Humanities and Social Sciences Letters
2022 Vol. 10, No. 2, pp. 103-126.
ISSN(e): 2312-4318
ISSN(p): 2312-5659
DOI: 10.18488/73.v10i2.2957

COMPETENCIES OF ACCOUNTING PROFESSIONALS AND QUALITY OF FINANCIAL REPORTING: EVIDENCE FROM ENTERPRISES IN THAILAND

Maneewan Sripan[1]
Kittipol Wisaeng[2+]

[1,2]*Business Administration and Digital Innovation, Mahasarakham Business School, Mahasarakham University, Thailand.*
[1]*Email: 62010990005@msu.ac.th Tel: (+66)089-9656650*
[2]*Email: kittipol.w@acc.msu.ac.th Tel: (+66)086-6393870*

(+ Corresponding author)

Article History
Received: 9 December 2022
Revised: 7 March 2022
Accepted: 21 March 2022
Published: 11 April 2022

Keywords
Accountant competencies
Quality of financial reporting
Impacts of business models.

ABSTRACT

Quality financial reporting positively benefits business development and economic decisions. It is essential for growth-oriented enterprises to ensure the quality of financial reporting to enhance performance. This study empirically examined accounting professionals' opinions on their competencies and quality in financial reporting. The data were collected from 381 samples. The instruments used for data collection were a self-administered survey and in-depth interviews. The results showed that the overall mean scores of competencies and quality of financial reporting were 4.31 and 4.37 respectively. Consequently, for higher levels of competency, this study suggests enhancing the following issues: professional knowledge (namely on economics, taxation and business laws and regulations), professional ethics (namely in finance and financial management), operational skills (namely financial reporting skills), organizational management skills (namely on business and organization of the environment) and adaptive skills for the digital age (namely information technology). In addition, for higher report quality, this study suggests enhancing the following areas: relevance to decision-making (such as objectives, procedures and methods), credibility (namely assurance and audit) and verifiability (namely governance, risk management and internal control). The findings of this study contribute what has been theoretically ignored and may be part of the revised conceptual framework suggested for future inquiry.

Contribution/Originality: This is one of the few studies that has aimed to revise a conceptual framework by incorporating overlooked factors (e.g., types of business models) into the competencies and performance indicators of the reports which have been discussed in current research and studies, using an inclusive and systematic approach.

1. INTRODUCTION

Recent attempts at understanding accounting professionals' attitudes towards accounting competencies and the quality of enterprise financial reporting have brought more attention to academic professionals and businesses. However, prior research that has empirically examined this issue in an inclusive and systematic manner is scant; scantier still is prior research that incorporated a business model into the study, since the impact of business models is rarely discussed in research and studies on current financial reporting. Consequently, it is not always clear if there are differences in financial reporting from one model to another, which can affect the quality of the report.

The objectives of this study were to examine accounting professionals' attitudes towards accounting competencies and financial reporting performances and compare the attitudes of two different types of enterprises, namely company (limited) and partnership (limited), to find out whether there are different impacts on the accounting professionals' attitudes towards accounting competencies and financial reporting performances between the two business models. This study also drew insight from a self-administered survey for further development and business implications drawn from expert opinions, in order to generate higher quality financial reporting for growth-oriented enterprises.

To achieve the above objectives, literature review on the role of quality financial reporting, accountant competencies, indicators of quality financial reporting and the impact of different business models on business performances are discussed in the following parts.

2. THEORY AND HYPOTHESIS

2.1. The Role of Financial Reporting

Today, growth-oriented enterprises from all over the world are paying close attention to quality financial reporting because such reported information yields positive benefits to business performance and economic decisions. Several financial and accounting scholars (Jaballah, Yousfi, & Ali, 2014) have identified the benefits such as in decision-making, credit and investment (Nwaobia, Kwarbai, Kwarbai, & Ajibade, 2016), risk-management (Soin & Collier, 2013) and overall market efficiency (IASB, 2013). It is therefore essential to review prior research on competencies that impact the quality of financial reporting and indicators of the quality and impact of business models on the quality of reporting, as discussed below.

2.2. Prior Research on Competencies Essential for Quality Financial Reporting

Several scholars (Klibi & Oussii, 2013; Raef Lawson & CSCA, 2019) have indicated competencies or key prerequisite qualities which are essential for quality financial reporting. For example, Palmer, Douglas, and Robert (2004) collected evidence from past competency studies and proposed key international knowledge, skills and accounting competencies such as general business knowledge, accounting knowledge, attitudes, competence, communication, interpersonal skills, IT, and problem-solving skills as essential components of quality financial reporting.

2.2.1. Professional Knowledge

Knowledge and knowledge-sharing culture play a major role in quality financial and accounting reporting as well as in the competencies of management accountants, accounting managers and financial and accounting professionals. According to Trivellas, Akrivouli, Tsifora, and Tsoutsa (2015) knowledge sharing culture has a positive impact on job satisfaction in accounting firms and general competence is the mediator between a culture of knowledge sharing and employee satisfaction in any accounting firm. The study by Trivellas et al. (2015) also proposed implications, particularly for accounting managers, that employees in a knowledge-sharing work environment tend to achieve higher job satisfaction and productivity gradually, as a result of strengthening general abilities. Therefore, there are specific guidelines for implementing management structures. Similarly, to increase knowledge of accounting, Fouché (2013) called for a change in accounting rules based on the new competency framework which focuses on quality and pervasive skills which include ethics, professionalism, qualifications, professional skills, specialized competencies, external reporting, inspection, assurance, financial management, management decisions, controls and taxation.

Additionally, new knowledge and technology competency are considered requirements for management accountants working with computerized information technology (IT) systems for producing financial ledgers and for reporting. Spraakman, O'Grady, Askarany, and Akroyd (2015) explored IT knowledge and skills required for today's management accountants and focused on Microsoft tools (Excel, Word, PowerPoint and Outlook) for analysis. To prepare for accounting in the digital age, (Pan & Seow, 2016) called for a digital revolution in accounting curriculum in future, while Sledgianowski, Gomaa, and Tan (2017) highlighted the importance of Big Data, information systems and technology as competencies for current and future capabilities.

2.2.2. Professional Ethics

The business community expects professional accountants to adhere to ethical standards and to ensure that accurate, transparent and timely information is presented to all end users. Any efforts to intentionally create false financial statements can severely damage a business reputation and lead to increased criminal and fraud activities and limit the benefits of financial statements (Jaijairam, 2017). Consequently, several studies such as those by Onyebuchi (2011); Mahdavikhou and Khotanlou (2012); Meymandi, Rajabdoory, and Asoodeh (2015) have paid attention to accounting ethics. Bonaci, Strouhal, Müllerová, and Roubíčková (2013) further identified ways to participate in efforts to align professional performance with reasonable expectations of society. Sudacevschi (2016) suggested that professional ethics in accounting services should include the following characteristics of diversity, responsibility in confidentiality, intangibility, perishability, inseparability and two-way information flow.

2.2.3. Operational Skills

One competency essential for successful financial reporting is operational skills, especially in the quality of local government financial reports. Several scholars have proposed the following operational skills: strategic competence (Fauré & Rouleau, 2011), human resources competence and use of information technology (Muda et al., 2017), information technology, performance capabilities and management of agility in the supply chain (Ngai, Chau, & Chan, 2011) and mastery of computer programs such as Word, Windows, Excel, Access, PowerPoint and creativity in problem solving, awareness of ethical issues and internet research (Cory & Pruske, 2012).

2.2.4. Personal Skills

Personal skills also influence the success of financial reporting. Tan and Laswad (2018) found that interpersonal and personal skills are the foremost skills required for this task. Similarly, Stephenson (2017) highlighted developing personal competencies in accounting education, which include interaction, problem-solving, project management and leadership skills. The ACOP (Accounting Community of Practice Pedagogy) strategy is effective in open communication, creative thinking, increasing student awareness of trust and maintaining dynamic learning environments.

2.2.5. Interaction and Communication Skills

Like personal skills, interaction and communication skills do impact financial reporting. For instance, Hargie, Dickson, and Tourish (2017) indicated that communication skills are essential for effective management. Additionally, Lin, Krishnan, and Grace (2013) stated that professionals considered strong communication skills as the key to career success. Riley and Simons (2016) further highlighted the fact that written communication skills are of foremost importance for accountants while Siriwardane and Durden (2014) emphasized the importance of verbal and written communication skills at different career levels and different career paths.

2.2.6. Organizational Management Skills

Organizational management skills play a vital role in all business aspects, particularly in financial reporting. Several scholars support this idea and have examined approaches and methods on how these skills affect financial reporting such as the increased participation of lean management accounting practices (Fullerton, Kennedy, & Widener, 2014); guidelines for SMEs (Small and Medium Enterprises) accounting (Lavia & Hiebl, 2015) and the use of SMEs accounting practices (Ahmad, 2012). More importantly, some studies have broadened organizational management skills by relating them to risk management. To illustrate this, Soin and Collier (2013) examined how risk and risk in management have moved away from being issues of narrow concern to finance (value at risk, derivatives, etc) and accounts (financial statement disclosure, etc) to issues of management control, and concluded that this is therefore a key area in which management accountants need to engage in. This study highlights the potential side effects of risk management and the issues of reliability and accountability resulting from the increased reputation risks taken by organizations.

2.2.7. Adaptive Skills for the Digital Age

Digital skills are seen to play a vital role in all future work areas, especially financial reporting. Some scholars like Van Laar, Van Deursen, Van Dijk, and De Haan (2017) have reinforced relations between 21st century skills and digital skills. Van Deursen and Van Dijk (2014) also highlighted the relationship between digital skills and information society and Drew (2018) proposed adaptive skills necessary for the digital age, such as integrating accounting with "big data" science. Other scholars further investigated factors that affect 21st-century digital skills. For instance, van Laar, van Deursen, van Dijk, and De Haan (2019) have highlighted determinants affecting digital skills in the 21st century in the areas of information, communication, critical thinking, creativity, problem solving and collaboration.

2.3. Prior Research on Quality Financial Reporting

Quality financial reporting is the key to success of an enterprise or business. Several studies have identified key indicators that encompass quality, namely relevance, credibility, comparability, verifiability, timeliness and understandability. The studies are summarized below:

2.3.1. Relevance

Relevance is one of the fundamental characteristics of good quality financial statements. Several scholars such as Vijitha and Nimalathasan (2014); Emeni, Uwuigbe, Uwuigbe, and Erin (2016) and Mulenga (2015) have identified the relevance of accounting information and prices of listed companies. Sirajuddin and Rasyid (2021) found that the information in Regional Government Financial Statements (LKPD) is relevant for decision making by Makassar City. The reports form the basis for the city's budget planning and are relevant to the planning and preparation of the Regional Revenue and Expenditure Budget (APBD), to meet the requirements of the financial statements as specified in the Government Accounting Standards (SAP).

2.3.2. Credibility

Credibility of accounting reports is a key attribute of the quality of financial statements. Enofe, Edemenya, and Osunbor (2015) studied the impact of accounting ethics in Nigerian financial reports . Similarly, Akpanuko and Umoren (2018) explored the influence of creative accounting on the credibility of accounting reports. Omoolorun and Abilogun (2017) conceptually reviewed and found that fraud-free financial reports had a negative impact on business. However, Aifuwa, Embele, and Saidu (2018) found that accounting creativity is a euphemism and contributes to 90% of unfair reporting on company operations. The creativity of such practices is motivated by greed and intended to deceive the public, potential investors and shareholders and decrease the rate of enterprise failures. However, the study found that numerous regulations without adequate audits, penalties or rewards reinforce creative accounting to provide the basis for deceptive, aesthetic and unfair reporting.

2.3.3. Comparability

Comparability is one of the qualitative attributes of increasingly useful financial information. It allows users to compare the financial status and performance across time and across companies. Several studies have investigated this issue. Su, Yang, and Dutta (2018) for instance, examined debt capital cost and accounting information comparability on financing costs in equity capital market. Similarly, Chircop, Collins, Hass, and Nguyen (2020) examined accounting comparability and innovative performance of organizations and found that greater accounting benchmarks lead to increased ability to predict future cash flows generated by affiliated R&D investments. Ross, Shi, and Xie (2019) examined the national and company-level factors of a comparison of domestic accounting capabilities between the 16 EU countries and US, following the adoption of international financial reporting standards. The authors found that domestic companies with regulatory accounting, a higher quality public auditor work environment, enforcement of more stringent accounting standards and greater reliance on capital market financing had higher domestic comparability. At the company level, the authors found that larger companies which were less involved in revenue management and with lower volatility of returns on assets had higher domestic comparability.

2.3.4. Verifiability

Verifiability is one of the major attributes of sound financial reporting. When financial statements are verifiable, this assures users that the statements show a fair representation of the business transactions involved. Al-Waeli, Hanoon, Ageeb, and Idan (2020) recommend that managements create better strategies that can ensure the effectiveness and efficiency of internal control. The efficiency of the accounting information system helps to improve the financial performance of the company. The study shows the relationship between accounting information systems and financial performance by using internal control as an intermediary. Existing research gaps in the context of industrial companies are filled with this study through the provision of new theoretical approaches and administrative basis for future studies. Kim-Gina (2018) examined the impact of the licensee's accounting system and reporting flexibility on the design of different key audit conditions consisting of the scope of audit eligibility and penalties for results of financial information.

2.3.5. Timeliness

Timely reporting of financial information is essential. The longer enterprises wait to publish their annual reports and financial statements, the more information they hold and the less useful it becomes. Several studies have been conducted on timeliness in financial reporting. Abernathy, Beyer, Masli, and Stefaniak (2014) for instance, examined the link between financial expertise and financial reporting timeliness, and expanded the discussion by examining how accounting expertise such as public accounting or Chief Financial Officers (CFO) affect timeliness. The results suggested that AC (Audit Committee) accounting financial expertise contributes to AC performance by enhancing the timeliness of financial information. In addition, this study highlighted how the personal characteristics of accounting professionals influence their contributions to AC performance. In addition, Iyoha (2012) examined how company attributes influence timeliness in Nigeria. The results showed that the age of a company is a key factor that enhances the overall quality of reporting timeliness. It also found significant differences in timeliness among industries in Nigeria. It was found that the banking sector was able to report financial standings in a timely manner. There are sufficient rules and regulations to ensure timely and quality reporting in Nigeria, where delays can be reduced through strict enforcement.

2.3.6. Understandability

Transactions must be reported in statements so that users have sufficient knowledge to be used appropriately for business, economic activities and general accounting; where users can study the information with reasonable care. Several researchers like Ewer (2007) and Nobes (2016) examined this issue from various perspectives. Jones and Smith (2014) compared alternative and traditional approaches to measure the understandability of financial narratives, assessing these understandings in a way which had never been applied in accounting before. It allowed researchers to assess the communicative effectiveness of the use of annual reports and prospectuses whereby the strength and weakness of various types of narratives could be analyzed. The researchers recommended that further studies were required, especially using MIT tests. According to Avi (2018) Financial Reporting Statements (FRS) using the Conceptual

Framework explain that understandability underlies the basic principles of financial reporting. Although the document highlights how this hypothesis represents a key element, the level of relevance is slightly lower than the basic qualitative characteristics There is an honest measurement of the factual economic subject of accounting. In addition to these standards, the IFRS Conceptual Framework (Nobes. & Stadler, 2015) identified qualitative attributes that enhance efficacy, comparability, understandability, verifiability and timeliness. It should be noted that these latter features are irrelevant; they have however, been identified as indispensable principles for improving communication in organizations.

2.4. Business Model

The business model is seldom discussed in current financial reporting research studies. However, it is not always clear why it is neglected. It is time for a change and this discussion will be part of the revised conceptual framework. Recent studies have discussed the importance of the business model, such as the sustainability model (Krishna, Dangayach, & Jainabc, 2011); business ethics and social sustainability model incorporating block chain technology (Ronaghi and Mosakhani, 2021) and trade relationship trust and commitment in corporate ethical management (Fei, Kwon, & Jin, 2021). It is clear that different business models have different functions, contributions and conceptions of development. To illustrate this, Reed and Reed (2009) examined four partnership models of business involvement for development. They confirmed the notion by describing each type of partnership, its conditions and its prospects for development. The findings concluded how the four types of business partnerships relate to different conceptions of development and function and how different policy paradigms promote different globalization agendas.

Drawing from past studies, the present study argues for the aforementioned attributes and the notion that different business models have different contributions and development ideas towards business and has therefore included this notion into the conceptual framework of this study and formulated the research questions below.

2.5. Conceptual Framework and Research Questions

2.5.1. Conceptual Framework

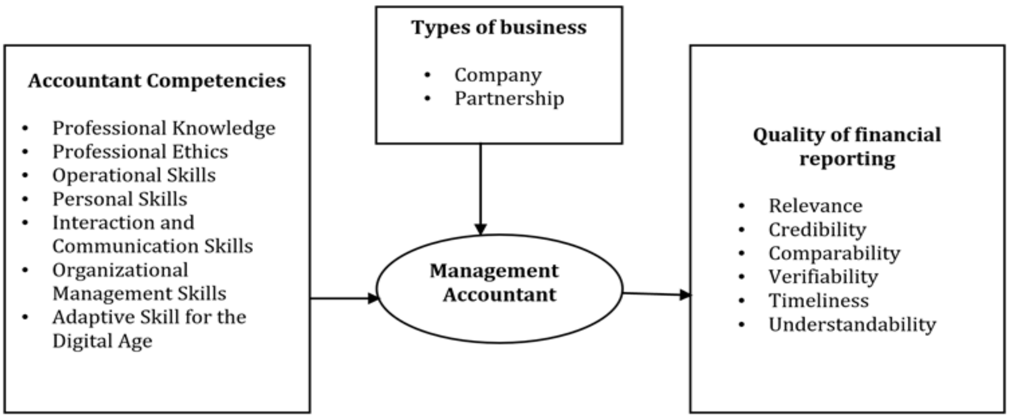

Figure 1. Conceptual framework of the study.

Figure 1 illustrates the relationship between accountant competencies and accounting reporting quality. To raise the quality of accounting reports, it is essential to enhance these competencies (namely professional knowledge, professional ethics, operational skills, personal skills, interaction and communication skills, organizational management skills and adaptive skills for the digital age). The enhanced competencies will improve the reporting quality of the six indicators of accounting, namely relevance, credibility, comparability, verifiability, timeliness and understandability. However, the types of business (company or partnership) also affect performance; this study therefore incorporates these two business types into the conceptual framework of this study.

2.5.2. Research Questions

The objective of this study was to explore the impact of accountant competencies on financial reporting quality. To achieve the main objective, the following research questions were investigated:

1. To what extent do management accountants agree with key accountant competencies and performances in financial reporting quality?
2. What is the relationship between key accountant competencies and financial reporting quality?
3. Do different types of business impact accountant competencies and financial reporting quality?
4. What are the conclusions to be drawn from the self-administered survey for further improvements in producing higher quality financial reports?
5. What are the implications to be drawn by growth-oriented enterprises to benefit from business performance and economic decisions?

3. METHOD

3.1. Design of the Study

This study was based on a mixed-method design. Geographically, this study was limited to entrepreneurs operating in the northeast of Thailand, consisting of 20 cities. The population was 67,907 financial and accounting heads of registered enterprises as company (limited) or partnership (limited) in the northeast of Thailand in 2020, consisting of the number of companies and partnerships as follows: Kalasin (1,977), Khon Kaen (9,373), Chaiyaphum (2,629), Nakhon Phanom (1,844), Nakhon Ratchasima (13,284), Bueng Kan (903), Buriram (3,769), Maha Sarakham (2,353), Mukdahan (1,323), Yasothon (1,453), Roi Et (3,183), Loei (1,881), Sisaket (2,491), Sakon Nakhon (2,745), Surin (3,189), Nong Khai (2,070), Nong Bua Lamphu (1,043), Amnat Charoen (833), Udon Thani (6,306) and Ubon Ratchathani (5,258). The data sample selection was based on stratified sampling. The sample size was 381 as calculated by Krejcie & Morgan and shown in Table 1. The participants in this study also included 10 financial and accounting experts for in-depth interviews, all of whom had at least 5-years experience and expertise in high-ranking positions of financial and accounting management and accounting education and council. The data were collected between January 5 and February 4, 2021, after the submission of revenue reports.

3.2. Instruments

The instruments for data collection were a self-administered questionnaire and in-depth interviews of financial and accounting experts.

3.2.1. The Questionnaire

The survey questionnaire was designed to evaluate accountant competencies and financial and accounting performances. A Likert-scale survey was designed to gain insight into these two key issues: accountant competencies (namely professional knowledge, professional ethics, operational skills, personal skills, interaction and communication skills, organizational management skills and adaptive skills for the digital age) and financial and accounting reporting quality (namely relevance, credibility, comparability, verifiability, timeliness and understandability).

3.2.2. In-Depth Interviews

In-depth interviews were conducted to obtainexperts' opinions and suggestions related to the results of the survey questionnaire, focusing particularly on the items that needed further improvement. Their suggestions provided ideas for improvement.

3.3. Data Analysis and Reliability Check

Descriptive statistics of means, standard deviation and percentage were used in this study. The qualitative and quantitative data from both instruments were analyzed. The questionnaires were constructed in response to the purposes of the study and then sent to five reviewers for content validity check and Item-Objective Congruence (IOC) evaluation. The researchers adjusted the items according to the suggestions offered by the reviewers. Reliability was tested using the Alpha Cronbach's Coefficient test; the result was 0.95, indicating a high value. The results of the questionnaire were interpreted based on the following criteria: strongly agree (average 4.51-5.00), agree (average 3.51-4.50), neutral (average 2.51-3.50), disagree (average 1.51-2.50) and strongly disagree (1.00-1.50). The experts' opinions were coded and compared based on triangulation.

4. DATA ANALYSIS AND RESULTS

4.1. Profiles of the Respondents

The profiles of the respondents were summarized, as presented in Table 1. The profiles provide background information to further explain the results of the first four research questions.

Table 1 shows the profiles of the respondents. The majority of the respondents are females (81.3648%, n.=310), in the age groups of 31 – 40 (42.7821%, n.=163) and 20 – 30 (33.5958%, n. =128), possess a bachelor's degree or equivalent (60.1049%, n.=229), have worked for 3-5 years (43.8320%, n.= 167) and 6-10 years (27.5590%, n.=105) and earn an average monthly income of less than 20,000 THB (52.7559%, n.=201) and 20,000-35,000 THB (32.0210%, n.=122). Three cities with the highest numbers of entrepreneurs are Nakhon Ratchasima (19.6850%, n.=75), Khon Kaen (13.9107%, n.=53) and Udon Thani (9.1863%, n.=35). Of the two types of businesses, the number of partnerships (52.2309%, n.=199) is higher than the company (47.7690%, n.=182).

The aforementioned profiles of the respondents were analyzed to answer research questions 1-5 respectively, as presented in Table 1.

4.2. Research Question 1

To what extent do management accountants agree with accountant competencies? The results of the survey revealed the management accountants' opinions on key competencies, as listed below:

Table 2 shows the mean scores, standard deviation and the performances in accountant competencies. The overall mean scores were high ($\overline{X}$ = 4.3084, S.D.= 0.2919). The mean scores of the competencies are arranged in order from the highest to the lowest as follows: personal skills ($\overline{X}$ = 4.4213, S.D.= 0.3537), professional ethics ($\overline{X}$ = 4.4162, S.D.= 0.3968), interaction and communication skills ($\overline{X}$ =4.4036, S.D.= 0.3653), adaptive skills for the digital age ($\overline{X}$ =4.3528, S.D.= 0.4209), organizational management skills ($\overline{X}$ = 4.3173, S.D.= 0.3971), professional knowledge ($\overline{X}$ = 4.2640, S.D.= 0.3661) and operational skills ($\overline{X}$ = 4.2538, S.D.= 0.3448). This indicates that the respondents strongly agree with all competencies with five out of seven competencies scoring higher than the overall mean scores (namely personal skills, professional ethics, interaction and communication skills, adaptive skills for the digital age and organizational management skills. This shows that the management accountants strongly agree that these competencies have an impact on financial reporting quality.

Table 1. Profiles of the respondents.

Demographic data	Items	Number	Percentage
Gender	Male	71	18.6351
	Female	310	81.3648
Age	Less than 20 years old	1	0.2624
	20 – 30 years	128	33.5958
	31 – 40 years	163	42.7821
	41 – 50 years	83	21.7847
	More than 40 years old	6	1.5748
Education	High school/vocational certificate	0	0.0000
	High vocational certificate	69	18.1102
	bachelor's degree or equivalent	229	60.1049
	Master's degree	75	19.6850
	Doctoral degree	8	2.0997
Work experience	Under 3 years	15	3.9370
	3-5 years	167	43.8320
	6-10 years	105	27.5590
	More than 10 years	94	24.6719
Average monthly income	less than 20,000 THB	201	52.7559
	20,000-35,000 THB	122	32.0210
	35,000-50,000 THB	56	14.6981
	More than 50,001 THB	2	0.5249
City of workplace	Kalasin	11	2.8871
	Khon Kaen	53	13.9107
	Chaiyaphum	15	3.9370
	Nakhon Phanom	10	2.6246
	Nakhon Ratchasima	75	19.6850
	Bueng Kan	5	1.3123
	Buriram	21	5.5118
	Maha Sarakham	13	3.4120
	Mukdahan	7	1.8372
	Yasothon	8	2.0997
	Roi Et	18	4.7244
	Loei	10	2.6246
	Sisaket	14	3.6745
	Sakon Nakhon	15	3.9370
	Surin	18	4.7244
	Nong Khai	12	3.1496
	Nong Bua Lamphu	6	1.5748
	Amnat Charoen	5	1.3123
	Udon Thani	35	9.1863
	Ubon Ratchathani	30	7.8740
Types of business	Company Limited	182	47.7690
	Partnership Limited	199	52.2309

Table 2 shows the overall mean scores in accountant competencies. It is also essential to look into the details of the mean scores of sub-competencies as seen below:

Table 2. Performances of accountant competencies.

Accountant Competencies	Mean	S.D.	Performance level
1. Professional knowledge	4.2640	0.3661	High
2. Professional ethics	4.4162	0.3968	High
3. Operational skills	4.2538	0.3448	High
4. Personal skills	4.4213	0.3537	High
5. Interaction and communication skills	4.4036	0.3653	High
6. Organizational management skills	4.3173	0.3971	High
7. Adaptive skills for the digital age	4.3528	0.4209	High
Total	4.3084	0.2919	High

Table 3. Performances of sub-competencies

Accountant Competencies	Mean	S.D.	Performance level
Professional Knowledge			
Knowledge of financial accounting and related disciplines	4.3249	0.4695	High
Knowledge of business organizations	4.2335	0.4214	High
Knowledge of information technology	4.4467	0.4984	High
Knowledge of laws and regulations related to accounting	4.2437	0.4303	High
Integration of knowledge with related disciplines	4.1929	0.3955	High
Application of theoretical knowledge to practice	4.2538	0.4363	High
Academic changes in disciplines and related disciplines being monitored and applied	4.2030	0.4032	High
Professional Ethics			
Neutrals, no bias. no conflict of interest or being influenced by professionals in decision-making	4.3655	0.4827	High
Continuous self-improvement in terms of operations, laws, regulations and techniques to acquire knowledge and professional competence at a level that can provide professional services effectively	4.4213	0.4950	High
No disclosure of information obtained from professional practice to others if it is not authorized or acts as a legal duty	4.6904	0.4635	Highest
Compliances with applicable laws and regulations to avoid any action that may cause disgrace to the profession	4.4670	0.5001	High
Operational Skills			
Procurement and understanding of information from various sources such as print and electronic media	4.2081	0.4070	High
Application of accounting principles and experience to analyze problems and solve operation problems	4.3198	0.4767	High
Proficiency in calculation and data analytics	4.5584	0.4978	Highest
Expertise in information technology	4.5076	0.5012	Highest
Analytical skills for decision-making and risk management	4.2030	0.4032	High
Presentation skills of financial reporting	4.2995	0.4592	High
Personal Skills			
Self-management	4.2437	0.4303	High
Creativity and self-learning	4.2335	0.4241	High
Ability to manage limited resources and complete tasks within deadlines	4.3401	0.4749	High
Ability to adapt to changes	4.6193	0.4868	Highest
Ability to apply professional values, codes of conduct and attitude to decision making	4.3299	0.4713	High
Caution as a professional accountant	4.5990	0.4913	Highest
Interaction and Communication Skills			
Collaboration with team and others	4.4975	0.5012	High
Group discussions to resolve conflicts	4.4112	0.4933	High
Interaction with people of different cultures or opinions	4.2944	0.4569	High
Negotiation carried out to reach an acceptable conclusion or agreement	4.1980	0.3994	High
Adaptability to work with people from different cultures	4.5178	0.5009	Highest
Ability to communicate and report through speaking and writing formally and informally	4.4365	0.4972	High
English proficiency in oral and written communication	4.2335	0.4241	High
Listening skills and effective communication	4.3095	0.4635	High
Organizational Management Skills			
Strategic planning and goal setting for better performance of the organization	4.2437	0.4303	High
Effective project, personnel and resource management	4.2437	0.4303	High
Assignments, motivations and personnel development	4.3299	0.4713	High
Project, personnel and resource management	4.2944	0.4569	High
Leadership, ability to make decisions and problem-solving	4.3909	0.4891	High
Adaptive Skills for the Digital Age			
Access to data anywhere and anytime through cloud computing	4.3503	0.4782	High
Ability to use accounting software, financial information, including other programs available through cloud computing	4.4975	0.5012	High
Contact various agencies through electronic systems	4.3553	0.4798	High
Availability of updated news on digital currencies	4.3350	0.4732	High
Ability to work from home	4.3553	0.4798	High

Table 3 shows the mean scores, standard deviation and performance in the sub-competencies. The results of the sub-competencies are as follows: First, in professional knowledge, the three highest scores are on knowledge of information technology ($\overline{X}$ = 4.4467, S.D.= 0.4984), knowledge of financial accounting and related disciplines ($\overline{X}$ = 4.3249, S.D.= 0.4695) and application of theoretical knowledge to practice ($\overline{X}$ = 4.2538, S.D.= 0.4363).

Second, in professional ethics, the three highest scores are on no disclosure of information obtained from professional practice to others if it is not authorized or acts as a legal duty ($\overline{X}$ = 4.6904, S.D.= 0.4635), compliances with applicable laws and regulations to avoid any action that may cause disgrace to the profession ($\overline{X}$ = 4.4670, S.D.= 0.5001) and continuous self-improvement in terms of operations, laws, regulations and techniques to acquire knowledge and professional competence at a level that can provide professional services effectively ($\overline{X}$ = 4.4213, S.D.= 0.4950). Third, in operational skills, the three highest scores are on proficiency in calculation and data analytics ($\overline{X}$ = 4.5584, S.D.= 0.4978), expertise in information technology ($\overline{X}$ = 4.5076, S.D.= 0.5012) and application of accounting principles and experience to analyze problems and solve operation problems ($\overline{X}$ = 4.3198, S.D.= 0.4767). Fourth, on personal skills, the three highest scores are on ability to adapt to changes ($\overline{X}$ = 4.6193, S.D.= 0.4868), caution as a professional accountant ($\overline{X}$ = 4.5990, S.D.= 0.4913) and ability to manage limited resources and complete tasks within deadlines ($\overline{X}$ = 4.3401, S.D.= 0.4749). Fifth, on interaction and communication skills, the three highest scores are on adaptability to work with people from different cultures ($\overline{X}$ = 4.5178, S.D.= 0.5009), collaboration with team and others ($\overline{X}$ = 4.4975, S.D.= 0.5012) and ability to communicate and report through speaking and writing formally and informally ($\overline{X}$ = 4.4365, S.D.= 0.4972). Sixth, on organizational management skills, the three highest scores are on leadership, ability to make decisions and problem-solving ($\overline{X}$ = 4.3909, S.D.= 0.4891), assignments, motivation and personnel development ($\overline{X}$ = 4.3299, S.D.= 0.4713) and project, personnel and resource management ($\overline{X}$ = 4.2944, S.D.= 0.4569).

Lastly, on adaptive skills for the digital age, the three highest scores are ability to use accounting software, financial information and other programs available through cloud computing ($\overline{X}$ = 4.4975, S.D.= 0.5012), contacting various agencies through electronic systems ($\overline{X}$ = 4.3553, S.D.= 0.4798) and ability to work from home ($\overline{X}$ = 4.3553, S.D.= 0.4798). These readings indicate that the respondents agreed with almost all sub-competencies, except for the following sub-competencies, with which they strongly agree, namely no disclosure of information obtained from professional practice to others if it is not authorized or acts as a legal duty, ability to adapt to changes, proficiency in calculation and data analytics, adaptability to work with people from different cultures and expertise in information technology. This means that they agree that the sub-competencies have an impact on financial reporting quality.

Table 4. Indicators of financial report quality

Financial Report Quality	Mean	S.D.	Performance level
1. Relevance to decision-making	4.3325	0.3569	High
2. Credibility	4.3452	0.4010	High
3. Comparability	4.4340	0.4204	High
4. Verifiability	4.3223	0.4151	High
5. Timeliness	4.4670	0.4042	High
6. Understandability	4.4036	0.4235	High
Total	4.3680	0.3307	High

4.3. Research Question 2

To what extent do management accountants agree with the standards of financial reporting quality? The results of the survey revealed the management accountants' opinions on the standards of financial reporting quality as seen above.

Table 4 shows the overall mean scores, standard deviation and financial report quality indicators. The overall mean score is high ($\overline{X}$ = 4.3680, S.D. = 0.3307). The mean score of each indicator is arranged from the highest to the lowest as follows: timeliness ($\overline{X}$ = 4.4670, S.D. = 0.4042), comparability ($\overline{X}$ = 4.4340, S.D. =0.4204), understandability ($\overline{X}$ = 4.4036, S.D. = 0.4235), credibility ($\overline{X}$ = 4.3452, S.D. = 0.4010), relevance to decision-making ($\overline{X}$ = 4.3325, S.D. = 0.3569) and verifiability ($\overline{X}$ = 4.3223, S.D. = 0.4151). This indicates that the respondents strongly agree with the indicators of financial report quality, with three out of six indicators scoring higher than the overall mean score (namely timeliness, comparability, and understandability.

Table 5. Performance indicators of financial report quality (sub-category).

Performance Indicators of Financial Report Quality	Mean	S.D.	Performance level
Relevance to decision-making			
Information on financial statements is useful for decision-making	4.4315	0.4965	High
Financial information is useful for prediction	4.3655	0.4827	High
Financial information provides feedback on past assessments	4.2893	0.4546	High
Predictive values correlate with confirmation values	4.2690	0.4445	High
Financial information provides a particular reporting entity	4.2335	0.4241	High
Credibility			
Reports present financial information through text and numbers	4.3249	0.4695	High
Information provides a complete picture of the asset group	4.3807	0.4868	High
Financial information is visually impartial, unbiased or otherwise embellished	4.4061	0.4923	High
Financial information is accurate or approximate to unobservable prices or values	4.3452	0.4766	High
Financial information creates credibility of accounting reports	4.3655	0.4827	High
Comparability			
Financial reports contain information that can be compared with similar information of other entities in the business	4.4619	0.4998	High
Financial information can be compared with accounts of all periods of the same reporting entity	4.3096	0.4635	High
Financial information can be compared in terms of similarities and dissimilarities with another reporting entity	4.4213	0.4950	High
Financial information can be comparable to a certain extent with a credible and unbiased representation of the phenomena associated with similar economic decisions of another reporting entity	4.4061	0.4923	High
Verifiability			
Knowledgeable and independent observers can come to the same conclusion	4.3046	0.4614	High
Financial reports can be verified directly and indirectly.	4.4975	0.5012	High
Financial reports can provide descriptive and forward-looking financial information	4.3401	0.4749	High
Timeliness			
Financial information reports can be delivered to relevant agencies on time	4.4467	0.4984	High
Information is readily available for decision-makers to use in a timely manner	4.4873	0.5011	High
Understandability			
Financial information is classified and presented clearly and concisely	4.3553	0.4798	High
Financial reports provide complete information and users can understand and apply them correctly.	4.3350	0.4732	High
The use of financial information for decision-making does not ignore complex information	4.4518	0.4989	High

This shows that the accountants agree that the indicators have an impact on financial reporting quality. Table 4 shows the overall mean scores of the financial report quality. It is also essential to look into the details of the mean scores of each indicator as seen above in Table 5.

Table 5 shows the mean scores, standard deviation and standards of financial reporting quality indicators. The details of the 6 sub-categories are explained in detail. First, on relevance to decision-making, the three highest scores are based on information derived for the following statements: financial statements are useful for decision-making ($\overline{X}$ = 4.4315, S.D. = 0.4965), financial information is useful for prediction ($\overline{X}$ = 4.3655, S.D. = 0.4827) and financial information provides feedback on past assessments ($\overline{X}$ = 4.2893, S.D. = 0.4546). Second, on credibility, the three highest scores show financial information is visually impartial, unbiased or otherwise embellished ($\overline{X}$ = 4.4061, S.D. = 0.4923), information provides a complete picture of the asset group ($\overline{X}$ =4.3807, S.D. = 0.4868) and financial information provides credibility of accounting reports ($\overline{X}$ = 4.3655, S.D.= 0.4827). Third, on comparability, the three highest scores show financial reports contain information that can be compared with similar information of other entities in the business ($\overline{X}$ = 4.4619, S.D. = 0.4998), financial information can be compared in terms of similarities and dissimilarities of another reporting entity ($\overline{X}$ = 4.4213, S.D. = 0.4950) and financial information can be compared to a certain extent with a credible and unbiased representation of a phenomena associated with similar economic decisions of another reporting entity ($\overline{X}$ = 4.4061, S.D. =0.4923). Fourth, on verifiability, there are three performance standards, and the mean scores show financial reports can be verified directly and indirectly ($\overline{X}$ = 4.4975, S.D. = 0.5012), financial reports can provide descriptive and forward-looking financial information ($\overline{X}$ = 4.3401, S.D. = 0.4749) and knowledgeable and independent observers can come to the same conclusions ($\overline{X}$ = 4.3046, S.D. = 0.4614). Fifth, on timeliness, there are two performance standards and the mean scores show information is readily available for decision-makers to use in a timely manner ($\overline{X}$ = 4.4873, S.D. = 0.5011) and financial information reports can be delivered to relevant agencies on time ($\overline{X}$ = 4.4467, S.D. = 0.4984). Lastly, on understandability, there are three performance indicators and the mean scores show the use of financial information for decision-making does not ignore complex information ($\overline{X}$ =4.4518, S.D. = 0.4989), financial information is classified and presented clearly and concisely ($\overline{X}$ = 4.3553, S.D. = 0.4798) and financial reports provide complete information and users can understand and apply them correctly ($\overline{X}$ = 4.3350, S.D. = 0.4732). These figures indicate that the respondents agree with all indicators. This means that they agree that all indicators have an impact on financial reporting quality. However, they do not strongly agree with any indicator. This means that there is room for improvement in all indicators.

4.4. Research Question 3

Do different types of businesses have an impact on accountant competencies and performance in financial reporting quality?

The results of the survey revealed the management accountants' opinions of performance in financial reporting quality as seen below: Table 6 shows a comparison of mean scores, standard deviation and comparison of accountant competencies of company and partnership. The overall mean score of accountant competencies of a company is higher ($\overline{X}$ = 4.3245, S.D. = 0.3019) than that of accountant competencies of a partnership ($\overline{X}$ = 4.2913, S.D. = 0.2802).

Analyzed in detail , the mean scores of accountant competencies of a company are ranked as follows: personal skills ($\overline{X}$ = 4.5213, S.D. = 0.3804), professional ethics ($\overline{X}$ = 4.4947, S.D. = 0.4306), interaction and communication skills ($\overline{X}$ = 4.4521, S.D. = 0.4020), organizational management skills ($\overline{X}$ = 4.4043, S.D. = 0.4355), adaptive skills for the digital age ($\overline{X}$ = 4.3511, S.D. = 0.4004), operational skills ($\overline{X}$ = 4.3191, S.D. = 0.3869) and professional knowledge ($\overline{X}$ = 4.2979, S.D. = 0.4037) respectively. On the other hand, the mean scores of accountant competencies of a partnership are ranked as follows: interaction and communication skills ($\overline{X}$ = 4.3592, S.D. = 0.3315), adaptive skills for the digital age ($\overline{X}$ = 4.3544, S.D. = 0.4407), professional ethics ($\overline{X}$ = 4.3495, S.D. = 0.3558), personal skills ($\overline{X}$ = 4.3301, S.D. = 0.3015), organizational management skills ($\overline{X}$ = 4.2379, S.D. = 0.3418), professional knowledge ($\overline{X}$ = 4.2282, S.D. = 0.3267) and operational skills ($\overline{X}$ = 4.2039, S.D. = 0.3006).

Table 6. Comparison of accountant competencies of company and partnership.

Accountant Competencies	Company			Partnership		
	$\overline{X}$	S.D.	Competency level	$\overline{X}$	S.D.	Competency level
1. Professional knowledge	4.2979	0.4037	High	4.2282	0.3267	High
2. Professional ethics	4.4947	0.4306	High	4.3495	0.3558	High
3. Operational skills	4.3191	0.3869	High	4.2039	0.3006	High
4. Personal skills	4.5213	0.3804	Highest	4.3301	0.3015	High
5. Interaction and communication skills	4.4521	0.4020	High	4.3592	0.3315	High
6. Organizational management skills	4.4043	0.4355	High	4.2379	0.3418	High
7. Adaptive skills for the digital age	4.3511	0.4004	High	4.3544	0.4407	High
Total	4.3245	0.3019	High	4.2913	0.2802	High

This indicates that the respondents of a company and a partnership strongly agree with all competencies. However, there are differences between a company and a partnership. This means that different types of businesses have different impact on accountant competencies and there are differences in the three highest scores of the two business types. The respondents of a company agree with personal skills, professional ethics and interaction and communication skills while the respondents of a partnership agree with interaction and communication skills, adaptive skills for the digital age and professional ethics. It is also noted that only personal skills have a higher mean score than the overall mean score. This means that the respondents consider only personal skills as having the highest effect on financial accounting quality.

Table 7. Comparison of financial report quality of company and partnership.

Financial Report Quality	Company			Partnership		
	$\overline{X}$	S.D.	Performance level	$\overline{X}$	S.D.	Performance level
1. Relevance to decision-making	4.4309	0.3921	High	4.2476	0.2960	High
2. Credibility	4.4096	0.4273	High	4.2913	0.3739	High
3. Comparability	4.4947	0.4368	High	4.3786	0.3989	High
4. Verifiability	4.4255	0.4517	High	4.2379	0.3627	High
5. Timeliness	4.4309	0.3921	High	4.5000	0.4082	High
6. Understandability	4.4787	0.4394	High	4.3350	0.3984	High
Total	4.4548	0.3628	High	4.2913	0.2802	High

Table 7 shows a comparison of mean scores, standard deviation and the key indicators of financial report quality of a company and a partnership. The overall mean score of key performance areas of a company is higher ($\overline{X}$ = 4.4548, S.D. = 0.3628) than that of key performance areas of a partnership ($\overline{X}$ = 4.2913, S.D. = 0.2802). The mean scores of key performance indicators of a company are ranked from the highest to the lowest as follows: comparability ($\overline{X}$ = 4.4947, S.D. = 0.4368), understandability ($\overline{X}$ = 4.4787, S.D. = 0.4394), relevance to decision-making ($\overline{X}$ = 4.4309, S.D. = 0.3921), verifiability ($\overline{X}$ = 4.4255, S.D. = 0.4517), timeliness ($\overline{X}$ = 4.4309, S.D. = 0.3921) and credibility ($\overline{X}$ = 4.4096, S.D. = 0.4273). On the other hand, the mean scores of key performances indicators of a partnership are ranked as follows: timeliness ($\overline{X}$ = 4.5000, S.D. = 0.4082), comparability ($\overline{X}$ = 4.3786, S.D. = 0.3989), understandability ($\overline{X}$ = 4.3350, S.D. = 0.3984), credibility ($\overline{X}$ = 4.2913, S.D. = 0.3739), relevance to decision-making ($\overline{X}$ = 4.2476, S.D. = 0.2960) and verifiability ($\overline{X}$ = 4.2379, S.D. = 0.3627). This indicates that the respondents of a company and a partnership agree with all the key indicators of financial report quality. However, there are differences between a company and a partnership. This means that different types of businesses have different impact on accountant competencies. There are differences in the three highest scores of the two business types. The respondents of a company agree with comparability, understandability and relevance to decision-making while the respondents of a partnership agree with timeliness, comparability and understandability. It is also noted that there are no indicators with which the respondents in either business strongly agree. This means that there are no indicators which the respondents consider to strongly affect financial accounting quality.

4.5. Research Question 4

What are the conclusions to be drawn from the self-administered survey for further development in producing higher quality financial reports?

The results of the research questions seen through the mean scores indicate the strengths and weaknesses which can be worked on or addressed to improve the quality of financial accounting reports; a value that is higher than the overall mean score is referred to as a strength while a value that is lower than the overall mean score is referred to as a weakness.

4.5.1. Strengths of Accountant Competencies

Effective sub-competencies in each area are listed as follows: first, professional knowledge includes (a) knowledge of information technology, (b) knowledge of financial accounting and related disciplines and (c) application of theoretical knowledge to practice. Second, professional ethics comprise (a) no disclosure of information obtained from professional practice to others if it is not authorized or acts as a legal duty, (b) compliances with applicable laws and regulations to avoid any action that may cause disgrace to the profession and (c) continuous self-improvement in terms of operations, laws, regulations and techniques to acquire knowledge and professional competence at a level that can provide professional services effectively. Third, operational skills consist of (a) proficiency in calculation and data analytics, (b) expertise in information technology and (c) application of accounting principles and experience to analyze problems and solve operation problems. Fourth, personal skills encompass (a) ability to adapt to changes, (b) caution as a professional accountant and (c) ability to manage limited resources and complete tasks within deadlines. Fifth, interaction and communication skills (based on the three highest scores) involve (a) adaptability to work with people from different cultures, (b) collaboration with team and others and (c) ability to communicate and report through speaking and writing formally and informally. Sixth, organizational management skills are composed of (a) leadership, which is the ability to make decisions and solving problems, completing assignments, showing motivation and personnel development and (b) implementation of projects and personnel and resource management. Lastly, adaptive skills for the digital age are engaged with (a) the ability to use accounting software and financial information including other programs available through cloud computing, (b) contacting various agencies through electronic systems and (c) ability to work from home.

Effective financial reporting indicators in each category are as follows: first , relevance to decision-making is related to (a) information on financial statements that is useful for decision-making, and (b) financial information that is useful for prediction. Additionally, credibility consists of (a) information that provides a complete picture of the asset group, (b) financial information that is visually impartial, unbiased or otherwise unembellished, (c) financial information that is accurate or approximate to unobservable prices or values and (d) financial information that creates credibility of accounting reports. Further, comparability comprises financial reports that contain information that can be compared with similar information of other entities in the business while verifiability is engaged with (a) financial reports that can be verified (directly verified) or supported (indirectly verified), and (b) financial reporting that might prove to be wrong (not based on actual facts) and not forward-looking in information. Finally, understandability encounters the problems in using financial information for decision-making that does not ignore complex information.

4.5.2. Weaknesses of Competencies

There are weaknesses that need to be improved in this area. Most important of all, in professional knowledge, accountants need more knowledge of (a) laws and regulations related to accounting, (b) knowledge of business organizations, academic changes in disciplines and related disciplines being monitored and applied and (c) integration of knowledge with related disciplines. In addition, they need to raise their professional ethics of neutrals, no bias. no conflict of interest or being influenced by professionals in decision-making. Also, they need to increase their operational skills in procurement and understanding of information from various sources such as print and electronic media and analytical skills for decision-making and risk management. In addition, they need to enhance their personal skills in their ability to apply professional values, codes of conduct and attitudes to decision making, self-management and creativity and self-learning. Next, they should promote essential interaction and communication skills (listening skills and effective communication skills, interaction with people of different cultures or opinions, English language proficiency in oral and written communication and negotiations carried out to reach an acceptable conclusion or agreement). Lastly, accountants should develop their organizational and management skills e.g. on strategic planning and goal setting, for better performance of the organization and effective project, personnel and resource management.

In order to produce financial reports of high quality, performances in the above areas need to be improved. For relevance to decision-making, accountants should acquire financial information which provides feedback on past assessments, predictive values correlating with confirmation values and financial information providing a particular reporting entity; for credibility, their reports should better represent financial information in text and numbers; for comparability, they need to pay more attention to financial information to be compared with accounts of any period of the same reporting entity to be similar or dissimilar to another reporting entity, and to be comparable to a certain extent with a credible and unbiased representation of the phenomena associated with similar economic decisions of another reporting entity; for verifiability, several knowledgeable and independent observers should come to the same conclusion when they read the report; for timeliness, financial information reports should be delivered to relevant agencies on time and for understandability, financial information should be classified and presented clearly and concisely, and the financial reports should provide complete information and users should be able to understand the content and apply it correctly.

4.6. Research Question 5

What are the business implications to be drawn for growth-oriented enterprises in order to benefit business performance and economic decisions?Business implications for growth-oriented enterprises can be drawn from the opinions of experts as summarized below:

Table 8 shows the experts' opinions on accountant competencies and financial report quality. Their opinions involve suggestions for professional knowledge (namely economics, taxation and business laws and regulations), professional ethics (namely finance and financial management), operational skills (namely financial reporting skills), organizational management skills (such as business and organizational environment) and adaptive skills for the digital age (namely information technology). Also, their suggestions for financial report quality include the issues of relevance to decision-making (namely objectives, procedures and methods), credibility (namely assurance and audit) and verifiability (namely governance, risk management and internal control).

Table 8. A summary of experts' opinions on accountant competencies and financial report quality.

Accountant Competencies				
Professional knowledge	Professional Ethics	Operational skills	Organizational management skills	Adaptive skills for the digital age
• Economics • Taxation • Business laws and regulations	• Finance and financial management	• Financial accounting and reporting	• Business and organizational environment	• Information technology • Information technology-incorporating business strategy and management
Financial Report Quality				
Relevance to decision-making		Credibility	Verifiability	
• Objectives, procedures and methods		• Audit and assurance	• Governance, risk management and internal control	

Based on the information given in Table 8, it can be concluded that several accountant competencies need to be enhanced. Professional knowledge, for example, as noted by several experts, refers to "paying more attention to economics such as microeconomics and macroeconomics, impacts of changes in macroeconomic indicators and various types of market structures including complete competition, monopoly and oligopoly." Expert advice offered on taxation is that "requirements and implementation of the country's tax collection system and analysis of tax issues related to uncomplicated international trade transactions are essential knowledge for accounting professionals." Business laws and regulations like the ones that govern different forms of business and the ones that are related to the working environment of professional accountants should also be taken into consideration.

Additionally, on professional ethics, professional accountants agree that finance and financial management can help improve accountant competencies. In reporting, accountants should remind themselves of these issues: (a) comparing various funding sources available to the organization, including financial instruments, bond markets, financing from banks, government bond markets and equity markets, (b) analyzing the cash flow and working capital requirements of the organization, (c) analyzing the current and prospective financial position of the organization using ratio analysis, trend analysis and cash flow analysis, (d) assessing suitability of various elements used in calculating the cost of capital of the organization, (e) applying various investment budgeting techniques in evaluating investment decisions and (f) explaining the method of valuation using the income method, asset method and the market value method for business planning, investment decisions and long-term financial management.

In addition, the following are suggestions on operational skills, specifically focusing on financial accounting and financial reporting of these issues: (a) applying principles to transactions, (b) applying International Financial Reporting Standards (IFRSs) or other relevant standards, (c) evaluating suitability of policies used in the preparation of financial statements, (d) consolidating financial statements in accordance with other standards, (e) interpreting financial statements and related disclosures and (f) interpretation of reports, including non-financial information such as integrated reports.

Moreover, on organizational management skills, business and organizational environments should also be taken into account; as suggested by professional accountants "the business needs to include the condition in which the organization operates, which includes the legal, technical and economic drivers, and analyze the characteristics of the global environment that affect trade and finance". Furthermore, "identifying key aspects of globalization, including the role of multinational businesses and emerging markets is also a must." In addition to organizational management skills, factors conducive to business and organizational environments should also be enhanced. These factors, as suggested by some of the experts, include "various methods that may be used to design an organization, the objectives and importance of duties and operations within the organization, internal and external factors that may affect the organization's strategy and the processes applied in the implementation of the organization's strategy."

Subsequently, on adaptive skills for the digital age, information technology must be further enhanced for data analysis and decision making, and support decision-making through business analysis and related work system controls. Business strategy and management must incorporate IT more to support decision-making through business analysis, data analysis and decision making; the professional accountants also suggested analyzing the adequacy of general control of IT and related work system controls.

Finally, key performance indicators of financial report quality that need to be improved involve the issue of relevance to decision-making. To achieve this, objectives, procedures and methods related to the audit of financial statements should be clearly identified as being relevant to the audit of the financial statements; quantitative methods used in audited work should also be applied. Additionally, credibility can be assured by audit and assurance**.** To do so, professional accountants suggested "describing elements of an engagement and the standards relevant to that engagement." Professional accountants see the need to "assess the risks of material misstatements to financial statements and the impact on audit strategy". On the other hand, professional accountants recommend to "apply relevant auditing standards (such as International Auditing Standards) and rules and regulations relating to the audit of statements" in their reports. Finally, to build verifiability, professional accountants of enterprises have opined the promotion of "principles of good governance, including the rights of owners and investors and the role of stakeholders in the regulatory requirements." Some experts have proposed to analyze the elements of the corporate governance conceptual framework and the risks and opportunities of the organization by using the risk management framework and internal control related financial reporting.

5. DISCUSSION

The findings of this study lend support to prior research on competencies. This study supports the notion that professional knowledge impacts the quality of financial and accounting reporting. The key factors of professional knowledge are knowledge-sharing culture and general competence (Trivellas et al., 2015), new competency frameworks with a focus on quality and pervasive skills, accounting and reporting, financial management, inspection and assurance, management decisions and controls and taxation knowledge of IT (Spraakman et al., 2015), digital skills (Pan & Seow, 2016) and Big Data information systems (Sledgianowski et al., 2017). As in previous studies, the present study emphasizes information technology. However, in comparison with past studies, the present study highlights the aspect of knowledge of financial accounting and related disciplines and integration of the knowledge with related disciplines, business organizations, laws and regulations related to accounting, application of theoretical knowledge to practice and academic changes in disciplines and related disciplines being monitored and applied.

In addition, this study is consistent with prior research that professional ethics constitute a key factor and has identified professional ethics related to accounting services (Bonaci et al., 2013; Jaijairam, 2017; Mahdavikhou & Khotanlou, 2012; Meymandi et al., 2015; Onyebuchi, 2011; Sudacevschi, 2016). This study has also proposed ways to enhance professional ethics (such as continuous self improvement in operations, laws, regulations and techniques to acquire knowledge and professional competence at a level that can provide professional services effectively, and compliance with applicable laws and regulations to avoid any action that may cause disgrace to the profession).In addition to prior research that support operational skills such as strategic competence (Fauré & Rouleau, 2011) and information technology (Cory & Pruske, 2012; Muda et al., 2017; Ngai et al., 2011), this study has identified additional skills that are vital for reporting such as proficiency in calculation and data analytics and analytical skills for decision-making and risk management.

In line with the conclusions made by Tan and Laswad (2018), that interpersonal and personal skills are the foremost skills and Stephenson (2017) who highlighted the importance of personal competencies such as interaction, problem-solving, project management and leadership, this study found personal skills as being vital, such as the ability to adapt to changes and ability to apply professional values, codes of conduct and positive attitudes to decision making.

This study is consistent with the study by Hargie et al. (2017)) that interaction and communication skills are keys to career success. Unlike prior studies which paid more attention to communication skills, like those of Riley and Simons (2016) and Siriwardane and Durden (2014) this study gives more attention to interaction skills like collaboration, group discussions to resolve conflicts and negotiations.

Organizational management skills in various forms and business models have been previously highlighted, such as the lean management accounting practices by Fullerton et al. (2014) SMEs (Ahmad, 2012; Lavia & Hiebl, 2015) and risk management (Soin & Collier, 2013). However, this study highlights these same skills for better performance of the organization, such as in strategic planning and goal setting and leadership, ability to make decisions and solving problems.

Scholars have concurred with the findings of Van Laar et al. (2017) that reinforced the 21st century digital skills , Van Deursen and Van Dijk (2014) who highlighted the relationship between digital skills and the information society, Drew (2018) who proposed adaptive skills necessary for the digital age and van Laar et al. (2019) who identified the determinants affecting digital skills in the 21st century. In a related manner, this study has accentuated adaptive skills for the digital age such as ability to use accounting software, financial information and other programs available through cloud computing.

The findings of this study lend support to prior research on quality financial reporting. Several scholars like Vijitha and Nimalathasan (2014); Emeni et al. (2016) and Mulenga (2015) found the relevance of accounting information a key performance indicator. This study also found these indicators are keys to relevance in decision-making such as being useful for decision-making, prediction and feedback on past assessments.

Like other studies that indicated credibility as a key to quality accounting reporting and proposed several ways to reinforce credibility, such as accounting ethics by Enofe et al. (2015) creative accounting Aifuwa et al. (2018) and avoidance of negative impacts of fraud-free financial reports (Omoolorun & Abilogun, 2017) this study has identified ways to reinforce credibility such as by providing a complete picture of the asset group, accurate or approximate to unobservable prices or values and visually impartial, unbiased or otherwise unembellished financial information.

Comparability, especially the adoption of international financial reporting standards, is proposed by researchers like Su et al. (2018) and Chircop et al. (2020) This study lends support to these researchers and identifies comparability with similar factors of other entities in the business, such as in accounts of the same periods as of the reporting entity, similarities and dissimilarities of the reporting entity and a credible and unbiased representation of the phenomena associated with similar economic decisions of the other reporting entity.

Verifiability is identified as a major attribute of financial reporting quality in the findings of several studies like that of Al-Waeli et al. (2020) and Kim-Gina (2018). This study lends support to the fact that quality reporting should be verified by direct and indirect verification, forward-looking financial information and similar reporting.

Findings of several studies like that of Abernathy et al. (2014) and Iyoha (2012) revealed that timeliness is a crucial indicator of quality reporting. The findings of this study are consistent with the findings that the reports should be delivered to relevant agencies on time and available for decision-makers to use in a timely manner.

Several studies (Ewer (2007); Nobes (2016); Jones and Smith (2014); Avi (2018); Nobes and Stadler

(2015)) have proposed understandability as a key reporting performance. This study confirms the significance of understandability in the following ways, namely, quality financial reports should be clear and concise and provide complete information so that users can apply them correctly for decision-making.

Lastly, studies by Fei et al. (2021); Krishna et al. (2011); Reed and Reed (2009); Ronaghi and Mosakhani (2021) consider business models as being the key to quality reporting. Like those studies, the present study found different impacts of two types of business models (namely company and partnership) on reporting in all competences and indicators in this study. The results of this study revealed that the company's overall mean scores were 4.32 and 4.45 while those of the partnership were 4.29 and 4.29.

6. CONCLUSIONS AND SUGGESTIONS FOR FUTURE STUDIES

Five conclusions can be drawn from the study.

First, the respondents agree with all competencies with five out of seven competencies scoring higher than the overall mean score (namely personal skills, professional ethics, interaction and communication skills, adaptive skills for the digital age and organizational management skills. This means that they agree that these competencies have an impact on financial reporting quality. In addition, the respondents strongly agree with almost all sub-competencies, except for the following sub-competencies with which they strongly agree: 1. no disclosure of information obtained from professional practice to others if it is not authorized or acts as a legal duty, 2. ability to adapt to changes, 3. proficiency in calculation and data analytics, 4. adaptability to work with people from different cultures and 5. expertise in information technology. This means that they agree that these sub-competencies impact financial reporting quality.

Second, the respondents agree with three out of six indicators of financial report quality that scored higher than the overall mean score, namely timeliness, comparability and understandability. This means that they agree that these indicators have an impact on financial reporting quality. Also, the respondents agree with all the indicators. This means that they agree that all indicators have an impact on financial reporting quality. However, they do not strongly agree with any of the indicators. This means that there is room for improvement in all indicators.

Third, the respondents of a company and a partnership agree with all competencies. However, there are differences between a company and a partnership. The company has higher scores than the partnership; there are differences in the three highest scores of the two business types. The respondents of a company agree with personal skills, professional ethics and interaction and communication skills while the respondents of a partnership agree with interaction and communication skills, professional ethics and adaptive skills for the digital age. It is also noted that only personal skills have a higher mean score than the overall mean score. This means that only personal skills are considered by the respondents as having the highest effect on financial accounting quality. Moreover, the respondents of a company and a partnership agree with all key indicators of financial report quality. However, there are differences between a company and a partnership here too. This means that different types of businesses have different impact on accountant competencies; there are differences in the three highest scores of the two business types. The respondents of a company strongly agree with comparability, understandability and relevance to decision-making while the respondents of a partnership strongly agree with timeliness, comparability and understandability. It is also noted that there are no indicators that the respondents in either business strongly agree with. This means that there are no indicators which the respondents consider strongly affect financial accounting quality.

Fourth, issues to be addressed for further development in order to produce higher quality financial reports point to both strengths and weaknesses, both in competencies and quality financial reporting.

Lastly, experts' opinions on business implications for growth-oriented enterprises to benefit from business performance and economic decisions cover the following two areas: accountant competencies and financial report quality. Accountant competencies involve suggestions on professional knowledge (e.g., economics, taxation and business laws and regulations), professional ethics (e.g., finance and financial management), operational skills (e.g., financial accounting and financial reporting), organizational management skills (e.g., business and organizational environment) and adaptive skills for the digital age (e.g., information technology and information technology-incorporating business strategy and management). Furthermore, the experts' opinions on producing quality financial reports cover the following issues: relevance to decision-making (e.g., objectives, procedures and methods), credibility (e.g., audit and assurance) and verifiability (e.g., governance, risk management and internal control).

7. LIMITATIONS AND DIRECTIONS FOR FUTURE STUDY

Future inquiry on quality financial reporting should revise the conceptual framework of this study which overlooks the impact of a business model on quality financial reporting and should take it into account as a key factor in the study of quality financial reporting.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study.

REFERENCES

Abernathy, J. L., Beyer, B., Masli, A., & Stefaniak, C. (2014). The association between characteristics of audit committee accounting experts, audit committee chairs, and financial reporting timeliness. *Advances in Accounting, 30*(2), 283-297.Available at: https://doi.org/10.1016/j.adiac.2014.09.001.

Ahmad, K. (2012). *The use of management accounting practices in Malaysian SMEs*. Doctoral Dissertation, University of Exeter.

Aifuwa, H. O., Embele, K., & Saidu, M. (2018). Ethical accounting practices and financial reporting quality. *EPRA Journal of Multidisciplinary Research, 4*(12), 31-44.

Akpanuko, E. E., & Umoren, N. J. (2018). The influence of creative accounting on the credibility of accounting reports. *Journal of Financial Reporting and Accounting, 16*(2), 292-310.Available at: https://doi.org/10.1108/jfra-08-2016-0064.

Al-Waeli, A. J., Hanoon, R. N., Ageeb, H. A., & Idan, H. Z. (2020). Impact of accounting information system on financial performance with the moderating role of internal control in Iraqi industrial companies: An analytical study. *Journal of Advanced Research in Dynamical and Control Systems, 12*(8), 246-261.

Avi, M. S. (2018). Understandability in Italian financial reporting and Jail: A link lived dangerously. *European Journal of Economics, Finance and Administrative Sciences, 99*(August-November), 30-41.

Bonaci, C. G., Strouhal, J., Müllerová, L., & Roubíčková, J. (2013). The corporate governance debate on professional ethics in the accounting profession. *Central European Business Review, 2*(3), 30-35.Available at: https://doi.org/10.18267/j.cebr.52.

Chircop, J., Collins, D. W., Hass, L. H., & Nguyen, N. N. Q. (2020). Accounting comparability and corporate innovative efficiency. *The Accounting Review, 95*(4), 127-151.Available at: https://doi.org/10.2308/accr-52609.

Cory, S. N., & Pruske, K. A. (2012). Necessary skills for accounting graduates: An explorattory study to determine what the profession wants. *ASBBS Proceedings, 19*(1), 208-218.

Drew, J. (2018). Merging accounting with'big data'science. *Journal of Accountancy, 226*(1), 48-52.

Emeni, F. K., Uwuigbe, O. R., Uwuigbe, U., & Erin, O. A. (2016). The value relevance of adopting IFRS: Evidence from The Nigerian banking sector. *Review of Economic Studies & Research Virgil Madgearu, 9*(2), 49-66.

Enofe, A. O., Edemenya, C., & Osunbor, E. (2015). The effect of accounting ethics on the quality of financial reports of Nigeria firms. *Research Journal of Finance and Accounting, 6*(12), 123-131.

Ewer, S. R. (2007). Transparency and understandability, but for whom? *The CPA Journal*, *77*(2), 16-18.

Fauré, B., & Rouleau, L. (2011). The strategic competence of accountants and middle managers in budget making. *Accounting, Organizations and Society*, *36*(3), 167-182.Available at: https://doi.org/10.1016/j.aos.2011.04.001.

Fei, S., Kwon, C., & Jin, C. (2021). The role of corporate ethical management on trade relationship trust and commitment: B2B. *Sustainability*, *13*(9), 5290.Available at: https://doi.org/10.3390/su13095290.

Fouché, J. P. (2013). A renewed call for change in accounting education practices. *International Journal of Educational Sciences*, *5*(2), 137-150.Available at: https://doi.org/10.31901/24566322.2013/05.02.07.

Fullerton, R. R., Kennedy, F. A., & Widener, S. K. (2014). Lean manufacturing and firm performance: The incremental contribution of lean management accounting practices. *Journal of Operations Management*, *32*(7-8), 414-428.Available at: https://doi.org/10.1016/j.jom.2014.09.002.

Hargie, O., Dickson, D., & Tourish, D. (2017). *Communication skills for effective management: Macmillan International Higher Education. Communication skills for effective management*. Basingstoke: Palgrave Macmillan.

IASB. (2013). *Exposure draft on an improved conceptual framework for financial reporting: The objective of financial reporting and qualitative characteristics of decision-useful financial reporting information*. London: FAS Board. Exposure Draft (May 29).

Iyoha, F. O. (2012). Company attributes and the timeliness of financial reporting in Nigeria. *Business Intelligence Journal*, *5*(1), 41-49.

Jaballah, E., Yousfi, W., & Ali, Z. (2014). Quality of financial reports: Evidence from the Tunisian firms. *E3 Journal of Business Management and Economics*, *5*(2), 30-38.

Jaijairam, P. (2017). Ethics in accounting. *Journal of Finance and Accountancy*, *23*, 1-13.

Jones, M., & Smith, M. (2014). Traditional and alternative methods of measuring the understandability of accounting narratives. *Accounting, Auditing & Accountability Journal*, *27*(1), 183-208.Available at: https://doi.org/10.1108/aaaj-04-2013-1314.

Kim-Gina, J. (2018). External verifiability of accounting information and intangible asset transactions. *Available at SSRN 3186175*.Available at: https://doi.org/10.2139/ssrn.3186175.

Klibi, M. F., & Oussii, A. A. (2013). Skills and attributes needed for success in accounting career: Do employers' expectations fit with students' perceptions? Evidence from Tunisia. *International Journal of Business and Management*, *8*(8), 118.Available at: https://doi.org/10.5539/ijbm.v8n8p118.

Krishna, A., Dangayach, G., & Jainabc, R. (2011). Business ethics: A sustainability approach. *Procedia-Social and Behavioral Sciences*, *25*, 281-286.

Lavia, L. O., & Hiebl, M. R. (2015). Management accounting in small and medium-sized enterprises: Current knowledge and avenues for further research. *Journal of Management Accounting Research*, *27*(1), 81-119.Available at: https://doi.org/10.2308/jmar-50915.

Lin, P., Krishnan, S., & Grace, D. (2013). The effect of experience on perceived communication skills: Comparisons between accounting professionals and students. In Advances in accounting education: Teaching and curriculum innovations (pp. 131-152): Emerald Group Publishing Limited.

Mahdavikhou, M., & Khotanlou, M. (2012). New approach to teaching of ethics in accounting "introducing Islamic ethics into accounting education". *Procedia-Social and Behavioral Sciences*, *46*, 1318-1322.Available at: https://doi.org/10.1016/j.sbspro.2012.05.294.

Meymandi, A. R., Rajabdoory, H., & Asoodeh, Z. (2015). The reasons of considering ethics in accounting job. *International Journal of Management, Accounting and Economics*, *2*(2), 136-143.

Muda, I., Wardani, D. Y., Maksum, A., Lubis, A. F., Bukit, R., & Abubakar, E. (2017). The influence of human resources competency and the use of information technology on the quality of local government financial report with regional accounting system as an intervening. *Journal of Theoretical & Applied Information Technology*, *95*(20), 5552-5561.

Mulenga, M. J. (2015). Value relevance of accounting information of listed public sector banks in Bombay stock exchange. *Research Journal of Finance and Accounting, 6*(8), 222-231.

Ngai, E. W., Chau, D. C., & Chan, T. (2011). Information technology, operational, and management competencies for supply chain agility: Findings from case studies. *The Journal of Strategic Information Systems, 20*(3), 232-249.Available at: https://doi.org/10.1016/j.jsis.2010.11.002.

Nobes, C. (2016). Towards an assessment of country effects on IFRS recognition decisions and measurement estimations. Paper, Venezia.

Nobes, C. W., & Stadler, C. (2015). The qualitative characteristics of financial information, and managers' accounting decisions: Evidence from IFRS policy changes. *Accounting and Business Research, 45*(5), 572-601.Available at: https://doi.org/10.1080/00014788.2015.1044495.

Nwaobia, A. N., Kwarbai, J. D., Kwarbai, J. D., & Ajibade, A. T. (2016). Financial reporting quality on investors decisions. *International Journal of Economics and Financial Research, 2*(7), 140-147.

Omoolorun, A., & Abilogun, T. (2017). Fraud free financial report: A conceptual review. *International Journal of Academic Research in Accounting, Finance and Management Sciences,* 7(4), 83-94.Available at: https://doi.org/10.6007/ijarafms/v7-i4/3405.

Onyebuchi, V. N. (2011). Ethics in accounting. *International Journal of Business and Social Science, 2*(10), 275-276.

Palmer, K. N., Douglas, E. Z., & Robert, E. P. (2004). International knowledge, skills, and abilities of auditors/accountants. Evidence from recent competency studies. *Managerial Auditing Journal, 19*(7), 889-896.Available at: https://doi.org/10.1108/02686900410549411.

Pan, G., & Seow, P.-S. (2016). Preparing accounting graduates for digital revolution: A critical review of information technology competencies and skills development. *Journal of Education for Business, 91*(3), 166-175.Available at: https://doi.org/10.1080/08832323.2016.1145622.

Raef Lawson, C., & CSCA, C. (2019). New competencies for management accountants. *Strategic Finance, 100*(9), 40-47.

Reed, A. M., & Reed, D. (2009). Partnerships for development: Four models of business involvement. *Journal of Business Ethics, 90*(S1), 3-37.Available at: https://doi.org/10.1007/s10551-008-9913-y.

Riley, T. J., & Simons, K. A. (2016). The written communication skills that matter most for accountants. *Accounting Education, 25*(3), 239-255.Available at: https://doi.org/10.1080/09639284.2016.1164066.

Ronaghi, M., & Mosakhani, M. (2021). The effects of blockchain technology adoption on business ethics and social sustainability: Evidence from the Middle East. *Environment, Development and Sustainability,* 1-26.Available at: https://doi.org/10.1007/s10668-021-01729-x.

Ross, J., Shi, L., & Xie, H. (2019). The determinants of accounting comparability around the world. *Asian Review of Accounting, 28*(1), 69-88.Available at: https://doi.org/10.1108/ara-04-2019-0087.

Sirajuddin, S. N., & Rasyid, I. (2021). The relevance of local government financial report information in decision making on regional revenue and expenditure budget planning. *Ilkogretim Online, 20*(5), 2270-2277.

Siriwardane, H. P., & Durden, C. H. (2014). The communication skills of accountants: What we know and the gaps in our knowledge. *Accounting Education, 23*(2), 119-134.Available at: https://doi.org/10.1080/09639284.2013.847329.

Sledgianowski, D., Gomaa, M., & Tan, C. (2017). Toward integration of big data, technology and information systems competencies into the accounting curriculum. *Journal of Accounting Education, 38,* 81-93.Available at: https://doi.org/10.1016/j.jaccedu.2016.12.008.

Soin, K., & Collier, P. (2013). Risk and risk management in management accounting and control. *Management Accounting Research, 24*(2), 82-87.Available at: https://doi.org/10.1016/j.mar.2013.04.003.

Spraakman, G., O'Grady, W., Askarany, D., & Akroyd, C. (2015). Employers' perceptions of information technology competency requirements for management accounting graduates. *Accounting Education, 24*(5), 403-422.Available at: https://doi.org/10.1080/09639284.2015.1089177.

Stephenson, S. S. (2017). Accounting community of practice pedagogy: A course management invention for developing personal competencies in accounting education. *Accounting Education, 26*(1), 3-27.Available at: https://doi.org/10.1080/09639284.2016.1247008.

Su, R., Yang, Z., & Dutta, A. (2018). Accounting information comparability and debt capital cost empirical evidence from Chinese listed companies. *Asian Economic and Financial Review, 8*(1), 90-102.Available at: https://doi.org/10.18488/journal.aefr.2018.81.90.102.

Sudacevschi, M. (2016). The promotion of the accounting services within the limits of professional ethics. *Challenges of the Knowledge Society*, 718-722.

Tan, L. M., & Laswad, F. (2018). Professional skills required of accountants: What do job advertisements tell us? *Accounting Education, 27*(4), 403-432.Available at: https://doi.org/10.1080/09639284.2018.1490189.

Trivellas, P., Akrivouli, Z., Tsifora, E., & Tsoutsa, P. (2015). The impact of knowledge sharing culture on job satisfaction in accounting firms. The mediating effect of general competencies. *Procedia Economics and Finance, 19*, 238-247.Available at: https://doi.org/10.1016/s2212-5671(15)00025-8.

Van Deursen, A. J., & Van Dijk, J. A. (2014). *Digital skills: Unlocking the information society*: Springer.

Van Laar, E., Van Deursen, A. J., Van Dijk, J. A., & De Haan, J. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior, 72*, 577-588.Available at: https://doi.org/10.1016/j.chb.2017.03.010.

van Laar, E., van Deursen, A. J., van Dijk, J. A., & De Haan, J. (2019). Determinants of 21st-century digital skills: A large-scale survey among working professionals. *Computers in Human Behavior, 100*, 93-104.Available at: https://doi.org/10.1016/j.chb.2019.06.017.

Vijitha, P., & Nimalathasan, B. (2014). Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka. *Merit Research Journal of Business and Management, 2*(1), 1-6.