

Improving The Quality of Accounting Human Resource in Vietnam in The Context of Digital Transformation: From Educational Perspective

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Received: 16/12/2022; Accepted: 22/12/2022; Published :26/12/2022

Abstract: *International economic integration has set higher requirements for human resource training in all industries and accounting is no exception. Accounting educators need to adapt with this situation by preparing students to have ability to use digital technologies. This article analyzes the changes in the role of accountancy profession to meet new requirements for knowledge and skills in the process of digital transformation. The implications to improve the quality of accountancy training and education adapting to emerging technologies are proposed based on IFAC's and other institutes' framework for accountancy profession.*

Keywords: *Accounting, accountancy profession, digital transformation, education and training*

1. Introduction

According to the World Economic Forum, repetitive jobs, stable and imitative jobs are more likely to be automated in the future. It means that some professions in the future will inevitably change as a result of digital transformation. Consequently, students studying in those field in vocational schools, colleges and universities may not be able to find jobs if they are not equipped themselves with technological knowledge and skills. What should be done by educational institutions are to provide their students with both theoretical and fundamental knowledge, which can be replaced in the digital transformation, and knowledge related to changes in the future such as analysis skills, problem solving and decision making, which seem not to be replaced but are going to be greatly supported by digital technologies such as big data, artificial intelligence and this will create breakthroughs in teaching and training.

In this article, the author aims at discussing on how accounting syllabus in colleges and universities should be innovated to meet the challenges of digital transformation. This is done with reference to the competency framework for accounting proposed by IFAC from 2006 to 2019 and the Canadian CPA's 2013 competency framework.

2. An overview of digital transformation

2.1. The concept of digital transformation

Digital transformation is a concept that has become popular in recent years when technology is

applied in every aspect of business. If it works, this will completely change the way businesses operate and help them accelerate productivity.

According to Gartner, an information technology research and advisory firm, Digital transformation is "the process of exploiting digital technologies and supporting capabilities to create a robust new business model." Jorge Lopez, research VP at Gartner, says that the most successful digital transformations have a high-level business industry vision aimed at changing their very industry.

Digital transformation can refer to anything from IT modernization (for example, cloud computing), to digital optimization, to the invention of new digital business models. The term is widely used in public-sector organizations to refer to modest initiatives such as putting services online or legacy modernization.

2.2. The differences among digitization, digitalization and digital transformation

Digitization in itself is only the process of compressing analogue media into bits and bytes so that they are available in digital form.

When it comes to digital transformation, it is necessary to look at the business areas and their processes, but much further than simply adapting them to the new digital technologies. Digital transformation is the profound and accelerating transformation of business activities, processes, competencies and models to fully leverage the changes and opportunities of digital technologies and their impact across society in a strategic and prioritized way.

Table 1. *The differences among digitization, digitalization and digital transformation*

| | Digitization | Digitalization | Digital transformation |
|-----------|--|---|---|
| Focus | Data conversion | Information processing | Knowledge leveraging |
| Goal | Change analog to digital format | Automate existing business operations and processes | Change company's culture, the way it works and thinks |
| Activity | Convert paper documents, photos, microfilms, LPs, films, and VHS tapes to digital format | Creation of completely digital work processes | Creation of a new digital company or transformation to a digital one |
| Tools | Computers and conversion/encoding equipment | IT systems and computer applications | Matrix of new (currently disruptive) digital technologies |
| Challenge | Volume <i>Material</i> | Price <i>Financial</i> | Resistance to change <i>Human resource</i> |
| Example |  Scanning paper-based registration forms |  Completely electronic registration process |  Everything electronic, from registration to content delivery |

3. Requirements for accountants in the new era

3.1. Changes in the role of accountants

Information technology has dramatically changed the job of accountancy. The function of accounting was initially widely accepted as the recording of transactions that have occurred in the past. This function then was more intensive and independent when accountants were considered to provide accounting services to managers. Nowadays, accounting functions, whether they are traditional or modern, require processing a lot of data, especially the function of advising on decision-making that can only be done thanks to the use of IT.

The following table briefly describes accountants' competency framework for IT as proposed by IFAC.

Table 2. *Accountants' IT competency framework by IFAC*

| Competence area | Description |
|---------------------------|---|
| (1) General understanding | General understanding: about IT strategies, understanding system design, system development about IT (purchased or built), IT management, risks (Competence) and benefits of IT based on digital platforms. |

- (2) Knowledge Understanding about internal control in about IT IT environment: about target, risks and controlling risk evaluation, risk hedging, particular (competence) controlling activities in IT environment.
- (3) Skills for Implementing IT risk controlling solutions IT controlling related to controlling environment, (skill) controlling goals, recognition, evaluation, choosing controlling procedure, communication methods ...
- (4) Skills for Be able to apply and implement an IT system using IT (skill) which is suitable for accounting system and the organization
- (5) System Skills for strategic management, information management system control, effective use of information skill (skill) system, control and maintenance of information system, purchase, development and operation of information system as well as update of systematic changes
- (6) System Regularly or periodically evaluating the e v a l u a t i o n system, reassessment after adjustments skills (skill)
- (7) System Analyse and assess the role of information design skills to the organization, apply new management (skill) methods, update or propose new ideas or approaches to improve the system.

CPA Canada proposed a range of necessary requirements for accountants in the new context: a) professionalism, b) risk management, c) operation implementation and report, d) ensure, e) decision making. These skills are specifically described in the table below.

Table 3. *Professional competence for accountants by CPA Canada*

| Competence area | Description |
|--|--|
| (1) Implementation and report | Identify important issues needed to be managed. Understand strategies and the planning process. Evaluate the appropriation of IT strategies. Assess risks and be able to manage risks. Evaluate the need for information of implementation and report. |
| (2) Strategic management and risk management | Evaluate the current system. Give ideas for improving the system. Identify and evaluate financial and non-financial information |
| (3) Ensure | Design suitable procedures to reduce risk, ensure identified risks being under controlled. Evaluate the effectiveness of internal control in IT environment. |
| (4) Decision making management | Analyze and give solutions to support managerial information. Evaluate alternatives. Identify and evaluate the option of purchasing technologies and others options. |

The above analysis shows that requirements for accountants' competence have changed substantially,

especially the competence for IT.

4. Implications for accounting training and education in adapting to digital transformation

Changes in business environment have made accounting training and educational curriculums become obsolete if they are not updated. Therefore, it is necessary to have continuous and periodic reviews of teaching curriculums and content and to diversify the teaching approach to best equip students with knowledge and skills to adapt to the requirement of digital transformation. Below are some proposed implications from the author's personal point of view to improve accounting educations in educational institutes.

Knowledge: General knowledge: is considered the basis for professional knowledge. It consists of general theoretical subjects, principles and common accounting practices. These subjects are not likely to change therefore they can be taught using technologies although there should be face to face discussions between students and teachers and students need to pass in these subjects in order to study the professional subjects due to the importance of fundamental knowledge in these subjects.

Professional subjects: It is unnecessary to focus too much on accounting techniques such as transaction analysis and recording because repetitive tasks are going to be performed by software. Teaching should focus more on process other than on bookkeeping tasks to equip students with the skills to evaluate, update and develop systems.

It is also necessary to increase case study discussion and teamwork to enhance students' ability to analyze, criticize, evaluate and choosing solutions for different situations. Particularly, system design and establishment related skills, system evaluating and analyzing skills, risk identifying and assessing skills need to be aware of in the teaching process.

More subjects on applying IT, using big data in analysis, evaluation and forecast. Therefore, subjects on statistic, analysis and forecast should not be underestimated. Financial analysis can be considered to be new major to be opened in business schools.

More optional subjects on system management, risk management, internal control.

Improve teaching methods, encouraging students' activeness in studying and their independence from coursebooks, slides and workbooks as this prevent students and teachers from being creative.

Improve testing methods, evaluation methods and focus more on developing thinking skills.

Skills:

Diversify students' collective study activities, effectively combine seminar, group assignments, projects with professional clubs.

More discussion between students and experts, more real activity in businesses under cooperation contracts between schools and businesses.

Other implications

Enhance cooperation among educational institutions instead of competing with each other; Create forums and networks for lecturers and students

Update knowledge, closely coordination with professional organization and associations in education, training and exchange of IT and professional experts.

5. Conclusion

The requirements for accountants' competence have changed substantially overtime and they are getting higher and higher. Accounting is one of the first areas that applied IT. Accountants nowadays are expected to have a high level of understanding about both IT and accounting so they should be equipped with necessary skills. Therefore, accounting curriculums and teaching methods should change to provide students with both necessary knowledge and skills. According to International Federation of Accountants and International Accounting Education Standards Board, proposed knowledge and skills can be obtained during the education process at educational institutions or during their career through training programs.

In the future, accountants need leadership skills, communication skills, management skills. Internal factors such as attitude, working motivation and commitment should also be taken into account in the jobs of accountant.

Reference

1. Deppe et al., (1991), *Emergency Competencies for the Practice of Accountancy*. Journal of Accounting Education, 9.
2. IFAC (2006, 2016, 2017), *Information Technology for Professional Accountants*, including: Proposed International Educational Practice statement 2.1; International Educational Guide 11; International Educational Standard 7.
3. IFAC (2019), *Professional Competence for Engagement Partners Responsible for Audits of Financial Statements*, International Education Standard 8.
4. Stone et al. (1996), *Cross-Cultural Comparisons: an empirical investigation of knowledge, skills, self-efficacy and computer anxiety in accounting education*. Accounting Education, 11(2).