PROSYS

Tech Outlook

Head of the Class

Samsung Chromebooks reduce cost and complexity to help school districts implement 1:1 computing environments.

As advances in technology continue to transform the educational experience, it is no longer sufficient for K-12 schools to have a technology lab or one or two workstations in a classroom. Schools today are shifting from isolated computer labs to a more pervasive technology experience that puts a laptop, tablet or handheld computer in the hands of every student. These 1:1 initiatives can provide access to a wider range of academic materials and interactive learning tools.

Cost considerations and resource constraints often keep K-12 schools behind the technology curve. However, Samsung Chromebooks help school districts do more with less. The budget-friendly laptops running Google's Chrome operating system are fast, secure, lightweight and easy to manage. Designed to be used primarily while connected to the Internet with most applications and data residing in the cloud, Chromebooks relieve school districts from heavy investments in software licensing and IT support.

"School districts are committed to initiatives that enhance learning through innovative technologies," said Tommy Whatley, VP of Advanced Services, ProSys. "Samsung Chromebooks help drive those enhancements by providing access to all kinds of cutting-edge tools that assist learning,

Chromebooks

inspire creativity and help prepare students for the future.

"The beauty of an Internet-based computing environment is that students can be up and running in a matter of seconds, and apps can be pushed to all of the devices with just a few mouse clicks. Chromebooks don't get bloated with old software, so they don't slow down over time."

Easy Management

With a price point considerably less than other popular laptops and tablets, Samsung Chromebooks help schools get technology into the hands of more students without busting the budget. Samsung claims Chromebooks reduce the three-year ownership cost per device by up to $1,134 over traditional PCs. That's one reason why Chromebooks became the top-selling device in the U.S. K-12 education market in 2014 — outpacing Apple's iPad.

However, it would be an oversimplification to attribute Chromebook sales growth to price alone.

"The Chromebook commotion in U.S. K-12 education goes beyond the question of lower cost," said Futuresource analyst Phil Maddocks. "Manageability is a key consideration for school districts in the U.S., and as the number of devices deployed in schools continues to increase, the ability to easily manage a large number of devices comes to the fore."

In a survey of school districts, IDC found that Chromebooks require approximately 69 percent less labor to install and 92 percent less labor to support compared to other classroom computers. IDC also found that the high reliability of Chromebooks increased actual teaching time by reducing management time by 82 percent.

Samsung Chromebooks can be centrally managed through a web-based management console, making it easy for educators to configure a set of laptops across the classroom or the entire school. The console makes it easy to create user groups, pre-install or block applications, track assets, manage user access, control network access and customize user features.

Chromebooks also update automatically, ensuring users always have the most recent technology and security features without requiring IT involvement. Files are encrypted and saved to user accounts, which makes it easy and safe for students to share a device or switch between devices.

Latest Enhancements

With the recent launch of its Chromebook 2 Series, Samsung has improved on its version of the machine with faster performance, longer battery life and a lightweight but durable design enhanced by a textured lid and elegant stitched design. The 2 Series comes in both 11.6-inch and 13.3-inch models.

"Chromebooks are particularly important in the education space — according to Futuresource, one in four devices now sold into K-12 schools in the U.S. are Chromebooks — so we've designed our latest models with students and teachers in mind, including features like rapid start times, longer battery life and an easy-to-grip design," said Tod Pike, senior vice president at Samsung's Enterprise Business Division.

The Samsung Chromebook 2 Series provides users with nearly instant access to everything they need. It wakes up in less than one second and cold boots in less than 10. Samsung's energy-efficient Exynos 5 Octa processors allow for effortless multitasking and rapid rendering of graphics and videos so multimedia content never misses a beat.

The 13.3-inch Chromebook 2 features a best-in-class HD display for rich multimedia experiences. It is also optimized for Google+ Hangouts messaging and video calling with enhanced audio quality on high-power speakers and a noise-reducing array microphone, helping conversations come alive on the high-resolution screen.

Up to 8.5 hours of battery life means that users can enjoy the Chromebook 2 models throughout a full school day — all on a single charge. The Chromebook 2 also comes with a package of premium apps, including smartphone access and data management service Air Droid Premium, task management and collaboration app Wunderlist Pro, and English-learning app LittleBridge.com.

While priced affordably, the new Samsung Chromebook 2 models are as stylish as other expensive, high-end laptops. The slim body measures less than three-quarters of an inch thick, making it easy to slip into any bag. At just under 2.5 pounds for the 11.6-inch model, it is also easy to carry anywhere.

Chromebooks have become the most popular mobile computing devices utilized in K-12 schools, and as the leading provider of Chromebooks in education, Samsung is helping to foster this growth by increasing options for educators. With its extensive battery life, bright display and student-friendly design, the Chromebook 2 helps teachers engage students and deliver new learning experiences.

"The Samsung Chromebook 2 Series is ideal for educators and administrators," said Whatley. "You can dramatically lower your ownership costs through streamlined deployment, centralized management, reduced security risks and decreased support requirements. These are classroom-ready machines that support a dynamic educational experience and help make 1:1 learning programs attainable for any school district."

News Briefs

Most Websites Vulnerable, Study Finds

Nearly nine in 10 websites had at least one serious vulnerability in the past year, and it generally took several months to resolve the problem, according to WhiteHat Security's 2015 Website Security Statistics Report.

In an analysis of more than 30,000 websites, the security firm found that 86 percent had at least one serious vulnerability. Multiple vulnerabilities were found in 56 percent of those. The study also claims major vertical industries aren't placing enough focus on remediation. On average, 61 percent of these vulnerabilities were resolved, but doing so required an average of 193 days from the first customer notification.

The report cites insufficient transport layer protection as the most likely vulnerability across vertical industries including retail trade, healthcare/social assistance, information technology and financial/insurance.

Researchers said the best way to lower the average number of vulnerabilities, speed up time-to-fix and increase remediation rates is to feed vulnerability results back to development through established bug tracking or mitigation channels. This approach makes application security front-and-center in a development group's daily work activity and creates an effective process to solve problems.

New Standard Could Drive WLAN Growth

Ruckus, Cisco, Aruba and other networking companies have begun introducing Wi-Fi access points (APs) based on Wave 2 features of the 802.11ac standard. Wave 2 APs will offer up to five times more bandwidth than Wave 1 and be able to support up to four times as many simultaneous connections on a given AP.

Some analysts say it may be some time before Wave 2 makes much headway in the enterprise because the technology requires infrastructure changes that aren't necessary with cheaper Wave 1 APs, which are generally capable of meeting current demand. However, Dell'Oro Group says the need to upgrade backhaul capacity and Power over Ethernet standards for Wave 2 will actually spark a "mini-upgrade cycle" this year.

The firm said it expects the wireless LAN (WLAN) market to expand almost 40 percent over the next five years, to be worth $13 billion by 2019, as organizations prepare for Wave 2 access points.

"We expect 2015 to be a pivotal year for the enterprise-class WLAN market with the introduction of higher speed 802.11ac Wave 2 systems," said Chris DePuy, a Dell'Oro Group analyst. "This will drive a need for greater Ethernet speeds, opening the door for an upgrade cycle to 2.5 and 5 Gbps Ethernet, which will drive a potential upgrade cycle for campus switching as well."

ProSys locations

Atlanta, GA (Headquarters)
Phone: 678-268-1300
Toll-Free: 888-337-2626
chash@prosysis.com

Atlanta, GA (Integration Center)
Phone: 678-268-9000
Toll Free: 888-337-2626
twheless@prosysis.com

Austin, TX
Phone: 512-658-5847
Toll Free: 888-337-2626
jwestmoreland@prosysis.com

Birmingham/Montgomery, AL
Phone: 205-314-5746
Toll-Free: 800-863-9778
birminghamsales@prosysis.com

The Carolinas
Toll-Free: 888-337-2626
chash@prosysis.com

Knoxville, TN
Phone: 865-310-8843
Toll-Free: 800-863-9778
pmadden@prosysis.com

Lexington, KY
Phone: 859-887-1023
Toll-Free: 800-863-9778
dclemmons@prosysis.com

Louisville, KY
Phone: 502-719-2101
Toll-Free: 800-863-9778
dclemmons@prosysis.com

Miami, FL
Phone: 305-256-8382
Toll-Free: 800-891-8123
lspivack@prosysis.com

Mid-Atlantic
Phone: 800-634-2588 ext 2
midatlantic@prosysis.com

Nashville, TN
Phone: 615-301-5200
Toll-Free: 800-863-9778
dclemmons@prosysis.com

New England
Toll Free: 800-634-2588 ext 1
newengland@prosysis.com

New York/Metro
Toll Free: 800-634-2588 ext 3
nymetro@prosysis.com

Seattle
Phone: 425-939-0342
sballantyne@prosysis.com

Tampa, FL
Phone: 813-440-2410
800-891-8123
lspivack@prosysis.com

Data Breach Costs Rising

Annual study says board-level involvement can help reduce impact of cyber attacks.

The Sony Pictures data breach in 2014 was a headline-grabber, exposing not only employee records and financial statements, but entire unreleased movies and a trove of snarky emails about studio executives and movie stars. Some 47,000 records were breached, and Sony executives estimated the investigation and remediation costs would be as much as $35 million.

Shockingly, that wasn't close to the worst breach of the year — it's not even in the top 20. Based on information gleaned from the massive data-breach database maintained by Privacy Rights Clearinghouse, the data-visualization firm Silk ranks the Sony breach as only number 33 on the list of biggest hacks of 2014. Ebay, J.P. Morgan Chase, Home Depot, Community Health Systems and Michaels Stores ranked as the top five.

The recent release of the annual Cost of Data Breach Study by IBM and the Ponemon Institute confirms that it was an exceptionally bad year. The benchmark study of breaches involving 350 companies spanning 11 countries found that the average consolidated total cost of a data breach is $3.8 million, representing a whopping 23 percent increase over the previous year.

The study also found that the average cost incurred for each lost or stolen record containing sensitive and confidential information increased 6 percent from a consolidated average of $145 to $154. Healthcare emerged as the industry with the highest cost per stolen record with the average cost reaching as high as $363. Additionally, retailers have seen their average cost per stolen record jump dramatically from $105 last year to $165 in this year's study.

"Based on our field research, we identified three major reasons why the cost keeps climbing," said Dr. Larry Ponemon, chairman and founder, Ponemon Institute. "First, cyberattacks are increasing both in frequency and the cost it requires to resolve these security incidents. Second, the financial consequences of losing customers in the aftermath of a breach are having a greater impact on the cost. Third, more companies are incurring higher costs in their forensic and investigative activities, assessments and crisis team management."

The study cites the following key takeaways:

• Board-level involvement and the purchase of insurance can reduce the cost of a data breach. For the first time, the study looked at the positive consequences that can result when boards of directors take a more active role when an organization had a data breach. Board involvement reduces the cost by $5.50 per record. Insurance protection reduces the cost by $4.40 per record.

• Business continuity management plays an important role in reducing the cost of data breach. The research reveals that having business continuity management involved in the

remediation of the breach can reduce the cost by an average of $7.10 per compromised record.

- The most costly breaches continue to occur in the U.S. and Germany at $217 and $211 per compromised record, respectively. India and Brazil still have the least expensive breaches at $56 and $78, respectively.

- The cost of data breach varies by industry. The average global cost of data breach per lost or stolen record is $154. The lowest cost per lost or stolen record is in transportation ($121) and public sector ($68).

- Hackers and criminal insiders cause the most data breaches. Forty-seven percent of all breaches in this year's study were caused by malicious or criminal attacks. The average cost per record to resolve such an attack is $170. In contrast, system glitches cost $142 per record and human error

---

"The industry needs to organize at the same level as hackers to help defend themselves from these continuing attacks."

---

or negligence $137 per record. The U.S. and Germany spend the most to resolve a malicious or criminal attack ($230 and $224 per record, respectively).

- Notification costs remain low, but costs associated with lost business have steadily increased. Lost business costs are abnormal turnover of customers, increased customer acquisition activities, reputation losses and diminished goodwill. The average cost has increased from $1.23 million in 2013 to $1.57 million in 2015. Notification costs decreased from $190,000 to $170,000 since 2013.

- Time to identify and contain a data breach affects the cost. For the first time, the study shows the relationship between how quickly an organization can identify and contain data breach incidents and financial consequences. Malicious attacks can take an average of 256 days to identify, while breaches caused by human error take an average of 158 days to identify.

"The growing sophistication and collaboration of cybercriminals ties directly with the historic costs we're seeing for data breaches," said Marc van Zadelhoff, Vice President of Strategy, IBM Security. "The industry needs to organize at the same level as hackers to help defend themselves from these continuing attacks. The use of advanced analytics, sharing threat intelligence data and collaborating across the industry will help to even the playing field against attackers while helping mitigate the cost to commerce and society."

UNDER PRESSURE

IT stress levels are on the rise, according to new survey.

High workplace stress levels for IT professionals are dramatically impacting both employees and employers, according to a new study. GFI Software's fourth annual IT stress survey finds that 78 percent of those surveyed say they are experiencing workplace stress, while 82 percent say they are actively considering a job change due to workplace stress and dissatisfaction with working conditions.

Additionally, IT professionals report they commonly put in unpaid overtime, often lose sleep, and regularly miss out on social and family functions as they attempt to deal with growing workloads. Many report feeling in poor physical condition due to work demands.

"Even in an industry like IT that's well known for being extremely stressful and highly demanding of its workforce, the findings of this year's IT Stress Survey makes for worrying reading," said Sergio Galindo, general manager of GFI Software. "The 2015 survey results clearly show a substantial deterioration of the work/life balance and job satisfaction among the U.S. IT workforce — quite concerning at a time when the IT sector is playing such a pivotal role in the growth of our economy."

Unreasonable Demands

For the second consecutive year, "unreasonable demands from management" was the most-cited contributing factor to workplace stress, although it was down considerably — from 36 percent in 2014 to 28 percent this year. User-related demands were cited by 23 percent, up from 16 percent in 2014. Budget limitations as a source of stress has remained consistent over the four years of the study, with approximately 16 percent of respondents citing this factor each year.

Survey results showed a rise in the number of respondents reporting that a relationship or friendship had failed or been severely damaged due to work commitments intruding on personal life. More than 25 percent experienced this in the last year — a new high in the four years of the survey, and up from 23 percent in 2014.

Nearly half (45 percent) reported missing social functions due to overrunning issues and tight deadlines at work, up from 38 percent in 2014. A further 40 percent also report missing time with their children due to work demands imposing on their personal time.

Business Impact

Along with the rise in stress and worker unhappiness, this year's survey revealed a continuing high amount of unpaid overtime required by IT staff to meet deadlines and deployments. Almost 48 percent report working up to eight unpaid hours of overtime a week, while 47 percent report working more than eight hours of unpaid overtime every week.
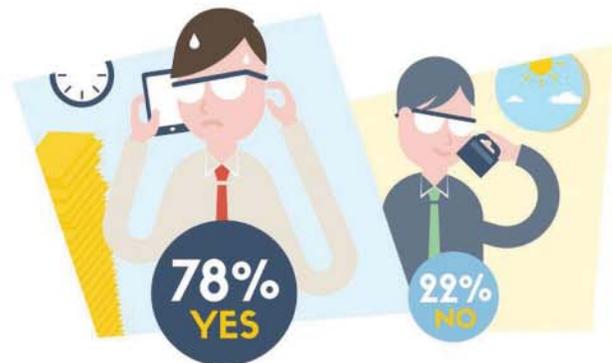
Opinion Matters, an independent insight agency, conducted the blind study by polling 410 IT professionals from the U.K. and U.S. Workers in the U.K. reported somewhat higher levels of stress, with 88 percent reporting they are stressed and 90 percent saying they are looking for a new job.

Steps to ease the pressure on IT pros will benefit the wider business, Galindo said. These steps include establishing realistic IT budgets and staffing headcounts, as well as automating mundane and time-intensive tasks such as resetting passwords, patching computers and servers and looking for network vulnerabilities.

"Smart employers understand that an overstressed and unhappy workforce means less productivity," he said. "The higher levels of illness, mistakes and staff turnover directly related to stress can significantly impact the bottom line. Investing in worker happiness and in systems to simplify the job of the IT department is often far cheaper than replacing over-stressed or unhappy staff."

IT STRESS USA REPORT

IS YOUR JOB AS AN IT ADMINISTRATOR STRESSFUL?

78% YES

22% NO

WHAT IS YOUR BIGGEST SOURCE OF STRESS?

23% The users I support

16% Not enough IT staff to get the job done

19% Not enough budget for IT upgrades and projects

28% Management

14% Tight deadlines

HAVE YOU EVER CONSIDERED SWITCHING CAREERS BECAUSE OF ON-THE-JOB STRESS?

47% Yes, but only occasionally

34% Yes, regulary

19% No, never

Source:
The research for GFI Software was carried out between:
11 / 03 / 2015 and 16 / 03 / 2015.
Sample: 205 IT administrators in companies of 10+ employees in the US

GFI