

HOW TO USE TECHNOLOGY IN A CPA PRACTICE

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*Technology motto: If you know where you are
going, you are going the wrong way.*

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November 21, 2002

Copy of slides available at

<http://www.cpematerials.com>

later this week



Today's Topics

- ◆ Equipment for the Office
- ◆ Methods of Connecting Your Office
- ◆ Electronic Filing—4/30 Filing Date
- ◆ Technology and Professional Standards Update
 - ◆ SSARS 8
 - ◆ Independence
 - ◆ SAS 94
- ◆ Internet Research and the Small Firm
- ◆ The Paperless Office



The Pros and Cons of Technologies

- ◆ Out of pocket costs decrease over time, so early adopters pay more
- ◆ Lost benefits of technology are never recovered if you adopt late
- ◆ Some technologies work great on paper, but not so well (or as expected in practice)
- ◆ Being the last one to adopt a technology puts you at a competitive disadvantage

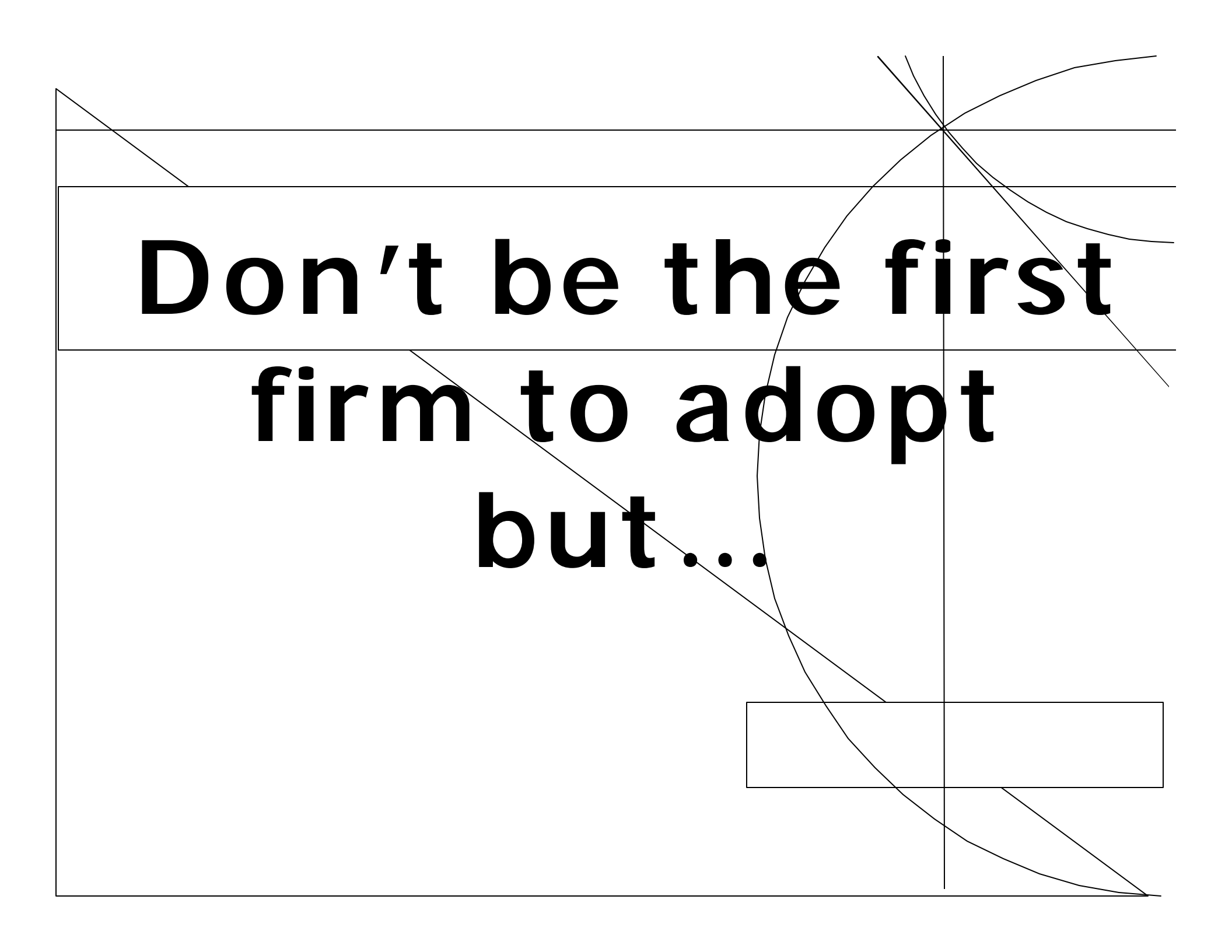
Do Not Delay In Properly Equipping Your Office

Benefits are not always easily identifiable.

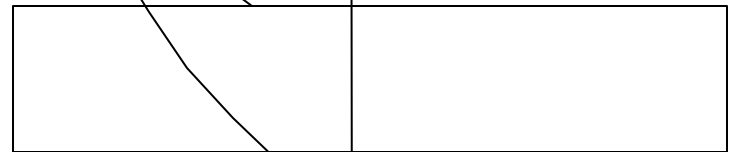
Costs are frequently over-stated

Costs consistently decrease with time

Don't let obsolescence delay your investment



**Don't be the first
firm to adopt
but...**



**...be sure not to be
the last firm to
adopt!**

What Are The Office Basics Too Many Offices Ignore?

- ◆ Using peer-to-peer networking when a centralized system is better
- ◆ Making employees run to the printer for exercise
- ◆ Stretching the use of equipment well past its prime
- ◆ Having outdated operating systems
 - ◆ CCH ProSystemFX dropping support for Windows 95 beginning next year
 - ◆ Microsoft Office

To Network Or Not To Network

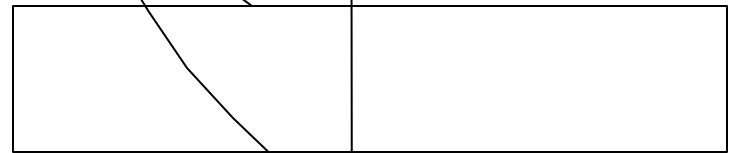
- ◆ If there is more than one computer in your office, hook 'em up!!
- ◆ If there are more than two computers in your office, you probably should use a dedicated server!!
- ◆ Share hard drives, share printers, share CD-ROM drives - Remember, everything you need to know about networking you learned in kindergarten.

How Can You Internet If You Don't Network?

- ◆ Networking can let you share Internet hookups
- ◆ Don't forget security when you get on the Internet - Networking can help, and hinder.
 - ◆ Special problems of high speed persistent connections
 - ◆ Issues of using "standard" software—will be exposed to the "standard" viruses
 - ◆ Keep products updated—most recent viruses and worms attacked security flaws that had already been patched

High Speed Persistent Connections

- ◆ DSL
- ◆ Cable Modem
- ◆ “Traditional” phone lines
 - ◆ Frame relay
 - ◆ T-1/Fractional T-1
 - ◆ ISDN (perhaps a technology whose time never came)
- ◆ Satellite



Security and the Persistent Connection

- ◆ You will be scanned and tested
- ◆ Consider need for firewall both for office *and* for any machines used at home
 - ◆ Home firewalls include Zone Alarm and Black Ice Defender
 - ◆ Test site: Gibson Research Shields Up found at <http://www.grc.com>
- ◆ Virus & Worm Protection
 - ◆ Keep virus software updated *but*
 - ◆ Realize that most outbreaks occur before software is updated

What Kind Of Equipment For A Server

- ◆ Plenty of ram(512 meg or better) and disk space (20 gigs or better)
- ◆ Tape backup - as large as your hard disk
- ◆ Expandable - dual processor motherboard
- ◆ As much redundancy as you can afford
 - ◆ RAID
 - ◆ Power supplies
 - ◆ CPU's
- ◆ Remember—a centralized server gives you a centralized point of failure

Wireless Networking

- ◆ Growth of 802.11b Equipment (Wi-Fi)
- ◆ Advantages
 - ◆ Free users from wires
 - ◆ Simplifies the use of laptops
 - ◆ Cost has dropped significantly
- ◆ Disadvantages
 - ◆ Security (especially defaults for equipment)
 - ◆ Interference with other signals (cordless phones) and limits on signal
 - ◆ Top speed 11 Mbps unless use more expensive 802.11a equipment—and actual throughput much less than that

Wireless Networking

◆ Equipment

- ◆ Wireless access point for wired network (about \$110)
- ◆ Wireless cards for machines
 - ◆ PC Card for laptops
 - ◆ USB based options for other machines
- ◆ Combination routers/access points being marketed for home market
- ◆ Note that these home networks may have security impact on your corporate network if employee has remote access

Wireless Networking

- ◆ Security issues

- ◆ Watch out for defaults that give away your equipment and likely methods to access
- ◆ Encryption on transmission
- ◆ Limit MAC addresses that can access network
- ◆ Consider not having SSID broadcast
- ◆ Some equipment defaults to zero security
 - ◆ Broadcasts manufacturer name as default SSID
 - ◆ Sets up for no encryption
 - ◆ Allows any MAC address to enter the network

Wireless Networking

◆ Future Developments and Other Options

◆ 802.11a

- ◆ Higher speed throughput
- ◆ Uses different radio frequency
- ◆ Less range than 802.11b
- ◆ More expensive than 802.11b

◆ 802.1x security

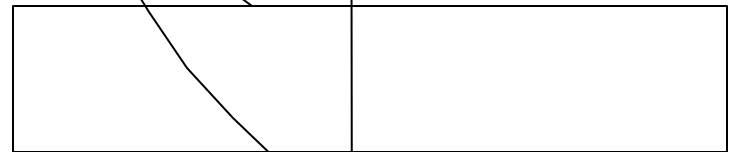
- ◆ Standard has been issued
- ◆ However, much equipment does not support

End User Equipment

- ◆ If the user travels, consider laptop as a desktop replacement
 - ◆ No transfers between machines
 - ◆ However, be sure to buy the power you need as laptops are generally expensive to upgrade
- ◆ Always buy as much power as you can get (except for the first 4-5 months after Intel releases a new chip)
- ◆ High power workstations with monitors now available for under \$1,500

Software Licensing

- ◆ What does Microsoft (and other vendors) know about you?
- ◆ Increasing online registrations and upgrades will become increasingly difficult to be out of compliance with licenses
- ◆ Be aware of “spyware” in general—does your firewall hardware/software limit access of programs to net without your consent?

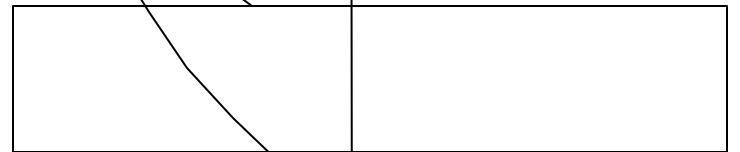


Remote Access - Do You Need It?

- ◆ If you have traveling staff
- ◆ If you want to work from home (and who doesn't!!)
- ◆ If you want to simplify software management
- ◆ If you want to stop upgrading desktop equipment!!
- ◆ Watch for potential impact of ASP
 - ◆ Still has not had predicted impact—but tax vendors continue to work on it
 - ◆ Rent rather than buy applications
 - ◆ Back to the future—return of the timesharing operation

Places To Go To Keep Current And Get More Information

- ◆ <http://www.cnet.com>
- ◆ <http://www.zdnet.com>
- ◆ <http://www.infoworld.com>
- ◆ <http://www.microsoft.com>



Electronic Filing

- ◆ Still not quite there for most CPAs
 - ◆ All forms/all schedules
 - ◆ Plain paper attachments
 - ◆ Real electronic filing (no paper/signature)
- ◆ Need to prepare for it in any event
 - ◆ IRS is moving on the issues above
 - ◆ By the time your clients ask for it, it may be too late to learn
 - ◆ Suggest you ready yourself today

Electronic Filing

- ◆ Proposed filing deadline extension
 - ◆ Bush administration has proposed granting e-filed returns a due date of April 30 and appears likely to attach to a bill next year
 - ◆ Lots of unresolved problems
 - ◆ IRS is planning for this eventuality
- ◆ Need to get ready
 - ◆ Information for IRS & Virginia is in your materials
 - ◆ Apply now—IRS suggests applying before December 1

An abstract geometric design consisting of several thin black lines and curves. A vertical line runs through the right side of the page. A horizontal line runs across the top. A diagonal line descends from the top left towards the bottom right. A large, smooth curve starts near the top right and sweeps down towards the bottom right. Another curve starts near the top right and sweeps down towards the bottom left. A small rectangle is positioned in the lower right quadrant. The overall composition is minimalist and modern.

Professional Standards and Technology

Recent changes to professional accounting standards that are impacted by technology

The Accidental Compilation and Technology

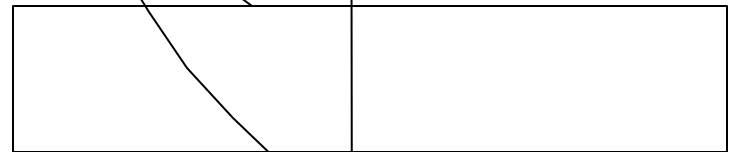
- ◆ Compilations are not driven by being engaged
- ◆ Have to perform a compilation if you submit a financial statement
- ◆ Definition of what constitutes a submission has changed

The Old Rule (Prior to SSARS 8)

- ◆ Submission occurred if you
 - ◆ Generated a financial statement *or*
 - ◆ Made material modifications to a financial statement
- ◆ Compilation and Review Risk Alert 1997/1998
 - ◆ Followed failed exposure draft on assembly of a financial statement
 - ◆ Had a list of potential submissions
 - ◆ Defined submission broadly

Prior to SSARS 8 You Had to Compile if...

- ◆ You made entries on a client's *Quickbooks* database
- ◆ You made entries on an accountant's copy of the *QuickBooks* database
- ◆ The issue revolved around the fact that the client could issue a command and print a financial statement



SSARS 8 (Technically SSARS 1 as amended...)

- ◆ Removed material modification requirement
- ◆ Rule now is you have to
 - ◆ *Present* to the client or third parties
 - ◆ Financial statements the CPA has *prepared*
- ◆ Most commentators believe that eliminates the issue of making modifications to the client's database
- ◆ *However* note the asterisk in Compilation/Review Alert

New SSARS Exposure Draft

- ◆ Published on August 1, 2002
- ◆ Covers a number of topics
- ◆ Association with statement when not compiling may be of interest from a technology and the standards standpoint
- ◆ Artifact of SSARS 8 and the new definition of submission?

Independence and Technology

- ◆ Ethics Interpretation 101-3
- ◆ GAO New Independence Standards
- ◆ Sarbanes-Oxley changes
- ◆ Technology gets involved because CPAs assisting their clients with technology problems involving their accounting systems may lose their independence if not careful
- ◆ The above changes all follow a similar model of seeing the CPA as losing his/her independence

Ethics Interpretation 101-3

- ◆ Updated Ethics Interpretation 101-3
- ◆ Officially—told not a change
- ◆ Practically—most practitioners feel this is a *major* change to how small firms practice
- ◆ Technology gets involved because CPAs assisting their clients with technology problems involving their accounting systems may lose their independence if not careful

Ethics Interpretation 101-3

- ◆ Generally expounds a “consulting” theory of independence (note that GAO and Sarbanes-Oxley go beyond this model)
- ◆ You are independent if and only if you merely advise the client to do something
- ◆ You are not independent if you actually execute an action
 - ◆ See list on page III-8
 - ◆ Note more detailed list in full interpretation
 - ◆ Need specific client consent for changes made to their accounting database

So what if I'm not independent?

- ◆ Have to disclose in a compilation
- ◆ More troublesome—cannot perform a review
 - ◆ A CPA that is not independent is prohibited from conducting a review
 - ◆ Is a problem in the peer review arena
 - ◆ Also could be a real problem in litigation
- ◆ Future technologies add problems
 - ◆ Intuit offering direct access from CPAs to client data in Quickbooks
 - ◆ ASP models also tout this feature

GAO Yellow Book Standards

- ◆ New Interpretation of Standards

Amendment No. 3, Released January 25, 2002

- ◆ Additional guidance issued in July—technology related portions in the appendix of materials
- ◆ Generally prohibits a CPA from performing certain services and remaining independent
- ◆ Remember these standards are in *addition* to the standards generally applicable under Virginia law (generally the AICPA Code of Ethics)
- ◆ New effective date—periods beginning after January 1, 2003

GAO Standards

- ◆ Specific Issues in Non-Technology Sections

- ◆ Management must take responsibility for work that is allowed (see questions 46 and following)
- ◆ Posting to the records is absolutely off limits, no matter if it is merely clerical (see question 50)
- ◆ Issues with assistance to clients and technology changes to address new accounting principles (Question 62)

GAO Standards

◆ Technology Section

- ◆ OK to set up chart of accounts and statement format for purchased commercial software (Question 68)
- ◆ Can do assistance and training on software that is *wholly* non-accounting related, though watch for indirect ties (Question 69)
- ◆ Can't install off the shelf software (Question 70)
- ◆ Auditing effectiveness of program is a potential problem (Question 71)

GAO Standards

◆ Technology Standards (Continued)

- ◆ Training for off the shelf package, independent of installation, doesn't impair independence (Question 72)
- ◆ Cannot sell firm developed software to organization and maintain independence (Question 73)
- ◆ Can provide *advice* about a particular software package (Question 74)
- ◆ Be careful of non-CPA specialists (Question 77)

Sarbanes-Oxley Act

- ◆ Similar to GAO, has a prohibition on provision of certain technology services to maintain independence
- ◆ Act indicates not meant to be used as a blueprint for nonpublic companies (See Act Section 209)
- ◆ However, other forces also seem to be moving towards this type of interpretation
- ◆ So get ready to conform to Sarbanes-Oxley

Sarbanes-Oxley Act Prohibited Services

- ◆ Bookkeeping or other services related to accounting records
- ◆ IS system design and implementation
- ◆ Appraisal or valuation services, fairness opinions or contribution-in-kind reports
- ◆ Actuarial services
- ◆ Internal audit outsourcing services
- ◆ Management functions or human resources
- ◆ Broker or deal, investment adviser or investment banking services
- ◆ Legal services and expert services unrelated to the audit

SAS 94

- ◆ Modified auditor's required understanding of internal control (AU ¶319)
- ◆ Officially, does not eliminate the possibility for auditor to determine internal controls should not be tested and full reliance will be placed on substantive tests
- ◆ However, auditor must determine *if* substantive tests can accomplish their objective due to lack of controls in the IT system (AU ¶319.04)
- ◆ Is aimed at requiring auditor to consider if there is implicit reliance on IT control systems

SAS 94

- ◆ Must obtain understanding of internal control in all audits (nothing new)
- ◆ Must specifically understand how IT affects controls relevant to audit (¶319.02)
- ◆ Definition of IT (footnote to ¶319.02)
 - ◆ Automated means of originating, processing, storing and communicating information
 - ◆ Includes recording devices, communication systems, computer systems (hardware, software & data) and other electronic devices

SAS 94

◆ Internal Control Benefits of IT Systems (AU

¶319.18)

- ◆ Consistently apply rules and perform complex calculations
- ◆ Timeliness, availability and accuracy
- ◆ Facilitate additional analysis of information
- ◆ Enhance ability to monitor activities
- ◆ Reduce risk controls will be circumvented
- ◆ Enhance segregation of duties

SAS 94

◆ Internal Control Risks of IT Systems (AU

¶319.19)

- ◆ Computer is always right mentality—relying on programs that are not working properly
- ◆ Unauthorized access to data poses risk to data
- ◆ Unauthorized changes in master files
- ◆ Unauthorized changes to software
- ◆ Failure to make necessary program changes
- ◆ Inappropriate manual overrides
- ◆ Potential loss of data

SAS 94

- ◆ Notes that a single flaw can compromise the entire system (AU ¶319.20)
- ◆ Consider the need for bringing in specialists to handle the IT control issues (AU ¶319.34)
 - ◆ Remember the overall requirement of adequate technical competence
 - ◆ Clear now must have adequate technical skills to understand the IT control systems
- ◆ Not allowed to assume because entity is small, IT can be ignored (AU ¶319.57)

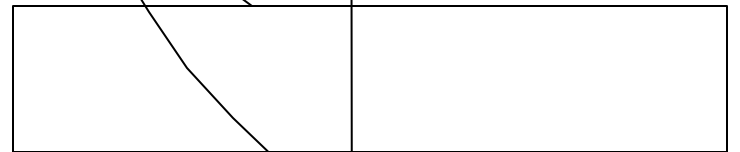
SAS 94

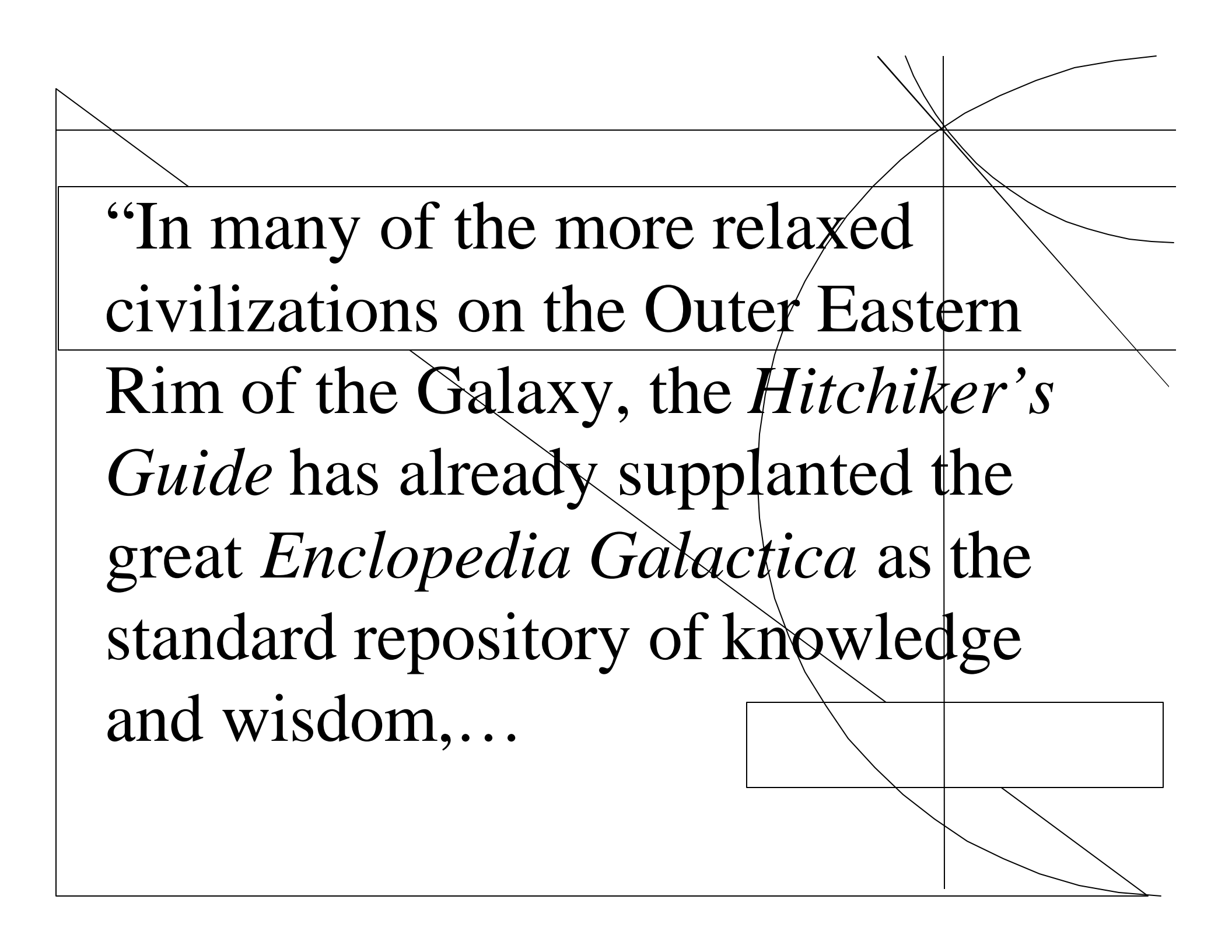
- ◆ Effective date—periods beginning on or after June 1, 2001
- ◆ Practical standpoint, for for May 31, 2002 fiscal years and later
- ◆ Earlier application is permissible

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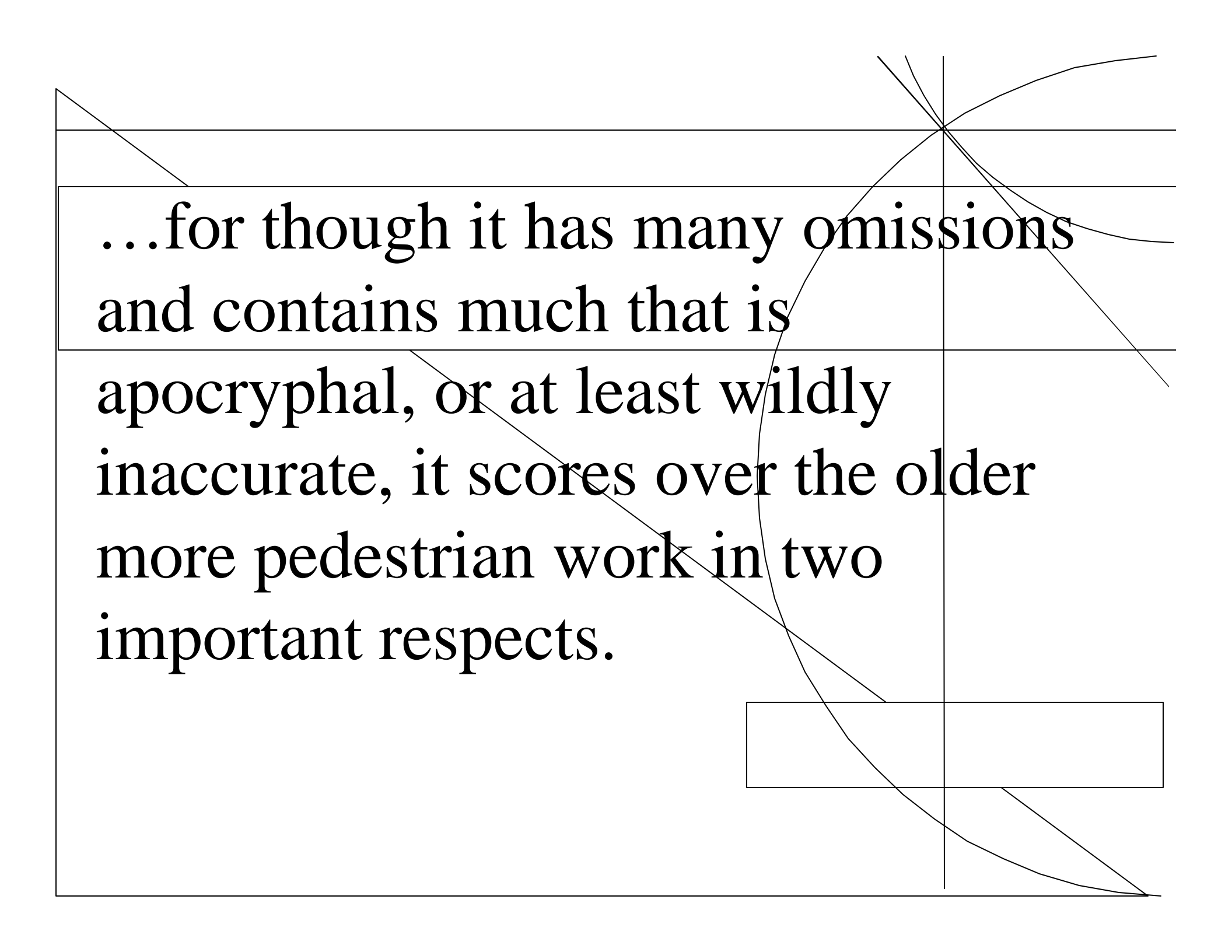
Tax Research and the Internet

Finding information via the net...

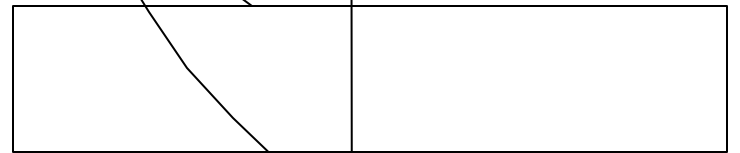




“In many of the more relaxed civilizations on the Outer Eastern Rim of the Galaxy, the *Hitchiker’s Guide* has already supplanted the great *Enclopedia Galactica* as the standard repository of knowledge and wisdom,...



...for though it has many omissions
and contains much that is
apocryphal, or at least wildly
inaccurate, it scores over the older
more pedestrian work in two
important respects.



First, it is slightly cheaper;

and second, it has the words **DON'T PANIC** inscribed in large friendly letters on its cover.”

Douglas Adams
*The Hitchhiker's Guide to the
Galaxy*

Internet vs. CDs and Paper

◆ Advantages

- ◆ Free Resources
- ◆ Accessible from anywhere with connection
- ◆ Current information available as soon as it happens

◆ Disadvantages

- ◆ Speed of access
- ◆ Free resources don't fill all needs
- ◆ Outdated and unreliable information
- ◆ Free sites disappear without warning

Free Sites

- ◆ Taxsites *<http://www.taxsites.com>*
- ◆ BenefitsLink *<http://www.benefitslink.com>*
- ◆ SmartPros *<http://accounting.smartpros.com>*
- ◆ Tax Court *<http://www.taxcourt.gov>*
- ◆ IRS *<http://www.irs.gov>*
- ◆ FindLaw *<http://www.findlaw.com>*
- ◆ Barry Rubin's State Links
<http://www.rubincpa.com/tax/statelink.html>
- ◆ Alt.accounting & Misc.taxes.moderated
(newsgroups)
 - ◆ <http://groups.google.com>

Subscription sites - Editorial Services

- ◆ BNA Portfolios

<http://www.bna.com>

- ◆ CCH Standard Federal Tax Reporter

<http://tax.cchgroup.com>

- ◆ RIA Federal Tax Coordinator

<http://checkpoint.riag.com>

- ◆ Using the Services

- ◆ Learn how to use complex searches

- ◆ Make use of old techniques

- ◆ Flipping pages

- ◆ Using the index

Subscription sites - News Services

- ◆ BNA Daily Tax Report and TaxCore
<http://www.bna.com>
- ◆ CCH Tax News Direct
<http://tax.cchgroup.com>
- ◆ Tax Analysts TaxBase
<http://taxbase.tax.org>
- ◆ Gives daily update of developments in tax law,
giving you an advantage of appearing up to
date on changes

Subscription Services - Source documents

- ◆ CCH US Master Tax Guide Plus
<http://tax.cchgroup.com>
- ◆ Tax Analysts Awareness Libraries
<http://taxbase.tax.org>
- ◆ Competes with source document CDs from Kleinrock and Tax Analysts.

Pay per use services

- ◆ Lexis-Nexis by Credit Card
<http://www.lexis.com>
- ◆ WestDoc
<http://www.westdoc.com>
- ◆ Good for those things you don't subscribe to
but find you need now

Making Proper Use of Web Sources

- ◆ Rate your sources, just like in print
- ◆ Learn to use your tools
 - ◆ Bookmarks/Favorite Places
 - ◆ Electronic mail
 - ◆ Usenet news program
- ◆ Arizona Society of CPAs Presentation
 - ◆ Manual
 - ◆ Website links
 - ◆ <http://www.cpematerials.com>

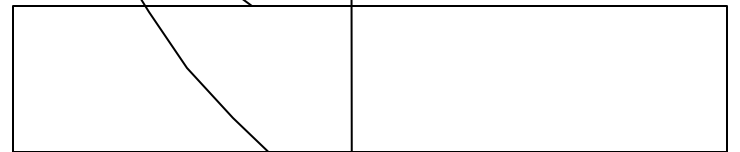
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Going Paperless...

And we really mean it this time (well, maybe)

Ultimate System

- ◆ No professional would ever need to leave his desk to find a document
 - ◆ All documents online (no offline archive)
 - ◆ All documents indexed
- ◆ Accessible from anywhere
- ◆ Accessible (with appropriate limits) by client without CPA involvement

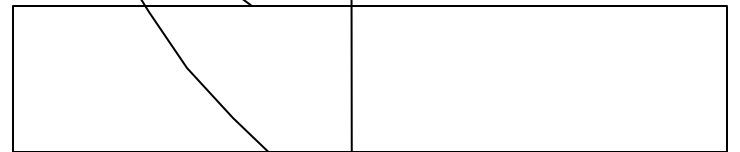


Practical Issues of Going Paperless

- ◆ Equipment you will need to purchase
 - ◆ Scanners - production, desktop and portable
 - ◆ Storage - online vs. archive
- ◆ Software needed to go paperless
- ◆ What to do with old records?
 - ◆ Scan everything in (labor intensive)
 - ◆ Start now and ignore the rest
 - ◆ Set date in the past
- ◆ See discussion in Appendix B

Legal and Tax Issues of Going Paperless

- ◆ IRS Imposed Requirements
 - ◆ Revenue Procedure 97-22
 - ◆ Revenue Procedure 98-25
- ◆ State law issues (including all agencies)
- ◆ Will electronic evidence be held to a higher standard?



IRS Requirements

- ◆ Reasonable controls
 - ◆ Integrity, accuracy and reliability
 - ◆ Prevent unauthorized creation, addition to, alteration of, deletion of or deterioration of records
- ◆ Quality assurance system
- ◆ Retrieval system with indexing
- ◆ Ability to produce legible hardcopies and be readable on a terminal
- ◆ Must tie to taxpayer's books and records

IRS Requirements (Continued)

- ◆ Must have and make available to IRS descriptions of
 - ◆ Electronic storage system & procedures
 - ◆ Indexing system
- ◆ During an exam, taxpayer must
 - ◆ Retrieve and reproduce records
 - ◆ Provide IRS with resources to locate, retrieve, read and reproduce records
- ◆ No agreements limiting IRS access to system
- ◆ Must maintain hardware necessary to read records

The End



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