

THEORETICAL INCURSIONS ON THE TRANSFORMATION OF THE ACCOUNTING PROFESSION AND THE NEED TO EXPAND SKILLS

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ABSTRACT: *The accountant is no longer a simple holder of records or "historical data", his role has changed, becoming a business partner, even an important "pawn" of the economic recovery. The changing market needs, combined with developments in emerging industries, have generated the need to constantly improve accountants' skills. The paper presents a structured review of the literature on the challenges to which the accounting profession is subjected in the current period, the place occupied in the area of some professions in the economic field, as well as the need to acquire new skills to face these challenges, their spectrum.*

KEY WORDS: *accounting, profession, skills, sustainability, hybridization.*

JEL CLASSIFICATIONS: *A20, M40, M41.*

1. CURRENT COORDINATES AND PERSPECTIVES OF THE ACCOUNTING PROFESSION

The permanent changes to which the accounting profession has been subjected in recent decades have made it necessary to continuously transform accountants, both to be successful and to meet the increasing demands of clients. According to (Gulin, et. al., 2019), the accounting profession is among the top professions that are and will be most strongly affected by technological developments and globalization, with a high probability of being automated and digitized in the near future.

Therefore, in order to respond adequately to the evolution of advanced technologies, globalization and the change in the way of reporting, which characterizes this first half of the twenty-first century, the accounting profession must propose a new model.

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In addition, in order to be able to foreshadow the future of the accounting profession, in a context of global uncertainty, it is essential to understand and analyze how the profession is metamorphosing in order to "move forward" and remain relevant.

In this context of change for the accounting profession, the accounting literature proposes four areas of interest (Blood & Hong, 2021): redefining the accounting profession and increasing its influence (1); identification and development of future competences, those competences that go beyond the scope of technical competences (2); developing additional technical skills, including understanding non-financial information and a deep understanding of emerging topics (3); review of educational curricula and teaching methods (4). We find that the accounting profession has become, more than ever, focused on skills that allow stronger relationships with clients, better interdisciplinary collaboration, complemented by the ability to anticipate, respond and adapt to changes, all of which require increased resilience and flexibility (Prinsloo, 2020).

More, in the investigation on the implementation of Big Data technology in the practice of the accounting profession, pointed out that in order to keep up with the current economy and ensure the future of accounting, professional accountants are forced to overcome the "traditional paradigm" and "promote the future" with a lot of courage (Groșanu, et al., 2021).

Association of Chartered Certified Accountants's report "Future ready: Accountancy careers in the 2020s" (ACCA, 2020, based on collective research conducted over the past three years by ACCA, highlights the critical place that the accounting profession occupies in "building sustainable organizations for the future" and developing new career opportunities. These are new directions of evolution as a result of technological progress, changes in employees' expectations of the workplace, changes in social norms and values (Lion, 2021).

The emergence of new skills will generate a "hybridization" of professions through the emergence of new professions, such as professional accountant specialized in cloud accounting, or in Blockchain, database analyst, advanced systems integrator, accounting specialist in cybercrime or data security (Lacurezeanu, et. al., 2020; Kruskopf, et. al., 2020; Zhang, et. al., 2018). These employees with evolved roles, according to the Chartered Global Management Accountants report (CGMA, 2013), are called the "new hybrid professionals", who will be meant to transform and interpret information into business actions and strategies (Gamage, 2016). Botar identifies how to reshape the accounting profession and the accounting field by changing the digital paradigm and considers cloud/online accounting falls into the category of contemporary paradigms that have shaped accounting (Botar, 2024).

Basically, for the construction and development of sustainable organizations, the accounting profession, under its various valences, will have an essential role.

Accountants are therefore obliged, on the one hand, to improve their existing skills and competences, and on the other hand, to acquire new ones, so that the profession retains its long-term viability and meets the need for sustainability.

Thus, new expectations are foreshadowed regarding the accounting profession.

In this context, we can say that the evolution of the profession comes with the change, on the one hand, of the expectations of what it means to be an "accountant", of

the skills and conduct necessary to meet the requirements of the future business ecosystem, and on the other hand, of the areas in which there is a greater demand for the skills offered by the profession.

In addition, according to the Sustainability Accounting Standards Board (SASB), the sustainability of the accounting profession is ensured by five "essential pillars": environment, social capital, human capital, innovation and governance, which support the process of creating added value and the sustainable development of the economic and social environment (Stanciu & Rîndașu, 2020).

Increasing digitalization gives accountants more time for analyzing and interpreting financial information, and therefore a deeper involvement in strategic planning (Asonitou, 2015). The accounting profession will go beyond the scope of traditional work activities, in addition to carrying out new, value-added activities, in order to monetize and develop the clients' business (Goretzki & Strauss & Weber, 2013). As a result, accountants will become "symbolic analysts with abstraction skills and the ability to grasp the meaning behind figures and ideas, in order to develop a holistic understanding of economic change and information technologies" (Covaleski, et. al., 2003). Consequently, these future transformations of the profession entail a "reinterpretation" of the role of the accountant in an organization.

In addition, according to IFAC, the accounting profession is meant to serve "the financial and, in some circumstances, non-financial information needs of a wide range of decision-makers, including, but not limited to: (a) the public, (b) current and potential investors, (c) the management and employees of organizations, (d) suppliers and lenders, (e) customers, and (f) government authorities. The ability of the accounting profession to meet users' information needs contributes to an efficient economy that generates value for society" (IFAC, 2019).

The World Economic Forum (WEF) conducted, in 2020, a survey on the future of jobs, which indicates an increasing trend in the demand of companies for analysts and specialists in Big Data, machine learning, artificial intelligence and a downward trend in the demand for officials, secretaries, accountants, auditors. In table no. 1, we have made a picture of the future dynamics of the professions, by highlighting the top 7 emerging professions and, respectively, the top 7 professions in decline, among which the accounting profession seems to be found:

Table 1. Emerging professions and declining professions by 2025

	EMERGING PROFESSIONS		DECLINING PROFESSIONS
1	Data analysts and scientists	1	Data entry officials
2	AI and machine learning specialists	2	Administrative and executive secretary
3	Big Data specialists	3	Accountants, accounting and payroll
4	Digital marketing & strategy specialists	4	ACCOUNTANTS AND AUDITORS
5	Process automation specialists	5	Workers - assembly
6	Business development professionals	6	Business services & administration managers
7	Digital transformation specialists	7	Customer and customer service worker information

Source: Own projection according to WEF, 2020

The changes affecting the accounting profession require, on the one hand, the capitalization of technology, and on the other hand, the development of new ways of action and extended skills that guarantee the viability of the accounting profession.

In the context of the current dynamics in the economic environment, when the accounting profession distances itself from technical activities, the need for transversal skills increases exponentially (Low, et. al., 2016; Rumbens, et. al., 2019). Moreover, according to Low, when hiring accounting graduates, there is a greater emphasis on transversal skills than on technical ones (Low, et. al., 2016). In addition, research conducted by globally recognized professional accounting bodies (e.g. International Federation of Accountants - IFAC, Chartered Institute of Management Accountants - CIMA, Association of International Certified Professional Accountants - AICPA, has highlighted the fundamental importance of soft skills for accounting graduates in the future practice of the profession (Tsiligris & Bowyer, 2021).

To meet this need to develop skills for the current and future workforce, but also to boost lifelong learning, the European Commission has proclaimed 2023 the "European Year of Skills" with the declared aim of contributing to the "green and digital transitions". Given that the workforce will be equipped with the skills required on the market, sustainability, innovation and increased competitiveness of companies are ensured (<https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/>).

It can be appreciated that the accounting profession will become a global profession, promoter of economic and societal progress, by ensuring financial management practices that strengthen trust in sustainable organizations, but also by contributing to the development of global governance regulations and standards that support the functioning of the future economy, always acting ethically and in the public interest.

2. EXPANDING SKILLS – A KEY TO RESUSCITATING THE ACCOUNTING PROFESSION?

What is a professional competence? The term "competence" with origins in psychology was taken over in the field of professional qualifications at the end of the twentieth century, when the paradigm of using competences as the main targets of education was developed.

Competence, in general, can be considered the ability to perform, in the real world, relevant tasks specific to a certain level of competence. The National Council for Professional Standards in the United Kingdom, defined competence as the ability to define the standards expected in employment (Thompson, 1996).

The European Qualifications Framework (EQF) for lifelong learning (EU, 2008), explains "competence" as the demonstrated ability to use personal, social and/or methodological knowledge, skills and abilities in work or study situations and in professional and personal development (Asonitou, 2015). In addition, the European Parliament and the Council of Europe have formulated as a recommendation eight key competences that define the European Framework of Reference for EU States, competences to be acquired by the end of compulsory education, but developed and updated throughout life.

In the accounting context, "professional competence is the ability to demonstrate the skills, values, ethics and technical and professional skills necessary to perform the role of a professional accountant, in a way that meets the needs and expectations of employers, clients, colleagues and the public" (Borgonovo, et, al., 2019).

The changing market needs, combined with developments in emerging industries, have generated the need to constantly improve the skills of accountants (Blood & Hong, 2021). According to the Future of Jobs Report by the World Economic Forum (WEF), by 2025, 50% of current employees will need a reskiller and 40% of them will change their core skills (WEF, 2020). According to the same report, the top 15 skills for which there is an increasing demand until 2025 can be found in table no. 2:

Table 2. Top 15 growing skills by 2025

1	Analytical thinking and innovation	9	Resilience, stress tolerance and flexibility
2	Active learning and learning strategies	10	Reasoning, problem-solving, and ideation
3	Solving complex problems	11	Emotional intelligence
4	Critical thinking and analysis	12	Troubleshooting and user experience
5	Creativity, originality and initiative	13	Service Orientation
6	Leadership and social influence	14	Systems analysis and evaluation
7	Use, monitoring and control of technology	15	Persuasion and negotiation
8	Technology design and programming		

Source: Own projection according to WEF, 2020

Analyzing this ranking, we observe a diversity of "transversal" skills, which include, in addition to analytical and critical thinking, complex problem solving and self-management skills such as active learning, stress resistance and tolerance, flexibility, negotiation skills. This vision is complemented by the European Commission (EC) which draws attention to the fact that "technical skills alone are not enough" and these must be completed "... among others, with skills in critical thinking, creativity, communication and the ability to work in a team" (EC, 2020).

According to the AICPA, the competencies that successful accountants should possess include, in addition to the basic ones, "soft" skills: communication, interpersonal and leadership, so that the accountant is "able to provide and exchange information in a meaningful context and with adequate delivery and interpersonal skills; capable of influencing, inspiring and motivating others to achieve results" (AICPA, 2008).

In the concern for defining accounting skills, we observe several interpretations that vary from cognitive abilities and personal attributes, to results reflected in the workplace. Most authors embrace the idea that competencies should contribute to performance and be focused on results. International Federation of Accountants refers to the results-based functional analysis preferred by the ACCA, on the one hand, and to the input-based approach such as knowledge, skills and professional values, supported by the Association of International Certified Professional Accountants - AICPA (IFAC, 2001). These differences in competence approaches are important because they help to develop competency-based standards more effectively, but also to develop assessment methods (Asonitou, 2015).

A holistic approach to the skills of the future accountant can be outlined using the research of Dondi, endorsed by the McKinsey Global Institute, as a benchmark (Dondi, et. al., 2021). It is believed that as advanced technologies invade the labour market, there will be a reversal in skills and competences: while the demand for basic manual and cognitive skills will be decreasing, the demand for "higher technological, social, emotional and cognitive skills" will increase. Thus, based on a survey of 18,000 people in 15 countries, the author identified a set of 56 fundamental competencies (a mixture of skills and attitudes) that, when assimilated by future employees, facilitate a higher probability of employment, continuous adaptation to change, higher earnings and job satisfaction. The 56 competencies are grouped into four competency categories: cognitive, digital, interpersonal, and self-driving, which in turn develop 13 separate skill groups belonging to the four categories. Based on them, we can outline the portrait of a future accountant who is a good manager, with communication and digital skills, who can develop relationships based on trust, on irreproachable ethics and "who can make a difference in the market" (Arraou, cited by Botea, 2018).

The purpose of these fundamental skills in an increasingly digitized and dynamic labor market aims at three essential aspects for future employees (Dondi, et. al., 2021): 1) they generate added value compared to what automated systems and intelligent solutions offer; 2) they are the desirable prerogative of any employee who operates in a digitized environment; 3) it facilitates the permanent adaptation of employees to constant changes and new jobs that arise.

According to current studies, the lack of specific skills and insufficient qualifications of employees are recognized as major barriers to the adoption of modern information technologies in the context of Industry 4.0 (Betti & Sarens, 2021; Oesterreich, et. al., 2019).

Despite the massive automation of the accounting field, graduates of economic studies affirm that their skills and competencies are little in line with the current requirements of an automated job in the field of accounting and that there is a discrepancy between theory and practice (Dolce, et. al., 2020). In this way, the education of accountants and their continuous training must have at its center the permanent optimization of basic skills with digital skills (Zhivets, 2018) and transversal skills (Berry & Routon, 2020), a fundamental aspect for the formation of the profiles of future accountants (Carvalho & Almeida, 2022).

3. CONCLUSIONS

The global economic and social disturbance, to which were added the Covid-19 pandemic crisis and the current war that threatens "world peace", have created the need but also the opportunity for a reset of the accounting profession and the future of accounting. Therefore, in this context, it is absolutely legitimate to address both the sustainability of the global economy and the sustainability of accounting education. The transformations taking place within the world economy: organizations mobilized to be more resilient, business models transformed, markets reshaped, capital relocated, will generate changes in the role of the professional accountant who will contribute to the creation of sustainable value for organizations while acting in the public interest.

Accountants are essential in analyzing business plans, managing the balance sheet and facilitating financing, in order to direct companies to the most appropriate initiatives, maintaining financial resilience on the way to a sustainable company. Therefore, several important key trends in technology, environment and society are outlined, which, in addition to stimulating anticipatory thinking and rethinking the nature of the accounting profession, constitute the premises for the long-term reconfiguration of accounting education, starting with pre-university education. All these challenges launched by the sustainable development of society also create increased expectations for economic education providers.

Currently, the accounting profession needs to be much more focused on skills and competencies that allow for more open relationships with clients, greater resistance and flexibility to change, and thorough interdisciplinary collaboration. In addition, future generations of accounting professionals will have a major role in the future, by complementing traditional accounting knowledge with new IT knowledge, by assimilating new emerging technologies, an integrated model of thinking, in a globalized world. Therefore, as the responsibilities of accountants become more diverse and complex, two apparently opposite trends are emerging: 1) accountants must increase their concern for deepening their technical specialization; 2) Accountants must keep their options open through a permanent interest in continuous learning, but also resilience and the ability to adapt to changing circumstances.

The accounting profession, like many other professions, is going through a process of "rebranding", of reassessing its future position, in the context of the multiple cultural, technological, social, economic transformations taking place globally, witnessing a "threat" to its future viability as a result of the three great challenges: the challenge of attraction, the challenge of relevance and the challenge of change.

REFERENCES:

- [1]. **Association of Chartered Certified Accountants** (2020) *Future ready: Accountancy careers in the 2020s* (pp. 1–73). [Online], <https://www.accaglobal.com/gb/en.html>, [Accessed 14.11.2022]
- [2]. **American Institute of Certified Public Accountants** (2008) *Top Five Values, Services, Competencies and Issues for the Future. The CPA Vision Project 2011*, [Online], http://www.cpavision.org/final_report, [Accessed 23 June 2022]
- [3] **Asonitou, S.** (2015) *The evolution of accounting education and the development of skills*. In 11th Interdisciplinary Workshop On Intangibles, Intellectual Capital And Extra-Financial Information, Athens University of Economics & Business, pp. 1-12, [Online] https://www.researchgate.net/publication/319464485_The_Evolution_of_Accounting_Education_And_the_Development_of_Skills, [Accessed 15 December 2022]
- [4] **Berry, R.; Routon, W.** (2020) *Soft skill change perceptions of accounting majors: Current practitioner views versus their own reality*, Journal of Accounting Education, 53(1006910)
- [5]. **Betti, N.; Sarens, G.** (2021) *Understanding the internal audit function in a digitalised business environment*, Journal of Accounting & Organizational Change, 17(2), pp. 197-216
- [6]. **Blood, B.; Hong, E.** (2021) *Developing the Accountancy Profession, The Accountancy Profession: This Way Forward*, [Online], <https://www.ifac.org/knowledge-gateway/developing-accountancy-profession/discussion/accountancy-profession-way-forward>, [Accessed 21 September 2021]
- [7]. **Borgonovo, A.; Friedrich, B.; Wells, M.** (2019) *Competency-based accounting education, training, and certification: an implementation guide*, World Bank Publications [Online], <https://cfr.worldbank.org/sites/default/files/2019-11/Competency-Based-Accounting-Education-Training-and-Certification-An-Implementation-Guide.pdf>, [Accessed, 22 November 2023]
- [8]. **Botar, C-F.** (2024) *Bibliometric Analysis of Cloud Accounting Phenomenon (I)*, CECCAR Business Review, Body of Expert and Licensed Accountants of Romania, 5(2), pp.1-13, [Online], <https://www.ceccarbusinessreview.ro/public/store/documente/articole/2024/6/CBR-Bibliometric-analysis-of-cloud-accounting-phenomenon-i-a399.pdf>, [Accessed 31 July, 2024]
- [9]. **Botea, R.** (2018) *Profesia contabilă este cea mai în pericol de a fi înlocuită de digitalizare. Contabilul care se adaptează schimbării va rămâne, în timp ce contabilul care nu ține pasul va ieși din piață*, Financiar Gazette, [Online], <https://www.zf.ro/eveniment/profesia-de-contabil-este-cea-mai-in-pericol-de-a-fi-inlocuita-de-digitalizare-contabilul-care-se-adapteaza-schimbarii-va-ramane-in-timp-ce-contabilul-care-nu-tine-pasul-va-iesi-din-piata-17547407>, [Accessed 9 April 2021]
- [10]. **Carvalho, C.; Almeida, A. C.** (2022) *The adequacy of accounting education in the development of transversal skills needed to meet market demands*, Sustainability, 14(10), [Online], <https://www.mdpi.com/2071-1050/14/10/5755>, [Accessed 21 October, 2023]

[11]. **Chartered Global Management Accountant** (2013) *From insight to impact: unlocking Opportunities in Big Data*, United Kingdom, [Online], <https://www.aicpacima.com/resources/download/from-insight-to-impact-unlocking-opportunities-in-big-data>, [Accessed, 12 December 2023]

[12]. **Covaleski, M. A.; Dirsmith, M. W.; Rittenberg, L.** (2003) *Jurisdictional disputes over professional work: the institutionalization of the global knowledge expert*, Accounting, Organizations and Society, 28(4), pp 323-355

[13]. **Dolce, V.; Emanuel, F.; Cisi, M.; Ghislieri, C.** (2020) *The soft skills of accounting graduates: Perceptions versus expectations*, Accounting Education, 29(1), pp. 57-76

[14]. **Dondi, M.; Klier, J.; Panier, F.; Schubert, J.** (2021) *Defining the skills citizens will need in the future world of work*, McKinsey & Company, [Online], <https://www.mckinsey.com/industries/public-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work>, [Accessed 18 July, 2022]

[15]. **European Commission** (2020). *Skills for Industry. Curriculum Guidelines 4.0: Future-Proof Education and Training for Manufacturing in Europe*, [Online], <https://op.europa.eu/en/publication-detail/-/publication/845051d4-4ed8-11ea-aece01aa75ed71a1>, [Accessed 11 May 2023]

[16]. **Gamage, P.** (2016) *Big Data: are accounting educators ready?*, Journal of Accounting and Management Information Systems, 15(3), pp. 588-604

[17]. **Goretzki, L.; Strauss, E.;Weber, J.** (2013) *An institutional perspective on the changes in management accountants' professional role*, Management accounting research, 24(1), pp. 41-63

[18]. **Groşanu, A.; Fülöp, M. T.; Cordoş, G. S.; Raita, G.** (2021) *Challenges and trends for the incorporation of big data in the accounting profession: From the traditional approach to the future professional accountant*, CECCAR Business Review, 1(12), pp. 64-72

[19]. **Gulin, D.; Hladík, M.; Valenta, I.** (2019). *Digitalization and the Challenges for the Accounting Profession*, ENTRENOVA-ENTERprise REsearch InNOVAtion, 5(1), pp. 428-437

[20]. **International Federation of Accountants** (2019) *Future-fit accountants: CFO & Finance function roles for the next decade*, p. 16, [Online], <https://www.ifac.org/knowledge-gateway/preparing-future-ready-professionals/publications/future-fit-accountants-roles-next-decade>, [Accessed 24 January 2023]

[21]. **Kruskopf, S.; Lobbas, C.; Meinander, H.; Söderling, K.; Martikainen, M.; Lehner, O.** (2020) *Digital accounting and the human factor: theory and practice*, ACRN Journal of Finance and Risk Perspectives

[22]. **Lacurezeanu, R.; Tiron-Tudor, A.; Breslelean, V. P.** (2020) *Robotic process automation in audit and accounting*, Audit Financiar Review, 18(4), pp. 752-770

[23]. **Lion, J. (2021) Future ready: accountancy careers in the 2020s, Professional insight report**, [Online], https://www.accaglobal.com/gb/en/professional-insights/pro-accountants-the-future/future_ready_2020s.html, [Accessed 12 December 2022]

[23]. **Low, M.; Botes, V.; De La Rue, D.; Allen, J.** (2016). *Accounting employers' expectations—the ideal accounting graduates*, e-Journal of Business Education and Scholarship of Teaching, 10 (1), pp. 36–57

[24]. **Oesterreich, T. D.; Teuteberg, F.; Bensberg, F.; Buscher, G.** (2019) *The controlling profession in the digital age: Understanding the impact of digitisation on the controller's job roles, skills and competences*, International journal of accounting information systems, 35(C)

[25]. **Prinsloo, A.** (2020) *What Defines the Accountant of Tomorrow?*, International Federation of Accountants [Online], <https://www.ifac.org/knowledge-gateway/discussion/what-defines-accountant-tomorrow> [Accessed 19 September 2022]

- [26]. **Rumbens, D.; Richardson, C.; Lee, C.; Mizrahi, J.; Roche, C.** (2019) *The path to prosperity: Why the future of work is human*, Deloitte: Sydney, Australia, [Online], https://cica.org.au/wp-content/uploads/90572c4f-4bb5-4b54-bf27-cc100d86890d_20190612-btlc-inbound-future-work-human-report.pdf, [Accessed 18 November 2023]
- [27]. **Stanciu, V.; Rîndașu, S.M.** (2020) *Sustainable professional training—challenges and solutions in emerging European countries*, Audit Financiar, 13(160), pp. 771-784
- [28]. **Thompson, J. P.** (1996) *Competence-Based Learning and Qualifications in the United Kingdom*, Proceedings of the Conference in Competencies and Accounting Education, Sheffield Hallam University
- [29]. **Tsiliqiris, V.; Bowyer, D.** (2021) *Exploring the impact of 4IR on skills and personal qualities for future accountants: a proposed conceptual framework for university accounting education*, Accounting Education, 30(6), pp. 621-649
- [30]. **World Economic Forum** (2020) *The future of jobs report: 2020*, pp. 1–163, [Online], http://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf, [Accessed 10 October 2022]
- [31]. **Zhang, C. A.; Dai, J.; Vasarhelyi, M.A.** (2018) *The impact of disruptive technologies on accounting and auditing education: how should the profession adapt?*, The CPA Journal, 88(9), pp. 20-26, [Online], <https://www.cpajournal.com/2018/09/13/the-impact-of-disruptive-technologies-on-accounting-and-auditing-education/>, [Accessed 5 January 2024]
- [32]. **Zhyvets, A.** (2018) *Evolution of professional competencies of accountants of small enterprises in the digital economy of Ukraine*, Baltic Journal of Economic Studies, 4(5), pp. 87-93.
- [33]. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-year-skills-2023_ro