

The Impact of Information Technology on Today's Accountant

June 18, 2010

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Course Overview



- Advances in computers and other business technologies are making accounting faster, cleaner and easier. However, the rate at which technology has been introduced makes it difficult for accountants to keep up. This session will explore the impact of technology on today's accountants and address how practitioners are addressing some of the risks and challenges associated with leveraging technology in today's workplace.



Agenda



- How Information Technology has benefited Accounting
 - ◆ In Organizations
 - ◆ In Professional Services Firms
- Technology in Today's Rapidly changing environment
 - ◆ Current Tools and Methods
 - ◆ Emerging Technologies
 - ◆ Internal Control
 - ◆ Concerns/Risks
 - ◆ Impact on Work Life and Personal Life
- Future of IT in Accounting



How Information Technology has benefited Accounting in Organizations



Information Technology Impact on Organizations



- Information Technology Benefits
 - ◆ Computerized Accounting Systems
 - ◆ Increased Functionality
 - ◆ Improved Accuracy
 - ◆ Faster Processing
 - ◆ Better External Reporting

Information Technology Impact on Organizations



- **Computerized Accounting Systems:**
 - ◆ The largest impact IT has made on accounting is the ability of companies to develop and use computerized systems to track and record financial transactions.
 - ◆ Manual spreadsheets, paper ledgers and hand-written financial statements have all been translated into computer systems that can quickly present individual transactions into financial reports.
 - ◆ This allows companies to create individual reports quickly and easily for decision making. Additionally, changes can be made relatively easy to reflect economic changes in business operations.

Information Technology Impact on Organizations



- Increased Functionality:
 - ◆ Computerized accounting systems have improved the functionality of accounting departments by increasing the timeliness of accounting information.
 - ◆ By improving the timeliness of financial information, accountants can prepare reports and operations analyses that give management an accurate picture of current operations.
 - ◆ The number of financial reports has also been improved by computerized systems; cash flow statements, market share reports and departmental profit and loss are now more accessible with computerized systems.

Information Technology Impact on Organizations



■ Improved Accuracy:

- ◆ Most computerized accounting systems have internal check and balance measures to ensure that all transactions and accounts are properly balanced before financial statements are prepared.
- ◆ Computerized systems will also not allow journal entries to be out of balance when posting, ensuring that individual transactions are properly recorded.
- ◆ Accuracy is also improved by limiting the number of accountants that have access to financial information.
- ◆ Less access by accountants ensures that financial information is adjusted only by qualified supervisors.

Information Technology Impact on Organizations



■ Faster Processing:

- ◆ Computerized accounting systems allow accountants to process large amounts of financial information and process it quickly through the accounting system.
- ◆ Quicker processing times for individual transactions has also lessened the amount of time needed to close out each accounting period.
- ◆ Month- or year-end closing periods can be especially taxing on accounting departments, resulting in longer hours and higher labor expense.
- ◆ Shortening this time period aids companies in cost control, which increases overall company efficiency.

Information Technology Impact on Organizations



■ Better External Reporting:

- ◆ Reports issued to outside investors and stakeholders have been improved by computerized accounting systems.
- ◆ Improved reporting allows investors to determine if a company is a good investment for growth opportunities and has the potential to be a high-value company.
- ◆ Companies can utilize these investors for equity financing, which they use for expanding business operations



How Information Technology has benefited Professional Services Firms



Information Technology Impact on Professional Services Firms



■ Information Technology Benefits:

- ◆ Audit software
- ◆ Knowledge-sharing applications
- ◆ Improved productivity
- ◆ Collaboration and communication across teams

Information Technology Impact on Professional Services Firms



■ Audit Software and Knowledge Sharing Applications:

- ◆ Once a slow paced and conservative industry, audit software and knowledge-sharing applications are two crucial components that converted public accounting firms into faster paced businesses.
- ◆ Automation of audit tasks and the use of specialized audit software has reduced the need for manual labor and changed the structure of audit teams.
- ◆ Equally important is the use of advanced systems to share knowledge across different parts of the organization to enable firms to leverage teams more effectively.

Information Technology Impact on Professional Services Firms



- Improved Productivity, Collaboration and Communication Across Teams:
 - ◆ Since the primary tasks of accounting professionals in public accounting firms involves information-intensive activities such as gathering, organizing, processing, evaluating, and presenting data, the use of IT is likely to improve the productivity of accounting professionals.
 - ◆ Teamwork is critical in a public accounting firm as audit engagements are performed by teams composed of professionals at different ranks and often across different locations. The use of groupware technology improves work collaboration and communication within teams.



The Risks/Concerns associated with Information Technology in the Accounting Profession Today



Information Technology Risks/Concerns



“Information technology is our greatest strength,
and at the same time, our greatest weakness”

Dr. Ron Ross
National Institute of Standards & Technology

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- Internal control, as a process and a structure, is of great concern to accountants
 - ◆ As key users of accounting information systems, accountants should take active roles in developing and reviewing the internal control structure (ICS) or framework
 - ◆ Accountants should work closely with system designers during the development phase of information systems to ensure that the planned control measures are adequate and auditable
 - ◆ During audits, accountants can assess the reliance to be placed on the ICS

Information Technology Today



- Internal control, as a process and a structure, is of great concern to accountants – cont'd
 - ◆ Developing and evaluating the ICS are skills in which accountants should excel
 - ◆ Since the ICS is the vehicle through which accounting information systems employ an array of controls, it deserves prominent attention

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- Control problems caused by computerization are numerous, including:
 - ◆ Risks during:
 - Data collection
 - Data processing
 - Data storage and retrieval
 - Information generation
 - Transmittal of data and information
 - Others?

Information Technology Risks/Concerns



■ Other IT Risks/Concerns:

- ◆ Information security
- ◆ Risk Governance
 - Risk appetite
 - Responsibility
 - Accountability
- ◆ Information sharing
- ◆ Reliance on third parties

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■ Concerns and Risks of IT and their impact on Accounting:

◆ Information Security

- Protecting information from loss/damage/theft
 - Is the information stored centrally?
 - Taken offsite (i.e. - via laptops)?
 - Sent over the internet via email?
 - What Data Center Physical and Environmental Controls exist?
- Fraud detection and prevention
 - Prevention from internal fraud and external hacking
 - Audit Trails

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■ Concerns and Risks of IT and their impact on Accounting:

- ◆ System-related risks, other than poor decision making and inefficient, ineffective operations, include:
 - Unintentional Errors
 - Deliberate Errors
 - Unintentional Losses of Assets
 - Theft of Assets
 - Breaches of Security
 - Acts of Violence
 - Natural Disasters

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■ Concerns and Risks of IT and their impact on Accounting:

◆ Computer crimes take various forms, including:

- Unauthorized access to stored data
- Sabotage of computer facilities
- Theft of computer hardware and software
- Unauthorized use of computer facilities for personal use
- Fraudulent modification or use of data

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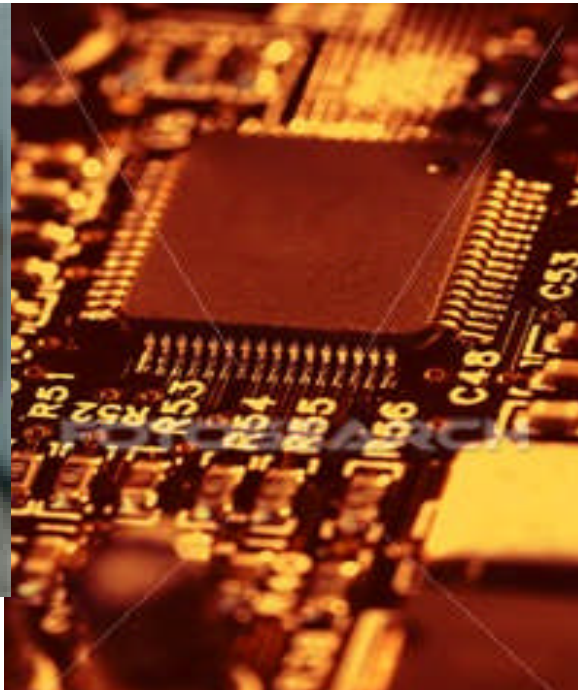
■ Concerns and Risks of IT and their impact on Accounting:

◆ Profession's Response

- New areas of accounting work, such as IT controls/compliance and forensic accounting
- New computer programs to track attempts to initiate fraud
- New security controls
 - Logical (e.g. Password and User ID complexity)
 - Physical (e.g. Secure ID Badges, Biometrics)



Technology in Today's Rapidly Changing Environment



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- **Current Tools employed by Accountants:**
 - ◆ **Global Enterprise Resource Planning Systems (ERPs)**
 - Oracle, SAP, Microsoft Dynamics
 - ◆ **Integrated Desktop Solutions**
 - Lotus Notes (Email, Calendar, Applications)
 - ◆ **Collaboration Tools**
 - Sharepoint
 - ◆ **Specialized Accounting Software Solutions**
 - Tax Software (TurboTax), Book Keeping (PeachTree, Quick Books)

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■ Learning about new Technology:

◆ Discussion for the class:

- There are so many technologies out there and more are coming out every day. This makes it tough to know where to look for information on new and existing accounting solutions. Take 10 minutes to discuss with your tables and come up with a list of places to turn to find information on new accounting technologies.



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- Impact on work-life balance:
 - ◆ Technology has made it possible to stay plugged in on a 24/7 basis.
 - Blackberries
 - Email
 - Laptops
 - Wireless Internet / Tethering
 - ◆ You can literally be flying over the Atlantic and still be able to talk to and email colleagues and clients

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■ Impact on work-life balance:

◆ Benefits

- Increased Productivity
- Increased Customer Service/Client Relationships
- Increased Freedom to work from anywhere

◆ Cons

- Burn Out
 - How do you get away and turn off?
 - How to you create an appropriate work-life balance?

Information Technology Today



What Impact has Information Technology had on you personally?

How do you manage the expectation of always being available?

Information Technology Tomorrow



■ LinkedIn, Facebook and **Twitter**

- ◆ Among the social networking tools used by companies looking for employers
 - **LinkedIn** use grew from 80 percent in 2008 to **95** percent of respondents in 2009
 - Facebook use grew from 36 percent in 2008 to **59** percent in 2009
 - A new addition, **Twitter**, ranked third with **42** percent of recruiters using the tool to source candidates

Source: Jobvite. May 2009

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■ Career Moves

◆ Making **social networking** work for you

- Keep it professional
- Follow the leaders
- Get educated
- Add value

◆ **Social Networking** Don'ts

- Don't comment negatively about current job
- Don't provide inconsistent information
- Don't post status you wouldn't want your boss to see

Information Technology Tomorrow



- Where will changes in IT take accounting in the future?
 - ◆ New and more complex tax laws, as well as auditing standards, changing technologies, and a slowly recovering economy have all shaped today's accounting environment
 - ◆ Many of these changes are related to the use of technology: how accountants use their time, ease, and accessibility of data from multiple sources, integrated systems, and virtual office capabilities through the use of the Web
 - ◆ As a result, the needs and expectations for the accounting professional are evolving into a new model for the future, one that embraces change as both a solution and a requirement for success

Let's hear from you!



■ Any questions?

