University of Mississippi

eGrove

Newsletters

American Institute of Certified Public Accountants (AICPA) Historical Collection

7-2005

InfoTech Update, Volume 14, Number 4, July/August 2005

American Institute of Certified Public Accountants. Information Technology Section

Follow this and additional works at: https://egrove.olemiss.edu/aicpa_news

Part of the Accounting Commons

JULY/AUGUST 2005 Vol. 14, No. 4

Newsletter of the AICPA Information Technology Section

nfoTe

What's Inside

FOCUS FOR THIS ISSUE: Spam and Authentication Technologies

1 Maximize Your Information Technology ROI

When we think of ROI, we naturally gravitate to the "numbers," but ROI has a greater impact when understood in the context of your entire IT initiative. TECH 2005 speaker David Ryan provides a personal perspective of the Management Accounting Guideline (MAG).

4 A Spam Primer and Safety Precautions

Spam – it's an ugly word that just isn't going away any time soon. As an accounting professional in a business or firm, how do you effectively find ways to deal with spam and ensure the reliability of your systems? Technology expert David Hochman provides the basics and beyond in this lively article.

7 Greg LaFollette, CPA.CITP: Vision, Victory and Verve An InfoTech Update Profile

8 Emerging Techs: A View Into Future Display Technologies

"Display Technologies" was selected as one of this year's emerging technologies, and for good reason. As our view of the world continually changes, the technology we use also changes in ways beyond our imagination. Well-known speaker and author Roman Kepczyk delivers his own take on how displays are evolving for the short- and long-term future.

10 Tech 2005: A 25-Year Journey of Innovation

On the heels of a very successful Tech conference in Las Vegas, E-Bitz author Susan Bradley offers a first-person perspective on the conference.



ELECTRONIC DOCUMENT MANAGEMENT

Maximize Your Information Technology ROI

By David Ryan, CPA.CITP

David Ryan, CPA.CITP, is vice president of Information Services for Artromick International in Columbus, Ohio. Ryan is a past chairman of the Ohio Society of CPAs' Technology Committee and the Columbus Chapter's Technology Committee, and has consulted with the staff at the Ohio Society to ensure its systems are efficient and productive.

The AICPA, in conjunction with CMA-Canada, recently sponsored a Management Accounting Guideline (MAG), "Evaluating Performance In Information Technology.[™] The overall focus of the MAG is to give CFOs, controllers and other finance professionals a tool to evaluate the payback on Information Technology (IT) related investments. The MAG is a great resource for CIOs, CTOs and other IS professionals to get a handle on what the finance end of the business is seeking to accomplish.

The MAG outlines the development of a general model integrating the key factors for IT success, dubbed the *IT Contribution Model* by the authors, and is broken down into four dimensions or segments: Inputs, Processes, Outputs and Outcomes. The main goal of the MAG is to show how these key factors can be articulated as objectives within the model, and then broken down further to outline the drivers for IT success.

There is often a perception that IT investments, on a consistent basis, fail to achieve their goals in a timely fashion. I find it interesting that much is written in the financial professional journals about the failure of IT to *deliver*, while IT-oriented magazines focus on how the 'bean counters' don't get it. If the reason for the MAG's creation was to help all the interested parties overcome this, how can this be accomplished?

The MAG discusses at length how accountability has to be the focus, and at the heart of accountability is measurement and evaluation. There are a number of charts and tables that break down each dimension into the drivers for success, along with the metrics, ratios and benchmarks to track to measure. This process seems easy, appealing to finance and IT's analytical nature.

However, there is an even greater core issue that ultimately will deliver the biggest return – strategy. Specifically, the alignment of IT's strategy with the overall



InfoTech UPDATE

July/August 2005, Volume 14, No. 4. Publication and editorial office: AICPA, 1211 Avenue of the Americas, New York, N.Y. 10036. Copyright © 2005, American Institute of Certified Public Accountants, Inc. Opinions of authors and the AICPA staff are their own and do not necessarily reflect policies of the Institute or the Information Technology Section. Any hardware or software products mentioned do not in any way represent an endorsement by the Institute or Section.

All rights reserved. You may copy and distribute this document subject to the following conditions:

- (1) Copy all text without modification and include all pages.
- (2) All copies must contain the AICPA copyright notice and any other notices provided therein.
- (3) You may not distribute this document for profit.

Editorial Advisory Board

Susan E. Bradley, CPA.CITP, MCP Tamiyasu, Smith Horn and Braun Fresno, Calif.

Michael R. Dickson, CPA.CITP Business Technology Group, LLC Columbus, Ohio

Mark S. Eckman, CPA Rockwell Collins, Inc., Cedar Rapids, Iowa Wayne E. Harding, CPA.CITP Englewood, Colo.

Roman H. Kepczyk, CPA.CITP InfoTech Partners North America, Inc. Phoenix, Ariz.

Janis R. Monroe, CPA IdentiRISK, Las Vegas, Nev. Sandi Smith, CPA Consultant, Dallas, Texas

Anne Stanton The Norwich Group, Norwich, Vt. Scott H. Cytron, ABC Editor, scytron@sbcglobal.net

If you wish to change your e-mail address or update your member profile, please send an e-mail to memsat@aicpa.org.

For questions about your subscription to InfoTech Update or other questions about your IT Membership Section benefits, please contact the AICPA at infotech@aicpa.org or leave us a voice mail message at 201-938-3828, option 3.

Continued from page 1

corporate strategy. Fundamentally, this means the strategies should be the same. How is the use of technology going to achieve the *corporation's* goals, and therefore, its profitability? For many companies and not-for-profits, this understanding requires a significant shift in organizational culture and, probably, reporting structures. The question most executives need to ask themselves is, "Why is Information Technology *not* sitting at the strategy table?"

Many in IT have wondered for years why they haven't been involved in these meetings. The answer is often based on the belief that IT is a cost center to be controlled. Both sides have been guilty of this. When I presented the MAG to groups and all the metrics were pored over, everyone agrees with the general analysis that an ROI calculation is fairly easy to do when it comes to cutting costs or productivity gains related to increased performance. Faster computers, faster connectivity, storage capacity and thin clients almost sell themselves.

Where the situation gets more difficult is showing how a given technology investment can increase top-line revenues. Calculating the cost of acquiring a customer, the loss of revenue for losing any given customer or improved sales due to better customer call center routing, is very foreign to most IT managers — and even a lot of accounting professionals. Marketing and sales departments need to be involved, and they are usually using a completely different set of metrics.

Investments made in technologies like a Web-based ordering system crosses many departments. Marketing, sales, customer service, IT, fulfillment and credit are just a few. These type of projects point to the integration of IT into all aspects of the business, but is the IT group getting its fair share of the payback when the marketing manager is the driving force behind the implementation? There is a lot of "noise" in many IT investments where multiple events are occurring at once, often across departments, but even across IT projects that feed off others. No one seems quite sure what cause created what effect.

The IT Contribution Model can help, even in these cases. It doesn't matter if the company is using a Balanced Scorecard, Economic Value Added (EVA) or Shareholder Values Analysis ROI calculation, the model can be used to determine if an investment is worthwhile.

To determine whether a given IT investment has met its ROI goal, whatever metric is used needs both a baseline number (and related dollar value) and ongoing analysis to determine if the goals were met. The metric or dollar value may even have to be adjusted over the life. Most IT managers fail to track these changes after the "go live" part of an investment. If the project deploys on time and on budget, the goal was met, but studies have shown that ROI dollars are left on the table. Often, the paybacks are greater than expected because of unanticipated savings or productivity gains. Finance and IT just need to look for them

An ROI Case Study

Given my accounting and finance background, I inherently *want* to calculate the payback as part of my analysis of an IT project. This includes not only my department's initiatives, but those of other groups where my input is appropriate. Hopefully the following example will illustrate what we have been talking about.



My company was looking to reduce its DSO (Days Sales Outstanding) on our receivables. I suggested we look to an Internet-based solution, either e-mail or a secure Web site. Previously, we used a standard batch printing routine (to paper) on a nightly basis of our invoices that then had to be stuffed, postage applied and mailed.

First, we calculated our current DSO. This was broken down further by specific groups and type of customers; the end results represented our DSO baseline. Second, we added up the all costs of various solutions. These included a new software tool to generate the invoices into a digital format, SSL certificates, hardware, network configuration issues to segregate customer access, and maintenance fees over three years.

We then looked at savings based on a reduction of paper costs, toner usage, printer life depreciation, postage and employee time. The calculated ROI assumed a given penetration rate (acceptance) in our customer base. The assumption was we would create all invoices electronically and print only those that were necessary. The appropriate cost of funds for both the acquisition of new equipment and the cost of carrying the receivables X number of extra days was calculated. Savings covered costs and it seemed like a decent investment.

But that was the easy part. I then got involved with multiple other departments. On the cost side, further savings were identified through reducing large vertical file cabinets that did not need to be purchased. I regained floor space from the retirement of existing cabinets, and the reduction of onsite and offsite archival storage of older invoices. This last saving only occurred starting in the third year since we keep two years of invoices on-site. There was a nominal increase in storage costs related to online document storage and our offsite streaming for backups. Again, this is a fairly standard ROI calculation for this type of investment.

At this point, we started talking to the frontline receivables staff. We identified productivity gains related to easier access to duplicate copies of invoices. We also ended up looking at the entire invoice format, and gathered information related to customer frustration with how they were laid out and our receivables process.

An amount needs to be assigned to the calculation for the very abstract concept of improved customer satisfaction, or customer loyalty. It isn't easy, but values could be assigned to the potential loss of revenues on those customers who would drop us because we were not easy to do business with; I have fired vendors for just this reason, as I am sure many others have.

If that doesn't seem to be a big enough number, then how about the loss of a major customer because of something as simple as how we showed our net pricing and discounts? That actually was part a different project related to EDI transactions, but we easily rolled it into this initiative. And, we could assign those dollars to the ROI calculation of this IT project.

Once the project is completed we will then try to use the features as a competitive advantage to gain *new* customers. Don't get me wrong. It is very hard to turn *qualitative* measures (soft & chewy) into *quantitative* metrics (hard numbers with \$ signs). Just how much of the annual revenue over the next three years of new customers does IT get to include in its ROI calculation? The easy answer is none — it's just too hard to figure. It obviously isn't 100 percent, but it certainly shouldn't be zero either! Marketing professionals, all the time, determine the success or failure of an ad campaign on generating new customers and new revenues from existing customers.

A Paradigm Shift

For manageability sake, the MAG stresses that only a limited number of metrics (20 or so) should be used. But if *it* is to matter in a competitive environment, companies are going to have to bypass the lower-hanging ROI fruit of cost reduction and look to the higher value returns generated by increased revenues. This will require IT to move out of its stereotypical "silo" and engage in a more holistic interaction with corporate executives related to strategy development and metrics. Finance will have to nail down costs and revenues, and everyone else will need to determine how IT can help them achieve *their* goal of aligning with corporate objectives.

Contact David Ryan at dryan@artromick.com.

SPAM TECHNOLOGY

A Spam Primer and Safety Precautions

By David Hochman

David Hochman is a freelance writer and public relations consultant. An expert on risk management and security issues, Hochman is based in Asbury Park, N.J.

Since the mid-1990s, e-mail has been viewed as a professional necessity, and many modern corporations, businesses and individuals would be lost without it. However, for all the benefits e-mail brings *to* our world, junk e-mail or spam can end up costing a company dearly.

Practically everyday, we are bombarded with endless email spam that is difficult to manage and hard to stop. Here's a refresher on the basics of spam and steps you can take to control this never-ending nuisance in your business or firm.

What is "spam?"

The term spam derived from a sketch in the old Monty Python's Flying Circus television show where the word "spam" is repeated over and over again in an annoying fashion. Early Internet adopters (apparently many fans of Monty Python) began to label e-mails that are unsolicited, repetitive and annoying, as spam. The term caught on to the point where it is now the universally accepted definition of unsolicited e-mails that are generally sent to multiple recipients to advertise a product or service.

For those who thrive on trivia, the meat packing firm Hormel, owner of the trademark for its famous processed meat product, SPAM, decided some time back as a matter of corporate policy *not* to object to the term spam when used to describe unsolicited commercial e-mail as long as it is used in lowercase letters to distinguish it from Hormel's trademark SPAM.

Regardless of its somewhat interesting etymology, spam presents a real risk to any business's bottom line. It causes office servers to become overloaded and corrupted by incoming e-mails and increases the risk of a company's computer network being infected with a virus. It also prompts concerns about recent federal regulations that govern the way certain private information is disseminated electronically.

Fortunately, there is software that can be installed, and procedures implemented, to help protect your firm or business from the mischief and mishaps caused by unsolicited commercial e-mail.

Spam "Zombies"

A report by the Federal Trade Commission warns that spammers often route their junk mail through the servers of innocent companies. Companies that have been taken advantage of by unscrupulous spammers are nicknamed "spam zombies."

Ray Everett-Church, co-author of *Fighting Spam for Dummies*, warns that spam zombies are "one of the most intractable problems we face today." Everett-Church, a principal at PrivacyClue.com, explains that spam zombies are "the offspring of the unholy union of spammers and virus writers, in which viruses infect people's desktop computers and are hijacked to deliver virus-infected spam. Companies can have infected computers spewing out some of the most offensive kinds of spam found on the Internet — and they might never even realize it. Beyond the annoyance of an infection, there are greater risks. For example, some viruses grab random documents from the victim's computer — including documents with sensitive personal or corporate information — then infect the files and send them off to unknown strangers."

Inadvertently relaying spam to outsiders can have severe ramifications for businesses, whose names often end up emblazoned on heaps of unsolicited messages. Any one of the above scenarios is likely to cause some serious damage to the reputation, finances and future of the duped business.

Fight the spam Plague

There are measures your business can take to minimize spam and decrease the risk of having your office server abused as a spam zombie. The most basic step is to ensure that your company's Information Technology staff can configure your employees' e-mail accounts to include specially designated folders where e-mail from unknown recipients can be directed, and then safely disposed of before any viruses spread. Many offices, however, take the next step and implement a system of "firewalls" to regulate incoming and outgoing messages. Some popular firewalls for businesses include RAV Anti-Virus (www.ravantivirus.com), Barracuda Spam Firewall (www.barracudanetworks.com) and Singlefin E-mail Protection Service (www.singlefin.net).

Each of these services offers a high-level of protection against spammers. For example, they can automatically check the origination of incoming messages against lists of approved and disapproved addresses selected by your office's system administrator. These are called "white lists" and "black lists." The firewalls also can ensure that messages do not originate from any senders found on a constantly updated "Real-time Black Hole List" of known spammer sites. They also can scan the header and body of each received e-mail for certain keywords and attachments that tend to signal spam. In addition, the protection services can monitor all outbound e-mail messages and quarantine those that appear suspicious. This system of screening outgoing messages helps ensure that your office does not accidentally spread viruses to outside computers.

Armed with the awareness that spammers are present, along with the awareness of the tools to fight them, you can work to ensure your firm or business does not become overwhelmed by spam or an unsuspecting spreader of it. If all else fails, you can hope that the government will actively work to help eradicate spammers under the provisions of the CAN-SPAM act — Controlling the Assault of Non-Solicited Pornography and Marketing. CAN-SPAM prohibits various practices, including fraudulently relaying e-mail through other servers. E-mailers who violate the act can be saddled with civil and criminal penalties. Visit *www.ftc.gov* to learn about which practices are unlawful and how to file a complaint if your business has suffered at the hands of spammers.

Federal Regulations

It is not only important to be certain that outgoing e-mails from your firm are not spreading viruses to outside computers, but vitally important under current federal regulations to ensure your office is not sending — knowingly or unknowingly — private information. Three pieces of legislation that have particular bearing for accounting professionals, CFOs and others in financial services are the Health Insurance Portability and Accountability Act (HIPAA), the Gramm-Leach-Bliley Act (GLBA) and the Sarbanes-Oxley Act (SOX). In a nutshell, all three government actions emphasize that certain private information must be protected. It bears mentioning, however, that all three are complex and multidimensional; to be confident that your firm's e-mail usage is in compliance with them, it is advisable to seek professional legal advice.

At first blush, it may be hard for an outsider to understand how HIPAA affects the lives of accounting professionals. After all, HIPAA was enacted in 2003 to safeguard the Protected Health Information (PHI) of medical patients, and PHI generally encompasses those records that contain information about individuals' physical and mental health. However, HIPAA often comes into play in the world of accounting through firms that provide services to entities. These include insurers, hospitals and physicians who must be aware of, and conscientiously adhere to, the requirements imposed under HIPAA. Although clients involved in the medical field typically can release PHI to accounting firms in the course of doing business, accountants and other business partners are required under the statute to take steps to keep PHI protected.

Just as HIPAA applies to protected health information, the GLBA was enacted to preserve the integrity of customers' non-public personal financial information by enacting safeguards to ensure privacy. The regulation applies to banks, brokers and insurers, and often applies to businesses that handle tax returns or provide related counseling. Financial institutions bound by the GLBA must advise their clients about the various ways in which their financial information is collected and shared, and must also implement a "security plan" to protect private information.

SOX, which took effect in 2004, has a direct impact on the accounting industry. It requires corporations and their independent auditors to certify that financial statements are truthful. The act has an additional requirement, however. Besides being "accurate," relevant financial statements also must be kept private. An "internal control" report that details security efforts must be filed annually by firms that handle financial statements. The purpose of establishing internal control systems is, in part, to guarantee that secret, insider information stays inside, where it belongs.

In a world overwhelmed by e-mail, how do you best protect private information and simultaneously protect your firm against litigation and the possibility of civil or criminal sanctions? You must establish a broad strategy that incorporates comprehensive employee training and the use of technological solutions.

First, set up clear policies for employees regarding how private information should be treated. Review these

Continued on page 6

Continued from page 5

policies often. It is essential to start with the basics, such as training employees to recognize information that is considered private under HIPAA, GLBA and SOX, emphasizing to employees the importance of keeping this information secure. A simple step to enhance security is to install passwords on all computers and instruct employees not to leave their machines unattended unless they have been safely "locked."

But you should not stop here. To shield your firm and the private information it transmits electronically, you also should take advantage of technological resources. All email messages containing sensitive information should be encrypted. By encrypting private information, you effectively turn it into code that can only be read by the intended recipient. During their training sessions, employees should be instructed about how to use encryption software to protect the integrity of PHI to comply with HIPAA, private financial information to comply with GLBA and private corporate information to comply with SOX. Some businesses might choose to employ multiple types of encryption technology to enhance their chances of successfully protecting private information when it is being transferred over the Internet from one server to another.

"Overcoming the annoyance of spam and the danger of invasion from spyware, viruses and other e-maladies requires the attention and cooperation of individual users, business networks and ISPs," says Stephan P. Gribok, a partner with the IT and IP Practice Groups at Duane Morris, a Philadelphia, Pa.-based law firm. "Users and businesses will appreciate that damage can easily result from failing to keep firewalls and other protections vigorous and current. Spam protection techniques and services are improving and becoming widely deployed. At some point, the unwillingness or inability of users, businesses, ISPs or public entities to take data security steps may be construed as a failure to meet basic privacy regulations, or as evidence of failure to take reasonable care, i.e., negligence."

On a related note, you should take steps to decrease the vulnerability of your firm's server so that outsiders cannot spy on and poach private information. Luckily, just as the services offered by companies like Barracuda and Singlefin can help to protect your office from receiving and spreading spam, they also can help to block spies from infiltrating your organization.

According to Everett-Church, "Many excellent new enterprise-level technologies are bringing some measure of relief, especially the new crop of anti-spam 'firewall' technologies that stop spam at the outermost perimeter of the corporate network. By fighting spam at the perimeter of your network, you reduce the need to build additional infrastructures. It's like stopping your in-laws at the front door — it saves you from having to have a spare bedroom!"

Plan and Train

It may seem like a daunting task to insulate your company from the various lethal effects of spam and protect private information from being improperly distributed via e-mail. However, meeting these goals is not as insurmountable as it first appears. It all begins with careful security planning and frequent employee training programs. By supplementing your personnel efforts with an investment in antivirus software and encryption technology, your firm will stand fearless in the face of spammers and federal regulators.

Contact David Hochman at djhochman@comcast.net ●

> During their training sessions, employees should be instructed about how to use encryption software to protect the integrity of PHI to comply with HIPAA, private financial information to comply with GLBA and private corporate information to comply with SOX



INFOTECH UPDATE PROFILE Greg LaFollette, CPA.CITP: Vision, Victory and Verve

If you attend any of the TECH conferences, read up on the latest trends in accounting and software, or even venture to the Web to check out the newest blog, there's one person that has his finger in all three of these pies ... and then some — Gregory L. LaFollette, CPA.CITP.

Greg is like a jack-of-all-trades in the accounting marketplace. Based in Ann Arbor, Mich., Greg is executive editor for *The CPA Technology Advisor*, president & CEO of the Accounting Technology Resource Network, a senior tax manager during busy season with Weidmayer, Schneider, Raham & Bennett, P.C., and operates his own blog at *www.TheTechGap.com*. He previously held an executive position with Thomson Creative Solutions and helped form LaFollette, Jansa, Brandt & Co., LLP in Sioux Falls, S.D., in the late '70s.

When does this guy find time to sleep?

"I'm really only good at very few things — and not very good at a lot of other things," he says. "My former partners and staff in the South Dakota accounting firm — who are still friends, by the way — my colleagues at Thomson Creative Solutions, and now the staff at *The CPA Technology Advisor* would probably agree, especially about the latter. My strengths, I believe, are vision and the ability to explain complex concepts in simple, understandable terms."

Greg built his career through consulting and advising in the high-tech marketplace — yet always going one step further by being a proactive participant in helping develop a service offering in technology consulting. More than 30 years ago, for example, when he was in South Dakota, the firm he helped start became a "technology showcase" for the latest and greatest high-tech gizmos. The firm even had a sabbatical program so that the staff could venture out and learn new ways of doing business. Greg says he fulfilled an early dream by working for four months in a software house in Beaverton, Ore.

"The firm was generally first with almost everything high-tech and began to share our productivity improvements with other firms in the upper Midwest," he says. "Every firm we consulted with made us smarter, and through user group meetings, I met executives of several major providers and began consulting with them regarding product development. My daily interaction inside a CPA firm, along with consulting with my peers, allowed me a perfect platform; I simply synthesized information and began representing the profession to the vendors."

From 1998 to late 2003, Greg was seen and heard frequently at accounting shows across the country when he represented Thomson Creative Solutions, a marriage that proved insightful.

"Thomson has considerable resources, and Creative Solutions had a culture of 'measure everything and manage the important stuff.' This measure-everything mentality meant that we gathered huge amounts of data. I quickly gravitated to slicing and dicing empirical data and rethinking what I thought I knew from previous anecdotal evidence. The most



CPA.CITP

important realization was that our profession is so incredibly flat — only 10 percent of the firms in America have more than 10 people — it's the small and medium sized firms that *are* the face of public accounting in our country. These are the firms that interact with Main Street businesses and are the firms to whom I most closely relate."

Now that Greg is in the publishing business, he provides his professional acumen to *The CPA Technology Advisor*, a publication members of the AICPA's IT-Member Section receive as a benefit of membership. However, he does not consider himself pidgeonholed or stuck just in the publishing world.

"I'm at the intersection of technology and public accounting. In fact, we've adopted that as a tagline for the magazine and we even own the street sign — you can see it at most of the trade shows!," he says. "The accounting publishing space is very, very

Continued on page 8

A View Into Future Display Technologies

By Roman H. Kepczyk, CPA.CITP

Roman H. Kepczyk, CPA.CITP, is president of InfoTech Partners North America, Inc. and chairman of the AICPA Information Technology Executive Committee. He consults exclusively with CPA firms on optimizing their production practices as they transition to a digital environment.

Evolutions in display technology are having a significant impact on the way people access information and images in their homes, offices and when they are on the move. Recognizing the importance of this, participants in the 2005 AICPA Top Technologies survey selected "Display Technologies" as one of the key technologies to watch this year. Whether discussing large screens for viewing entertainment, flat-panel monitors for working in the office, or smaller screens found on PDAs and cell phones, advancements continuously stretch the envelope, opening up new opportunities for business and personal use.

When video displays are discussed, most people first think of screens used to watch television and other video programming. While widescreen and projection systems increased the size of the viewable area, they did not always improve the viewing experience. With the rollout of HDTV (High Definition Television), expectations increased even more based on the clarity of detail, and today, the line

Continued on page 9

Continued from page 8

crowded with six national publications that, with only a few exceptions, aren't particularly well defined. Most seem to address larger firms in their content. For example, less that 5 percent of the firms resell software, yet some magazines devote page after page of space to what's happening in the reseller market. I frankly don't understand the allure."

As is the tradition with ITU Profiles, Greg knew he was going to get the "why the CITP" question. As a member of the CITP Credentialing Committee, Greg is passionate in the pursuit to build on the CPA designation.

"We must specialize to survive; if we fail, we'll simply watch others pick off sections of the profession, ultimately leaving only the riskiest and least profitable for the 'generalist,'" he says. "I firmly believe that the CPA of tomorrow will have to specialize. Think about being introduced to a person at a cocktail party ---- someone says, 'Scott, I'd like you to meet Dr. So and So.' One of your first questions in conversation will certainly be, 'What kind of doctor are you?' We'll be having that same sort of conversation in our profession in 25 years, and in my opinion, the ABV, PFS and CITP are just the beginning."

Back to Greg's vision of the future of the profession, a component he believes comes from more than 30 professional years of "sheer laziness."

"I have *always* tried to see an easier way of doing everything, looked for the shortcut, the process improvement or the perfect tool to complete a one hour job in 10 minutes. I've spent hours and hours and hours looking to save those 50 minutes. Fortunately, with age often comes judgment, and as that judgment improved, so did my track record in choosing what processes needed improvement."

Continuous improvement is the key just take a look at his blog, for example. He was somewhat skeptical at first whether a blog would be efficient and effective, but became a true believer once the community established itself and readers began commenting on his view.

"Practicing accountants are literally bombarded with information, so the blog provides immediacy that the magazine can't while allowing me to present people, processes, products and services that might not otherwise be introduced to the community. At the end of the day, that's what it's all about — a community where we're all trying to be more productive. The blog helps build community and also helps new vendors get attention in a busy marketplace. Those are good things."

Scott H. Cytron, ABC, is editor of InfoTech Update. Contact him at scytron@sbcglobal.net.

.........



between an HDTV and high resolution computer screens begins to blur.

This trend is continuing with the rollout of new technologies exhibited at this year's Society for Information Display (SID) 2005 Conference held in Boston last May. While most highend LCD (liquid crystal display) TV displays are usually in the 40" to 46" range, Samsung showcased an 82" prototype LCD TV display, currently the largest in the world, and a sign of things to come for advertising and theatrical viewing.

Samsung also demoed a 40" OLED (organic light emitting diode) screen that has WXGA (1280x800) HD-class resolution. What makes this technology so amazing is that these large size screens are less than three centimeters thick — thinner than most picture frames!

Display technologies are also having a significant impact in the office due to professionals using two or more monitors to display information. An Association for Accounting Administration survey conducted in December 2004 found that 52 percent of responding firms were already using dual monitors. The significant reduction in cost of flat panel 17" and 19" monitors, as well as the increase in RAM on computers, led firms to standardize on dual monitors for production personnel because it allowed them to open and work effectively with more and more applications.

In recent years, ViewSonic and MassMultiples rolled out versions that have a vertical display format (rather than the traditional landscape mode), allowing individuals to view entire documents on the screen. In addition to reducing the amount of scrolling required to review legal or tax documents, these screens take up less desktop real estate. In addition, some new monitors are integrating video conferencing capabilities into a screen, such as Polycom's VSX 3000 into a flat-panel display.

Handheld devices such as PDAs and cell phones have also benefited from new display technologies that have increased resolution and brightness because they can be used in sunlit or very dark locations effectively. For example, the resolution for Treo handhelds doubled from 160x160 pixels in the 600 model to 320x320 in the 650 version. More pixels in the same size screen means clearer, more vibrant viewing.

Wearable display devices like monocles and screen glasses are also expanding the viewable area of PDAs and mobile computers. Xybernaut has been a long-time manufacturer of wearable computers that allowed users to mount a miniature screen on eyeglasses and see information as clearly as if it were on a very large computer or projection screen. In addition, SecondSight has developed monocles for expanding the view of smaller devices.

Other emerging display technologies to check out:

- F-Origin's Iris display technology for PDAs that uses a smaller screen as a "window" to a complete document or Web page by moving the PDA to view the entire document. This is done with a built-in gyroscope that senses when the PDA is moved forward, backward, left or right, and adjusts the image to "look" in that direction.
- Monitors capable of projecting three-dimensional images (like wearing 3D glasses) have evolved for some time. Companies like Philips have shown 3D prototypes, and SeeReal Technologies has developed a screen capable of displaying 2D and 3D images that can be embedded in Web sites.
- While improved resolution and screen brightness is one of the primary goals of display manufactures, there are times when information on a display should be kept private, such as an ATM or account verification. Toshiba Matsushita Display (TMD) created a VCP (Viewing Angle for Controlled Privacy) monitor that allows wide-angle viewing for initial screens, and then selectively switching to a narrow view so that people looking from periphery positions would only see a black screen.
- Creating a display that encompasses all of your peripheral vision (similar to an Omnimax screen) allows people to be "in" the image — useful for gaming and simulation applications (such as a driving test). Elumens created the Vision Station 3D that projects a large image on a dome in front of the user.
- Flexible display technologies are also on the horizon and eventually, monitors will be embedded into curved surfaces or clothing. Early prototypes were developed by various companies, including Plastic Logic, E Ink and Polymer Vision (Philips), showing that significant strides have been made.

Wherever people work, play or relax, there are new display technologies that will allow them to clearly see the information they need in a format appropriate to that situation.

Contact Roman Kepczyk at roman@itpna.com.

A 25-Year Journey of Innovation

By Susan E. Bradley, CPA.CITP

Susan E. Bradley, CPA.CITP, MCP, GSEC, is a principal with Tamiyasu, Smith, Horn and Braun in Fresno, Calif. She writes an ongoing column, E-Bitz, for *InfoTech Update*.

I can probably sum up my thoughts about this year's Tech 2005, the AICPA's 25th annual CPA technology conference, with four things: red hats, purple clothes, and the names Rick and Bill.

Las Vegas is always the capital of conventions and you can count on an eclectic mix of people in any hotel. Prior to leaving for Vegas, I knew this was going to be an unusual trip because of the number of older women on my plane who were wearing purple outfits with red hats. Turns out this was the week the Red Hat Society met in Vegas, a conference for this over-50 women's group that embraces fun and friendship.

More than that, the Red Hats understand the bond that comes from a common history, and it's this embraced history and change in the lives of these women that reminded me of what the accounting profession has endured in technology for 25 years. Rick Richardson has earned his own "purple outfit and red hat" for living with technology; his future predictions have turned into reality all those years. And for most of that time, there have been two names that have been intertwined with one another during this quarter century, Rick on one side and Bill on the other.

Don't know which Bill I'm talking about? Bill Gates, who else? Tuesday evening, as Rick went through the 25-year history of the Tech conference, a parallel history of Bill was present. Today, we have more storage on a USB thumb drive than there was in the Compaq luggable we used to have — the single piece of hardware that got the most cheers during Rick's presentation.

And here's where we begin. The Compaq (*www.obsolete-computermuseum.org/compaq*) was indeed the piece of hardware that revolutionized how we did business in our firm and was the first computer to actually free us from the office. Suddenly, we could go into the field and work on the information and data. Revolutionary in its concept that computing could be portable, the Compaq is the computer that I believe made my right arm longer than the left due to the

sheer weight of the machine, and yet, this was the one device that made our offices rethink how we worked. We didn't have to be in a fixed office anymore.

What a concept ... free to roam and compute at will! Yes, I know my father had a 50-pound calculator that he took from place to place, but that doesn't count. It didn't have an electronic spreadsheet in it.

Antiquated Technologies or Yesterday's Innovations?

In the 25 years of Rick to Bill, what were the key elements that made what we do actually happen?

The Spreadsheet

I know there are folks in my electronic community that are still running and waxing poetic about Lotus 1-2-3, v. 2.0, but the historians do not talk about Lotus when referring to early spreadsheets. We're talking about VisiCalc — the original spreadsheet that started it all. That one item truly revolutionized what our world was like. Before that, when I was a young whippersnapper of an accountant, my days were filled with manually calculating depreciation computations and penciling them in. Suddenly, the drudgery of manual calculations were non-existent. Calculations were instant and there were no more erasures or taping sheets together. The mind boggles with how this one program changed everything we do.

Liquid Paper

Once upon a time, we used a tax preparation service and would get to the end of tax season without enough time to correct the data input, so we would use bottle after bottle of white-out to correct the tax returns. I think I ruined several blouses with getting Liquid Paper on them. What do we do now? Do we still use this correction fluid? Nope; instead, we just kill more trees.

LaserJet Printing

If it weren't for the fact that it now squeaks horrifically and is slow, I think we could still print on our firm's first printer, the original HP LaserJet III. Think of how we take printers for granted these days and then consider how cutting edge

they were back then. I think that HP was in the range of \$2,000, and yet, I can get a faster, quicker one now for a fraction of the amount.

DOS and Windows

For all our joking about Microsoft Windows, the fact is that this technology revolutionized the technology industry. No longer did we have to do our computing in mainframes ... computing came to our desktops. Smaller devices (thin clients) dominate instead of relying on large servers. More than that, Windows brought the computer to offices that probably would never have been able to purchase a mainframe. So while Rick can give his interactive presentation with a Mac, the fact is, for business, we're still under all that GUI layer still running in a DOS world.

25 Years of Technology Predictions

I could go on listing the technologies that have become obsolete over the years or dramatically changed, but you get the point.

There, for all these changes, was Rick Richardson. For 28 years, he was with Ernst and Young, the last 12 of which he served as National Director of Technology. All during that time, he's been predicting the future and getting it right about 70 percent of the time — not a bad average at all and one I would consider very promising!

So too has the Tech conference changed. Once only accounting applications and spreadsheets, there was a buzz in nearly all of the presentations this year on the importance of security, encryption, personal identity and privacy. All of these concepts resonated in this year's conference tracks. And, as usual, there to wrap up and send us on our way with his outlook for 2005 and beyond was Rick. For 25 years, he's been giving us what bellwether items we need to look out for in the immediate- and long-term future.

So what's Rick's hot prediction this year? Voice-Over IP (VoIP), so much so he that even included a VoIP ROI calculator in his presentation to ensure we are really proving to our employers and clients why VoIP is so hot. When I mentioned VoIP to a group specializing in small business consulting, they said that you would be *insane* not to be looking at or evaluating VoIP.

The ability to collaborate and connect is very important in this economy, and we're always looking for ways to communicate more and more on a daily basis. The convergence of our telephone and data networks just seems to be a logical thing. I can discuss a network with someone from Australia one moment while receiving a call the next minute from the former Soviet Union where a fellow IT pro is helping an entrepreneur set up an Internet cafe.

Of all the messages from Rick's future predictions was the central theme of an increase in sharing of data and communications, and breaking down barriers in applications. It's all about ensuring that the metadata of your application is enabled to ensure a cross platform experience along with your basic data. Ensuring that all of your data is ready for the explosion in search might be a wise move. As the search engines get better, the data will need to be more searchable.

So what else did Rick Richardson predict for the next 25 years? I'm not going to tell you everything; you're just going to have to see him in person at the 26th AICPA Tech Conference to be held in Austin, Texas, June 12-14, 2006. Yes, Austin: home of technology giants like Texas Instruments. IBM, Motorola, and even The University of Texas at Austin, renowned for its computer and engineering program.

Next year's Tech conference looks to be an interesting beginning of the next 25 years of computing, and in the meantime, will we see computers implanted in our bodies? How about new ways of gathering data in real time? Regardless of what the future will bring, you can count on the AICPA Tech Conference to guide our future.

Contact Susan Bradley at *sbradcpa@* pacbell.net.

The ability to collaborate and connect is very important in this economy, and we're always looking for ways to communicate more and more on a daily basis.

Attention IT Section Members

COMING SOON

to a mailbox near you, "Evaluating Performance in Information Technology." This guide, which is being sent free to all IT Section Members, will help you to develop an IT performance measurement framework, articulate specific measures, describe the causal relationship between various drivers and measures, and through examples, illustrate how companies can identify and measure the payoffs of IT Investments.

AICPA O O IT Section

American Institute of Certified Public Accountants Information Technology Section 201 Plaza Three, Harborside Financial Center Jersey City, NJ 07311-3881

ADDRESS SERVICE REQUESTED

ISO Certified

