



## A Survey of the Influence of Skill Sets on the Performance of Professional Accountants

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### **Abstract**

**Purpose:** This study has two purposes: i) to determine which skill sets are considered the most important and necessary for today's accountants, and ii) to investigate the impact of major categories such as business skills, soft skills, technical and digital skills, and ethical skills on the performance of accountants in the workplace

**Methodology:** Under the assumption that there is an infinite population, a sample of 315 accountants was randomly chosen from the contacts on LinkedIn. In order to categorise 22 skills into four groups—business, soft, technical, digital, and ethical skills—data was collected from 91 respondents (28.3% response rate) during the course of the month of February 2023

**Findings:** According to the study's results, today's accountants place a higher value on time management, problem-solving, critical thinking, knowledge of and ability to interpret accounting standards, leadership (SS), business knowledge (BS), professional behaviour, adherence to the code of conduct (ES), financial statement preparation, interpretation, and analysis (TDS), as well as other skills. The independent variables "business skills" (BS), "technical and digital skills" (TDS), and the control variable "continental location" (CL) all significantly improve the employment performance of accountants, according to the findings of the regression analysis.

**Originality/Value:** This study advances both theory and application. It places a strong emphasis on educating professional accountants about the need to arm themselves with the newest skill sets in light of a changing environment in order to improve their performance at work. It also looks at the most important skills that affect how well professional accountants perform. The study recommends that colleges and institutions provide accounting students enough time to acquire each of the four skill sets. To enhance these skills, particularly business, technological, and digital capabilities, professional accountants should take part in CPD with their employers.

## 1. Introduction

Because there is a growing demand for accountants, having advanced accounting skills will help people get better jobs because they will allow them to understand money and budgeting in ways that go beyond the traditional ones. Technical and regulatory knowledge are no longer enough to succeed in the accounting industry. Clients today expect services that are significantly different from those they received in the past, thanks in large part to technology's significant contribution to the profession's rapid evolution. Furthermore, these services necessitate a completely unique set of skills. Corporate leaders and managers in the financial industry have reported a lack of technical and non-technical skills among entry-level management accounting and finance professionals (McCann, 2015). Finding qualified candidates for professional-level positions in accounting and auditing, financial analysis, compliance, and business services can be difficult for chief financial officers (Robert Half, 2020). The findings of Asonitou and Hassall's (2019) study in the context of Greece revealed that professional skills were valued, but there was a disparity between the weights assigned to relevant abilities by various stakeholder groups and how they should be developed through the educational process. According to the findings, it is critical to improve aspiring accountants' critical thinking skills through innovative teaching strategies and the development of curricula that promote graduates' employability and sustainable development. With an objective to study the effects of levels of professional accountant skills on performance in the new normal era, Yoosuk, Shoommuangpak, and Pornpundejwittaya's (2023) study **findings show that** the level of skills of professional accountants is at a high level. When classified by level of importance, the most important skills were digital skills, followed by emotional and social skills and professional skills, respectively.

**As professional accountants manage their accounting careers and take steps to advance them, they have to ensure that they improve their accounting skills and learn new ones. In the midst of the COVID-19 pandemic, business practices and technology are evolving; thus, it is worthwhile to investigate which skills**

are the most valuable complements in this ever-changing market place and which skill sets have the greatest influence on accountants' performance at work. Furthermore, accounting skills in demand vary by job title, of course, but the following overview of four major sets of skills, namely, business, soft, technical and digital, and ethical, for professional accountants can help them advance in their job search as well as in their accounting career. Accounting education also emphasizes that education must prepare accounting graduates to perform their jobs (Fung, 2017; Al-Hattami, 2021).

### **1.1 Research questions**

- i. What are the essential skills for modern accountants?
- ii. Do the major skill sets influence accountants' performance in the workplace?

### **1.2 The study's objectives**

- i. To examine the important and necessary skill set that modern accountants should develop.
- ii. To investigate the influence of major categories, such as business skills, soft skills, technical and digital skills, and ethical skills, on accountants' performance in the workplace.

Six sections make up the remainder of the paper. A thorough review of the literature, the formation of hypotheses, a theoretical framework, and a research model are all included in Section 2. Part three discusses the sample selection, research instrument's components and procedures for gathering data. Results and discussion on skill sets are presented in Section 4, and empirical findings, analysis, and a summary of hypotheses are covered in Section 5. The final portion includes a summary, recommendations for further research, and a discussion of the study's shortcomings.

## **2. Literature Review**

The fourth industrial revolution presents many opportunities and challenges in a digitized world of work. This section provides a systematic review of the literature on the importance of the skill sets that accounting professionals require today to be efficient and effective in the changing business and digital technology environments.

Prior literature pinpoints the "skills gap," which is the mismatch between the skills accountants possess and the skill sets demanded by employers (Succi and Canovi, 2019). The size and nature of the skills gap depend on whether the right skills are embedded in the university and professional accounting bodies' curriculum and how they are delivered and assessed (Tan and Laswad, 2018). Universities have attempted to align their curricula with the skills demanded by employers but have met challenges, and the expectation gap is persistent (Bridgstock and Jackson, 2019; Osmani et al., 2019). However, considering the variability of job roles and the dynamic nature of the labour market, it may be impossible for universities to continually identify and meet the hard skills required by employers (Bennett, 2019; Pham and Jackson, 2020). The literature review for necessary skills is analysed into four categories: (a) business skills; (b) soft skills; (c) technical and digital skills; and (d) ethical skills.

## **2.1 Business skills (BS)**

Accountants' business skills in this study include business knowledge, research, project management, regulatory management, and networking. Accountants are increasingly being recognized as business partners and internal consultants (Tsiligiris, 2019). Accountants of the future are viewed as potential internal business consultants in light of the growing impact of digital transformation. Accountants can meet the demand for real-time, accurate data analytics that are explained in simple terms. According to most reports, accountants will be directly involved in decision-making in the future (AICPA and CIMA, 2020a; Goh et al., 2019). Future accountants should also be able to facilitate internal business partnerships. Accountants' changing role as decision-makers necessitates a more comprehensive understanding of the business environment.

The study by Mandilas et al. (2014) demonstrates the importance of networking in the workplace for accountants. Because accountants must communicate with a wide range of groups both within and outside the company, strong networking and social skills are essential for generating business. Furthermore, Burke et al. (2008) argue that the accountant of the twenty-first century should be more of a consultant than in

the past, capable of locating both financial and nonfinancial data. According to Weaver and Kulesza (2013) and Khemiri (2021), business research skills and abilities are a valuable asset for accountants in their field.

## **2.2 Soft skills (SS)**

Leadership, organization, critical thinking, time management, adaptability, problem-solving, knowledge and interpretation of accounting standards, and oral communication are examples of soft skills. Soft skills are becoming increasingly important, according to research conducted by several international accounting professional bodies (e.g., CIMA, AICPA, IFAC). Employers have identified communication, teamwork, time management, and problem-solving skills as critical pre-requisites for accounting graduate recruitment, ongoing employment, and promotion (Montano et al., 2001; Tempone et al., 2012). At the same time, research shows that employers believe accounting graduates lack these critical soft skills (Teng et al., 2019). Tsiligiris and Bowyer's (2021) study aims to identify the skills and personal qualities that define accounting graduates' employability in the context of the fourth industrial revolution. They conclude that future accountants must have a diverse set of skills, with a growing emphasis on soft skills. Soft skills are regarded as crucial in assisting accountants to succeed in the future of work, where higher cognitive skills are valued.

Since the late 1990s, accounting professional bodies and other external organizations have argued for the importance of critical thinking in accounting and finance (Reinstein and Bayou, 1997). Analytical/critical thinking is one of the top three professional competencies required by accountants in the United States and Tunisia, according to Khemiri's (2021) survey. Similarly, "critical thinking/problem-solving skills" were ranked as the most important skill by industry leaders (61.7%) and accountants in the context of the United States and Tunisia. Accountants must be able to provide more strategic and deeper insights in order to be an effective business partner. Osmani et al. (2017) study findings support previous findings. Furthermore, Wanwijit and Kongchan (2017) discovered that time management or punctuality at work is a matter of management planning because an accountant

presents financial information to executives in order for them to make business decisions. Similarly, Atanasovski, Trpeska, and Lazarevska (2018) demonstrated that time management is one of the most important skills for professional accountants to possess.

Cernuşcă (2020) investigates employers' perceptions of the hard and soft skills required by accounting students and professional accountants in light of accounting graduates' access to the labour force. Accounting students (future accounting professionals) must possess a set of powerful soft skills to complement the hard skills acquired and tested during academic studies in order to succeed and perform well in the field in which they will work. Furthermore, Kavanagh and Drennan (2008) state that leadership should be one of the skills required of modern accountants. Working with co-workers requires strong interpersonal skills as well as oral communication (Kwarteng and Mensah, 2022; Joshi and Bremser, 2004). Similarly, Hussein (2017) claims that intellectual and communication skills, as well as interpersonal relationships, are essential for modern accountants.

### **2.3 Technical & digital skills (T&DS)**

The role of a professional accountant has evolved as technology has advanced, and new-age accountants must acquire technical and digital skills (TDS). Digital skills are defined as "a set of abilities to access and manage information using digital devices, communication applications, and networks" (UNESCO, 2018). The digital skills required for accountants vary depending on an individual's age and experience, as well as the business sector of the job role.

Accountants are already familiar with, or are being trained to become familiar with, key technologies such as ERP and spreadsheet applications, which have long been used as baseline technologies. This should remain the primary focus of their accounting education and training. However, the use of new skills such as cloud-based accounting solutions, standard business intelligence (BI) applications, and tax return digitization is increasing. There are also advanced digital skills that concern accountants' familiarity with disruptive technologies such as AI and blockchain

technology. In addition, data skills are a subset of digital skills required for accountants. The two most common data skills are data management and analysis.

Kroon, Alves, and Martins (2021) investigate the skills required of today's accountants and the role that is assigned to them. They argue that technological developments affecting the accountant's role and skills have been discussed in a fragmented manner in the existing literature. The accounting profession has been greatly influenced by technology. Many manual processes have been simplified, making work easier and more efficient. Financial data can now be accessed from anywhere at any time thanks to the use of cloud technology. It has also enabled data collaboration among various stakeholders, resulting in a reduction in the time required to complete a task. Supervising data processing requires being digitally literate, tech-savvy, and familiar with software. According to both early-career accountants and managers, accounting knowledge and skills, as well as staying up-to-date on new legislation, updates, and systems, were critical to their roles. Problem-solving skills were also required, particularly when it came to adding value through analytics to inform decision-making. Early-career accountants and managers both cited professionalism as an important skill for success, such as time management, efficiency, and relationship building.

According to Jackson, Michelson, and Munir (2020), 72% of early-career accountants believe technology has changed their skills for success in a moderate or significant way. According to the survey, there is a shift from data processing to analytics, which includes data interpretation, problem solving, and value addition. This includes thinking about ways to automate for greater efficiency. The emphasis on communication and technological skills is consistent with previous research in the field.

Artificial intelligence (AI) and machine learning (ML) have added a new dimension to the accounting profession. These technologies have made it possible to automate manual and repetitive tasks, allowing accountants to focus on more important aspects of their jobs. Furthermore, professional accountants can now use predictive analytics (Indian Institute of Commerce (IIC), 2021). These technologies have made it

possible to automate manual and repetitive tasks, allowing professionals to concentrate on more important aspects of their jobs. Because of the use of predictive analytics, professional accountants can now make data-driven decisions, resulting in more informed and accurate predictions. Professional accountants can now use advanced tools and software to analyze massive amounts of data in minutes, providing them with valuable insights and trends.

These insights can be used to identify areas for improvement, make more accurate predictions, and drive decisions. A KPMG survey found that 69% of audit executives believe AI and machine learning will have a significant impact on audit quality (cited by the Indian Institute of Commerce, 2021). As technology advances, it will improve the audit process, resulting in higher-quality reports and recommendations.

However, in today's fast-changing environment, interpersonal skills are more important as the accounting profession shifts away from technical activities (Rumbens et al., 2019). Accounting graduates are perceived by employers as having the necessary technical accounting skills but lacking important soft skills (Low et al., 2016). Employers also continue to expect accounting graduates to have a basic understanding of fundamental accounting skills, but they expect these skills to be learned on the job. Simultaneously, employers place a greater emphasis on graduates' soft skills, such as interpersonal and communication skills, as well as the ability to fit in and adapt to the firm's organizational culture (Low et al., 2016).

#### **2.4 Ethical skills (ES)**

According to a recent study by Kwarteng and Mensah (2022), the four qualities that accountants need most in the workplace are professional skills, technical skills, professional ethics principles, and attitude. The results of Rogosic and Perica's study from 2022 indicate that accountants are more likely to comprehend the importance of accounting ethical principles when they have higher degrees of affective professional commitment. According to Milliron (2012), professional accountants need strong ethical principles and work ethics because they can impact how well they perform on the job. According to Jones and Abraham (2009), the most crucial



factors for professional accountants in the Australian setting are analysis and ethical standards.

The results of the Huterski, Voss, and Huterska (2020) and Ishaque et al. (2021) studies support the use of the accounting ethics code because it offers guidelines and increases awareness, both of which lead to accountants acting in a more appropriate professional manner in terms of code of conduct compliance.

### **2.5 Experience**

In theory, the effectiveness of accountants and auditors with increased experience should increase. The findings are confirmed by Setiawan (2022). According to other studies, Nurhadi et al. (2022) found that in the Indonesian environment, auditors' performance is more influenced by their experience than by their professionalism. Listiana (2018), on the other hand, presents a range of study findings and argues that auditor experience has no influence on audit performance

### **2.6 Continental-location**

In the field of accounting, the idea of globalization is widely accepted. The expansion of global organizations has an impact on accountants' performance since it increases their job options and gives them the chance to learn new skills, as the whole environment in which a corporation functions is shaped by national and international cultural norms. Thus, the continental-location element might potentially have an impact on how well accountants perform at work as different continents have unique cultural traits, judicial systems, and economic structures. According to Toner's (2011) research, there are significant disparities in worker skill development systems across advanced nations, particularly for vocational skills.

### **2.7 Influence of skill sets on accountants' performance**

The relationship between business, soft, technical, and digital skills, as well as ethical abilities and accountants' contextual performance at work, has not received much attention from academic research or empirical inquiry in the past. According to a recent study by Yoosuk, Shoosmuangpak, and Pornpundejwittaya (2023), the skills of professional accountants, including their professional, digital, emotional, and social skills (networking skills), positively impacted how well they performed in the

new lifestyle era with statistical significance at the 0.01 level. Whereas Trivellas et al. (2015) claim that accounting managers are more likely to attain improved performance and, as a result, effectiveness as a result of strengthened general competences or skill acquisition in a career advancement setting. Kwarteng and Servoh's study from 2022 found that graduates' performance in the job was greatly influenced by their technical ability, professional skills, and professional values, ethics, and attitudes. In a similar vein, the results of Treetosakul's (2020) study reveal that both the overall efficiency performance and professional accounting skills of accountants in private enterprises in Bangkok were at the top level. The research by Ardina, Wahyuni, and Suarjana (2021) demonstrates that both hard and soft skills have a favourable and significant impact on the competitiveness of accounting students. Also, by enhancing performance, the combination of soft and hard talents improves employees' capacity to work effectively (Chala and Bouranta, 2021). Prior studies have shown that integrating personal traits and social abilities enhances individual employee performance (Turek and Perek-Bialas, 2013; Ibrahim, Boerhannoeddin, and Bakare, 2017). An employee's career path and productivity can be enhanced by a mix of knowledge and interpersonal skills (networking), according to Sisson and Adams (2013) and Anggiani (2017).

It's crucial to keep in mind that the foundation of an accountant's skills is topic knowledge. Accounting expertise continues to be a crucial requirement for future accountant success despite the predicted disruption in accounting careers and altering expectations about the use of technology. Based on the existence of strong accounting knowledge foundations, all other talents (such as digital, soft, business, and ethical) are valued.

## **2.8 Hypotheses development**

H01: Business skills influence significantly the accountants' performance in the work place.

H02: Soft skills influence significantly the accountants' performance in the work place.

H03: Technical and digital skills influence significantly the accountants' performance in the work place.

H04: Ethical skills influence significantly the accountants' performance in the work place.

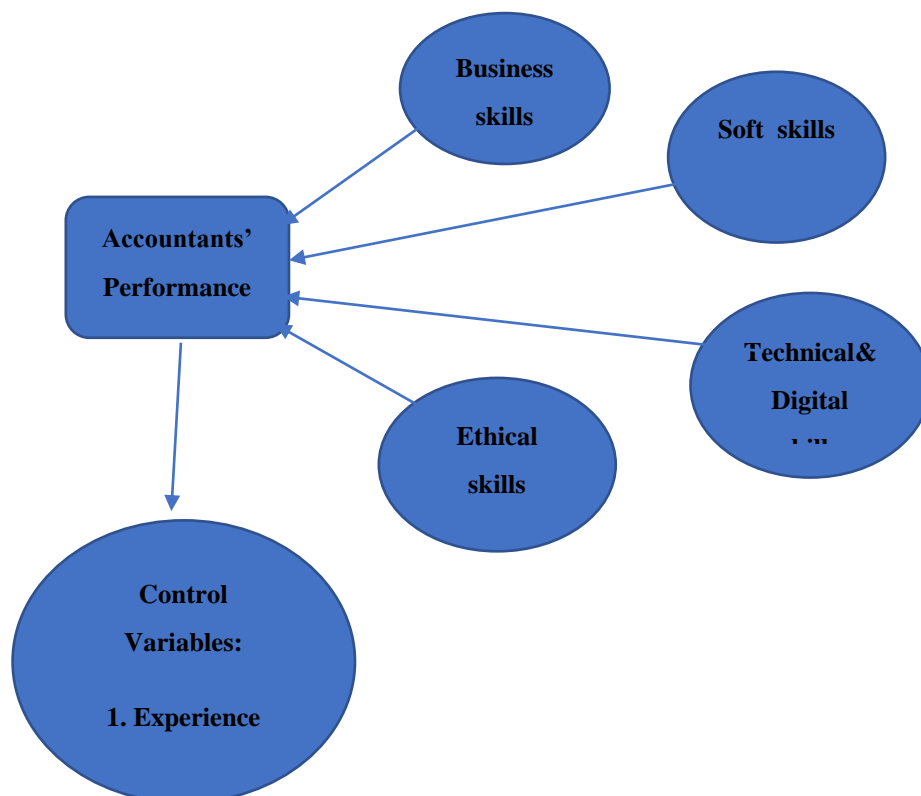
H05: Continent-location influences the accountant's performance in the work place.

H06: Experience influences the accountant's performance in the work place.

## 2.9 Theoretical framework

Figure-1 presents below the theoretical framework for this study. This demonstrates that the four set of skills influence the accountants' performance in the work place.

**Figure 1:** Influencing Skill Sets of Accountants' Performance



## 2.10 Research Model

$$Y (\text{Acc-perf}) = \beta_0 + \beta_1 (\text{BS}) + \beta_2 (\text{SS}) + \beta_3 (\text{T\&DS}) + \beta_4 (\text{ES}) + \beta_5 (\text{Exp}) + \beta_6 (\text{CL}) + \varepsilon$$

Where

Dependent variable

Y = Accountant performance (measured through Likert scale)

### Independent variables

$\beta_0$  = Constant

$\beta_1$  = Business skills (BS) (measured through Likert scale)

$\beta_2$  = Soft skills (SS) (measured through Likert scale)

$\beta_3$  = Technical & Digital skills (TDS) (measured through Likert scale)

$\beta_4$  = Ethical skills (ES) (measured through Likert scale)

### Control variables

$\beta_5$  = Experience (EXP) (dichotomized as less than 10 yrs.= 0; 10 yrs. and more =1)

$\beta_6$  = Continent –location (CL) (dichotomized as Asia =1; Rest of the world = 0)

$\varepsilon$  = Error term

## 3. Methodology

### 3.1 Sample selection

The quantitative data for this study was gathered from the LinkedIn connections who were professional accountants using a simple random sampling technique. In order to calculate sample size, the study employed the formula for an infinite population (Cochran and Lord Jr., 1963). We calculated the sample size for this study using the Cochran formula, which is as follows:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

- e is the desired level of precision (i.e. the margin of error),
- p is the (estimated) proportion of the population that has the attribute in question,
- q is 1 – p.

The sample size for this study was calculated using this formula to be 218. However, in order to increase response rates, we sent questionnaire links to 315 accountants.

### **3.2 Research instrument design and data collection**

The primary data was gathered using a self-designed questionnaire that was posted online using Google Form. A survey link was sent to LinkedIn members who had accounting qualifications and held various accounting positions. Respondents were given one month to complete the online questionnaire, with reminders sent three weeks after the questionnaire link was sent. The data collection took place in February 2023.

There were three sections to the questionnaire. Part A covered the demographic information of the respondents. Part B asked respondents to rate the importance of the 22 accounting skills in their workplace. They were assessed using a Likert scale ranging from 1 (not required) to 5 (very important). Part C addressed the extent to which four major skill sets influenced accountants' performance, namely, business skills, soft skills, technical and digital skills, and ethical skills. The variables were assessed using a Likert rating scale ranging from 1 (to a lesser extent) to 5 (strongly agree). In this study, questions tested in previous studies were used. Respondents were also asked in open-ended questions to provide any comments or suggestions on the skill set.

### **3.3 Pre-testing of the questionnaire**

A pre-test was conducted by gathering feedback from two professional accountants from the company as well as feedback from an accounting professor. The questionnaire was then improved and finalized.

### **3.4 Responses**

A total of 91 responses were returned. Six questionnaires were found to be incomplete, so they were removed from the analysis. This results in a response rate of 28.9%. Furthermore, we compared the first 20% of early responses with the last 20% of late responses to see if there was any non-response bias. The T-test results in insignificance.

## 4. Results and Discussions

### 4.1 Respondents characteristics

Table 1 presents the demographic information about the respondents.

**Table-1: Characteristics of Respondents**

Characteristics	Frequency	N
Gender	Male: 54 ( 63.5%) Female: 31 (36.5%)	85
Age	Less than 30 Yrs. : 28 (32.9%) 30 yrs. and more: 57 (67.1%)	85
Experience	Less than 10 yrs. : 43 (50.6%) 10 yrs. and more: 42 (49.4%)	85
Position	Chief Accountant = 4 (4.7%) Accountant = 23 (27.1%) Auditor= 21 (24.7%) Cost Accountant /Management accountant = 4 (4.7%) Finance Manager = 22 (25.9%) Others = 11 (12.9%)	85
Academic qualification	Undergraduate = 13 (15.3%) Postgraduate= 72 (84.7%)	85
Professional Qualifications	CA= 30 (35.4%) CPA/ACCA= 25 (29.4%) CMA/CIMA= 15 (17.6%) Others= 15 (17.6%)	85
Industry	Manufacturing = 25 (29.4%) Non-manufacturing = 60 (70.6%)	85
Continent	Asia = 59 (69.4%) Rest of the world = 26 (30.6%)	85

**Source: Author's Survey**

The demographic characteristics of survey participants are shown in Table 1. It is clear that 63.5% of the respondents are male, with the remainder being female. A total of 67.1% of those who completed the questionnaire were 30 or older.

Accountants completed 27.1% of the questionnaires, finance managers completed 25.9%, and auditors completed 24.7%. Furthermore, 50.6% have less than ten years of experience, while 49.4% have ten or more years of experience.

In addition, 4.7% of respondents are chief accountants. Furthermore, 35.4% of respondents are chartered accountants, 29.4% have CPA or ACCA professional qualifications, and 17.6% have CMA or CIMA qualifications. Surprisingly, 84.7% of respondents have postgraduate academic degrees. The majority of respondents (70.6%) work in non-manufacturing industries, while 29.4% work in manufacturing. Surprisingly, the survey has a global component in that 69.4% of respondents are from Asia and the remaining 30.6% are from the rest of the world.

Normality, correlation, linearity, and multi-collinearity testing are important assumptions that are generally considered in the analysis of results, as these assumptions make the data suitable for regression analysis (Pallant, 2010). These steps are followed in this study.

#### **4.2 Frequency distribution and basic statistics**

Table 2 shows the frequency distribution of the 22 skill sets that today's accountants should develop.

**Table-2: Frequency Distribution**

Skill Sets	Very important	Essential	Somewhat necessary	Least important	Not necessary	Mean	SD	Rank
<b>A: Business skills:</b>								
Knowledge of business	58 (68.2%)	26 (30.6%)	-	1 (1.2%)	-	4.66	0.547	3.5
Research	29 (34.1%)	43 (50.6%)	10 (11.8%)	3 (3.5%)	-	4.15	0.764	20
Project management	33 (38.8%)	39 (45.9%)	12 (14.1%)	-	1 (1.2%)	4.21	0.773	18.5
Regulatory management	41 (48.2%)	35 (41.2%)	9 (10.6%)	-	-	4.38	0.672	15
Networking	36 (42.4%)	34 (40.0)	13 (15.3%)	1 (1.2%)	1 (1.2%)	4.21	0.832	18.5
<b>B: Soft skills:</b>								
Leadership	53 (62.4%)	23 (27.1%)	8 (9.4%)	-	1 (1.2%)	4.49	0.766	10
Organisation	47 (55.3%)	30 (35.3%)	8 (9.4%)	-	-	4.46	0.665	12
Critical thinking	54 (63.5%)	26	5	-	-	4.58	0.605	8

		(30.6%)	(5.9%)					
Time management	71 (83.5%)	14 (16.5%)	-	-	-	4.84	0.373	1
Adaptability	44 (51.8%)	38 (44.7%)	3 (3.5%)	-	-	4.48	0.569	11
Problem-solving	60 (70.6%)	22 (25.9%)	3 (3.5%)	-	-	4.67	0.543	2
Knowledge & interpretations of accounting standards	52 (61.2%)	24 (28.2%)	9 (10.6%)	-	-	4.51	0.684	9
Oral communication	40 (47.1%)	39 (45.9%)	5 (5.9%)	1 (1.2%)	-	4.39	0.656	14
C: Technical & Digital skills								
Writing	41 (48.2%)	31 (36.5%)	12 (14.1%)	-	1 (1.2%)	4.31	0.802	17
Spreadsheet	53 (62.4%)	29 (34.1%)	3 (3.5%)	-	-	4.59	0.563	7
Artificial intelligence (AI) & Machine Learning (ML)	14 (16.5%)	40 (47.1%)	23 (27.1%)	5 (5.9%)	3 (3.5%)	3.67	0.944	21
Blockchain technology	7 (8.3%)	25 (29.8%)	30 (35.7%)	18 (21.4%)	4 (4.8%)	3.15	1.012	22
Data analytics	43 (51.2%)	30 (35.7%)	8 (9.5%)	2 (2.4%)	1 (1.2%)	4.33	0.841	16
Preparation of financial statements and their interpretation and analysis	58 (68.2%)	22 (25.9%)	4 (4.7%)	1 (1.2%)	-	4.61	0.638	6
Understanding and appropriate interpretations of IFRS and International Auditing Standards (ISAs)	46 (54.1%)	31 (36.5%)	7 (8.2%)	1 (1.2%)	-	4.44	0.698	13
D: Ethical skills								
Professional behaviour	58 (68.2%)	25 (29.4%)	2 (2.4%)	-	-	4.66	0.524	3.5
Adherence to the code of conduct	59 (69.4%)	22 (25.9%)	3 (3.5%)	-	1 (1.2%)	4.62	0.672	5

**Source: Author's Survey**

The survey included 22 skills for the respondents to rate as important and necessary skills. These abilities were derived from previous research. The respondents were asked to rate them on a Likert scale of 5 (very important) to 1 (not necessary). Table



2 contains the results. Furthermore, the 22 skills were divided into four major categories: business skills (5 skills), soft skills (8 skills), technical and digital skills (7 skills), and ethical skills (2 skills). The frequency distribution, as well as the mean and standard deviation, are shown in the table. The skills are ranked in order of importance based on mean values.

It is clear that 'time management' is rated one (mean = 4.84; SD = 0.373) by the accountants as the most important skill for them in the workplace. Accounting professionals must manage their time effectively. Even accountants with years of experience may struggle with time management, making this skill one of the most difficult to master. Accounting professionals must meet deadlines in order to comply with the requirements of multiple regulatory agencies, so they understand the value of time management.

The second most important skill for them is 'problem-solving' (mean = 4.67; SD = 0,543). Accounting problem-solving skills are extremely valuable because businesses are full of problems that must be solved, and almost all business problems have a financial impact. Many previous studies found similar results (e.g., Maradona, Chand, and Lodhia, 2022; Derekoy, 2019; Asonitou, 2019; Gadner, 2017).

They ranked 'knowledge of business' (mean = 4.66; SD = 0.547) and 'professional behaviour" (mean = 4.66; SD = 0.524) as the third-most important skills that may influence their performance at work. This backs up Dwaase, Awotwe, and Smith's (2020) previous findings. Professional accountants are sought after for various types of financial and legal advice. A good consultant can provide specific solutions to assist a company in solving a problem or optimizing a process. Apart from effectively analyzing the business, aptitude for dealing with difficult problems and the ability to build strong relationships may aid in their success in consulting.

'Adherence to the code of conduct' (mean = 4.62; SD = 0.672) is ranked 5<sup>th</sup> in the list. . The Sandifer (2018) survey also found that work ethics are one of the most important skills for today's accountants. Furthermore, 'preparation of financial statements and their interpretation and analysis' is ranked as the 6<sup>th</sup> most important skill for today's accountants (mean = 4.61; SD= 0.638), in addition to 'knowledge and

interpretation of accounting standards' (mean = 4.51; SD= 0.584). Both skills are the core ones required for any accountant to perform effectively in the workplace. This finding supports the findings of Maradona, Chand, and Lodhia (2022). Accounting interpretations help to eliminate ambiguity and keep accountants from applying incorrect methodologies, so this skill is critical for accountants. Greater uniformity improves clarity, allowing investors to compare stocks and decide which ones to invest in more easily.

Working knowledge of 'spreadsheet' is ranked seventh in importance (mean = 4.59; SD = 0.563) for accountants to master. This is an important skill in the technical and digital skills category. According to the findings of the Bahador, Haider, and Saat (2018) study, the three main skills enhancement approaches that have emerged from the use of spreadsheets in small and medium accounting firms are formal education, experiential learning and job rotation, and knowledge sharing among peers.

'Critical thinking' turned out to be the 8<sup>th</sup> most important skill (mean = 4.58; SD = 0.605) according to the respondents. Accountants with critical thinking skills are better able to add value to data, interpret trends within the business, understand how people and performance intersect, and take on a broader commercial perspective that benefits the business.

Surprisingly, respondents rate 'data analytics,' 'artificial intelligence (AI) and machine learning (ML),' and 'blockchain technology' the lowest. It appears that theoretically, professionals acknowledge the need to embrace the digital shift and recognize that technology is constantly evolving, but in practice, adoption of such skills remains slow. This contradicts the findings of Webb's (2016) survey of ACCA members, in which 89% stated that digital skills were either necessary or very necessary in their industry, and 63% stated that they believed they had the appropriate level of digital skills for their roles.

## 5. Empirical Findings

### 5.1 Mean and standard deviation for variables

**Table-3 : Descriptive Statistics**

Variable	Mean	Std. Deviation	N
Influence on accountants performance	4.40	0.623	84
Business Skills (BS)	4.40	0.518	84
Soft Skills (SS)	4.56	0.499	84
Technical & Digital Skills (TDS)	4.04	0.768	84
Ethical Skills (ES)	4.29	0.769	84
Continent-location (CL)	0.94	0.734	84
Experience (EXP)	0.49	0.503	84

**Source: Author's Survey**

Table 3 shows the descriptive statistics on the variables included in the model. Number of responses are 84. The table shows mean values and standard deviations for the dependent and independent variables. It is clear that mean values for all variables are greater than standard deviation.

### 5.2 Correlation

**Table-4: Correlations**

Correlation	Experience	Soft Skills	Location-Continent	Ethical skills	Technical & Digital Skills	Business Skills
Experience	1.000	-0.039	0.046	0.036	0.107	-0.090
Soft Skills	-0.039	1.000	-0.024	-0.067	-0.081	-0.231
Location-Continent	0.046	-0.024	1.000	-0.176	0.159	0.133
Ethical Skills	0.036	-0.067	-0.176	1.000	-0.139	-0.024
Technical & Digital Skills	0.107	-0.081	0.159	-0.139	1.000	0.064
Business Skills	-0.090	-0.231	0.133	-0.024	0.064	1.000

**Source: Author's Survey**

Table 4 displays the results of the correlation analysis between independent and dependent variables. It demonstrates that the variables observed are independent of one another and correlate with total variables. The highest correlation for business skills (BS) and soft skills (SS) is 0.231, which does not exceed 0.80 (Judge, 1985). The results show no signs of multicollinearity. This is supported by the low variance

inflation factor (VIF) value reported in regression coefficients (Table 7).

### 5.3 ANOVA and model summary

Tables 5 and 6 presents results of ANOVA and model summary respectively.

Table- 5: ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.373	6	1.062	3.162	.008 <sup>b</sup>
	Residual	25.865	77	0.336		
	Total	32.238	83			

a. Dependent Variable: Extent to which accountants' performance is influenced by skill sets

**Source: Author's Survey**

Table- 6: Model Summary

Model	R	R square	Adjusted R square	Standard error of estimate	Change statistics				
					R square change	F change	df1	df2	Sig. change
1	0.445	0.198	0.135	0.580	0.198	3.162	6	77	0.008

a. Dependent Variable: Extent to which accountants' performance is influenced by skill sets

a. Predictors: (Constant), Influence by BS, influence by SS, influence by TDS, influence by ES, influence by EXP. Influence by CONTD

**Source: Author's Survey**

Tables 5 and 6 show the ANOVA as well as a summary of the study's regression model. These tables show the F-value, R-square, and adjusted R-square for the regression model. The value of R square is obviously 0.445. The model's explanatory power, expressed as R<sup>2</sup>, indicates that variations in the independent variables explain 44.5% of the variations in the dependent variable. The F-ratio is shown in

table 6. The F-ratio is 3.162 and significant at the 1% level, indicating that the regression model is significant.

How much influence do skill sets have on accountant performance? They have a positive impact on their work performance, according to 100% of respondents. Prior research has shown that employee competencies have a significant impact on service performance and customer experience, and that customer experience directly influences service performance (Hanafi and Ibrahm, 2018). The results of multiple regression are shown in Table 7.

### 5.4 Multiple Regression

**Table-7: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error				Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1.533	0.845		1.815	0.073	-0.149	3.215		
	Business Skills (BS)	0.348	0.128	0.289	2.715	0.008	0.093	0.604	0.918	1.098
	Soft Skills (SS)	0.027	0.132	0.022	0.203	0.839	-0.236	0.289	0.933	1.072
	Technical & Digital Skills (TDS)	0.222	0.085	0.273	2.595	0.011	0.052	0.392	0.943	1.061
	Ethical Skills (ES)	0.012	0.085	0.014	0.138	0.891	-0.157	0.181	0.947	1.056
	Continent-location (CL)	0.199	0.090	0.234	2.216	0.030	0.020	0.377	0.934	1.071
	Experience (EXP)	0.173	0.128	0.140	1.350	0.181	-0.082	0.429	0.972	1.029

a. Dependent Variable: Extent to which accountants' performance is influenced by skill sets

a. Predictors: (Constant), Influence by BS, influence by SS, influence by TDS, influence by ES, influence by EXP. Influence by CONTD

**Source: Author's Survey**

The regression equation's results are shown in Table 7. For the regression, the ENTER method was used. The data set has no multi-collinearity issues because the VIF values are low. The maximum VIF value is 1.098, which is significantly lower than the acceptable threshold level. It is discovered that the independent variables 'business skills (BS) ( $t = 2.715$ ,  $p < 0.01$ ), 'technical and digital skills' (TDS) ( $t = 2.295$ ,  $p < 0.05$ ), and the control variable 'continent-location" (CL) ( $t = 2.216$ ,  $p < 0.05$ ) have a significant positive effect on accountants' performance at work place.

Coyne, Coyne , and Walker (2018) assert that accountants have specialized knowledge as business specialists. Therefore, the findings clearly demonstrate that accountants' business knowledge is an important aspect of today's changing business environment. Accountants are increasingly being used as business advisers or catalysts rather than number crunchers. According to Jui and Wong (2013), what do the independent director, internal auditor, and chief financial officer all have in common? Individuals in these positions could all be professional accountants working in businesses. Aside from these roles, professional accountants work in a wide range of businesses, including the public sector, the non-profit sector, regulatory or professional bodies, and academia. Their diverse work and experience have one thing in common: their understanding of accounting. Professional accountants in business are frequently on the front lines of ensuring the accuracy of financial reporting. Furthermore, accounting professionals in business, according to Jui and Wong (2013), help with corporate strategy, provide advice, and help businesses reduce costs, improve their bottom line, and mitigate risks. Accounting professionals who possess strong business acumen can help develop strategy, inform key decisions and serve as business partners across multiple departments (e.g. Robert Half, 2022). Professional accountants have oversight over all aspects of the company's financial health as chief financial officers. Professional accountants serve as internal auditors, providing independent assurance to management that the organization's risk management, governance, and internal control processes are operating effectively. They should embrace business management skills (Dwaase,

Awotwe, and Smith, 2020). As a result, knowledge of business and advisory skills are critical for today's accountants.

Accountants have always been eager to adopt new technologies (Carlin, 2019), but the revolutionary potential of accounting technologies can only be realized through a similarly profound accounting thought revolution. As a result, accountants are valuable collaborators in the design and maintenance of information systems with information technology (IT) specialists, not only as end users of business information but also as advocates for other internal and external decision-makers. Accounting graduate programs are expected to develop knowledge and skills related to the integration of information technologies, according to the AACSB (2018) accounting accreditation standard A5. Faculty and student adaptability to emerging technologies, as well as mastery of current technology, are specifically mentioned (AACSB-International) (2018). Technical and digital skills (T&DS) have a significant impact on accountants' performance. The study's findings fill a gap in the findings of Kroon, Alves, and Martins (2021), who used a systematic literature review methodology to analyze 40 articles published between 2015 and 2020 and concluded that there is a significant gap in the impact of technical skills on accountants' work. According to the findings of Bygren's (2016) research, digitalization skills have a direct impact on how companies should strategically organize their businesses. Many of the consequences of digitalized accounting will have an immediate impact on strategies, actions, and processes.

Accounting-related technological changes have recently been widely studied (Belfo and Trigo, 2013; Arnold, 2018), presenting accounting challenges for which future technological responses are still expected. Similarly, studies on the new role and skills of accountants have emerged, with many of them focusing on blockchain. Blockchain technology will necessitate the training of a new generation of accounting professionals to operate in the new blockchain environment (Schmitz & Leoni, 2019; Secinaro, Calandra, and Biancone, 2021).

Accounting is also influenced by national and international cultural values which is the overall environment in which a business operates. Accounting standards are derived from accounting practices, which are further developed and influenced by culture through business connections, so accounting is heavily influenced by the culture in which it is performed. Many of the differences between the two countries' responses are found to be attributable to cultural dimensions on an individual level, specifically those of independence vs. collectivism and long-term vs. short-term orientation. Asian accountants are less likely to disclose information (i.e., are more secretive) than U.S. accountants. Therefore, continental-location also influences accountants' performance as their working experiences, cultural values and practices may differ.

### 5.5 Summary of hypotheses

**Table-8: Summary of Hypotheses**

	<b>Hypothesis</b>	<b>Accept</b>	<b>Reject</b>
H01:	Business skills influence significantly the accountants' performance in the work place.	√	
H02:	Soft skills influence significantly the accountants' performance in the work place.		√
H03:	Technical and digital skills influence significantly the accountants' performance in the work place.	√	
H04:	Ethical skills influence significantly the accountants' performance in the work place.		√
H05:	Continent-location influences the accountant's performance in the work place.	√	
H06:	Experience influences the accountant's performance in the work place.		√

Table 8 presents the summary of hypotheses tested in this study. It is clear that H02, H04, and H06 are rejected as it is not supported by the results. While H01, H03 and H05 are accepted as the findings from the study support them.



## **6. Summary, Conclusions , Direction for future research and Limitations of the study**

### **6.1 Summary and conclusion**

The current study has two goals: 1) to determine which skill sets are considered the most important and necessary for today's accountants, and 2) to investigate the impact of major categories such as business skills, soft skills, technical and digital skills, and ethical skills on the performance of accountants in the workplace. Based on a response rate of 28.8%, both male and female accountants participated in this study's survey, and they were highly experienced and professionally qualified. The findings demonstrate that time management, problem solving, critical thinking, knowledge and interpretation of accounting standards, leadership (SS), business knowledge (BS), professional behaviour, adherence to the code of conduct (ES), financial statement preparation, interpretation, and analysis (TDS), are ranked higher as important essential skills for today's accountants. However, respondents ranked emerging digital skills such as artificial intelligence (AI) and machine learning (ML), data analytics, and blockchain technology lower. It means that soft skills continue to dominate the accountants' skill domain even today, and their adoption of digital skills is slow.

According to the regression results, the independent variables "business skills' (BS), 'technical and digital skills' (TDS), and the control variable 'continent-location' (CL) have a significant positive effect on accountants' performance at work. The independent variables account for 44.5% of the variation in the dependent variable, and the regression model is significant as well. This means that, in addition to traditional soft skills, accountants' performance is now influenced by business skills as well as technical and digital skills in a changing environment. Work experience on different continents influences and helps accountants improve their performance.

The findings call on universities and colleges to adequately develop all four skill sets in accounting students. Professional accountants and their employers should participate in CPD to improve these skills, particularly business skills and technical and digital skills.

## **6.2 Future research**

This study contributes to both research and practice. Future research with a larger sample size is encouraged to investigate whether certain factors may moderate their influence on the effectiveness and performance of accountants in the workplace in terms of skill set adoption. The impact of these skills across industries may also be investigated, as skill sets differ across industries. Mixed methods can also be used to collect and analyze data to investigate the deeper impact of changing skill sets on accountant performance.

Additional research, particularly from emerging economies, on the influence of skill sets on the performance of accountants in corporate and public sector companies is suggested, which may reflect the issue of performance problems, whether there are differences or not. Future research could build on and validate the current findings by examining the role of organizational or national culture (Trivellas and Dargenidou, 2009a) in the various profiles of employee competencies as well as internal environment variables.

## **6.3 Limitations of the study**

The study's findings should be interpreted with certain caveats in mind. Our findings are continent-wide rather than country-specific, and they cannot be extended or compared to other countries. Furthermore, the selection of influencing factors in the model could be based on a specific stream of literature, and other literature may also suggest some other variables for investigation.

Another limitation is that the findings are based on a cross-sectional survey. If the survey is extended to other time periods, the results may change slightly. Furthermore, while every effort was made to improve the response rate, there may be a tendency among respondents to underplay or remain neutral on certain questions because they may consider them confidential or sensitive in nature.

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