THE INTEGRATION OF INFORMATION TECHNOLOGY SKILLS IN ACCOUNTING CURRICULUM AT PUBLIC UNIVERSITIES IN EGYPT

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ABSTRACT

Professional and academic accountants have debated the issue of integration of information technology (IT) skills in accounting during the past three decades. However, the majority of prior studies are very descriptive in nature and lack a theoretical background. Most of these studies investigated the issue of Required IT skills and Integrated IT skills in different settings. Prior studies also investigated the issue separately, either from the perspective of professional or academic accountants. Based on information processing theory and task-technology fit, this study investigated the alignment (IT Alignment) between Required IT skills and Integrated IT skills in a single setting. It also examined factors that influence IT Alignment. Data were collected from 249 accounting lecturers in public universities in Egypt, who were also practicing accountants. Survey was mailed out in March 2011, and response rate was 69.02%. Descriptive statistics indicated that the top 5 Required IT were generalized audit software, embedded audit modules/real-time modules, word-processing, small business accounting software, and electronic spreadsheets, while the top 5 Integrated IT were word processing, electronic spreadsheets, electronic presentations, database search and retrieval, and test data. Using a matching approach, the top 5 most aligned variables were word-processing, electronic spreadsheets, electronic presentations, internal network configurations, and database search and retrieval. Thirty-five hypotheses were then tested to examine factors that influenced IT Alignment. Results of multiple regressions suggested that market need played a major role in influencing the IT alignment. Other factors included financial resources, university/faculty support, interest and attitude toward the IT integration. This study has deepened current understanding of IT integration into accounting and has provided useful insights for Deans of Faculty of Accountancy in planning their IT integration. More importantly, the study also opens up possibilities for further study of IT integration, both in Egypt and around the globe.

Keywords: Required IT Skills, Integrated IT Skills, Accounting Education, IT Alignment

ABSTRAK

Isu menyepadukan kemahiran teknologi maklumat dalam bidang perakaunan telah dibahaskan oleh akauntan profesional dan akademik tiga dekad lalu. Bagaimanapun, kebanyakan kajian lalu berbentuk deskriptif dan terbatas dari segi asas teori. Kebanyakan kajian tersebut menyelidiki isu kemahiran IT Diperlukan dan kemahiran IT Bersepadu dalam persekitaran yang berbeza. Kajian lalu juga meneliti isu tersebut secara berasingan, sama ada dari perspektif akauntan profesional atau akauntan akademik. Berdasarkan teori pemprosesan maklumat dan padanan tugas-teknologi, kajian ini menyelidiki penjajaran (Penjajaran IT) antara kemahiran IT Diperlukan dengan kemahiran IT Bersepadu dalam persekitaran tunggal. Ia juga meneliti faktor-faktor yang mempengaruhi penjajaran IT. Data telah dikutip daripada 249 pensyarah perakaunan di universiti awam di Mesir, yang juga merupakan pengamal perakaunan. Tinjauan telah dihantar pada bulan Mac 2011, dan kadar respons yang diterima adalah 69.02%. Statistik deskriptif menunjukkan bahawa lima kemahiran utama IT Bersepadu ialah perisian audit umum, modul audit terbenam/modul masa nyata, pemprosesan kata, perisian perakaunan bagi perniagaan kecil, dan hamparan elektornik, manakala lima kemahiran utama IT Bersepadu ialah pemprosesan kata, hamparan elektronik, pembentangan elektronik, carian dan dapatan pangkalan data, dan pengujian data. Dengan menggunakan pendekatan pemadanan, lima pemboleh ubah yang paling terjajar ialah pemprosesan kata, hamparan elektronik, konfigurasi rangkaian dalaman, dan carian dan dapatan pangkalan data. Tiga puluh lima hipotesis diuji untuk menyelidik faktor-faktor yang mempengaruhi Penjajaran IT. Keputusan regresi berbilang menunjukkan bahawa kehendak pasaran memainkan peranan utama dalam mempengaruhi penjajaran IT. Faktor lain termasuk sumber kewangan, sokongan universiti/fakulti, minat dan sikap terhadap kesepaduan IT. Kajian ini meningkatkan kefahaman semasa tentang kesepaduan IT dalam perakaunan dan memberikan gambaran bagi Dekan-dekan Fakulti Perakaunan dalam perancangan mereka untuk menyepadukan IT. Lebih penting lagi, kajian ini membuka peluang bagi kajian-kajian kesepaduan IT, di Mesir dan di negara lain.

Kata kunci: Kemahiran IT Diperlukan, Kemahiran IT Bersepadu, Pendidikan Perakaunan, Kesejajaran IT

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

There have been rapid changes occurring in business environment over the last two decades due to the advancement of information technology (IT), concentration power in certain market investors, and globalization (Arnold & Sutton, 2007). These changes resulted in the decrease of the cost of information and the increase in the level of competition among businesses (Celik & Ecer, 2009). To some extent, the root of these three changes is IT, which driven the growth of productivity (Chang et al., 2011). The integration of IT in business operations helped the dissemination of information inexpensively. This relates directly to the second change, namely the market investors' demand for additional information. Reduction in time and effort to communicate globally through electronic commerce applications also facilitate the market to be global. In other words, IT helps the growth of globalization (Arnold & Sutton, 2007).

IT is defined as "hardware and software products, information system operations and management processes, as well as human resources and skills required to apply those products and processes to the task of information production and information system development, operation, management and control" (IFAC, 2009, p.30). IT knowledge refers to the ability to describe the conceptual or theoretical aspects of the technology, while IT skills refer to the ability to practice or apply the technology in the real world (IFAC, 2009). Skelton (2012) indicates that “knowledge is the most important building block for developing skills".

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