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THE IMPACTS OF IT TRENDS ON CPAS’ EDUCATION: A SURVEY

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Abstract

Due to the exponential growth of the Internet and related technologies, The American Institute of Certified Public Accountants (AICPA) increasingly believes that accounting professionals need to possess an information technology knowledge base that will allow them to continue to function effectively in this rapidly changing business environment. The market suggests that any business that does not want to get left behind must adopt new e-commerce strategies and technology. The purpose of this study is to solicit the opinions of CPAs regarding mandatory IT education for CPA candidates utilization of emerging IT by CPAs and their clients. A pilot study has been conducted and a broader survey is currently underway.

Introduction

Information technology is advancing at a faster pace than ever before. The American Institute of Certified Public Accountants (AICPA) is concerned about this trend and increasingly believes that accounting professionals need to possess an information technology knowledge base that will allow them to continue to function effectively in this rapidly changing business environment. The purpose of this study is to solicit the opinions of CPAs regarding mandatory IT education for CPA candidates utilization of emerging IT by CPAs and their clients. We are confident that the results of the survey will be of great value in helping us make the academic environment for aspiring accountants more meaningful. In order to test our survey instrument and refine it for use in the broader survey, we decided to first conduct a pilot survey among several CPA firms locally. This report provides the results of this pilot survey.

Background

The AICPA, recognizing that accounting education needs to integrate more IT exposure into standard curriculums, created the Technology Curriculum and Competency Model Task Force to define technology competencies for the accounting profession. Based up a review of the International Federation of Accountants (IFAC) International Education Guideline No. 11, Information Technology in the Accounting Curriculum, the AICPA task force concluded that the skills identified in the IFAC guideline are universally applicable and encourages the adoption of this guideline within the United States (AICPA, 2000).

The IFAC guideline defines information technology (IT) as “hardware and software products, information systems operations and management processes, and the skills required to apply those products and processes to the tasks of information production and information systems development, management, and control.” The guideline prescribes that all professional accountants should be competent in general IT knowledge and user IT requirements and at least one of the roles of manager, designer, and evaluator of information systems. It differentiates between pre-qualification and post-qualification requirements and stresses the need for relevant theoretical knowledge and practical experience (AICPA, 2000).

The guideline is directed at accounting educators, professional accountants, regulators and those involved in the continuing education and evaluation of accountants. It provides guidance in the following areas:
The education domain  
The work domain  
The continuing professional education domain  
The licensing and regulation domain

The AICPA Task Force predicts that IT will continue to grow in importance at a rapid rate and can no longer be considered a peripheral discipline for the professional accountant. Instead, IT and accounting have evolved to such an extent that it is difficult to perceive accounting as independent from IT. As a result, academic curriculums must include increasing exposure to these changing technologies (AICPA, 2000).

More than ever before, IT dictates how business operates and how management, accounting and IT professionals interact. The guideline stresses that, while accountants need not become experts in IT, they do need a strategic and conceptual understanding of IT as a business resource. This understanding would include familiarity with the functions of technology components, the objectives of technological advancement in these components, and the potential impact of these advancements on business systems. With a sound strategic and conceptual foundation, accountants will able to use, evaluate and control IT more effectively and be better able to assist clients in achieving business objectives (AICPA, 2000).

Methodology

This study examine the specific ways in which the merging of accounting and information technology is impacting CPA firms of all sizes. The CPA profession is composed of a wide variety of firms ranging from multinationals with thousands of employees to single accountant firms. The implications of the AICPA task force are that the entire accounting profession is being greatly impacted by the advance of information technology. The purpose of this study is to examine the impact in terms of the accounting firm characteristics and specific information technologies. A survey, currently underway, is designed to elicit data on the nature of the firm (type, size, and types of services), the use of specific information technologies within the firm, and consulting engagements involving specific information technologies.

An initial pilot survey of six diverse CPA firms has been conducted to refine the survey instrument. The pilot survey results indicate that considerable variation may exist within the profession relating to specific technologies. The survey is currently being sent to all CPA firms within the state of North Carolina. North Carolina is the 10th largest state in the country and the firms being surveyed include local, regional, national, and multinational firms with widely varying practice profiles. It is proposed that a survey of this significant sub-population of all US accounting firms will provide useful information on the use of information technologies in accounting firms.

Besides providing useful information on accounting firm IT usage, we will test a number of hypothesis relating specific information technologies to accounting firm characteristics including type (local, regional, national, multinational), size (number of staff, number of offices), and practice work profiles. This study will also contrast the use of specific information technologies within firms with consulting relating to information technologies performed by firms.

From the results of the broader survey, we expect to determine some measure of the impact of this rapidly changing, technology driven, business environment on CPA’s and their clients. More specifically, we expect to gain insight in the following areas:

- Data about the responding firm’s size, location and service mix, and the correlation between that data and other data described below.
- The extent to which the responding firms feel that IT education is necessary to remain competitive, and whether or not the firm provides for ongoing IT training.
- The extent to which the responding firms utilize internet or other emerging information technologies internally to achieve greater productivity and efficiencies.
- The extent to which the responding firms have become involved with new Web assurance opportunities.
- The extent to which the responding firms are involved in IT related consulting engagements.
- The extent to which responding firms believe there is need and/or demand for specific information technologies among their clients.
- The extent to which the responding firms believe that the internet/e-commerce poses a serious threat or provides a material opportunity for its clients.
Preliminary Results of the Pilot Study

The survey was mailed to eight CPA firms locally for the pilot study and six useful responses were received. Based upon the size of the responses to the pilot survey there are few conclusions that can be drawn with any certainty.

All respondents agreed that IT knowledge was necessary for the CPA to remain competitive and that IT competency should be tested on the exam, however, they were not nearly as unanimous in their opinions regarding the other related questions. It is understandable that a CPA firm with an IT group may feel it unnecessary to require others in the firm to acquire IT skills, but it is important to understand how smaller CPA firms justify not requiring base level IT skills and continuing IT education.

Responses regarding internal utilization of IT indicate that the primary use of Internet technology is for communication purposes. Whether the limited utilization of certain basic security safeguards indicates a perceived lack of need or an absence of awareness is unclear, but these responses are consistent with the responses indicating limited use of the Internet for business transactions. Utilization of productivity/efficiency enhancing software is more evident in the larger firms where auditing and consulting comprise a larger percentage of the firm’s service mix. The absence of utilization of XBML requires further investigation to determine the reason.

The responses relating to web assurance services were surprising. Given the AICPA’s endorsement of the web trust concept, the abundance of literature proclaiming this grand new opportunity for CPAs, and the growth in the Internet over the past two years, we expected indications of some experience with this service, particularly from larger, perhaps more IT savvy CPA firms. Whether this absence of activity may be attributable to pilot study sample size or indicative of the broader environment is impossible to determine at this time. This is an area of questioning that is broadened in the larger survey.

Regarding IT related engagements, the fact that one respondent could not complete several questions on the survey because its IT group was in a different location suggests a flaw in the instrument design. While this instance was significant in this small pilot survey, it may not be a significant factor in a broader survey. It is our belief that the majority of CPA firms do not have a separate IT group, and therefore, in a broader survey incomplete responses for that reason should not be a significant factor. This assumption may not be valid; therefore this and other factors that may contribute to a higher rate of incomplete responses are being reviewed.

The assumption that CPAs in public practice have an understanding of their business clients’ IT needs may not be valid. Certainly, there is not enough data from this small sample to prove or disprove that assumption. However, some firms mostly checked the “don’t know” option to questions relating to their IT engagements suggesting that the CPAs in the pilot survey do not have a sufficient understanding of their clients’ IT needs and it may be indicative of the broader state-wide population. Lastly, there is a strong perception, even with the small pilot survey sample, that the Internet and its implications for business present significantly more opportunity than threat to the CPAs’ client base.

The pilot study survey is being redefined to reflect the issues uncovered in the pilot study. It is anticipated that the complete survey will be distributed to the population in the 2nd quarter of 2001 with analysis of the results to commence in the 3rd quarter of the year.

References