THE HIERARCHY OF CURRENT SKILLS NECESSARY FOR THE ACCOUNTING PROFESSION IN THE VIEW OF ACCOUNTING PRACTITIONERS

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ABSTRACT: *Digital technologies and artificial intelligence are transforming the labor market, and today's workforce will need to acquire new skills and continuously adapt as new trends and responsibilities emerge. In addition, the global economic situation has profoundly accelerated this transformation. Through this paper we aim to make an radiography, through a psychometric questionnaire, of the position of the current accounting practitioners in Romania, regarding the new extended skills that, according to the accounting literature, create favorable conditions for increasing the relevance and viability of the accounting profession in the new economic and social context.*

KEY WORDS: *accounting profession, accounting practitioners, skills, challenges, flexibiliy.*

JEL CLASSIFICATIONS: *A20, M40, M41.*

1. INTRODUCTION

The world of accountants is a changing world, subject to complex challenges generated among others by growing regulations and governance, globalization, and increased use of digital technologies (ACCA, 2018). It is obvious that the need for flexibility, adaptation to changes, and the acquisition of new skills is aware both by accountants, who are increasingly oriented towards personal professional development, and by their employers.

The ACCA reports entitled Professional accountants - the future highlight trends in this profession, such as: neurodiversity: embracing inclusive workplaces; ways for professional accountants to make a positive impact in tackling issues such as climate

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change, social inequality and a widespread lack of trust; the need for a strong culture of diversity, etc. (https://www.accaglobal.com/gb/en/professional-insights/).

"Accounting and finance professionals need to be open to the changes created by big data, cloud, mobile and social platforms, and to cope with the demands of cybercrime, digital service delivery and artificial intelligence" (ACCA & IMA, 2013).

Chua mentions skills and abilities that must be a constant in the accountant's work and a sure path to success in the profession: technical and ethical skills, intelligence, creativity, digital skills, emotional intelligence, vision (Chua, 2016).

Also, the discrepancy that exists between the skills and competencies acquired through formal education and the demands of practice cannot be ignored (Dolce, et. al., 2020).

"The accounting profession is at a pivotal moment of transformation. Over the next decade, automation, AI, cloud technology, blockchain integration, data analytics, ethical considerations, regulatory changes, cybersecurity, and globalization will redefine the role of accountants. To thrive in this evolving landscape, accountants must embrace innovation, adapt to new technologies, and continue their professional development" (Guerra, 2023). Also, studies undertaken at national level highlight the need to adapt the accounting profession to the requirements of information technologies (Mîța & Man, 2022).

Obviously, the subject of competencies necessary for the accounting profession has a vast approach in the literature (Asonitou, 2015; Asonitou 2022; Borgonovo, et. al., 2019; Botea, 2018; Betti & Sarens, 2021; Brand, 2022; Berry & Routon, 2020; Carvalho & Almeida; Dondi et al., 2021; Oesterreich, et. al., 2019; Zhyvets, 2018; 2022 etc.).

In this context, we aim to identify what is the perception of accounting practitioners in Romania regarding the skills needed in the exercise of the accounting profession and their analysis.

2. RESEARCH METHODOLOGY

In order to understand and explore how the accounting profession will move forward in the context of the twenty-first century, characterized by a global market with a real-time economy, what are the skills and abilities needed by future accountants, we set out to find out the answer to the following question: to what extent do the new accounting paradigms generate a change of approach regarding the new skills that will support the mission and role of the accounting practitioner?

In order to answer the research question, we formulated the following objectives:

- To identify the perception of accounting practitioners regarding the importance of extended skills in the exercise of the profession;
- Analysis of respondents' perception of the environment in which extended competences are formed and developed.

The investigation carried out falls into the category of quantitative research and was carried out between November 2022 and March 2023. In order to achieve the above-mentioned objectives, we applied statistical-mathematical analysis methods.

In order to ensure the relevance and geographical representativeness of the questionnaire, we selected one county from each development region of the country, as represented in table 1:

Table 1. Centralized situation of CECCAR subsidiaries contacted for the case study

No	Development region	County	Email CECCAR branch
1	Center	Mureș	ceccarmures@ceccarmures.ro
2	North West	Bihor	ceccarbihor@ceccarbihor.ro
3	West	Timiș	ceccartimis@ceccartimis.ro
4	North East	Suceava	ceccarsuceava@ceccarsuceava.ro
5	South	Dâmbovița	ceccardambovita@ceccardambovita.ro
6	South West	Dolj	ceccardolj@ceccardolj.ro
7	South East	Galați	ceccargalati@ceccargalati.ro

The questionnaire was addressed to accounting practitioners, who are professional accountants or employees of entities. The questionnaire was developed and sent through the www.survio.ro platform and the generated link was sent by email to the selected CECCAR branches, which distributed it to the members of the body. Also, the link was sent for access through social networks, in order to fill in the questionnaire by accounting practitioners.

In order to collect the results, we accessed the www.survio.ro platform on April 7, 2023. A number of 245 questionnaires were completed that were considered valid and which were the basis of our statistical analysis.

The questionnaire had the following structure:

- part I, general questions, in order to establish a picture as faithful as possible regarding the personal profile of the respondents (gender, age, experience gained in the field, field of activity, type of company in which they work);
- part II, questions regarding the importance of extended competences: cognitive, digital, self-management and interpersonal and relating to them in the new economic context;
- part III, questions regarding the respondents' perception of the stage of acquiring the necessary skills in the exercise of the profession.

To complete the questionnaire that included both closed-ended questions, in which participants were asked to express their opinion on a five-point Likert scale: from 1 (not at all important) to 5 (very important), and open-ended questions.

The research was organized following ethical principles, such as anonymity, confidentiality and voluntary participation. The introduction of the questionnaire informed respondents that they could withdraw at any time after completing the 16 questions. The collected data was centralized and analyzed with the help of dedicated software programs: Microsoft Excel and Minitab.

3. ANALYSIS OF THE RESULTS

In order to establish the personal profile of the respondents, we took into account the following variables: 1) in order to establish the typology of the respondents, they were analyzed according to their biological age, length of service, level of professional training, the way of carrying out the accounting activity; 2) as far as the entities are concerned, we were concerned about their field of activity and size, according to the Romanian legislation in force.

Therefore, from the point of view of the positions/positions occupied, the distribution of the sample was 20% economists/accountants within companies, 52% expert accountants, 28% licensed accountants. The graphic representation of the status of the respondents is presented below, in figure 1:

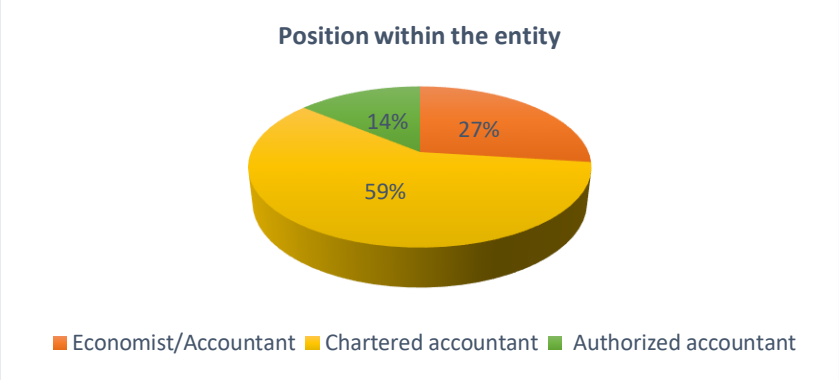


Figure 1. Structure of respondents by position/position within the entity

Regarding the professional training of the respondents, 64% of the 245 respondents are licensed economists, 19% have master's degrees in the field, doctorates in accounting have a percentage of 3%, and graduates of economic high school, 14% of those surveyed, according to the graphic representation in the figure below:

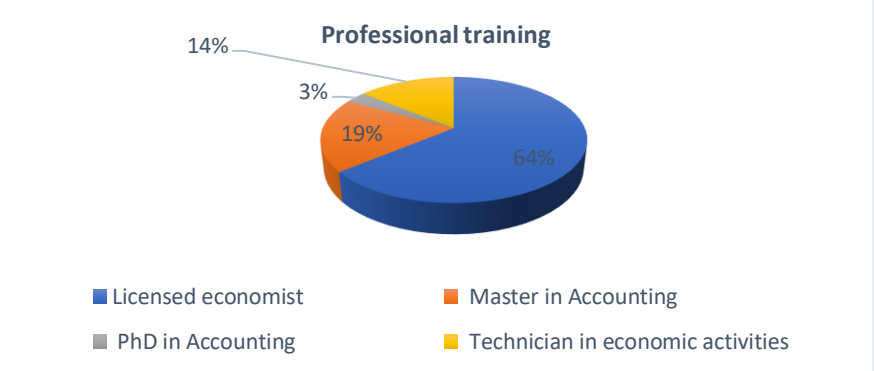


Figure 2. Profesional training of respondents

Research confirms that new accounting paradigms have led to a major shift in the responsibilities and role of accounting professionals, who have to make a huge leap from simple "transaction registrars" to strategic advisors and analysts for their clients (Coman, et. al., 2022).

Therefore, a change of mentality, flexibility and openness among accounting practitioners is necessary, in a dynamic and often unpredictable business environment. In table 2 we captured the correlation between the age of the respondents, the professional experience in the field of accounting and the position held within the entity:

Table 2. Correlation between age, position and professional experience

Professional experience in the accounting field							TOTAL	%
Position/ Function respondents	Experience (Years)	< 5	5-15	16-25	26 – 35	>35		
	Economist/Accountant	15	11	13	7	3	49	20%
	Chartered accountant	8	31	57	19	12	127	52%
	Authorized accountant	19	9	28	11	2	69	28%
TOTAL		42	51	98	37	17	245	100%
Age of respondents	< 25 years	8	2	0	0	0	10	4%
	25 – 40 years	17	39	42	0	0	98	40%
	41 – 50 years	15	7	46	18	0	86	35%
	51 – 60 years	2	3	10	15	9	39	16%
	> 60 years	0	0	0	4	8	12	5%
TOTAL		42	51	98	37	17	245	100%
PERCENTAGE		17%	21%	40%	15%	7%	100%	

According to the data presented, in the age category up to 40 years old we have 108 respondents, i.e. 44%, and 56% are over 40 years old, while 38% have an experience of up to 15 years, the remaining 62% have a professional experience in the accounting field of more than 15 years.

The research carried out indicates that there is no dependency relationship between the work experience of respondents and the recognition of the advantages of digitalization, which demonstrates that on the part of the accounting profession, there is a natural acceptance of the implementation of advanced digital technologies in the professional activity (Chu & Yong, 2021).

According to the research of Coman, achieving a sustainable transition to a digital environment requires, on the one hand, a workforce with advanced digital skills, and on the other hand, organizations eager to implement emerging digital technologies (Coman, et. al., (2022).

Regarding the entities for which the respondents carried out the accounting activity, the situation of the field of activity, respectively, the type of entities is reflected in table 3:

Table 3. Field of activity and type of entity

Field of activity	Entity type							
	Micro Entities		Small entitties		Mediun and large entities		TOTAL	
	No	%	No	%	No	%	No	%
Production	37	15%	22	9%	15	6%	74	30%
Trade	46	19%	25	10%	19	8%	90	37%
Services	37	15%	27	11%	17	7%	81	33%
TOTAL	120	49%	74	30%	51	21%	245	100%

A number of 120 of the respondents carry out accounting activities within micro-entities (49%), 74 (30%) of them work within small entities, and the remaining 51 respondents, representing a percentage of 21% of those surveyed, work within medium and large entities, divided into the fields of activity represented in the table above. The distribution by fields of activity is close, the largest share being held by entities that carry out activities in the field of commerce (37%). We believe that, within micro and small entities, the contribution of accountants is high, as they take on responsibilities that in large entities are carried out by employees from several departments, and therefore, they need "more transversal skills, greater adaptability and better learning skills" (Cuhna, et. al., 2022). Based on the collected results, the statistical analysis of the data was performed, based on the weighted average score with the number of responses, the results being systematized in table 4:

Table 4. Case Study Results

Extended competences	Score					Weighted average score
A. Cognitive skills	1	2	3	4	5	
Identifying relevant information	0%	0%	0%	26%	74%	**4,74**
Time management and prioritization	0%	0%	0%	29%	71%	**4,71**
Expression and public speaking	0%	0%	23%	49%	28%	**4,05**
Active listening	0%	0%	11%	40%	49%	**4,38**
Creativity and imagination	0%	3%	34%	37%	26%	**4,28**
Adaptability	0%	0%	6%	29%	65%	**4,59**

Understanding bias	0%	0%	37%	34%	29%	**3,92**
Agility of thought	0%	0%	3%	20%	77%	**4,74**
Applying knowledge in different contexts	0%	0%	3%	23%	74%	**4,71**
Ability to learn all the time	0%	0%	0%	11%	89%	**4,89**
B. Digital skills	**1**	**2**	**3**	**4**	**5**	
Digital learning	0%	0%	6%	17%	77%	**4,71**
Digital ethics	0%	0%	6%	31%	63%	**4,57**
Programming knowledge	3%	17%	29%	34%	17%	**3,79**
Analysis of statistical data	0%	0%	3%	46%	51%	**4,48**
Understanding and using intelligent systems	0%	0%	9%	37%	54%	**4,45**
Cybersecurity	0%	3%	6%	28%	63%	**4,51**
Digital literacy	0%	3%	14%	37%	46%	**4,26**
Digital collaboration	0%	3%	9%	42%	46%	**4,31**
Computational and Algorithmic Thinking	0%	3%	20%	40%	37%	**4,11**
Literacy on new technologies	0%	0%	17%	43%	40%	**4,23**
Implementation of new technologies	0%	0%	9%	48%	43%	**4,34**
C. Interpersonal skills	**1**	**2**	**3**	**4**	**5**	
Creating an inspirational vision	0%	0%	14%	32%	54%	**4,4**
Empathy	3%	3%	29%	34%	31%	**3,87**
Promoting inclusion	0%	3%	26%	48%	23%	**3,34**
Collaboration	0%	0%	0%	40%	60%	**4,6**
Organizational awareness	0%	0%	9%	34%	57%	**4,48**
Emotional intelligence	0%	0%	6%	26%	68%	**4,62**
Humility	9%	20%	37%	17%	17%	**3,13**
Motivation	3%	9%	37%	28%	23%	**3,59**
Conflict resolution	0%	3%	17%	43%	37%	**4,14**
D. Self-management skills	**1**	**2**	**3**	**4**	**5**	
Understanding Your Own Emotions	0%	0%	9%	48%	43%	**4,43**
Self-confidence	0%	0%	0%	26%	74%	**4,74**
Courage in taking risks	0%	0%	3%	31%	66%	**4,63**
Change and innovation	0%	0%	0%	34%	66%	**4,66**
Knowing Your Own Strengths	0%	0%	0%	29%	71%	**4,71**

Integrity	0%	0%	9%	23%	68%	**4,59**
Self-motivation and well-being	0%	0%	9%	31%	60%	**4,51**
Energy, passion and optimism	0%	0%	0%	49%	51%	**4,51**
Coping with uncertainty	0%	0%	12%	34%	54%	**4,42**
Self-development	0%	0%	0%	23%	77%	**4,77**
Seriousness and perseverance	0%	0%	0%	14%	86%	**4,86**

Source: own processing based on study results

The study confirms that all extended competencies scored highly, i.e. 35 competencies out of 41 have more than 4, and the other 6 competencies achieved an average score above 3. This fact validates the first hypothesis of the study, namely that there is a change of mentality among accounting practitioners regarding the need for assimilation and development of extended skills such as cognitive, digital, interpersonal and self-management.

This aspect is reinforced by the highest score of 4.89 obtained by the "Ability to learn permanently", which highlights the idea that respondents are aware that in the face of new changes and challenges regarding the evolution of the accounting profession, lifelong learning is the fundamental solution.

A close score of 4.86 is obtained by the skill "Seriousness and perseverance" which indicates the causal link between the two skills. At the opposite pole are skills such as: "Humility" (score, 3.13), "Promoting inclusion", (score, 3.34), "Motivation" (score, 3.59) and "Empathy", (score 3.87).

Summarizing the results, the study emphasizes the importance of self-management skills (average score of 4.62), cognitive skills (average score of 4.5) and digital skills (average score of 4.34), while interpersonal skills, as a whole, obtained a lower score (average score of 4.01), which indicates a greater concern of employees for professional values than for human or interrelational values.

A. *Cognitive skills* reflect flexibility of thinking, critical thinking, planning and ways of working, respectively, communication. Analyzing the score of cognitive competences, "the ability to learn permanently" is the most valued competence, being evaluated by 89% of respondents as being very important for the future exercise of the accounting profession, followed by "agility of thought" (77% to a large extent), skills that demonstrate high mental flexibility among respondents. Also, respondents (74% to a very large extent) value skills from the category of skills associated with critical thinking, such as "thinking agility" and "identifying relevant information", but also from the group: planning and working methods, such as "applying knowledge in different contexts". A low score was given to skills such as "understanding biases" (37% of respondents considered it to be of little importance in the profession), "creativity and imagination" (34% to a very small extent), "expression and public speaking" (23% to a small extent).

B. *Digital skills.* In the midst of the era of digitalization, respondents recognized the need to develop digital skills in the category of fluency and digital citizenship, such as "digital learning" (77% considered it very important) but also "digital ethics" (63% -

very important). Respondents also understood the need to ensure protection in the use of digital technology, so they gave a high score to the "cybersecurity" competence (63% considered it very important). At the opposite pole, assessed as less significant in achieving the goals of the accounting profession, were skills such as "programming knowledge" (46% of respondents rated it as very unimportant or unimportant for the profession), "computational and algorithmic thinking" (20% - not very important), respectively "literacy on new technologies" (17% - not very important). Therefore, we see an obvious concern for developing digital fluency and citizenship skills, for understanding digital systems, but when it comes to those skills, which are related to the use and development of software, smart solutions and advanced technologies, there is a certain reluctance on the part of practitioners

C. *Interpersonal skills.* Analyzing the answers regarding the evaluation of the importance of interpersonal skills, the highest score is recorded by the "emotional intelligence" skill (68% consider it very important), followed by a skill that develops the effectiveness of teamwork: "collaboration" (60%), respectively "organizational awareness" (57%), a skill that develops the ability to mobilize the work team.

Less appreciated by respondents were skills such as "humility" (9% - not at all and 57% - very little and not very important), "motivation" (37% - not very important) and "promoting inclusion" (26% - not very important). We notice the respondents' appreciation for interpersonal skills that are more related to the strictly professional aspects of the activity carried out, and less for those related to the human side of the employee.

D. *Self-management skills.* Referring to the 11 self-management skills, the respondents valued in a high percentage three skills that support the achievement of objectives: "seriousness and perseverance" (86% to a very large extent), "goal orientation" (77% - to a very large extent) and "self-development" (77% - to a very large extent). "Self-confidence" was also a skill rated by 74% as very important for fulfilling the role and mission of the professional accountant. The self-management skills that respondents see as less significant in the exercise of the accounting profession are "dealing with uncertainty" (12% - to a small extent), "understanding one's own emotions", "integrity", respectively, "overcoming routine" (9% to a small extent).

For an overview of the respondents' perception of extended skills, we have made a ranking of the top 5 skills considered to a very large extent important in the exercise of the accounting profession, illustrated in table 5:

Table 5. Ranking of the most appreciated extended skills

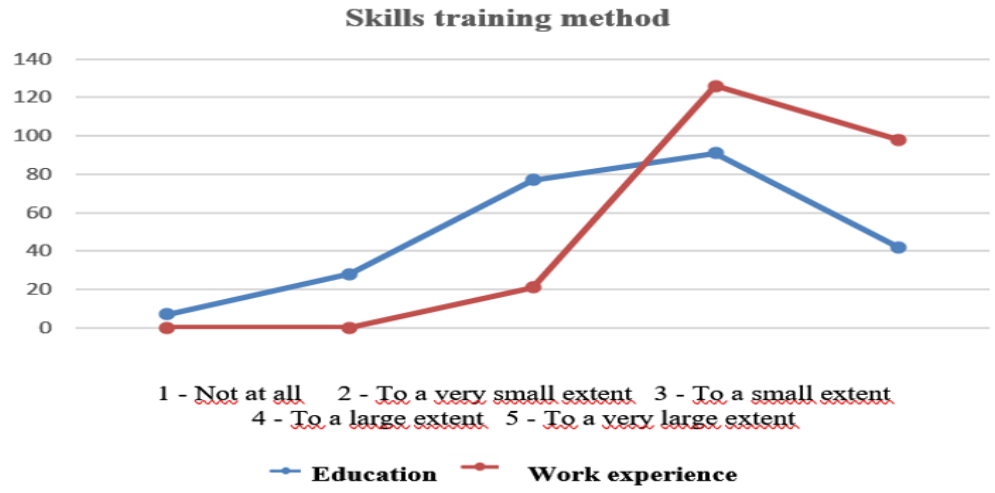
Nr	Cognitive skills	Score	Digital skills	Score	Interpersonal skills	Score	Self management skills	Score
1.	Ability to learn	4,89	Digital learning	4,71	Emotional intelligence	4,62	Seriousness and perseverance	4,86
2.	Agility of thought	4,74	Digital ethics	4,57	Collaboration	4,60	Self-confidence	4,74

3.	Identifying relevant information	4,74	Cybersecurity	4,51	Organizational awareness	4,48	Self-development	4,72
4.	Time management and prioritization	4,71	Analysis of statistical data	4,48	Creating an inspirational vision	4,40	Knowing Your Own Strengths	4,71
5.	Applying knowledge in different contexts	4,71	Understanding and using intelligent systems	4,45	Conflict resolution	4,14	Courage in taking risks	4,63

Source: own processing based on study results

According to the research of Dondi employees with a higher level of education are more prepared for the inherent changes in the workplace, but this fact is not necessarily associated with a higher score of fundamental skills (Dondi, et. al., 2021). Regarding the way of acquiring extended skills, the respondents of our questionnaire give a weighted average score of 3.54 for the formal education offered in economic high schools and faculties, while the score offered to professional experience in training and developing these skills is 4.31. Therefore, the respondents consider that the initial pre-university accounting education and then the one carried out in the university environment, contribute to a lesser extent to the development of these extended skills, on the other hand, the practical experience in the workplace has a greater role in this regard.

A comparative illustration of this fact is made in figure 3:



Source: own projection

Figure 3. Comparative analysis of the perception of the way extended competences are formed

Therefore, in the opinion of the respondents, extended competences are formed and developed through the practice of the profession rather than at the stage of learning it, so the second hypothesis is invalid.

Among the skills that respondents have acquired through accounting education in pre-university and university education are: adaptability, self-confidence, communication, meeting deadlines, organization. As for the skills acquired through professional experience, the following were mentioned: digital skills regarding new technologies, organizational and communication skills.

The fact is that the accountancy profession can play an essential role in transforming the world to deliver a more equitable, green and inclusive future (Brand, 2022).

4. CONCLUSIONS

Considering the fact that this research represents an exploratory study that aims to analyze trends, we can consider the chosen sample representative, in order to outline a relevant image for the analyzed aspect. The information was collected by applying an online questionnaire, participation in the survey being voluntary, respondents being informed that the data provided will be used in a study that analyzes their perception of the new set of skills, which will characterize the accounting profession. Respondents were also free to opt out of completing the questionnaire at any time.

Analyzing the responses received regarding the respondents' perception of extended competences, we conclude:

- the cognitive skills with a significant impact on the accounting profession are: ability to learn, agility of thinking, identification of relevant information, application of knowledge in different contexts, while the skills that obtained a low score were: creativity and imagination, understanding biases, expression and public speaking;
- the digital skills considered important are digital learning and ethics, cybersecurity, understanding and using intelligent systems, statistical data analysis, while digital skills such as: programming knowledge or computational and algorithmic thinking obtained a low score;
- the self-management skills that significantly influence the profession are seriousness and perseverance, self-development, self-confidence, knowledge of one's own strengths, and those considered to a small extent important for the accounting profession are: understanding one's own emotions, coping with uncertainty or overcoming routine;
- In the category of interpersonal skills, trust, collaboration, organizational awareness, creating an inspirational vision prevail and the less rated skills are: humility, promoting inclusion or motivation.

Regarding the way of assimilating extended skills, respondents considered that the training and development of these skills is achieved both through high school and university specialty training, and through the exercise of the profession, but to a greater extent in the second situation. Therefore, following the investigation carried out, the first hypothesis formulated was validated and the second invalidated.

We believe that, in the current economic and social context, the new valences of accountants' education arise from the needs of the market, from the digital revolution and from the entire phenomenon of internationalization and globalization of business. We agree with the opinion of Tiron Tudor who argues that "it is necessary that, in addition to the solid specialized knowledge included in the curricula in the traditional way, some new elements should be taken into account, such as marketing in the accounting profession, promotion of the image of the professional accountant, development of innovation capacities, use of social media and information technology in the provision of quality professional services" (Tiron Tudor, 2014).

Employers in the economic field are shifting their interest to graduates with skills much broader than technical expertise. On this topic, the European Commission has a rather moderate tone advocating for lifelong learning: "However, rapidly advancing technology requires a general mindset for continuous improvement and lifelong learning.

It's not just about what you know, but increasingly about one's ability to adapt to ever-changing circumstances and constantly develop their knowledge and skills. Focusing only on technical skills is therefore not enough" (European Commission, 2020).

The research carried out can be useful for teachers, professional bodies and other actors in the economic environment who will be influenced but also directly involved in the phenomenon of the accounting paradigm shift generated by the expansion of advanced technologies, integrated thinking and globalization, an evolution that requires the development of new skills.

The limit of the research is given by the geographical limitation for seven counties of the country, but belonging to different regions of development. The study was also based on qualitative questions that required subjective answers, influenced by the mentality, behavioral particularities and culture of the respondents.

The research perspectives involve extending the study to the other counties of the country, with results that can highlight the mentality and perception of accounting practitioners in Romania regarding the new skills that offer viability to the accounting profession.

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