not want to get your hopes up too high because the insider buzz is that whatever adjustments are going to be made will benefit auditors a lot more than IT organizations.

LSI Logic will purchase rival chip and storage systems maker **Agere Systems** for $4 billion. No other details were available at press time.

Google is ending a service that lets users pose questions on its Web site and get answers for a fee. **Google Answers,** conceived by co-founder **Larry Page,** will stop accepting new questions, the Mountain View, Calif., company said on its Web log.

Hewitt Associates, a human resources firm, forecasts base salary increases of **3.7** percent in 2007, the highest in 5 years but a modest increase from 2006's 3.6 percent.

Verizon Business said it will offer **Polycom's Telepresence Video System** to its large business customers. The non-exclusive arrangement comes almost two months after Verizon Business said it would test and conduct customer trials of **Cisco's** competing **TelePresence 1000 and 3000** video systems. Cisco unveiled its systems in October.

Google Inc. will test selling advertising for 50 newspapers, part of the company's latest effort to extend its reach beyond the Web. Advertisers' offers for available space will be relayed to publishers, who will accept or reject them. The trial is an effort by Google to tap offline ad markets such as print and radio, and it comes as newspapers face declining sales and readership.

The **PUCO** has opened an investigation to further examine **Buzz Telecom Corp.'s** alleged violations of the state's **Minimum Telephone Service Standards (MTSS).** The Commission also directed Buzz to stop marketing its telecommunication services to Ohio consumers.

Text messages sent to and from mobile phones will more than double over the next five years to 2.3 trillion messages sent by 2010. The number of messages transmitted over short message service (SMS) systems in 2005 was estimated at 936 billion, according to **Gartner.** Total revenues from text messaging is forecast to grow to $72.5 billion in 2010 from $39.5 billion in 2005.

Computer hackers will open a new front in the multi-billion pound **"cyberwar"** in 2007, targeting mobile phones, instant messaging, and community Web sites such as **MySpace,** security experts predict. As people grow wise to email scams, criminal gangs will find new ways to commit online fraud, sell fake goods, or steal corporate secrets. People could find their computers infected with viruses that secretly record all their keystrokes or send out millions of spam email messages. Identity theft fraudsters will trawl through sites which allow people to leave their pictures and personal details, finding targets for "phishing" attacks.

AT&T is cranking up the competition between the telephone and cable industries by adding 27 high-definition channels to its fledgling TV service, more than most major cable rivals offer. The company is doing this as it is starting to expand its so-called **U-verse** service that launched last summer in San Antonio. AT&T just added the service in Houston and is about to launch in San Francisco, New Haven, and Hartford, Conn. Until recently, AT&T's U-verse service had included only standard-definition channels, a disadvantage as millions of American households are buying high-definition TV sets.

Cleveland Heights is set to debut an 18-month long trial offering **free wireless Internet** along three corridors. The city wants to combine its eclectic restaurant and nightlife atmosphere with high tech options that will draw new businesses and residents. The network, provided by the nonprofit group **OneCleveland,** will run along Mayfield, Coventry, and Cedar Roads and be complete by July 2007. The city and nearby **Case Western Reserve University** will contribute funds to help launch the network, which could cost more than $150,000. OneCleveland says it also can connect government, schools, and other institutions to a fiber ultra-broadband network. The nonprofit OneCleveland will provide free service under an 18-month deal with the city.

The **price of copper** was close to eight month lows as the red metal neared the end of the year on a downward slope having led the industrial metal price rally in the first half of the year. The three-month copper price touched an intra-day low of $6,325 a tonne on the **London Metal Exchange.** Copper prices have fallen 28 per cent from their record high of $8,790 seen in May, but remain 45 per cent above their year ago level.

Motorola, the world's No. 2 cell phone maker signed a definite agreement to acquire **Good Technology,** a provider of mobile computing software. Good Technology brings to the table a powerful wireless e-mail offering, giving Motorola a competitive edge in the smartphone market. The acquisition will help Motorola broaden mobile computing capabilities on smartphones and attract more business customers. Motorola will gain Good Technology's wireless messaging, data access, and wireless security products and incorporate them into its "advanced productivity solutions for mobile professionals."

Don't talk so much guys! New research shows that men who use **cell phones** frequently have significantly lower sperm counts than those who don't use the devices at all. The electromagnetic radiation from cell phones and the heat they generate are among the possible factors, according to the **American Society for Reproductive Medicine.**

More next issue!

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