PRESIDENT'S MESSAGE

**Lance Turcato
President**

Time sure flies when you are having fun!

Welcome to 1st Quarter, 1999. The theme for this quarter is *Technology Hot Topics and Trends*. On behalf of the Board, I would like to thank Valacon, Inc. for sponsoring this quarter (refer to their ad in this newsletter). We have an information-packed education program planned for this quarter. Refer to the Educational Offerings section of this newsletter for an overview of those sessions. If you have not received a copy of our *1998/1999 Catalogue of Continuing Education*, please refer to our Web site, www.sfisaca.org, or contact Todd Weinman, our Education Committee Chairperson, to request a copy of the *Catalogue*.

Our education program for 4th Quarter, 1998, was a major success! Attendance is on the rise and we have received positive feedback from several Chapter members as well as non-members. The committee columns in this newsletter provide an excellent overview of all of the Chapter's accomplishments for 4th Quarter, 1998. Please take a moment to read those columns. I would like to thank the entire Board of Directors for their great work this past quarter. I would also like to thank all of the committee members and other volunteers who volunteered their time to make the quarter an outstanding success!

For my message, I would like to focus on our Corporate Sponsorship Program. The Board has worked diligently over the past few months to finalize the sponsorship agreements for the next year.

On behalf of the entire Board, I would like to recognize and thank the following firms for their commitment to the future of the Chapter through their financial support:

General Sponsors

Monthly Bulletin
PricewaterhouseCoopers,
Operational & Systems Risk Management

1998/1999 Catalogue of Continuing Professional Education
Charles Schwab & Co., Inc.,
Internal Audit Department

1998/1999 Membership Directory
Lander International

Quarterly Sponsors

4th Quarter, 1998
Charles Schwab & Co., Inc.,
Internal Audit Department

1st Quarter, 1999
Valacon, Inc.

2nd Quarter, 1999
KPMG Peat Marwick LLP,
Information Risk Management

3rd Quarter, 1999
Pacific Bell

4th Quarter, 1999
PricewaterhouseCoopers,
Operational & Systems Risk Management

These sponsorships allow us to provide you with valuable education programs at very reasonable rates. Furthermore, the sponsorships allow us to produce quality Chapter publications and to acquire the necessary resources to continue to grow and improve the Chapter's offerings. If you would like more information regarding how your firm can participate in our Corporate Sponsorship Program, please contact me by phone at (415) 636-1261, or by email at lance.turcato@schwab.com.

In closing, I would like to encourage you to become involved in the continued growth of the Chapter. Serve on our Board or volunteer to assist with committee initiatives. At a minimum, please join us and participate at our monthly educational events.

My thanks once again to everyone who has made the start of the year an overwhelming success!

Lance M. Turcato, CPA, CISA
President

EDUCATIONAL OFFERINGS

Todd Weinman
Committee Chairperson

January 19, 1999

Luncheon presentation
11:30AM – 2:00PM
Business Integrity and Validation of Computer Systems

Afternoon seminar
2:00PM – 6:00PM
Y2K Update:
Countdown to the Millennium

February 16, 1999

Luncheon presentation
11:30AM – 2:00PM
Electronic Espionage and the Auditor's Role in Protecting Trade Secrets

Afternoon seminar
2:00PM – 6:00PM
Legal and Regulatory Developments Related to Cyberspace

March 16, 1999

Luncheon presentation
11:30AM – 2:00PM
Project Management for IS Auditors and Security Professionals

Afternoon seminar
2:00PM – 6:00PM
Security Awareness: What Every Auditor Should Know About Information Security

If our first two sessions of the 1998/1999 Educational Calendar are any indication, we will have a sensational year of educational programming. In September, Richard Tuck treated us to an informative and visionary look into the future of IS Audit and the career implications of these trends. This was followed by a very strong program in October, November and December which featured discussions regarding the risks of e-commerce and the audit, control and security implications of Internet and Web-based technologies. Not only is attendance up over previous years, but we have also received wonderful feedback on our presenters. We are also excited to see many non-members attending, including many individuals outside of the field of IS Audit-continue to spread the word!

Holiday Cheer

Attendees at our December luncheon on Internet Resources for IS Auditors and Security Professionals received a special holiday treat from the Chapter. In addition, complimentary wine was served with lunch.

Saver Pass Program

The Board would like to encourage each of you to take advantage of our Saver Pass Program. This program provides significant savings for the advanced purchase of multiple education sessions. Your employer will like this program because the discount passes may be shared among employees (membership requirements still apply). Refer to our *1998/1999 Education Catalogue* or our Web site for more details regarding this program.

YEAR 2000-RELATED WEB SITES

PC Magazine – Year 2000 Resource Center • http://www.pcmag.com/y2k

This is an excellent resource. Also, check out their 10/6/98 issue for the best coverage of Y2K and what you should be doing!

Ziff Davis Y2K Site • http://www.zdnet.com/zdy2k/

This site is informative and has a Java applet that counts-down the time left until the new millennium.

Y2K News Magazine • http://www.y2knews.com/

Covers Y2K on a global level, and includes a chat room and a newsgroup-like, threaded discussion forum.

Year2000.Com • http://www.year2000.com/

This site isn't the easiest to navigate, but contains a lot of timely articles and insights.

Y2K.Com • http://www.y2k.com/

This site, with an obvious name, focuses on legal and management issues. Learn how to gauge your organization's liability.

Yahoo – Y2K Category
http://dir.yahoo.com/Computers_and_Internet/Year_2000_Problem/

Government Compliance • http://www.itpolicy.gsa.gov/mks/yr2000/y2khome.htm

This site was created to assist government agencies meet their compliance mandates. It includes articles, best practices, and databases of software compliance.

State Initiatives • http://www.state.pa.us/Technology_Initiatives/year2000.html

Examples of sites created by states with explanations of how they are educating businesses, universities, and local governments towards meeting their compliance.

European Perspective • http://www.bug2000.co.uk/

Check out this site set up by the British Government.

GASB Issues TB 98-1 on Year 2000 Disclosures • http://www.gasb.org

The GASB recently issued Technical Bulletin 98-1, Disclosures about Year 2000 Issues, that is effective for financial statements on which the auditor's report is dated after October 31, 1998. The AICPA issued illustrative reporting guidance on Y2K disclosures made under TB 98-1; refer to http://www.aicpa.org/members/y2000/gasb98-1.htm

Y2K and the Investor • http://www.y2kinvestor.com/

How will the Year 2000 affect your portfolio? Gain insights in this area at this site.

Gary North • http://www.garynorth.com/

Gary offers his blunt, pessimistic advice, and has many links to articles and papers.

Access all of these sites and others from the Resources section of our Web site at http://www.sfisacaorg/resources/other.htm

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Year 2000 Perspective – Not Just A Systems Issue

By Vince Turner, CISA

As auditors evaluate the consequences of Y2K, the focus is on managerial and technological implications. One area that is not yet addressed is consumer behavior. Even if the aftermath of computer glitches prove to be small, consumers will begin in 1999 to fear the worst and change their behavior appropriately. Below I have listed some scenarios that would not be far fetched:

- In December a travel agent sees his business beginning to decline.
- Airlines brace for reduced income based on passengers' decisions not to fly in January.
- Consumers, hearing that they need cash in the New Year, reduce their Christmas purchases. Merchants suffer.
- Health and safety personnel are denied vacation leave in December and for the near future.
- Banks, promising cash on demand in January, cannot find security guards to reserve for the New Year.
- Partygoers who had planned trips out of the country to celebrate the new millennium, request refunds of their deposits.
- Home safes are in scarce supplies.
- Crime goes up as more people carry cash.

You can continue to list more scenarios on your own. It's not hard to begin to see that consumer behavior can have a traumatic impact on 1999. If we are to counter this, organizations need more in their contingency plans other than what to do on January 1, 2000.

European Privacy Directive – Is Corporate America Ready?

By Laura Brown, Ernst & Young LLP

It is fitting that the topic of this quarter's newsletter, "Hot Topics and Trends", pursues the discussion of privacy. Possibly no other online issue is currently receiving as much global attention as the issue of privacy. Privacy issues now present an even greater impact on organizations than just a few months ago and the implications and visibility are potentially substantial.

So what has changed? Many things. Intensifying US regulatory scrutiny, increasing public/consumer recognition of the potential abuses of privacy, recognition by companies of the importance of trust to enable greater electronic commerce and perhaps of singular importance, the effective date of the European Union Data Protection Directive on October 25, 1998. Surprisingly, even at this late date, many US companies are still unaware of the Directive and dangerously unfamiliar with its impact.

Background

The European Union Data Protection Directive, passed in 1995, imposes strict privacy standards and practices likely affecting the collection and use of personal information around the world. The intention of the Directive is to protect EU citizens with regard to the processing of personal data and provide a uniform high level of protection of personal information across the EU. Specifically, countries exchanging personal information with any entity resident in any of the EU member states will be required to adhere to the Directive's strict standards for privacy protection. The provision of most interest to non-EU countries is the prohibition of the transfer of personal information to countries considered by the EU as having "inadequate" privacy protections. ("Inadequacy" is currently being defined as the absence of federal privacy legislation and a lack of governing privacy body.) Information protected under the Directive includes information on EU citizens as customers or employees, as well as non-EU citizens when that information is exported from the EU.

The Impact – Hype or Reality?

As the Wall Street Journal reported on 11/1/98, "No kidding. Under a new privacy directive from the EU, it's illegal for you to take" European business card information you've collected "back home to the U.S." Even the seemingly simplest collection of data on a Web site might have dramatic global implications. Few companies and Web sites may be immune.

Some U.S. companies are taking the Directive very seriously. Citibank has executed a number of contractual agreements with the German privacy regulators. Sweden and American Airlines recently came to agreement on the use of data on Swedish passengers concerning information such as special meal requests which might enable one to infer a specific religion or medical condition of a passenger.

Europeans take adherence to the Directive very seriously. Targeting specific companies for non-compliance to the Directive is a tactic publicly threatened by European privacy advocates. The London-based privacy group, Privacy International, posted a list of 24 multinational companies that they will target for violations of the Directive.

Struggle for Compliance

The difficulty in meeting the requirements of the Directive mandates lies in the understanding that the US and EU have very different regulations and philosophies on privacy resulting in very different opinions on necessary approaches to addressing privacy needs.

In the US, consumer-supplied information which is furnished to one company is often sold to others without the knowledge of the consumer. Further,

Books:

None of Your Business: World Data Flows, Electronic Commerce, and the European Privacy Directive (1988, Brookings Institution Press) by Swire and Litan. Peter Swire also has a home page: www.osu.edu/units/law/swire.htm

Web sites:

Department of Commerce www.ntia.doc.gov/

UK Data Protection Registrar www.open.gov.uk/dpr/

Center for Social and Legal Research www.privacyexchange.org

TRUSTe www.truste.org

the consumer is often uncertain and unaware of the purposes for which it was sold. Europeans argue that personal information should never be sold by a company unless specific permission has been obtained. Such dramatic constitutional, diplomatic and philosophic differences underlie the ongoing negotiations to agree on standard practices.

In addition to differences in approach, organizations that are proactively attempting to meet the requirements of the Directive are confronting ambiguities and complexities unforeseen by the authors of the Directive. The Directive was written before the arrival of the current framework of the Internet and distributed, client/server computing. Further, because not all member EU countries have implemented their own national privacy laws in compliance with the Directive, US companies will continue to struggle to gain an understanding of what is expected.

While a number of large US multi-national companies are addressing the issue through the execution of "contracts" with each of the member countries as allowed by the Directive, many company positions are still uncertain.

Leading the negotiations from the US is Ambassador David Aaron, Under Secretary for the International Trade Administration. Negotiations to address the fundamental differences in approach to privacy and the need for the US to be regarded as "adequate" have led to accelerated negotiations in the past few months. A "practical" compromise is desperately being sought to avert "restraint of trade" complaints.

On November 4, 1998, "Safe Harbor Principles", a US solution to EU privacy requirements, were defined and proposed by the US as meeting Directive requirements. The concept is that voluntary adherence and compliance to "safe harbor" provisions will have a

presumption of adequacy and will thus allow continued data transfers.

There are seven Safe Harbor principles.

1. Notice. Individuals must be informed about what type of personal information is collected, how, for what purpose, and with whom it is also shared. Information on limiting use and disclosure must also be present.

2. Choice. The opportunity to choose how information is used ("opt-out") must be allowed. Specific permission ("opt-in") must be obtained from the consumer for information such as medical information.

3. Onward Transfer. Individuals must be given the opportunity to choose the forward of their information to third parties. The same levels of privacy protection must be afforded the information if it is transferred.

4. Security. Reasonable measures must be taken by organizations collecting, maintaining, or using personal information to protect from loss, misuse, unauthorized access disclosure, alteration or destruction.

5. Data Integrity. Information must be accurate, complete, and current and kept only for the purposes for which it was gathered.

6. Access. Individuals must have reasonable access to information about them and be able to correct or amend inaccurate information.

7. Enforcement. Effective privacy protections must include assurance of compliance, mechanisms for recourse and consequences for non-compliance.

(Complete information on the Safe Harbor Principles can be found on the Department of Commerce Web site.) As the principles have only recently become available, responses are still being formulated.

The Next Steps

The largest of multinational companies are likely already executing contracts with the individual countries with whom they do business. Risks of "Non-Transfer Orders" are greatest for them if these contacts have not been executed. However, as negotiations continue and the solutions and approaches become more evident for other companies, there are certain steps which should not be minimized nor relegated to a low priority.

US and EU regulators agree that privacy policies are extremely important. They further agree that policies should be based on Fair Information Principles and include enforcement mechanisms as described in the *Elements of Effective Self-Regulation for Protection of Privacy* report. As US and EU regulators continue to monitor privacy practices, both have specifically announced that content of privacy policies will be carefully scrutinized.

Safe Harbor principle implementation would logically complement privacy policies. Further actions should include participation in a self-regulatory framework as defined by an industry trade association. Where it is found none exists, associations are being encouraged to develop them. Finally, organizations should consider participation in a privacy program such as TRUSTe. TRUSTe is recognized as a successful cornerstone of the privacy self-regulatory framework.

The US has been granted a grace period to give organizations time to implement principles and practices. This time should not be wasted as critically reviewing and revising privacy processes and practices to comply with US and EU regulation and law will be no small corporate undertaking.

MEMBERSHIP

Hector Massa
Committee Chairperson

The membership count for the San Francisco Chapter as of November 30, 1998, stands at 342 members. Please join me and the SF ISACA Board in welcoming these new Chapter members.

September 1998

Franz R. Riedel, CPA
Kaiser Permanente, Oakland
Transferred from
Silicon Valley Chapter

October 1998

Kim Brown
Savings Bank of
Mendocino County

Margaret L. Crossman
Oakland, California

Paul S. Dimon
UCSF
Reinstated member

William Y. Luk, CISA,CPA
Wells Fargo Bank
Reinstated member

Umesh Reghuram, CIA,CPA
Fremont, California
Reinstated member

Philip A. Burger, CISA,CPA
Alameda, California
Transfer from
Willamette Chapter

November 1998

Meg Cronin
Alameda, California
Transfer from Los Angeles
Chapter

Stacey A. Dolan
Ernst & Young

Maryam Malek
Bay View Capital Corporation
Transfer from New Jersey
Chapter

Mary A. McPherson
Pricewaterhouse Coopers LLP

Member Milestone

The Board of Directors would like to congratulate the following members on their accomplishments:

Chuck Dormann – ISACA's CobiT Presented to State Operational Auditors

Several of us have had the challenging experience of trying to describe the nature of CobiT, ISACA's breakthrough IT control tools package, to non-CISAs. Chuck Dormann of our Chapter had the opportunity to present CobiT to the state governmental auditors of the National Legislative Program Evaluation Society (NLPES) at their educational convention in Sacramento in October. There was a very positive response to Chuck's presentation on CobiT and his participation on the panel for the subject, "Integrating Computer Tools Into Program Evaluation." Chuck, a Past President of the San Francisco Chapter, is currently serving as the Chair of ISACA's International Academic Relations Committee and makes presentations on ISACA matters to groups in academia. He encourages all CISAs to seek and accept opportunities to speak within their own organizations or at meetings of other business and auditing professionals on topics such as CobiT, ISACA and our respected professional designation, the CISA. Chuck can be reached for assistance or just encouragement about possible speaking engagements through cado@home.com.

Sumit Kalra – Outgoing Student Chapter President

Sumit Kalra completed his term as ISACA Student Chapter President at San Francisco State University. Sumit also graduated this past December and began working at Deloitte & Touche LLP in the Computer Assurance Services practice. Sumit made several contributions to the Chapter as Student Chapter President and will continue to serve on the SF ISACA Board as a member of the Academic Relations Committee. Let's all applaud Sumit on his accomplishments – congratulations Sumit!

Keep the Chapter informed of milestones you achieve in your career. Send an overview of your accomplishments and career changes to Shirley Thomas, Newsletter Coordinator (shirleythomas@dttus.com).

CISA COORDINATION

Georg Wolfl
Committee Chairperson

1999 CISA Examination

The International Chapter of ISACA administers registration for the CISA exam scheduled for Saturday, June 12, 1999. To register for the exam, contact the International Chapter to obtain registration materials. Please note that all registrations for the exam must be completed by April 1, 1999. The cost for the examination is $295 for ISACA members and $325 for non-members. A discount of $30 will be given for registrations received before March 1, 1999. For detailed information regarding the CISA exam, please access ISACA International on the Web at: http://www.isaca.org/examinfo.htm.

1999 CISA Review Course

The San Francisco Chapter offers a complete review course for the 1999 CISA examination. This review course is designed to assist candidates in preparing for the CISA examination. The five, four-hour review sessions will be taught by professional IS audit, control and security professionals and will include lectures, practice questions and exams, and classroom discussions. The cost for the course is $150.00 for ISACA members and $315.00 for non-members. There is no cost for repeat students. The review course will be held on Saturday mornings from April 24, 1999 through June 5, 1999 in downtown San Francisco. For more information on the course, please access the Chapter's Web site at: http://www.sfisaca.org/cisa.

CISA Item Writing Program

In order to continue to offer an examination that measures a candidate's knowledge of current audit, security and control practices, new questions are regularly required for the CISA Examination. Questions are sought from experienced practitioners who can develop items that relate to the application of sound audit principles and practices. Continuing education hours and cash payments are offered as incentive to question writers. If you are interested in participating in the CISA Item Writing Program, please request information about the program from ISACA International, Certification Department (certification@isaca.org).

ANNOUNCEMENTS

Refer A New Member – Receive A Free Gift

The Board of Directors recently established the New Member Referral Program. Chapter members who refer an individual who joins ISACA – San Francisco Chapter will receive a free gift. Don't miss an opportunity to help your colleagues keep abreast of developments in IS audit, security and control. Encourage your colleagues and friends to join ISACA today! Make copies of the membership application included in this newsletter and pass those copies along to your colleagues.

For more information or to submit your referral to the New Member Referral Program, please send our Membership Committee Chairperson, Hector Massa (hlmsa@aol.com), the name, address, phone number, and email address for the individual being referred.

ISACA International Reports
Membership Growth Worldwide

| | Membership totals | | |
	11/30/98	11/30/97	11/30/96
Asia/Middle East	2,503	2,354	1,935
Central/South America	786	719	614
Europe/Africa	4,549	4,141	3,563
North America	10,959	10,020	9,110
Oceania	1,134	1,134	1,111
Totals	**19,931**	**18,368**	**16,333**

This represents an 8.5% increase in membership compared with the same month's statistics from last year. Over a 12 month period, monthly growth has averaged 9.34%.

Call For Nominations

Would you like to be part of the team that is moving the San Francisco Chapter into the next millennium? Now is the time to take action and help your Chapter to continue to grow into the year 2000 and beyond. The Chapter is now accepting nominations for the 1999/2000 Chapter year. The following positions will be filled through a formal election in late spring, 1999: President, 1st Vice President, 2nd Vice President, Secretary, Treasurer, Director (four of seven Directors to be elected). Officers serve one-year terms and Directors serve two-year terms; commencing in July.

Serving on the board is a great way to network with other professionals and to gain exposure in the IT audit and security profession. If you are interested in participating as an officer or director or if you would like to nominate another member, please send the name, address, phone number, and email address for the proposed nominee to our Nominations Committee at the Chapter address on the back of this newsletter, or email Lance Turcato.

www.sfisaca.org

Learn about the San Francisco Chapter

Learn about the CISA certification

Test your skills with our CISA sample test questions

Complete our member survey

Access information regarding ISACA international

Access information regarding our Student Chapters

Register for monthly meetings

Register for seminars

Access information regarding ISACA conferences

Register for the CISA review course

Access our Chapter newsletters and monthly bulletins

Update your membership information (address, phone, E-mail)

Access IS audit, control and security resources

Research employment opportunities

Join a Chapter committee

Learn how you can join ISACA – understand the benefits

Contact Chapter Officers and Directors

Edmund Lam
Committee Chairperson

Success at last! San Francisco State University (SFSU) has agreed to enroll their first students in a new IT Auditing curriculum. The process began two years ago when the ISACA-San Francisco Chapter (SF-ISACA) helped establish a Student Chapter at the University. Following the establishment of the Student Chapter, SF-ISACA board members worked and consulted with numerous students and professors at SFSU to launch the IT Audit curriculum. Under the new curriculum, students meeting the program requirements will receive a Bachelor of Science Degree with an emphasis in IT Auditing. The curriculum will prepare students to sit for both the CISA and CPA examinations.

We would like to thank the following individuals for their hard work in making this project a success:

• Professor Kenneth Leong, Accounting Department Chair at SFSU
• Professor Jamie Eng, Business Analysis and Computing Department Chair at SFSU
• Chuck Dormann, ISACA Board Member who initiated the initial contact and established the SFSU ISACA Student Chapter
• Sumit Kalra, SFSU ISACA Student Chapter President
• William Luk, Blair Bautista, Eleanor Lee, and Victor De Leon for their support
• Ric Jazaie, SFSU student, for his input to the curriculum
• The entire ISACA board for their support through the whole process

The IT Auditing curriculum was officially announced at the SFSU Accounting Students Organization Fall 1998 Awards Banquet on November 20, 1998. Three SF-ISACA board members attended this event: Blair Bautista, Edmund Lam, and Lance Turcato. Eleanor Lee, Academic Relations Committee member also attended the event. To show our continued support to SFSU and the ISACA Student Chapter, SF-ISACA established a scholarship program. The scholarship provides for free admission to the Chapter's CISA Review Course and all educational events offered by the Chapter for one year. Blair Bautista presented the first scholarship to Karina Daza at the SFSU Awards Banquet. Karina has also been selected as the new Student Chapter President for the SFSU Student Chapter. Karina has already done a lot for the Chapter. Congratulations Karina!

On another note, the Academics Relations team has begun discussions with Golden Gate University (GGU) and San Jose State University (SJSU) to get the ball rolling on the establishment of ISACA Student Chapters at those universities.

As Chairperson, this has been a very rewarding personal and professional experience. I have made several new friends and have made new contacts. I was especially encouraged when a SFSU student (Sumit Kalra), under our guidance, passed the CISA examination on the first attempt. There is still a lot of work to be done and I look forward to working with GGU and SJSU to establish their student chapters and to begin discussions with them regarding an IT Audit curriculum. I will be working with William Luk, Sumit Kalra, Eleanor Lee, David Fong, and other volunteers on these projects. We can always use more assistance. If you are interested in helping out, please contact me at your convenience.

STUDENT CHAPTER

Sumit Kalra
Outgoing Student Chapter President, SFSU

As I was writing my last column as the SFSU ISACA Student Chapter President, it was hard to believe how much was accomplished in the last two years. The SF Chapter of ISACA was not only able to raise awareness at the University, but also worked with the University to adopt a curriculum in IT Audit. The curriculum is designed to give students a background in both financial and IT auditing with enough technical competence to prepare students for the CISA and CPA exams. This achievement was accomplished through the dedication and constant support of Edmund Lam, Kathleen Arnold, Blair Bautista, Chuck Dormann, William Luk and Marcus Jung among others. Presently, thanks to Lance Turcato and the SF ISACA Board, we have the SFSU Student Chapter, the IT Audit curriculum, and two scholarships available for students pursuing a career in IT Audit. The SFSU Accounting Students Organization would like to extend its thanks to all of you for supporting and putting up with the development of the SFSU Student Chapter.

As I step down as Student Chapter President, Karina Daza steps up to the challenge. Karina will represent SF ISACA as SFSU Student Chapter President for 1999. She will continue with efforts to expand the Student Chapter by recruiting more officers and members.

Lastly, my future plans are to stay as an advisor to the SFSU Student Chapter and to assist the Academic Relations Committee with efforts to establish student chapters at other universities. I have also committed to developing a Web site for ISACA student chapters nationwide.

Karina Daza
Incoming Student Chapter President, SFSU

With the aid of the SF ISACA Chapter, my predecessor was instrumental in the establishment of a new IT Audit curriculum by introducing the concept of IS auditing to the students and faculty at SFSU. My goal for next semester is to generate interest and increase student participation in the Student Chapter. The Student Chapter is thankful to the SF ISACA Chapter for its support over the past two years. I am excited to start the year with a new curriculum that will help students become acquainted with the IT Audit field academically and professionally through internships. Our Student Chapter's goal is to educate and provide support and guidance for those interested in the profession.

Karina is a senior at San Francisco State University pursuing a double major in Business Information Computing Systems and Accounting. She has been involved in many student organizations: Accounting Students Organization (member for three years), Beta Alpha Psi (Treasurer), and IMA (Student Chapter President). Karina was the recipient of the Arthur Wallace Scholarship for two years and benefactor of the National Institute of Health Scholarship. She has worked as an intern at Richard Lee, CPA & Consulting during the summer and will be working during the remainder of her time as a student at Charles Schwab & Co., Inc. in the Internal Audit Department. Karina has accepted an offer with Ernst & Young's Information Systems Assurance and Advisory Services (ISAAS) group and will begin that position after graduating in May, 1999.

THE INTERNAL AUDIT PROFESSION IN THE MILLENNIUM

Richard Tuck, CES, CPC, CIPC, is president of Lander International, the world's largest full service IS audit resource center. Over a career spanning twenty years in the placement field, he has interviewed over 10,000 auditors and spoken at more than 400 conferences on topics related to audit careers. His company is one of the 500 fastest growing in the nation according to INC. Magazine.

AICPA Applauds Passage of Year 2000 Information Disclosure Act

Source: American Institute of Certified Public Accountants

The AICPA lauded Congress for passing and sending to President Clinton S. 2392, the Year 2000 Information Disclosure Act, which the president signed on Oct. 19. This non-partisan bill represents a critical first step to jumpstart the sharing of information by industry and government officials about Year 2000 computer problems and solutions by offering some protection from the threat of liability suits over disclosed Y2K information.

Also regarding the Year 2000 Issue, the National Association of Manufacturers has created a Web site that will serve as a clearinghouse for information about products and services dealing with the millennium computer challenge. The Clearinghouse for Current Solutions, at www.nam.org/y2k/y2khome.asp, will help companies share information, especially small and medium-sized firms that lack electronic sophistication.

By Richard Tuck, CES, CPC, CIPC

Every profession has gone through changes in the last 10 years, and internal audit has experienced more change than most. Some sectors of corporate America have adopted new value systems, and audit is still trying to catch up. "Gaining a competitive advantage" became one of the decade's catch phrases, along with new words "downsizing", "rightsizing", "outsourcing" and "co-sourcing". A bottom-line mentality dominated in many stockholders' meetings, and many organizations worked hard to position themselves for mergers, takeovers and buyouts. "Value-added" became a new component for marketing internal services throughout a company.

With entire levels of mid-level management wiped out, many organizations have adopted an attitude that it is individuals not departments that can change a company and improve profitability. Each individual is expected to learn how to make a contribution to the bottom line and the organization's future success. This paradigm shift has not left internal audit departments unaffected. Many audit organizations have been grappling with how to meet management's new expectations and yet remain true to their intrinsic beliefs about the internal audit profession and upholding the standards.

The 1990s is also the decade of the COSO report and COBIT and a heightened awareness of the importance of controls. This is ironic in that with fewer managers there are often fewer rules, and organizations rely more on individual integrity and best efforts. On the technology side, many more organizations are now willing to take risks that would have been unfathomable a decade ago. Companies are feeling compelled to adopt unproven technologies just to maintain their competitive advantage. One could easily draw the conclusion that with more emphasis on controls and companies taking greater risks, this would also have been a time when the size of audit departments would have swollen. But the

contrary is the case. Corporate America has shrunken in almost every department including internal audit. Ironically audit departments have been required to cover more bases and have more far reaching responsibilities but with fewer resources.

The end result as we approach the millennium is a chasm that has developed in the audit profession with traditionalists on one side and so-called progressives on the other. Many audit departments feel it is important to maintain their independent roles and be observers of the risk-taking that is prevalent. Other audit groups feel it is important to adjust to the changes happening throughout the rest of the organization, and they have begun playing a far different role in their organizations. Instead of emphasizing the importance of auditor independence, many departments have striven to shed the traditional auditor mantle and become internal consultants. And sometimes within one company the internal audit group has literally formed two teams with one providing regulatory compliance style reviews and the other providing consulting services.

The new internal audit/consulting services departments differ from traditional audit groups in many ways. The biggest single distinction is a new definition of results. In the new approach the focus of results is not on producing a report for senior management that outlines potential problems and exposures. In this kind of environment an audit department is not judged to be successful by the number or size of reports issued. Rather the new definition is focused on what impact the audit group had on the overall company's bottom line success. In other words, how many recommendations were enacted and what was the quality of these recommendations? An audit finding that doesn't result in a change or improvement is viewed as an expensive waste of company resources.

In this new approach to audit consulting there may not be any written reports at all. If the auditor and his customer (usually a business unit) determine to just issue memos to each other, that saves time

and gets to the results quicker. If they determine that a report would be helpful, the document is designed for the department that requested the help not for senior management. The report can either be written by the auditor, a member of the business unit, or it can be a joint effort. And instead of only describing the potential problems and exposures, the report also describes specific solutions. One thing is sure – the report is not designed for senior management's use. In fact the only time senior management sees such a report is if a problem surfaces that absolutely cannot be solved by the team. And no one on this team (the auditor or the business unit members) wants anything escalated to senior management, so it is rare for problems to not get solved at a lower level.

Audits themselves are often not conducted only by people from the internal audit department. A team assigned to perform an audit may in fact be comprised of one formally trained auditor and several people from a range of other departments in the organization. The concept is that brainstorming done just by auditors is too limited. A person from the Human Resources Department or the Marketing Department may come up with ideas very foreign to the auditor who is a controls expert, and these fresh ideas may be just what the organization needs most. Conducting an audit with this "consulting" emphasis often times invites the auditor to step way over the line of independence. The auditor is after all part of the team that brings about the solution.

Sometimes the auditor's role on the team is that of a controls expert. Other times he or she becomes a facilitator helping the people in the business unit being audited identify potential problems that they may be too close to notice. Control Self Assessment (CSA) is one very valuable tool for auditors beginning to learn a more structured approach to the facilitation role. In other situations the auditor may play the part of a teacher or trainer educating members of the business unit to understand how to implement

controls. One fundamental rule in many of the organizations that support this consulting role for the audit department is that every person is responsible for controls and for improving the company. Maintaining a controlled environment is not just the responsibility of the senior management team; nor is it just the audit department's problem. These auditor/consultants are there to help people throughout the organization better understand the need for controls and then teach them how to successfully implement controls that really work.

The industry sectors that seem to be more quickly adopting the notion of auditors moving towards this consulting role are surprising. I could have predicted that manufacturing, retail, distribution, and communications organizations could have easily seen the value in such an alignment. I have frankly been surprised though at the number of government agencies and not-for-profit organizations also investigating such a major change in the auditor's role.

Will the audit profession be hurt in the long run by such overt non-adherence to the idea of auditors needing to maintain their independence? Many people think it is debatable that auditors ever considered themselves truly independent in the first place. Their argument runs that if an auditor is returning to do an annual review of a business unit, how can he or she erase from memory the previous year's audit and its results? How can an auditor who has reviewed fifty medical clinics go into a new one without a bias as to what will likely be found? Is this bias then not already a lack of independence? And, in this day and age when so many practitioners view internal audit as a stepping stone to a career in operations or finance or MIS, how can auditors truly be independent when they know full well that they are creating impressions in the minds of their potential future bosses?

For many members of senior management it is far more important to focus on what kinds of results audit is bringing to a company, not on whether or not the auditors were independent as they

brought about the results. Many audit professionals continue to work with a very different score card than senior management uses when evaluating how effective the internal audit department is – I am sure this is one of the reasons outsourcing of internal audit has become so popular. Many management teams want measurable, quantifiable results. Many auditors feel it would be compromising their professional ethics to play any role that asks them to not maintain their independence. Having the auditor be an active participant making the changes and improvements makes a lot more sense to many members of senior management.

What will the future hold? Certainly a decade from now many audit groups will continue to operate as they have in the past. But I expect many more auditors in the future will be working hands-on as parts of teams directly bringing about change. Many auditors will enjoy having a more direct impact on bringing about improvements, and many management teams will invite the participation and enjoy seeing the quick results of this approach. But I also think the shift in this direction will not be without its controversies. Every time the newspapers announce a corporate error, the fingers point to the audit department and the traditionalists ask "Where were the auditors when this happened? Were they so distracted doing "consulting" work that they forgot their number one responsibility?"

We will see many variations on these themes as time passes. Change is afoot and companies are experimenting with what works best. A growing trend is developing in some larger organizations where a business unit independently hires its own auditor/ consultant. If the Internal Audit Department can't or won't make auditors available to help with such special projects as developing better controls, the managers hire their own! Temporarily this solution solves the independence issue.

It is bound to be a very interesting future for the audit profession.

CAREER ADVICE

Developing your Career

Sandy Geffner is a former IS Audit Director and Manager who is currently President of Valacon, Inc., a professional search firm specializing in IS Audit. He has passed the CISA and CPA examinations, and his article, "Introduction to Auditing Microcomputers", was published by Auerbach.

Sandy is very active in ISACA, serving on the Board of the Los Angeles Chapter and as Co-Chair of the 1995 International Conference.

By Sandy Geffner

In these changing times, IS Auditors are frequently concerned about what they can do to enhance their career potential. There are two natural areas of focus – advancement within IS Audit, and movement into other areas. Furthermore, there are two areas of "growth" to be considered. The first is a voluntary lateral change of position or a promotion. The second is a forced change where an Auditor will find him/herself faced with unanticipated circumstances. This often occurs due to the changing nature of the business environment (downsizing, re-engineering, mergers, outsourcing, etc.). This article focuses on achieving a position or promotion in IS Audit.

Growth within IS Audit is a combination of opportunity and having the right skills or abilities to take advantage of the opportunity. As a former IS Audit Director and Manager who is now a recruiter, I am in constant contact with hiring authorities. The key criteria they consider are:

Technical knowledge. Everyone has a different meaning for Technical. It can vary from operating systems knowledge to specific platform knowledge to IS experience to emerging technologies awareness to a solid understanding of IS and application controls.

Audit knowledge. Generalized, solid audit skills.

Communication skills, attitude, personality. A minimum level of Technical and/or Audit knowledge is typically required, but what really counts once the acceptable level is attained is the ability to work with people and clearly present thoughts and recommendations, both verbally and in writing. A positive and enthusiastic attitude is always noticed. Flexibility and the ability to learn are musts in these transitioning times. The above characteristics are usually the key elements in determining who is offered a position or a promotion.

Business orientation. Awareness of business issues and trends. Concerned with the bottom line and the effect on the business. Solution oriented.

Educational background. Non-degreed hirings are increasingly rare. Financial and technical majors are generally preferred but not usually mandatory. Advanced degrees are usually a plus.

Certifications. Usually a CPA or a CISA. In recent years, the CISA has achieved increasing recognition for IS Auditors. A number of companies have begun to require it either to be hired, or in order to be promoted to the Senior level. In some cases, a company will accept a CISA in lieu of a degree.

As an IS Auditor, what does this mean for you? Typically, it is too late to change your existing degree (although you can always add an advanced degree), but most of the other key points can be addressed throughout your career:

Take current/emerging technologies and audit courses/seminars wherever possible.
Take advantage of "on-the-job" training as much as possible.

Constantly work on presentation skills. Consider joining Toastmasters or other groups that offer communications training.

Maintain or become a positive personality. If you can do this in these trying times, you will stand out. Help others, become active in ISACA, etc.

Widen your focus. Do you know what your company's key products are? Key markets? Future plans and obstacles? Is your Audit Department meeting your company's needs? Study your company and industry and the general business environment.

Acquire your CISA certification. This demonstrates a commitment to your professional growth as well as establishing that you possess at least a certain level of knowledge.

Be alert. Not all opportunities are easily recognizable. Sometimes, opportunities are what you make of them.

CALENDAR OF UPCOMING EVENTS

Date	Event	Place	Reference
January 17-21, 1999	8th Annual RSA Data Security Conference and Expo	San Jose, California	www.rsa.com/conf99
January 19, 1999	ISACA Luncheon Presentation and Afternoon Seminar	San Francisco, California	www.sfisaca.org
February 16, 1999	ISACA Luncheon Presentation and Afternoon Seminar	San Francisco, California	www.sfisaca.org
March 15-17, 1999	'99 Annual ISSA Conference	Orlando, Florida	www.issa-intl.org
March 16, 1999	ISACA Luncheon Presentation and Afternoon Seminar	San Francisco, California	www.sfisaca.org
March 21-24, 1999	10th Annual Corporate Contingency Planning Seminar and Exhibition	San Diego, California	www.drj.com
March 28-31, 1999	Euro CACS '99	Zurich, Switzerland	www.isaca.org/conf1.htm
April 20, 1999	ISACA Luncheon Presentation and Afternoon Seminar	San Francisco, California	www.sfisaca.org
April 21-23, 1999	1999 CPM Conference, Embracing Continuity and All That Jazz!	New Orleans	www.contingencyplanexpo.com
May 18, 1999	ISACA Luncheon Presentation and Afternoon Seminar	San Francisco, California	www.sfisaca.org
May 2-6, 1999	North America CACS '99	Orlando, Florida	www.isaca.org/conf1.htm
May 4-7, 1999	Oceania CACS '99	Melbourne, Australia	www.isaca.org/conf1.htm
June 12, 1999	CISA Examination		www.sfisaca.org/cisa/index.htm
June 15, 1999	ISACA Luncheon Presentation and Afternoon Seminar	San Francisco, California	www.sfisaca.org
July 11-14, 1999	The International Conference	Denver, Colorado	www.isaca.org/conf1.htm
September, 1999	Asia-Pacific CACS '99	Taipei, Taiwan	www.isaca.org/conf1.htm
October 10-13, 1999	Latin America CACS '99	Montevideo, Uruguay	www.isaca.org/conf1.htm

IFAC Survey Finds Most Countries Not Ready For Y2K

Source: American Institute of Certified Public Accountants

According to a study by the International Federation of Accountants, only one in seven countries is addressing the Year 2000 Issue effectively. While awareness of the issue is nearly universal, only 14% of its member bodies responding to the survey indicated their countries' public and private sectors were well prepared to deal with Y2K. Responses were received by 56 of IFAC's 140 member bodies, representing 50 countries.

IFAC says the results indicate that while awareness and concern are strong – 98% in the public sector and 96% in the private-the vast majority of survey participants considered both sectors to be only "somewhat prepared." What's more, 13% of respondents, mostly from developing nations, indicated their countries' public sectors were "not at all prepared" to address the computer challenge. Several respondents who indicated problems in their countries with Y2K readiness cited lack of economic resources as a reason; others indicated that businesses and government agencies had grossly underestimated the scope of the problem.

On a separate but related issue, IFAC has released an International Auditing Practice Statement, The Implications for Management and Auditors of the Year 2000 Issue. The statement clarifies the respective responsibilities of management and the auditor, suggests questions an auditor may ask management as part of the auditor's initial assessment of the risk of material misstatements occurring, provides assistance in the application of ISAs, and outlines circumstances where an auditor may wish to issue a modified report. The practice statement may be obtained without charge from the IFAC Web site at www.ifac.org. Copies also are available from the IFAC Secretariat at 212/286-9344.

WORKFLOW MAKES LIFE EASIER FOR IT AUDITORS

By Ken Michaels, OSRM,
PricewaterhouseCoopers LLP

Today's workflow systems allow IT auditors to review a process efficiently and effectively. Armed with workflow process information, IT auditors can identify key controls, evaluate operating efficiency and reduce the cost of their audits.

Workflow Reference

An internet search using 'workflow' or 'process automation' will yield a substantial number of vendors and institutions. Some informational sites are noted below.

http://www.waria.com/
The Workflow And Reengineering International Association (WARIA) is a non-profit organization that includes product evaluations, networking between users and vendors, education and training.

http://laser.cs.umass.edu/
workflow/compilation.htm
A compilation of papers on current research in workflow and process automation.

www.pcweek.com
Search for 'workflow' articles at this site. A search will result in several articles regarding product reviews and industry developments.

Workflow is the automation of a process to enable automatic routing, approval gathering and data collection.

Today's workflow systems are Web-based, scalable and comparatively simple to implement. Workflow systems can automate any repetitive process that requires routing or authorization. Almost any process that can be broken down into defined steps and routing rules can be automated with a workflow system.

For example, a process found in many organizations is the request for business travel. The travel request process requires three key people: the employee, the employee's manager and the travel desk. A travel request can include the following steps:

- Employee completion of the request
- Manager approval or change
- Routing of the request to the travel desk for booking with third party
- Confirmation of the booked travel request with the employee
- Employee acceptance or change
- Confirmation of booking by travel desk with third party

Once the process is documented in the workflow application, it is exported to the workflow system. The workflow system automatically routes the request to the appropriate individuals. The workflow system records information on the process, such as travel data, completion times and authorizations.

Key controls are strengthened in a workflow environment by building them directly into the process.

Implementation of a workflow solution requires process and resource definitions. The process definition is based on business rules approved by management. Once automated, a current, accurate and complete understanding of the process is immediately available to the IT auditor.

Implementation of a workflow solution also requires explicit resource definitions. The resource repository guides the flow of data in a workflow process. In the travel request example, parameters established in the resource repository determine the authorization required (i.e. employee's manager). The request is then forwarded to the appropriate department, in this example, the travel desk. By reviewing the process flowchart and the resource repository, an understanding of the resource rules is easily obtained by the IT auditor. Controls are consistently enforced because they are built into the process.

Workflow data can be used by the IT auditor to assess process efficiency and provide value added recommendations to management.

Workflow systems track each activity (i.e. travel request) as a separate instance. Each employee's request for travel is independent of the next. The workflow engine collects data on each instance and retains the history for a specified period. The workflow tool records information such as system activity, open instances and completion times. By analyzing the data from completed instances, IT auditors can evaluate bottlenecks in the workflow. The IT auditor can directly impact the organization by providing recommendations to improve performance and gain efficiencies.

Audits of workflow processes can cost less than manual processes because tests of controls and sample sizes are reduced. Since workflow systems require strong process descriptions and resource rules, the control environment is inherently strengthened. In reviewing a workflow process, high reliance can be placed on key controls because they are built into the process. Sample sizes in substantive testing can also be reduced due to the strong controls. The cost is low for testing of sampled items because the history for each instance is centralized, accessible and includes all of the necessary information.

Implementing a workflow solution benefits the company in many areas. With the additional benefits of reduced audit and processing costs, gains in efficiency and increased impact of IT audit on the organization, it is easy to see why workflow systems are a hot trend in today's business environment.

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Sandy Geffner: 11 years experience as an IS Audit Director/Manager including Big 5 Consulting experience; passed the CPA and CISA exams; B.S. in Math and MBA; active board member of ISACA-LA and 1995 International Conference Co-Chair; speaker for ISACA, IIA, AITP and ISSA.

Stuart Fried: Over 15 years in search and placement; prior experience as internal auditor and corporate accountant; taught university accounting; B.S. in Accounting and Marketing; M.A. in Clinical Psychology; Membership Co-Chair of ISACA-LA and 1995 International Conference Co-Chair.

Helen Kang: CPA; experience with Arthur Andersen, LLP and Mark Dauberman CPA Review Course; B.S. in Accounting and Communications; active board member of IIA-SFV.

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- IS Audit Sr Manager & Senior with High-tech company, $70k - $120k + Bonus
- IS Audit Manager with Investment Management firm, $75k - $90k + Bonus
- Start-up IS Audit Opportunity with High-tech company, $80k - $90k + Bonus + Stock Options
- IS Audit Sr Manager with Entertainment & Media company, $90s + Bonus
- Start-up IS Audit Manager with Service and Distribution corporation, $80k - $100k + Bonus
- IS Audit Manager with Insurance company, $70k - $75k + Bonus + Profit-Sharing
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